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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 51, 52, 78, and 97

[EPA-HQ-OAR-2020-0272; FRL-10021-34-OAR]

RIN 2060-AU84

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

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The U.S. Environmental Protection Agency (EPA) is taking this action to address interstate transport of ozone pollution under the "good neighbor provision" of the Clean Air Act (CAA). This final action is taken in response to the United States Court of Appeals for the District of Columbia Circuit's (D.C. Circuit) remand of the Cross-State Air Pollution Rule (CSAPR) Update in *Wisconsin v. EPA* on September 13, 2019. The CSAPR Update finalized Federal Implementation Plans (FIPs) for 22 states to address their good neighbor obligations for the 2008 ozone National Ambient Air Quality Standards (NAAQS). The D.C. Circuit found that the CSAPR Update, which was published on October 26, 2016 as a partial remedy to address upwind states' obligations prior to the 2018 Moderate area attainment date under the 2008 ozone NAAQS, was unlawful to the extent it allowed those states to continue their significant contributions to downwind ozone problems beyond the statutory dates by which downwind states must demonstrate their attainment of the air quality standards. On the same grounds, the D.C. Circuit also vacated the CSAPR Close-Out in *New York v. EPA* on October 1, 2019. This final rule resolves 21 states' outstanding interstate ozone transport obligations with respect to the 2008 ozone NAAQS.

This action finds that for 9 of the 21 states for which the CSAPR Update was found to be only a partial remedy (Alabama, Arkansas, Iowa, Kansas, Mississippi, Missouri, Oklahoma,

Texas, and Wisconsin), their projected ozone precursor emissions in the 2021 ozone season and thereafter do not significantly contribute to a continuing downwind nonattainment and/or maintenance problem, and therefore the states' CSAPR Update FIPs (or the SIPs subsequently approved to replace certain states' CSAPR Update FIPs) fully address their interstate ozone transport obligations with respect to the 2008 ozone NAAQS. This action also finds that for the 12 remaining states (Illinois, Indiana, Kentucky, Louisiana, Maryland, Michigan, New Jersey, New York, Ohio, Pennsylvania, Virginia, and West Virginia), their projected 2021 ozone season nitrogen oxides (NO_X) emissions significantly contribute to downwind states' nonattainment and/or maintenance problems for the 2008 ozone NAAQS. In this final action, EPA is issuing new or amended FIPs for these 12 states to replace their existing CSAPR NO_X Ozone Season Group 2 emissions budgets for electricity generating units (EGUs) with revised budgets via a new CSAPR NO_X Ozone Season Group 3 Trading Program. EPA is requiring implementation of the revised emission budgets beginning with the 2021 ozone season. Based on EPA's assessment of remaining air quality issues and additional emission control strategies for EGUs and other emissions sources in other industry sectors (non-EGUs), EPA is further determining that these NO_X emission reductions fully eliminate these states' significant contributions to downwind air quality problems for the 2008 ozone NAAQS. In this action, EPA is also finalizing an error correction of its June 2018 approval of Kentucky's good neighbor SIP.

DATES: This final rule is effective on **[insert date 60 days after date of publication in the Federal Register]**.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2020-0272. All documents in the docket are listed on the www.regulations.gov website. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available

only in hard copy form. Publicly available docket materials are available electronically through www.regulations.gov.

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SUPPLEMENTARY INFORMATION:

Preamble Glossary of Terms and Abbreviations

The following are abbreviations of terms used in the preamble.

4-step good neighbor framework	4-step framework
AEO	Annual Energy Outlook
AQAT	Air Quality Assessment Tool
AQM TSD	Air Quality Modeling Technical Support Document
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 System(s)
CFR	Code of Federal Regulations
CMDb	Control Measures Database
CMV	Commercial Marine Vehicle
CoST	Control Strategy Tool
CRA	Congressional Review Act
CSAPR	Cross-State Air Pollution Rule
EGU	Electric Generating Unit
EISA	Energy Independence and Security Act

EPA	U.S. Environmental Protection Agency
FIP	Federal Implementation Plan
FR	Federal Register
HDGHG	Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium – and Heavy- Duty Engines and Vehicles
IC	Internal Combustion
ICI	Industrial, Commercial, and Institutional
ICR	Information Collection Request
IPM	Integrated Planning Model
iSIP	Infrastructure State Implementation Plan
km	Kilometer
lb/mmBtu	Pounds per Million British Thermal Units
LEC	Low Emission Combustion
LNB	Low-NO_X Burners
MJO	Multi-Jurisdictional Organizations
mmBtu	Million British Thermal Units
MOVES	Motor Vehicle Emission Simulator
MSAT2	Mobile Source Air Toxic Rule
NAAQS	National Ambient Air Quality Standard
NEI	National Emission Inventory
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NODA	Notice of Data Availability
Non-EGU	Non-electric Generating Unit
NSPS	New Source Performance Standard

NUSA	New Unit Set-Aside
OSAT/APCA	Ozone Source Apportionment Technology/Anthropogenic Precursor Culpability Analysis
OMB	Office of Management and Budget
OTC	Ozone Transport Commission
OTR	Ozone Transport Region
PEMS	Predictive Emissions Monitoring System
$PM_{2.5}$	Fine Particulate Matter
ppb	Parts Per Billion
RACT	Reasonably Available Control Technology
RIA	Regulatory Impact Analysis
RICE	Reciprocating Internal Combustion Engines
RRF	Relative Response Factor
RTC Document	Response to Comment Document
SCR	Selective Catalytic Reduction
SIP	State Implementation Plan
SMOKE	Sparse Matrix Operator Kernel Emissions
SNCR	Selective Non-catalytic Reduction
SO_2	Sulfur Dioxide
TIP	Tribal Implementation Plan
TSD	Technical Support Document
tpy	Ton Per Year
ULNB	Ultra-low NO_X Burner
VOC	Volatile Organic Compound
WRF	Weather Research and Forecasting Model

Table of Contents

I. Executive Summary
A. Purpose of Regulatory Action
B. Summary of the Major Provisions of the Regulatory Action
C. Costs and Benefits
II. General Information
A. Does this Action Apply to Me?
III. EPA's Legal Authority for the Final Rule
A. Statutory Authority
B. Prior Good Neighbor Rulemakings Addressing Regional Ozone
IV. Air Quality Issues Addressed and Overall Approach for the Final Rule
A. The Interstate Ozone Transport Challenge
1. Nature of Ozone and the Ozone NAAQS
2. Ozone Transport
3. Health and Environmental Effects
B. Relationship Between this Regulatory Action and the 2015 Ozone NAAQS
C. Approach to Address the Remanded Transport Obligations for the 2008 Ozone NAAQS
1. Events Affecting Application of the Good Neighbor Provision for the 2008 Ozone NAAQS
2. FIP Authority for Each State Covered by the Final Rule
3. The 4-step Good Neighbor Framework
V. Analyzing Downwind Air Quality and Upwind-State Contributions
A. Overview of Air Quality Modeling Platform
B. Emission Inventories
1. Foundation Emission Inventory Data Sets
2. Development of Emission Inventories for EGUs
3. Development of Emission Inventories for Non-EGU Point Sources
4. Development of Emission Inventories for Onroad Mobile Sources
5. Development of Emission Inventories for Commercial Marine Vessels
6. Development of Emission Inventories for Other Nonroad Mobile Sources
7. Development of Emission Inventories for Nonpoint Sources
C. Air Quality Modeling to Identify Nonattainment and Maintenance Receptors
D. Pollutant Transport from Upwind States
1. Air Quality Modeling to Quantify Upwind State Contributions
2. Application of Screening Threshold
VI. Quantifying Upwind-State NO_X Reduction Potential to Reduce Interstate Ozone Transport for the 2008 NAAQS
A. The Multi-Factor Test
B. Identifying Levels of Control Stringency
1. EGU NO_X Mitigation Strategies
2. Non-EGU NO_X Mitigation Strategies
3. Mobile Source NO_X Mitigation Strategies
C. Emission Reduction Potential of Control Stringencies
1. EGU Emission Reduction Potential
2. Non-EGU Emission Reduction Potential

D. Assessing Cost, EGU and Non-EGU NO_X Reductions, and Air Quality
1. EGU Assessment
2. Non-EGU Assessment
3. Overcontrol Analysis
VII. Implementation of Emission Reductions
A. Regulatory Requirements for EGUs
B. Quantifying State Emissions Budgets
C. Elements of New Trading Program
1. Applicability
2. State Budgets, Variability Limits, Assurance Levels, and Penalties
3. Unit-Level Allocations of Emission Allowances
4. Transitioning from Existing CSAPR NO_X Ozone Season Group 2 Trading Program
5. Compliance Deadlines
6. Monitoring and Reporting
7. Recordation of Allowances
8. Conforming Revisions to Regulations for Existing Trading Programs
D. Submitting a SIP
1. SIP Option to Modify 2022 Allocations
2. SIP Option to Modify Allocations in 2023 and Beyond
3. SIP Revisions that Do Not Use the New Group 3 Trading Program
4. No SIP Option for Additional States to Participate in the New Trading Program
E. Title V Permitting
F. Relationship to Other Emission Trading and Ozone Transport Programs
1. Existing Trading Programs
2. Title IV Interactions
3. NO_X SIP Call Interactions
VIII. Costs, Benefits, and Other Impacts of the Final Rule
IX. Summary of Changes to the Regulatory Text for the Federal Implementation Plans and Trading Programs
A. Amended CSAPR Update FIP Provisions
B. New CSAPR NO_X Ozone Season Group 3 Trading Program Provisions
C. Transitional Provisions
D. Conforming Revisions, Corrections, and Clarifications to Existing Regulations
X. Statutory and Executive Order Reviews
A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review
B. Paperwork Reduction Act (PRA)
C. Regulatory Flexibility Act (RFA)
D. Unfunded Mandates Reform Act (UMRA)
E. Executive Order 13132: Federalism
F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use
I. National Technology Transfer and Advancement Act (NTTAA)

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
K. Congressional Review Act
L. Determinations Under CAA Section 307(b)(1) and (d)

I. Executive Summary

This final rule resolves the interstate transport obligations of 21 states under the good neighbor provision of the Clean Air Act (CAA or the Act), CAA section 110(a)(2)(D)(i)(I), for the 2008 ozone National Ambient Air Quality Standards (NAAQS). The 2008 ozone NAAQS is an 8-hour standard that was set at 75 parts per billion (ppb).[1] The U.S. Environmental Protection Agency (EPA or the Agency) published the Cross-State Air Pollution Rule (CSAPR) Update on October 26, 2016, which, among other things, partially addressed the interstate transport of emissions from 21 states with respect to the 2008 ozone NAAQS.[2] *See* 81 FR 74504. On December 21, 2018, EPA published the CSAPR Close-Out Rule, which found that the CSAPR Update was a complete remedy for 20 of those states based on air quality analysis of the year 2023.[3]

On September 13, 2019, the United States Court of Appeals for the District of Columbia Circuit (D.C Circuit) remanded the CSAPR Update, concluding that it was invalid in one respect because it unlawfully allowed upwind states to continue their significant contributions to downwind air quality problems beyond the statutory dates by which downwind States must demonstrate their attainment of ozone air quality standards. *Wisconsin v. EPA,* 938 F.3d 303, 318-20 (D.C. Cir. 2019) (*Wisconsin*) (per curiam); *see also id.* 336-37 (concluding that remand without vacatur was appropriate). Subsequently, on October 1, 2019, in a judgment order, the D.C. Circuit vacated the CSAPR Close-Out on the same grounds on which it had remanded without vacatur the CSAPR Update in *Wisconsin*. *New York v. EPA*, 781 Fed. App'x 4, 7 (D.C.

[1] *See* 73 FR 16436 (March 27, 2008).
[2] In the CSAPR Update, EPA found that the finalized Tennessee emission budget fully addressed Tennessee's good neighbor obligation with respect to the 2008 ozone NAAQS. *See* 81 FR 74504, 74508 n. 19 (Oct. 26, 2016).
[3] *See* 83 FR 65878 (Dec. 21, 2018).

Cir. 2019) (*New York*). The court found the CSAPR Close-Out inconsistent with the *Wisconsin* holding because the rule analyzed the year 2023 rather than 2021 and failed to demonstrate that it was an impossibility to address significant contribution by the 2021 Serious area attainment date ("the next applicable attainment date"). To address the *Wisconsin* and *New York* decisions, EPA proposed this rule in the *Federal Register* on October 30, 2020 to revise the CSAPR Update (85 FR 68964).[4]

In this final rule, in accordance with *Wisconsin* and *New York*, EPA has aligned its analysis and the implementation of emission reductions required to address significant contribution with the 2021 ozone season, which corresponds to the July 20, 2021 Serious area attainment date for the 2008 ozone NAAQS. EPA has further determined which emission reductions are impossible to achieve by the 2021 attainment date and whether any such additional emission reductions should be required beyond that date. *See Wisconsin*, 938 F.3d at 320; *New York*, 781 Fed. App'x at 7.

In this action on remand, EPA is not reopening any determinations, findings, or statutory or regulatory interpretations that are not required to address the *Wisconsin* remand, unless the Agency has explicitly so stated. This final action addressing the remand of the CSAPR Update in *Wisconsin* also has the effect of addressing the outstanding obligations that resulted from the D.C. Circuit's vacatur of the CSAPR Close-Out in *New York*. *See New York*, 781 Fed. App'x at 7.

A. Purpose of the Regulatory Action

The purpose of this rulemaking is to protect public health and welfare by eliminating emissions in certain upwind states that significantly contribute to nonattainment, or interfere with maintenance, of the 2008 ozone NAAQS in the U.S. Ground-level ozone causes a variety of

[4] On July 28, 2020, the U.S. District Court for the Southern District of New York issued a decision establishing a deadline of March 15, 2021, for EPA to issue a final rule fully resolving good neighbor obligations under the 2008 ozone NAAQS for seven upwind states. *New Jersey v. Wheeler*, No. 1:20-cv-01425 (S.D.N.Y. July 28, 2020).

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, for example, by limiting tree growth. Studies have established that ozone transport occurs on a regional scale (i.e., hundreds of miles) over much of the eastern U.S., with elevated concentrations occurring in rural as well as metropolitan areas.[5, 6] As discussed in more detail in section IV.A.1, assessments of ozone control approaches have concluded that nitrogen oxides (NO_X) control strategies are effective to reduce regional-scale ozone transport.[7]

Clean Air Act section 110(a)(2)(D)(i)(I), which is also known as the "good neighbor provision," requires states to prohibit emissions that will contribute significantly to nonattainment or interfere with maintenance in any other state with respect to any primary or secondary NAAQS.[8] The statute vests states with the primary responsibility to address this "interstate transport" of air pollutants through the development of good neighbor State Implementation Plans (SIPs), which are one component of larger SIP submittals typically required three years after EPA promulgates a new or revised NAAQS. These larger SIPs are often referred to as "infrastructure" SIPs or iSIPs. *See* CAA section 110(a)(1) and (2). 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, the CAA also requires EPA to fill a backstop role by issuing Federal Implementation Plans (FIPs) where states fail to submit good neighbor SIPs or EPA disapproves a submitted good neighbor SIP. *See generally* CAA section 110(k) and 110(c).

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[5] Bergin, M.S. et. al. (2007) Regional air quality: local and interstate impacts of NO_X and SO_2 emissions on ozone and fine particulate matter in the eastern United States. Environmental Sci & Tech. 41: 4677-4689.
[6] Liao, K. et. al. (2013) Impacts of interstate transport of pollutants on high ozone events over the Mid-Atlantic United States. Atmospheric Environment 84, 100-112.
[7] *See also* 82 FR 51238, 51248 (Nov. 3, 2017) (citing 76 FR 48208, 48222 (Aug. 8, 2011)) and 63 FR 57381 (Oct. 27, 1998).
[8] 42 U.S.C. 7410(a)(2)(D)(i)(I).

On October 26, 2016, EPA published the CSAPR Update, which finalized FIPs for 22 states that EPA found failed to submit a complete good neighbor SIP (15 states)[9] or for which EPA issued a final rule disapproving their good neighbor SIP (7 states).[10] The FIPs promulgated for these states included new NO_X ozone season emission budgets for electric generating units (EGUs) to reduce interstate transport for the 2008 ozone NAAQS. These emission budgets took effect in 2017 in order to assist downwind states with attainment of the 2008 ozone NAAQS by the 2018 Moderate area attainment date. EPA acknowledged at the time that the FIPs promulgated for 21 of the 22 states only partially addressed good neighbor obligations under the 2008 ozone NAAQS. The 22 states for which EPA promulgated FIPs to reduce interstate ozone transport as to the 2008 ozone NAAQS are listed in Table I.A-1.

Table I.A-1 List of 22 Covered States for the 2008 8-Hour Ozone NAAQS in the CSAPR Update

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

[9] Alabama, Arkansas, Illinois, Iowa, Kansas, Maryland, Michigan, Mississippi, Missouri, New Jersey, Oklahoma, Pennsylvania, Tennessee, Virginia, and West Virginia.
[10] Indiana, Kentucky, Louisiana, New York, Ohio, Texas, and Wisconsin.

West Virginia
Wisconsin

In response to the D.C. Circuit's remand of the CSAPR Update in *Wisconsin* and the court's vacatur of the CSAPR Close-Out in *New York*, this rule finds that 12 of the 22 states listed in Table I.A-1 require further ozone season NO_X emission reductions to address the good neighbor provision as to the 2008 ozone NAAQS. As such, EPA is promulgating new or revised FIPs for these states that include new EGU NO_X ozone season emission budgets, with implementation of these emission budgets beginning with the 2021 ozone season.[11] The 12 states for which EPA is promulgating new or revised FIPs to reduce interstate ozone transport as to the 2008 ozone NAAQS in this rulemaking are listed in Table I.A-2.

Table I.A-2 List of 12 Covered States for the 2008 8-Hour Ozone NAAQS

State
Illinois
Indiana
Kentucky
Louisiana
Maryland
Michigan
New Jersey
New York
Ohio
Pennsylvania
Virginia
West Virginia

The enhanced control stringency represented by the new EGU NOx ozone season emission budgets for these states will take effect 60 days after publication in the *Federal Register*, which

[11] As discussed in section IV.C.2.c., in 2018 EPA approved a SIP revision for Indiana replacing the state's CSAPR Update FIP with equivalent state regulations. This SIP revision, like the CSAPR Update FIP it replaced, was partial in nature. EPA is issuing a new FIP rather than a revised FIP for Indiana in this action.

corresponds to the effective date of the rule as a whole.[12] This date will fall before the July 20, 2021, Serious area attainment date for the 2008 ozone NAAQS. EPA has determined that it is feasible for the EGUs subject to this rule to comply with the enhanced stringency of the budgets and that there is sufficient time before the effective date to prepare to meet these budgets by either undertaking the emission control measures EPA has identified in this action, or by taking advantage of compliance flexibilities available through the new interstate emissions trading program EPA is establishing.[13] As explained in greater detail below, due to timing considerations, one aspect of EPA's selected EGU control stringency—installation of state-of-the-art combustion controls—will not take effect until the 2022 ozone season, and this is accounted for in EPA's budget-setting process.

EPA is further adjusting these states' emission budgets for each ozone season from 2022 to 2024 to incentivize ongoing operation of identified emission controls to address significant contribution, until such time that air quality projections demonstrate resolution of the downwind nonattainment and/or maintenance problems for the 2008 ozone NAAQS. No further budget adjustments will be made after that time (i.e., after the 2024 ozone season). EPA is implementing the new state-level ozone season emission budgets through a new CSAPR NO_X Ozone Season Group 3 Trading Program. Based on EPA's assessment of remaining air quality issues and additional emission controls, EPA is further determining that these NO_X emission reductions fully eliminate these states' significant contribution to nonattainment and interference with maintenance of the 2008 ozone NAAQS in other states.

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[12] As discussed in section VII.C.4.a, EPA is ensuring that the enhanced control stringency represented by the new budgets will not take effect until the rule's effective date by issuing supplemental allowances for the portion of the 2021 ozone season occurring before the rule's effective date.

[13] In general, throughout this notice, where EPA refers to "addressing good neighbor obligations," "implementing reductions," or "compliance feasibility" by or in the 2021 ozone season (or similar formulations), this does not refer to the beginning of the ozone season on May 1, but rather to the effective date of this action, which is when the enhanced control stringency represented by the new EGU NOx ozone season emission budgets will take effect.

As discussed in more detail in section IV.C.2.b below, for one state, Kentucky, EPA is making an error correction under CAA section 110(k)(6) of its June 2018 approval of the Commonwealth's SIP, which had concluded that the CSAPR Update was a complete remedy based on modeling of the 2023 analytic year. EPA finds that the basis for that conclusion was invalidated by the decisions in *Wisconsin* and *New York*. With finalization of this error correction and disapproval of Kentucky's SIP, Kentucky's good neighbor obligations are outstanding. In light of the *Wisconsin* remand of Kentucky's FIP and EPA's error correction, the Agency has the necessary authority to amend the CSAPR Update FIP for Kentucky.

For the nine remaining states with FIPs promulgated under the CSAPR Update that EPA previously found partially addressed good neighbor obligations for the 2008 ozone NAAQS (Alabama, Arkansas, Iowa, Kansas, Mississippi, Missouri, Oklahoma, Texas, and Wisconsin), EPA's updated air quality and contributions analysis shows that these states are not linked to any downwind air quality problems in 2021.[14] Therefore, EPA finds that the existing CSAPR Update FIPs (or the SIP revisions later approved to replace the CSAPR Update FIPs) for these states satisfy their good neighbor obligations for the 2008 ozone NAAQS.[15] Consequently, EPA is not requiring additional emission reductions from sources in these states in this final rule.

B. *Summary of the Major Provisions of the Regulatory Action*

To reduce interstate ozone transport under the authority provided in CAA section 110(a)(2)(D)(i)(I), this rule further limits ozone season (May 1 through September 30) NO_X emissions from EGUs in 12 states using the same framework EPA used in the CSAPR and other

[14] EPA's use of a contribution threshold to determine, without further analysis of potential emission reduction opportunities, that certain states have no remaining good neighbor obligations with respect to a given NAAQS is part of the analytic approach that was followed in the CSAPR rulemaking and upheld by the Supreme Court. *See EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489, 521-22 (2014).

[15] As discussed in section IV.C.2.c., in 2017 and 2019 EPA approved SIP revisions for Alabama and Missouri replacing the states' CSAPR Update FIPs with equivalent state regulations. These SIP revisions, like the CSAPR Update FIPs they replaced, were partial in nature. EPA is therefore determining in this action that the states' existing SIP provisions satisfy these states' good neighbor obligations for the 2008 ozone NAAQS.

good neighbor rules (the 4-step good neighbor framework or 4-step framework). The 4-step good neighbor framework provides a process to address the requirements of the good neighbor provision for ground-level ozone NAAQS: (1) identifying downwind receptors that are expected to have problems attaining or maintaining the NAAQS; (2) determining which upwind states contribute to these identified problems in amounts sufficient to "link" them to the downwind air quality problems (i.e., here, a contribution threshold equal to or greater than 1 percent of the NAAQS); (3) for states linked to downwind air quality problems, identifying upwind emissions that significantly contribute to downwind nonattainment or interfere with downwind maintenance of the NAAQS; and (4) for states that are found to have emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS downwind, implementing the necessary emission reductions through enforceable measures. In this final rule, EPA applies this 4-step framework to respond to the D.C. Circuit's remand in *Wisconsin* and to revise the CSAPR Update with respect to the 2008 ozone NAAQS.

In order to apply the first step of the 4-step framework to the 2008 ozone NAAQS, EPA performed air quality modeling coupled with ambient measurements in an interpolation technique to project ozone concentrations at air quality monitoring sites in 2021.[16] ("Interpolation" is a numerical method for constructing new data points within the range of a discrete set of known data points, in this case the known data are the 2016 measured-based and 2023 modeling-based ozone concentrations.) EPA evaluated 2021 projected ozone

[16] The next relevant attainment date for the 2008 ozone NAAQS is July 20, 2021, for Serious nonattainment areas. 80 FR 12264, 12268; 40 CFR 51.1103. As discussed in section V, historically, EPA has considered the full ozone season prior to the attainment as supplying an appropriate analytic year for assessing good neighbor obligations. While this would be 2020 for a July 2021 attainment date (which falls within the 2021 ozone season running from May 1 to September 30), in this circumstance, because the 2020 ozone season is wholly in the past, it is appropriate to focus on 2021 in order to address good neighbor obligations to the extent possible by the 2021 attainment date. It would not be appropriate to select an analytical year that is wholly in the past, because the agency interprets the good neighbor provision as forward looking. *See* 85 FR at 68981; *see also Wisconsin*, 938 F.3d at 322. Consequently, in this action EPA uses the analytic year 2021.

concentrations at individual 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. Such monitoring sites are referred to as nonattainment and/or maintenance receptors. Based on EPA's analysis, the Agency identified four nonattainment and/or maintenance receptors in 2021 (i.e., three receptors in Connecticut and one in Texas). EPA received comments on its approach to identify nonattainment and/or maintenance receptors in 2021. A summary of these comments, as well as EPA's responses, can be found in section V and in the Response to Comments (RTC) document for this final rule.

To apply the second step of the framework, EPA used an air quality modeling-based technique to quantify the contributions in 2021 from upwind states to ozone concentrations at individual monitoring sites, as described in section V. Once quantified, EPA then evaluated these contributions relative to a screening threshold of 1 percent of the NAAQS (i.e., 0.75 ppb) for those monitoring sites identified as nonattainment and/or maintenance receptors in step 1. States with contributions that equal or exceed 1 percent of the NAAQS were identified as warranting further analysis for significant contribution to nonattainment or interference with maintenance. States with contributions below 1 percent of the NAAQS were considered to not significantly contribute to nonattainment or interfere with maintenance of the NAAQS in downwind states. Based on EPA's updated air quality and contribution analysis using 2021 as the analytic year, EPA is determining that the following 12 states have contributions that equal or exceed 1 percent of the 2008 ozone NAAQS, and thereby warrant further analysis for significant contribution to nonattainment or interference with maintenance: Illinois, Indiana, Kentucky, Louisiana, Maryland, Michigan, New Jersey, New York, Ohio, Pennsylvania, Virginia, and West Virginia. EPA received comments on its approach to quantify interstate contributions and the use of a 1 percent of the NAAQS screening threshold. A summary of these comments, as well as EPA's responses, can be found in section V and in the RTC document for this final rule.

At the third step of the 4-step framework, EPA applied the multi-factor test used in the CSAPR Update, which evaluates cost, available emission reductions, and downwind air quality impacts to determine the amount of linked upwind states' emissions that "significantly" contribute to downwind nonattainment or maintenance receptors. In this action, EPA applied the multi-factor test to both EGU and non-EGU source categories and assessed potential emission reductions in all years for which there is a potential remaining interstate ozone transport problem (i.e., through 2025), in order to ensure a full remedy in accordance with the *Wisconsin* decision.

In the proposed rule, EPA identified a control stringency that reflects the optimization of existing selective catalytic reduction (SCR) controls and installation of state-of-the-art NO_X combustion controls at EGUs, represented by a cost of $1,600 per ton of NOx reduced. In this final rule, EPA is determining that optimization of existing selective non-catalytic reduction (SNCR) controls should also be included in EPA's identified EGU control stringency. As discussed in further detail in Section VI, EPA adjusted its representative cost for optimizing existing SNCR controls to $1,800 per ton in response to comments received on the proposed rule, as well as further EPA review of available information. EPA views $1,600 per ton for optimization of existing SCR controls and installation of state-of-the-art NO_X combustion controls and $1,800 per ton for optimization of existing SNCRs as comparable for policy purposes. In addition, other considerations beyond marginal cost and air quality improvement, as outlined in the section VI.D discussion of the multi-factor test, support inclusion of emission reduction potential from optimization of existing SNCR controls in EPA's identified EGU control stringency in this rule.

At the selected control stringency in this final rule, downwind ozone air quality improvements continue to be maximized relative to a representative marginal cost. That is, the ratio of emission reductions to marginal cost and the ratio of ozone improvements to marginal cost are maximized relative to the other control stringency levels evaluated. EPA finds that these cost-effective EGU NO_X reductions will make meaningful and timely improvements in

downwind ozone air quality to address interstate ozone transport for the 2008 ozone NAAQS, as discussed in section VI.D.1 below. Further, this evaluation shows that emission budgets reflecting the optimization of existing SCRs and SNCRs, and installation of state-of-the-art NO_X combustion controls at EGUs do not over-control upwind states' emissions relative to either the downwind air quality problems to which they are linked at step 1 or the 1 percent contribution threshold that triggers further evaluation at step 2 of the 4-step framework.

EPA notes that two of these EGU emission controls (optimization of existing SCR controls and installation of state-of-the-art NO_X combustion controls) were also selected in the CSAPR Update for the 2017 ozone season, and which at that time EPA characterized as only a partial remedy. For this rule, EPA extends its evaluation of the reduction potential from these emission controls to years beyond 2017 in order to assess a full remedy. EPA's updated analysis, as discussed in more detail in section VI, leads the Agency to find that these emission controls can provide additional cost-effective emission reductions for the 2021 through 2024 ozone seasons. While EPA's analysis indicates that the majority of EGUs implemented these emission controls in response to the CSAPR Update, changes in the power sector since the 2017 ozone season and updated air quality and contribution analysis show that there is a demonstrated need to update the emission budgets for these 12 states to incentivize ongoing operation of identified emission controls to fully eliminate significant contribution and interference with maintenance. Likewise, EPA finds that many EGUs are already operating their existing SNCR controls to some extent but that additional cost-effective emission reductions for the 2021 through 2024 ozone seasons are available. Taken together, the emission budgets established in this final rule reflect EPA's identified EGU control stringency of optimization of all existing post-combustion controls (SCRs and SNCRs) by the 2021 ozone season, and the installation of state-of-the-art NO_X combustion controls by the 2022 ozone season.

For non-EGU industry sectors and emissions sources, EPA applied the step 3 multi-factor test to determine whether any emission reductions should be required from non-EGU sources to

address significant contribution under the 2008 ozone NAAQS. EPA acknowledged in the proposed rule that its current datasets with information on emissions, existing controls on emissions sources, emission-reduction potential, and air quality impacts for these sources are not as well developed as the datasets it has for EGUs. Nonetheless, using the best information currently available to the Agency, including some additional analysis conducted between the proposed rule and this final action, EPA is concluding that there are relatively fewer emission reductions available at a cost threshold comparable to the cost threshold selected for EGUs. In EPA's reasoned judgment, the Agency concludes such reductions are estimated to have a much smaller effect on any downwind receptor in the year by which EPA finds such controls could be installed. For these reasons, EPA is finding that limits on ozone season NO_X emissions from non-EGU sources are not required to eliminate significant contribution or interference with maintenance under the 2008 ozone NAAQS (see section VI.D.2).

Based on EPA's analysis at step 3, the Agency is promulgating EGU NO_X ozone season emission budgets developed using a uniform control stringency of optimization of existing SCRs and SNCRs, and installation of state-of-the-art NO_X combustion controls. EPA is determining that with implementation of this control stringency, the 12 states in Table I.A-2 will have fully addressed significant contribution under the good neighbor provision for the 2008 ozone NAAQS. EPA is aligning implementation of emission budgets with relevant attainment dates for the 2008 ozone NAAQS, consistent with CAA requirements and the D.C. Circuit's decision in *Wisconsin v. EPA*.[17] As EPA's final 2008 Ozone NAAQS SIP Requirements Rule[18] established the attainment date of July 20, 2021, for ozone nonattainment areas currently designated as

[17] *See* 938 F.3d 303, 320 (D.C. Cir. 2019) (holding that EPA must align interstate transport compliance deadlines with downwind attainment deadlines unless EPA can demonstrate an impossibility or other necessity).
[18] 80 FR 12264, 12268; 40 CFR 51.1103.

Serious, EPA is establishing emission budgets and implementation of these emission budgets starting with the 2021 ozone season as shown in Table I.B-1.[19]

Table I.B-1 EGU NO_X Ozone Season Emission Budgets (Ozone Season NO_X Tons)*

State	2021 Budget	2022 Budget	2023 Budget	2024 Budget
Illinois	9,102	9,102	8,179	8,059
Indiana	13,051	12,582	12,553	9,564
Kentucky	15,300	14,051	14,051	14,051
Louisiana	14,818	14,818	14,818	14,818
Maryland	1,499	1,266	1,266	1,348
Michigan	12,727	12,290	9,975	9,786
New Jersey	1,253	1,253	1,253	1,253
New York	3,416	3,416	3,421	3,403
Ohio	9,690	9,773	9,773	9,773
Pennsylvania	8,379	8,373	8,373	8,373
Virginia	4,516	3,897	3,980	3,663
West Virginia	13,334	12,884	12,884	12,884
Total	107,085	103,705	100,526	96,975

*Note – The 2022 and beyond budgets incorporate the installation of state-of-the-art NO_X combustion controls, whereas the 2021 budgets do not**.** Additionally, the 2024 emissions budget applies to 2024 and each year thereafter.

EPA further determined which emission reductions are impossible to achieve by the 2021 attainment date and whether any such additional emission reductions should be required beyond that date.[20] *See Wisconsin*, 938 F.3d at 320. EPA estimates that one part of the selected control stringency — installation of state-of-the-art NO_X combustion controls — requires approximately one to six months depending on the unit. Recognizing that the final rule will become effective slightly after the start of the 2021 ozone season, EPA determined it is not possible to install state-

[19] As discussed in section VII.C.4.a, EPA is ensuring that the enhanced control stringency represented by the new budgets will not take effect until the rule's effective date by issuing supplemental allowances for the portion of the 2021 ozone season occurring before the rule's effective date. Those supplemental allowances are not reflected in the 2021 Budget column in Table I.B-1.

[20] As described in detail in sections VI.B and VI.C, some mitigation efforts that require the installation of significant new plant hardware (e.g., combustion control upgrade, selective catalytic reduction, and non-selective catalytic reduction) are not possible by the 2021 attainment date. However, EPA factored some of these measures (i.e., combustion controls) into its quantification of significant contribution starting at the later date of the start of the 2022 ozone season.

of-the-art NO_X combustion controls on a regional scale by the 2021 ozone season. Therefore, the 2021 ozone season emission budgets reflect only the optimization of existing SCR and SNCR controls at the affected EGUs, but the emission budgets for the 2022 ozone season and beyond reflect both the continued optimization of existing SCR and SNCR controls and installation of state-of-the-art NO_X combustion controls. Detailed installation-timing information for this technology is available in section VI.B and the EGU NO_X Mitigation Strategies Final Rule TSD.

As discussed in section VI.D.1, EPA's air quality projections anticipate that with the implementation of the identified control stringency for EGUs, downwind nonattainment and maintenance problems for the 2008 ozone NAAQS will persist through the 2024 ozone season. Therefore, EPA is adjusting emission budgets for upwind states that remain linked to downwind nonattainment and maintenance problems through the 2024 ozone season to incentivize the continued optimization of existing SCR and SNCR controls, and installation of state-of-the-art NO_X combustion controls. The 2024 emission budgets will then continue to apply in each year thereafter.

To apply the fourth step of the 4-step framework (i.e., implementation), EPA is including enforceable measures in the promulgated FIPs to achieve the required emission reductions in each of the 12 states. Specifically, the FIPs require power plants in the 12 states to participate in a new CSAPR NO_X Ozone Season Group 3 Trading Program that largely replicates the existing CSAPR NO_X Ozone Season Group 2 Trading Program with the main differences being the geography and budget stringency. This final rule leaves unchanged the budget stringency of the existing CSAPR NO_X Ozone Season Group 1 and Group 2 trading programs for the states that remain covered by those programs.

EPA is finalizing the proposed feature of the budget-setting process in which budgets are adjusted in 2022, 2023, and 2024 to account for future unit retirements and construction of new units that are known with sufficient certainty as of this final action. As discussed in section VII.C.3.b, in response to comments, EPA has made the methodology for allocating allowances to

existing units in this final rule more consistent with the budget-setting process by eliminating allocations to units following their retirements in instances where the future retirements were scheduled in advance with sufficient certainty to be taken into account in the budget-setting process.

As proposed, to promote compliance flexibility without relaxing the program stringency identified as appropriate to address states' obligations under CAA section 110(a)(2)(D)(i)(I), EPA is creating a limited initial bank of allowances for use in the new Group 3 trading program by converting allowances banked in 2017-2020 under the existing Group 2 trading program at a formula-based conversion ratio. The target bank amount is based on the sum of the states' "variability limits" – that is, the amounts by which emissions from a given state's units can exceed the state's emission budget before incurring a penalty surrender ratio. As discussed in section VII.C.4.b, in response to comments requesting greater certainty, in the final rule EPA has modified the proposed conversion ratio formula so as to yield an expected fixed conversion ratio of 8:1 (i.e., eight Group 2 allowances must be exchanged for each Group 3 allowance). Participation in the conversion process is mandatory for the sources in states covered by the Group 3 trading program and, if the Group 3 sources' accounts collectively do not hold enough Group 2 allowances to exchange for the entire target bank amount, for holders of Group 2 allowances in non-source accounts as well.[21]

As discussed in section VII.C.4.c, the final rule also provides a second opportunity for sources to create an additional limited number of Group 3 allowances through the voluntary conversion of additional Group 2 allowances at an 18:1 conversion ratio (known as a "safety valve"). Any 2017-2020 Group 2 allowances that have not already been exchanged for Group 3 allowances through the process of creating the initial bank may be used to obtain additional Group 3 allowances through the safety valve mechanism. The availability of the starting bank

[21] Compliance accounts of sources in states that continue to be covered by the existing Group 2 trading program will not be included in the conversion process.

and any additional allowances converted using this "safety valve" ensures that compliance with the rule is feasible and addresses any market liquidity concerns raised by commenters.

The remainder of this preamble is organized as follows: section III describes EPA's legal authority for this final action; section IV describes the human health and environmental context, as well as EPA's approach for addressing interstate transport for the 2008 ozone NAAQS; section V describes EPA's assessment of downwind receptors of concern and upwind state ozone contributions to those receptors, including the air quality modeling platform and emission inventories that EPA used; section VI describes EPA's application of the multifactor test at step 3 of the 4-step framework to EGU and non-EGU sources, quantification of upwind state obligations in the form of final EGU NO_X emission budgets, and assessment of overcontrol; section VII details the implementation requirements including key elements of the CSAPR NO_X Ozone Season Group 3 Trading Program and deadlines for compliance; section VIII describes the expected costs, benefits, and other impacts of this final rule; section IX discusses changes to the existing regulatory text; and section X discusses the statutes and executive orders affecting this final rule. Each section includes a summary of the principal comments received with respect to that topic, as well as EPA's responses. The Revised Cross State Air Pollution Update Rule – Response to Comment document (RTC), which includes a compilation of all comments received and EPA's responses, has been included in the docket for this action.

C. *Costs and Benefits*

A summary of the key results of the cost-benefit analysis that was prepared for this final rule is presented in Table I.C-1. Table I.C-1 presents estimates of the present values (PV) and equivalent annualized values (EAV), calculated using discount rates of 3 and 7 percent as directed by OMB's Circular A-4, of the health benefits, climate benefits, compliance costs, and net benefits of the final rule, in 2016 dollars, discounted to 2021. The estimated net benefits are the estimated benefits minus the estimated costs of the final rule.

Table I.C-1. Estimated Health Benefits, Climte Benefits, Compliance Costs, and Net Benefits of the Final Rule, 2021 Through 2040 (Millions 2016$, Discounted to 2021)

		3% Discount Rate	7% Discount Rate
Present Value	Health Benefits[b]	$4,800 and $37,000	$3,200 and $25,000
	Climate Benefits[b]	$4,400	$4,400
	Compliance Costs[c]	$370	$260
	Net Benefits	**$8,800 and $41,000**	**$7,300 and $29,000**
Equivalent Annualized Value			
	Health Benefits	$320 and $2,500	$300 and $2,400
	Climate Benefits	$290	$290
	Compliance Costs	$25	$25
	Net Benefits	**$590 and $2,800**	**$570 and $2,700**

[a] Numbers may not sum due to independent rounding.
[b] The health benefits are associated with several point estimates and are presented at real discount rates of 3 and 7 percent. The two benefits estimates are separated by the word "and" to signify that they are two separate estimates. The estimates do not represent lower- and upper-bound estimates and should not be summed. Climate benefits are based on changes (reductions) in CO_2 emissions and are calculated using four different estimates of the social cost of carbon (SC-CO_2) (model average at 2.5 percent, 3 percent, and 5 percent discount rates; 95th percentile at 3 percent discount rate). For the presentational purposes of this table, we show the climate benefits associated with the average SC-CO_2 at a 3 percent discount rate, but the Agency does not have a single central SC-CO_2 point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC-CO_2 estimates; the additional benefit estimates are presented in Table VIII.5 in Section VIII. As discussed in Chapter 5 of the Regulatory Impact Analysis for the Final Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, are also warranted when discounting intergenerational impacts.
[c] To estimate these annualized costs, EPA uses a conventional and widely accepted approach that applies a capital recovery factor (CRF) multiplier to capital investments and adds that to the annual incremental operating expenses. Annual costs were calculated using a 4.25% real discount rate consistent with the rate used in IPM's objective function for cost-minimization.

As shown in Table I.C-1, the PV of the health benefits of this final rule, discounted at a 3-percent discount rate, is estimated to be about $4,800 million and $37,000 million, with an EAV of about $320 million and $2,500 million. At a 7-percent discount rate, the PV of the health benefits is estimated to be $3,200 million and $25,000 million, with an EAV of about $300 million and $2,400 million. The two health benefits estimates for each discount rate reflect alternative ozone and $PM_{2.5}$ mortality risk estimates. The PV of the climate benefits of this final rule, discounted at a 3-percent rate, is estimated to be about $4,400 million, with an EAV of about $290 million. The PV of the compliance costs, discounted at a 3-percent rate, is estimated

to be about $370 million, with an EAV of about $25 million. At a 7-percent discount rate, the PV of the compliance costs is estimated to be about $260 million, with an EAV of about $25 million.

II. General Information

A. *Does This Action Apply to Me?*

This final rule affects EGUs, and regulates the groups identified in Table II.A-1:

Table II.A-1 — Regulated 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 EPA is now aware are regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your EGU entity is regulated by this action, you should carefully examine the applicability criteria found in 40 CFR 97.1004, as promulgated in this final action. 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. EPA's Legal Authority for the Final Rule

A. Statutory Authority

The statutory authority for this final 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 underpinnings for this action. The most relevant portions of CAA section 110 are subsections 110(a)(1), 110(a)(2) (including 110(a)(2)(D)(i)(I)), 110(c)(1), and 110(k)(6).

CAA 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.[22] The statute directly imposes on states the duty to make these SIP submissions, and the requirement to make the submissions is not conditioned upon EPA taking any action other than promulgating a new or revised NAAQS.[23]

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" or "iSIP" submissions. CAA section 110(a)(1) addresses the timing and general requirements for iSIP submissions, and CAA section 110(a)(2) provides more details concerning the required content of these submissions.[24] It includes a list of specific elements that "[e]ach such plan" submission must address.[25]

CAA section 110(c)(1) requires the Administrator to promulgate a FIP at any time within two 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. This obligation applies unless the state corrects the deficiency through a SIP revision that the Administrator approves before the FIP is promulgated.[26]

CAA section 110(a)(2)(D)(i)(I), also known as the "good neighbor" provision, provides the primary basis for this final action.[27] It requires that each state SIP include provisions sufficient to "prohibit[ ], consistent with the provisions of this subchapter, any source or other type of emissions activity within the State from emitting any air pollutant in amounts which

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[22] 42 U.S.C. 7410(a)(1).
[23] *See EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489, 509-10 (2014).
[24] 42 U.S.C. 7410(a)(2).
[25] 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.,* Memorandum from Stephen D. Page on Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2) (Sept. 13, 2013).
[26] 42 U.S.C. 7410(c)(1).
[27] 42 U.S.C. 7410(a)(2)(D)(i)(I).

will—(I) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any [NAAQS]."[28] EPA often refers to the emission reduction requirements under this provision as "good neighbor obligations" and submissions addressing these requirements as "good neighbor SIPs."

Once EPA promulgates a NAAQS, EPA must designate areas as being in "attainment" or "nonattainment" of the NAAQS, or "unclassifiable." CAA section 107(d).[29] For ozone, nonattainment is further split into five classifications based on the severity of the violation—Marginal, Moderate, Serious, Severe, or Extreme. Higher classifications provide states with progressively more time to attain while imposing progressively more stringent control requirements. *See* CAA sections 181, 182.[30] In general, states with nonattainment areas classified as Moderate or higher must submit plans to EPA to bring these areas into attainment according to the statutory schedule. CAA section 182.[31] If an area fails to attain the NAAQS by the attainment date associated with its classification, it is "bumped up" to the next classification. CAA section 181(b).[32]

Section 301(a)(1) of the CAA also gives the Administrator the general authority to prescribe such regulations as are necessary to carry out functions under the Act.[33] Pursuant to this section, EPA has authority to clarify the applicability of CAA requirements and undertake other rulemaking action as necessary to implement CAA requirements. In this final rule, among other things, EPA is clarifying the applicability of CAA section 110(a)(2)(D)(i)(I) with respect to the 2008 ozone NAAQS. In particular, EPA is using its authority under CAA sections 110 and 301 to issue new or amended FIPs to revise NO_X ozone season emission budgets for 12 states to eliminate their significant contribution to nonattainment or interference with maintenance of the

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[28] *Id*.
[29] 42 U.S.C. 7407(d).
[30] 42 U.S.C. 7511, 7511a.
[31] 42 U.S.C. 7511a.
[32] 42 U.S.C. 7511(b).
[33] 42 U.S.C. 7601(a)(1).

2008 ozone NAAQS in another state, and EPA is making findings as to 9 additional states that the CSAPR Update FIPs (or SIP revisions later approved to replace those FIPs) are a complete remedy and need no further revision.[34] In addition, EPA is addressing its obligation to respond to the D.C. Circuit's remand of the CSAPR Update in *Wisconsin v. EPA*, 938 F.3d 303, with respect to the 21 states for which the FIPs created by that rule were found to be only a partial remedy. This final rule wholly resolves the Agency's obligations on remand. Finally, CAA section 301[35] affords the Agency any additional authority that may be needed in order to make certain other changes to its regulations under 40 CFR parts 51, 52, 78, and 97, in order to effectuate the purposes of the Act. Such changes are discussed in section VII of this preamble.

B. *Prior Good Neighbor Rulemakings Addressing Regional Ozone*

EPA has issued several rules interpreting and clarifying the requirements of CAA section 110(a)(2)(D)(i)(I) with respect to the regional transport of ozone for states in the eastern United States. These rules, and the associated court decisions addressing these rules, summarized here, provide important direction regarding the requirements of CAA 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.[36] The rule required 22 states and the District of Columbia to amend their SIPs to reduce NO_X emissions that contribute to ozone nonattainment in downwind states. EPA set ozone season NO_X budgets for each state, and the states were given the option to participate in a regional trading program, known as the NO_X Budget Trading Program.[37] The

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[34] 42 U.S.C. 7410, 7601.

[35] 42 U.S.C. 7601.

[36] 63 FR 57356 (Oct. 27, 1998). As originally promulgated, the NO_X SIP Call also addressed good neighbor obligations under the 1997 8-hour ozone NAAQS, but EPA subsequently stayed and later rescinded the rule's provisions with respect to that standard. *See* 84 FR 8422 (March 8, 2019).

[37] "Allowance Trading," sometimes referred to as "cap and trade," is an approach to reducing pollution that has been used successfully to protect human health and the environment. Trading programs have two key components: Emissions budgets (the sum of which provide a cap on emissions), and tradable allowances equal to the budgets that authorize allowance holders to emit a specific quantity (e.g., one ton) of the pollutant. This approach ensures that the environmental goal is met while the tradable allowances provide flexibility for individual participants to

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

EPA's next rule addressing the good neighbor provision, the Clean Air Interstate Rule (CAIR), was promulgated in 2005 and addressed both the 1997 fine particulate matter ($PM_{2.5}$) NAAQS and 1997 ozone NAAQS.[38] CAIR required SIP revisions in 28 states and the District of Columbia to reduce emissions of sulfur dioxide (SO_2) and/or NO_X—important precursors of regionally transported $PM_{2.5}$ (SO_2 and annual NO_X) and ozone (summer-time NO_X). As in the NO_X SIP Call, states were given the option to participate in regional trading programs to achieve the reductions. When EPA promulgated the final CAIR in 2005, EPA also issued findings that states nationwide had failed to submit SIPs to address the requirements of CAA section 110(a)(2)(D)(i) with respect to the 1997 $PM_{2.5}$ and 1997 ozone NAAQS.[39] On March 15, 2006, EPA promulgated FIPs to implement the emission reductions required by CAIR.[40] CAIR was remanded to EPA by the D.C. Circuit in *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008), *modified on reh'g*, 550 F.3d 1176. For more information on the legal issues underlying CAIR and the D.C. Circuit's holding in *North Carolina*, refer to the preamble of the CSAPR rule.[41]

In 2011, EPA promulgated the CSAPR to address the issues raised by the remand of CAIR. The CSAPR addressed the two NAAQS at issue in CAIR and additionally addressed the good neighbor provision for the 2006 $PM_{2.5}$ NAAQS.[42] The CSAPR required 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

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establish and follow their own compliance path. Because allowances can be bought and sold in an allowance market, these programs are often referred to as "market-based."

[38] 70 FR 25162 (May 12, 2005).

[39] 70 FR 21147 (April 25, 2005).

[40] 71 FR 25328 (April 28, 2006).

[41] 76 FR 48208, 48217 (Aug. 8, 2011).

[42] 76 FR 48208.

air quality standards.[43] To align implementation with the applicable attainment deadlines, EPA promulgated FIPs for each of the 28 states covered by the CSAPR. The FIPs require EGUs in the covered states to participate in regional trading programs to achieve the necessary emission reductions. Each state can submit a good neighbor SIP at any time that, if approved by EPA, would replace the CSAPR FIP for that state.

The CSAPR was the subject of an adverse decision by the D.C. Circuit in August 2012.[44] However, this decision was reversed in April 2014 by the Supreme Court, which largely upheld the rule, including EPA's approach to addressing interstate transport in the CSAPR. *EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489 (2014) (*EME Homer City I*). The rule was remanded to the D.C. Circuit to consider claims not addressed by the Supreme Court. *Id*. In July 2015 the D.C. Circuit generally affirmed EPA's interpretation of various statutory provisions and EPA's technical decisions. *EME Homer City Generation, L.P. v. EPA*, 795 F.3d 118 (2015) (*EME Homer City II*). However, the court remanded the rule without vacatur for reconsideration of EPA's emissions budgets for certain states, which the court found may have over-controlled those states' emissions with respect to the downwind air quality problems to which the states were linked. *Id*. at 129-30, 138. For more information on the legal issues associated with the CSAPR and the Supreme Court's and D.C. Circuit's decisions in the *EME Homer City* litigation, refer to the preamble of the CSAPR Update.[45]

In 2016, EPA promulgated the CSAPR Update to address interstate transport of ozone pollution with respect to the 2008 ozone NAAQS.[46] The final rule updated the CSAPR ozone

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[43]The CSAPR was revised by several rulemakings after its initial promulgation in order to revise certain states' budgets and to promulgate FIPs for five additional states addressing the good neighbor obligation for the 1997 ozone NAAQS. *See* 76 FR 80760 (Dec. 27, 2011); 77 FR 10324 (Feb. 21, 2012); 77 FR 34830 (June 12, 2012).

[44] 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 the CSAPR. EPA sought review with the D.C. Circuit *en banc* and the D.C. Circuit declined to consider EPA's appeal *en banc*. *EME Homer City Generation, L.P. v. EPA*, No. 11–1302 (D.C. Cir. January 24, 2013), ECF No. 1417012 (denying EPA's motion for rehearing en banc).

[45] 81 FR 74504, 74511 (Oct. 26, 2016).

[46] 81 FR 74504.

season NO_X emissions budgets for 22 states to achieve cost-effective and immediately feasible NO_X emission reductions from EGUs within those states.[47] EPA aligned the analysis and implementation of the CSAPR Update with the 2017 ozone season in order to assist downwind states with timely attainment of the 2008 ozone NAAQS.[48] The CSAPR Update implemented the budgets through FIPs requiring sources to participate in a revised CSAPR NO_X ozone season trading program beginning with the 2017 ozone season. As under the CSAPR, each state could submit a good neighbor SIP at any time that, if approved by EPA, would replace the CSAPR Update FIP for that state. The final CSAPR Update also addressed the remand by the D.C. Circuit of certain states' CSAPR phase 2 ozone season NO_X emissions budgets in *EME Homer City II*. Further details regarding the CSAPR Update are discussed in sections IV.C.1.a and IV.C.1.b below.

In December 2018, EPA promulgated the CSAPR "Close-Out," which determined that no further enforceable reductions in emissions of NO_X were required with respect to the 2008 ozone NAAQS for 20 of the 22 eastern states covered by the CSAPR Update, and reflected that determination in revisions to the existing state-specific sections of the CSAPR Update regulations for those states.[49] Further details on the CSAPR Close-Out are discussed in section IV.C.1.c below.

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[47] One state, Kansas, was made newly subject to the CSAPR ozone season NO_X requirement by the CSAPR Update. All other CSAPR Update states were already subject to ozone season NO_X requirements under the CSAPR.

[48] 81 FR 74516. EPA's final 2008 Ozone NAAQS SIP Requirements Rule, 80 FR 12264, 12268 (Mar. 6, 2015), revised the attainment deadline for ozone nonattainment areas designated as Moderate to July 20, 2018. *See* 40 CFR 51.1103. In order to demonstrate attainment by this deadline, states were required to rely on design values calculated using ozone season data from 2015 through 2017, since the July 20, 2018, deadline did not afford enough time for measured data of the full 2018 ozone season.

[49] 83 FR 65878, 65882 (Dec. 21, 2018). After promulgating the CSAPR Update and before promulgating the CSAPR Close-Out, EPA approved a SIP from Kentucky resolving the Commonwealth's good neighbor obligations for the 2008 ozone NAAQS. 83 FR 33730 (July 17, 2018). In this action, EPA is making an error correction under CAA section 110(k)(6) to convert this approval to a disapproval, because the Kentucky approval relied on the same analysis which the D.C. Circuit determined to be unlawful in the CSAPR Close-Out. Our action with respect to Kentucky is discussed in section IV.C.2.b. below.

The CSAPR Update and the CSAPR Close-Out were both subject to legal challenges in the D.C. Circuit. *Wisconsin v. EPA*, 938 F.3d 303 (D.C. Cir. 2019) (*Wisconsin*); *New York v. EPA*, 781 Fed. App'x 4 (D.C. Cir. 2019) (*New York*). As discussed in greater detail in section IV.C.1.d below, in September 2019, the D.C. Circuit upheld the CSAPR Update in virtually all respects, but remanded the rule because it was partial in nature and did not fully eliminate upwind states' significant contribution to nonattainment or interference with maintenance of the 2008 ozone NAAQS by "the relevant downwind attainment deadlines" in the CAA. *Wisconsin*, 938 F.3d at 313-15. In October 2019, the D.C. Circuit vacated the CSAPR Close-Out on the same grounds that it remanded the CSAPR Update in *Wisconsin*, specifically that the Close-Out rule did not address good neighbor obligations by "the next applicable attainment date" of downwind states. *New York*, 781 Fed. App'x at 7.

IV. Air Quality Issues Addressed and Overall Approach for the Final Rule

A. The Interstate Ozone Transport Challenge

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.

1. 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 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 ppb as an 8-hour level.[50] 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 as a truncated value (i.e., digits to right of decimal removed).[51] In general, areas that exceed the ozone standard are designated as nonattainment areas, pursuant to the designations process under CAA section 107 and are subject to heightened planning requirements depending on the degree of severity of their nonattainment classification, *see* CAA sections 181, 182.

2. Ozone Transport

Studies have established that ozone formation, atmospheric residence, and transport occur on a regional scale (i.e., thousands of kilometers) over much of the eastern U.S.[52] While substantial progress has been made in reducing ozone in many areas, interstate ozone transport is still an important component of peak ozone concentrations during the summer ozone season.

EPA has previously concluded in the NO_X SIP Call, CAIR, and the 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 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). 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 for ozone transport. This analysis is in the docket for this final rule and can be also found at EPA's website at: https://www.epa.gov/ttnecas1/docs/20151001ria.pdf

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[50] 73 FR 16436 (Mar. 27, 2008).
[51] 40 CFR part 50, Appendix P to part 50.
[52] Bergin, M.S. et al. (2007) Regional air quality: Local and interstate impacts of NO_X and SO_2 emissions on ozone and fine particulate matter in the eastern United States. Environmental Sci & Tech. 41: 4677–4689.

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. For example, a study that evaluates the effectiveness on ozone concentrations of EGU NO_X reductions achieved under the NO_X Budget Trading Program (i.e., the NO_X SIP Call) shows that regulating NO_X emissions in that program was highly effective in reducing both ozone and dry-NO_3 concentrations during the ozone 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.[53]

Previous regional ozone transport efforts, including the NO_X SIP Call, CAIR, and the CSAPR, required ozone season NO_X reductions from EGUs to address interstate transport of ozone. EPA took comment on regulating EGU NO_X emissions to address interstate ozone transport in the notice-and-comment process for these rulemakings. EPA received some comments suggesting it modify its pollutant focus to either include VOCs in addition to NOx, or apply a more granular time scale. However, EPA did not modify its proposed approach in this final rule. These comments, as well as EPA's responses, are addressed in section VI.A and VII.B.

As described in section VI, EPA's analysis finds that the power sector continues to be capable of making NO_X reductions at reasonable cost that reduce interstate transport with respect to ground-level ozone. EGU NO_X emission reductions can be made in the near-term under this final rule by fully operating existing EGU NO_X post-combustion controls (i.e., SCRs and SNCRs) – 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,

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[53] Butler, et al., "Response of Ozone and Nitrate to Stationary Source Reductions in the Eastern USA". *Atmospheric Environment,* 2011.

additional assessment reveals that these available EGU NO_X reductions would make meaningful and timely improvements in ozone air quality.

EPA also observes that significant emission reduction potential from EGUs is available through post-combustion control retrofits (e.g., new SCRs and new SNCRs). These controls reduce emissions and can have a meaningful air quality impact, but, in contrast to the controls discussed above, they are only available on a longer time frame (reflecting the time required to develop, construct, and install the technology) that exceeds the expected downwind nonattainment and maintenance problems for the 2008 ozone NAAQS and are estimated to have a higher cost.

3. 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* EPA's October 2020 Regulatory Impact Analysis for the Proposed Revised Cross-State Air Pollution Rule (CSAPR) Update for the 2008 Ozone NAAQS (EPA-452/P-20-003), in the docket for this rule and available on EPA's website at: https://www.epa.gov/sites/production/files/2020-10/documents/revised_csapr_update_ria_proposal.pdf , for more information on the human health and welfare and ecosystem effects associated with ambient ozone exposure.

B. Relationship Between this Regulatory Action and the 2015 Ozone NAAQS

On October 1, 2015, EPA strengthened the ground-level ozone NAAQS to 70 ppb on an eight-hour averaging time.[54] While reductions achieved by this rule may have the effect of aiding

[54] 80 FR 65291 (Oct. 26, 2015). On December 20, 2020, EPA published its decision, based on the air quality criteria, to retain the existing 8-hour NAAQS for ozone. *See* https://www.epa.gov/ground-level-ozone-pollution/ozone-national-ambient-air-quality-standards-naaqs.

in attainment and maintenance of the 2015 standard, this action is taken solely with respect to EPA's authority to address remaining CAA good neighbor obligations under the 2008 ozone NAAQS. EPA and states are working outside of this final action to address the CAA good neighbor provision for the 2015 ozone NAAQS, including consideration of any necessary control requirements for EGU and non-EGU sources.

EPA received several comments regarding the relationship of this rule to the 2015 ozone NAAQS and the schedule for implementation of good neighbor obligations related to that NAAQS. These comments are out of the scope of this action, which considers states' obligations under 2008 ozone NAAQS in response to the *Wisconsin* remand and the *New York* vacatur. *Wisconsin v. EPA*, 938 F.3d 303 (D.C. Cir. 2019). *New York v. EPA*, 781 F. App'x 4 (D.C. Cir. 2019). This action does not address any state's obligations under the 2015 ozone NAAQS. Nonetheless, the emission reductions and associated improvement in ozone levels achieved by this action are beneficial toward reducing ozone for purposes of the 2015 ozone NAAQS and its associated attainment planning and good neighbor requirements. In some cases, the reductions necessary to address significant contribution or interference with maintenance at receptors identified in this action for purposes of the 2008 ozone NAAQS will have the effect of incidentally improving ozone levels at potential receptors under the 2015 ozone NAAQS.

C. Approach to Address the Remanded Transport Obligations for the 2008 Ozone NAAQS

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

EPA is taking this action to address the remand of the CSAPR Update in *Wisconsin v. EPA*, 938 F.3d 303 (D.C. Cir. 2019). This section will discuss the key, relevant aspects of the CSAPR Update, the related CSAPR Close-Out, and the D.C. Circuit's decisions in *Wisconsin* and *New York v. EPA*, 781 Fed. App'x 4 (D.C. Cir. 2019) (the latter of which vacated the Close-out Rule based on the same reasoning as the *Wisconsin* decision remanding the Update). The basis for EPA's authority under CAA section 110(c) (42 U.S.C. 7410(c)) to promulgate good

neighbor FIPs for the 21 states subject to this action on remand is discussed in sections III and IV.C.2.

a. The CSAPR Update

On October 26, 2016, the CSAPR Update was published in the *Federal Register*. 81 FR 74504. The purpose of the CSAPR Update was to address the good neighbor provision for the 2008 ozone NAAQS, as well as address the remanded CSAPR obligations for the 1997 ozone NAAQS. The CSAPR Update required EGUs in 22 states to reduce ozone season NO_X emissions that significantly contribute to other states' nonattainment or interfere with other states' abilities to maintain the 2008 ozone NAAQS.

To establish and implement the CSAPR Update emissions budgets, EPA followed the same 4-step analytic process that it used in the CSAPR, an approach which reflects the evolution of the Agency's prior regional interstate transport rulemakings related to ozone NAAQS. The 4-step framework is described in more detail in sections IV.C.3 and VI.A.

In the CSAPR Update, to evaluate the scope of the interstate ozone transport problem at step 1, EPA identified downwind areas that were expected to have problems attaining and maintaining the 2008 ozone NAAQS using modeling that projected air quality to a future compliance year. *See* 81 FR 74517. EPA aligned the analysis and implementation of the CSAPR Update with the 2017 ozone season (May 1 – September 30) in order to assist downwind states with attainment of the 2008 ozone NAAQS by the 2018 Moderate area attainment date. *Id.* at 74516. (EPA's final 2008 Ozone NAAQS SIP Requirements Rule established the attainment deadline of July 20, 2018, for ozone nonattainment areas classified as Moderate.[55]) Because the attainment date fell during the 2018 ozone season, the 2017 ozone season was the last full season from which data could be used to determine attainment of the NAAQS by that date.

[55] *See* 80 FR 12264, 12268 (Mar. 6, 2015); 40 CFR 51.1103.

At step 2, EPA identified upwind states that collectively contribute to these identified downwind areas. In the CSAPR Update, EPA used a screening threshold of 1 percent of the NAAQS to identify states "linked" to downwind ozone problems sufficient for further evaluation for significant contribution to nonattainment or interference with maintenance of the NAAQS under the good neighbor provision. 81 FR 74518. This same threshold for analysis was used in the CSAPR as to the 1997 ozone NAAQS. *See* 76 FR at 48237-38.

At step 3, EPA quantified emissions from upwind states that would significantly contribute to nonattainment or interfere with maintenance by first evaluating various levels of uniform NO_X control stringency, each represented by an estimated representative marginal cost per ton of NO_X reduced. EPA then applied the same multi-factor test that was used in the CSAPR to evaluate cost, available emission reductions, and downwind air quality impacts to determine the appropriate level of uniform NO_X control stringency that addressed the impacts of interstate transport on downwind nonattainment or maintenance receptors. EPA used this multi-factor assessment to gauge the extent to which emission reductions could be implemented in the future compliance year (*i.e.*, 2017) and to evaluate the potential for over- and under-control of upwind state emissions.

Within the multi-factor test, EPA identified a "knee in the curve," i.e., a point at which the cost-effectiveness of the emission reductions was maximized, so named for the discernable turning point observable in a multi-factor (i.e., multi-variable) curve. *See* 81 FR 74550. EPA concluded that this was at the point where emissions budgets reflected a uniform NO_X control stringency represented by an estimated marginal cost of $1,400 per ton (2011$) of NO_X reduced. This cost threshold in turn represented a control strategy of installing or upgrading combustion controls and optimizing existing SCR controls. In light of this multi-factor test, EPA determined this level of stringency in emissions budgets represented the level at which incremental EGU NO_X reduction potential and corresponding downwind ozone air quality improvements were maximized—relative to other control stringencies evaluated—with respect to marginal cost. That

is, the ratio of emission reductions to marginal cost and the ratio of ozone improvements to marginal cost were maximized relative to the other levels of control stringency evaluated. EPA found that feasible and cost-effective EGU NO_X reductions were available to make meaningful and timely improvements in downwind ozone air quality to address interstate ozone transport for the 2008 ozone NAAQS for the 2017 ozone season. *Id*. at 74508. Further, the Agency's evaluation showed that emissions budgets reflecting the $1,400 per ton cost threshold did not over-control upwind states' emissions relative to either the downwind air quality problems to which they were linked or the 1 percent contribution threshold in step 2 that triggered their further evaluation in step 3. *Id*. at 74551–52.

At step 4, EPA finalized EGU ozone season NO_X emissions budgets developed using uniform control stringency represented by $1,400 per ton. These budgets represented emissions remaining in each state after elimination of the amounts of emissions that EPA identified would significantly contribute to nonattainment or interfere with maintenance of the 2008 ozone NAAQS in downwind states. EPA promulgated FIPs requiring the covered power plants in the 22 covered states to participate in the CSAPR NO_X Ozone Season Group 2 Trading Program starting in 2017.[56]

b. Partial Nature of the CSAPR Update

At the time it promulgated the CSAPR Update, EPA considered the FIPs to be "partial" and that the rule "may not be sufficient to fully address these states' good neighbor obligations" for the 2008 ozone NAAQS for 21 of the 22 states included in that rule. 81 FR 74508, 74521 (Oct. 26, 2016). Based on information available at the time of the rule's promulgation, EPA was unable to conclude that the CSAPR Update fully addressed most of the covered states' good

[56] The NO_X ozone season trading program created under the CSAPR was renamed the CSAPR NO_X Ozone Season Group 1 Trading Program and now applies only to sources in Georgia. In the CSAPR Update, EPA found that Georgia did not contribute to interstate transport with respect to the 2008 ozone NAAQS, but the state has an ongoing ozone season NO_X requirement under the CSAPR with respect to the 1997 ozone NAAQS.

neighbor obligations for the 2008 ozone NAAQS. *Id*. at 74521. Information available at the time indicated that, even with the CSAPR Update implementation, several downwind receptors were expected to continue having problems attaining and maintaining this NAAQS and that emissions from upwind states were expected to continue to contribute greater than or equal to 1 percent of the NAAQS to these areas during the 2017 ozone season. *Id*. at 74551–52. Further, EPA could not conclude at that time whether additional EGU and non-EGU reductions implemented on a longer timeframe than 2017 would be needed to address states' good neighbor obligations for this NAAQS.

Additionally, EPA determined it was not feasible to complete an emissions control analysis that may otherwise have been necessary to evaluate full elimination of each state's significant contribution to nonattainment or interference with maintenance and also ensure that emission reductions already quantified in the rule would be achieved by 2017. *Id*.at 74522. EPA was unable to fully consider both non-EGU ozone season NO_X reductions and further EGU reductions that may have been achievable after 2017. *Id*. at 74521. *See* section IV.D.3 below.

Thus, EPA also could not make an emission reduction-based conclusion that the CSAPR Update would fully resolve states' good neighbor obligations with respect to the 2008 ozone NAAQS because the reductions evaluated and required by the CSAPR Update were limited in scope (both by technology and sector). As a result of the remaining air quality problems and the limitations on EPA's analysis, for all but one of the 22 affected states, EPA did not determine in the CSAPR Update that the rule fully addressed those states' downwind air quality impacts under the good neighbor provision for the 2008 ozone NAAQS. *Id*. at 74521. For one state, Tennessee, EPA determined in the final CSAPR Update that Tennessee's emissions budget fully eliminated the state's significant contribution to downwind nonattainment and interference with maintenance of the 2008 ozone NAAQS because the downwind air quality problems to which the state was linked were projected to be resolved with implementation of the CSAPR Update. *Id*. at 74552.

c. The CSAPR Close-Out

Following implementation of the CSAPR Update and the approval of Kentucky's SIP (under a court-ordered deadline),[57] on December 21, 2018, EPA issued the CSAPR "Close-Out" to address any good neighbor obligations that remained for the 2008 ozone NAAQS for the 20 remaining states in the CSAPR Update region. *See* 83 FR 65878 (Dec. 21, 2018). The CSAPR Close-Out made a determination that, based on additional information and analysis, the CSAPR Update fully addressed the remaining 20 affected states' good neighbor obligations for the 2008 ozone NAAQS. In particular, EPA determined that 2023 was an appropriate future analytic year considering relevant attainment dates and the time EPA estimated to be necessary to implement new NO_X control technologies at EGUs. Based on EPA's analysis of projected air quality in that year, EPA determined that, for the purposes of addressing good neighbor obligations for the 2008 ozone NAAQS, there would be no remaining nonattainment or maintenance receptors in the eastern U.S. As a result of this determination, EPA found that, with continued implementation of the CSAPR Update, these 20 states would no longer contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to the 2008 ozone NAAQS. *Id*.

d. D.C. Circuit Decisions in Wisconsin v. EPA and New York v. EPA.

The CSAPR Update was subject to petitions for judicial review, and the D.C. Circuit issued its opinion in *Wisconsin v. EPA* on September 13, 2019. 938 F.3d 303. The D.C. Circuit upheld the CSAPR Update in all respects save one: the court concluded that the CSAPR Update was inconsistent with the CAA to the extent that it was partial in nature and did not fully eliminate upwind states' significant contribution to nonattainment or interference with maintenance of the 2008 ozone NAAQS by the downwind states' 2018 Moderate attainment date. *Id*. at 313.

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[57] *See* 83 FR 33730 (July 17, 2018) (approval of Kentucky's SIP for the 2008 ozone NAAQS). *See* section IV.C.2.b. for discussion of the final action regarding Kentucky in this notice.

The court identified three bases for this holding: (1) the D.C. Circuit's prior opinion in *North Carolina v. EPA*, 531 F.3d 896 (2008), which held, in the context of CAIR, that the good neighbor provision requires states to eliminate significant contribution "consistent with the provisions" of Title I of the CAA, including the attainment dates applicable in downwind areas, 938 F.3d at 314 (citing 531 F.3d at 912); (2) the unreasonableness of EPA's interpretation of the phrase "consistent with the provisions [of Title I]" in the good neighbor provision as allowing for variation from the attainment schedule in CAA section 181 because it would enable significant contribution from upwind states to continue beyond that statutory timeframe, 938 F.3d at 315-18; and (3) the court's finding that the practical obstacles EPA identified regarding why it needed more time to implement a full remedy did not rise to the level of an "impossibility," *id.* at 318-20. With respect to the third basis, the court also found EPA must make a higher showing of uncertainty regarding non-EGU point-source NO_X mitigation potential before declining to regulate such sources. *Id.* at 318-20.

However, the court identified flexibilities that EPA retains in administering the good neighbor provision, acknowledging that EPA has latitude in defining which upwind contribution "amounts" count as significant and thus must be abated, permitting EPA to consider, among other things, the magnitude of upwind states' contributions and the cost associated with eliminating them. 938 F.3d at 320. The court further noted that, in certain circumstances, EPA can grant extensions of the attainment deadlines under the Act; for instance, the court cited CAA section 181(a)(5), which allows EPA to grant one-year extensions from attainment dates under certain circumstances. *Id.* Finally, the court noted that EPA can attempt to show "impossibility." *Id.* The court also recognized that the statutory command that compliance with the good neighbor provision must be achieved consistent with Title I might be read, upon a sufficient showing of necessity, to allow some deviation from downwind deadlines, so long as it is rooted in Title I's framework and provides a sufficient level of protection to downwind States. *Id.*

The court in *Wisconsin* remanded but did not vacate the CSAPR Update, finding that vacatur of the rule could cause harm to public health and the environment or disrupt the trading program EPA had established and that the obligations imposed by the rule may be appropriate and sustained on remand. *Id.* at 336. The court also rejected petitioners' request to place EPA on a six-month schedule to address the remand, noting the availability of "mandamus" relief before the D.C. Circuit should EPA fail to "modify the rule in a manner consistent with our opinion." *Id.* at 336-37.

On October 1, 2019, in a judgment order, the D.C. Circuit vacated the CSAPR Close-Out on the same grounds that it remanded the Update in *Wisconsin*. *New York v. EPA*, 781 Fed. App'x 4 (D.C. Cir. 2019). Because the Close-Out analyzed the year 2023 rather than 2021 ("the next applicable attainment date") and failed to demonstrate that it was impossible to address significant contribution by the 2021 attainment date, the court found the rule ran afoul of the *Wisconsin* holding. *Id.* at 7. "As the EPA acknowledges, the Close-Out Rule 'relied upon the same statutory interpretation of the Good Neighbor Provision' that we rejected in *Wisconsin*. Thus, the Agency's defense of the Close-Out Rule in these cases is foreclosed." *Id.* at 6-7 (internal citation omitted). The court left open the possibility that the flexibilities identified in *Wisconsin*, 938 F.3d at 320, and outlined above, may be available to EPA on remand. *Id*.

Following *Wisconsin* and *New York*, EPA on remand must address good neighbor obligations for the 21 states within the CSAPR Update region for which the Update was only a partial remedy. As explained in the following section, EPA already retains FIP authority as to 20 of these states. In addition, EPA is taking action pursuant to CAA section 110(k)(6) (42 U.S.C. 7410(k)(6)) to find that Kentucky's SIP was approved in error and is thus promulgating a FIP for Kentucky consistent with the obligations for the other remaining CSAPR Update region states.

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

On March 12, 2008, EPA promulgated a revision to the ozone NAAQS, lowering both the primary and secondary standards to 75 ppb. *See* National Ambient Air Quality Standards for

Ozone, Final Rule, 73 FR 16436 (March 27, 2008). Specifically, the standards require that an area may not exceed 0.075 parts per million (75 ppb) using the 3-year average of the fourth highest 24-hour maximum 8-hour rolling average ozone concentration. These revisions of the NAAQS, in turn, triggered a 3-year deadline for states to submit SIP revisions addressing infrastructure requirements under CAA sections 110(a)(1) and 110(a)(2), including the good neighbor provision. Several events affected the timely application of the good neighbor provision for the 2008 ozone NAAQS, including reconsideration of the 2008 ozone NAAQS and legal developments pertaining to the CSAPR, which created uncertainty surrounding EPA's statutory interpretation and implementation of the good neighbor provision.[58] Notwithstanding these events, EPA ultimately affirmed that states' good neighbor SIPs were due on March 12, 2011.

a. FIP Authority for the CSAPR Update States

EPA subsequently took several actions that triggered EPA's obligation under CAA section 110(c) to promulgate FIPs addressing the good neighbor provision for several states.[59] First, on July 13, 2015, 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 (effective August 12, 2015). This finding triggered a two-year deadline for EPA to issue FIPs to address the good neighbor provision for these states by August 12, 2017. The CSAPR Update finalized FIPs for 13 of these states (Alabama, Arkansas, Illinois, Iowa, Kansas, Michigan, Mississippi, Missouri, Oklahoma, Pennsylvania, Tennessee, Virginia, and West Virginia), requiring their participation in a NO_X trading program. EPA also determined in the CSAPR Update that the Agency had no further FIP obligation as to nine additional states identified in the finding of failure to submit

[58] These events are described in detail in section IV.A.2 of the CSAPR Update. *See* 81 FR 74515.

[59] This section of the preamble focuses on SIP and FIP actions for those states addressed in the CSAPR Update. EPA has also acted on SIPs for other states not mentioned in this action. The memorandum, "Proposed Action, Status of 110(a)(2)(D)(i)(I) SIPs for the 2008 Ozone NAAQS," more fully describes the good neighbor SIP status for the 2008 ozone NAAQS and is available in the docket for this rule.

because these states did not contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to the 2008 ozone NAAQS. *See* 81 FR 74506.[60, 61] On June 15, 2016, and July 20, 2016, EPA published additional rules finding that Maryland and New Jersey, respectively, also failed to submit transport SIPs for the 2008 ozone NAAQS. *See* 81 FR 38963 (June 15, 2016) (New Jersey, effective July 15, 2016); 81 FR 47040 (July 20, 2016) (Maryland, effective August 19, 2016). The finding actions triggered two-year deadlines for EPA to issue FIPs to address the good neighbor provision for Maryland by August 19, 2018, and for New Jersey by July 15, 2018. The CSAPR Update also finalized FIPs for these two states.

In addition to these findings, EPA finalized disapproval or partial disapproval actions for good neighbor SIPs submitted by Indiana, Kentucky, Louisiana, New York, Ohio, Texas, and Wisconsin.[62] These disapprovals triggered EPA's obligation to promulgate FIPs to implement the requirements of the good neighbor provision for those states within two years of the effective date of each disapproval or, in the case of Kentucky, within two years of the issuance of the judgment in a subsequent Supreme Court decision.[63] EPA promulgated FIPs in the CSAPR Update for each of these states.

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[60] The nine states were Florida, Georgia, Maine, Massachusetts, Minnesota, New Hampshire, North Carolina, South Carolina, and Vermont. These determinations were not challenged in *Wisconsin*, and EPA is not reopening these determinations in this rule.

[61] The two remaining states addressed in the findings of failure to submit (California and New Mexico) were not part of the CSAPR Update or the CSAPR Close-Out analysis and are not addressed in this rule.

[62] *See* the following actions: Indiana (81 FR 38957, June 15, 2016); Kentucky (78 FR 14681, March 7, 2013); Louisiana (81 FR 53308, August 12, 2016); New York (81 FR 58849, August 26, 2016); Ohio (81 FR 38957, June 15, 2016); Texas (81 FR 53284, August 12, 2016); and Wisconsin (81 FR 53309, August 12, 2016).

[63] In the 2013 disapproval action for Kentucky, EPA stated that it had no mandatory duty to issue a FIP because of the D.C. Circuit's holding in *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7 (D.C. Cir. 2012), that EPA cannot impose good neighbor FIPs without first quantifying states' obligations. *See* 78 FR 14681. In 2014, the Supreme Court reversed the D.C. Circuit's holding. *EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489, 509-10 (2014). In light of the Supreme Court's decision, on review of our 2013 disapproval action for Kentucky in the Sixth Circuit, EPA requested, and the court granted, a vacatur and remand of the portion of EPA's final action that determined that a FIP obligation was not triggered. *See* Order, *Sierra Club v.*

As discussed in more detail above in section IV.C.1, in issuing the CSAPR Update, EPA could not determine that it had entirely addressed EPA's outstanding CAA obligations to implement the good neighbor provision with respect to the 2008 ozone NAAQS for 21 of 22 states covered by that rule. Accordingly, the CSAPR Update did not fully satisfy EPA's obligation under CAA section 110(c) to address the good neighbor provision requirements for those states by approving SIPs, issuing FIPs, or some combination of those two actions. EPA found that the CSAPR Update FIPs fully addressed the good neighbor provision for the 2008 ozone NAAQS only with respect to Tennessee.

b. Correction of EPA's Determination Regarding Kentucky's SIP Revision and its Impact on EPA's FIP Authority for Kentucky

After promulgating the CSAPR Update and before promulgating the CSAPR Close-Out, EPA approved a SIP submission from Kentucky resolving the Commonwealth's good neighbor obligations for the 2008 ozone NAAQS based on a demonstration that no further emission reductions were needed from Kentucky with the CSAPR Update FIP for Kentucky in place. *See* 83 FR 33730 (July 17, 2018). The action was separate from the CSAPR Close-Out because it was taken in response to a May 23, 2017 order from the U.S. District Court for the Northern District of California requiring EPA to take a final action fully addressing the good neighbor obligation for the 2008 ozone NAAQS for Kentucky by June 30, 2018.[64] EPA was obligated to address the outstanding obligation by either approving a SIP revision submitted by Kentucky or promulgating a FIP to address any remaining obligation.[65]

EPA, No. 13-3546, ECF No. 74-1 (6th Cir. Mar. 13, 2015). On remand, EPA determined that its FIP obligation as to Kentucky was triggered as of June 2, 2014, the date of issuance of the Supreme Court's judgment. *See* 81 FR 74513.

[64] *See* Order, *Sierra Club v. Pruitt*, No. 3:15–cv–04328 (N.D. Cal. May 23, 2017).

[65] The obligation ultimately derives from EPA's 2013 action disapproving Kentucky's SIP addressing the 2008 ozone NAAQS on the basis that Kentucky relied on the CAIR program for the 2008 ozone NAAQS good neighbor obligation. However, as previously discussed, the trigger for the timing of the obligation was the 2014 issuance of the Supreme Court's judgment in *EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489 (2014). *See supra* note 63.

On May 10, 2018, Kentucky submitted a final SIP revision to EPA, on which the Agency finalized approval consistent with the court-ordered deadline. *See* 83 FR 33730. The Kentucky SIP revision that EPA approved relied on the reductions from the CSAPR Update FIP for Kentucky and provided a technical analysis, including emission projections and air quality modeling for 2023, showing that with the CSAPR Update level of reductions, the receptors to which Kentucky was linked were attaining and maintaining the 2008 ozone NAAQS in 2023. This allowed EPA to conclude that Kentucky did not have any further obligation for the 2008 ozone NAAQS, and EPA approved the SIP revision. The SIP revision from Kentucky was an analytical demonstration only, and it did not replace the CSAPR Update FIP; rather, the CSAPR Update FIP was left in place for Kentucky and was relied on in the state's demonstration.

The approval relied on the same rationale and technical analysis—including the use of a 2023 analytic year—that was eventually used for the other CSAPR Update FIP states in the CSAPR Close-Out. EPA's approval stated:

> "no additional emission reductions are necessary to address the good neighbor provision for the 2008 ozone NAAQS beyond those required by the Cross-State Air Pollution Rule Update (CSAPR Update) federal implementation plan (FIP). Accordingly, EPA is approving Kentucky's submission because it partially addresses the requirements of the good neighbor provision for the 2008 ozone NAAQS, and it resolves any obligation remaining under the good neighbor provision after promulgation of the CSAPR Update FIP. The approval of Kentucky's SIP submission and the CSAPR Update FIP, together, fully address the requirements of the good neighbor provision for the 2008 ozone NAAQS for Kentucky."

83 FR 33730.

Subsequent to EPA's approval of the Kentucky SIP submission, EPA issued the CSAPR Close-Out, which concluded that, based on essentially the same analysis used for Kentucky, none of the other 20 CSAPR Update states had further good neighbor obligations to address the 2008

8-hour ozone NAAQS. In the Fall of 2019, the DC Circuit issued the *Wisconsin* and *New York* decisions remanding the CSAPR Update Rule and vacating the CSAPR Close-Out (see section IV.C.1.d.).

Kentucky's CSAPR Update FIP, which Kentucky relied on (and did not replace) in its SIP revision, is part of the CSAPR Update remand, and EPA must address it in this action. Further, the D.C. Circuit's review of the CSAPR Close-Out found fault with, and vacated, the same rationale for other states that EPA had used to approve Kentucky's SIP submission in June 2018.

Therefore, in light of the remand of Kentucky's CSAPR Update FIP in *Wisconsin* and vacatur of the CSAPR Close-Out in *New York*, EPA is determining in this final action that its approval of Kentucky's SIP revision as fully resolving the state's 2008 ozone NAAQS good neighbor obligations was in error. Section 110(k)(6) of the CAA (42 U.S.C. 7410(k)(6)) gives the Administrator authority, without any further submission from a state, to revise certain prior actions, including actions to approve SIPs, upon determining that those actions were in error. The court's remand of the partial FIP for Kentucky in *Wisconsin* and the vacatur of EPA's conclusions for states identically situated to Kentucky in the CSAPR Close-Out means that EPA's approval of Kentucky's SIP was in error. EPA is compelled on remand to act consistently with the court's opinion and has reassessed Kentucky's good neighbor obligations under the 2008 ozone NAAQS here. In doing so, EPA's analysis identifies an additional emission reduction obligation for Kentucky. Therefore, EPA is correcting the error in Kentucky's SIP approval through this final rulemaking, as allowed by the CAA when a prior SIP approval was in error. This error correction under CAA section 110(k)(6) revises the approval of Kentucky's SIP to a disapproval and rescinds any statements that the SIP submission fully addresses the requirements of the good neighbor provision for the 2008 ozone NAAQS for Kentucky. The Kentucky approval relied on the same analysis that the D.C. Circuit determined to be unlawful in the CSAPR Close-Out: it only addressed conditions in 2023, ignoring the 2021 attainment date

without a showing of impossibility or necessity in doing so. Kentucky's remanded partial FIP has been reassessed in this action, consistent with EPA's methodology to address the other 20 states with remanded CSAPR Update FIPs, and consistent with the D.C. Circuit's direction in *Wisconsin* and *New York*. As discussed in greater detail in the sections that follow, EPA is determining that there are additional emission reductions that are required for Kentucky to fully satisfy its good neighbor obligations for the 2008 ozone NAAQS. The analysis on which EPA reaches this conclusion for Kentucky is the same, regionally consistent analytical framework on which the Agency is taking action for all of the other CSAPR Update states with remanded FIPs.

Comment: The Agency received several comments regarding its error correction for Kentucky from the state and from sources in Kentucky. The commenters generally disagreed with EPA's use of CAA section 110(k)(6) to correct the error in the SIP approval based on the *Wisconsin* and *New York* decisions. Commenters did not agree that the court decisions are applicable to the Kentucky action or that EPA had any other basis to determine that Kentucky has outstanding good neighbor obligations under the 2008 ozone NAAQS. Two commenters also argued that EPA overestimated emissions from Kentucky in the modeling released with the proposed rule of this action.

Response: EPA disagrees that there is no basis to correct its error in approving Kentucky's SIP revision or to find that Kentucky has outstanding good neighbor obligations under the 2008 ozone NAAQS. *Wisconsin* and *New York* require the state or EPA to analyze the interstate impacts of Kentucky's emissions by the 2021 Serious attainment date. The Kentucky SIP approval is based on analysis of the 2023 ozone season. Further, the Kentucky SIP approval relies on reductions achieved from Kentucky's CSAPR Update FIP, which was remanded by *Wisconsin*. The information provided by commenters on emissions from Kentucky was already reflected in EPA's modeling and did not present information with regard to Kentucky that changed EPA's 2021 analysis, which shows Kentucky has further good neighbor obligations under the 2008 ozone NAAQS. Comments related to EPA's technical basis for concluding that

Kentucky has further obligations, including comments regarding alleged additional emission reductions achieved by Kentucky sources, are addressed in the RTC document.

c. CSAPR Update SIP Revisions that Do Not Affect FIP Authority

Subsequent to the promulgation of the CSAPR Update, EPA approved SIPs fully replacing the CSAPR Update FIPs for Alabama, Indiana, and Missouri.[66] In those SIP approvals and consistent with the conclusions of the CSAPR Update, EPA found that the SIPs partially satisfy Alabama's, Indiana's, and Missouri's good neighbor obligations for the 2008 ozone NAAQS. Thus, EPA continues to have an obligation to fully address good neighbor requirements for the 2008 ozone NAAQS with respect to Alabama and Missouri, stemming from the July 13, 2015, findings of failure to submit, and Indiana, due to the June 15, 2016, disapproval of the state's good neighbor SIP. *See* 80 FR 39961; 81 FR 38957. Other states have also submitted 2008 ozone NAAQS good neighbor SIPs or SIPs to replace their CSAPR FIPs, some of which EPA has approved and some of which still remain pending. These circumstances do not affect the scope or basis for this rulemaking.

d. Summary of Authority for FIPs for this Action

Table IV.C–1 summarizes the statutory deadline for EPA to address its FIP obligation under CAA section 110(c) and the event that activated EPA's obligation for each of the 21 CSAPR Update states that are the subject of this final action. For more information regarding the actions triggering EPA's FIP obligation and EPA's action on SIPs addressing the good neighbor provision for the 2008 ozone NAAQS, see the memorandum, "Final Action, Status of 110(a)(2)(D)(i)(I) SIPs for the 2008 Ozone NAAQS," in the docket for this action.

Table IV.C–1—Actions That Activated EPA's Statutory FIP Deadlines

State	Type of action (Federal Register citation, publication date)	Statutory FIP deadline †
Alabama	Finding of Failure to Submit (80 FR 39961, 7/13/2015)	8/12/2017
Arkansas	Finding of Failure to Submit (80 FR 39961, 7/13/2015)	8/12/2017

[66] *See* 82 FR 46674 (Oct. 6, 2017) (Alabama); 83 FR 64472 (Dec. 17, 2018) (Indiana); 84 FR 66316 (Dec. 4, 2019) (Missouri).

State	Type of action (Federal Register citation, publication date)	Statutory FIP deadline †
Illinois	Finding of Failure to Submit (80 FR 39961, 7/13/2015)	8/12/2017
Indiana	SIP disapproval (81 FR 38957, 6/15/2016)	7/15/2018
Iowa	Finding of Failure to Submit (80 FR 39961, 7/13/2015)	8/12/2017
Kansas	Finding of Failure to Submit (80 FR 39961, 7/13/2015)	8/12/2017
Kentucky	SIP disapproval (78 FR 14681, 3/7/2013)	6/2/2016
Louisiana	SIP disapproval (81 FR 53308, 8/12/2016)	9/12/2018
Maryland	Finding of Failure to Submit (81 FR 47040, 7/20/2016)	8/19/2018
Michigan	Finding of Failure to Submit (80 FR 39961, 7/13/2015)	8/12/2017
Mississippi	Finding of Failure to Submit (80 FR 39961, 7/13/2015)	8/12/2017
Missouri	Finding of Failure to Submit (80 FR 39961, 7/13/2015)	8/12/2017
New Jersey	Finding of Failure to Submit (81 FR 38963, 6/15/2016)	7/15/2018
New York	SIP disapproval (81 FR 58849, 8/26/2016)	9/26/2018
Ohio	SIP disapproval (81 FR 38957, 6/15/2016)	7/15/2018
Oklahoma	Finding of Failure to Submit (80 FR 39961, 7/13/2015)	8/12/2017
Pennsylvania	Finding of Failure to Submit (80 FR 39961, 7/13/2015)	8/12/2017
Texas	SIP disapproval (81 FR 53284, 8/12/2016)	9/12/2018
Virginia	Finding of Failure to Submit (80 FR 39961, 7/13/2015)	8/12/2017
West Virginia	Finding of Failure to Submit (80 FR 39961, 7/13/2015)	8/12/2017
Wisconsin	Partial SIP disapproval as to prong 2 (81 FR 53309, 8/12/2016)	9/12/2018

† For states other than Kentucky, the FIP deadline is two years from the effective date of the SIP disapproval or Finding of Failure to Submit, which generally trails the publication date by 30 days. For Kentucky, the FIP deadline is two years after the issuance of the Supreme Court's judgment in *EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489 (2014). *See supra* note 63.

3. The 4-Step Good Neighbor Framework

The CSAPR and the subsequent CSAPR Update, building on EPA's prior methodologies in the NO_X SIP Call and CAIR, established a 4-step process to address the requirements of the good neighbor provision.[67] In this final action to address the remand of the CSAPR Update, EPA follows the same steps. These steps are: (1) identifying downwind receptors that are expected to have problems attaining or maintaining the 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

[67] *See* CSAPR, Final Rule, 76 FR 48208, 48248-48249 (Aug. 8, 2011); CSAPR Update, Final Rule, 81 FR 74504, 74517-74521 (Oct. 26, 2016).

maintenance of the NAAQS; and (4) for states that are found to have emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS downwind, implementing the necessary emission reductions through enforceable measures.

Step 1 – In the 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 future air quality conditions generally accounts for on-the-books emission reductions 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 NAAQS. In the CSAPR Update, EPA also considered current monitored air quality data to further inform the projected identification of downwind air quality problems. These same considerations are included for this final rule. EPA is not reopening the definition of nonattainment and maintenance receptors promulgated in the CSAPR Update. Further details and application of step 1 for this rule are described in section V.

Step 2 – The CSAPR and the CSAPR Update used a screening threshold of 1 percent of the NAAQS to identify upwind states that were "linked" to downwind air pollution problems. States with contributions greater than or equal to the threshold for at least one downwind problem receptor (i.e., nonattainment or maintenance receptor identified in step 1) were identified as needing further evaluation for actions to address transport if their air quality was impacted.[68] EPA evaluated a given state's contribution based on the average relative downwind impact calculated over multiple days.[69] States whose air quality impacts to all downwind

[68] For ozone the impacts would include those from (VOC) and NO_X, and from all sectors.
[69] The number of days used in calculating the average contribution metric has historically been determined in a manner that is generally consistent with EPA's recommendations for projecting future year ozone design values. Our ozone attainment demonstration modeling guidance at the time of CSAPR recommended using all model-predicted days above the NAAQS to calculate future year design values (https://www3.epa.gov/ttn/scram/guidance/guide/final-03-pm-rh-

problem receptors were below this threshold did not require further evaluation for actions to address transport—that is, these states were determined to not contribute to downwind air quality problems and therefore had no emission reduction obligations under the good neighbor provision. EPA has used this threshold because a notable portion of the transport problem in the eastern half of the United States can result from relatively small contributions from a number of upwind states. Use of the 1 percent threshold for the 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 same metric is discussed in the CSAPR Update Rule. *See* 81 FR 74538. While EPA has updated its air quality data for determining contributions, the Agency is not reopening the use of the 1 percent threshold in this action to address the remand of the CSAPR Update. Application of step 2 for this rule is described in section V.

Step 3 – For states that are linked in step 2 to downwind air quality problems, the CSAPR and the CSAPR Update evaluated NO_X reductions that were available in upwind states by applying a uniform control stringency (represented by a cost per ton of NO_X reduced) to entities in these states. EPA evaluated multiple factors, including NO_X reduction potential, cost, and downwind air quality improvements available at several control stringencies 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.*

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guidance.pdf). In 2014 EPA issued draft revised guidance that changed the recommended number of days to the top-10 model predicted days (https://www3.epa.gov/ttn/scram/guidance/guide/Draft-O3-PM-RH-Modeling_Guidance-2014.pdf). For the CSAPR Update EPA transitioned to calculating design values based on this draft revised approach. The revised modeling guidance was finalized in 2019 and, in this regard, EPA is calculating both the ozone design values and the contributions based on a top-10 day approach. U.S. Environmental Protection Agency, 2018. Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, $PM_{2.5}$, and Regional Haze, Research Triangle Park, NC. (https://www3.epa.gov/ttn/scram/guidance/guide/O3-PM-RH-Modeling_Guidance-2018.pdf).

EME Homer City.[70] In this action, EPA applies this same approach to identify NO_X emission reductions necessary to address significant contribution for the 2008 ozone NAAQS.

In *EME Homer City*, the Supreme Court held that "EPA cannot require a State to reduce its output of pollution by more than is necessary to achieve attainment in every downwind State or at odds with the one-percent threshold the Agency has set." 572 U.S. at 521. The Court acknowledged that "instances of 'over-control' in particular downwind locations may be incidental to reductions necessary to ensure attainment elsewhere." *Id*. at 492.

> "Because individual upwind States often 'contribute significantly' to nonattainment in multiple downwind locations, the emissions reductions required to bring one linked downwind State into attainment may well be large enough to push other linked downwind States over the attainment line. As the Good Neighbor Provision seeks attainment in *every* downwind State, however, exceeding attainment in one State cannot rank as 'over-control' unless unnecessary to achieving attainment in *any* downwind State. Only reductions unnecessary to downwind attainment *anywhere* fall outside the Agency's statutory authority."

Id. at 522 (footnotes excluded).

The Court further explained that "while EPA has a statutory duty to avoid over-control, the Agency also has a statutory obligation to avoid 'under-control,' *i.e.*, to maximize achievement of attainment downwind." *Id.* at 523. Therefore, in the CSAPR Update, EPA evaluated possible over-control by considering whether an upwind state is linked solely to downwind air quality problems that can be resolved at a lower cost threshold, or if upwind states would reduce their emissions at a lower cost threshold to the extent that they would no longer meet or exceed the 1 percent air quality contribution threshold. *See* 81 FR at 74551-52. This evaluation of cost, NO_X reductions, and air quality improvements, including consideration of

[70] *EPA v. EME Homer City Generation, L.P.,* 572 U.S. 489 (2014).

potential over-control, results in EPA's determination of upwind emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS downwind and should therefore be eliminated. This allows EPA to then determine an enforceable emissions limit (often embodied in the form of an emissions budget) for the covered sources. Emissions budgets are the remaining allowable emissions after the elimination of emissions identified as significantly contributing to nonattainment or interfering with maintenance of the standard downwind.

In both the CSAPR and the CSAPR Update, EPA focused its step 3 analysis on EGUs. In the CSAPR Update, EPA did not quantify non-EGU stationary source emission reductions to address interstate ozone transport for the 2008 ozone NAAQS for two reasons. First, EPA explained that there was greater uncertainty in EPA's assessment of non-EGU NO_X mitigation potential, and that more time would be required for states and EPA to improve non-EGU point source data and pollution control assumptions before it could develop emission reduction obligations based on that data. *See* 81 FR 74542. Second, EPA explained that it did not believe that significant, certain, and meaningful non-EGU NO_X reduction was in fact feasible for the 2017 ozone season. *Id.* In *Wisconsin,* the D.C. Circuit found that the practical obstacles EPA identified with respect to its evaluation of non-EGUs did not rise to the level of an "impossibility," 938 F.3d at 318-20. The court also found that EPA must make a higher showing of uncertainty regarding non-EGU point-source NO_X mitigation potential before declining to regulate such sources on such a basis, *id.* Therefore, as discussed in more detail in section VI, in this final action on remand from *Wisconsin*, EPA has included all major stationary source sectors in the linked upwind states in its "significant contribution" analysis at step 3 of the 4-step framework.

Step 4 – the CSAPR and the CSAPR Update established interstate trading programs to implement the necessary emission reductions. Each state subject to the program is assigned an emissions budget for the covered sources. Emissions allowances are allocated to units covered by the trading program, and the covered units then surrender allowances after the close of each

control period in an amount equal to their ozone season EGU NO_X emissions. Emissions allowances are allocated to units covered by the respective trading program, and the covered units then surrender allowances after the close of each control period in an amount equal to their ozone season EGU NO_X emissions.

All of EPA's trading programs established under the good neighbor provision allow for interstate trading. However, in order to ensure that each state achieves reductions proportional to the level of their significant contribution, beginning with the CSAPR, EPA established "assurance levels" set as percentage of each state's budget (e.g., 121 percent) above which emissions from sources in that state become subject to a higher "penalty" surrender ratio. These assurance levels are designed to allow for a certain level of year-to-year variability within power sector emissions to account for fluctuations in demand and EGU operations. The levels are therefore set by determining a "variability limit," calculated based on an analysis of the historical level of variability in EGU operations.

Thus, both the CSAPR and the CSAPR Update set assurance levels equal to the sum of each state's emissions budget plus its variability limit. The CSAPR and the CSAPR Update included assurance provisions to limit state emissions to levels below 121 percent of the state's ozone season NOx emissions budget by requiring additional allowance surrenders in the instance that emissions in the state exceed this level. This limit on the degree to which a state's emissions can exceed its budget is responsive to previous court decisions (see discussion in section VII.C.2 of this preamble) and was not part of the CSAPR Update aspects remanded to EPA in *Wisconsin*. EPA is applying the same variability limits and assurance provisions in this rule.[71] Implementation using a trading program is further described in section VII.

EPA received several comments related to its overall approach in this rulemaking. These comments related to the following topics: (1) whether this rule remains only a partial remedy in

[71] Historical heat input and NO_X emissions in states covered by the CSAPR programs may be found in the "Historical CSAPR Update Emissions and Heat Input 2000 to 2019.xlsx" file.

terms of both the amount of emission reductions achieved and the timing of implementation; (2) whether any additional EGU emission reductions relative to the CSAPR Update are permissible in light of the CSAPR Update record and the scope of the D.C. Circuit's decision in *Wisconsin*; and (3) EPA's use of cost to define significant contribution. Other comments on EPA's overall approach in this action are addressed in the RTC document.

Comment: Numerous commenters asserted that despite EPA purporting to fully address the covered states' good neighbor obligations, the rule remains only a partial solution, and allows upwind states' significant contribution to nonattainment and interference with maintenance of the 2008 ozone NAAQS to continue past the next attainment date. One commenter asserts that this rule will "hinder" attainment of the 2015 ozone NAAQS in downwind states. Many commenters claim that the rule is insufficient to ensure downwind attainment of the NAAQS. The commenters question EPA's application of the 4-step framework and disagree with the Agency's conclusions drawn from that analysis, particularly with respect to the EPA's determinations at step 3 and the emissions controls adopted at step 4. Some commenters also challenge the legal basis for the selection of the 2021 analytic year, as opposed to 2020, and whether EPA has met the requirement to obtain reductions "as expeditiously as practicable" or otherwise complied with the holdings in *Wisconsin* and *New York* to eliminate significant contribution on par with the relevant downwind attainment deadlines. *See, e.g. Wisconsin*, 938 F.3d at 315. Some argue that EPA depends on claims of technical infeasibility or scientific uncertainty and flawed cost effectiveness considerations in not requiring more emission reductions on a shorter timeframe. Others believe the implementation timeframe of this rule to be a phased plan in direct conflict with *Wisconsin* and *New York*. One commenter concludes there is a "mismatch" between EPA's 4-step framework's multi-factor test at step 3 and the implementation timeframes in this rule. They also argue that EPA should consider the cost of RACT in downwind states when analyzing the maximized cost effectiveness of controls in upwind states. Several commenters also brought attention to the length of time between when

2008 ozone NAAQS good neighbor SIPs were initially due and the proposed rule in October 2020.

Response: This rule is a full remedy for the good neighbor provision for the covered upwind states for the 2008 ozone NAAQS based on EPA's analysis. The good neighbor provision does not obligate upwind states to fully resolve a downwind nonattainment or maintenance problem. CAA section 110(a)(2)(D)(i)(I) only requires that upwind states prohibit those emissions that "contribute significantly to nonattainment" or "interfere with maintenance of the NAAQS." As such, the objective of the good neighbor provision is the elimination of upwind significant contribution or interference with maintenance. It does not require that the upwind states bear the full burden of bringing downwind states into attainment. Ultimate achievement of the NAAQS downwind is accomplished through the larger framework of the CAA, including under sections 110, 181, 182 and other provisions to attain the NAAQS. Thus, in this action, EPA must determine what amount of upwind contribution is significant (or interferes with maintenance) and require elimination of that significant contribution while avoiding overcontrol or undercontrol. *EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489, 521-23 (2014).

Further, it is not correct to say that good neighbor obligations can only be found to be fully addressed when there is no longer any remaining air quality problem at the downwind receptors. Indeed, the Supreme Court recognized in *EME Homer City*, 572 U.S. at 521-22, that under the framework EPA has adopted, EPA could not require a state to further reduce its emissions once it is at or below the 1 percent contribution threshold at all receptors. The aim of the good neighbor provision is to eliminate significant contribution to nonattainment and interference with maintenance, not to achieve final attainment at the downwind receptor. Further, in upholding EPA's approach to defining and allocating upwind responsibility in the CSAPR, the Court in *EME Homer City* recognized the discretion EPA has in defining what constitutes "significant" contribution, and did not hold that obligations on upwind states must be imposed to

"maximize" downwind attainment without consideration of any other factors. *Accord Wisconsin*, 938 F.3d at 320 (recognizing EPA's discretion to interpret "significant contribution").

The comments do not establish a basis for asserting that EPA's approach to defining significant contribution or interference with maintenance is unlawful or unreasonable. They do not explain what is meant by "excessive amounts of ozone pollution," "excessive upwind contributions," "sufficient emission reductions," or "sufficient upwind reductions." These comments do not inform how EPA should define significant contribution nor do they recognize that EPA has discretion to define significant contribution. The D.C. Circuit first upheld the validity of using cost as part of the method for determining "significance" in *Michigan v. EPA*, 213 F.3d 663, 675-79 (D.C. Cir. 2000). The Supreme Court upheld that same approach in *EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489, 512-20 (2014) ("Eliminating those amounts that can cost-effectively be reduced is an efficient and equitable solution to the allocation problem the Good Neighbor Provision requires the Agency to address."). EPA applied this approach again in the CSAPR Update, its first action to address good neighbor obligations under the 2008 ozone NAAQS. And while that action only provided a partial remedy, no party in *Wisconsin* challenged as a general matter EPA's ability to use cost-effectiveness in determining and allocating upwind responsibility. *Wisconsin* and *New York* recognized EPA's discretion to define significant contribution. *Wisconsin v. EPA*, 938 F.3d 303, 319-20 (D.C. Cir. 2019) ("EPA, though, possesses a measure of latitude in defining which upwind contribution 'amounts' count as 'significant[ ]' and thus must be abated."); *New York v. Envtl. Prot. Agency*, 781 F. App'x 4, 7 (D.C. Cir. 2019) ("[I]n determining what constitutes a significant contribution to downwind nonattainment, the agency can consider the amount of upwind states' contributions and the cost of abating them.").

With respect to the timing of when such reductions must be achieved, EPA agrees that "as expeditiously as practicable" is the first-order statutory directive. *See* CAA section 181(a)(1); *Wisconsin*, 938 F.3d at 313. EPA's approach in this rule, after determining significant

contribution, implements all reductions that EPA identified as possible by the 2021 attainment date, and requires additional reductions of EGUs in later ozone seasons to the extent not possible by that date to fully eliminate significant contribution. In this case, implementing reductions any faster than the 2021 ozone season is impossible because 2020 is in the past. Commenters are incorrect to assert that EPA has unlawfully failed to require all necessary reductions by the 2021 attainment date. EPA has required those reductions that it has determined are possible by that date; EPA has also made a determination that additional reductions that are only possible after that date are nonetheless necessary to eliminate significant contribution or interference with maintenance, as EPA has interpreted those terms, and is requiring those later reductions as expeditiously as practicable. Achieving necessary reductions past the next attainment date when EPA finds it is impossible to do so beforehand is consistent with the statute and prior caselaw. *Wisconsin* and *New York* recognized these flexibilities available to EPA in acknowledging that for reasons of necessity or impossibility, EPA may deviate from the attainment schedule for downwind areas established in the Act. *Wisconsin v. EPA*, 938 F.3d 303, 320 (D.C. Cir. 2019). *New York v. EPA*, 781 F. App'x 4, 7 (D.C. Cir. 2019). Indeed, these commenters are not asserting that EPA lacks authority to require reductions beyond the attainment date, only that EPA should have required the reductions by that date. But these comments fail to establish a technical or evidentiary basis to overturn EPA's judgment that such additional reductions are not in fact possible by the 2021 attainment date.

EPA disagrees that *Wisconsin* held that it must address good neighbor obligations by the full ozone season prior to the attainment date (i.e., here, 2020). The decision recognized that the agency must fully address good neighbor obligations (to the extent EPA determines possible) by the attainment date itself. 938 F.3d at 315. EPA's practice of addressing obligations by the full ozone season prior to the attainment date, while not mandated by statute or caselaw, continues to make good policy sense, because it assists downwind areas with improved three-year design

values[72] used in determining whether attainment has been achieved. However, in this instance, as one commenter correctly notes, reductions in 2020 are not possible since this rule was not proposed until after the 2020 ozone season. EPA nonetheless can still meet the legal mandate to achieve those reductions that are possible by the 2021 attainment date.

Further, EPA is not relying on "scientific uncertainty" as a justification for not requiring reductions earlier. As explained elsewhere in this record, EPA has determined the amount of time needed for installation and operation of various control strategies. With respect to the optimization of existing SNCR controls, EPA notes that it is requiring that strategy as reflected in the final budgets by the 2021 attainment date, as explained in sections VI.B.1, C.1, and D.1.

EPA defined significant contribution in this rule based on an assessment of control alternatives under the 4-step good neighbor framework's step 3 multi-factor test. EPA's determination of what controls to require and when they can first be implemented are based on EPA's technical evaluation and application of the third step multi-factor analysis in the 4-step framework. The only "mismatch" that one commenter identified at the third step is no mismatch at all; it is simply the reality that some of the controls that EPA is requiring in this rule cannot be installed before the 2021 ozone season, and some controls that EPA assessed cannot be installed and operational before air quality problems are projected to resolve under the 2008 ozone NAAQS (i.e., by the 2025 ozone season). These comments have not explained how EPA's evaluation of control options under that test was arbitrary or capricious.

The reasons for alleged past delays in implementing ozone transport obligations is out of the scope of this action on remand. However, EPA notes that the time it has taken to get reductions in place to address interstate ozone transport is due to multiple factors, including past judicial stays of major transport rules such as the NO_X SIP Call and the CSAPR. In addition, EPA had made a determination in the CSAPR Close-out that it had fully addressed good

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

neighbor obligations; it was not until the D.C. Circuit ruled in *Wisconsin* that the basis for this conclusion was revealed to be insufficient. The CSAPR Update has and continues to achieve upwind reductions for the 2008 ozone NAAQS. As explained elsewhere in the preamble to this action, EPA now finds it to be a full remedy for nine upwind states.

Comment: Several commenters said that the CSAPR Update was already a complete remedy with regard to the EGU sector. One commenter described EPA's response to the remand as "unreasonable" and its re-application of the 4-step framework as "erroneous." Other commenters opined that EPA has no legal basis to require short-term EGU controls under the *Wisconsin* remand. In their opinion, *Wisconsin* found that the CSAPR Update fully eliminated significant contribution from EGUs, which they supported by quoting portions of the decision. They asserted that *Wisconsin* only authorized EPA to search for emission reductions from non-EGUs and to narrowly reconsider the CSAPR Update in terms of the statutory downwind attainment dates.

Response: The commenters are incorrect that EPA lacks a legal basis to re-assess and fully address good neighbor obligations for the covered states under the *Wisconsin* remand. As an initial matter, the CSAPR Update was, by EPA's own admissions, a partial rule. *See* 81 FR at 74521-22. The court's analysis upholding the portions of the rule in *Wisconsin* cited by these commenters was against a backdrop that the rule was only partial in nature. *See, e.g.*, 938 F.3d at 327. *Wisconsin* required EPA to provide a complete remedy by the next applicable attainment date. This was confirmed in the *New York* decision vacating the CSAPR Close-out. The D.C. Circuit found that rule violated the holding in *Wisconsin* by failing to analyze the 2021 analytic year without a sufficient showing of impossibility or necessity. To the extent that EPA had attempted to fully address the relevant obligations in the CSAPR Close-Out Rule, that action has been vacated. Therefore, on remand, EPA not only needs to use a different analytic year to inform its analysis under the 4-step framework, but it also needs to apply that framework in order

to determine what, if any, obligations must be addressed, and what emission reductions must be required.

EPA disagrees that *Wisconsin* prevents requiring additional necessary controls on EGUs. As stated in the preamble to the CSAPR Update, EPA did not view the CSAPR Update as necessarily fully eliminating significant contribution from EGUs. *See* 81 FR 74522. *Wisconsin* recognized that EPA anticipated "further EGU reductions that are achievable after 2017" may be necessary to completely eliminate significant contribution or interference with maintenance for the 2008 ozone NAAQS. *Wisconsin v. EPA*, 938 F.3d 303 (D.C. Cir. 2019) (quoting 81 FR 74522). In the present action, evaluation of a full remedy in accordance with *Wisconsin* under the 4-step framework, and particularly the step 3 multi-factor test, establishes that additional reductions from EGUs should be required in 12 of the states currently subject to the CSAPR Update. For nine other states, their continued obligations under the CSAPR Update satisfy their good neighbor obligations for the 2008 ozone NAAQS. That same analysis shows that reductions from non-EGUs are not justified under the same test.

Comment: Some commenters argued that EPA's use of cost in defining significant contribution has no statutory basis and is contrary to NAAQS attainment planning caselaw and the Supreme Court's holding in *EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489 (2014) ("*EME Homer City*"), because it does not result in sufficient emission reduction for attainment and maintenance of the NAAQS. The commenter also said that even if EPA could use cost as a basis for defining significant contribution for non-attainment, the Agency could not do so for interference with maintenance. Another commenter described EPA's proposed cost threshold of $1,600 per ton as "arbitrary" and inconsistent with the CAA and *EME Homer City*, as this cost threshold is insufficient to enable downwind states reach attainment or maintenance. Further, commenters argued, EPA's use of cost-effectiveness as a metric at step 3 fails to identify what the ultimate goal should be, as cost-effectiveness can only be used to evaluate which way to best

achieve a goal. One commenter argued that EPA should require upwind reductions so long as the downwind benefit of such reductions continues to outweigh their cost.

Response: The approach used here is materially the same approach the Agency applied in the NO_X SIP Call, the CSAPR, and in the CSAPR Update. These comments essentially seek to relitigate *EME Homer City*, as well as the D.C. Circuit's prior opinion in *Michigan v. EPA*, 213 F.3d 663 (D.C. Cir. 2000). Contrary to the commenters' interpretation, *EME Homer City* allowed the use of cost both to define and to allocate upwind state responsibility. 572 U.S. 489, 518-520 (2014) ("The Agency, tasked with choosing which among equal "amounts" to eliminate, has chosen sensibly to reduce the amount easier, i.e., less costly, to eradicate."). Notably, in the CSAPR rulemaking, EPA used cost as part of a multi-factor effectiveness metric in the multi-factor test to determine the "amount" of upwind contribution that is "significant" in a very similar manner as EPA did in the CSAPR Update and now here in this action on remand. *See* 76 FR 48208, 48248-51 (Aug. 8, 2011). In the NO_X SIP Call, EPA took a similar approach. *See* 213 F.3d at 675 ("Although the dividing line was a very low threshold of contribution, in the end EPA's rule called for termination of only a subset of each state's contribution. EPA decided that the 23 'significant contributors' need only reduce their ozone *by the amount achievable with 'highly cost-effective controls.* "') (emphasis added) (citing 63 FR at 57403).

Commenters fail to identify why an alternative method for determining "contribution" is compelled by the statute, or that EPA's approach is unlawful, arbitrary, or capricious. Contrary to these commenters' assertion, the good neighbor provision does not contemplate that an upwind state's obligation can only ever be resolved once a downwind receptor is fully in attainment. The Supreme Court recognized in *EME Homer City* that the 1 percent contribution threshold used at step 2 must necessarily be a stopping point in EPA's analysis because a state that contributed less than that would not be assessed for reductions at step 3 in the first place. 572 U.S. at 521. The Supreme Court in *EME Homer City* recognized that the problem of defining "significant contribution" in the context of a regional pollutant like ozone is inherently

extremely complex. *Id.* at 514. The Court found that using cost (and specifically, a uniform cost-effectiveness threshold) to allocate the reduction obligation was both equitable and efficient. *Id.* at 519.

Further, the case law on barring use of cost considerations in the attainment planning context cited by one commenter is inapplicable. EPA has discretion to interpret significant contribution, as recognized by *Wisconsin* and *New York*. *Wisconsin v. EPA*, 938 F.3d 303, 319-20 (D.C. Cir. 2019) ("EPA, though, possesses a measure of latitude in defining which upwind contribution 'amounts' count as 'significant[ ]' and thus must be abated."). *New York v. Envtl. Prot. Agency*, 781 F. App'x 4, 7 (D.C. Cir. 2019) ("[I]n determining what constitutes a significant contribution to downwind nonattainment, the agency can consider the amount of upwind states' contributions and the cost of abating them.").

The comment that cost effectiveness does not provide an adequate basis for EPA to select the correct level of stringency misapprehends the full scope of the step 3 multi-factor analysis EPA applies in the 4-step framework. EPA's analysis at step 3 additionally considers the total amount of reductions to be achieved by a control stringency as well as the effect on air quality at downwind receptors. EPA also must take into consideration the minimum amount of time needed for controls to be installed and operational, because if an air quality problem is no longer present by the time controls could be operational, then there is no need for those controls to be required. *See* 572 U.S. at 521. Thus, it is not just the relative cost effectiveness of a control stringency but its ultimate effect on a downwind problem that informs EPA's determination of "significance."[73]

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[73] To some degree, these commenters may be overstating the relative importance of "cost" in EPA's step 3 analysis. EPA's design of cost thresholds derives from the identification of discrete types of NOx emission control strategies. EPA then identifies a representative cost-effectiveness on a per ton basis for that technology. In the step 3 analysis, it is not the cost per ton value itself that is inherently meaningful, but rather how that cost-effectivess value relates to other control stringencies, how many emission reductions may be obtained, and how air quality is ultimately impacted. Said differently, when EPA determines not to require controls at a higher cost threshold, it is not on grounds that they are simply "too expensive for industry." Further, there are always inherent uncertainties in identifying a precise cost per ton value for any particular control stringency, but this in itself does not upset EPA's ability to render an overall policy

The uniform control stringency selected in this rule for EGUs compares favorably with prior transport rulemakings in terms of cost-effectiveness, overall cost, total reductions, and downwind benefits. By contrast, when EPA analyzed the best available current data on non-EGUs for potential control, EPA's analysis showed that at a comparable cost level ($2,000/ton – on a weighted average basis, rather than the 90th percentile value used as a representative marginal cost used for EGU SCR optimization, far fewer NO_X emission reductions were available and their corresponding effect on downwind receptors was much smaller, on the order of a few hundredths of a ppb.

Regarding the comment that EPA has failed to give independent effect to the requirement to prohibit emissions that interfere with maintenance of the NAAQS in other states (i.e., prong 2): EPA gives effect to prong 2 through identifying receptors that may have trouble attaining the NAAQS under varying air quality and meteorological conditions. *EME Homer City* upheld EPA's approach to using cost to determine "amounts" with respect to both prong 1 and 2, and this is settled law. *EPA v. EME Homer City Generation*, 572 U.S. at 518-520. EPA's use of the term "significant contribution" in its analysis at the third step of the 4-step framework is applied for both prongs 1 and 2. This approach to giving effect to the "interfere with maintenance" prong has been upheld twice by the D.C. Circuit. *See EME Homer City*, 795 F.3d at 136; *Wisconsin*, 938 F.3d at 325-27. In effect, EPA's determination of what level of upwind contribution constitutes "interference" with a maintenance receptor is the same determination as what constitutes "significant contribution" for a nonattainment receptor. Nonetheless, this continues to

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judgment based on the step 3 factors as to the level of emission reductions required. As an example, EPA explains in Section VI.D.1 why its cost thresholds for EGU control stringencies at $1,600 per ton and $1,800 per ton in this action generate essentially the same point on a cost curve for purposes of its step 3 analysis. In any case, EPA notes that the Agency's determination not to require further EGU controls than EPA identified in this action, and to a certain extent non-EGU controls, is based primarily on timing, not a determination of relative cost-effectiveness. Likewise, emission controls included in the emission budgets in this rulemaking would likely still be included even if their representative cost levels were somewhat higher, so long as they still present a compelling result in the multi-factor test taking timing and downwind air quality impacts into account.

give independent effect to prong 2 because EPA applies a broader definition for identifying maintenance receptors, which accounts for the possibility of problems maintaining the NAAQS under realistic potential future conditions. While EPA and others may occasionally use the language of "significance" as a shorthand for determinations at the third step under both prongs 1 and 2, this does not detract from the fact that EPA gives prong 2 independent effect under the 4-step framework.

EPA has explained elsewhere in the record for this action why the selected control stringency selected in this rule is appropriate in light of EPA's application of the step 3 multi-factor test of the 4-step framework. To the extent commenters argue that EPA should have selected a higher cost threshold or required more reductions based on the technical data, those issues are addressed elsewhere in the record.

V. Analyzing Downwind Air Quality and Upwind-State Contributions

In this section, EPA describes the air quality modeling and analyses performed to identify nonattainment and/or maintenance receptors and evaluate interstate contributions to these receptors from individual upwind states for the 2021 analytic year. Although the air quality modeling was performed using an air quality modeling platform that covers the contiguous 48 states, the analysis to identify receptors and evaluate contributions focuses on the 21 upwind states that are the subject of this rule with respect to the 2008 ozone NAAQS. In this action, EPA is not addressing the good neighbor obligations of any other state, nor is it addressing the obligations of any state, including the 21 covered by this action, with respect to the 2015 ozone NAAQS.

The year 2021 was selected as the appropriate future analytic year for this rule because it coincides with the July 20, 2021, Serious area attainment date under the 2008 ozone NAAQS. In the CSAPR Update, EPA had aligned its analysis and implementation of emission reductions with the 2017 ozone season (ozone seasons run each year from May 1 – September 30) in order to assist downwind states with timely attainment of the 2008 ozone NAAQS by the Moderate

area attainment date of July 20, 2018. *See* 81 FR 74516. In order to demonstrate attainment by this deadline, states were required to rely on design values calculated using ozone season data from 2015 through 2017, since the July 20, 2018, deadline did not afford enough time for measured data of the full 2018 ozone season. Similarly, for the Serious area attainment date in 2021, states will rely on design values calculated using ozone season data from 2018 through 2020. However, it is not possible to impose emission reductions on upwind states in the 2020 ozone season, which has already passed. Reductions in the 2021 ozone season will nonetheless occur in time for the 2021 attainment date and therefore assist downwind states in achieving attainment by the July 20, 2021, attainment date, in compliance with the *Wisconsin* holding. *See Wisconsin*, 938 F.3d at 309 (the CSAPR Update was unlawful to the extent it allowed upwind states to "continue their significant contributions to downwind air quality problems *beyond the statutory deadlines* by which downwind States must demonstrate their attainment of air quality standards") (emphasis added). Further, EPA continues to interpret the good neighbor provision as forward-looking, based on Congress's use of the future-tense "will" in section 110(a)(2)(D)(i), an interpretation upheld in *Wisconsin*, 938 F.3d at 322. It would be "anomalous," *id.*, for EPA to impose good neighbor obligations in 2021 and future years based solely on finding that "significant contribution" had existed at some time in the past.

EPA has also conducted additional analysis of remaining air quality receptors and contribution in years beyond 2021, in order to ensure a complete step 3 analysis. EPA has analyzed these later years to determine whether any additional emission reductions that are impossible to obtain by the 2021 attainment date may yet be necessary in order to fully address significant contribution. This comports with the D.C. Circuit's direction in *Wisconsin* that implementing good neighbor obligations beyond the dates established for attainment may be justified on a proper showing of impossibility and/or necessity. *See* 938 F.3d at 320. However, for purposes of EPA's initial analysis of air quality at step 1 of the 4-step framework, in

accordance with *Wisconsin*, EPA has selected the 2021 ozone season, corresponding with the 2021 Serious area attainment date.

The remainder of this section includes information on: (1) The air quality modeling platform used in support of this final rule with a focus on the base year and future year base case emission inventories, (2) the method for projecting design values in 2021, and (3) the approach for calculating ozone contributions from upwind states.[74] The Agency also provides the design values for nonattainment and maintenance receptors and the predicted interstate contributions that are at or above the 1 percent of the NAAQS screening threshold. The 2016 base period and 2021, 2023, and 2028 future design values and contributions for all ozone monitoring sites are provided in the docket for this rule. The Air Quality Modeling Technical Support Document (AQM TSD) in the docket for this rule contains more detailed information on the air quality modeling aspects of this rule.

A. Overview of Air Quality Modeling Platform

EPA used the 2016-based modeling platform for the air quality modeling for this final rule. This modeling platform includes 2016 base year emissions from anthropogenic and natural sources and 2016 meteorology. The platform also includes anthropogenic emission projections for 2023 and 2028. The emissions data contained in this platform were developed by EPA, Multi-Jurisdictional Organizations (MJOs), and state and local air agencies as part of the Emissions Inventory Collaborative Process. This process resulted in a common-use set of emissions data for a 2016 base year and 2023 and 2028 that can be leveraged by EPA and states for regulatory air quality modeling.[75] The air quality modeling was performed for a modeling region (i.e., modeling domain) that covers the contiguous 48 states using a horizontal resolution of 12 x 12 km. EPA used the CAMx version 7beta6 for air quality modeling for both the

[74] For the 2023 and 2028 modeling used in the step 3 analysis, EPA followed the same method for projecting design values and approach for calculating contributions as described for the 2021 analytic year.

[75] http://views.cira.colostate.edu/wiki/wiki/9169.

proposed rule and this final rule.[76] Additional information on the 2016-based air quality modeling platform can be found in the AQM TSD.

B. Emission Inventories

EPA developed emission inventories for the proposed rule, including emission estimates for EGUs, non-EGU point sources, stationary nonpoint sources, onroad mobile sources, nonroad mobile sources, wildfires, prescribed fires, and biogenic emissions that are not the result of human activities. 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 facilitate comparison of model outputs with ambient measurements. To prepare the emission inventories for air quality modeling, EPA processed the emission inventories using the Sparse Matrix Operator Kernel Emissions (SMOKE) Modeling System version 4.7 to produce the gridded, hourly, speciated, model-ready emissions for input to the 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 Technical Support Document (TSD) "Preparation of Emissions Inventories for the 2016v1 North American Emissions Modeling Platform," hereafter known as the "Emissions Modeling TSD." This TSD is available in the docket for this rule and at https://www.epa.gov/air-emissions-modeling/2016v1-platform.

1. Foundation Emission Inventory Data Sets

Emissions data were developed that represented the year 2016 to support air quality modeling of a base year from which future air quality could be forecasted. As noted above, EPA used the Inventory Collaborative 2016 version 1 (2016v1) Emissions Modeling Platform, released in October 2019, as the primary basis for the inventories supporting the air quality modeling. This platform was developed through a national collaborative effort between EPA and state and local agencies along with MJOs. The original starting point for the U.S. portions of the

[76] EPA did not receive any comments on the use of CAMx version 7beta6 for the air quality modeling for this rule.

2016 inventory was the 2014 National Emissions Inventory (NEI), version 2 (2014NEIv2), although all of the inventory sectors were updated to better represent the year 2016 through the incorporation of 2016-specific state and local data along with nationally applied adjustment methods. The future base case inventories developed for 2023 and 2028 represent projected changes in activity data and predicted emission reductions from on-the-books actions, planned emission control installations, and promulgated federal measures that affect anthropogenic emissions.[77]

2. Development of Emission Inventories for EGUs

Annual NO_X and SO_2 emissions for EGUs in the 2016 base year inventory are based primarily on data from continuous emission monitoring systems (CEMS) and other monitoring systems allowed for use by qualifying units under 40 CFR part 75, with other EGU pollutants estimated using emission factors and annual heat input data reported to EPA. For EGUs not reporting under part 75, EPA used the most recent data submitted to the NEI by the states. Emissions data for sources that did not have data provided for the year 2016 were pulled forward from data submitted for 2014. The Air Emissions Reporting Rule, *(*80 FR 8787; February 19, 2015), requires that Type A point sources large enough to meet or exceed specific thresholds for emissions be reported to EPA every year, while the smaller Type B point sources must only be reported to EPA every three years. For more information on how the 2016 EGU emissions data were developed and prepared for air quality modeling, see the Emissions Modeling TSD.

EPA projected future 2023 and 2028 baseline EGU emissions using the version 6 – January 2020 reference case of the Integrated Planning Model (IPM).[78,79] IPM, developed by ICF Consulting, is a state-of-the-art, peer-reviewed, multi-regional, dynamic, deterministic linear

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[77] Biogenic emissions and emissions from wildfires and prescribed fires were held constant between 2016 and the future years because (1) these emissions are tied to the 2016 meteorological conditions and (2) the focus of this rule is on the contribution from anthropogenic emissions to projected ozone nonattainment and maintenance.

[78] https://www.epa.gov/powersectormodeling.

[79] The 2016v1 platform released in October 2019 used the May 2019 reference case. The January 2020 IPM reference case is a later version than what was originally released with 2016v1.

programming model of the contiguous U.S. electric power sector. It provides forecasts of least cost capacity expansion, electricity dispatch, and 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. 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.[80]

The IPM version 6 – January 2020 reference base case accounts for updated federal and state environmental regulations, committed EGU retirements and new builds, and technology cost and performance assumptions as of late 2019. This projected base case accounts for the effects of the finalized Mercury and Air Toxics Standards rule, the CSAPR and the CSAPR Update, New Source Review settlements, and other on-the-books federal and state rules through 2019[81] impacting SO_2, NO_X, directly emitted particulate matter, and CO_2, and final actions EPA has taken to implement the Regional Haze Rule.

Additional 2021 EGU emissions baseline levels were developed through engineering analytics as an alternative approach that did not involve IPM. EPA developed this inventory for use in step 3 of this final rule, where it determines emission reduction potential and corresponding emission budgets. IPM includes optimization and perfect foresight in solving for least cost dispatch. Given that this final rule will likely become effective either immediately prior

[80] 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.

[81] 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 6 – January reference case, that cutoff date was November 2019.

to or slightly after the start of the 2021 ozone season, EPA adopted a similar approach to the CSAPR Update where it relied on IPM in a relative way in step 3 to avoid overstating optimization and dispatch decisions that were not possible in the short time frame. EPA does this by using the difference in emission rate observed between IPM runs with and without the cost threshold applied, rather than using absolute values. In both the CSAPR Update and in this rule at step 3, EPA complemented that projected IPM EGU outlook with historical (e.g., engineering analytics) perspective based on historical data that only factors in known changes to the fleet. This 2021 engineering analytics data set is described in more detail in the Ozone Transport Policy Analysis Final Rule TSD.

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

The non-EGU point source emissions in the 2016 base case inventory match those in the 2016v1 platform. Some non-EGU point source emissions were based on data submitted for 2016, others were projected from 2014 to 2016, and the emissions for remaining small sources were kept at 2014 levels. Prior to air quality modeling, the emission inventories were processed into a format that is appropriate for the air quality model to use. Projection factors and percent reductions in this final rule reflect comments received as a result of the Inventory Collaborative development process, 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 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). Details on the development and processing of the non-EGU emissions inventories for 2016, 2023, and 2028 are available in the Emissions Modeling TSD.

For aircraft emissions at airports, the emissions used were based on adjustments to emissions in the 2017 NEI (see https://www.epa.gov/air-emissions-inventories/2017-national-emissions-inventory-nei-data for data and a TSD). EPA developed and applied factors to adjust

the 2017 emissions to 2016, 2023, and 2028 based on activity growth projected by the Federal Aviation Administration Terminal Area Forecast[82] system, published in 2018.

Emissions at rail yards were represented as non-EGU point sources. The 2016 rail yard emissions are largely consistent with the 2017 NEI rail yard emissions. The 2016, 2023, and 2028 rail yard emissions were developed through the Inventory Collaborative process. The rail yard emissions were interpolated from the 2016 and 2023 emissions. Class I rail yard emissions were projected using the Energy Information Administration's 2019 Annual Energy Outlook (AEO) freight rail energy use growth rate projections for 2016, 2023, and 2028 with the fleet mix assumed to be constant throughout the period.

Point source oil and gas emissions for 2016 were based on the 2016v1 point inventory, while nonpoint oil and gas emissions were primarily based on a run of EPA Oil and Gas Tool for the year 2016. The 2016 oil and gas inventories were projected to 2023 and 2028 using regional projection factors by product type based on AEO 2019 projections. 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 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. Additional information on the development and modeling of the oil and gas emission inventories can be found in the Emissions Modeling TSD.

4. Development of Emission Inventories for Onroad Mobile Sources

Onroad mobile sources include exhaust, evaporative, and brake and tire wear emissions from vehicles that drive on roads, parked vehicles, and vehicle refueling. Emissions from vehicles using regular gasoline, high ethanol gasoline, diesel fuel, and electric vehicles were represented, along with buses that used compressed natural gas. EPA developed the onroad mobile source emissions for states other than California using EPA's Motor Vehicle Emissions

[82] https://www.faa.gov/data_research/aviation/taf/.

Simulator (MOVES) 2014b**.** MOVES2014b was used with inputs provided by state and local agencies, where available, in combination with nationally available data sets. Onroad emissions for the platform were developed based on emissions factors output from MOVES2014b run for the year 2016, coupled with activity data (e.g., vehicle miles traveled and vehicle populations) representing the year 2016. The 2016 activity data were provided by some state and local agencies, and the remaining activity data were derived from the 2014NEIv2. The onroad emissions were computed within SMOKE by multiplying emission factors developed using MOVES with the appropriate activity data. Onroad mobile source emissions for California were consistent with the emissions provided by the state.

The future-year emissions for onroad mobile sources represent all national control programs known at the time of modeling except for the Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles (HDGHG) – Phase 2[83] and the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule.[84] Finalized rules incorporated into the onroad 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). Estimates of the impacts of rules that were in effect in 2016 are included in the 2016 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 2016. Local control programs such as the California LEV III program are included in the onroad mobile source emissions. The

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[83] The effect of the HDGHG Phase 2 rule on criteria pollutants is estimated in Table 5-48 of the Regulatory Impact Analysis, available from https://nepis.epa.gov/Exe/ZyPDF.cgi/P100P7NS.PDF?Dockey=P100P7NS.PDF.

[84] Information on the SAFE vehicles rule is available from https://www.epa.gov/regulations-emissions-vehicles-and-engines/safer-affordable-fuel-efficient-safe-vehicles-final-rule. Preliminary analysis by the Office of Transportation and Air Quality of the impact of this rule on criteria pollutants show impacts of less than 1 percent for VOC and no impact for NO_X.

future year onroad emissions reflect projected changes to fuel properties and usage. MOVES was run for the years 2023 and 2028 to generate the emissions factors relevant to those years. Future year activity data for onroad mobile sources were provided by some state and local agencies, and otherwise were projected to 2023 and 2028 using AEO 2019-based factors. The future year emissions were computed within SMOKE by multiplying the future year emission factors developed using MOVES with the year-specific activity data. Additional information on the approach for generating the onroad mobile source emissions is available in the Emissions Modeling TSD.

5. Development of Emission Inventories for Commercial Marine Vessels

The commercial marine vessel (CMV) emissions in the 2016 base case emission inventory for this rule were based on those in the 2017 NEI. Factors were then applied to adjust the 2017 NEI emissions backward to represent emissions for the year 2016. The CMV 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 prior to 2016. The cumulative impacts of these rules through 2023 and 2028 were incorporated into the projected emissions for CMV sources. The CMV emissions were split into emissions inventories from the larger category 3 (C3) engines, and those from the smaller category 1 and 2 (C1C2) engines. Some minor adjustments to the CMV emissions were implemented following the October 2019 2016v1 release. These updated CMV inventories were released publicly by February, 2020[85].

6. Development of Emission Inventories for Other Nonroad Mobile Sources

Nonroad mobile source emission inventories (other than CMV, locomotive, and aircraft emissions) were developed from monthly, county, and process level emissions output from

[85] See 2016emissions, 2023emissions, and 2028 emissions under ftp://newftp.epa.gov/air/emismod/2016/v1/.

MOVES2014b. MOVES2014b included important updates to nonroad engine population growth rates. Types of nonroad equipment include recreational vehicles, pleasure craft, and construction, agricultural, mining, and lawn and garden equipment. State-submitted emissions data for nonroad sources were used for California.

EPA also ran MOVES2014b for 2023 and 2028 to prepare nonroad mobile emissions inventories for future years. The nonroad mobile emission control programs include reductions to locomotives, diesel engines, and recreational 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.

Line haul locomotives are also considered a type of nonroad mobile source but the emissions inventories for locomotives were not developed using MOVES2014b. Year 2016 locomotive emissions were developed through the Inventory Collaborative and are mostly consistent with those in the 2017 NEI. The projected locomotive emissions for 2023 and 2028 were developed by applying factors to the base year emissions using activity data based on 2018 AEO freight rail energy use growth rate projections and emission rates adjusted to account for recent historical trends.

7. Development of Emission Inventories for Nonpoint Sources

The emissions for stationary nonpoint sources in our 2016 base case emission inventory are largely consistent with those in the 2014NEIv2, although some were adjusted to more closely reflect year 2016 using factors based on changes to human population from 2014 to 2016. Stationary nonpoint sources include evaporative sources, consumer products, fuel combustion that is not captured by point sources, agricultural livestock, agricultural fertilizer, residential wood combustion, fugitive dust, and oil and gas sources. For more information on the nonpoint sources in the 2016 base case inventory, see the Emissions Modeling TSD and the 2014NEIv2 TSD.

Where states provided the Inventory Collaborative information about projected control measures or changes in nonpoint source emissions, those inputs were incorporated into the projected inventories for 2023 and 2028. Adjustments for state fuel sulfur content rules for fuel oil in the Northeast were included. Projected emissions for portable fuel containers reflect the impact of projection factors required by the final MSAT2 rule and the EISA, including updates to cellulosic ethanol plants, ethanol transport working losses, and ethanol distribution vapor losses.

For 2016, nonpoint oil and gas emissions inventories were developed based on a run of EPA Oil and Gas Tool for 2016. To develop the future year inventories, regional projection factors for nonpoint oil and gas sources were developed by product type based on AEO 2019 projections to 2023 and 2028. Estimates of criteria air pollutant (CAP) co-benefit reductions resulting from the NESHAP for RICE and NSPS rules and Oil and Gas NSPS VOC controls for select source categories were included. Additional details on the application of these rules and projections for nonpoint sources are available in the Emissions Modeling TSD. EPA received comments on the emissions inventories used in the proposed rule. These comments and EPA's responses are provided below and in the RTC.

Comment: EPA received comments that contend that the Agency did not include emission reductions from all "on the books" control programs in certain states. These commenters say that monitoring sites that were identified as nonattainment and/or maintenance receptors might not be receptors if the Agency had accounted for the impacts of all control programs.[86]

Response: The emissions inventories used for the step 1 and step 2 air quality modeling of 2023 and 2028 were developed through a collaborative process through which input from state and local agencies and multijurisdictional organizations was solicited and accepted. For point

[86] For emissions sectors other than EGUs, EPA received only a limited set of comments on the base year and projected emissions inventories. Comments on emission inventories are addressed elsewhere in this document and in the RTC.

sources, the 2016 inventories were derived from state and local submissions to the 2016 NEI as required by the Air Emissions Reporting Rule see 80 FR 8787 (February 19, 2015). Any rules promulgated by 2016 that would have impacted emissions in the year 2016 would be included in those inventories. EPA then accounted for known changes in those inventories that would occur by 2023 and 2028 using EPA projection methods along with stakeholder-developed information. The Midatlantic Regional Air Management Association (MARAMA) worked with their member states and Ozone Transport Commission (OTC) states to develop projection and control factors for the years 2023 and 2028. These factors were provided to EPA in May 2019 and reflect rules impacting nonpoint sources that were promulgated prior to 2019. Through the Inventory Collaborative process, the inventories used for modeling included the "on the books" control programs that were identified by EPA and the state and multijurisdictional organization (MJO) partners such as MARAMA that provided inputs to the collaborative inventories. Rules related to emissions for sources other than EGUs promulgated in 2019 or later following the completion of the inventories for those sources are not included in the modeling for this rule.

The commenter has listed multiple pages of various state-level NO_X and VOC control programs and regulations, promulgated over multiple decades. The commenter did not provide quantitative information or data to support their claim that EPA failed to include the control programs cited by the commenter in the emissions inventories used to support the proposed rule, what the effect would be had they been included or characterized differently, and whether the effect would have changed any of the regulatory outcomes in EPA's analysis. This comment is further addressed in the RTC.

Comment: EPA received comment suggesting changes to its EGU emissions inventory used in its step 1 and step 2 evaluations based on more recent data.

Response: EPA is not changing the emissions inventory derived from its IPM modeling that incorporated the latest data at the time of execution in January of 2020 used at step 1 and step 2 of the 4-step framework. However, both in the proposed rule and at final, EPA reaffirmed

its step 1 and step 2 findings using an updated/alternative EGU emissions inventory from the engineering analytics tool used in step 3 and discussed in the Ozone Transport Policy Analysis Final Rule TSD. This tool reflects known changes (e.g., retirements and new builds) applied to historical data to estimate future year EGU emissions. It represents alternative EGU emissions inventory perspective as it does not factor in model-projected changes. Moreover, it incorporates the latest available data and commenter input regarding any fleet changes. EPA, in the proposed and final rule, uses this alternative inventory in conjunction with its air quality assessment tool (AQAT) to estimate air quality impacts and upwind state contributions. Both in the proposed rule and final, this alternative emissions inventory and subsequent AQAT sensitivity analysis led to the same step 1 and step 2 findings as the IPM-based EGU emissions inventory and related CAMx modeling results. That is, EPA has examined a range of EGU inventories using different future year projections and incorporating the latest available data and commenter input. Across this range of EGU emission inventory estimates, EPA reaches the same conclusion for step 1 and step 2 downwind receptors and upwind linkages. Therefore, EPA's EGU emission inventories and corresponding step 1 and step 2 analytic findings have been robustly examined, tested across a range of assumptions, and are robust to a variety of assumptions, including the unit updates suggested by the commenter. For a complete unit-by-unit inventory of all EGUs included in the future year baseline for the engineering analytic tool, see the Ozone Transport Policy Analysis Final Rule TSD; Appendix A. The data in this Appendix reflect future unit level operating status taking into account retirement and new build announcements from both commenter input and the latest EIA Form 860 monthly (October 2020) available.

C. *Air Quality Modeling and Analyses to Identify Nonattainment and Maintenance Receptors*

In this section the Agency describes the air quality modeling and analyses performed in Step 1 to identify locations where the Agency expects there to be nonattainment or maintenance receptors for the 2008 8-hour ozone NAAQS in the 2021 analytic future year. Where EPA's analysis shows that an area or site does not fall under the definition of a nonattainment or

maintenance receptor in 2021, that site is excluded from further analysis under EPA's good neighbor framework.

In this final rule, EPA is not reopening the approach used in the CSAPR Update to identify nonattainment and maintenance receptors. *Wisconsin* upheld EPA's approach to identifying nonattainment and maintenance receptors against specific challenges. *See* 938 F.3d at 325-27.[87] As this action is taken in response to the *Wisconsin* remand and to complete the good neighbor obligations that were partially addressed in the CSAPR Update, it is entirely appropriate to continue to apply the same approach to identifying receptors to fully address the outstanding obligations as EPA took in partially addressing them. Indeed, to do otherwise would be anomalous and could lead to inconsistent treatment of states under the 4-step framework for purposes of the 2008 ozone NAAQS. However, as an aid to understanding EPA's approach to identifying receptors, a summary of this approach follows.

EPA's approach gives 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*.[88] Further, in its decision on the remand of the CSAPR from the Supreme Court in the *EME Homer City* case, the D.C. Circuit confirmed that EPA's approach to identifying maintenance receptors in the CSAPR comported with the court's prior instruction to give independent meaning to the "interfere with maintenance" prong in the good neighbor provision. *EME Homer City II*, 795 F.3d at 136.

In the CSAPR Update, EPA identified nonattainment receptors as those monitoring sites that are projected to have average design values that exceed the NAAQS and that are also measuring nonattainment based on the most recent monitored design values. This approach is

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[87] The Court's holding rested in part on the partial nature of the CSAPR Update, *id.* at 327, and rejected the remainder of the challenge to EPA's treatment of maintenance receptors because petitioners in the case failed to establish actual over-control. Here, EPA has also conducted a rigorous overcontrol analysis showing that this action does not result in overcontrol. *See* Ozone Policy Analysis Final Rule TSD for details.

[88] 531 F.3d at 910-911 (holding that EPA must give "independent significance" to each prong of CAA section 110(a)(2)(D)(i)(I)).

consistent with prior transport rulemakings, such as the NO_X SIP Call and CAIR, where EPA defined nonattainment receptors as those areas that both currently monitor nonattainment and that EPA projects will be in nonattainment in the future compliance year.[89]

The Agency explained in the NO_X SIP Call and CAIR and then reaffirmed in the CSAPR Update that EPA has the most confidence in our projections of nonattainment for those counties that also measure nonattainment for the most recent period of available ambient data. 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 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. 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 (i.e., ozone conducive meteorology). 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, applying this methodology in this final rule, EPA assessed the magnitude of the maximum projected design value for 2021 at each receptor in relation to the 2008 ozone NAAQS and, where such a value exceeds the NAAQS, EPA determined that receptor to be a "maintenance" receptor for purposes of defining interference with maintenance, consistent with

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[89] *See* 63 FR 57375, 57377 (October 27, 1998); 70 FR 25241(January 14, 2005). *See also North Carolina*, 531 F.3d at 913-914 (affirming as reasonable EPA's approach to defining nonattainment in CAIR).

the method used in the CSAPR and upheld by the D.C. Circuit in *EME Homer City II*.[90] That is, monitoring sites with a maximum design value that exceeds the NAAQS are projected to have a maintenance problem in 2021.

Recognizing that nonattainment receptors are also, by definition, maintenance receptors, EPA often uses the term "maintenance-only" to refer to receptors that are not also nonattainment receptors. Consistent with the methodology described above, 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 ozone concentrations below the level of the applicable NAAQS, 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.

As described above in section V.B., EPA is using the 2016 and 2023 base case emissions developed under the EPA/MJO/state collaborative project as the primary source for base year and 2023 future year emissions data for this final rule. Because this platform does not include emissions for 2021, EPA developed an interpolation technique based on modeling for 2023 and measured ozone data to determine ozone concentrations for 2021. To estimate average and maximum design values for 2021, EPA first performed air quality modeling for 2016 and 2023 to obtain design values in 2023. The 2023 design values were then coupled with the corresponding 2016 measured design values to estimate design values in 2021 using the interpolation technique described below.

Consistent with EPA's modeling guidance, the 2016 and 2023 air quality modeling results were used in a "relative" sense to project design values for 2023. That is, the ratios of future year model predictions to base year model predictions are used to adjust ambient ozone design values up or down depending on the relative (percent) change in model predictions for

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

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. In addition, the Agency calculated maximum design values from within the 5-year base period to represent conditions when meteorology is more favorable than average for ozone formation. Because the base year for the air quality modeling used in this final rule is 2016, the base period 2014-2018 ambient ozone design value data was used in order to project average and maximum design values in 2023.

The ozone predictions from the 2016 and 2023 air quality model simulations were used to project 2014-2018 average and maximum ozone design values to 2023 using an approach similar to the approach in EPA's guidance for attainment demonstration modeling. This guidance recommends using model predictions from the "3 x 3" array of grid cells[91] surrounding the location of the monitoring site to calculate a Relative Response Factor (RRF) for that site.[92] The 2014-2018 average and maximum design values were multiplied by the RRF to project each of these design values to 2023. In this manner, the projected design values are grounded in monitored data, and not the absolute model-predicted 2023 concentrations. In light of comments on the Notice of Data Availability (82 FR 1733; January 6, 2017) and other analyses, EPA also projected 2023 design values based on a modified version of the "3 x 3" approach for those monitoring sites located in coastal areas. In this alternative approach, EPA

[91] As noted above, each model grid cell is 12 x 12 km.

[92] The RRF represents the change in ozone based on emission changes at a given site. In order to calculate the RRF, EPA's modeling guidance recommends selecting the 10 highest ozone days in an ozone season at any given monitor in the base year, noting which of the grid cells in the 3x3 array experienced the highest ozone concentrations in the base year, and averaging those ten highest concentrations. The model is then run using the projected year emissions, in this case 2023, with all other model variables held constant. Ozone concentrations from the same ten days, in the same ten grid cells, are then averaged. The fractional change between the base year (2011 model run) averaged ozone concentrations and the future year (2023 model run) averaged ozone concentrations represents the relative response factor.

eliminated from the RRF calculations the modeling data in those grid cells that are dominated by water (i.e., more than 50 percent of the area in the grid cell is water) and that do not contain a monitoring site (i.e., if a grid cell is more than 50 percent water but contains an air quality monitor, that cell would remain in the calculation). The choice of more than 50 percent of the grid cell area as water as the criteria for identifying overwater grid cells is based on the treatment of land use in the Weather Research and Forecasting model (WRF).[93] Specifically, in the WRF meteorological model those grid cells that are greater than 50 percent overwater are treated as being 100 percent overwater. In such cases the meteorological conditions in the entire grid cell reflect the vertical mixing and winds over water, even if part of the grid cell also happens to be over land with land-based emissions, as can often be the case for coastal areas. Overlaying land-based emissions with overwater meteorology may be representative of conditions at coastal monitors during times of on-shore flow associated with synoptic conditions and/or sea-breeze or lake-breeze wind flows. But there may be other times, particularly with off-shore wind flow when vertical mixing of land-based emissions may be too limited due to the presence of overwater meteorology. Thus, for our modeling EPA calculated 2023 projected average and maximum design values at individual monitoring sites based on both the "3 x 3" approach as well as the alternative approach that eliminates overwater cells in the RRF calculation for near-coastal areas (i.e., "no water" approach).

The 2023 average and maximum design values for both the "3 x 3" and "no water" approaches were then paired with the corresponding base period measured design values at each ozone monitoring site. Design values for 2021 for both approaches were calculated by linearly interpolating between the 2016 base period and 2023 projected values.[94] The steps in the interpolation process for estimating 2021 average and maximum design values are as follows:

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[93] https://www.mmm.ucar.edu/weather-research-and-forecasting-model.

[94] EPA examined the 2019 design values as a way to support the set of monitoring sites that were identified as receptors based on the 2021 interpolated design values. The outcome of this analysis was that each of the five receptors in 2021 had 2019 measured design values that

(1) Calculate the ppb change in design values between the 2016 base period and 2023;

(2) Divide the ppb change by 7 to calculate the ppb change per year over the 7-year period between 2016 and 2023;

(3) Multiply the ppb per year value by 5 to calculate the ppb change in design values over the 5-year period between 2016 and 2021;

(4) Subtract the ppb change between 2016 to 2021 from the 2016 design values to produce the design values for 2021.

The projected 2021 and 2023 design values using both the "3 x 3" and "no-water" approaches are provided in the AQM TSD.[95] For this final rule, EPA is relying upon design values based on the "no water" approach for identifying nonattainment and maintenance receptors.

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.[96] Therefore, projected design values that are greater than or equal to 76 ppb are considered to be violating the 2008 ozone NAAQS. For those sites that are projected to be violating the NAAQS based on the average design values in 2021, the Agency examined the design values for 2019, which are the most recent certified measured ozone design values at the time of this action. As noted above, the Agency identified nonattainment receptors in this rulemaking as those sites that are violating the

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exceeded the 2008 NAAQS. In addition, there are four other monitoring sites in the eastern U.S. that are not projected to be receptors in 2021, but that have 2019 design values that exceeded the NAAQS. Because the measured design values at these sites are only 1 or 2 ppb above the NAAQS, it is reasonable to assume that these four sites will be clean by 2021 – which is consistent with the projections for these monitoring sites. Thus, the analysis of 2019 measured data and 2021 projections provides confidence in the approach for identifying nonattainment/maintenance receptors in 2021.

[95] Based on the 2021 design values, there are 129 monitoring sites that have different design values based on the "3 x 3" approach vs the "no-water" approach. For these 129 monitoring sites, the average difference is 0.41 ppb and the median difference is 0.28 ppb. The average and median percent differences between the "3 x 3" and "no-water" design values at these 129 monitoring sites are 0.65 percent and 0.52 percent, respectively. Thus, there is not much difference in the design values between these two approaches.

[96] 40 CFR Part 50, Appendix P to Part 50 – Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Ozone.

NAAQS based on current measured air quality and also have projected average design values of 76 ppb or greater. Maintenance-only receptors 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 2021 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 the Agency projects to be nonattainment and maintenance receptors for the ozone NAAQS in the 2021 base case are used for assessing the contribution of emissions in upwind states to downwind nonattainment and maintenance of ozone NAAQS as part of this action.

Table V.C-1 contains the 2014-2018 base period average and maximum 8-hour ozone design values, the 2021 base case average and maximum design values,[97] and the 2019 design values for the two sites that are projected to be nonattainment receptors in 2021 and the two sites that are projected to be maintenance-only receptors in 2021.[98] The design values for all monitoring sites in the U.S. are provided in the docket for this rule. Additional details on the approach for projecting average and maximum design values are provided in the AQM TSD.

Table V.C-1. Average and Maximum 2014-2018 and 2021 Base Case 8-Hour Ozone Design Values and 2019 Preliminary Design Values (ppb) at Projected Nonattainment and Maintenance-Only Sites.

Monitor ID	State	Site	Average Design Value 2014-2018	Maximum Design Value 2014-2018	Average Design Value 2021	Maximum Design Value 2021	2019 Design Value
Nonattainment Receptors							
090013007	CT	Stratford	82.0	83	76.5	77.4	82
090019003	CT	Westport	82.7	83	78.5	78.8	82

[97] The design values for 2021 in this table are based on the "no water" approach.
[98] Using design values from the "3 x 3" approach does not change the total *number* of receptors in 2021. However, with the "3 x 3" approach the maintenance-only receptor in New Haven County, CT has a projected maximum design value of 75.5 ppb and would, therefore, not be a receptor using this approach. In contrast, monitoring site 090010017 in Fairfield County, CT has projected average and maximum design value of 75.7 and 76.3 ppb, respectively, with the "3 x 3" approach and would, therefore, be a maintenance-only receptor with this approach.

Monitor ID	State	Site	Average Design Value 2014-2018	Maximum Design Value 2014-2018	Average Design Value 2021	Maximum Design Value 2021	2019 Design Value
Maintenance-Only Receptors							
090099002	CT	Madison	79.7	82	73.9	76.1	82
482010024	TX	Houston	79.3	81	75.5	77.1	81

Comment: Some commenters said that EPA's interpolation method for determining design values in 2021 is flawed because (1) the method incorrectly assumes that ozone precursor emissions in all source sectors in all states change at an equal rate between 2016 and 2023, (2) linearly interpolated EGU emissions for 2021 overstate EPA's IPM-predicted EGU emissions for 2021, and (3) the method does not account for the non-linear response of ozone to emissions changes. These commenters say that EPA should have developed a 2021 specific emissions inventory or at a minimum developed an interpolated 2021 emission inventory and then rerun the photochemical model to account for the reactivity of ozone formation from the distribution of ozone precursor emissions. The commenters contend that failing to take this step, EPA has introduced significant uncertainty into the air quality projections of the proposed rule and potentially subjected multiple upwind states to unnecessary additional control requirements.

Response: As an initial matter, there is no legal obligation for EPA to directly model the selected analytic year, here 2021, in order to make regulatory determinations within the 4-step good neighbor framework. Given the limited amount of time EPA had to complete this rulemaking in order to meet the court-ordered March 15 deadline, EPA reasonably chose to use existing air quality modeling and contribution information to derive an appropriately reliable projection of air quality conditions and contributions in 2021. The Supreme Court recognized in *EME Homer City* that it is not possible to perfectly account for all factors that will affect downwind air quality problems in a future year. Regulators, the Court noted, "must account for the vagaries of the wind" and in assigning upwind responsibility face a "thorny causation problem." 572 U.S. 489, 497, 514. EPA's ultimate task is not to achieve a perfect understanding of atmospheric conditions in some future year, but "to quantify the amount of upwind gases . . .

that must be reduced to enable downwind states to keep their levels of ozone . . . in check. *Id.* 497. *See also EME Homer City Generation, L.P. v. EPA*, 795 F.3d 118, 135-36 ("We will not invalidate EPA's predictions solely because there might be discrepancies between those predictions and the real world. . . . [A] model is meant to simplify reality in order to make it tractable.").

EPA continues to view the interpolation analysis presented at proposal as sufficiently reliable for purposes of the regulatory determinations made in this rulemaking. Commenters assert that it is *possible* EPA may have found certain upwind state linkages not to exist had EPA taken a different approach to developing its projections for 2021. But no commenter has established an actual instance of overcontrol, which the courts have held must be clearly established through as-applied challenges. *See Wisconsin*, 938 F.3d at 325 ("'[T]he Supreme Court has made clear . . . that the way to contest instances of over-control is not through generalized claims that EPA's methodology would lead to over-control, but rather through a "particularized, as-applied challenge."'") (quoting *EME Homer City*, 795 F.3d at 137).

Nonetheless, in consideration of these comments, EPA has performed additional analysis, which confirms the regulatory determinations EPA proposed and is now finalizing. EPA was able to construct an emissions inventory for 2021, using available data and the same approach as EPA used to develop projection inventories for 2023 and 2028. Details on the construct of the 2021 emissions are provided in the Emissions Modeling TSD. There was, however, insufficient time to perform air quality modeling using this newly constructed 2021 inventory. Instead EPA used the Air Quality Assessment Tool (AQAT) to perform a sensitivity analysis to determine whether there would be any change in the outcome of this rule if the projection of 2021 air quality were based on projected 2021 emissions rather than EPA's interpolation method, as described above. In brief, AQAT uses the results of existing base year and future year air quality modeling as part of an interpolation technique to estimate ozone design values and contributions for analytic years that are not modeled as well as to analyze the air quality impacts of control

scenarios in step 3 of the 4-step transport framework. AQAT is calibrated using model simulations to account for the non-linearity response of ozone to emissions changes. As noted by the commenter, EPA's interpolation approach inherently assumes that the relative change in emissions between 2016 and 2023 is the same across all states. Because this application of AQAT considered 2021 state level emissions on a state-by-state basis, the analysis accounted for any state-to-state differences in the change in emissions between 2016 and 2023. As part of this sensitivity analysis EPA coupled the 2021 emissions and 2023 model-predicted ozone design values and contributions to estimate design values and contributions in 2021. EPA also used the 2021 emissions in AQAT to create a more-refined interpolated 2022 emission inventory. EPA then used the AQAT to examine the effects of this refined 2022 emission inventory on ozone design values and contributions. The results indicate that any changes in the nonattainment or maintenance status of individual receptors using 2021 and 2022 projected emissions would not affect which upwind states significantly contribute to nonattainment and/or interfere with maintenance of the 2008 NAAQS in another state.[99] Details on AQAT and this sensitivity analysis can be found in the Ozone Policy Analysis Final Rule TSD.

Comment: Other commenters claim that there is a disconnect between EPA's projected 2021 design values and current ozone monitoring data. These commenters said that EPA should give priority to monitored data over modeled data when evaluating which areas need transport obligations resolved. Specifically, one commenter performed an analysis to estimate 2021 design values by first estimating a fourth high maximum daily average 8-hour (MDA8) ozone concentration in 2021 based on the four-year average of the measured fourth high values during the period 2017 through 2020 and second, calculating the 2021 design value as the average of the measured fourth high value in 2019, the preliminary fourth high value in 2020 and the estimated

[99] Because EPA directly modeled 2023 and 2028, EPA relied solely on that modeling, and associated inventories, for its analysis of 2023 and later years.

fourth high value in 2021.[100] Another commenter performed a statistical linear regression analysis of the fourth highest measured values for each of three time periods: 2012 through 2020, 2014 through 2020, and 2016 through 2020 to estimate fourth highest values in 2021 that would result in nonattainment in 2021 at individual monitoring sites. This commenter said that an assessment of actual ambient monitor data, such as the analysis performed by this commenter, should be given as much weight, if not more, in identifying receptors in 2021 as the modeling-based analysis performed by EPA. Both commenters said that the results of their analyses support EPA's finding that the four monitoring sites identified in Table V.C-1, above will be receptors in 2021. However, both commenters claim that the Madison, Connecticut monitoring site 090099002 will be a nonattainment receptor, whereas EPA projects this site to be a maintenance-only receptor in 2021. Also, both commenters claim that there will be an additional 2021 nonattainment receptor at the Greenwich, Connecticut monitoring site 090010017. One commenter noted that identifying the Madison monitoring site as nonattainment instead of maintenance-only and the Greenwich monitoring site as a receptor will not alter the outcome of EPA's determination of which upwind states are linked to downwind receptors at step 2 of the 4-step transport framework.

In addition to the 2021 receptors in Connecticut, one commenter said that there will be two additional monitoring sites in the eastern U.S. that each have a chance of being a nonattainment or maintenance receptor in 2021. These monitoring sites are Houston-Deer Parksite 492011039 and Dallas-Grapevine site 48439007). The other commenter said that their analysis shows that there will be up to four additional nonattainment receptors in 2021 in the eastern U.S. outside of Connecticut. These monitoring sites include the Chicago-Northbrook, Illinois monitoring site 170314201, the Michigan City, Indiana monitoring site 180910005, the

[100] Ozone design values and fourth high maximum daily 8-hour ozone concentrations for 2020 are preliminary and have not yet been cerified by EPA.

El Paso, Texas monitoring site 481410037, and the Dallas-Eagle Mountain Rock monitoring site 484390075.

Response: EPA agrees with these commenters that the four monitoring sites identified by EPA as receptors in Table V.C-1 will be receptors in 2021. EPA also agrees that there would be no change in the upwind states covered by this rule if the Madison, Connecticut maintenance-only receptor is a nonattainment receptor rather than maintenance-only receptor. As described above, a maintenance-only receptor is a monitoring site that is at risk of being in nonattainment under meteorological conditions that are more conducive than average for ozone formation. Also, upwind states that are linked to maintenance-only receptors are evaluated by EPA using the same approach as those upwind states linked to nonattainment receptors in EPA's analysis of significant contribution in step 3 of the 4-step transport framework. Regarding the Greenwich, Connecticut monitoring site, EPA's contribution data, as provided in the docket for this rule, shows that there would be no additional upwind states covered by this rule if this monitoring site was included as a receptor in 2021. That is, all the upwind states that are linked to this monitoring site, using a 1 percent of the NAAQS threshold, are also linked to one or more of the other 2021 nonattainment and/or maintenance receptors in Connecticut that are identified in Table V.C-1.

EPA disagrees with the commenters that the six additional monitoring sites (i.e., Chicago/Northbrook, Dallas/Eagle Mountain Rock, Dallas/Grapevine, El Paso, Houston/Deer Park, and Michigan City) will be nonattainment or maintenance receptors in 2021. First, as explained in the Air Quality TSD, these sites are not identified in the methodology EPA uses to identify nonattainment and maintenance receptors. These conclusions are bolstered by EPA's review of measured design values for the period 2012 through 2019 at each of these six monitoring sites (see Table V.C-2). These data show that each of these sites, except for the site in Michigan City, is not measuring nonattainment based on their 2019 design value, which are the most recent official design values based on state-certified data. Moreover, the monitoring site in

El Paso has not measured a violation during this entire eight-year time period; the Houston/Deer Park site has not measured a violation in the most recent 6 years; the Dallas/Eagle Mountain Lake site has not measured a violation in the most recent 4 years; the Chicago/Northbrook site has measured only 1 violation in the most recent 6 years; and the Dallas/Grapevine site has measured only one violation in the most recent 4 years. At the Michigan City site, there are no official measured design values in 2016, 2017, and 2018 because there was no valid fourth high MDA8 ozone concentration in 2016. As a result, the data at this site did not meet the criteria in EPA's modeling guidance for calculating valid future year design values. As such, EPA has not calculated projected design values nor any contributions for this site.

Table V.C-2. Ozone design values at monitoring sites identified as receptors by commenters.

Site ID	State	County	Site Name	2012	2013	2014	2015	2016	2017	2018	2019
170314201	IL	Cook	Chicago/Northbrook	78	77	74	68	71	72	77	74
180910005	IN	LaPorte	Michigan City	83	83	79	68	-	-	-	76
481410037	TX	El Paso	El Paso	72	72	72	71	70	71	73	75
482011039	TX	Harris	Houston/Deer Park	84	79	72	69	67	68	71	75
484390075	TX	Tarrant	Dallas/Eagle Mountain Lake	82	81	79	76	72	71	70	73
484393009	TX	Tarrant	Dallas/Grapevine	86	86	80	78	75	75	76	75

Comment: In the proposed rule EPA requested comment on applying the "3 x 3" approach and the "no water cell" approach, described above, to identify modeled-grid cells for use in projecting ozone design values to a future year. One commenter said that both the "3 x 3" and "no water cell" approaches are acceptable, a second commenter supported the use of the "no water cell" approach, while a third commenter suggested that EPA modify the "no water cell" approach to exclude from the calculation of projected design values any data from the grid cell containing the monitoring site, if the monitor grid cell is also dominated by water.

Response: EPA has considered these comments and will continue to rely upon the "no water cell" approach used for the proposed rule to calculate projected design values at monitoring sites in coastal areas. The alternative suggested by one commenter to exclude model

data from the grid cell containing the monitoring site, if that grid cells is classified as a "water" grid cell, ignores the modeling data for the location of the monitoring state which is contrary to EPA's air quality modeling guidance. This guidance recommends that the calculation of ozone relative response factors, which are used in projecting future year design values, include the modeled data in grid cells immediately surrounding the monitoring site along with the grid cell in which the monitor is located. For coastal monitoring sites, the grid cell in which the monitor is located is more likely to be representative of the monitor locations, than adjacent over-water grid cells. In this regard, the approach suggested by the commenter is too restrictive in that modeling data in the grid cell containing the monitoring site would never be used in projecting design values for that monitor.

D. Pollutant Transport from Upwind States

1. Air Quality Modeling to Quantify Upwind State Contributions

This section documents the procedures EPA used to quantify the impact of emissions from specific upwind states on 2021 8-hour design values for the identified downwind nonattainment and maintenance receptors. 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.

EPA performed nationwide, state-level ozone source apportionment modeling using the CAMx Ozone Source Apportionment Technology/Anthropogenic Precursor Culpability Analysis

(OSAT/APCA) technique[101] to quantify the contribution of 2023 base case NO_X and VOC emissions from all sources in each state to projected 2023 ozone design values at air quality monitoring sites. The CAMx OSAT/APCA model run was performed for the period May 1 through September 30 using the projected 2023 base case emissions and 2016 meteorology for this time period. As described below, in the source apportionment modeling the Agency tracked (i.e., tagged) the amount of ozone formed from anthropogenic emissions in each state individually as well as the contributions from other sources (e.g., natural emissions).

To determine upwind contributions in 2021 the Agency applied the contributions from the 2023 modeling in a relative manner to the 2021 ozone design values. The analytic steps in the process are as follows:

(1) Calculate the 8-hour average contribution from each source tag to each monitoring site for the time period of the 8-hour daily maximum modeled concentrations in 2023;

(2) Average the contributions and concentrations for each of the top 10 modeled ozone concentration days in 2023[102] and then divide the average contribution by the corresponding concentration to obtain a Relative Contribution Factor (RCF) for each monitoring site; and

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[101] As part of this technique, ozone formed from reactions between biogenic VOC and anthropogenic NO_X or biogenic NO_X and anthropogenic VOC are assigned to the anthropogenic emissions. This approach is designed to fully capture as part of the anthropogenic contribution the total amount of ozone formed from photochemical reactions that involve emissions from all anthropogenic sources. In this manner, ozone is assigned to the controllable (i.e., anthropogenic) precursors that react with non-controllable (i.e., biogenic) precursors.

[102] The number of days used in calculating the average contribution metric has historically been determined in a manner that is generally consistent with EPA's recommendations for projecting future year ozone design values. Our ozone attainment demonstration modeling guidance at the time of the CSAPR recommended using all model-predicted days above the NAAQS to calculate future year design values (https://www3.epa.gov/ttn/scram/guidance/guide/final-03-pm-rh-guidance.pdf). In 2014 EPA issued draft revised guidance that changed the recommended number of days to the top-10 model predicted days (https://www3.epa.gov/ttn/scram/guidance/guide/Draft-O3-PM-RH-Modeling_Guidance-2014.pdf). For the CSAPR Update EPA transitioned to calculating design values based on this draft revised approach. The revised modeling guidance was finalized in 2019 and, in this regard, EPA is calculating both the ozone design values and the contributions based on a top-10 day approach (https://www3.epa.gov/ttn/scram/guidance/guide/O3-PM-RH-Modeling_Guidance-2018.pdf).

(3) Multiply the 2021 design values by the 2023 RCF at each site to produce the average contribution metric values in 2021.[103] The resulting 2021 contributions from each tag to each monitoring site in the U.S. along with additional details on the source apportionment modeling and the procedures for calculating contributions can be found in the AQM TSD.

In the source apportionment model run, EPA tracked the ozone formed from each of the following tags:

- 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 the Agency has point source inventory data in the 2016v1 emissions modeling platform (EPA 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 (EPA 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"

[103] The method for calculating the average contribution metric values in 2021 was also applied to 2023 and 2028 based on the projected design values and contribution modeling for each of those years, respectively.

category. The contributions from wildfire and 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 average contribution metric is intended to provide a reasonable representation of the contribution from individual states to the projected 2021 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 that is the subject of this rule to 8-hour ozone nonattainment and maintenance receptors in downwind states in 2021 is provided in Table V.D-1.

Table V.D-1. Largest Contribution to Downwind 8-Hour Ozone Nonattainment and Maintenance Receptors in 2021.

Upwind State	Largest Downwind Contribution to Nonattainment Receptors for Ozone (ppb)	Largest Downwind Contribution to Maintenance-Only Receptors for Ozone (ppb)
Alabama	0.11	0.27
Arkansas	0.18	0.15
Illinois	0.81	0.80
Indiana	1.26	1.08
Iowa	0.17	0.22
Kansas	0.13	0.11
Kentucky	0.87	0.79
Louisiana	0.27	4.68
Maryland	1.21	1.56
Michigan	1.71	1.62
Mississippi	0.10	0.37
Missouri	0.36	0.33
New Jersey	8.62	5.71
New York	14.44	12.54
Ohio	2.55	2.35
Oklahoma	0.20	0.14

Upwind State	Largest Downwind Contribution to Nonattainment Receptors for Ozone (ppb)	Largest Downwind Contribution to Maintenance-Only Receptors for Ozone (ppb)
Pennsylvania	6.86	5.64
Texas	0.59	0.36
Virginia	1.30	1.69
West Virginia	1.49	1.55
Wisconsin	0.23	0.23

Comment: One commenter said that the future year average contribution metric should be calculated using the modeled contributions on the same days that were used to calculate the RRFs for projecting future ozone design values.

Response: EPA believes that its approach, as described above, for calculating the future year average contribution metric provides a more technically reliable estimate of contributions than the method suggested by the commenter. In calculating the average contribution metric, EPA uses modeled contributions on the 10 days in the future year with the highest model-predicted concentrations.[104] In part because the formation of ozone from precursor emissions can be highly nonlinear and dependent on meteorological conditions, the response of ozone to emission reductions can vary from day to day. In this regard, the days with the highest model-predicted ozone concentrations in the 2016 base year that are used for projecting ozone design values may not be among the highest ozone days in the future analytic year. In this situation, the calculation of the contribution metric could exclude days with higher concentrations in the future year in favor of lower future-concentration days that happened to correspond to the highest days in 2016. The problems with basing the calculation of future year average contributions on the days that were used to project design values are illustrated in Table V.D-2. Table V.D-2 includes

[104] If there are fewer than 5 days with model-predicted future year ozone concentrations greater than or equal to 60 ppb, then an average contribution metric is not calculated because. Using the 60 ppb criteria aligns with the criteria for projecting future year design values, as recommended in EPA's air quality modeling guidance.

the data for all the days that were either used to project design values and/or to calculate the average contribution values from each upwind state to a particular receptor. The data in the "2016 Modeled" column are the 2016 base year MDA8 ozone concentrations and the data in the "2023 Modeled" column are the MDA8 ozone concentrations in 2023. The data in the table are ranked based on the magnitude of the 2016 MDA8 concentrations.[105] Comparing the 2023 MDA8 ozone concentrations to the corresponding 2016 values shows that the days with the highest MDA8 ozone concentrations in 2016 are not the same days as the highest MDA8 ozone concentrations in 2023. Of importance, the top 10 days based on 2016 model predictions includes five days with 2023 MDA8 ozone concentrations below 60 ppb. In calculating the average contribution metric EPA excludes from the calculation all days with future year modeled MDA8 concentrations below 60 ppb. Thus, using EPA's approach the average contribution metric in this example would be calculated based on daily contribution data for the top 6 MDA8 concentration days in 2023, because the remaining top 10 future year days are below 60 ppb (i.e., 05/06, 05/13, 06/08, 09/12, and 09/28). Moreover, even though the concentration on the sixth-highest day in 2023 is 60 ppb, the contribution data on this day would be excluded from the calculations because this day is not among the top 10 days used to project design values.

Table V.D-2. MDA8 Ozone Concentrations in 2016 Used to Project Design Values and the 2023 Modeled MDA8 Concentrations on the Same Days (ppb).

Date	2016 Rank	2016 Modeled	2023 Rank	2023 Modeled
07/01	1	79.4	3	69.1
06/27	2	79.4	1	74.5
05/12	3	76.4	2	69.7
06/08	4	71.9	7	59.5
09/12	5	69.4	13	51.8
09/28	6	68.5	10	56.3
08/09	7	68.5	5	61.0
05/13	8	67.8	9	57.1
09/19	9	67.5	4	61.3
05/06	10	67.1	8	58.1

[105] Top 10 days that have modeled MDA8 ozone predictions less than 60 ppb are not included in the RRF calculation.

Date	2016 Rank	2016 Modeled	2023 Rank	2023 Modeled
08/08	11	65.8	12	54.4
07/21	12	65.2	11	55.9
06/30	13	64.8	14	50.0
05/10	14	63.4	6	60.0

It is obviously impossible for EPA, or anyone, to predict which exact days in a future year will have high ozone levels, nor does it make sense to analyze contribution on modeled days of low ozone concentration. EPA's methodology is reasonable in projecting *where* ozone problems are likely to recur in a future year and analyzing *who* is contributing to those problems under the conditions for high ozone formation in those locations.

Comment: One commenter said that EPA should base the calculation of the future year contribution metric on days with measured exceedances of the NAAQS. Specifically, the comment asked EPA to examine the 2016 measured concentrations at receptors in Connecticut to ensure that the contribution from Illinois to these receptors was calculated on days when the monitor measured exceedances.

Response: EPA continues to believe that the future year contribution metric should be based on the highest ozone concentration days in the future year. However, as a sensitivity analysis EPA recalculated the average contribution from Illinois to the three receptors in Connecticut using the daily contributions on days with measured exceedances of the NAAQS, after applying the 60 ppb screening criteria to eliminate from the calculations those days with future year model-predicted MDA8 ozone concentrations below 60 ppb. The results of this sensitivity analysis, as provided in Table V.D-3, show that Illinois would contribute above the 1 percent of the NAAQS screening threshold to each of the three Connecticut receptors using the approach suggested by the commenter.

Table V.D-3. Contributions from Illinois (ppb) to Receptors in Connecticut.

Receptor	Contribution Based on EPA's Method	Contribution Based on Measured Exceedance Days
Stratford	0.69	0.98
Westport	0.81	0.76
Madison	0.80	1.03

2. Application of Screening Threshold

EPA evaluated the magnitude of the contributions from each upwind state to downwind nonattainment and maintenance receptors. In step 2 of the good neighbor framework, 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. The contributions from each of the CSAPR Update states to each downwind nonattainment and/or maintenance receptor that were used for the step 2 evaluation can be found in the AQM TSD.

As discussed above in section IV, EPA is not reopening the air quality screening threshold of 1 percent of the NAAQS used in the CSAPR Update. Therefore, as in the CSAPR Update, EPA uses an 8-hour ozone value for this air quality threshold of 0.75 ppb as the quantification of 1 percent of the 2008 ozone NAAQS.

Comment: Several commenters said that EPA's 1 percent of the NAAQS threshold is too low and that, instead, a threshold of 1 ppb or 2 ppb should be used as the contribution screening threshold in step 2.

Response: As noted above, the Agency is not reopening the use of the 1 percent threshold in this action to address the remand of the CSAPR Update. This action is taken in response to the *Wisconsin* remand and to complete the good neighbor obligations that were partially addressed in the CSAPR Update. It is entirely appropriate to continue to apply the same screening threshold to identifying receptors to fully address the outstanding obligations as EPA took in initially addressing them. Indeed, to do otherwise would be anomalous and pose a risk of inconsistent

requirements for different states. While the Agency is not reopening the application of the 1 percent threshold in this action on remand, explanation for how this value was originally derived is available in the CSAPR rulemaking in 2011. *See* 76 FR 48208, 48237-38. Further, in the CSAPR Update, EPA re-analyzed the threshold for purposes of the 2008 ozone NAAQS and determined it was appropriate to continue to apply this threshold. EPA compared the 1 percent threshold to a 0.5 percent of NAAQS threshold and a 5 percent of NAAQS threshold. EPA found that the lower threshold did not capture appreciably more upwind state contribution compared to the 1 percent threshold, while the 5 percent threshold allowed too much upwind state contribution to drop out from further analysis.[106] EPA therefore determined the 1 percent threshold was appropriate for purposes of good neighbor obligations under the 2008 ozone NAAQS. This determination was not challenged in the *Wisconsin* case. Thus, EPA is applying the 1 percent threshold at step 2, consistent with its initial analysis of obligations in the CSAPR Update and without reopening its prior determination on this issue in that rule.

a. *States that Contribute Below the Screening Threshold*

Of the 21 states that are the subject of this final rule, EPA has determined that the contributions from each of the following states to nonattainment and/or maintenance-only receptors in the 2021 analytic year are below the threshold: Alabama, Arkansas, Iowa, Kansas, Mississippi, Missouri, Oklahoma, Texas, and Wisconsin. Because these states are considered not to contribute to projected downwind air quality problems, EPA is determining that the CSAPR Update FIPs for these states (or, in the case of Alabama and Missouri, the SIP revisions later approved to replace the states' CSAPR Update FIPs) are a complete remedy to address their significant contribution under the good neighbor provision for the 2008 ozone NAAQS. These states remain subject to the ozone season NO_X emission budgets established in the CSAPR

[106] *See* Final CSAPR Update Air Quality Modeling TSD, at 27-30 (EPA-HQ-OAR-2015-0596-0144).

Update, and EPA is not reopening the determinations in the CSAPR Update regarding these states.[107]

b. States that Contribute at or Above the Screening Threshold

In this final rule, states with remanded emission budgets under the CSAPR Update that contribute to a specific receptor in an amount at or above the screening threshold in 2021 are considered linked to that receptor. The ozone contributions and emissions (and available emission reductions) for these states are analyzed further at step 3, as described in section VI, to determine whether and to what extent emission reductions might be required from each state.

Based on the maximum downwind contributions in Table V.D-1, the step 2 analysis identifies that the following 11 states contribute at or above the 0.75 ppb threshold to downwind nonattainment receptors: Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, New York, Ohio, Pennsylvania, Virginia, and West Virginia. Based on the maximum downwind contributions in Table V.D-1, the following 12 states contribute at or above the 0.75 ppb threshold to downwind maintenance-only receptors: Illinois, Indiana, Kentucky, Louisiana, Maryland, Michigan, New Jersey, New York, Ohio, Pennsylvania, Virginia, and West Virginia. The levels of contribution between each of these linked upwind state and downwind nonattainment receptors and maintenance-only receptors are provided in Table V.D-2 and Table V.D-3, respectively.

Table V.D-2. Contribution (ppb) from Each Linked Upwind State to Downwind Nonattainment Receptors in 2021.

Upwind State	**Nonattainment Receptors**	
	Stratford, CT	Westport, CT
Illinois	0.69	0.81
Indiana	0.99	1.26
Kentucky	0.78	0.87
Louisiana	0.27	0.27

[107] EPA notes that the updated modeling establishing that these states no longer contribute as of 2021 assumes in its baseline the continued implementation of the CSAPR Update budgets in these states.

Upwind State	Nonattainment Receptors	
Maryland	1.21	1.20
Michigan	1.16	1.71
New Jersey	7.70	8.62
New York	14.42	14.44
Ohio	2.34	2.55
Pennsylvania	6.72	6.86
Virginia	1.29	1.30
West Virginia	1.45	1.49

Table V.D-3. Contribution (ppb) from Each Linked Upwind State to Downwind Maintenance-Only Receptors in 2021.

Upwind State	Maintenance-Only Receptors	
	Madison, CT	Houston, TX
Illinois	0.80	0.02
Indiana	1.08	0.02
Kentucky	0.79	0.02
Louisiana	0.15	4.68
Maryland	1.56	0.00
Michigan	1.62	0.00
New Jersey	5.71	0.00
New York	12.54	0.00
Ohio	2.35	0.00
Pennsylvania	5.64	0.00
Virginia	1.69	0.00
West Virginia	1.55	0.00

In conclusion, as described above, states with contributions that equal or exceed 1 percent of the NAAQS to either nonattainment or maintenance receptors are identified as “linked” at step 2 of the good neighbor framework and warrant further analysis for significant contribution to nonattainment or interference with maintenance under step 3. EPA is determining that the following 12 States are linked at step 2: Illinois, Indiana, Kentucky, Louisiana, Maryland, Michigan, New Jersey, New York, Ohio, Pennsylvania, Virginia, and West Virginia.

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

A. *The Multi-Factor Test*

This section describes EPA's methodology at step 3 of the 4-step framework for identifying upwind emissions that constitute "significant" contribution for the states subject to this final rule. This analysis focuses on the 12 states linked at steps 1 and 2 of the framework, as identified in the sections above. Following the existing framework as applied in the CSAPR Update, EPA's assessment of linked upwind state emissions reflects analysis of uniform NO_X emission control stringency. The analysis has been extended to include assessment of non-EGU sources in addition to EGU sources in the linked upwind states.

Each level of uniform NO_X control stringency is characterized by a set of pollution control measures. EPA applies a multi-factor test—the same multi-factor test that was used in the CSAPR and the CSAPR Update[108]— to evaluate increasing levels of uniform NO_X control stringency. The multi-factor test, which is central to EPA's step 3 quantification of significant contribution, considers cost, available emission reductions, and downwind air quality impacts to determine the appropriate level of uniform NO_X control stringency that addresses the impacts of interstate transport on downwind nonattainment or maintenance receptors. The uniform NO_X emission control stringency, represented by marginal cost (or a weighted average cost in the case of EPA's non-EGU analysis), also serves to apportion the reduction responsibility among collectively contributing upwind states. This approach to quantifying upwind state emission-reduction obligations using uniform cost was reviewed by the Supreme Court in *EME Homer City Generation*, which held that using such an approach to apportion emission reduction responsibilities among upwind states that are collectively responsible for downwind air quality

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

impacts "is an efficient and equitable solution to the allocation problem the Good Neighbor Provision requires the Agency to address." 572 U.S. at 519.

There are four stages in developing the multi-factor test: (1) Identify levels of uniform NO_X control stringency; (2) evaluate potential NO_X emission reductions associated with each identified level of uniform control stringency; (3) assess air quality improvements at downwind receptors for each level of uniform control stringency; and (4) select a level of control stringency considering the identified cost, available NO_X emission reductions, and downwind air quality impacts, while also ensuring that emission reductions do not unnecessarily over-control relative to the contribution threshold or downwind air quality.

Comment: Some commenters suggested EPA also consider regulating volatile organic compounds (VOCs) as it represents another precursor to ozone formation. They assert EPA's failure to reduce significant contributions to downwind nonattainment/maintenance by reducing upwind VOC emissions disproportionately harms communities of color, low-income communities, and children, perpetuating environmental injustice.

Response: EPA agrees that VOCs are a precursor along with NOx in forming ground-level ozone and that ozone formation chemistry can be "NOx-limited", where ozone production is primarily determined by the amount of NOx emissions or "VOC-limited", where ozone production is primarily determined by the amount of VOC emissions.[109] EPA also acknowledges that VOCs can contain toxic chemicals that affect public health. EPA's obligation in this action is to complete the elimination of significant contribution to nonattainment or interference with maintenance of NAAQS in other states for 12 states in the East to meet the requirements of section 110(a)(2)(D)(i)(I) of the Act. Provisions for local NAAQS attainment and exposure to toxic pollutant concentrations are addressed by other sections of the statute. EPA and others have long regarded NOx to be the more significant ozone precursor in the context of interstate ozone

[109] "Ozone Air Pollution." *Introduction to Atmospheric Chemistry*, by DANIEL J. JACOB, Princeton University Press, PRINCETON, NEW JERSEY, 1999, pp. 231–244.

transport.[110] In response to this comment, EPA examined the results of the contribution modeling performed for this rule to identify the portion of the ozone contribution attributable to anthropogenic NOx emissions versus VOC emissions from each linked upwind state to each downwind receptor. Table VI.A provides the ozone contribution from each upwind state linked to the receptors in Connecticut along with the percent (in parenthesis) of the contribution that is formed under "NOx-limited" photochemistry. The data show that NOx is the determinative precursor for over 80 percent of the total contribution from each upwind state to each of these receptors. In addition to the Connecticut receptors, ozone primarily formed from NOx emissions is 95 percent of the 4.58 ppb contribution from Louisiana to the receptor in Harris County, Texas. Therefore, EPA's review of the data leads to the finding that, as proposed, a focus on NOx emission reductions is appropriate for the purpose of addressing interstate ozone transport.

Table VI.A. Contribution (ppb) From Each Linked Upwind State to Receptors in Connecticut and the Percent of the Contribution from NO_X.

State	Receptor	IL	IN	KY	MD	MI	NJ	NY	OH	PA	VA	WV
CT	Stratford	Not Linked	0.96 (95%)	0.76 (96%)	1.18 (90%)	1.13 (95%)	7.48 (83%)	14.01 (81%)	2.27 (95%)	6.53 (93%)	1.25 (93%)	1.41 (97%)
CT	Westport	0.79 (94%)	1.23 (95%)	0.85 (96%)	1.18 (89%)	1.67 (94%)	8.44 (83%)	14.14 (81%)	2.50 (95%)	6.72 (92%)	1.27 (92%)	1.45 (96%)
CT	Madison	0.78 (95%)	1.04 (96%)	0.77 (96%)	1.51 (91%)	1.57 (95%)	5.53 (84%)	12.15 (86%)	2.27 (95%)	5.47 (92%)	1.63 (93%)	1.51 (96%)

For both EGUs and non-EGUs, section VI.B describes the available NOx emission controls considered and their associated cost levels (in 2016$). Section VI.C discusses EPA's application of that information to assess emission reduction potential of the identified control stringencies. Finally, section VI.D describes EPA's assessment of associated air quality impacts and EPA's subsequent identification of appropriate control stringencies considering the relevant

[110] 81 FR 74514.

factors (cost, available emission reductions, and downwind air quality impacts). As discussed in greater detail in section VI.D, the multi-factor test informed EPA's determination of appropriate EGU NO_X ozone season emission budgets necessary to reduce emissions that significantly contribute to nonattainment or interfere with maintenance of the 2008 ozone NAAQS for the 2021 ozone season and subsequent control periods.

This multi-factor approach is consistent with EPA's approach in the prior CSAPR and CSAPR Update actions. In addition, as was done in the CSAPR Update, EPA evaluated possible over-control by determining if an upwind state is linked solely to downwind air quality problems that could have been resolved at a lower representative cost threshold, or if upwind states could reduce their emissions below the 1 percent air quality contribution threshold at a lower representative cost threshold. This analysis is described in section VI.D.

In the proposed rule, EPA identified a control stringency that reflects the optimization of existing SCR controls and installation of state-of-the-art NO_X combustion controls at EGUs, with an estimated marginal cost of $1,600 per ton. As explained in greater detail in section VI.D, EPA is finalizing an EGU control stringency that also includes optimizing existing SNCR controls. Application of the multi-factor test to non-EGU sources has led EPA to conclude, as the Agency proposed, that emission reductions from non-EGU sources are not necessary to address significant contribution or interference with maintenance under the 2008 ozone NAAQS.

B. Identifying Levels of Control Stringency

1. EGU NO_X Mitigation Strategies

In identifying levels of uniform control stringency for EGUs, EPA reassessed the same NO_X emission controls that it had analyzed in the CSAPR Update, all of which are considered to be widely available in this sector: (1) fully operating existing SCR, including both optimizing NO_X removal by existing operational SCRs and turning on and optimizing existing idled SCRs; (2) installing state-of-the-art NO_X combustion controls; (3) fully operating existing SNCRs, including both optimizing NO_X removal by existing operational SNCRs and turning on and

optimizing existing idled SNCRs; (4) installing new SNCRs; and (5) installing new SCRs. For the reasons explained in the EGU NO_X Mitigation Strategies Final Rule TSD included in the docket for this final rule, EPA determined that for the regional, multi-state scale of this rulemaking, only EGU NO_X emission controls 1 and 3 are possible for the 2021 ozone season (fully operating existing SCRs and SNCRs). As discussed in section VI.B.1.b, EPA finds that it is not possible to install state-of-the-art NO_X combustion controls by the 2021 ozone season on a regional scale. EPA determined state-of-the-art NO_X combustion controls at EGUs are available by the beginning of the 2022 ozone season.

a. Optimizing Existing SCRs

Optimizing (i.e., turning on idled or improving operation of partially operating) existing SCRs can substantially reduce EGU NO_X emissions quickly using investments that have already been made in pollution control technologies. With the promulgation of the CSAPR Update, most operators improved their SCR performance and have continued to maintain that level of improved operation. However, this SCR performance is not universal and some drop has been observed as the CSAPR Update ozone-season allowance price has declined steadily since 2017. For example, recent power sector data from 2019 reveal that, in some cases, operating units have SCR controls that have been idled or are operating partially, and therefore suggest that there remains reduction potential through optimization.[111] EPA determined that optimizing all of these remaining SCRs in the 12 linked states is a readily available approach for EGUs to reduce NO_X emissions.

EPA estimates a representative cost of optimizing SCR controls to be approximately $1,600 per ton. EPA's analysis of this emission control is informed by comment on the CSAPR Update proposed rule and updated information on operation and industrial-input costs that have

[111] *See* "Ozone Season Data 2018 vs. 2019" and "Coal-fired Characteristics and Controls" at https://www.epa.gov/airmarkets/power-plant-data-highlights#OzoneSeason.

become available since the CSAPR Update.[112] While the costs of optimizing existing, operational SCRs include only variable costs, the cost of optimizing SCR units that are currently idled back into service considers both variable and fixed costs. Variable and fixed costs include labor, maintenance and repair, parasitic load, and ammonia or urea for use as a NO_X reduction reagent in SCR systems. EPA performed an in-depth cost assessment for all coal-fired units with SCRs. More information about this analysis is available in the EGU NO_X Mitigation Strategies Final Rule TSD, which is found in the docket for this rule. The TSD notes that, for the subset of SCRs that are already partially operating, the cost of optimizing is often much lower than the $1,600 per ton marginal cost and often under $800 per ton.

EPA is using the same methodology to identify SCR performance as it did in the CSAPR Update. To estimate EGU NO_X reduction potential from optimizing, EPA considers the difference between the non-optimized NO_X emission rates and an achievable operating and optimized SCR NO_X emission rate. To determine this rate in the CSAPR Update, EPA evaluated nationwide coal-fired EGU NO_X ozone season emissions data from 2009 through 2015 and calculated an average NO_X ozone season emission rate across the fleet of coal-fired EGUs with SCR for each of these seven years. EPA found it prudent to not consider the lowest or second-lowest ozone season NO_X emission rates, which may reflect new SCR systems that have all new components (e.g., new layers of catalyst). Data from these new systems are not representative of ongoing achievable NO_X emission rates considering broken-in components and routine maintenance schedules. To identify the potential reductions from SCR optimization in this final action, EPA followed the same methodology and incorporated the latest reported coal-fired EGU NO_X ozone season emissions data. EPA updated the timeframe to include the most recent and best available operational data (i.e., 2009 through 2019). Considering the emissions data over the

[112] The CSAPR Update found $1,400 per ton was a level of uniform control stringency that represented turning on idled SCR controls. EPA uses the same costing methodology, but updating for input cost increases (e.g., urea reagent) to arrive at $1,600 per ton in this rule (while also updated from 2011 dollars to 2016 dollars).

full time period of available data results in a third-best rate of 0.08 pounds per million British thermal units (lb/mmBtu). EPA notes that over half of the SCR-controlled EGUs achieved a NO_X emission rate of 0.068 lbs/mmBtu or less over their third-best entire ozone season. Moreover, for the SCR-controlled coal units that EPA identified as having a 2019 emission rate greater than 0.08 lb/mmBtu, EPA verified that in prior years, the majority (approximately 95 percent) of these same units had demonstrated and achieved a NO_X emission rate of 0.08 lb/mmBtu or less on a seasonal and/or monthly basis. This further supports EPA's determination that 0.08 lb/mmBtu reflects a reasonable emission rate for representing SCR optimization in quantifying state emission budgets as discussed in section VII.B. This fleet-level emission rate assumption of 0.08 lb/mmBtu for non-optimized units reflects, on average, what those units would achieve when optimized. Some of these units may achieve rates that are lower than 0.08 lb/mmBtu, and some units may operate above that rate based on unit-specific configuration and dispatch patterns.

EPA evaluated the feasibility of optimizing idled SCRs for the 2021 ozone season. Based on industry past practice, EPA determined that idled controls can be restored to operation quickly (less than two months). This timeframe is informed by many electric utilities' previous long-standing practice of utilizing SCRs to reduce EGU NO_X emission during the ozone season while putting the systems into protective lay-up during the non-ozone season months. For example, this was the long-standing practice of many EGUs that used SCR systems for compliance with the NO_X Budget Trading Program. It was quite typical for SCRs to be turned off following the September 30 end of the ozone season control period. These controls would then be put into protective lay-up for several months of non-use before being returned to operation by May 1 of the following ozone season.[113] Therefore, EPA believes that optimization of existing SCRs is possible for the portion of the 2021 ozone season covered under this final rule.

[113] In the 22 state CSAPR Update region, 2005 EGU NO_X emissions data suggest that 125 EGUs operated SCR systems in the summer ozone season while idling these controls for the remaining

The vast majority of SCR controlled units (nationwide and in the 12 linked states) are already partially operating these controls during the ozone season based on historical 2019 emissions rates. EPA believes that this widely demonstrated seasonal behavior of turning on idled SCRs also supports the Agency's determination that optimizing existing SCR systems currently being operated to some degree within the ozone season, which would necessitate fewer changes to SCR operation relative to restarting idled systems, is also feasible for the 2021 ozone season. Full operation of existing SCRs that are already operating to some extent involves increasing reagent (i.e., ammonia or urea) flow rate, and maintaining and replacing catalyst to sustain higher NO_X removal rate operations. Increasing NO_X removal by SCR controls that are already operating can be implemented by procuring more reagent and catalyst. EGUs with SCR routinely procure reagent and catalyst as part of ongoing operation and maintenance of the SCR system. In many cases, where EPA has identified EGUs that are operating their SCR at non-optimized NO_X removal efficiencies, EGU data indicate that these units historically have achieved more efficient NO_X removal rates. Therefore, EPA determined that optimizing existing SCRs currently being operated could generally be done by reverting back to previous operation and maintenance plans. Regarding full operation activities, existing SCRs that are only operating at partial capacity still provide functioning, maintained systems that may only require increased chemical reagent feed rate up to their design potential and catalyst maintenance for mitigating NO_X emissions. Units must have adequate inventory of chemical reagent and catalyst deliveries to sustain operations. Considering that units have procurement programs in place for operating SCRs, this may only require updating the frequency of deliveries. This may be accomplished within a few weeks.

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7 non-ozone season months of the year. Units with SCR were identified as those with 2005 ozone season average NO_X rates that were less than 0.12 lbs/mmBtu and 2005 average non-ozone season NO_X emission rates that exceeded 0.12 lbs/mmBtu and where the average non-ozone season NO_X rate was more than double the ozone season rate.

Comment: EPA received comments supporting the 0.08 lb/mmBtu emission rate as achievable and, according to some commenters, conservative. Some of these commenters went on to provide their own analysis demonstrating that the 0.08 lb/mmBtu was achievable not only on average for the non-optimized fleet, but also for these individual units and that the resulting state emission budgets were likewise achievable. Some commenters suggested that the rate should be lower and premised on EPA using a longer historical baseline (e.g., extending baseline back to year 2006) and relying on the first- or second-best year instead of the third best year of SCR performance. In addition to supporting the 0.08 lb/mmBtu optimization rate as viable for 2021, these same commenters noted the 2021 attainment data and suggested implementation by 2021 was not only achievable, but necessary under Clean Air Act requirements and the *Wisconsin* directive.

Response: As explained above, EPA chose 2009 for the start of its baseline period of SCR performance examination because that is the first year of annual compliance under the CAIR NO_X program. The analysis focuses on the third best ozone season average rate because EPA believes that the first or second best rate, as discussed in the CSAPR Update final rule, could continue to capture disproportionately new SCR components and/or the onset of new regulatory programs and does not necessarily reflect achievable ongoing NO_X emission rates. Therefore, EPA is finalizing analysis using the third best rate starting from 2009 – consistent with its approach in the CSAPR Update.

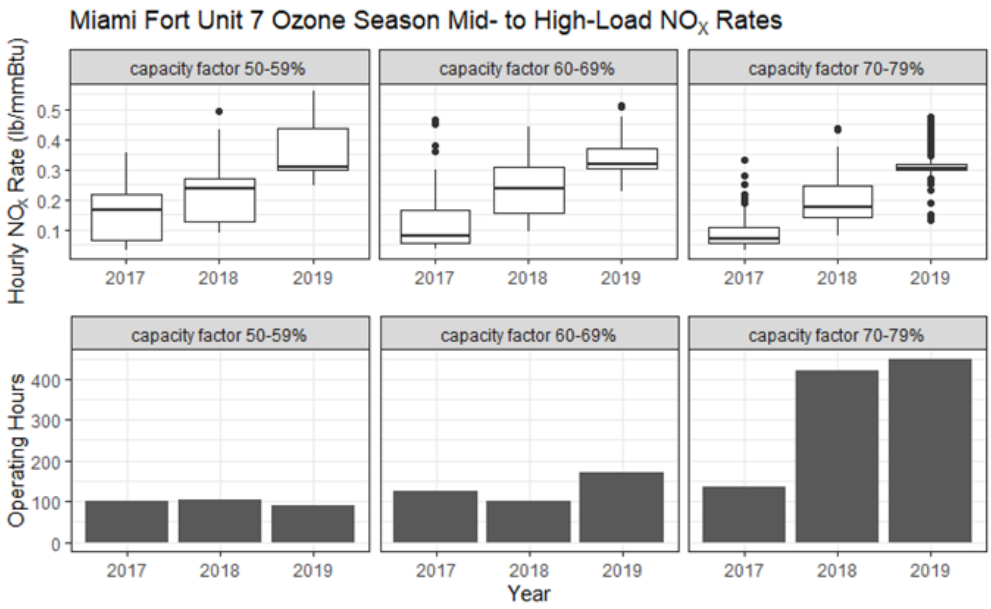
Comment: Other commenters suggested that EPA should apply a higher emission rate than 0.08 lb/mmBtu premised on considerations such as: a generally reduced average capacity factor for coal units in recent years, the age of the boiler, coal rank (bituminous or subbituminous), or other unit-specific considerations that make the 0.08 lb/mmBtu rate unattainable for a specific unit. They also suggested that EPA's determination of the rate should be premised on EPA using a shorter historical baseline (e.g., shortening the baseline to year 2013).

Response: EPA did not find sufficient justification to apply a higher average emission rate than 0.08 lb/mmBtu or for shortening the baseline to exclude representative operational data starting in 2009. EPA found that some commenters were misunderstanding or misconstruing both EPA's assumption and implementation mechanism as a unit-level requirement for every SCR-controlled unit instead of a reflection of a fleet-wide average based on a third-best rate. The commenters' observation - that 0.08 lb/mmBtu may be difficult for some units to achieve or may not be a preferred compliance strategy for a given unit given its dispatch levels - does not contradict EPA's assumption, but rather supports its methodology and assumptions. As EPA pointed out in the proposed rule, "this fleet-level emission rate assumption of 0.08 lb/mmBtu for non-optimized units reflects, on average, what those units would achieve when optimized. Some of these units may achieve rates that are lower than 0.08 lb/mmBtu, and some units may operate above that rate based on unit-specific configuration and dispatch patterns."[114] In other words, EPA is using this assumption as the average performance of a unit that optimizes its SCR, recognizing that heterogeneity within the fleet will likely lead some units to overperform and others to underperform this rate. Moreover, a review of unit-specific historical data indicates that this is a reasonable assumption: not only has the group of units with SCR optimization potential demonstrated they can perform at or better than the 0.08 lb/mmBtu rate on average, but 95 percent of the individual units in this group have met this rate on a seasonal and/or monthly basis based on their reported historical data.[115] Additionally, EPA's examination of units with the largest emission reduction potential based on SCR optimization levels of 0.08 lb/mmBtu indicates the ability of units to improve emission rate performance. As an example, Miami Fort Unit 7 had considerably more hours operating at a 70 to 79 percent capacity factor in 2019 compared to previous years. However, Miami Fort Unit 7's ozone-season NO_X emission rate

[114] 85 FR 68991.
[115] See "Optimizing SCR Units With Best Historical NOx Rates Final" file included in the docket for this rulemaking.

substantially increased in 2019 compared to previous years. This runs counter to the notion that an increase in emission rates is purely driven by reduced capacity factor, as suggested by commenters. This substantial deterioration in the median emission rate performance is observable even when comparing specific hours in 2019 to specific hours in prior years when the unit operated in the same 70 to 79 percent capacity factor range. In fact, in 2019 the unit experienced notable emission rate increases from prior years across multiple capacity factor ranges as low as 40 percent to as high as 80 percent. This type of data indicates instances where the increase in emission rate (and emissions) is not necessitated by load changes but is more likely due to the erosion of the existing incentive to optimize controls (i.e., the ozone-season NOx allowance price has fallen so low that unit operators find it more economic to surrender additional allowances instead of continuing to operate pollution controls at an optimized level). This type of decline in emission rate performance at some SCR-controlled units is what EPA disincentivizes with the full remedy nature of this action.

Figure 1 to Section VI.B.- Example of Unit-level Emission Rate Changes at a Given Capacity Factor Range.



EPA observed this pattern in other units identified in this rulemaking as having significant SCR optimization emission reduction potential. In the accompanying Emissions Data TSD for the supplemental notice that EPA recently released in a proceeding to address a recommendation submitted to EPA by the Ozone Transport Commission under CAA section 184(c), EPA noted, "In their years with the lowest average ozone season NOx emission rates in this analysis, these EGUs had relatively low NO_X emission rates at mid- and high-operating levels; moreover, there was little variability in NO_X emission rates at these operating levels. However, during the 2019 ozone season, these EGUs had higher NO_X emission rates and greater variability in NO_X emission rates across operating levels than in the past, particularly at mid-operating levels."[116] That hourly data analysis, included in this docket, controls for operating level changes and still finds there to be instances across multiple SCR-controlled units in the 12-state region where hourly emission rates are increasing even when compared to the same load levels in previous years.

To the extent commenters have alleged that in recent years coal-fired EGUs have declined in capacity factor and that SCR performance declines at those lower operating levels, EPA notes that this does not necessarily result in a compliance feasibility challenge. First, as explained elsewhere in this section, EPA believes the 0.08 rate assumption is achievable on a fleetwide average basis. Second, the implementation mechanism of a mass-based emission trading program eliminates any compliance feasibility concern. Even if reduced operation of a unit were to affect the rate-based performance of a unit, it would also lower emissions-producing generation from that unit, which in turn reduces the number of allowances the unit operator must hold for compliance under this emission trading program. Commenters have failed to establish that compliance with the mass-based implementation mechanism of this rule is actually unachievable. Further, hourly data indicate that maintaining consistent SCR performance at

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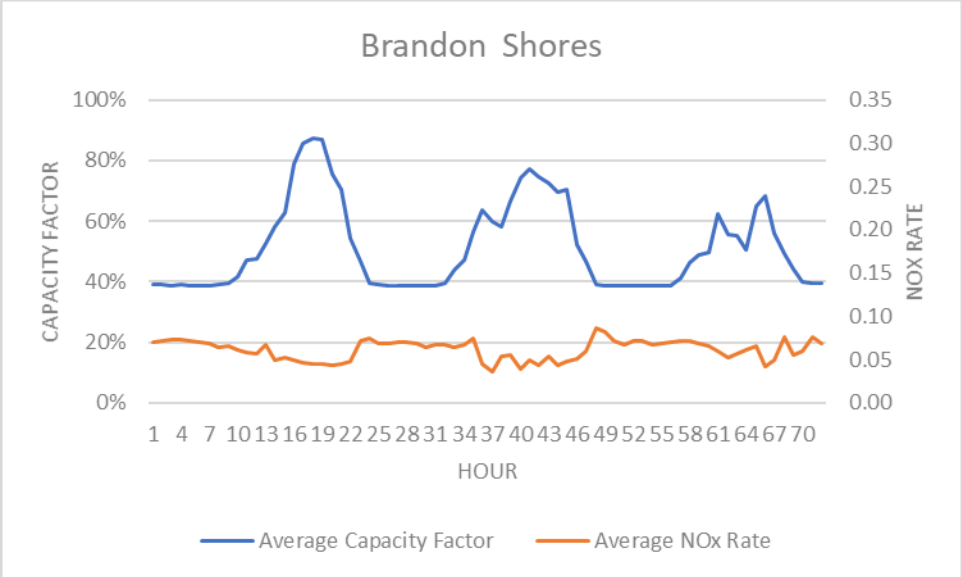
[116] "Analysis of Ozone Season NOx Emissions Data for Coal-Fired EGUs in Four Mid-Atlantic States". EPA Clean Air Markets Division. December 2020. Available at https://www.epa.gov/sites/production/files/2020-12/documents/184c_emission_data_tsd.pdf.

lower capacity factors is possible. For example, the unit-level performance data in the graph below show the emission rate at a plant staying relatively low (consistent with our optimization assumption of 0.08 lb/mmBtu) and stable across a wide range of capacity factors.[117]

Figure 2 to Section VI.B.- Example of Consistently Low Unit-level Emission Rate During Periods of Varying Capacity Factor



Comment: EPA received comment suggesting that EPA subcategorize its SCR optimization rate assumption by coal rank (i.e., bituminous or subbituminous) as the difference between the two would imply that the 0.08 lb/mmBtu rate is not appropriate.

Response: EPA reviewed historical data for SCR operation by coal rank and assessed it against its 0.08 lb/mmBtu fleet-wide average assumption and did not find any change necessary or appropriate. EPA found many instances of both SCR-controlled coal units combusting subbituminous coal and SCR-controlled coal units combusting bituminous coal (including instances in earlier years where these very same units that EPA is identifying as having optimization potential relative to their 2019 levels) operating at emission rate levels at or below

[117] EPA, *Air Markets Program Data*. Available at www.epa.gov/ampd.

the 0.08 lb/mmBtu rate. In other words, although these units may not be operating at this emission rate in 2019, it is not due to coal rank as they have - in the vast majority of cases - met that rate in some period prior to 2019. In this case, the use of the average rate and the third best year accommodates any heterogeneity in emission rate that may stem from a unit's coal choice and makes 0.08 lb/mmBtu a reasonable average performance rate regardless of coal rank. Moreover, EPA notes that the covered fleet with the identified SCR optimization potential identified in this rule is composed of sources who have purchased and consumed both subbituminous and bituminous coal. The presence of both types of coal burning units within the region coupled with this observation that some units have utilized both types of coal, further support the use of a single fleet-wide average for purposes of estimating reduction potential and implementing state emission budgets – consistent with the CSAPR Update. This use of an average value, instead of two separate values is also consistent with EPA's approach in the CSAPR Update. EPA further examines and addresses this comment in the EGU NO_X Mitigation Strategies Final Rule TSD.

Comment: EPA also received comment suggesting it should deviate from its approach in the CSAPR Update of using a nationwide set of data to establish a third best year, and instead use an average from just the 12 covered states.

Response: EPA reviewed the data and its methodology and evaluated it against its intention to identify a technology-specific representative emission rate for SCR optimization. In doing so, EPA did not identify any need to make the suggested change. EPA is interested in the performance potential of a technology, and a larger dataset provides a superior indication of that potential as opposed to a smaller, state-limited dataset. In both the CSAPR Update and in this rule, EPA appropriately relied on the largest dataset possible (i.e., nationwide) to derive technology performance averages that it then applied respectively to the CSAPR Update 22-state region and this rule's 12-state region. Finally, as noted above, in affirming the reasonableness of this approach, EPA examined the historical reported data (pre-2019) for the units in the 12 states

with SCR optimization potential and found the nationwide derived average appropriate and consistent with demonstrated capability and performance of units within those states. That is, the vast majority of units for which this resulting emission rate assumption was being applied had demonstrated the ability to achieve this rate in some prior time period. This information is discussed further in the EGU NOx Mitigation Strategies Final Rule TSD in the docket.

In the proposed rule, EPA relied on the same SCR optimization timing assumptions it utilized in the CSAPR Update. EPA received comments on the feasibility of implementing SCR optimization mitigation measures by the start of the 2021 ozone season.

Comment: While many commenters supported the feasibility of 2021 ozone-season implementation by noting the "immediate availability" of SCR optimization, those that did not focused on two concerns: 1) that the engineering, procurement, and other steps required for SCR optimization were not feasible given the anticipated 1.5 months between rule finalization and the start of the 2021 ozone season and 2) that the short implementation time frame may not allow enough time for allowance trading to occur, and thus jeopardize allowance market liquidity and the overall that the implementation mechanism of a trading program.

Response: EPA disagrees that these concerns justify a change in approach, as explained below, and is finalizing the same SCR optimization timing assumptions it proposed.

As an initial matter, sources will have more than two months between the date of signature on this final action and the rule's effective date when the enhanced control stringency being adopted in this rule will take effect.[118] Further, EPA has determined that this implementation schedule is achievable and necessary in order to address good neighbor obligations by the July 20, 2021 Serious area attainment date for certain downwind receptors, in

[118] As discussed in section VII.C.4.a, EPA is ensuring that the enhanced control stringency represented by the new budgets will not take effect until the rule's effective date by issuing supplemental allowances for the portion of the 2021 ozone season occurring before the rule's effective date.

accordance with the *Wisconsin* decision of the D.C. Circuit.[119] While EPA observes that implementation of this control stringency is viable during the 2021 ozone season at the unit level as described below, it also notes that the flexible implementation mechanism of a trading program, starting bank, and safety valve (as discussed in VII.C.4) obviate any unit-specific compliance challenges raised by commenters.

As indicated in the discussion and graphics above, data in the EGU NO_X Mitigation Strategies Final Rule TSD, and in the CSAPR Update, there is ample evidence of units restoring their optimal performance within a two-month timeframe. Not only do units reactivate SCR performance level at the start of an ozone-season when tighter emission limits begin, but unit-level data also shows instances where sources have demonstrated the ability to quickly alter their emission rate within an ozone-season and even within the same day in some cases. Moreover, this emission control is familiar to sources and was analyzed and included in the CSAPR Update emission budgets finalized in 2016. With this experience, and notice through the October 2020 proposed rule, as well as over two months from final rule to effective date, the viability of this emission control for the 2021 ozone season is entirely consistent with the 2-week to 2-month timeframe that EPA identified as reasonable in both the CSAPR Update and the proposed rule. Similar to prior rules, commenters provide some unit-level examples where it has taken longer. Also similar to those prior rules, EPA does not find those unit-level examples compelling in the context of its fleet average assumptions and in the implementation context of a trading program which provides compliance alternatives in the event a specific unit prefers more time to implement the control stringency. As noted in *Wisconsin,* "…all those anecdotes show is that

[119] EPA further disagrees with these commenters to the extent they are suggesting that they could not have prudently taken steps to prepare for compliance with this control stringency by the 2021 ozone season at least from the date of the proposed rule in October of 2020. *See Americans for Clean Energy v. EPA*, 864 F.3d 691, 721-22 (D.C. Cir. 2017) (rejecting industry claims of insufficient time for compliance when proposed rule provided "many months" notice of the likely obligations established in the final rule). EPA notes that all reductions finalized in this rule were discussed in those proposed rule materials, and SCR optimization-driven reductions - accounting for the vast majority of 2021 reductions - were proposed in that October notice.

installation can drag on when companies are unconstrained by the ticking clock of the law." 938 F.3d at 330. Commenters also provide logistical details for certain engineering steps (e.g., procuring catalyst replacement) that will not be necessary in many instances to improve performance at existing SCRs. The majority of emission reductions from units with SCRs would be available within hours (from turning on and fully operating those existing control devices) even in the absence of catalyst that is not as optimally configured or with reagent sprayers that have not been recently tuned as commenters suggest they must be. And as noted previously, a prudent EGU operator has had since at least the publication date of the proposed rule in October 2020 to take steps to prepare for compliance, such as planning for the necessary products to run their controls.

EPA further disagrees with commenters' assertions that the 2021 emission budgets are not feasible. Claiming that ultimate compliance with the emissions trading program is infeasible ignores the flexibilities of EPA's trading program implementation mechanism, including the starting allowance bank and the "safety valve" mechanism for accessing even more allowances. EPA uses a fleet-wide average assumption that non-optimized units with SCR will optimize to 0.08 lb/mmBtu on average by 2021. EPA uses this average assumption in its derivation of state-emission budgets, but then implements the reductions through a trading program that provides sources the flexibility to operate at different emission rates, as they need only hold allowances adequate to cover their emissions for the relevant control period. Not every unit need implement this emission control or meet this rate in order to comply with the state budget under the trading program. For some units, the timing and rate performance will likely be easier to meet than estimated by EPA, creating space for other sources to achieve different rates on different schedules while collectively complying with the state emission budget. Additionally, while given the large amount of historical data demonstrating that units can operate their controls (often within hours of startup), unit operation (i.e., seasonal capacity factor) is another variable that operators can utilize to reduce seasonal emissions. In short, because compliance is based on

seasonal emission totals, variation in emission rates is not on its own a barrier to meeting a seasonal total state emission target. In short, commenters concerned about 2021 implementation viability largely neglected these critical aspects of the trading program and did not provide any comprehensive state or system modeling showing the 2021 implementation of the state budgets was not achievable when factoring in the program's trading program. Instead of performing this critical evaluation step, commenters most often limited their arguments to a hypothetical unit-specific rate requirement evaluation, ignoring the broader mechanisms of EPA's quantification and implementation of good neighbor obligations.

EPA notes that historical emission data and program experience support its assumption regarding timing of these emission controls. Similar arguments regarding next-season implementation challenges were made against the CSAPR Update but were not borne out in the data as both unit-level and state-level emissions adjusted consistent with EPA's assumptions for that first season of implementation (the emission rate at SCR controlled units dropped by nearly half in the 2017 ozone season, the first ozone-season of the CSAPR Update implementation) when EPA examined this challenge in the context of EPA's Response to CAA section 126(b) petitions from Maryland and Delaware.[120] Moreover, the future modeling data, as well as some commenters' own analysis, supported the viability of EPA's 2021 implementation. Finally, some utilities with a significant footprint in this region even have their own near-term and medium-term emission reduction goals, which , if realized, reflect even more fleet alignment with emission reductions.[121, 122] For all of these reasons, EPA determined it was not necessary to change its emission control implementation timing assumptions from those utilized in the CSAPR Update.

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[120] 83 FR 50465.

[121] https://www.duke-energy.com/Our-Company/Environment/Global-Climate-Change

[122]Proctor, Darrell. *Indiana Utility Will Close Coal Units, Transition to Renewable.* Power Magazine. November, 2018. Available at https://www.powermag.com/indiana-utility-will-close-coal-units-transition-to-renewables/.

With regard to market liquidity concerns, EPA notes that those same concerns have been voiced in the lead-up to past trading programs but ultimately did not materialize. For example, a functioning allowance market formed and resulted in 100 percent compliance with the allowance holding requirements during the first year of implementation. See more discussion on this issue in section VII.C.3. EPA notes that the date by which sources must hold allowances to cover their emissions for the first control period under this final rule is June 1, 2022 – more than 14 months after the date of signature of the rule. Moreover, shortly after the final rule's effective date and well before the end of the 2021 control period, the allowances allocated to most sources from both the state emission budgets and from the initial Group 3 bank will be recorded in sources' accounts and available for trading. Finally, as an additional measure promoting market liquidity, EPA will allow the use of Group 2 allowances at an 18:1 trade-in ratio to provide additional assurance to sources that allowances will be available, but ensuring that the cost of this compliance option is such that entities will take it only in the very unlikely event that access to such additional allowances proves to be necessary. The safety valve is described further in section VII.C.4.c., The presence of the safety valve, combined with the recordation of allowances from the state budgets and the starting bank shortly after the rule's effective date, should obviate any market liquidity concerns, as the number of allowances available for trading in the market for the first control period well in advance of the compliance deadline will accommodate a variety of compliance pathways and unit operational decisions.

b. Installing State-of-the-Art NO_X Combustion Controls

EPA estimates that the representative cost of installing state-of-the-art combustion controls is comparable to, if not notably less than, the estimated cost of optimizing existing SCR (represented by $1,600 per ton). State-of-the-art combustion controls such as low-NO_X burners (LNB) and over-fire air (OFA) can be installed and/or updated quickly and can substantially reduce EGU NO_X emissions. In the 12 states linked to downwind receptors in this final rule, approximately 99 percent of coal-fired EGU capacity is equipped with some form of combustion

control; however, the control configuration and/or corresponding emission rates at a few units indicate they do not currently have state-of-the-art combustion control technology. As discussed in EPA's response to comments below, the Agency has updated its NOx emission rates for upgrading existing combustion controls to state-of-the-art combustion control from the proposed rule, where EPA estimated a range of 0.139 to 0.155 lbs/mmBtu. In this final rule, EPA is determining that NO_X emission rates of 0.146 to 0.199 lbs/mmBtu can be achieved on average depending on the unit's boiler configuration,[123] and, once installed, reduce NO_X emissions at all times of EGU operation.

The feasibility of installing combustion controls was examined by EPA in the CSAPR where industry demonstrated the ability to install state-of-the-art LNB controls on a large unit (800 MW) in under six months when including the pre-installation phases (design, order placement, fabrication, and delivery).[124] In the proposed rule, EPA discussed comments it had received on the CSAPR Update regarding installation of combustion controls from the Institute of Clean Air Companies.[125] Those comments provided information on the equipment and typical installation time frame for new combustion controls, accounting for all steps, and noted it generally takes between 6-8 months on a typical boiler – covering the time through bid evaluation through start-up of the technology. The deployment schedule was described as:

- 4-8 weeks – bid evaluation and negotiation
- 4-6 weeks – engineering and completion of engineering drawings
- 2 weeks – drawing review and approval from user
- 10-12 weeks – fabrication of equipment and shipping to end user site
- 2-3 weeks – installation at end user site

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[123] Details of EPA's assessment of state-of-the-art NO_X combustion controls are provided in the EGU NO_X Mitigation Strategies Final Rule TSD.

[124] EPA finds that, generally, the installation phase of state-of-the-art combustion control upgrades —on a single-unit basis—can be as little as four weeks to install with a scheduled outage (not including the pre-installation phases such as permitting, design, order placement, fabrication, and delivery) and as little as six months considering all implementation phases.

[125] EPA-HQ-OAR-2015-0500-0093.

- 1 week - commissioning and start-up of technology

Given the above timeframe of approximately 6 to 8 months to complete combustion control installation in the region, EPA is determining that the installation of state-of-the-art combustion controls is a readily available approach for EGUs to reduce NO_X emissions by the start of the 2022 ozone season. More details on these analyses can be found in the EGU NO_X Mitigation Strategies Final Rule TSD.

The cost of installing state-of-the-art combustion controls per ton of NO_X reduced is dependent on the combustion control type and unit type. EPA estimates the cost per ton of state-of-the-art combustion controls to be $400 per ton to $1,200 per ton of NO_X removed using a representative capacity factor of 70 percent. See the NO_X Mitigation Strategies Final Rule TSD for additional details.

Comment: EPA received comment on the proposed timing, cost, and performance rate of combustion controls.

Response: EPA is finalizing its proposed assumptions on the cost and timing for upgrading combustion controls. These assumptions are consistent with the CSAPR Update. They are described above and further discussed in the RTC document and in the EGU NOx Mitigation Strategies Final Rule TSD. EPA is updating its assumed performance rate for state-of-the-art combustion controls from the proposed rule based on two factors. First, as commenters pointed out, EPA was in the process of updating these assumptions based on the latest representative-year data and an updated inventory of units with like controls. This update and corresponding emission rates were in the October 2020 NEEDS file placed in the docket for the proposed rule, but the data were not available in time to be included in EPA's proposed rule analysis. This adjustment raised the average emission rate assumption to 0.199 lb/mmBtu for combustion controls on dry bottom wall fired units and 0.146 lb/mmBtu for tangentially fired units. Additionally, commenters provided detailed analysis of how other unit considerations, such as coal rank, can result in large deviations from what has been historically demonstrated with this

combustion control technology. Based on these comments and EPA's review of historical performance data for tangentially-fired units by coal rank with state-of-the-art combustion controls, EPA determined it was appropriate to use the 0.199 lb/mmBtu rate for both tangentially and wall-fired units in this final rule. As noted by commenters, many of the likely impacted units burn bituminous coal, and the 0.146 lb/mmBtu nationwide average for tangentially-fired (inclusive of subbituminous units) appeared to be below the demonstrated emission rate of state-of-the-art combustion controls for bituminous coal units of this boiler type. EPA notes that its analysis of illustrative units indicates the costs are often lower than the $1,600 per ton level EPA assumes in this rule. Similarly, the pervasiveness of this technology (i.e., 99 percent of units have some form of combustion controls) in response to previous EPA actions indicates the wide spread cost-effectiveness of this control and therefore its inclusion in the final EGU NOx emission budgets beginning in the 2022 ozone season (noting that the trading program gives units flexibility in compliance options to accommodate their specific circumstances).

c. Optimizing Already Operating SNCRs or Turning on Idled Existing SNCRs

Optimizing already operating SNCRs or turning on idled existing SNCRs can also reduce EGU NO_X emissions quickly, using investments in pollution control technologies that have already been made. Compared to no post-combustion controls on a unit, SNCRs can achieve a 25 percent reduction on average in EGU NO_X emissions (with sufficient reagent). They are less capital intensive but less efficient at NOx removal than SCRs. These controls are in use to some degree across the U.S. power sector. In the 12 states identified in this final rule, approximately 14 percent of coal-fired EGU capacity is equipped with SNCR. Recent power sector data suggest that, in some cases, SNCR controls have been operating less in 2019 relative to performance in prior years.[126]

[126] *See* "Ozone Season Data 2018 vs. 2019" and "Coal-fired Characteristics and Controls" at https://www.epa.gov/airmarkets/power-plant-data-highlights#OzoneSeason.

In the proposed rule, EPA determined that optimizing already operating SNCRs or turning on idled SNCRs is an available approach for EGUs to reduce NO_X emissions, has similar implementation timing to restarting idled SCR controls (less than two months for a given unit), and therefore could be done in time for the 2021 ozone season. EPA is finalizing its proposed determination that this emission control technology can be implemented in the 2021 ozone season. As explained in section VI.D.1 below, EPA is including optimization of existing SNCRs in its selected EGU control stringency. Thus, EPA provides further discussion here confirming the implementation timing of this emission control technology.

First, as noted with respect to SCR optimization, this rule will have an effective date over two months from the date of signature. In light of EPA's timing estimates of roughly 0.5 to 2 months for EGU operators to optimize their controls, this timing provides sufficient advance notice for operators of SNCR-equipped units to undertake any preparatory activities that may be needed prior to the effective date of the rule, and the onset of the increased stringency represented by the new emission budgets. Furthermore, because the emission reduction obligation is implemented through a mass-based trading program, these sources (and all others in the newly established Group 3 trading program) have abundant flexibility to choose other means of complying with their emission budget. Finally, as explained in section VII.C.4.d, EPA is providing a safety valve allowing access to additional allowances usable in the Group 3 trading program (through exchange of banked 2017-2020 Group 2 allowances at an 18:1 conversion ratio). As the amount of additional Group 3 allowances made available through the safety valve mechanism exceeds the effect on the emission budgets of including the optimization of existing SNCR controls several times over, there is no basis to believe that there will be compliance difficulty for any covered units.

In the proposed rule, EPA estimated a representative cost of approximately $3,900 per ton for turning on and fully operating idled SNCRs. For existing SNCRs that have been idled, unit operators may need to restart payment of some fixed and variable operating costs associated

with these controls. Fixed and variable costs include labor, maintenance and repair, parasitic load, and ammonia or urea. The majority of the total fixed and variable operating costs for SNCR is related to the cost of the reagent used (e.g., ammonia or urea) and the resulting cost per ton of NO_X reduction is sensitive to the NO_X rate of the unit prior to SNCR operation. EPA is finalizing its adjusted representative cost of $1,800 per ton as described in the response to comments below, but applies the same performance, and timing assumptions for SNCRs that are idled as in the proposed rule.

Comment: Commenters observed that many SNCRs are already operating over the past several years (in an environment with an allowance price signal much lower than the $3,900 per ton threshold that EPA proposed represented turning on and optimizing idled controls). This observation suggests that the representative cost for this technology to optimize is likely less than estimated by EPA in the proposed rule when these operating patterns are accounted for.

Response: First, EPA examined the portion of the fleet with SNCR optimization potential and determined that the majority of units were already partially operating their controls. Therefore, EPA revisited the cost for SNCR optimization for units that are partially operating their controls. At proposal, EPA had noted a representative cost of $1,800 per ton for SNCR-controlled unit to optimize their controls if that control was already on and partially operating reflecting the cost of adding more reagent. This is similar to its analysis for SCR optimization that revealed an $800 per ton cost for SCR optimization at units with partially operating controls (as opposed to $1,600 per ton at units with idled SCR controls). EPA revisited this assessment of SNCR optimization cost at units with partially operating controls and found $1,800 per ton to still be a representative cost.[127] Therefore, given the majority of the SNCR-controlled fleet with identified optimization potential was already partially operating their controls based on 2019 historical data, EPA determined that $1,800 per ton (as opposed to the $3,900 per ton cost

[127] See "EGU_SCR_and_SNCR_costs_Revised_CSAPR_Proposal.xlsx"file, Summary Page cell E19. Available in the docket for this rulemaking at proposal at EPA-HQ-OAR-2020-0272-0006.

estimated in the proposed rule for turning on idled SNCRs) was a more representative cost for the mitigation strategy in this rulemakng. The representative cost of optimizing SNCR that is already partially operating excludes the fixed operating and maintenance (FOM) cost associated with starting up an idled SNCR control. For more details on this assessment, refer to the EGU NO_X Mitigation Strategies Final Rule TSD in the docket for this rule. This adjustment in the expected cost of implementing this emission control has factored into EPA's determination to include optimization of existing SNCRs in its selected control stringency as discussed in more detail in section VI.D.1.

d. Installing New SNCRs

EPA is finalizing its determination not to include installation of new SNCRs in its selected control stringency in this rule. The amount of time needed to retrofit an EGU with new SNCR extends beyond the 2021 Serious area attainment date. However, similar to SCR retrofits discussed in section VI.B.1.e, and consistent with the *Wisconsin* decision, EPA evaluated potential emission reductions and associated costs from this emission control technology, and assessed the impacts and need for this emission control at the earliest point in time when post combustion control installation could be achieved. SNCR installations, while generally having shorter project timeframes (i.e., as little as 16 months (including pre-contract award steps) for an individual power plant installing controls on more than one boiler), share similar implementation steps with and also need to account for the same regional factors as SCR installations.[128] One recent example of installation timing took over a year—SNCR installation at the Jeffrey power

[128] A month-by-month evaluation of SNCR installation is discussed in EPA's "Engineering and Economic Factors Affecting the Installation of Control Technologies for Multipollutant Strategies" in EPA's NO_X Mitigation Strategies Final Rule TSD. As noted in the proposed rule, the analysis in this exhibit estimates the installation period from contract award as within a 10–13-month timeframe. The exhibit also indicates a 16-month timeframe from start to finish, inclusive of pre-contract award steps of the engineering assessment of technologies and bid request development. The timeframe cited for installation of SNCR at an individual source in this final action is consistent with this more complete timeframe estimated by the analysis in the exhibit.

plant (Kansas) was in the planning phase in 2013 but not in service until 2015.[129] Therefore, EPA is determining that at least 16 months would be needed to complete all necessary steps of SNCR development and installation at the EGUs not currently equipped with SNCRs in the 12 states linked to downwind receptors in this final rule. EPA discusses the timing of SNCR and SCR post-combustion retrofits together and in more detail in section VI.C.1.

SNCR technology provides owners a relatively less capital-intensive option for reducing NO_X emissions compared to SCR technology, albeit at the expense of higher operating costs on a per-ton basis and less total emission reduction potential. EPA examined the remaining nationwide coal-fired fleet that lack SNCR or other NO_X post-combustion control to estimate a representative cost of SNCR installation on a dollar per ton basis. Costs were estimated using the operating and unit characteristics specific to this fleet. As described in the EGU NO_X Mitigation Strategies Final Rule TSD, EPA estimated that $5,800 per ton reflects a representative cost level at which they are available for a majority of the uncontrolled fleet.

Comment: EPA received some comments on timing and performance assumptions of this technology that largely focused on the decision to couple timing considerations for reduction evaluation purposes of SCR and SNCR retrofits together.

Response: EPA used the same cost, performance, and timing assumptions for this technology as it used in the proposed rule. EPA evaluates new retrofit technologies (i.e., SCR and SNCR) timing in tandem at step 3, and therefore it addresses this timing component in section VI.C.1. Remaining comments on SNCR performance potential are addressed in the RTC Document and in the EGU NOx Mitigation Strategies Final Rule TSD.

e. Installing New SCRs

The amount of time needed to retrofit an EGU with new SCR extends beyond the 2021 Serious area attainment date. However, similar to SNCR retrofits discussed above, and consistent

[129] 2013 EIA Form 860, Schedule 6, Environmental Control Equipment.

with the *Wisconsin* decision, EPA evaluated potential emission reductions and associated costs from this control technology, as well as the impacts and need for this emissions control strategy, at the earliest point in time when their installation could be achieved. The amount of time to retrofit EGUs with new SCR varies between approximately 2 and 4 years depending on site-specific engineering considerations and on the number of installations being considered. In prior actions, EPA has noted 39-48 months as appropriate for regionwide actions when EPA is evaluating multiple installations at multiple locations.[130]

The Agency examined the cost for retrofitting a unit with new SCR technology, which typically attains controlled NO_X rates of 0.07 lbs/mmBtu or less. Based on the characteristics of the remaining nationwide coal fleet that does not have a post-combustion control retrofit, EPA estimated that for unit and performance characteristics representative of that subgroup, $9,600 per ton reflects a representative cost level at which the SCR retrofit technology was typically available for the majority of these sources.

Comment: EPA received comments on the cost and performance of this technology, as well as comment on its timing assumption (as part of the collective timing assumptions in step 3).

Response: For this final rule's analyses, EPA used the same cost, performance, and timing assumptions that it used for this technology in the proposed rule. For more details on this assessment, refer to the EGU NO_X Mitigation Strategies Final Rule TSD in the docket for this final rule and the RTC Document. Section VI.C.1 presents comments and EPA responses on the timing assumptions for installation of new SCRs.

f. Generation Shifting.

Finally, EPA evaluates emission reduction potential from generation shifting across the representative dollar per ton levels estimated for the other emission controls considered above.

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[130] Final Report: Engineering and Economic Factors Affecting the Installation of Control Technologies for Multipollutant Strategies, EPA– 600/R–02/073 (Oct. 2002), available at https://nepis.epa.gov/Adobe/PDF/P1001G0O.pdf.

Shifting generation to lower NO_X-emitting or zero-emitting EGUs occurs in response to economic factors (including regulatory signals such as pollution control costs). As the cost of emitting NO_X increases, it becomes increasingly cost-effective for units with lower NO_X rates to increase generation, while units with higher NO_X rates reduce generation. Because the cost of generation is unit-specific, this generation shifting occurs incrementally on a continuum. Consequently, there is more generation shifting at higher cost NO_X-control levels. It is reasonable for EPA to quantify and include the emission reduction potential from generation shifting at cost levels that are representative of the emission control technologies evaluated in the multi-factor analysis. Including emission reductions from generation shifting is important, ensuring that other cost-effective reductions (e.g., fully operating controls) can be expected to occur in a competitive electricity marketplace where generation shifting will inevitably occur in response to pollution control requirements. Generation shifting treatment and results are discussed in greater detail in the EGU NO_X Mitigation Strategies Final Rule TSD.

In general, when EPA estimates emission reduction potential from generation shifting, EPA finds small amounts of generation shifting to existing lower NO_X- emitting or zero-emitting units could occur consistent with the near-term implementation timing for this final rule. As a proxy for limiting the amount of generation shifting that is feasible for the near-term ozone seasons, EPA limits its assessment to shifting generation to other EGUs within the same state. EPA believes that limiting its evaluation of shifting generation (which EPA sometimes refers to as re-dispatch) to the amount that could occur within the state represents a conservatively small amount of generation-shifting because it does not capture further potential emission reductions that would occur if generation was shifted more broadly among units in different states within the interconnected electricity grid.

Comment: Commenters suggested that EPA should have included additional reductions from generation shifting beyond those levels that are commensurate with the emission controls identified. Commenters note that the statutory command is to eliminate significant contribution

to downwind nonattainment or maintenance problems, 42 U.S.C. 7410(a)(2)(D)(i)(I), not merely to create a strong enough incentive that sources will likely install certain control technology. Because generation shifting is an independent measure that EGUs have widely deployed to reduce NO_X emissions, EPA has no basis for evaluating only the emission reductions that result from a NO_X price that matches - but goes no further than - the estimated representative NO_X control costs of other emission control technologies assessed.

Response: EPA is finalizing the same approach to generation shifting that it proposed and that it included in the CSAPR Update. This rule's approach to capturing emission reduction potential from generation shifting in the state's emission budgets focuses on preserving the incentive for combustion and post-combustion controls to operate. Factoring generation shifting into the state emissions budgets helps promote an allowance price that will incentivize these controls to operate.

EPA recognizes that looking at higher levels of reductions purely through generation shifting is possible, assuming the availability for dispatch of lower or zero emitting generation assets that could substitute for the higher emitting EGUs. Shifting to such generators that are already in existence and operating at capacity factors that allow for some increase in their generation is the most economically efficient form of generation shifting, assuming other considerations such as availability, cost, reliability, and other factors are accounted for. Even greater shifting of generation to lower or zero emitting assets may be considered with the construction of new assets, although cost, timing, and economic considerations are generally of a greater magnitude and complexity in this context. Sophisticated power sector modeling tools, such as EPA's Integrated Planning Model (IPM) platform, can provide realistic and reliable assessments of the degree of generation shifting that may be accomplished at different cost levels. Indeed, in the Regulatory Impact Analysis for the proposed rule and for this final rule, EPA assessed a less-stringent control alternative for EGUs at the $500 per ton level, which was based solely on generation shifting rather than any at-the-source control technology. In general,

EPA continues to stand by its discussion of its legal authority for and the technical viability of generation shifting as a method of emission reduction under the good neighbor provision, as set forth in the final CSAPR Update rule. *See especially* 81 FR 74504, 74545-47; *see also* CSAPR Update Response to Comment Document at 546-550 (legal authority); *id.* 528-533 (technical feasibility). (EPA had no occasion and did not reopen this portion of the CSAPR Update in this action on remand.)

Nonetheless, while generation shifting as a stand-alone strategy for emission reductions is available for both states' and EPA's consideration in the context of good neighbor SIPs or FIPs, EPA maintains the position discussed in the proposed rule for this action that further generation shifting than is captured by the methodology of the proposed rulemaking is unnecessary in the context of the resolution of good neighbor obligations for the 2008 ozone NAAQS in this action. The remaining timeframe for addressing upwind contribution to downwind nonattainment and maintenance receptors is through the 2024 ozone season, as downwind air quality problems for the 2008 ozone NAAQS are projected to be resolved by the 2025 ozone season. In EPA's judgment, the capital intensive nature of new builds and the likely multi-year timeframe necessary for the permitting and construction of new units make generation shifting to new generating resources, beyond those already planned and included in the baseline, not possible before downwind receptors are already resolved. With respect to generation shifting to existing generation resources with excess capacity, again, this rule already incorporates a certain amount of such generation shifting at cost levels representative of the other control technologies selected to quantify the state emission budgets in this rule. EPA believes that this degree of emission reduction through generation shifting is appropriate to include under the step 3 multi-factor analysis for the circumstances and compliance timetable currently presented by the 2008 ozone NAAQS, particularly the finding that downwind receptors will be resolved under this NAAQS by the 2025 ozone season.

Comment: Other commenters suggest that EPA should not factor in any generation shifting based reductions into state emission budgets, noting that EPA rejected the use of generation shifting in rescinding the Clean Power Plan and should do the same here in establishing emission reduction obligations under the good neighbor provision of section 110 of the Clean Air Act. According to these commenters, the emission budgets should be based on cost-effective emission reduction strategies that reflect technologies that can be implemented within the affected source's fence line.

Response: EPA notes again that its treatment of generation shifting here is consistent with both the CSAPR Update and the CSAPR, and the statute. Moreover, this comment incorrectly conflates the question of statutory authority under section 111 of the Act, the authority at issue in the Clean Power Plan and its repeal and subsequent litigation, with the question of statutory authority under section 110. As EPA explained in the CSAPR Update:

> The good neighbor provision requires state and federal plans implementing its requirements to "prohibit[ ] . . . *any source or other type of emissions activity within the State* from emitting any air pollutant in *amounts* which will" significantly contribute to nonattainment or interfere with maintenance of the NAAQS in any other state. CAA section 110(a)(2)(D)(i)(I) (emphasis added). The EPA's consideration of the potential for generation shifting in developing state budgets is consistent with this statutory requirement. First, contrary to the commenters' contention, the statute does not limit the EPA's authority under the good neighbor provision to basing regulation only to control strategies for individual sources. The statute authorizes the state or EPA in promulgating a plan to prohibit emissions from "any source or other type of emissions activity within the State" that contributes (as determined by EPA) to the interstate transport problem with respect to a particular NAAQS. This broad statutory language shows that Congress was directing the states and the EPA to address a wide range of entities and activities that may be responsible for downwind emissions. However, this provision is silent as to the

> type of emission reduction measures that the states and the EPA may consider in establishing emission reduction requirements, and it does not limit those measures to individual source controls. The EPA reasonably interprets this provision to authorize consideration of a wide range of measures to reduce emissions from sources, which is consistent with the broad scope of this provision, as noted immediately above.

81 FR 74545.[131]

Finally, EPA notes that its interpretation of section 111 of the Act as unambiguously precluding the use of generation shifting as a "best system of emission reduction" under that provision was recently rejected by the D.C. Circuit. *American Lung Association v. EPA*, No. 19-1140 (D.C. Cir. Jan. 19, 2021). The court there also rejected arguments that generation shifting in the Clean Power Plan runs afoul of the federalism doctrine, slip op. 92 ("Interstate air pollution is not an area of traditional state regulation. And federalism concerns do not bar the United States government from addressing areas of *Federal* concern just because its actions have incidental effects on areas of state power.") (emphasis in original) (citing *FERC v. EPSA*, 136 S. Ct. 760, 775-778 (2016)), or conflicts with FERC's authority, *id.* 95 n.12 ("The effects of environmental regulations on the power grid do not amount to power regulation statutorily reserved to FERC."). In this rule, as in prior transport rules, EPA has established emission budgets that capture a certain degree of generation shifting that is modeled to occur as an economical response by the power sector to a particular cost threshold associated with at-the-plant control technologies. EPA has not mandated or ordered any particular degree of generation shifting to occur or that it occurs in a particular way. Further, this action is related solely to air pollution, in this case NO_X as an ozone-precursor, and does not affect or purport to regulate any particular type of generation or achieve any type of generation mix, except as related to those

[131] EPA also noted in the CSAPR Update, "Interpreting the Good Neighbor Provision to be sufficiently broad to authorize reliance on generation shifting is also consistent with the legislative history for the 1970 CAA Amendments. The Senate Report stated that to achieve the NAAQS, '[g]reater use of natural gas for electric power generation may be required,' S. Rep. No. 91–1196 at 2." 81 FR 74545 n.141.

NO_X emissions. *Cf. id.* 88 ("The Clean Power Plan was aimed not at regulating the grid, but squarely and solely at controlling air pollution—a task at the heart of the EPA's mandate."). The budgets here simply reflect an expectation that the power sector can and will take advantage of the compliance flexibility of a mass-based emission trading program to shift generation when it is economical to do so in response to an environmental mandate.

Finally, EPA solicited comment on whether other ozone-season NO_X mitigation technologies should be considered. EPA invited comments on the cost and performance of the above listed technologies and any other potential mitigation technologies. For example, in January of 2020 the New York Department of Environmental Conservation adopted a rule to limit emissions from combustion turbines that operate as peaking units. EPA has not historically considered NO_X mitigation technologies for these sources in its rulemakings, such as the CSAPR and the CSAPR Update, but invited comment on their appropriateness for this rulemaking. Separately, location and high emission rates of grid-connected municipal solid waste combustors, generally not covered under EPA's transport rules given their small size and differing purpose, have also led some stakeholders to suggest mitigation measures be considered for those sources.

Comment: EPA received comments calling on the Agency to reduce NO_X from peaking units and municipal waste combustors and claimed that the agency's focus in its proposed rule on the suite of EGU emission controls above failed to address large sources of NO_X emissions that are relatively close to the Connecticut receptors. Some of these commenters go one step further and say not only should EPA regulate these sources, but that EPA should only require emission reductions from local sources in place of reductions from larger emitting sources upwind.

Response: EPA is finalizing its evaluation of the same suite of emission controls as in the proposed rule. EPA notes that several states close to, or that have, nonattainment or maintenance receptors are already taking some of these measures. For example, New York finalized the state

regulation mentioned above and New Jersey notes in their comment that the measures documented in New Jersey's Good Neighbor SIP include controls for sources such as behind-the-meter distributed generation / demand response (DG/DR) electric generators and municipal waste combustors. Even with these local measures, nonattainment and maintenance receptors persist in the region with demonstrable upwind state contribution, and thus the presence of these initiatives does not absolve upwind states and sources from the responsibility of addressing their significant contribution.[132] In the proposed rule, EPA inquired whether these additional emission controls should be considered in addition to, not in place of, the other proposed controls. EPA did not receive determinative evidence that 1) there were meaningful, upwind reductions from these emission controls that are not already being addressed by state rules, or 2) that any further reductions could be implemented in a timeframe consistent with the remaining nonattainment and maintenance receptors that resolve after 2024. EPA notes the New York rule referenced above was finalized in early 2020, but its control measures will phase in during the 2023-2025 period. Therefore, EPA is not finalizing any additional reductions from new control measures at these sources in this final rule, but, pending further analysis, doing so may be appropriate in a future context (e.g., under a different NAAQS). Finally, EPA notes to the extent that any of the sources meet the applicability requirements and are covered in the Group 3 trading program under this rulemaking, they would have an incentive to reduce emissions consistent with the ozone NO_X allowance price. Moreover, as identified in the discussion the EGU NO_X Mitigation Final Rule TSD, a significant number of units with this technology are located in states with rules addressing those sources.

2. Non-EGU NO_X Mitigation Strategies

[132] For instance, despite these measures, EPA does not agree with comments from New Jersey that there is therefore no basis for including New Jersey in the Group 3 trading program in this action. New Jersey is projected to remain linked to the Connecticut receptors well above the 1 percent threshold.

EPA has not regulated emissions from non-EGU sources as part of its regional transport rulemakings since the 1998 NO_X SIP Call. In *Wisconsin*, the D.C. Circuit held that EPA must, on remand, implement a full remedy by the next attainment date (2021 for this final rule), or as soon as possible thereafter on a showing of impossibility, to achieve necessary reductions by that date. 938 F.3d at 320. The court also directed the Agency to address non-EGU sources, unless "the scientific uncertainty is so profound that it precludes EPA from making a reasoned judgment." *Id.* at 318-20 (quoting *Massachusetts v. EPA*, 549 U.S. 497, 534 (2007)). The D.C. Circuit found that the practical obstacles EPA identified with respect to its evaluation of non-EGUs in the CSAPR Update did not rise to the level of an "impossibility," *id*. The court also found that EPA must make a higher showing of uncertainty regarding non-EGU point-source NO_X mitigation potential before declining to regulate such sources on the basis of "uncertainty." *Id*. Thus, in the proposed rule, EPA extended its analysis to include all major stationary source sectors in the linked upwind states, including non-EGU emissions sources in various industry sectors. As discussed in section V, of the 22 states originally included in the CSAPR Update, EPA has determined that 12 states warrant analysis at step 3 for significant contribution to downwind nonattainment and/or maintenance receptors for the 2008 ozone NAAQS. Therefore, the Agency focused its step 3 assessment on non-EGU sources in these 12 states. For these sources, EPA retained its focus on NO_X as the most effective precursor pollutant for addressing interstate ozone transport at a regional scale. *See* 82 FR 51238, 51248 (Nov. 3, 2017) (citing 76 FR 48222) and 63 FR 57381.

The remainder of this section summarizes the analysis EPA conducted in the proposed rule. EPA is finalizing this analysis using the best available current data, largely as proposed, and determines on the basis of this analysis that emission reductions from non-EGU sources/units in the 12 states are not needed to eliminate their significant contribution to nonattainment or interference with maintenance in any other state. EPA made some minor updates to its analysis of non-EGU emission reduction potential, and these changes did not affect its overall conclusion

that reductions are not warranted under the step 3 multi-factor test. EPA responds to significant comments on its assessment of non-EGU emission reduction potential at the end of the relevant section below, and addresses remaining comments on potential non-EGU emission reductions in the RTC document located in the docket for this action.

For non-EGU sources, there are many types of emissions sources or units that emit NO_X and many control technologies or combinations of control technologies for these sources or units. As such, there are many approaches to assessing emission reduction potential from non-EGU emission sources or units. In this final rule, EPA applied the multi-factor test used for EGUs in an effort to determine an appropriate stringency level for non-EGU sources/units in linked upwind states. EPA identified available control technologies and estimated their costs and potential emission reductions. The Agency considered the information it has regarding control technology implementation timeframes, including information on such timeframes provided by commenters on the proposed rule, to determine potential air quality impacts in relevant future years.

To identify levels of control for non-EGU sources/units, EPA used the Control Strategy Tool (CoST),[133] the Control Measures Database (CMDb), and the projected 2023 inventory from the 2016v1 modeling platform. EPA assessed potential emission reductions associated with applying controls to emissions units with 150 tons per year (tpy) or more of pre-control NO_X emissions in 2023, which is an emissions threshold that represents a comparable unit size to 25 MW for EGUs used in prior interstate transport rulemakings. To derive this emissions threshold, EPA used emissions expected from an average 25 MW EGU unit operating at a median heat rate, emission rate, and capacity factor for a coal-fired unit.[134] In CoST, the Agency used the

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[133] Further information on CoST can be found at the following link: https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/cost-analysis-modelstools-air-pollution.

[134] For additional details on calculating the 150 tpy emissions threshold, please see the section titled *Background for Determining Source Size/Threshold for Non-EGU Emissions Sources* in the memorandum titled *Assessing Non-EGU Emission Reduction Potential*, available in the docket for this rule.

maximum emission reduction strategy[135] to estimate the largest quantity of potential emission reductions from each emissions source or unit located in the 12 upwind states linked to downwind receptors in this final rule. Eleven of the 12 upwind states had sources/units with 150 tpy or more of pre-control NO_X emissions in 2023; the projected 2023 emissions inventory did not include non-EGU point sources/units in New Jersey with pre-control NOx emissions greater than 150 tpy for which CoST had applicable control measures.[136]

For the 12 linked states, EPA categorized the CoST results for control technologies that comprise approximately 92 percent of the total estimated potential emission reductions from the non-EGU sources/units with 150 tpy or more of NO_X emissions in these states;[137] those technologies and related emissions sources/units are summarized in Table VI.B.2-1 below. In tranche one before further refinement and verification, the number of emissions units CoST applied SCR to was 51 and the number of emissions units CoST applied SNCR to was 23. The estimated emission reductions from those control applications were 12,724 ozone season tons. In tranche two, before further refinement and verification, the number of emissions units to which CoST applied layered combustion (a type of combustion control technology) was 49, the number

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[135] The maximum emission reduction algorithm assigns to each source the single measure (if a measure is available for the source) that provides the maximum reduction to the target pollutant, regardless of cost. For more information, see the CoST User's Guide available at the following link: https://www.cmascenter.org/cost/documentation/3.5/CoST%20User's%20Guide/.

[136] Total NOx emissions at the facility level in this analysis are likely much larger than NOx emissions at the emissions source/unit level, and facilities often have several individual emissions units. In New Jersey there are facilities with total NOx emissions greater than 150 tpy. EPA did not, however, identify any individual emissions units at those facilities with pre-control NOx emissions greater than 150 tpy for which CoST had applicable control measures.

[137] CoST applied a few additional controls that are not commonly used and did not result in significant additional emission reductions. Ten different control technology applications make up the remaining 8 percent of the control technology applications. Compared to the five technologies EPA assessed further, these ten control technology applications do not, individually or collectively, have the potential to result in significant additional emission reductions. For additional details, see the technical memorandum titled *Assessing Non-EGU Emission Reduction Potential* and the Excel workbook titled *Control Summary – Max Emission Reduction $10k 150 tpy cutoff 12 States Updated Modeling – No Replace – 05-18-2020.xlsx* in the docket for this rule.

of emissions units to which CoST applied NSCR[138] or layered combustion was 65, and the number of emissions units to which CoST applied ultra-low NOx burner and SCR was 56. The estimated emission reductions from those control applications were 17,283 ozone season tons. EPA then calculated a weighted average cost per ton (in 2016$) for estimated potential reductions associated with each control technology and plotted the weighted average cost per ton values. From the resulting curve, EPA identified a clear break point that defined two tranches of potential emission reduction, as shown in Table VI.B.2-1. For additional details on the curve and the potential emission reductions in tranches one and two, please see the memorandum titled *Assessing Non-EGU Emission Reduction Potential*, available in the docket for this rule.

Table VI.B.2-1 Details on Tranches One and Two of Potential Emission Reductions

Tranche	**Technologies/ Industry Sectors or Source Groups**	**Weighted Average Cost (2016$ per ton)**	**Cost Range (2016$ per ton)**
Tranche One	SCR/Glass Manufacturing, IC Engines SNCR/Cement Manufacturing	2,000	64[139] – 5,700
Tranche Two	Layered Combustion/ Lean Burn IC Engines NSCR or Layered Combustion/Industrial Rich Burn Natural Gas IC Engines Ultra-low NO_X Burner and SCR/Industrial Boilers	5,000 –6,600	1,400 – 9,700

[138] NSCR is non-selective catalytic reduction, a control technology applicable to rich-burn natural gas-fired internal combustion (IC) engines.

[139] For the emissions unit estimated to generate emission reductions at $64 per ton, the emissions and cost estimates were incorrect. The 2023 projected emissions for the unit were significantly overestimated as a result of a growth factor EPA received for these emissions from a multi-jurisdictional partner organization. Further, the equation used to estimate the cost was mis-specified in CoST, and the true cost is likely on the order of $800 per ton. However, these emission reductions were still assessed, as discussed in section VI.C.2 below.

Given the large number of emissions units in one or more industry sectors that could require control installation, EPA does not have detailed information on the time needed to install all of the control technologies identified in Table VI.B.2-1. Any installation timing estimates would need to reflect the time needed to install controls across a potentially large number of sources, the time needed to have appropriate NO_X monitoring installed, the time needed to raise the necessary financing, and other steps in the permitting, construction and procurement processes. EPA previously examined the time necessary to install some of the controls indicated in Table VI.B.2-1 for different industries in the 2016 *Final Technical Support Document (TSD) for the Final Cross-State Air Pollution Rule for the 2008 Ozone NAAQS, Assessment of Non-EGU* NO_X *Emission Controls, Cost of Controls, and Time for Compliance Final TSD* ("CSAPR Update Non-EGU TSD"), which is discussed in section VI.C.2. EPA expects that the controls for glass furnaces and cement kilns would take at least 2 years to install on a sector-wide basis across the 12-state region affected by this final rule. Information available to the Agency, including information provided by commenters, does not establish that implementation of NOx control technologies for non-EGU emission sources/units could take place in less than 2 years. Therefore, EPA has determined that the 2023 ozone season is the earliest ozone season by which these non-EGU controls could be installed. EPA thus concludes that no NO_X controls for non-EGUs included in this cost analysis can be installed by the 2021 ozone season. Additional information on installation times for non-EGU NO_X controls can be found in section VI.C.

3. Mobile Source NO_X Mitigation Strategies

Under a variety of CAA programs, EPA has established federal emissions and fuel quality standards that reduce emissions from cars, trucks, buses, nonroad engines and equipment, locomotives, marine vessels, and aircraft (i.e., "mobile sources"). Because states are generally preempted from regulating new vehicles and engines with certain exceptions (*see generally* CAA sections 209, 177), mobile source emissions are primarily controlled through EPA's federal programs. EPA has been regulating mobile source emissions since it was established as a federal

agency in 1970, and all mobile source sectors are currently subject to NO_X emissions standards. EPA factors these standards and associated emission reductions into its baseline air quality assessment in good neighbor rulemaking, including in this action. Such reductions are an important reason for the historical and long-running trend of improving air quality in the United States. These trends help explain why the overall number of receptors and severity of ozone nonattainment problems under the 2008 ozone NAAQS continues to decline. Such data are factored into EPA's analysis at steps 1 and 2 of the 4-step framework. As a result of this long history, NO_X emissions from onroad and nonroad mobile sources have substantially decreased (73 percent and 57 percent since 2002, for onroad and nonroad, respectively)[140] and are predicted to continue to decrease into the future as newer vehicles and engines that are subject to the most recent, stringent standards replace older vehicles and engines.[141]

For example, in 2014 EPA promulgated new, more stringent emissions and fuel standards for light-duty passenger cars and trucks.[142] The fuel standards took effect in 2017, and the vehicle standards are phasing in between 2017 and 2025. Other EPA actions that are continuing to reduce NO_X emissions include the Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements (66 FR 5002; January 18, 2001); the Clean Air Nonroad Diesel Rule (69 FR 38957; June 29, 2004); the Locomotive and Marine Rule (73 FR 25098; May 6, 2008); the Marine Spark-Ignition and Small Spark-Ignition Engine Rule (73 FR 59034; October 8, 2008); the New Marine Compression-Ignition Engines at or Above 30 Liters per Cylinder Rule (75 FR 22895; April 30, 2010); and the Aircraft and Aircraft Engine Emissions Standards (77 FR 36342; June 18, 2012).

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[140] US EPA. Our Nation's Air: Status and Trends Through 2019. https://gispub.epa.gov/air/trendsreport/2020/#home.

[141] National Emissions Inventory Collaborative (2019). 2016v1 Emissions Modeling Platform. Retrieved from http://views.cira.colostate.edu/wiki/wiki/10202.

[142] Control of Air Pollution from Motor Vehicles: Tier 3 Motor Vehicle Emission and Fuel Standards, 79 FR 23414 (April 28, 2014).

EPA is currently developing a new regulatory effort to reduce NO_X and other pollution from heavy-duty trucks (known as the Cleaner Trucks Initiative), as described in the January 21, 2020, Advance Notice of Proposed Rulemaking (85 FR 3306). Heavy-duty vehicles are the largest contributor to mobile source emissions of NO_X and will be one of the largest mobile source contributors to ozone in 2025.[143] Reducing heavy-duty vehicle emissions nationally would improve air quality where the trucks are operating as well as downwind. As required by CAA section 202(a)(3)(A) of the Act, EPA will be proposing NO_X emission standards that "reflect the greatest degree of emission reduction achievable through the application of technology which the Administrator determines will be available for the model year to which such standards apply, giving appropriate consideration to cost, energy, and safety factors associated with the application of such technology." Section 202(a)(3)(C) requires that standards apply for no less than 3 model years and apply no earlier than 4 years after promulgation.

Given these requirements, EPA is considering implementation of new heavy-duty NO_X emission standards beginning in model year 2027. In addition, any new rulemaking process for other mobile source sectors would not achieve actual NO_X emission reductions before 2025, given the lead time necessary for EPA and for manufacturers.

However, EPA's existing regulatory program will continue to reduce NO_X emissions into the future, and EPA is currently taking active steps to ensure that these NO_X reductions occur. The CAA prohibits tampering with emissions controls, as well as manufacturing, selling, and installing aftermarket devices intended to defeat those controls. EPA currently has a National Compliance Initiative called "Stopping Aftermarket Defeat Devices for Vehicles and Engines," which focuses on stopping the manufacture, sale, and installation of hardware and software specifically designed to defeat required emissions controls on onroad and nonroad vehicles and engines.

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[143] Zawacki et al, 2018. Mobile source contributions to ambient ozone and particulate matter in 2025. Atmospheric Environment. Vol 188, pg 129-141. Available online: https://doi.org/10.1016/j.atmosenv.2018.04.057.

C. Emission Reduction Potential of Control Stringencies

1. EGU Emission Reduction Potential

For EGUs, as discussed in section VI.A, the multi-factor test considers increasing levels of uniform control stringency in combination with consideration of total NO_X reduction potential and corresponding air quality improvements. EPA evaluated EGU NO_X emission controls that are widely available (described previously in section VI.B.1), that were assessed in previous rules to address ozone transport, and that have been incorporated into state requirements to address ozone nonattainment.

The tables below summarize the emission reduction potentials (in absolute ozone season tons) from these emission controls across the 12-state region. Table VI.C.1-2 focuses on near-term mitigation emission controls while Table VI.C.1-3 includes emission controls with extended time frames for implementation.

Table VI.C.1-2 - EGU Ozone-season Emission Reduction Potential – 2021

		Reduction potential (tons) for varying levels of technology inclusion		
State	**Baseline 2021 OS NOx**	**SCR Optimization**	**SCR Optimization + LNB Upgrade**	**SCR/SNCR optimization + LNB Upgrade**
Illinois	9,368	171	171	267
Indiana	15,856	2,771	2,771	2,805
Kentucky	15,588	282	1,531	1,538
Louisiana	15,476	87	87	658
Maryland	1,501	1	1	1
Michigan	13,898	1,166	1,284	1,288
New Jersey	1,346	92	92	92
New York	3,469	53	53	53
Ohio	15,829	6,140	6,140	6,140
Pennsylvania	11,896	3,517	3,517	3,517
Virginia	4,664	50	320	380
West Virginia	15,165	1,479	1,960	2,281
Total	**124,057**	**15,809**	**17,927**	**19,021**

*EPA shows reduction potential from state-of-the-art LNB upgrade as a near-term reduction emission control but explains in sections VI.B and VI.D that this reduction potential would not be implemented until 2022. Sum of state values may vary slightly from total due to rounding.

Table VI.C.1-3 - EGU Ozone-season Emission Reduction Potential – 2025

		Reduction potential (tons) for varying levels of technology inclusion*			
State	**Baseline 2025 OS NOx**	**SCR Optimization + LNB Upgrade**	**SCR/SNCR optimization + LNB Upgrade**	**SCR/SNCR optimization + LNB Upgrade + SNCR Retrofit + Generation Shifting**	**SCR/SNCR optimization + LNB Upgrade + SCR Retrofit + Generation Shifting**
Illinois	8,281	138	233	1,053	1,401
Indiana	12,232	2,648	2,668	3,309	3,802
Kentucky	14,551	1,199	1,205	2,755	5,022
Louisiana	15,476	87	659	1,098	2,854
Maryland	1,350	2	2	181	181
Michigan	11,009	1,205	1,209	2,331	3,656
New Jersey	1,346	92	92	89	89
New York	3,456	53	53	159	159
Ohio	15,927	6,155	6,155	6,284	6,706
Pennsylvania	11,896	3,523	3,523	3,975	4,045
Virginia	4,162	323	367	417	850
West Virginia	15,165	1,960	2,281	2,328	4,597
Total	**114,850**	**17,384**	**18,448**	**23,978**	**33,363**

*Both tables VI.C.1-2 and VI.C.1-3 include limited generation shifting (reflecting that which would occur at the price level consistent with control operation). It does not factor in generation shifting reduction potential that may be attributable to incremental new builds or incremental retirements. Sum of state values may vary slightly from total due to rounding.

Comment: Some commenters suggested that the emission reduction estimates for an identified technology needed to be updated based on new or updated data.

Response: EPA has updated the total emission reduction potential for each technology based on information provided by commenters. Further details are provided in the RTC Document included in the docket, the EGU NOx Mitigation Strategies Final Rule TSD, and in the Ozone Transport Policy Analysis Final Rule TSD. In summary, comments containing new data, information, or analysis that resulted in changes to the values in the tables above included information on 1) shared stack emissions apportionment, 2) updated information and data on retirements and new builds, 3) updated information and data on combustion control performance,

and 4) and updated information on SNCR optimization cost. In the first three instances, the resulting impact was a change in the inventory of units with identified emission reduction potential (and therefore overall emission reduction potential from that category). For instance, multiple commenters provided EPA with data on shared stack emissions apportionment not readily available in unit-level data reported to EPA. In some cases where stack data are measured and reported, and that stack is shared by two units (one with an SCR and one without), the apportionment method of those reported stack emissions for reporting purposes is heat input-based and therefore may not reflect the unit-level operation of the control at that unit, even when that control is operating. In other words, it may have apportioned those stack emissions (e.g., 10 tons) as 5 tons to each unit, while the actual operation is 9 tons from the uncontrolled unit and 1 ton from the controlled unit. This can give the appearance of a controlled unit emitting above the optimized rate, when in fact it is already operating below the 0.08 lb/mmBtu threshold. Similar to the CSAPR Update, EPA incorporated the information from this comment and new data into this final rule, and EPA has adjusted the Agency's inventory of units that may have SCR reduction potential accordingly. Likewise, EPA received some updated information on unit-level retirement status such as changes to the retirement status of the Colver Power Plant in Pennsylvania and the Pleasants Power Station in West Virginia. As these units are no longer retiring, their retirement is not factored into the step 3 baseline or resulting state emission budgets. Similarly, EPA also incorporated comments and new data regarding new units expected to come online and retiring units expected to go offline after 2019 but prior to 2024 ozone season.[144] Also, as noted above, EPA updated its performance rate assumption for LNB controls based on updated data and comments, resulting in less emission reduction potential from this technology category. Finally, the emission reduction levels associated with SNCR optimization

[144] EPA relied on unit-level data from the proposal, commenter data, and the latest EIA Form 860m (October 2020) available at the time of the final rule analysis.

were updated to be consistent with the representative cost (and commensurate generation shifting-based reductions) adjustments discussed above.

Comment: Some commenters asserted that EPA should change its timing assumptions for post-combustion control retrofits by parsing out different timing assumptions for SNCR and SCR retrofits. They claim that doing so would result in more emission reductions available starting in earlier years (e.g., 2023) given that SNCR retrofit technology could be installed by that year.

Response: EPA is finalizing the same timing assumptions that it proposed for the installation of post-combustion controls. As discussed in section VI.B.1.e and noted in prior actions, EPA generally views 39-48 months as an appropriate implementation timeframe for regionwide installation of new post-combustion control technologies when EPA is evaluating multiple installations at multiple locations. As discussed further below, this is primarily based on SCR retrofit rather than SNCR. The period from finalization of this rule until the start of the 2024 ozone-season would allow less than 39 months for post combustion controls to be regionally installed and operating. The 2025 ozone season represents a period approximately 48 months after finalization of this rule and reflects a more demonstrably possible window for making retrofits on a regional scale. Therefore, EPA finds that 2025 is the earliest ozone season by which new SNCR or SCR may be installed across multiple EGUs on a regional basis.

Installing new SCR or SNCR controls for EGUs generally involves the following steps: conducting an engineering review of the facility to determine suitability and project scope; advertising and awarding a procurement contract; obtaining a construction permit; installing the control technology; testing the control technology; and obtaining or modifying an operating permit. These timeframes are intended to accommodate a plant's need to conduct an engineering assessment of the possible NO_X mitigation technologies necessary to then develop and send a bid request to potential suppliers. Control specifications are variable based on individual plant configuration and operating details (e.g., operating temperatures, location restrictions, and ash loads). Before making potential large capital investments, plants need to complete these careful

reviews of their system to inform and develop the control design they request. They then need to solicit bids, review bid submissions, and award a procurement contract—all before construction can begin.

Scheduled curtailment, or planned outage, for pollution control installation would also be necessary to complete SCR or SNCR projects on a regional scale. Given that peak demand and rule compliance would both fall in the ozone season, sources would likely need to schedule installation projects for the "shoulder" seasons (i.e., the spring and/or fall seasons), when electricity demand is lower than in the summer, reserves are higher, and ozone season compliance requirements are not in effect. If multiple units were under the same timeline to complete the retrofit projects as soon as feasible from an engineering perspective, this could lead to bottlenecks of scheduled outages as each unit attempts to start and finish its installation in roughly the same compressed time period. Thus, any compliance timeframe that would assume installation of new SCR or SNCR controls should be developed to reasonably encompass multiple shoulder seasons to accommodate scheduling of curtailment for control installation purposes and better accommodate the regional nature of the program.[145]

Finally, the time lag observed between the planning phase and in-service date of SCR operations in certain cases also illustrates that site-specific conditions can lead to installation times of four years or longer—even for individual power plants. For instance, SCR projects for units at the Ottumwa power plant (Iowa), Columbia power plant (Wisconsin), and Oakley power plant (California) were all in the planning phase in 2014. By 2016, these projects were under construction with estimated in-service dates of 2018.[146] Further, large-scale projects also

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[145] The workforce disruption experienced at the onset of the COVID-19 pandemic has resulted in a backlog of scheduled outages for power plant maintenance. According to Genscape, PJM (a regional transmission organization covering a substantial portion of the EGUs affected by this rule) observed a shortfall of more than a quarter of planned outages for power plant maintenance in the spring 2020 shoulder season. Finn, Pat; Szumloz, Zach; Gordon, Elliot. *Impacts of the Coronavirus on the PJM Power Market, Taking a Closer Look at Demand, Supply, Energy Prices, and Congestion. Genscape, A Wood Mackenzie Business. April 2020.*

[146] 2014 EIA Form 860. Schedule 6. Environmental Control Equipment.

illustrate that timelines can extend beyond the general estimate for a single power plant when the project is part of a larger, multifaceted air pollution reduction goal. For instance, the Big Bend power plant in Florida completed a multifaceted project that involved adding SCRs to all four units as well as converting furnaces, over-fire air changes, and making windbox modifications, during which a decade elapsed between the initial planning stages and completion.[147]

EPA notes that differences between these control technologies exist with respect to the potential viability of achieving cost-effective, regional NO_X reductions from EGUs. SCR controls generally achieve greater EGU NO_X reduction efficiency (up to 90 percent) than SNCR controls (25 percent). EPA observes that for the remaining uncontrolled coal fleet in the 12 states, SCRs are, on average, more expensive on a cost per ton basis. However, the analysis in the EGU NO_X Mitigation Strategies Final Rule TSD notes that the cost range varies widely for units depending on inlet NO_X rate and capacity factor. Therefore, for some units, it is possible that SCR retrofit costs are lower than SNCR costs on a cost per ton basis. Moreover, there are a host of other market and policy drivers that may lead a specific unit to prefer an SCR retrofit over an SNCR retrofit. As a result, EPA finds it is reasonable to allow sufficient time for EGU operators to select installation of SCR in response to a multi-state emission control program whose emission budgets would reflect emission reductions from new post-combustion controls. Therefore, EPA is using an SCR-inclusive planning and installation schedule to represent new post-combustion retrofit potential on a regional basis (be it SNCR or SCR as determined by individual EGU owners under our flexible market-based emission trading program).

Furthermore, SNCR installation at an individual source would render later installation of an SCR less cost-effective, because such a unit would have already expended some unrecoverable capital on the less-effective pollution control technology. As a result, it would be counterproductive to assume EGUs should install the less effective SNCR control technology to

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[147] Big Bend's Multi-Unit SCR Retrofit. Power Magazine. March 1, 2010. Available at http://www.powermag.com/big-bends-multi-unit-scr- retrofit/.

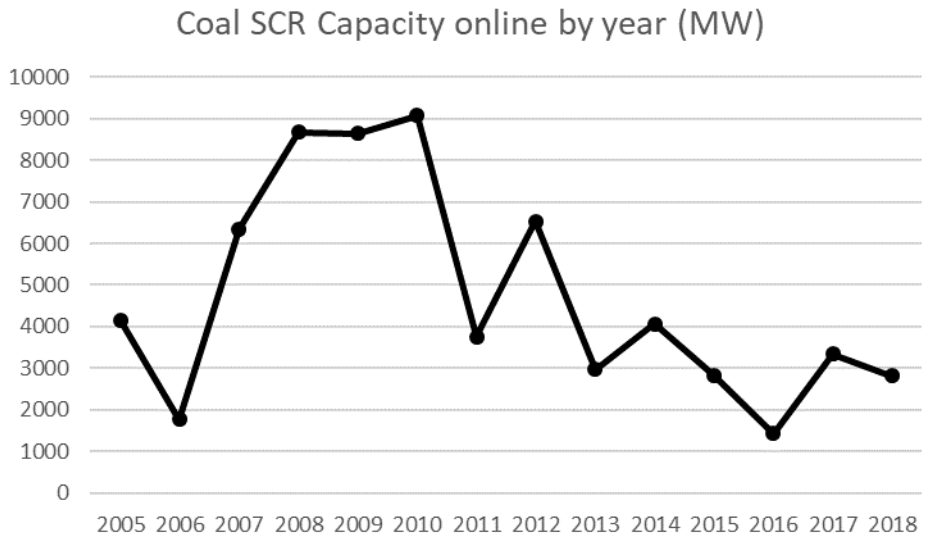
address a short-run air quality concern under an older and less stringent NAAQS when it may later prove necessary to require the more effective SCR control technology to address longer-run air quality concerns under a more stringent NAAQS for the same pollutant. Considering these factors, EPA finds it is appropriate to give particular weight to the timeframe required for implementation of SCR across the region as compared to SNCR to allow sources the flexibility to make the most efficient post-combustion control investment. Historically, units have chosen to retrofit with higher performing SCR at a much greater rate than they have chosen SNCR. For SCR, the total time associated with project development is estimated to be up to 39 months for an individual power plant installing controls on more than one boiler. However, more time is needed when considering installation timing for new SCR controls regionally. EPA has previously determined that a minimum of 48 months (four years) is a reasonable time period to allow to complete all necessary steps of SCR projects at EGUs on a regional scale. This timeframe would allow for regional implementation of these controls (i.e., at multiple power plants with multiple boilers) considering the necessary stages of post-combustion control project planning, shepherding of labor and material supply, installation, coordination of outages, testing, and operation.[148]

In addition to its engineering assessment, EPA looked at historical data to validate this 39-48 month installation timeframe. EPA observed over 12 GW of uncontrolled coal capacity in the linked states covered in this rule. For comparison, EPA looked at the last 15 years of data to see if a similar amount of capacity had come online in a shorter time frame. It observed that it had not. Most notably, the CAIR was finalized in March of 2005 covering much of the Eastern U.S. and drove significant SCR retrofit activity, with incentives for early installation and reductions. From this date, 39-48 months would have placed the SCRs online in the mid 2008 to 2009 time frame. The graphic below illustrates an uptick in coal-fired capacity retrofitted with

[148] Final Report: Engineering and Economic Factors Affecting the Installation of Control Technologies for Multipollutant Strategies, EPA– 600/R–02/073 (Oct. 2002), available at https://nepis.epa.gov/Adobe/PDF/P1001G0O.pdf.

SCRs in response to the rule (Figure VI.D.2). Most of this capacity comes online in 2009 and 2010. Although EPA's data on when sources started planning these controls and whether it was driven purely by CAIR or other factors are not perfect, the Agency finds the chart below consistent with its determination that a 39-48 month time frame is reasonable for SCR retrofit possibility on a regional level.

Figure 1 to Section VI.C.- SCR Capacity (MW) as a Function of Online Year.



Comment: EPA received comment on the timing assumptions regarding SCR and SNCR retrofit. Commenters noted that EPA should require SNCR installation as it can be installed in as little as 16 months, and that EPA's reliance on SCR timing to justify not considering SNCR is not reasonable given that EPA is not considering SCR installation. Moreover, the commenter also suggested that if these controls are not available on a region-wide level by the start of 2024, that EPA should still include them for a limited number of units (e.g., 30 percent of the unretrofitted fleet) as the Clean Air Act requires that upwind states limit emissions "as expeditiously as practicable."

Response: EPA believes its proposed collective timing assumptions for post-combustion control retrofit are practicable given that the preferable capital-intensive investment retrofit decision would be highly unit-specific and subject to a unit's compliance strategy choices with

respect to multiple regulatory requirements. For the reasons described above, EPA believes that separating the post-combustion retrofit timing consideration would create a framework that potentially inhibits greater emission reductions from technologies like SCR that may be both preferable to the unit's operator and beneficial to overall emission reductions. While the commenter observed that SCR installation is not included as part of EPA's proposed control stringency, states and EPA may consider requiring this emission control technology to address good neighbor obligations or other attainment planning requirements for the 2015 ozone NAAQS or other CAA programs. Therefore, while the commenter suggests that the exclusion of new SCR installations from the control stringency selected for this rule should result in the decoupling of SNCR and SCR for timing considerations, EPA observes that the broader regulatory context potentially presents situations where a better performing emission reduction technology is the preferred retrofit choice. If EPA were to ignore the observation that this post-combustion retrofit technology decision is a binary choice, as these technologies substitute for rather than complement one another, it would potentially eliminate or make more costly the eventual decision to implement a better performing SCR technology by implementing on a schedule that did not allow for that compliance strategy.

With regard to the suggestion that, if it is not possible to require all non-retrofitted units to install new controls, EPA should at least require some units to retrofit with SNCR and SCR, EPA observed that doing so would result in making selective choices about which linked upwind states should face more stringent requirements and would upset the uniform control stringency scheme allowing for "equitable and efficient" implementation of good neighbor obligations. *EME Homer City*, 572 U.S. at 519. In addition, it would necessitate far greater unit-level analysis, which would likely have prevented EPA from finalizing a rule in time to implement reductions for the 2021 ozone season.

2. Non-EGU Emission Reduction Potential

EPA performed a similar analysis of reduction potential for the non-EGU mitigation technologies identified, as discussed in section VI.B.2 of this notice. EPA's assessment of emission reduction potential from the controls in the tranches reflects ongoing uncertainty resulting from the quality of the current information available to the Agency. This uncertainty has been addressed to some extent through further research conducted since the proposed rule. Because information for existing controls on non-EGU emissions sources is missing in the 2016 base year inventory for some states and incomplete for some sources, EPA went through a process in the proposed rule to further verify existing control information and refine the NO_X emission reduction potential estimated by CoST, the CMDb, and the 2023 projected inventory. In the proposed rule EPA focused its verification and refinement efforts on those upwind states with the largest estimated potential air quality impacts from potential non-EGU emission reductions. Since the proposed rule, EPA extended its verification and refinement efforts to several additional linked states.

In the proposed rule, EPA identified two tranches of controls for non-EGU emissions sources/units associated with two levels of weighted average cost per ton. EPA assumed that the potential reductions in tranche one were likely cost-effective because tranche one's weighted average cost of $2,000 per ton is similar to the identified control stringency for EGUs represented by $1,800 per ton (see section VI.D.1). The additional steps EPA took, discussed in more detail below, included:

- Looked at potential emission reductions in tranche one that were estimated to cost less than $2,000 per ton; and
- For those potential reductions in tranche one that were estimated to cost less than $2,000 per ton, reviewed online facility permits and industrial trade literature to verify and determine if the estimated emission reductions may be actual, achievable emission reductions or if the estimated emission reductions are associated with emissions units that are already controlled.

EPA focused its verification and refinement efforts on those upwind states with the largest estimated potential air quality impacts from potential non-EGU emission reductions. Specifically, EPA used an estimate of 0.02 ppb as a threshold for air quality improvement that may be obtained from reductions from non-EGU emissions sources in each state to better target its efforts to verify and refine the potential estimated non-EGU NO_X emission reductions. The Agency explained that it was not applying a 0.02 ppb impact threshold as a step in the step 3 multi-factor test. Rather, the threshold allowed the Agency to better target its efforts toward the potentially effective states for non-EGU NO_X emission reductions. Based on this, the states for which the Agency verified existing control information and refined the NO_X emission reduction estimates in the proposed rule included: Indiana, New York, Ohio, Pennsylvania, and West Virginia. For additional discussion on the air quality impacts by state, see the section titled *Air Quality Impacts from Potential Non-EGU Emissions Reductions* in the technical memorandum titled *Assessing Non-EGU Emission Reduction Potential* in the docket for this rule. In this final rule, EPA extended its verification process to additional linked states, including Maryland, Michigan, and Virginia.[149]

As noted above to focus the set of non-EGU emissions sources/units in the linked upwind states (Indiana, Maryland, Michigan, New York, Ohio, Pennsylvania, Virginia, and West Virginia) for which EPA could verify existing control information and refine the NO_X emission reduction estimates, the Agency assumed that the potential reductions in tranche one were likely

[149] The verification efforts did not include New Jersey, Illinois, and Kentucky. For New Jersey, the projected 2023 emissions inventory did not include non-EGU point sources/units with pre-control NO_X emissions greater than 150 tpy for which the Agency had applicable control measures; as such, there were no potential NO_X emission reductions to verify. For Illinois, EPA did not review the potential controls for emissions sources/units because their permits were not available online. (However, as discussed below, EPA assumed all of the potential emission reductions estimated by CoST from units in Illinois were considered available.) For Kentucky EPA did not review the potential controls because CoST did not identify applicable control measures for any emissions sources/units in the state; as such, there were no potential NO_X emission reductions to verify. Louisiana was not assessed because the receptor to which it is linked is projected to resolve by the 2023 ozone seaon, which is the earliest ozone season EPA finds non-EGU emission reductions may become available.

cost-effective because tranche one's weighted average cost of $2,000 per ton is similar to the identified control stringency for EGUs represented by up to $1,800 per ton (see section VI.D.1).

In the proposed rule, EPA found in Indiana, New York, Ohio, and Pennsylvania, that the estimated emission reductions in tranche one that cost less than $2,000 per ton were 6,346 ozone season tons. Note that no potential emission reductions at a cost of less than $2,000 per ton were identified in West Virginia because CoST originally estimated control costs for two IC engines in West Virginia inappropriately, and CoST did not identify likely cost-effective controls for any other non-EGU emissions units in the state. EPA removed the two IC engines in West Virginia from further consideration because the corrected potential cost was greater than $2,000 per ton.

In reviewing the potential controls in tranche one that were estimated to cost less than $2,000 per ton for Indiana, New York, Pennsylvania, and Ohio, EPA found that these reductions were from SCR applied to glass furnaces and SNCR applied to cement kilns. In addition in this final rule, EPA found in Maryland, Michigan, and Virginia the estimated emission reductions in tranche one that cost less than $2,000 per ton are 664 ozone season tons. These estimated reductions were also from glass furnaces and cement kilns. The total estimated emission reductions in tranche one in Indiana, Maryland, Michigan, New York, Pennsylvania, Ohio, and Virginia that cost less than $2,000 per ton are 7,010 ozone season tons.

Next, to verify the information on the application of these controls and estimated emission reductions, EPA reviewed facilities' online title V permits and industrial trade literature for the likely cost-effective emission reductions associated with SCR applied to glass furnaces and SNCR applied to cement kilns. In the proposed rule, EPA determined that of the 20 emissions units in Indiana, New York, Pennsylvania, and Ohio included in the cost analysis, source permits identified that 10 units (i) already have controls and monitors (primarily CEMS), (ii) are installing controls and CEMS or consolidating operations in the next few years as a result of recent consent decrees issued as part of EPA's New Source Review Air Enforcement Initiative, (iii) have shut down, or (iv) are planning to shut down by 2023. These 10 units account for

approximately 34 percent of estimated potential emissions reductions from Pennsylvania, New York, Ohio, and Indiana in tranche 1 that cost <$2,000 per ton. The results of the online permit review and review of industrial trade literature, summarized in Table VI.C.2-1 below, suggested that approximately 14 percent of the CoST-estimated potential emission reductions in these four states may be possible to achieve.

Table VI.C.2-1 Status of Potential Emission Reductions

	Number of Emissions Units	OS Tons	(Percent of Total)
Shutdowns	4	824	13
Lehigh Cement – Kiln Replacements	3	366	6
NEI Discrepancy/Uncertain[150]	1	3,286	51
Already Controlled/Uncertain	5	967	15
Possible Emission Reductions	7	903	14
TOTAL	**20**	**6,346**	

In EPA's analysis for this final rule, the online permit review for Maryland, Michigan, and Virginia identified approximately 62 ozone season tons out of the estimated 664 ozone season tons that are from sources/units already controlled, leaving an estimated 602 ozone season tons of likely cost-effective emission reductions from these states. For additional details on the review of online permits and industrial trade literature, please see the memorandum titled *Assessing Non-EGU Emission Reduction Potential*, available in the docket for this rule.

EPA previously examined the time necessary to install the controls indicated in the table above (with details on the technology tranches) for different industries. The 2016 CSAPR Update Non-EGU TSD provided preliminary estimates of installation times for a variety of NO_X

[150] In the memorandum titled *Assessing Non-EGU Emission Reduction Potential,* the section titled *Conclusions of Verification and Review of Controls on Non-EGU Sources in Four States and Potential Emissions Reductions* includes a discussion related to the underlying uncertainty in these estimates of emission reductions. Approximately 51 percent of the estimated emission reductions are associated with only one emissions unit at a facility in Pennsylvania. In the 2023 projected inventory, the pre-control emissions are significantly higher than what appears in the Pennsylvania Air Emissions Report for this facility and significantly higher than any other glass furnace in this analysis. The projected inventory does not show a control on any unit at this facility, even though a review of the permit indicates that one unit does have a control.

control technologies applied to a large number of sources in non-EGU industry sectors.[151] For virtually all NO_X controls applied to cement manufacturing and glass manufacturing, information on installation times was not available to provide an estimate, and the installation time for these controls was "uncertain." There was an exception for SNCR applied to cement kilns; however, the installation time estimate of 42-51 weeks listed in the CSAPR Update Non-EGU TSD does not account for implementation across multiple sources, the time needed to have NO_X monitoring installed, and other steps in the permitting and construction processes.

To improve upon information from the CSAPR Update Non-EGU TSD on installation times for SCR on glass furnaces and SNCR on cement kilns, EPA reviewed information from permitting actions and a consent decree. For two glass manufacturing facilities that installed SCR on glass furnaces, from the time of permit application to the time of SCR operation was approximately 19 months for one facility and is currently at least 20 months for another facility.[152] These installation times do not reflect time needed for pre-construction design and engineering, financing, and factors associated with scaling up construction services for multiple installations at several emissions units. With respect to cement kilns, an April 2013 consent decree between EPA and CEMEX, Inc. required installation of SNCR at a kiln within 450 days, or approximately 15 months, of the effective date of the consent decree. Similarly, this installation time does not reflect time associated with scaling up construction services for multiple control installations at several emissions units.

This information and EPA's general experience indicate that a two-year installation timeframe for a rule requiring installation of new control technologies across a variety of

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[151] The CSAPR Update Non-EGU TSD is available on EPA's website at the following link: https://www.epa.gov/airmarkets/assessment-non-egu-NO_X-emission-controls-cost-controls-and-time-compliance-final-tsd.

[152] Cardinal FG Company submitted a permit application to the Wisconsin Department of Natural Resources (WIDNR) to construct an SCR in December 2017 at a facility in Portage, Wisconsin. The SCR was expected to be ready for testing in mid-July 2019. In addition, Cardinal FG Company submitted a permit application to the WIDNR to construct an SCR in January 2019 at a facility in Menomonie, Wisconsin. The SCR is currently not operational.

emissions sources in several industry sectors on a regional basis is a relatively fast installation timeframe. A shorter installation timeframe of approximately one year (i.e., in time for the 2022 ozone season) would raise significant challenges for sources, suppliers, contractors, and other economic actors, potentially including customers relying on the products or services supplied by the regulated sources.[153]

Thus, for this rule, EPA estimates that these controls for glass furnaces and cement kilns would take at least 2 years to install on a sector-wide basis across the 12-state region. Therefore, based on the information currently available, EPA in its reasoned judgment finds that the 2023 ozone season is the earliest ozone season by which these non-EGU controls could be installed.

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

To determine the emissions that are significantly contributing to nonattainment or interfering with maintenance, EPA applied the multi-factor test to EGUs and non-EGUs separately, considering for each the relationship of cost, available emission reductions, and downwind air quality impacts. Specifically, EPA determined the appropriate level of uniform NO_X control stringency that addresses the impacts of interstate transport on downwind nonattainment or maintenance receptors. EPA also evaluated possible over-control by determining if an upwind state is linked solely to downwind air quality problems that could have been resolved at a lower cost threshold, or if an upwind state could have reduced its emissions below the 1 percent air quality contribution threshold at a lower cost threshold.

1. EGU Assessment

[153] EPA notes that in several places, the CAA itself indicates a general congressional expectation that the retrofit of emissions controls onto existing sources across diverse industry sectors and at a regional or national scale may take at least several years. For instance, under CAA section 112(i)(3), Congress allowed for up to three years for compliance with control requirements in national rules for hazardous air pollutants for existing sources. And under CAA section 169A(g)(4), Congress established up to five years for the installation of best available retrofit technology (BART) for over two-dozen source categories. While these provisions also call for installation "as expeditiously as practicable," EPA notes that both of these timeframes are longer than the two-year estimate EPA uses in this rulemaking.

For EGUs, EPA examined the emission reduction potential associated with each EGU emission control technology (presented in section VI.C.1) and its impact on the air quality at downwind receptors. Specifically, EPA identified the projected air quality improvement relative to the base case, as well as whether the air quality improvements are sufficient to shift the status of receptors from nonattainment to maintenance or from maintenance to clean. Combining these air quality factors, cost, and emission reductions, EPA identified a control stringency for EGUs that maximizes the air quality improvement from emission controls available in the timeframe for which air quality problems at downwind receptors persist. This control stringency reflects the optimization of existing SCR controls and installation of state-of-the-art NO_X combustion controls, which are widely available at a representative marginal cost of $1,600 per ton. It also includes the optimization of existing SNCR controls at sources that are already partially operating these controls, which becomes widely available as a mitigation technology at $1,800 per ton. EPA's evaluation also shows that emission budgets reflecting the operation of these existing post combustion controls and combustion control upgrades do not over-control upwind states' emissions relative to either the downwind air quality problems to which they are linked at step 1 or the 1 percent contribution threshold that triggers further evaluation at step 2 of the 4-step framework for the 2008 ozone NAAQS. To assess downwind air quality impacts for each nonattainment and maintenance receptor identified in section V.C, EPA evaluated the air quality change at that receptor expected from the progressively more stringent upwind EGU control stringencies that were available for that time period. This assessment provides the downwind ozone improvements for consideration and provides air quality data that is used to evaluate potential over-control.

To assess the air quality impacts of the various control stringencies at downwind receptors, EPA evaluated changes resulting from the emission reductions associated with the identified emission controls in each of the upwind states, as well as corresponding reductions of similar stringency in the downwind state containing the receptor they are linked to. By applying

these emission controls to the state containing the receptor, EPA assumes that the downwind state will implement (if it has not already) an emissions control stringency for its sources that is comparable to the upwind control stringency identified here. Consequently, EPA explicitly ensures that it is accounting for the downwind state's share of a nonattainment or maintenance problem (which is a part of the overcontrol evaluation).[154]

For states that were not linked to that receptor, the air quality change at that receptor was evaluated assuming emissions equal to the engineering analytics base case emission level. This method holds each upwind state responsible for its share of the specific downwind problems to which it is linked. For states that are not linked to that receptor (even if they are linked to a different receptor), EPA assumes that they are not making emission reductions beyond those in the base case to that receptor. In practice, because these states, by definition, do not impact such receptors above the contribution threshold, the changes in emissions have little to no effect on the non-linked receptor. Furthermore, if EPA were to explicitly consider these reductions within the framework, it would introduce interdependency into the solution for significant contribution. The state-and-receptor-specific definition of significant contribution would devolve into a simultaneous regional action, where particular states would have to either "go first" or where non-linked states would shoulder burdens to receptors to which they are not linked while other linked states would do less. In any case, EPA has verified that even if it were to account for non-linked state reductions under the selected control stringency, the changes in concentrations at the receptors are so small that they do not affect the attainment or maintenance status of any receptor.

For this assessment, EPA used an ozone air quality assessment tool (ozone AQAT) to estimate downwind changes in ozone concentrations related to upwind changes in emission levels. EPA used this tool to analyze the years for which downwind nonattainment and

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[154] This step is irrelevant in the analysis for the Connecticut receptors because that state shows no EGU reduction potential from the EGU control optimization or retrofit technologies identified given its already low-emitting fleet.

maintenance problems persist for the 2008 ozone NAAQS. Under the base case, EPA projects that such air quality problems persist through 2025. Therefore, EPA focused its assessment on the years 2021 through 2025.

This tool is similar to the AQAT tool used in the CSAPR Update to evaluate changes in ozone concentrations. The ozone AQAT uses simplifying assumptions regarding the relationship between each state's change in NO_X emissions and the corresponding change in ozone concentrations at nonattainment and maintenance receptors to which that state is linked. This method is calibrated using two CAMx air quality modeling scenarios that fully account for the non-linear relationship between emissions and air quality associated with atmospheric chemistry. The two CAMx modeling scenarios are the 2016fh1 base year and the 2023fh1 future year scenarios for the 2021 time period. For the 2024 and 2025 AQAT simulations, the two CAMx modeling scenarios are the 2023fh1 future year and the 2028fh1 scenario. See the Ozone Transport Policy Analysis Final Rule TSD for additional details.

For each EGU emission control technology, EPA first evaluated the magnitude of the change in ozone concentrations at the nonattainment and maintenance receptors for each relevant year. EPA next evaluated whether the estimated change in concentration would resolve the receptor's nonattainment or maintenance concern by lowering the average or maximum design values below 76 ppb, respectively. For a complete set of estimates, see the Ozone Transport Policy Analysis Final Rule TSD or the ozone AQAT excel file.

In 2021, there are two nonattainment receptors and two maintenance receptors (see section V.C for details). Table VI.D.1-1 summarizes the results of EPA's evaluation of air quality improvements in 2021 at these receptors using AQAT. EPA evaluated the air quality improvements at the four receptors for the three EGU emission control technologies that are available in the near-term. EPA determined that the average air quality improvement at the four receptors relative to the engineering analytics base case was 0.16 ppb for optimization of existing SCRs and LNB upgrades, and 0.17 ppb when also including optimization of existing SNCRs.

EPA determined that the Westport receptor (090019003) remains nonattainment and the Houston receptor (482010024) remains maintenance across these control stringencies, while the Stratford receptor (090013007) switches from nonattainment to maintenance with the optimization of existing SCRs and LNB upgrades (i.e., its average DV becomes clean but its maximum DV remains above the NAAQS). Lastly, the New Haven receptor has all nonattainment and maintenance resolved in the engineering analytics base case. For more information about how this assessment was performed and the results of the analysis for each receptor, refer to the Ozone Transport Policy Analysis Final Rule TSD and to the Ozone AQAT included in the docket for this rule.

Table VI.D.1-1. Air Quality Improvements at the Four Receptors in 2021 from Near-Term Emission Control Technologies

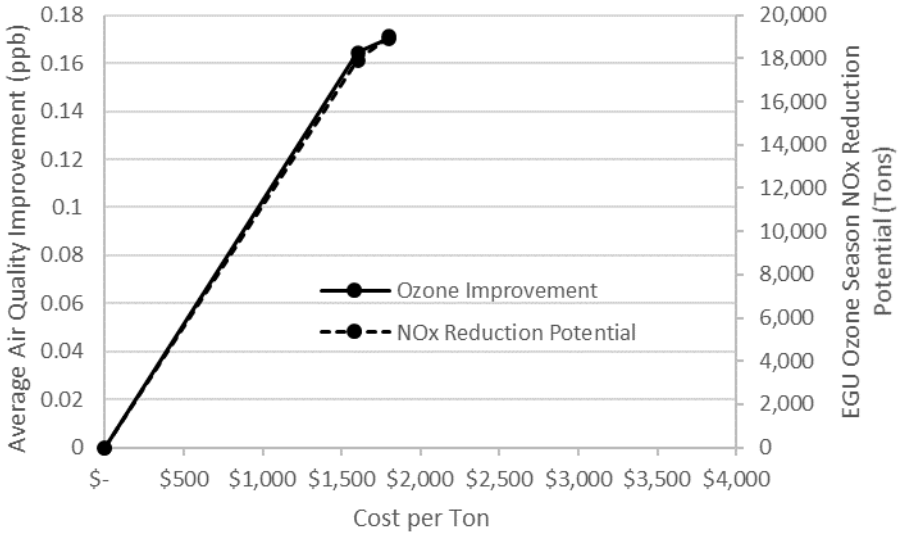
			Baseline	**SCR Optimization + LNB Upgrade**	**SCR/SNCR optimization + LNB Upgrade**	**Baseline**	**SCR Optimization + LNB Upgrade**	**SCR/SNCR optimization + LNB Upgrade**
Monitor ID #	State	County	Average DV (ppb)	Average DV (ppb)	Average DV (ppb)	Max DV (ppb)	Max DV (ppb)	Max DV (ppb)
90013007	Connecticut	Fairfield	76.13	75.93	75.93	77.05	76.85	76.85
90019003	Connecticut	Fairfield	78.27	78.12	78.12	78.58	78.43	78.42
90099002	Connecticut	New Haven	73.59	73.38	73.37	75.74	75.53	75.52
482010024	Texas	Harris	75.62	75.51	75.50	77.25	77.15	77.13
Average AQ Improvement Relative to Base (ppb)			0.00	0.16	0.17			

Figure 1 illustrates the air quality improvement relative to the estimated representative cost associated with the previously identified near-term emission control technologies. This graph shows improving air quality at the downwind receptors as emission control technologies are assumed to be implemented. In this final rule, EPA has adjusted this graph to reflect a revised estimated representative cost of $1,800 per ton for optimization of already operating SNCRs (which, as explained in section VI.B.1, EPA has adjusted from a value of $3,900 per ton in the proposed rule, which reflected turning on idled SNCRs). In the proposed rule, the SNCR cost

extended the right terminus of the solid line out to $3,900 per ton and showed a "knee-in-the-curve" pattern. As noted by commenters, a "knee-in-the-curve" is not on its own a justification for not requiring reductions beyond that point in the cost curve. Even though EPA did not solely rely on this factor in the proposed rule, it notes that this inflection point is greatly diminished and there a less discernable knee when the SNCR optimization cost is updated to reflect $1,800 per ton. In fact, as explained below, EPA does not view the now very slight difference in cost thresholds between $1,600 per ton and $1,800 per ton as significant, and together, EPA views them as comparable in terms of the relationship of available emission reductions to air quality improvement.

The graph in Figure 1 to Section VI.D.1 highlights that the majority of emission reduction potential and air quality improvement occurs from optimization of existing SCRs, with some additional reductions from installation of state-of-the-art combustion control at the same cost threshold. At the slightly higher cost threshold of $1,800 per ton, there is some additional air quality improvement from optimization of existing SNCRs. Taken together, this level of control stringency in emission budgets represents the level at which incremental EGU NO_X reduction potential and corresponding downwind ozone air quality improvements are maximized with respect to identified near-term emission control technologies. While the more stringent emission budget levels (e.g., emission budgets reflecting the inclusion of optimization of existing SNCRs) yield a relatively small amount of incremental emission reductions and fewer air quality improvements, they still demonstrate meaningful air quality improvement. Further, after consideration of comments and examining cost data, EPA has identified additional compelling reasons favoring the inclusion of optimization of SNCR controls in the context of this full remedy rulemaking, discussed below. This evaluation shows that EGU NO_X reductions for each of the near-term emission control technologies are available at reasonable cost and that these reductions can provide improvements in downwind ozone concentrations at the identified nonattainment and maintenance receptors.

Figure 1 to Section VI.D.1 - EGU Ozone Season NO_X Reduction Potential in 12 Linked States and Corresponding Total Reductions in Downwind Ozone Concentration at Nonattainment and Maintenance Receptors for Each Cost Threshold Level Evaluated (2021/2022)*



*Note – Starting with the $1,600 per ton cost threshold in this figure, full implementation of assumed SCR optimization and state-of-the-art combustion control upgrades are reflected.

EPA finds that the control stringency that reflects optimization of existing SCRs and SNCRs, and installation of state-of-the-art combustion controls results in a substantial number of emission reductions totaling nearly 19,000 tons (approximately 16 percent of the baseline level), resulting in all downwind air quality problems for the 2008 ozone NAAQS being resolved after 2024 (one year earlier than the base case).[155] There are also projected changes in receptor status (from projected nonattainment to maintenance-only) for the Stratford and Westport receptors (the first in 2021, the second in 2024). In addition, the Houston receptor changes from maintenance to attainment in 2023. In 2021, the average level of improvement in ozone concentrations at all four of the receptors is 0.17 ppb.

[155] EPA is not obligated to fully resolve downwind nonattainment and maintenance issues through the good neighbor provision, as some commenters assert. EPA considers the changes in receptor status in this analysis informative in the context of the step 3 multi-factor test. However, that does not mean EPA agrees that good neighbor obligations may only be considered fully addressed when all downwind receptors have reached attainment.

Including optimization of existing SNCRs yields incremental emission reductions of approximately 1,200 tons as there are fewer sources with this emission control technology. As noted in the proposed rule, a small portion of the coal fleet had this technology in place (14 percent), and of that small portion, many units with these SNCR controls had emission rates of 0.13 lb/mmBtu or less (many operating less than 0.1 lb/mmBtu), suggesting they were already optimizing their SNCRs. Analysis using the AQAT tool suggests that optimization of existing SNCRs has an average air quality improvement of 0.01 ppb. While having no further impact on receptors' classification status, it does deliver additional improvement at the problematic receptors.

Given the small portion of the EGU fleet with existing SNCRs in the 12 linked states, the limited number of additional reductions, and the relatively higher cost for this emission control technology, EPA had proposed to determine that the potential emission reductions associated with optimizing existing SNCRs not be required to eliminate significant contribution from the 12 linked states under the 2008 ozone NAAQS. Based on comments EPA received and outlined below, along with subsequent review of cost data and additional considerations, EPA is including emission reduction potential from this emission control technology in the state emission budgets for this final rule.

Comment: Commenters suggested that reductions from optimizing existing SNCRs should be included in the final rule consistent with Clean Air Act requirements and the full remedy nature of this action. These commenters noted that EPA's touchstone metric in the step 3 multi-factor analysis of "maximizing" air quality improvement relative to representative marginal cost was not a sufficient reason to exclude these reductions. They suggest it is eminently "reasonable" to require EGUs to operate all existing controls, for which they have already made significant capital expenditures to purchase and install. These commenters argued that the reductions, even if small, still delivered air quality improvement in a meaningful timeframe at downwind receptors linked to upwind contribution. The same commenters also noted that these

emission control technologies may cost less than EPA suggested in the proposed rule because most of the SNCRs are already operating to some degree at a much lower allowance price incentive.

Response: EPA is including SNCR optimization in its EGU control stringency in this final rule. EPA examined both its methodology and its cost assumptions and determined it was appropriate to include SNCR optimization-driven reductions in identifying significant contribution. EPA concludes that most of these units are already operating and, in most cases, would not incur the additional FOM cost associated with $3,900 per ton estimate included in the proposed rule, and reductions were likely significantly less expensive, consistent with the commenters' observation that a broad set of units appeared to be incentivized to operate these controls under the CSAPR NO_X Ozone Season Group 2 Trading Program (which applied control stringency levels with a representative cost of $1,400 per ton). This technology inclusion was further supported by the observation that most SNCR-controlled units already appear to be operating at lower rates compared with their higher historical emission rates (indicating partial operation) even with the current allowance price substantially under $1,800 per ton.

There are additional considerations unique to EGUs with existing SNCRs that EPA has determined support including their optimization as part of EPA's identified control stringency, such as:

- These controls are already installed and available for operation on these units;
- they are on average already partially operating, but not necessarily optimized;
- the reductions are available in the near-term (during ozone seasons when the problematic receptors are projected to persist), including by the 2021 Serious area attainment date;
- these sources are already covered under the existing CSAPR NO_X Ozone Season Group 2 Trading Program and thus have the monitoring, reporting, recordkeeping,

and all other necessary elements of compliance with the trading program already in place;

- the overall compliance burden and total cost is relatively low, and the incremental cost of operating the technology is not capital intensive.

Indeed, when comparing units of similar size and operation, the absolute annual cost of operating SNCR controls in total dollar terms is often comparable to or less than the cost of operating SCR controls. However, the significantly lower NOx removal efficiency for existing SNCRs (20 to 25 percent) compared to existing SCRs (60 to 90 percent) results in a higher cost-per-ton estimate.

Another consideration that weighs heavily in favor of including the optimization of existing SNCRs as part of EPA's identified control stringency is that emission budgets are set using historical data as a starting point, thus capturing the emission reductions achieved by the EGUs already optimizing their SNCR controls. In other words, state emission budgets assume these units are to continue optimizing those controls. At the same time, EPA's proposed approach would have implicitly allowed EGUs not fully operating their SNCRs to continue to not do so, avoiding the associated cost, and reaping a competitive advantage over those EGUs who, in fully operating their controls, are acting in a more environmentally responsible manner. EPA views this treatment of higher emitting units to be problematic, when the number of EGUs already optimizing their SNCR controls underscores the cost-effectiveness and feasibility of this control measure. Further, as proposed, EPA is including optimization of existing SCRs in its identified control stringency. SCRs are more capital-intensive investments with much better environmental performance. If EPA failed to include optimization of existing SNCRs in its identified control stringency in this action, EGUs that chose SNCRs, which is a less effective form of emission control, would be allowed to continue not operating that control. Considerations of effective and equitable environmental policy strongly weigh against allowing such a result and the perverse incentives it would tend to foster.

These factors, coupled with EPA's final rule cost evaluation, leads the Agency to include optimization of existing SNCRs as part of its identified control stringency. As such, EPA is determining that the full operation of all existing post-combustion controls (both SCRs and SNCRs) and state-of-the-art combustion control upgrades from units constitute the Agency's identified control stringency for EGUs and the associated emision reductions are reflected in the new emission budgets in this final rule. This determination for EGUs is the result of the assessment of the multiple factors and considerations listed above rather than any single factor.

Finally, EPA is determining to not incorporate any additional generation shifting associated with optimization of existing SNCRs, as its updated costs are commensurate with levels of generation shifting already associated with the optimization of existing SCRs reflected in the new state emission budgets. In the proposed rule, EPA identified 1,700 tons of emission reductions from generation shifting associated with optimization of existing SNCRs at a representative cost of $3,900 per ton. Because EPA is determining that $3,900 per ton is not the cost associated with optimizing these partially operating SNCR controls, the Agency is not including that 1,700 tons of generation shifting reduction potential in the state emission budgets in this final rule. Therefore, the emission reductions associated with optimization of existing SNCRs are approximately 1,200 tons for the 12-state region.

Comment: Some commenters suggest that EPA examine higher cost thresholds consistent with downwind state RACT requirements.

Response: EPA first notes that it is including all identified EGU emission controls that are possible to implement during the period during which the upwind state remains linked to a downwind nonattainment or maintenance receptor. While EPA believes the stringency of downwind emission requirements can be useful information in evaluating which control stringencies should be considered upwind, it is – on its own – not dispositive of what that upwind stringency should be. As demonstrated through EPA's air quality modeling, the air quality impact (generally expressed in ppb of ambient ozone concentration at a downwind receptor) of a ton of emissions reduced varies by

geography, with areas where the receptor is located generally having a much higher ppb per ton of emissions impact. Therefore, the home state where a receptor is located may generate much greater environmental and public health benefit from a ton of emissions reduced in that state than in an upwind state. In many cases, that may merit a different level of stringency for the home state. However, EPA does view the EGU control stringency it is implementing in this final rule as largely consistent with those EGU emission controls covered by RACT requirements in downwind states (e.g., optimize existing controls and upgrade to state-of-the-art combustion controls). While installation of new post-combustion controls (SCR or SNCR) may also qualify for RACT, EPA's analysis is that such controls could not be operational on a fleetwide scale before all downwind receptors are projected to resolve. Controls associated with the selected EGU control stringency are implementable by the 2021 ozone season (or in the case of upgraded or new combustion controls, by the 2022 ozone season; see the discussion in section VI.C and in the EGU NO_X Mitigation Strategies Final Rule TSD for details). Thus, as to the 2021 and 2022 ozone seasons these are the only emision controls for EGUs that EPA is assessing for this timeframe because they are the only ones that are possible. *See Wisconsin*, 938 F.3d at 320.

As discussed above in section VI.C, EPA estimates that the time necessary to install new SNCR or new SCR controls (represented by $5,800 per ton and $9,600 per ton cost) on a regional basis across multiple EGUs is approximately 39 to 48 months. While a single new SNCR may be installed within 16 months, for the reasons explained in section VI.C.1, a time frame that encompasses the ability for a unit to make a unit-specific choice of what post-combustion control (SCR or SNCR) is best for its configuration and future operating plans is appropriate. Therefore, EPA considers the timing estimates for SNCR and SCR together, and the 39-48 month time frame for SCR installation (with its superior NOx control efficiency) is the most appropriate time period to use for assessing post-combustion controls. Assuming a final rule in the spring of 2021, this means that these controls could not be operational by the 2024 ozone season, and therefore the reduction potential is not available until the 2025 ozone season.

According to EPA's air quality assessment, there are no remaining air quality receptors in 2025 assuming the control stringency identified in this final rule for EGUs is already in place in the 12 linked states. It is not necessary to require emission controls that can only be operational at a point in time when EPA's projections demonstrate there is no remaining interstate transport problem for the 2008 Ozone NAAQS.

EPA requested comment on its proposed determination that new post-combustion controls (SCR or SNCR) are not possible to implement on a regional basis by the start of the 2024 ozone season), and if evidence established such controls were possible, how EPA might apply its step 3 multi-factor analysis in that circumstances. EPA received comments on this topic and addresses the timing assumptions in Section VI.C.1. Moreover, the Appendix to the Ozone Transport Policy Analysis Final Rule TSD further discusses how, even if the controls were available on an earlier time scale, the multi-factor assessment would not necessarily indicate their inclusion in this rule.

2. Non-EGU Assessment

The Agency used CoST and the 2023 projected emissions inventory to identify uncontrolled emissions sources or units and applied controls to emissions units with 150 tpy or more of pre-control NO_X emissions, which is an emissions threshold that represents a comparable unit size to 25 MW for EGUs. EPA categorized the CoST results by the control technologies, calculated a weighted average cost per ton (in 2016$) for emission reductions associated with each technology, and identified two tranches of potential reductions based on estimated cost effectiveness (for details see section VI.B.2). EPA took a series of steps to further verify and refine the NO_X emission reduction potential estimated by CoST, the CMDb, and the 2023 projected inventory and found that the cost-effective emission reductions in tranche one were from SCR applied to glass furnaces and SNCR applied to cement kilns. These controls could likely take 2-4 years to install. Therefore, at the time of this final rule, EPA is concluding that the

2023 ozone season is the earliest ozone season by which these non-EGU controls could be installed (for details see section VI.C.2).

Using 2023 as the potential earliest date by which controls for glass furnaces and cement kilns can be installed, EPA assessed whether these emission controls should be required at step 3 under its multi-factor test. [156] EPA estimated that across the 11 states linked to the remaining receptor in Connecticut in 2023 (Westport), the available emission reductions from tranche one at less than $2,000 per ton are 1,505 ozone season tons.[157]

Using AQAT, EPA assessed whether this level of emission reductions would have a meaningful effect on the Connecticut receptor. EPA determined that the improvement in air quality at this receptor from these emission reductions is 0.03 ppb. This potential air quality improvement is about an order of magnitude less than the air quality improvement EPA expects to obtain from the emission controls identified in its selected control stringency for EGUs in 2023, which, at a representative cost of $1,800 per ton,[158] is estimated to improve air quality at the remaining Connecticut receptor by 0.28 ppb. These air quality improvements and

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[156] Louisiana is excluded from this analysis because the Houston, Texas receptor to which it is linked is projected to be neither a nonattainment nor a maintenance receptor by the 2023 ozone season based on the CAMx modeling with IPM emissions. In addition, New Jersey is not included because there were no potential NO_X emission reductions from New Jersey because the projected 2023 emissions inventory did not include non-EGU point sources/units in New Jersey with pre-control NO_X emissions greater than 150 tpy for which the Agency had applicable control measures.

[157] The 1,505 ozone season tons is a total of 903 tons from Table VI.C.2.1 and 602 ozone season tons from the remaining 5 states (Michigan, Illinois, Kentucky, Virginia, and Maryland). Details on the 903 ozone season tons are discussed in Section VI.C.2 above. As noted earlier in this section, for Kentucky EPA did not review the potential controls because CoST did not identify applicable control measures for any emissions sources/units in the state. In addition, EPA did not conduct an online permit review for Illinois non-EGU sources/units because their permits were not available online. The 602 ozone season tons reflect the review of emissions units in Michigan, Virginia, and Maryland, as well as all of the tons CoST estimated for Illinois but that were not verified or reviewed.

[158] EPA notes that the cost per ton value used in the non-EGU assessment was a weighted average cost per ton, whereas thecost/ton value used in the EGU SCR optimization assessment was a 90th percentile cost. In other words, the threshold EPA used for evaluating non-EGU emissions sources/units represents a relatively higher, or more stringent, cost/ton threshold value for considering potential controls compared to EGUs than the dollar value alone suggests.

representative costs support the Agency's position, consistent with its proposed rule, that requiring these non-EGU controls is not warranted under EPA's step 3 multi-factor analysis.

Based on this assessment, the Agency determines under the multi-factor test that even the likely most cost-effective reductions from non-EGU sources (i.e., those below $2,000 per ton in tranche one) do not rise to the level of "significance" that would justify mandating them under the good neighbor provision for the 2008 ozone NAAQS.[159] In the proposed rule, EPA encouraged stakeholder comments on the analysis with respect to the tranche one non-EGU control strategies.

Comment: One commenter suggested that EPA should consider SCR as a control technology for cement plants. The commenter stated that SCR has been used at cement kilns across the globe and that a cement plant in Joppa, Illinois has successfully demonstrated its use with a reported 80 percent removal rate for NOx, while a plant in Midlothian, Texas, has obtained a permit to install SCR units on its kilns.

Response: The Agency appreciates the information from the commenter about SCR controls on cement kilns. However, what the comment does not consider is the time it has taken to install controls at the two plants cited. The SCR installation at the Joppa, IL plant took approximately 6 years to install. The SCR at the Midlothian, TX cement plant is currently not operating, to the best of EPA's knowledge. Cost and testing concerns have led to slow acceptance of SCR at cement kilns in the United States. The examples provided suggest the time to install these SCRs is much longer than downwind air quality problems are projected to persist for the 2008 ozone NAAQS.

EPA estimates that the 2023 ozone season is the earliest ozone season by which the 111 identified non-EGU emissions units in tranche two could be retrofitted or have controls installed.

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[159] EPA's analysis in this final rule allows the Agency to reach the conclusion that emission reductions are not required from these emissions sources in order to resolve good neighbor obligations for the 2008 ozone NAAQS. EPA's assessment of emission reduction potential from non-EGU sources for this rulemaking is not intended to imply that a similar conclusion would be reached in the context of a different NAAQS.

In tranche two, the weighted average cost of the estimated emission reductions from non-EGU emissions sources ranges from $5,000 to $6,600 per ton. Across the 11 states linked to the remaining receptor in Connecticut in 2023 (Westport), the Agency identified approximately 11,100 tons of potential ozone season emission reductions by applying layered combustion, NSCR (non-selective catalytic reduction) or layered combustion, and ultra-low NO_X burners in combination with SCR to 111 emissions units in the oil and gas industry and several manufacturing industries. Since the proposed rule, EPA verified existing control information and refined the NO_X emission reduction estimates for emissions sources/units in tranche two. Of the approximately 11,100 tons of potential ozone season emission reductions, EPA determined that approximately 10 percent of those estimated reductions are from sources/units already controlled. In the proposed rule EPA sought comment on the feasibility of further controlling NO_X from IC engines and large ICI boilers, including optimizing combustion and installing ultra-low NO_X burners.

EPA's assessment is that, with implementation of the new emission budgets for EGUs reflecting the Agency's selected control stringency (see section VI.D.1.), there will no longer be any downwind receptors in 2025 with respect to the 2008 ozone NAAQS. Focusing then on whether there are any non-EGU NO_X emission reductions available to address significant contribution under the step 3 multi-factor test in either the 2023 or 2024 ozone seasons, based on its assessment EPA is concluding that any such potentially available reductions would not be justified. EPA's assessment determined that there is a relatively smaller quantity of NO_X reductions that may be available from the non-EGU control strategies in tranches one and two in these years, across the 11 states linked to the remaining receptor. These control strategies are estimated to have a limited impact on further improving air quality at this receptor for this rulemaking. As shown in the Ozone Policy Analysis Final Rule TSD, the incremental effects of emission reductions from non-EGUs do not affect the status of any of the four receptors in any of the relevant years compared with EPA's EGU control stringency. For more information, refer to

the Ozone Transport Policy Analysis Final Rule TSD. EPA therefore is concluding that no emission reductions from non-EGU sources are necessary to eliminate significant contribution under the good neighbor provision for the 2008 ozone NAAQS.

EPA solicited comment on its analysis, and whether, based on updated or more complete information, there may be grounds to find non-EGU emission reductions are necessary to address significant contribution for the 2008 ozone NAAQS.

Comment: EPA received several comments in response to this request. Some commenters tended to agree that with more complete information, further analysis would not find it necessary to further control emissions from non-EGU sources in this rule. A group of industry trade associations stated that without highly cost-effective options to reduce emissions from non-EGU emissions sources/units, the estimated reductions did not rise to the level of significance to mandate controls. Another commenter stated that the most appropriate mechanisms to consider whether further limits on NO_X emissions from industry boilers, furnaces and other emission sources are cost-effective are the existing NSR/PSD, NSPS, and RACT programs. This commenter stated that there is no need to apply additional programs on top of existing programs, or to circumvent existing programs, that are designed to address the issue of cost-effective emissions controls.

Another commenter stated that EPA should direct states to submit revisions to their SIPs because the SIP planning process is the best platform for the identification of potential NOx emission reductions at the local level that may be necessary in non-EGU industry sectors. State and local air pollution control agencies have access to the detailed emissions inventory data from sources and emissions units in non-EGU industry sectors. With this data, states can assess whether additional emission reductions are necessary at the local level from non-EGU industry sectors.

Lastly, other commenters disagreed and stated that EPA lacks statutory authority to exclude non-EGU emissions sources from the coverage of the good neighbor provision, which extends to

"any source or other type of emissions activity" that significantly contributes to downwind nonattainment or interferes with downwind maintenance.

Response: EPA stated in the proposed rule that it understands the methodology employed in its assessment was one approach to assessing emission reduction potential from non-EGU emissions sources or units and to determining an appropriate control stringency level for non-EGU sources. EPA also provided details on determining the 150 tpy emissions threshold in the section titled *Background for Determining Source Size/Threshold for Non-EGU Emissions Sources* in the memorandum titled *Assessing Non-EGU Emission Reduction Potential*. Based on EPA's analysis for this final rule and considering comments received, EPA determined that its analysis presents a credible analytical foundation on which to conclude that new emission controls on non-EGU sources are not required from the linked upwind states in order to address significant contribution or interference with maintenance of the 2008 ozone NAAQS.

Comment: The Agency received a number of comments on its step 3 analysis to determine whether any emission reductions should be required from non-EGU sources/units to address significant contribution under the 2008 ozone NAAQS. These comments covered a variety of issues related to the assessment of emission reduction potential from non-EGU sources/units. Environmental organizations and downwind states submitted comments that focused on the Agency's determination that further emission reductions would not need to be required from non-EGU sources/units. These comments emphasized that the assessment of non-EGU emission reductions was improperly limited to (a) Controls that would cost $2,000 per ton of emission reductions and (b) a narrow set of potential source types or emissions units. There were also several comments on EPA's decision to analyze emissions units of 150 tpy and larger for the non-EGU analysis. Commenters stated that previous transport rule makings analyzed emission units of 100 tpy and greater.

There were also several comments on the legal requirements to evaluate and include emission reductions from non-EGU emissions sources/units in the rule. The comments

emphasized both the impossibility threshold from recent court decisions and data availability. One commenter said that a refusal to include non-EGU emission reductions in the rule would represent an abdication of statutory responsibility. Several comments expressed frustration that the Agency has claimed data uncertainty issues in interstate transport rulemakings for years and that should no longer be a viable reason to exclude non-EGU emissions sources/units. The commenters stated that this is backed up by the decision in *Wisconsin*.

Finally, a number of stakeholders from industry associations and upwind states submitted comments stating they agreed with the proposed decision not to include emission reductions from non-EGU emissions sources/units in this rule. The commenters recognized the data limitations faced by the Agency, saying that additional emission reductions from this sector are not necessary to meet obligations under the good neighbor provisions. All of these groups provided limited additional information beyond what the Agency possessed and came to the same conclusions with regard to emission reductions from non-EGU sources/units. A point made in several comments was that emission reductions would not be able to be achieved before the 2023 ozone season due to the timing it would take to install and make operational the emission control devices.

Response: EPA disagrees that the assessment of non-EGU emission reduction potential was unnecessarily limited by carving out large numbers of potential sources, controls, and locations. Using the best information currently available to the Agency, EPA extended its emission reduction and air quality analyses beyond EGUs to include many major stationary source sectors in the linked upwind states, including non-EGU emissions sources in various industry sectors (see Table 2 in the September 1, 2020 document titled *Assessing Non-EGU Emission Reduction Potential* for a summary). In the analyses, we determined that emissions reductions from non-EGU sources will have a relatively small effect on any downwind receptor in the year by which such controls could likely be installed and do not rise to the level of "significance" that would justify mandating them under the good neighbor provision for the 2008 ozone NAAQS. Further,

in the September 1, 2020 memorandum, EPA included a discussion of the assessment for determining an appropriate emissions size threshold comparable to those EGUs included in this and previous transport rulemakings.

In addition, EPA disagrees that the use of a $1,600/ton EGU threshold as a roughly equivalent threshold to assess non-EGU controls is inappropriate. We note that the $2,000/ton threshold value used for assessing non-EGU controls provides a rough equivalence with the threshold value and analysis for EGUs. The $2,000/ton threshold value is a weighted average of control costs, while EPA's cost threshold for EGUs is based on a 90th percentile metric. A 90th percentile metric provides a higher cost threshold for assessing potential controls than a weighted average cost. In other words, the $2,000/ton threshold EPA used for evaluating non-EGU emissions sources/units represents a relatively lower cost/ton threshold value for considering potential controls.

EPA also believes that its determination with respect to emissions reductions from non-EGU sources in this action is not premised on "uncertainty," or lack of information, but rather a finding based on the analysis of tranche 1 and tranche 2 controls that those non-EGU emission controls that could be potentially available at a cost-effectiveness comparable to EGU controls do not produce sufficient total emission reductions or downwind air quality impacts to be justified under EPA's step 3 multi-factor analysis. The emissions control strategy EPA assessed for non-EGU emissions sources across all twelve states did not generate sufficient air quality improvements to justify requiring.

Additional responses to these comments are provided in the RTC Document included in the docket.

EPA also requested comment on a number of questions related to specific control technologies on non-EGU emissions sources the Agency evaluated, and in particular sought feedback and data from stakeholders with relevant expertise or knowledge. Recognizing the limitations and uncertainties in the existing data EPA used in the assessment of non-EGU

emission reductions in the proposed rule, EPA requested comment to assist in substantiating whether the assessment is fully supportable based on additional information and analyses not currently available to the Agency.

Comment: One industry association (National Lime Association) prepared a cost estimate using publicly available information from the EPA Control Cost Manual Worksheet and generic public emission factors from EPA Standard AP-42. The industry-specific report demonstrated: (a) the industry could not possibly achieve any meaningful reductions in NOx emissions by the 2021 ozone season to eliminate "significant" contribution under the 2008 ozone NAAQS; and (b) even considering the most favorable application of retrofit SNCR control in the industry, installation of such controls could not be considered "cost-effective" in the context of this rule. Another trade association stated that obtaining information on NOx emissions units, much less sector-specific information on NOx emission units for purposes of the multi-factor test, would be exceedingly challenging based on available state and local air authority emission inventories and potentially proprietary technology and site-specific cost information.

Another commenter provided unit-specific information prepared for four-factor analyses for recent Regional Haze SIPs for several units in the iron and steel industry. Lastly, another commenter stated that developing a more complete non-EGU inventory is an essential task for EPA. EPA should continue to develop its non-EGU inventory for two purposes: (i) if the New York metropolitan area does not attain the 2008 ozone NAAQS in 2024, as EPA projects, additional emission reductions throughout the region may be necessary, and (ii) EPA is statutorily mandated to act on states' Good Neighbor SIPs for the more stringent 2015 ozone NAAQS now or in the coming months. The commenter concluded that EPA may ultimately need to issue FIPs in instances of SIP disapprovals and emission reductions beyond the EGU sector will likely be required for the New York metropolitan area to attain the 2015 ozone NAAQS. The commenter concluded that because of the complexity of non-EGU operations and control

options, EPA should engage with states and affected industries to ensure an accurate inventory and control analysis.

Response: EPA agrees that securing sufficient, detailed sector- and unit-specific information for NOx emission units and related costs to use for the multi-factor test has been difficult.

In the proposed rule, to help inform further technical review and comments, the following Excel workbooks were available in the docket and referenced in the memorandum titled *Assessing Non-EGU Emission Reduction Potential*: (i) for a summary of the CoST run results *CoST Control Strategy - Max Reduction $10k 150 tpy cutoff 12 States Updated Modeling - No Replace - 07-23-2020,* and (ii) for summaries of emission reductions by control technologies, *Control Summary - Max Reduction $10k 150 tpy cutoff 12 States Updated Modeling – No Replace – 05-18-2020*. Note that the *CoST Control Strategy - Max Reduction $10k 150 tpy cutoff 12 States Updated Modeling - No Replace - 07-23-2020* Excel workbook includes a READ ME worksheet that provides details on the parameters used for the CoST run.

To improve the underlying data used in an assessment of emission reduction potential from non-EGU sources, EPA requested comments on: (i) the existing assessment of emission reduction potential from glass furnaces and cement kilns; and (ii) emission reduction potential from other control strategies or measures on a variety of emissions sources in several industry sectors.

Comment: EPA received limited comments on the existing assessment of emission reduction potential from glass furnaces and cement kilns. A commenter noted that EPA incorrectly identified two cement kilns as eligible for SNCR installation in its analysis. Through a 2017 consent decree with EPA and the Department of Justice, SNCR was not feasible for one of the kilns because of the current configuration of the equipment. For the second kiln, SNCR was already installed because a different configuration allowed for the control installation.

Response: EPA appreciates the submittal of this information.

Comment: EPA received several comments regarding emission reduction potential from other control strategies or measures on a variety of emissions sources in several industry sectors. A few commenters indicated that a 2017 OTC paper titled *White Paper on Control Technologies and OTC State Regulations for Nitrogen Oxides (NOx) Emissions from Eight Source Categories* reflects appropriate control strategies, identifies emission limits and regulations for eight source categories, and details information for four of the 12 states identified as significantly contributing to downwind areas with attainment or maintenance issues for the 2008 ozone NAAQS.

Other commenters cited a 2009 OTC paper that analyzed the cost of installing NOx controls on ICI boilers. The paper concluded that key variables that impact cost analyses include boiler type, boiler firing type, type of fuel combusted, type of emission control, uncontrolled emission rate, controlled emission rate, capital cost of control equipment, financial costs, unit capacity factor (hours/year), flue gas flow rates and temperatures, and commodity prices. The analysis found that NOx control costs for non-EGU emissions sources are highly variable and site-specific and the cost per ton of NOx removed from several control technologies reviewed was significantly above the proposed rule representative cost of the selected EGU control stringency ($1,600 per ton).

Response: EPA appreciates the references provided regarding the assessment of non-EGU emissions sources/units. Non-EGU emissions sources/units are diverse, making them challenging to analyze. Nonetheless, EPA's determination with respect to emission reductions from non-EGU sources in this action is not premised on "uncertainty," or lack of information. Rather, EPA's finding is based on the analysis of tranche one and tranche two controls. EPA determined that those non-EGU emission controls that could be potentially available at a cost-effectiveness comparable to EGU controls do not produce sufficient total emission reductions or downwind air quality impacts that would justify requiring them under EPA's step 3 multi-factor analysis.

EPA requested comment on the aspects of the assessment presented above of emission reduction potential from the glass and cement manufacturing sectors. The Agency did not receive any comments directly addressing this that were independent of the other comments.

In addition, EPA requested comment on the following:

- Other than glass and cement manufacturing, are there other sectors or sources that could achieve potentially cost-effective emission reductions? What are those sectors or sources? What control technologies achieve the reductions? What are cost estimates and installation times for those control technologies?
- Are there other sectors where cost effective emission reductions could be obtained by, in lieu of installing controls, replacing older, higher emitting equipment with newer equipment?
- Are there sectors or sources where cost effective emission reductions could be obtained by switching from coal-fired units to natural gas-fired units?
- For non-EGU sources without emissions monitors, what would CEMS cost to install and operate? How long would CEMS take to program and install? Are monitoring techniques other than CEMS, such as predictive emissions monitoring systems (PEMS), sufficient for certain non-EGU facilities that would not be brought into a trading program? If so, for what types of non-EGU facilities, and under what circumstances, would PEMS be sufficient? What would be the cost to install and operate monitoring techniques other than CEMS?

Comment: EPA received several comments in response to this set of questions. Two industry association commenters indicated that where feasible, facilities have already largely replaced or repowered boilers to comply with several other EPA rules (e.g., boiler MACT, Regional Haze Rule, and 1-hour SO2 NAAQS). With respect to fuel switching for boilers, one industry association stated that many of their members undertook fuel switching as a compliance strategy for the boiler MACT. Another commenter cautioned that EPA should consider other

factors when evaluating the time necessary to retrofit add-on controls, including the availability of the specialized trades that are needed to complete the retrofit installation of low NOx burners and Clean Air Act permitting obligations, which increase the time needed for a retrofit.

With respect to installation timing and the cost of CEMS, three trade associations provided the following estimates:

- Installation Timing
    - 28 weeks (7 months) -- delivery time for a CEMS shelter with pre-installed analyzers and other equipment is about 24 weeks; installation time and programming would take about another 4 weeks.
    - 16 – 24 weeks (4-6 months) -- CEMS installation would likely take 4 to 6 months if a facility was currently ready to start. However, this timeline does not take into account the time required to obtain capital approval, issue an RFP, engage a consultant, and make any necessary structural modifications to the stack if it cannot accommodate CEMS.
- Cost
    - $500,000 -- cost will depend on whether the stack is designed to accommodate a CEMS. If a stack is designed to support a NOx CEMS, the cost to install, program, and certify the NOx CEMS could be $500,000. Ongoing operation and maintenance costs are likely around $150,000 per year.
    - $300,000 - $400,000 -- capital cost for the equipment (assuming a single boiler installation) is approximately $300,000 to $400,000 (2016$). Actual costs at a given facility will vary and will depend on factors including the availability of space and the location of the CEMS air-conditioned shelter.

Additionally, one commenter stated that a rigorous PEMS, if a feasible alternative, would be more expensive than a CEMS. While another commenter stated that PEMS have proven to be very reliable and significantly less expensive to operate and maintain than CEMS. The

commenter observed that PEMS minimize the up-front capital costs, as well as the on-going cost of operation, maintenance, and quality assurance.

Response: EPA thanks for the commenters for this information.

EPA requested comments on the feasibility of further controlling NO_X from large ICI boilers and IC engines, including optimizing combustion and installing low NO_X burners.

Comment: EPA received several comments in response to this request. One commenter stated that EPA should pursue requiring additional NOx controls on IC engines and large ICI boilers, including optimizing combustion and installing ultra-low NOx burners and offered no specific supporting information. An industry association stated that most of their members' boilers are already equipped with low NOx burners. The members' experiences with the retrofit installation of low NOx burners on existing boilers are that the reductions achieved vary from boiler to boiler as a function of: (a) the existing configuration of the boiler, (b) the boiler fuel, and (c) the day-to-day operation of the boiler to meet the demands for thermal energy from the end-use processes or customers.

Another industry association noted that recent Regional Haze Rule-related analyses for forest products industry boilers indicated that the cost of installing additional controls (LNB/FGR, SNCR, or SCR retrofits) is generally more than $5,000/ton, based on representative actual emissions. The commenter stated that if EPA were to determine that NOx controls on ICI boilers should be required, no new controls could be implemented by the 2021 ozone season and it would be difficult to implement controls before 2024. Facilities would need a minimum of four years to implement controls after promulgation of any requirement to do so because the process to undertake a retrofitting project is complex, involving design, engineering, permitting, procurement, and installation. The commenter stated that since the start of the COVID-19 pandemic, the time necessary to implement construction projects has increased considerably.

Additionally, two energy companies offered their experiences with modifying IC engines. One energy company indicated that after the modification it took three to five years to get engine

performance back to previous levels. The same energy company stated that as operations evolve, where feasible, they will install newer engines, or turbines, at natural gas compressor and storage sites. A second energy company has already replaced some older uncontrolled IC engines with new, state-of-the art low NOx compressor engines and/or combustion turbines within its fleet, intending to operate the newer IC engines preferentially over the older units. They stated that regulating IC engines at compressor stations will not result in significant reductions in actual NOx emissions, and they do not believe it is cost-effective.

Response: EPA thanks the commenters for this information.

EPA requested comment on whether EPA should require that large non-EGU boilers and turbines -- as defined in the NO_X SIP call as boilers and turbines with heat inputs greater than 250 Million British Thermal Units (mmBtu) per hour or with NO_X emissions greater than 1 ton per ozone season day[160] -- within the 12 states employ controls that achieve emission reductions greater than or equal to what can be achieved through the installation of low NO_X burners.

Comment: EPA received a few comments in response to this request. One industry association stated that there is no justification for a requirement for large industrial boilers within the 12 states covered by this rule to employ controls that achieve emission reductions greater than or equal to what can be achieved through the installation of low NO_X burners. Such a requirement could be infeasible for certain types of boilers without a significant capital investment and could increase CO emissions above allowable levels. The commenter suggested that these types of requirements are better implemented through the New Source Review (NSR) permitting process where a site-specific analysis is required. Another commenter stated that such a requirement could require very significant capital investment for retrofitting certain types of existing boilers and may not be feasible for certain types of boilers.

Response: EPA thanks for the commenters for this information.

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[160] Note that the 250 mmBTU/hr for ICI boilers and turbines is equivalent to 25 MW heat input for an EGU. The tonnage per source was 1 ton per ozone season day, and because controls on non-EGUs operate year-round, the emissions would be 365 tons per year.

EPA requested comment on (i) the magnitude of the emission reductions that could be achieved by requiring that large non-EGU boilers and turbines install controls that achieve emission reductions greater than or equal to what could be achieved through the installation of low NO_X burners, (ii) the prevalence of these or better NO_X controls already in place on this equipment in these 12 states, and (iii) the time it typically takes to install such controls. EPA did not receive any comments in direct response to this comment solicitation.

As mentioned in the discussion above on emission reductions from the EGU sector, EPA understands that it is generally possible to install LNB on EGU boilers fairly quickly and that these burners can significantly reduce NO_X emissions. EPA notes that in the original interstate transport rule, the NO_X SIP call, the Agency concluded that controls on large, non-EGU boilers and turbines were cost effective and allowed states to include those emissions sources in their budgets as a means of providing additional opportunities to reduce state-wide NO_X emissions in a cost-effective manner.[161]

Also, five of the 12 states that are subject to this rulemaking are within the Ozone Transport Region (OTR) -- Maryland, New Jersey, New York, Pennsylvania, and Virginia. As member states of the OTR, these five states are required to implement reasonably available control technology (RACT) state-wide on major sources of emissions.[162] It is likely that NO_X controls, such as low NO_X burners, are already in wide-spread use on large non-EGU boilers and turbines within these five states. However, such controls may not be as widely used in states outside of the OTR. Therefore, the Agency also solicited comments on the following:

- How effective are ultra-low NO_X burners or low NO_X burners in controlling NO_X emissions from ICI boilers?

[161] *See* 63 FR 57402 (October 27, 1998).
[162] One exception to the requirement of state-wide RACT within the OTR is for Virginia. Only the Northeast portion of the state is included within the OTR and only facilities within that portion of the state are subject to RACT.

- Are they generally considered part of the process or add-on controls? If they are part of a process, how could EPA estimate the cost associated with changing the process to accommodate ultra-low NO_X burners and low NO_X burners?
- What are the costs (capital and annual) for these as add-on control technologies on ICI boilers?
- What are the earliest possible installation times for these control technologies on ICI boilers? EPA believes it is generally possible to install low NO_X burners on EGU boilers relatively quickly and that low NO_X burners can significantly reduce NO_X emissions. EPA solicited comment on whether this is also true for large non-EGU ICI boilers.
- Do some of the emissions units included in the summary already have either add-on controls or controls that are part of a process? If so, what control is on the unit and what is the control device (or removal) efficiency?
- Natural gas compressor stations are the largest NO_X-emitting non-EGU sector[163] affecting the 12 states that are the subject of this final rule, and many of these facilities are powered by decades-old, uncontrolled IC engines. Should emission reductions be sought from the IC engines at these stations, either through installing controls, upgrading equipment, or other means?
- How effective is low emission combustion in controlling NO_X from IC engines?
- What is the cost (capital and annual) for low emission combustion on IC engines?
- What is the earliest possible installation time for low emission combustion on IC engines? In lieu of installing controls, is replacing older, higher emitting equipment with newer equipment a cost-effective way to reduce emissions from IC engines?

[163] Based on data from the 2017 NEI database.

- Do some of the emissions units included in the summary already have either add-on controls or controls that are part of a process? If so, what control is on the unit and what is the control device (or removal) efficiency?

The Agency encouraged stakeholders with particular expertise, such as source owners and operators, state agencies, trade associations, and knowledgeable non-governmental organizations, to evaluate the information available in the docket and presented above and provide updates, corrections, and other information as may assist in improving EPA's ability to more accurately assess non-EGU emission control strategies relevant to addressing interstate ozone transport.

Comment: EPA received relatively few comments directly in response to this request. One NGO cited EPA's 2016 *Final Technical Support Document (TSD) for the Final Cross-State Air Pollution Rule for the 2008 Ozone NAAQS, Assessment of Non-EGU NOx Emission Controls, Cost of Controls, and Time for Compliance Final TSD* with information on controls and costs for IC engines. Another comment encouraged the Agency to pursue controlling NOx from ICI boilers and IC engines, including optimizing combustion and installing low NOx burners.

Response: EPA notes that the 2016 *Final Technical Support Document (TSD) for the Final Cross-State Air Pollution Rule for the 2008 Ozone NAAQS, Assessment of Non-EGU NOx Emission Controls, Cost of Controls, and Time for Compliance Final TSD* was prepared for the purpose of presenting and seeking comment on the then currently available information on emissions and control measures for sources of NO_X other than EGUs; it was not prepared for use in conducting a rigorous regulatory analysis under the step 3 multi-factor test, nor for establishing specific emissions limits.

3. Overcontrol Analysis

As part of the air quality analysis using the Ozone AQAT, EPA evaluated potential over-control with respect to whether (1) the expected ozone improvements would be greater than

necessary to resolve the downwind ozone pollution problem (i.e., beyond what is necessary to resolve all nonattainment and maintenance problems to which an upwind state is linked) or (2) the expected ozone improvements would reduce the upwind state's ozone contributions below the screening threshold (i.e., 1 percent of the NAAQS; 0.75 ppb).

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." 572 U.S. at 521. 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 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. As the Supreme Court explained, "while EPA has a statutory duty to avoid over-control, the Agency also has a statutory obligation to avoid 'under-control,' i.e., to maximize achievement of attainment downwind." 572 U.S. at 523. The Court noted that "a degree of imprecision is inevitable in tackling the problem of interstate air pollution" and that incidental over-control may be unavoidable. *Id*. "Required to balance the possibilities of under-control and over-control, EPA must have leeway in fulfilling its statutory mandate." *Id*.[164]

Consistent with these instructions from the Supreme Court and the D.C. Circuit, EPA first evaluated whether reductions resulting from the emission budgets for EGUs in 2021 and 2022 can be anticipated to resolve any downwind nonattainment or maintenance problems. As

[164] Although the Court described over-control as going beyond what is needed to address "nonattainment" problems, EPA interprets this holding as not impacting its approach to defining and addressing both nonattainment and maintenance receptors. In particular, EPA continues to interpret the Good Neighbor provision as requiring it to give independent effect to the "interfere with maintenance" prong. *Accord Wisconsin*, 938 F.3d at 325-27.

discussed in Section VI.D.1, the proposed control stringency (represented by a $1,600 per ton cost threshold) was adjusted to a control stringency that includes optimization of existing SNCRs (represented by a $1,800 per ton cost threshold) in this final rule. This assessment shows that the emission budgets reflecting $1,800 per ton would change the status of one of the two nonattainment receptors (first shifting the Stratford monitor to a maintenance-only receptor in 2021 and then shifting that monitor to attainment in 2022). However, no other nonattainment or maintenance problems would be resolved in 2021 or 2022. EPA determined that none of the 11 states are solely linked to the Stratford receptor that is resolved at the $1,800 per ton level of control stringency in 2022.

Reductions resulting from the $1,800 per ton emission budgets for EGUs would shift the Houston receptor in Harris County, Texas, from maintenance to attainment in 2023. These emission reductions would also shift the last remaining nonattainment receptor (the Westport receptor in Fairfield, Connecticut) to a maintenance-only receptor in 2024. No nonattainment or maintenance receptors would remain after 2024.

Next, EPA evaluated the potential for over-control with respect to the 1 percent of the NAAQS threshold applied in this final rulemaking at step 2 of the good neighbor framework for the $1,800 per ton cost threshold level for each year downwind nonattainment and maintenance problems persist (i.e., 2021 through 2024). Specifically, EPA evaluated whether the emission levels would reduce upwind EGU emissions to a level where the contribution from any of the 12 upwind states would be below the 1 percent threshold that linked the upwind state to the downwind receptors. EPA finds that under the $1,800 per ton EGU cost threshold level for 2021 to 2024 emission levels, all 12 states that contributed greater than or equal to the 1 percent threshold in the base case continued to contribute greater than or equal to 1 percent of the NAAQS to at least one remaining downwind nonattainment or maintenance receptor for as long as that receptor remained in nonattainment or maintenance. For more information about this assessment, refer to the Ozone Transport Policy Analysis Final Rule TSD and the Ozone AQAT.

Since emission reductions resulting from the $1,800 per ton emission budgets for EGUs are not projected to result in the expected ozone improvements: (1) Being greater than necessary to resolve the downwind ozone pollution problem (i.e., beyond what is necessary to resolve all nonattainment and maintenance problems to which an upwind state is linked) or (2) reducing the upwind state's ozone contributions below the screening threshold (i.e., 1 percent of the NAAQS; 0.75 ppb), EPA finds that the $1,800 control strategy does not result in overcontrol.

Based on the multi-factor test applied to both EGU and non-EGU sources and subsequent assessment of overcontrol, EPA finds that the emission reductions associated with the $1,800 per ton control stringency for EGUs constitute elimination of significant contribution and interference with maintenance without overcontrol from the 12 linked upwind states. Therefore, as discussed in section VII, EPA is establishing emission budgets for EGUs in the 12 linked states that reflect the remaining allowable emissions after the emission reductions associated with the $1,800 per ton control stringency have been achieved. For additional comments and responses and details about the test and the overcontrol analysis, see the RTC and Ozone Transport Policy Analysis Final Rule TSD.

VII. Implementation of Emission Reductions

A. Regulatory Requirements for EGUs

The CSAPR established a seasonal NO_X trading program for states determined in that rulemaking to have good neighbor obligations with respect to the 1997 ozone NAAQS. The CSAPR Update established a new seasonal NO_X trading program for 22 states determined to have good neighbor obligations with respect to the 2008 ozone NAAQS – the CSAPR NO_X Ozone Season Group 2 Trading Program – and renamed the seasonal NO_X trading program established in the CSAPR, which now covers only Georgia, the CSAPR NO_X Ozone Season Group 1 Trading Program.[165] Each of these trading programs for seasonal NO_X emissions

[165] For states that were determined in the CSAPR Update to still have good neighbor obligations with respect to the 1997 ozone NAAQS in addition to the 2008 ozone NAAQS, participation in

established state-level budgets for EGUs and allowed affected sources within each state to use, trade, or bank allowances within the same trading group for compliance. In the CSAPR NO_X Ozone Season Group 1 and Group 2 trading programs, sources are required to retire one Group 1 or Group 2 allowance, respectively, for each ton of NO_X emitted during a given ozone season. EPA is using the same regional trading approach, with modifications to reflect updated budgets, trading groups, and certain additional revisions, as the compliance remedy implemented through the FIPs to address interstate transport for the states having further good neighbor obligations with respect to the 2008 ozone NAAQS in this rule.

Of the 22 states currently covered by the CSAPR NO_X Ozone Season Group 2 Trading Program, EPA is establishing revised budgets for 12 states, as explained below. Therefore, EPA is creating an additional geographic group and trading program comprised of these 12 upwind states with remaining linkages to downwind air quality problems in 2021. This new group, Group 3, will be covered by a new CSAPR NOx Ozone Season Group 3 Trading Program. Aside from the removal of the 12 covered states from the current Group 2 trading program, this rule leaves unchanged the budget stringency and geography of the existing CSAPR NO_X Ozone Season Group 1 and Group 2 trading programs.

EPA is using the existing CSAPR NO_X ozone season allowance trading system framework, established in the CSAPR for Group 1 and used again in the CSAPR Update for Group 2, to implement the emission reductions identified and quantified in the FIPs for this rule. The new Group 3 trading program is being codified at 40 CFR part 97, subpart GGGGG. As with the existing CSAPR trading programs, emissions monitoring and reporting will be performed according to the provisions of 40 CFR part 75, and decisions of the Administrator under the program will be subject to the administrative appeal procedures in 40 CFR part 78.

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the Group 2 trading program replaced participation in the Group 1 trading program as the FIP remedy for such states' obligations with respect to the 1997 NAAQS. *See* 81 FR 74509.

Comment: EPA received several comments suggesting that Louisiana not be included in the Group 3 trading program. Commenters suggested that EPA has no basis for including Louisiana in the Group 3 trading program because its linkage geography (i.e., to a receptor in Texas) is separate from the 11 remaining Group 3 states which have linkages to receptors in Connecticut. Several commenters also raised the possibility of under-control in the 12-state trading program should EPA allow trading of emission allowances between Louisiana and the remaining 11 states.

Response: EPA disagrees with comments that Louisiana should not be included in the Group 3 trading program. All covered states in the Group 3 trading program, regardless of the downwind monitors to which they are linked, are subject to emission budgets established based on the same set of emission control measures applied at the same levels of stringency. In similar circumstances in earlier rulemakings to address the good neighbor provision, EPA has routinely included states in a common trading program based on a uniform level of control stringency, not based on whether the states were all found to be linked to the same downwind receptors. For example, the states required to participate in the Group 2 trading program under the CSAPR Update included one state linked only to downwind receptors in Connecticut, two states linked only to downwind receptors in Michigan, and two states linked only to downwind receptors in Texas, as well as other states linked to downwind receptors in multiple states. *See* 81 FR 74538 tbls. V.E-2 and V.E-3.

Moreover, all states subject to the new Group 3 trading program will be required to comply with the assurance provisions in this final action. The assurance provisions ensure that emissions within a covered state do not exceed that state's emission reduction obligations (see section VII.C.2.). The assurance provisions, and associated variability limits, impose an additional allowance surrender requirement when a state's emissions exceed its budget for a given control period by 21 percent. The additional allowance surrender requirement associated with the assurance provisions provides an incentive for sources within a state to comply with the emission

budgets for a given control period, while accounting for the inherent variability in operations and emissions from one year to the next. By limiting the degree to which any state's emissions exceed that state's emissions budget, the assurance provisions reduce concerns that a state covered by the new Group 3 trading program would be able to routinely rely on surplus allowances purchased from another state in the trading program in a different geographic region (or in the same geographic region) instead of reducing emissions within the state. Establishing assurance levels with compliance penalties responds to and complies with the D.C. Circuit's holding in *North Carolina* requiring EPA to ensure that sources in each state meet their good neighbor obligations while still taking advantage of the benefits of an interstate trading program. *See* 531 F.3d at 908. *See also* 81 FR 74566-67.

Comment: Some commenters asserted that implementation of emission reductions through a state-level, seasonal emissions budget program with trading flexibilities is not sufficient to ensure that reductions are realized on high ozone days when they are most needed. These commenters suggested that EPA replace or supplement its emission trading program with unit-specific emission rate requirements applied on a shorter time scale (e.g., daily). Commenters assert that existing controls must be maintained and operated in accordance with good pollution control practices whenever feasible. Commenters assert that shorter-term NO_X emission rate limits must ensure that SCRs are operated in accordance with good pollution control practices at all times the units are operating. They suggest that short-term limits are necessary to prevent units from turning controls off intermittently on days with high ozone in order to harvest additional power that would otherwise be used for control operation.

Response: EPA is finalizing the implementation of required emission reductions through the same ozone season trading program structure successfully used in prior CSAPR rules, CAIR, and the NO_X Budget Trading Program associated with the 1998 NO_X SIP Call. These trading programs have been demonstrated to be highly effective at achieving emission reductions. For instance, as discussed in greater detail below, EPA has previously demonstrated that in the first

CSAPR Update compliance period (i.e., the 2017 ozone season), the budget drove sources, nearly uniformly, to operate their controls for that control period.[166] EPA acknowledges that without adjustments in budget stringency to ensure continued operation of the selected control strategy (or equivalent reductions), this analysis may not hold in later years of a trading program should a sufficient bank of allowances develop that the price signal for continued control operation is weakened. However, EPA has addressed that concern in this rule by making downward adjustments in the budgets to account for known fleet changes. Early in the implementation of the CSAPR Update in 2017, when emission budgets were binding and allowance prices were higher, EPA conducted an analysis on how effectively units were operating their SCRs 1) in response to a trading program implementation measure and 2) on High Electricity Demand Days (HEDD). This analysis was done in the context of responding to petitions from Maryland and Delaware under CAA section 126(b) petition.[167] With this rule in place as of 2021, the situation will be comparable and the analysis of 2017 data provides a good indication of how EPA anticipates sources with post-combustion controls will respond to a trading program implementation measure designed to be a full remedy. Moreover, EPA performed the same analysis using 2019 data and continues to find that units operate their SCRs on HEDD as described below.

In the Maryland/Delaware CAA section 126(b) action, EPA examined the complete set of 2017 ozone-season data and did not find evidence of sources regularly idling controls on high ozone days when subject to a sufficiently stringent budget.[168] EPA found that, based on 2017 emissions data reflecting implementation of the CSAPR Update, 261 of 274 units had ozone-season emission rates below 0.20 lb/mmBtu, indicating they were likely operating their post-

[166] Discussion of Short-term Emission Limits (EPA-HQ-OAR-2018-0295-0026), available in the docket for this action.

[167] 83 FR 50444 (October 5, 2018).

[168] Discussion of Short-term Emission Limits (EPA-HQ-OAR-2018-0295-0026).

combustion controls through most of the ozone season. On average, the 274 units were operating at an average emission rate of approximately 0.088 lb/mmBtu.[169] Consequently, EPA found that on average, SCR-controlled units were operating their SCRs throughout the season and that the petitioner's assertion of the likelihood of trading programs leading to widespread idling of controls was not borne out in the most recently available data. In years following 2017, EPA has seen the seasonal emission rates of some SCR-controlled units increase, while the vast majority continue to operate and optimize their controls. As noted above, this is attributable to the partial nature of the CSAPR Update and consequently that program not being configured to account for fleet changes after 2017. Nonetheless, EPA's analysis of 2017 data shows that the CSAPR Update regional trading program and other EPA regional trading programs have driven significant reductions and can provide continued incentive for control operation in a full-remedy context, so long as the budget is sufficiently stringent.

EPA has revisited the aforementioned examinations of SCR performance rates using 2019 hourly NO_X emissions data in place of 2017 data. While there was an increased frequency and number of units turning off their controls in 2019, EPA again found that this did not happen during the hours with the highest generation.[170] As was shown in the analysis conducted for the Maryland/Delaware action, and confirmed based on 2019 analysis, SCR-controlled units generally operated with lower emission rates during high generation hours, suggesting SCRs generally were in better operating condition—not worse, let alone idling—during those days/hours. In other words, EPA compared NO_X rates for EGUs for hours with high energy demand and compared them with seasonal average NO_X rates and found very little difference, just as it had observed in the 2017 data. Thus, the data do not support the notion of wide-spread reduction of SCR operation on high demand days. Moreover, the auxiliary power used for

[169] 83 FR at 50466.
[170] See Units_Cycling_SCR_2017_and_2019.xlsx for a description of the units cycling in 2017 and 2019 and NOxRateOfSCRunitsDuringHighRegionalDemand_2017_and_2019.xls for the analysis of unit rates on HEDD.

control operation is small—typically less than one percent of the generation at the facility—and it is, therefore, unlikely that sources would cease operation of controls for such a limited energy savings. Instead, the previous analysis indicated that increases in total emissions on days with high generation are generally the result of additional units that do not normally operate coming online to satisfy increased energy demand and units that do regularly operate increasing hourly utilization, rather than reduced functioning of control equipment. In this action, the Agency concludes that while short-term limits and a regional trading budgets are not necessarily mutually exclusive and could complement each other (and do in fact complement each other since many states already have established emission rate requirements for their EGUs through other control programs such as RACT), in this specific instance, where the Agency is addressing regional air quality issues with regionally uniform levels of control through the flexibilities afforded by a mass-based trading program, specific unit-level control requirements, particularly short-term emissions limits, are not necessary, so long as the mass-based budget is sufficiently stringent. This rule addresses the need for sufficiently stringent budgets through budget adjustments in each year through 2024 to ensure that stringency levels account for known future changes in the fleet.

Further, EPA finds there to be environmental benefits associated with a mass-based trading program that controls units' total amounts of emissions. This creates an incentive structure resulting in lower-emitting sources tending to operate more than dirtier units. Moreover, EPA's implementation program provides – through an allowance price – an incentive to optimize emissions performance as much as possible. This approach not only encourages units to achieve the rates assumed in the budget-setting process, but to perform at even better rates where better performance can be achieved at a cost lower than the allowance price. By contrast, an implementation mechanism that provides a unit-specific emission rate would not incentivize the unit to perform better than its rate requirement. Thus, the trading program encourages controls to not only operate on high electric demand days, but it could provide a unit additional

incentive (through its allowance price) to outperform an equivalent emission rate assumption implemented through a unit-specific rate requirement.

Finally, as other commenters pointed out, unit-specific short-term emission rates pose significant implementation and rulemaking challenges, because there are more unit-specific characteristics that must be taken into account to arrive at unit-specific rate requirements. In establishing a trading program, EPA is better able to rely with confidence on fleet averages used for calculating state budgets. Were EPA to choose to implement a unit-specific emissions rate regime for implementation, the compliance flexibility afforded by emissions trading would not be available and it would not be possible to rely on fleet average information to the same extent for purposes of establishing appropriate levels of control stringency. EPA would likely be unable to establish such requirements or mandate them in time to meet the 2021 Serious area attainment date.

B. Quantifying State Emissions Budgets

EPA is quantifying state emission budgets consistent with the approach used in the CSAPR Update. However, given *Wisconsin's* direction to implement a full remedy, EPA must address upwind emission reduction potential beyond the initial year for which it is establishing emission budgets. Whereas in the partial-remedy context of the CSAPR Update, EPA established budgets based only on its assessment of the 2017 analytic year and noted it would revisit future years at a later date, in this action EPA is simultaneously looking at budgets for all relevant future years to comply with the full-remedy directive. Consequently, for the Group 3 states EPA is quantifying specific budgets in each year to ensure that EGUs continue to be incentivized to implement the full extent of EPA's selected control stringency while linkages to downwind nonattainment and maintenance receptors remain unresolved. In effect, by doing this, EPA is accounting for scheduled fleet turnover after the first-year budget. For instance, if State X's budget was 100 tons in 2021, but there are 10 tons of emissions from a unit scheduled to retire at the end of the year and 5 tons expected from a new unit coming online, then the state emission budget for 2022

will reflect these scheduled changes by establishing a budget of 100 tons – (10 tons -5 tons) = 95 tons for the subsequent year. This adjustment in methodology reflects the need to anticipate and respond to scheduled fleet turnover in the power sector in ensuring that the control stringency selected to eliminate significant contribution remains incentivized. Based on the Agency's experience implementing prior good neighbor trading programs, setting emissions budgets that do not account for planned retirements in subsequent years can lead to an erosion in the allowance price signal and hence a reduced incentive to take the mitigation measures identified in EPA's significant contribution determination (e.g., optimize SCRs). EPA's air quality projections demonstrate that even with a $1,800 per ton EGU control stringency, the Group 3 states continue to contribute above the 1 percent of the NAAQS threshold to at least one receptor whose nonattainment and maintenance concerns persist through the 2024 ozone season (with the exception of Louisiana, as discussed in more detail below). As such, and in order to implement a full remedy as required under the *Wisconsin* decision, EPA is determining that it is necessary to design a step 4 implementation framework that effectively ensures the continued optimization of existing SCR and SNCR controls and the incentive to install or upgrade combustion controls for so long as downwind nonattainment and maintenance concerns persist. Therefore, for all Group 3 states except Louisiana, the emission budget setting process described below applies to each year from 2021 through 2024, with the budgets held constant from 2024 onwards. For Louisiana, the emission budget setting process applies to 2021 and 2022 only, with the budget held constant from 2022 onwards, as the Houston receptor to which Louisiana is linked is projected to be resolved by the 2023 ozone season.

EPA is not increasing the stringency of the program over these years in the sense of requiring any further emission reductions than the control stringency represented by $1,800 per ton achieves. Rather, these budget adjustments account for pre-existing, on-going changes in the EGU sector, which if not accounted for, could significantly weaken the incentive to optimize existing SCR and SNCR controls and install or upgrade combustion controls. By determining

emissions budgets for a given emissions control across a range of years (e.g., 2021-2024), EPA is able to best reflect the realization of that technology in any given year. For instance, a unit may be scheduled to retire (independent of any environmental regulation) in 2023. Therefore, the same $1,800 per ton uniform control stringency (i.e., SCR and SNCR optimization, and combustion control installation or upgrade) will produce a different state emissions level (i.e., budget) in 2021 and 2024 due to this change in fleet composition. Having the emissions estimated for each year allows EPA to best ensure the reductions available from the identified control stringency continue to be achieved to eliminate that state's significant contribution. This type of phased implementation preserves the intended control stringency of the rule and is consistent with the direction under the *Wisconsin* decision to promulgate a full-remedy rule. In prior trading programs, commenters observed that the program's static emission budgets quickly fell behind the rapid pace of change in the power sector fleet. As this occurs, a large allowance bank builds and the price of allowances falls below the price in the initial years. For example, the price of CSAPR Update Group 2 allowances started out at levels near $800 per ton in 2017 and provided a strong signal for the mitigation technology identified in the significant contribution determination. However, in subsequent years as the fleet of covered EGUs changed, the price of those allowances declined to less than $70 per ton in July 2020.[171] Stakeholders have pointed out that these low prices could allow for some backsliding of the emission control technologies (e.g., reduced incentive to operate SCR controls) that were initially determined to be cost-effective and required to eliminate significant contribution. At the same time that the incentive for EPA's selected control stringency weakens, EPA's data show that downwind air quality receptors continue to persist at step 1, and the overall level of anthropogenic emissions from an upwind state continues to contribute to those receptors above the contribution threshold at step 2. Under these conditions, a legal basis exists within EPA's 4-step framework to undertake measures that ensure EGUs continue to implement EPA's selected control stringency. Stated differently, EPA

[171] Data from S&P Global Market Intelligence.

is confident that it is well within its statutory authority under CAA section 110(a)(2)(D)(i)(I) to impose on each covered EGU in a linked upwind state an emission limit that is enforceable and permanent, reflective of the control stringency EPA has determined is needed to eliminate significant contribution from that state. EPA's approach in this rule better incentivizes the selected control stringency while retaining the flexible compliance benefits of an interstate-trading approach to implementation.[172]

In summary, in order to implement a full remedy, EPA is implementing ozone season budgets for each year that reflect ongoing incentivization of the emission reduction measures identified in this rule, with a final budget being implemented in 2024 (the last year EPA projects downwind receptors to remain unresolved) and then held constant for each year thereafter. EPA requested comment on this approach and is finalizing the same approach that it proposed.

Comment: EPA received comment noting some stakeholders' strong support for the issuance of NO_X emissions budgets that were updated each ozone season to account for fleet changes. Commenters also claimed that failing to do so would raise concerns that, as the cost of allowances falls, units would be incentivized to buy cheaper allowances rather than optimize controls. They note this dynamic would undercut the purpose of the trading program, and EPA's efforts to address this issue by adjusting the NO_X emissions budgets each ozone season in response to fleet changes are necessary to avoid such an outcome. They conclude it is a fair and equitable practice that ensures continued optimization of emissions controls. EPA also received comment opposing this methodology, generally for the stated reasons that 1) the methodology differs from past EPA methodology, 2) EPA's budget methodology should allow for other existing sources to replace the retiring generation by assuming a corresponding replacement or

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[172] EPA continues to believe in the value of an interstate trading program for implementation of good neighbor obligations for EGUs. Through trading, the ultimate choice of compliance strategy is left to EGU owners and operators. EPA is not imposing an enforceable mandate that each EGU with an existing SCR or SNCR, or ability to install or upgrade combustion controls undertake the control stringency represented by the $1,800 per ton threshold. Sources have maximum flexibility to undertake compliance strategies that meet their specific operational and planning needs.

even increase in emissions, 3) some of the scheduled future retirements are uncertain, and 4) reducing budgets based on retirements but continuing to allocate allowances to those retiring units penalizes the non-retiring units by reducing their allocation in a manner disproportionate to their needs.

Response: EPA determined that in order to fulfill the *Wisconsin* directive to implement a full remedy, these phased budgets are necessary to ensure an incentive for existing controls to continue to operate. Not including such a mechanism in a full-remedy approach would lead to the possibility highlighted in EPA's proposed rule and some comments, and supported by historical data, where the incentive to operate controls decreases over time with fleet turnover, even though upwind states remain linked to downwind receptors. If EPA did not include such a phase-down mechanism in budgets accounting for fleet turnover, then the other alternative to ensure a full remedy would be unit-specific emission rate requirements (as the only alternative to continue to incentivize existing controls to operate). EPA notes that the some of the commenters who oppose the phase-down mechanism which preserves the trading program's effectiveness across time also support EPA's trading program as the preferred implementation mechanism relative to unit-specific emission rate requirements and even explicitly oppose unit-specific emission rate requirements in some cases. However, the continued reliance on a trading program for full-remedy policy solutions requires this mechanism to ensure the program's effectiveness remains robust in the context of scheduled fleet turnover.

With regard to comments that this approach is different than EPA's past approaches, EPA notes that this approach is not unprecedented or inconsistent with past EPA programs. In the first CSAPR rule, EPA implemented phase 1 and phase 2 NO_X budgets for states, which tightened over time even as the rule stringency remained constant for that pollutant. In the CSAPR Update, EPA examined only 2017 for its partial remedy and noted it would revisit future years to see if additional reductions were necessary when implementing a full remedy. This rule achieves that full remedy.

Comment: Some commenters suggested that EPA should assume increased generation from existing units (beyond recent historical data and beyond baseline levels) as some of these units retire, thus offsetting some of the emission reductions.

Response: EPA first notes that it does include emissions and additional generation from additional new sources that are under construction and/or that have received their permit approvals. This new-unit generation offsets the amount of retiring generation in EPA's baseline at the regional level. Second, EPA notes that in both the proposed and the final rule it evaluated the assumed fossil generation from covered sources within its future year baseline (after factoring in retiring fossil generation) relative to historical trends and continues to find that its assumed future level of fossil fuel-fired generation is well within the trend observed over the past four years. In other words, whereas fossil generation from the covered fleet in these 12 states has been declining at approximately 2 percent on average over the past four years, EPA's future year baseline contains fossil generation well within this historical trend (i.e., continued decline at less than 2 percent). Moreover, EPA's assumption that existing, higher-emitting sources will, on average, not raise their generation levels in the future is consistent not only with historical trends, but also with both modeling outlooks for future generation from these EGUs as well as announced plans to replace retiring fossil generation with non-fossil sources. For many of these scheduled retirements, utilities not only have broad plans stating their intention to replace higher-emitting fossil sources with lower emitting sources, but already have those plans for replacement generation, such as renewable technologies, underway.[173,174]

Comment: Some stakeholders note the uncertainty of some scheduled retirements, and the potential for them to be possibly altered pending information from regulatory entities.

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[173] "Coal retirements in Indiana could be hastened by 2.6GW of wind, solar and energy storage". Available at https://www.energy-storage.news/news/coal-retirements-in-indiana-could-be-hastened-by-2.6gw-of-wind-solar-and-en#.

[174] "Duke Vows to Triple Renewable Capacity, Reach Net-Zero Emissions by 2030". Utility Dive, October 2020. Available at. https://www.utilitydive.com/news/duke-vows-to-double-renewables-capacity-reach-net-zero-methane-emissions-b/586791/.

Response: With regard to commenters noting that some retirements are uncertain and therefore should not be factored into EPA future baseline and budget estimates, EPA notes it is using the best available data at the time of the final rule and that no retirement plans included in the final rule were contradicted by commenter data submitted on the proposed rule. EPA relies on a compilation of data from DOE EIA Form 860 where facilities report their future retirement plans and on the information included in its NEEDS database. This information is considered to be highly reliable, real-world information that provides EPA with the high confidence that such retirements will in fact occur. Indeed, in response to commenters' suggestions to factor in yet additional potential retirements, EPA has declined to do so where the intention to retire a unit is not abundantly supported by utility-reported information. Despite this conservative approach to identifying known fleet changes, if a unit's future retirement status ultimately does not materialize on the scheduled date, EPA observes that such an unexpected departure from the currently available evidence would still not contradict its future state-level and region-level estimates. EPA's approach of using historical data and incorporation only of announced fleet changes in estimating its future baseline means that its future year baseline generation and retirement outlook for higher emitting sources is likely conservative, as EPA does not assume any retirements beyond those that are announced. In other words, there are more likely to be additional future EGU retirements that materialize post-rule signature that impact the 2021-2024 timeframe than there are to be announced retirement plans that are subsequently unwound. The analytic tools and information resources used in any estimation of state and regional future EGU emission totals inherently have some discrepancies between what is projected for the future and how the future unfolds - particularly at the unit level. But those potential unit-level discrepancies, inherent in the enterprise of prediction, would at most impact emissions both ways and do not, on their own, undermine EPA's aggregate state and regional estimates. Additionally, as noted elsewhere, EPA's use of a market-based program, a starting bank of converted allowances, availability of additional converted allowances through the "safety valve" mechanism, and

variability limits are all features that will readily accommodate whatever small discrepancies there may be between EPA's projection of the EGU fleet and actual fleet conditions in any of the relevant future years. Therefore, EPA's resulting state emission budgets are robust to the inherent uncertainty in future year baseline conditions.

Finally, with regard to comments concerning the impacts of the successive year emissions budget changes' on unit-level allocations for non-retiring units, EPA considers this not to be a budget-setting issue, but rather a question of how to allocate allowances within the budget. Thus, this topic is addressed in section VII.C.3.

EPA's emissions budget methodology and formula for establishing Group 3 budgets are described in detail in the Ozone Transport Policy Analysis Final Rule TSD and summarized below.

For determining emission budgets, EPA generally used historical ozone season data from the 2019 ozone season, the most recent data whose representativeness was not called into question by the unusual circumstances of the Covid-19 pandemic. This is similar to its approach in the CSAPR Update where EPA began with 2015 data (the most recent year at the time). As in the CSAPR Update, EPA combined historical data with IPM data to determine emission budgets. The budget setting process has three primary steps:

1) Determine a future year baseline - Start with the latest reported historical unit-level data (e.g., 2019), and adjust any unit data where a retirement or new build is known to occur by the baseline year. This results in a future year (e.g., 2021) baseline for emissions budget purposes.[175]
2) Factor in additional emission controls for the selected control stringency (e.g., $1,800 per ton) - For the unit-level emission control technologies identified in this control stringency, adjust the baseline unit-level emissions and emission rates. For example, if an

[175] EPA used 2019 historical data in the proposed rule because that was the latest available at that time. EPA took comment on using 2020 ozone-season data at the final rule as that data became available in November of 2020, and discusses that topic later in this section.

SCR-controlled unit had a baseline greater than 0.08 lb/mmBtu, its rate and corresponding emissions would be adjusted down to levels reflecting its operation at 0.08 lb/mmBtu.

3) Incorporate generation shifting – Use IPM in a relative way to capture the reductions expected from generation shifting at a given $ per ton level that reflects control optimization (constrained to within-state shifting).

By using historical unit and state-level NO_X emission rates, heat input, and emissions data at step 1 of the budget setting process, EPA is grounding its budgets in the most recent representative historical operation for the covered units.[176] This data set is a reasonable starting point for the budget setting process as it reflects the latest data reported by affected facilities under 40 CFR part 75. The reporting requirements include quality control measures, verification measures, and instrumentation to best record and report the data. In addition, the designated representatives of EGU sources are required to attest to the accuracy and completeness of the data. In step 1 of the budget setting process, EPA first adjusted the 2019 ozone-season data to reflect committed fleet changes under a baseline scenario (i.e., announced and confirmed retirements, new builds, and retrofits that have already occurred). For example, if a unit emitted in 2019, but retired in 2020, its 2019 emissions would not be included in the 2021 estimate. For units that had no known changes, the 2021 emissions assumption was the actual reported data from 2019 at this first step of adjusting the baseline. EPA also included known new units and scheduled retrofits in this manner. Using this method, EPA arrived at a baseline emission, heat input, and emission rate estimate for each unit for a future year (e.g., 2021), and then was able to aggregate those unit-level estimates to state-level totals. These state-level totals constituted the state's baseline from an engineering analytics perspective. The ozone-season state-level

[176] EPA notes that historical state-level ozone season EGU NO_X emission rates are publicly available and quality assured data. They are monitored using CEMS or other methodologies allowed for use by qualifying units under 40 CFR part 75 and are reported to EPA directly by power sector sources.

emissions, heat input, and emissions rates for covered sources under a baseline scenario were determined for each future year examined (2021 through 2024). Because 2024 is the last ozone season for which EPA projects continued contribution to any downwind receptors, 2024 is the last year for which EPA is making an adjustment to emission budgets.

For step 2 of the emissions budget setting process, EPA examined how the baseline emissions and emission rates would change under different control stringencies for EGUs. For instance, under the SCR optimization scenario, if a unit was not operating its SCR at 0.08 lb/mmBtu or lower in the baseline, EPA lowered that unit's assumed emission rate to 0.08 lb/mmBtu and calculated the impact on the unit's and state's emission rate and emissions. Note, the heat input is held constant for the unit in the process, reflecting the same level of unit operation compared to historical 2019 data. An improved emission rate is then applied to this heat input, reflecting control optimization. In this manner, the state-level baseline totals from step 1 reflecting known baseline changes were adjusted to reflect the additional application of the assumed control technology at a given control stringency.

Finally, at step 3 of the emissions budget setting process, EPA used IPM to capture any generation shifting at a given control stringency necessary for the majority of the respective emission control technology to operate. EPA explains how it accounts for generation shifting in more detail in in section VI.B and in the Ozone Transport Policy Analysis Final Rule TSD. In this rule, as a proxy for the near-term reductions required by 2021, EPA has constrained generation shifting to occur only within-state.

EPA requested comment on the approach described above, as well as alternatives discussed in the budget-setting TSD. Specifically, EPA requested comment on its consideration of using 2020 data in place of 2019 data as the most recent historical data set to inform final rule budgets. Although the reduction potential associated with the selected control stringency described in section VI would likely not change substantially with that data set, the baseline values calculated

in step 1 of the emissions budget setting process may change significantly and possibly result in lower or higher state-level emission budgets.

Comment: EPA received comment highlighting the unique impact of the Covid-19 pandemic on 2020 emissions and generation data due to changes in market conditions that may not be representative in subsequent years (e.g., changes in net generation, time-of-day impacts on demand, and natural gas prices). Commenters cautioned against relying on 2020 data for informing step 3 analysis in this rule.

Response: EPA is finalizing, as proposed and consistent with these comments, the continued use of 2019 EGU data as the latest, most representative historical year for informing the Agency's step 3 analysis. EPA examined the unique Covid-related impacts on the power sector and energy market data. It observed significant changes for some variables where the change appeared to be specific to the 2020 dataset and pandemic-related conditions, and therefore not representative of future power sector operations or market conditions. These included changes in natural gas prices, the demand profiles for electricity (which influence what units generate at different parts of the day), and overall electricity demand. This was further borne out by comparing quarterly year-over-year data which revealed that changes in Q4 2020 data relative to Q4 2019 data were not as pronounced as changes in Q2 2020 data relative to Q2 2019 data, indicating the temporary status of some of changes observed in the 2020 ozone season. For instance, Q2 2020 NO_X emissions were down 20 percent year-over-year, but Q4 2020 NO_X emissions were down only 9 percent year-over-year. EPA provides additional detail in the RTC document on its consideration of 2019 and 2020 data as the most recent historical representative year of the power sector. Had EPA utilized 2020 data as the starting point for its future year baseline in Engineering Analytics, it likely would have been incorporating some 2020-fleet operational changes (and corresponding emission levels) unique to the pandemic year instead of fleet changes expected to endure into post-2020 years. As also explained in the RTC document, while EPA did continue to use 2019 as the starting historical data set, it recognized commenters'

observations that New York and Virginia were differently situated in that their emissions were higher in 2020 than 2019 (whereas all other states were lower, at least partially attributable to Covid impacts). Additionally, reflecting the 2020 fleet dynamics in the future year baseline for New York helps capture some of the dynamics related to the retirement of one unit at the Indian Point nuclear facility as pointed out by the commenter. To account for these atypical circumstances, EPA incorporated upward adjustments to its future year baseline values for New York and Virginia that reflected the incremental changes in heat input, generation, and emissions for 2020 relative to 2019.

Comment: Some commenters suggested EPA use a multi-year historical baseline for its step 3 analysis on the theory that this would provide a more robust set of historical data and a more representative baseline for the power sector.

Response: EPA is finalizing use of the same single-year historical baseline approach it used in the proposed rule. This approach is similar to the CSAPR Update, where EPA also relied on a single-year historical baseline to inform its step 3 approach. EPA's interest in a historical data set to inform this part of the analysis is to capture the current status of the power sector (i.e., incorporating the latest new builds, retirements, and unit operation in response to current regulations and market conditions). Incorporating prior years through a multi-year historical baseline would dilute, rather than strengthen, the methodology's ability to capture the most representative perspective of the current power sector. It would in effect include units that no longer exist, market conditions that have since evolved, and a regulatory landscape that has likewise since changed. It would diminish the effect of newer generation resources that have come online which reflect the impacts of the latest changes in technology performance and cost levels. EPA finds that, particularly at the state and regional level, the most recent year data is a better representation and basis for future year baselines rather than incorporating older data. In other applications, where the purpose is not forward looking, but rather distribution-based and

unit-level focused, lengthier historical baselines have more value. See additional response to this comment in the State Emission Budgets section of the RTC document.

C. Elements of New Trading Program

To implement the updated emissions budgets developed according to the process described in section VII.B, EPA is requiring EGUs in each of the 12 covered states to participate in a new CSAPR NOx Ozone Season Group 3 Trading Program. The provisions of the new "Group 3" trading program are largely identical to the provisions of the "Group 2" trading program in which affected EGUs in the 12 covered states participated from 2017 through 2020. The principal differences between the Group 2 and Group 3 trading programs are the differences in state budgets and geography established in this rule to address the covered states' remaining obligations under CAA section 110(a)(2)(D)(i)(I) with respect to the 2008 ozone NAAQS. One other difference, which EPA is adopting in response to comments, concerns the determination of which units are eligible to receive allocations of allowances for use in the new Group 3 trading program as "existing units" under EPA's default allocation methodology. Specifically, certain units with scheduled future retirement dates will not receive allocations as existing units for use in the Group 3 trading program starting with the first control period for which the units' scheduled retirements are reflected in adjustments to the state emission budgets. This aspect of implementation of the Group 3 trading program is discussed in section VII.C.3.b.

The proposed rule included several provisions designed to address the transition from the Group 2 trading program to the Group 3 trading program. The provisions for allocation of supplemental allowances to ensure that the enhanced control stringency established in this action applies only after the rule's effective date are finalized as proposed. The provisions concerning creation of an initial bank of Group 3 allowances in exchange for banked 2017-2020 Group 2 allowances at a formula-based conversion ratio and the provisions concerning the recall of certain previously recorded 2021-2024 Group 2 allowances are finalized with certain modifications adopted after consideration of comments. Also, in response to comments, the final

rule includes transitional provisions establishing a "safety valve" mechanism under which sources may obtain additional Group 3 allowances in exchange for additional 2017-2020 Group 2 allowances at a higher conversion ratio. All of these transitional provisions are discussed in section VII.C.4.

The only other differences between the new Group 3 trading program regulations and the Group 2 trading program regulations that applied for emissions through the 2020 control periods are a small number of corrections and administrative simplifications that have no effect on program stringency; EPA is eliminating these differences by making the same corrections and simplifications to the regulations for the Group 2 trading program and the other existing CSAPR trading programs starting with the 2021 control periods.[177] In this section, the Agency discusses major elements of the new Group 3 trading program, with emphasis on the elements that differ from the previous provisions of the Group 2 trading program as well as the provisions specifically designed to address the transition from the Group 2 trading program to the Group 3 trading program.

1. Applicability

In this rule, EPA is using the same EGU applicability provisions in the new Group 3 trading program as in the existing Group 2 trading program and the other CSAPR trading programs, without change. Under the general CSAPR applicability provisions, 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, which is producing electricity for sale, with the exception of certain cogeneration units and solid waste incineration units.

[177] The corrections and simplifications generally apply to each of the five existing CSAPR trading programs at subparts AAAAA through EEEEE of 40 CFR part 97, and a subset also apply to the Texas SO_2 Trading Program at subpart FFFFF of 40 CFR part 97. The specific corrections and simplifications are described as applied to the new Group 3 trading program in sections VII.C.1. through VII.C.7. The same changes as applied to the existing programs are discussed in section VII.C.8.

2. State Budgets, Variability Limits, Assurance Levels, and Penalties

EPA is establishing revised state budgets for EGU emissions of ozone season NO_X for the 12 "Group 3" states subject to new or amended FIPs in this final rule in order to fully address these states' significant contribution with respect to the 2008 ozone NAAQS. The budgets have been established according to the process described in section VII.B. As discussed in that section, for each of the covered states, separate budgets are established for the three individual years 2021, 2022, and 2023, and then for 2024 and beyond.[178] Portions of the updated NO_X ozone season emission budgets are reserved as updated new unit set-asides and Indian country new unit set-asides for the same control periods, as further described in section VII.C.3.a. The amounts of the state emissions budgets for 2021, 2022, 2023, and 2024 and beyond are shown in tables VII.C.2-1, VII.C.2-2, VII.C.2-3, and VII.C.2-4.

Similar to the previous requirements to hold Group 2 allowances sufficient to cover their NO_X emissions in each control period from 2017 through 2020, sources in states covered by the new Group 3 trading program will be required to hold new Group 3 allowances sufficient to cover their NO_X emissions in each control period in 2021 and thereafter. For Group 3 states that were found in the CSAPR Update to still have good neighbor obligations with respect to the 1997 ozone NAAQS, EPA is determining that participation of the state's EGUs in the more stringent Group 3 trading program will satisfy those obligations.[179]

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

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[178] See section VII.C.4.a. for a discussion of transitional provisions included in this final rule to ensure that the increased stringency of the new emission budgets being established for the 2021 control period will apply only after the rule's effective date, even though the new Group 3 trading program will be implemented as of the start of the 2021 ozone season on May 1, 2021.

[179] Out of the 12 states included in the Group 3 trading program, Illinois, Indiana, Kentucky, and Louisiana were found in the CSAPR Update to still have good neighbor obligations with respect to the 1997 ozone NAAQS. *See* 81 FR 74509 n.21 (November 21, 2016).

with compliance penalties responds to the D.C. Circuit's holding in *North Carolina* requiring EPA to ensure within the context of an interstate trading program that sources in each state are required to eliminate emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS in another state.[180]

Like the emission budgets promulgated in the CSAPR and the CSAPR Update, the revised emission budgets promulgated in this rule 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, changing weather patterns, changes in electricity demand, or disruptions in electricity supply from other units or from the transmission grid. Recognizing this, the trading program provisions finalized in the CSAPR and CSAPR Update rulemakings include variability limits, which define the amount by which an individual state's emissions may exceed the level of its budget in a given year to account for variability in EGU operations. A state's budget plus its variability limit equals the state's assurance level, which acts as a cap on the state's NO_X emissions during a given control period (in this rulemaking, the relevant control period is the May-September ozone season). The new CSAPR NOx Ozone Season Group 3 Trading Program provisions established for affected sources in the 12 states subject to the new trading program under this final rule contain equivalent assurance provisions to the prior CSAPR and CSAPR Update trading programs.

The variability limits ensure that the trading program can accommodate the inherent variability in the power sector while ensuring that each state eliminates the amount of emissions within the state, in a given control period, that must be eliminated to meet the statutory mandate of CAA section 110(a)(2)(D)(i)(I). Moreover, the structure of the trading program, which achieves required emission reductions through limits on the total numbers of allowances allocated, assurance provisions, and penalty mechanisms, ensures that the variability limits only allow the amount of temporal and geographic shifting of emissions that is likely to result from

[180] 531 F.3d at 908.

the inherent variability in power generation, and not from decisions to avoid or delay the optimization or installation of necessary controls.

To establish the variability limits in the CSAPR, EPA analyzed historical state-level heat input variability as a proxy for emissions variability, assuming constant emission rates. *See* 76 FR 48265. The variability limits for ozone season NO_X in both the CSAPR and the CSAPR Update were calculated as 21 percent of each state's budget, and these variability limits for the NO_X ozone season trading programs were then codified in 40 CFR 97.510 and 40 CFR 97.810, along with the respective state budgets. For this final rule, EPA is retaining variability limits for the 12 Group 3 states covered by this rule calculated as 21 percent of each state's revised budget.[181]

Table VII.C.2-1: CSAPR NO_X Ozone Season Group 3 State Budgets, Variability Limits, and Assurance Levels for 2021[182]

State	Emissions budget (tons)	Variability Limit (tons)	Assurance Level (tons)
Illinois	9,102	1,911	11,013
Indiana	13,051	2,741	15,792
Kentucky	15,300	3,213	18,513
Louisiana	14,818	3,112	17,930
Maryland	1,499	315	1,814
Michigan	12,727	2,673	15,400
New Jersey	1,253	263	1,516
New York	3,416	717	4,133
Ohio	9,690	2,035	11,725
Pennsylvania	8,379	1,760	10,139
Virginia	4,516	948	5,464
West Virginia	13,334	2,800	16,134

[181] See section VII.C.4.a. for a discussion of transitional provisions included in the final rule to ensure that the increased stringency of the new budgets will apply only after the rule's effective date, even though the new Group 3 trading program will be implemented as of the start of the 2021 ozone season on May 1, 2021. The supplemental allowances and assurance level adjustments that are being provided for the 2021 control period in accordance with those transitional provisions are not reflected in the amounts shown in Table VII.C.2-1.

[182] The state-level emission budget calculations pertaining to Tables VII.C.2-1 through VII.C.2-4 are described in section VII.B, and in greater detail in the Ozone Transport Policy Analysis Final Rule TSD. Budget calculations and underlying data are also available in Appendix A of that TSD.

Table VII.C.2-2: CSAPR NO_X Ozone Season Group 3 State Budgets, Variability Limits, and Assurance Levels for 2022

State	Emissions Budget (tons)	Variability Limit (tons)	Assurance Level (tons)
Illinois	9,102	1,911	11,013
Indiana	12,582	2,642	15,224
Kentucky	14,051	2,951	17,002
Louisiana	14,818	3,112	17,930
Maryland	1,266	266	1,532
Michigan	12,290	2,581	14,871
New Jersey	1,253	263	1,516
New York	3,416	717	4,133
Ohio	9,773	2,052	11,825
Pennsylvania	8,373	1,758	10,131
Virginia	3,897	818	4,715
West Virginia	12,884	2,706	15,590

Table VII.C.2-3: CSAPR NO_X Ozone Season Group 3 State Budgets, Variability Limits, and Assurance Levels for 2023

State	Emissions Budget (tons)	Variability Limit (tons)	Assurance Level (tons)
Illinois	8,179	1,718	9,897
Indiana	12,553	2,636	15,189
Kentucky	14,051	2,951	17,002
Louisiana	14,818	3,112	17,930
Maryland	1,266	266	1,532
Michigan	9,975	2,095	12,070
New Jersey	1,253	263	1,516
New York	3,421	718	4,139
Ohio	9,773	2,052	11,825
Pennsylvania	8,373	1,758	10,131
Virginia	3,980	836	4,816
West Virginia	12,884	2,706	15,590

Table VII.C.2-4: CSAPR NO_X Ozone Season Group 3 State Budgets, Variability Limits, and Assurance Levels for 2024 and Beyond

State	Emissions budget (tons)	Variability Limit (tons)	Assurance Level (tons)
Illinois	8,059	1,692	9,751
Indiana	9,564	2,008	11,572
Kentucky	14,051	2,951	17,002
Louisiana	14,818	3,112	17,930
Maryland	1,348	283	1,631
Michigan	9,786	2,055	11,841
New Jersey	1,253	263	1,516

New York	3,403	715	4,118
Ohio	9,773	2,052	11,825
Pennsylvania	8,373	1,758	10,131
Virginia	3,663	769	4,432
West Virginia	12,884	2,706	15,590

The assurance provisions include penalties that are triggered in the event that the covered sources' emissions in a given state, as a whole, exceed the state's assurance level. The CSAPR and the CSAPR Update provided that, when the emissions from EGUs in a state exceed that state's assurance level in a given year, particular sources within that state will be assessed a 3-to-1 allowance surrender on emissions exceeding the assurance level. Specifically, each excess ton above a given state's assurance level must be met with one allowance, per standard compliance, and two additional allowances to satisfy the penalty. The penalty was designed to deter state-level emissions from exceeding assurance levels. In both the CSAPR and the CSAPR Update, the assurance provisions were designed to account for variability in the electricity sector while ensuring that the necessary emission reductions occur within each covered state, consistent with the court's holding in *North Carolina*, 531 F.3d at 908. If EGU emissions in a given state do not exceed that state's assurance level, no penalties are incurred by any source.

To assess the penalty under the assurance provisions, EPA is following the same methodology finalized in the CSAPR Update. *See* 81 FR 74567. In that methodology, EPA evaluates whether any state's total EGU emissions in a control period exceeded the state's assurance level, and if so, EPA then determines which groups of units in the state represented by a "common designated representative" emitted in excess of the common designated representative's share of the state assurance level and, therefore, will be subject to the allowance surrender requirement described above. Thus, penalties under the assurance provisions are triggered for the group of sources represented by a common designated representative when two conditions are met: (1) The group of sources and units with a common designated representative 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 designated representative had emissions exceeding the respective common designated representative's share of the state assurance level. EPA is establishing assurance provisions for the CSAPR NOx Ozone Season Group 3 Trading Program that are equivalent to the assurance provisions in the CSAPR NOx Ozone Season Group 2 Trading Program.

In this final rule, EPA is simplifying the procedures for administering the assurance provisions, as compared to the analogous provisions included in the existing CSAPR trading programs for control periods before 2021.[183] The simplifications are made possible by the revisions to the process for allocating allowances from the new unit set-asides that are discussed in section VII.C.3.c. The same simplifications are also being implemented in the existing CSAPR trading programs, as discussed in section VII.C.8. These simplifications concern the procedures for determining the portion of the state's assurance level to be assigned to each common designated representative. Specifically, certain provisions of these procedures as previously implemented in the existing CSAPR trading programs were designed to address circumstances where a new unit operates but has no allowance allocation determined for it. Administration of these provisions required EPA to issue a notice to collect information needed solely for this purpose that is not otherwise required to be reported to EPA. Because the revised new unit set-aside ("NUSA") allocation procedures eliminate the possibility that a new unit would not have an allowance allocation determined for it, EPA is eliminating the provisions for issuance of the related extra notice. EPA also is extending the date as of which a common designated representative is determined under both the new Group 3 trading program and the existing CSAPR trading programs from April 1 of the year following the control period to July 1 so as to preserve the relationship of those dates to the allowance transfer deadline, which is being

[183] EPA proposed and requested comment on implementing the simplified assurance provisions as of the 2023 and 2021 control periods, respectively. No comments were received, and EPA is clarifying the regulations by implementing the simplified provisions as of the 2021 control period. For further discussion, see section VII.C.8.b.

extended from March 1 of the year following the control period to June 1.[184] Further discussion of these changes from the current provisions in the existing trading programs is provided in section VII.C.8.

Comment: EPA received several comments concerning the achievability of state emissions budgets in 2021 that highlighted the quick implementation timeframe and suggesting that such a timeframe would not allow enough times for a liquid allowance market to form and thus inhibit sources' ability to obtain the allowances that they need for compliance.

Response: As an initial matter, EPA observes that in 25 years of promulgating and administering trading programs for NO_X and SO_2 as mechanisms to address acid precipitation or interstate transport of air pollution, the Agency has never encountered a single instance where a source was unable to comply with the requirements of any of these trading programs because of an inability to find allowances available for purchase. Almost all of the sources that will participate in the trading program established under this final rule have previously participated in some of these other trading programs and therefore are, or should be, fully aware that under every such trading program, a functioning allowance market has developed. Nevertheless, some commenters assert that in the trading program established under this specific final rule – where the emission reductions required for the first control period are set at levels designed to be achievable without installation of any new controls by any source – for the first time ever, either no industry participants will be willing to take actions that would create surplus allowances or all industry participants will refuse to sell such surplus allowances at any price. The comments fly in the face of 25 years of evidence and common experience, not to mention principles of economics and market participants' self-interest. EPA views the comments as unsupported and speculative to the point of irrationality.

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[184] As discussed in section VII.C.8., in order to minimize unnecessary differences between the CSAPR trading programs and the similarly structured Texas SO_2 Trading Program, EPA is also revising the date for determination of a common designated representative under the Texas SO_2 Trading Program.

EPA first addresses the viability of 2021 implementation for the emission reductions required under this rule in detail in section VI. B above. With regard to the specific market liquidity concerns expressed here, EPA notes that those same concerns have been voiced in the lead-up to past CSAPR trading programs and have never materialized. Instead, a functioning allowance market has always formed and resulted in 100 percent compliance with the allowance holding requirements for the first control period (and subsequent control periods). As described in this section, under the new trading program sources are not required to hold (and subsequently surrender) any allowances for compliance purposes until June 1, 2022 - well after the end of the 2021 ozone season. In the current CSAPR Update ozone season programs, EPA observes that most trades occur near or after end of the ozone season. Therefore, the approximately two months between final rule promulgation and the start of the compliance period is in no way a limit on the time sources have to buy and sell allowances for that compliance period. Rather, sources will have eight months after the end of the control period in which to engage in any necessary or desired allowance market transactions. The total quantity of allowances usable for the 2021 control periods from state emission budgets and from the initial Group 3 bank (discussed in section VII.C.4.b) will be known before the start of the 2021 control period, and EPA expects that almost all such allowances will be recorded in sources' compliance accounts well before the end of the 2021 control period, ensuring that there will be no logistical impediments to such transactions. Moreover, in many cases, units that may have the need to procure allowances will also have associated units under common ownership elsewhere in the fleet that hold a surplus of allowances In this case, it is only a matter of intra-owner allowance movement needed to align allowancing holdings with allowance surrender obligations, and the need for accessing a broader allowance market is mooted.

Further, the level of the budgets, in addition to the initial Group 3 bank, should obviate any market liquidity concerns as the number of allowances on the market for the first year will accommodate a variety of compliance pathways and unit operational decisions. Moreover, the

experience of the CSAPR programs reveals that the allowance price is highest in the first compliance period, creating an incentive for all sources to implement achievable emission reductions and for sources with surplus of allowances to sell them while allowance prices are highest, generating the conditions for a robust market to form – further promoting market liquidity. While EPA strongly disagrees, based on previous program implementation and forward-looking analysis, that there is any risk of market illiquidity, the Agency is creating an additional "safety valve" in this final rule due to the near-term implementation timetable. Consistent with commenters' suggestions, EPA will allow the one-time conversion of Group 2 allowances at an 18:1 ratio to provide additional assurance to sources that allowances will be available, but ensuring that the cost of this compliance option is such that entities will utilize it only in the very unlikely event that access to such additional allowances proves to be necessary. The safety valve is described further in section VII.C.4.c.

Comment: EPA received several comments concerning the proposed variability limits and associated assurance levels for the states in the Group 3 trading program. Some commenters suggested that EPA should eliminate or tighten variability limits for the Group 3 trading program. One commenter justified these changes by observing that the Group 2 trading program established under the CSAPR Update had excess availability of allowances and low allowance prices.

One commenter suggested that EPA eliminate variability limits for the Group 3 trading program on the basis that the variability limits and associated assurance levels as proposed do not result in the elimination of downwind non-attainment by the end of 2021. This commenter stated that EPA failed to provide a full explanation in the proposed action as to why the 21 percent variability limit used in the trading programs for ozone season NO_X established in the CSAPR and the CSAPR Update was still applicable in the new Group 3 trading program. The commenter stated there is no justification for EPA to increase the budget amounts due to variability in EGU fleet operation if EPA is correct in its assessment that the proposed NOx mass

emission budget levels are representative of near-term achievable NOx emission control obligations based on historical EGU fleet operation. The commenter stated that increasing budgets by 21 percent to arrive at an assurance level permits an upwind state's EGU fleet to emit NOx mass emissions more than the levels necessary to meet the given state's obligation to downwind areas. The commenter further states a belief that EPA is misapplying the concept of EGU fleet operational variability to permit a state's EGU fleet to emit NOx mass emissions at levels that may negatively impact the health and welfare of downwind populations.

Response: EPA disagrees with the commenters and is retaining the variability limits and associated assurance levels as reflected in both the CSAPR and the CSAPR Update. EPA believes a variability limit of 21 percent continues to be appropriate for states in the Group 3 trading program. The assertion that state budgets are increased by 21 percent in response to the variability limit is incorrect. Rather, as described in the CSAPR, the CSAPR Update, and reiterated in this final action, the variability limits reflect expected year-to-year or season-to-season variability in demand for electricity, and therefore, variability in the use of fuel and in emissions. While a given state may emit up to the assurance level (i.e., that state's budget plus the 21 percent variability limit) during years with adverse meteorology and atypical levels of electricity demand, allowances banked from prior control periods may then be used for compliance obligations. However, the total number of allowances issued for each control period in the Group 3 trading program is equal to the sum of the Group 3 states' emission budgets, not the sum of the Group 3 states' assurance levels. Although EPA is also creating an initial bank of allowances in an amount equal to the sum of the states' variability limits for the 2022 control period (see section VII.C.4.b), creation of the bank is a one-time event and does not represent a 21 percent increase in the state emission budgets established for each control period.

With regard to the comment that EPA has not sufficiently justified reusing in the Group 3 trading program the same 21 percent variability limits used in the trading programs for ozone season NO_X established in the CSAPR and the CSAPR Update, EPA disagrees that updating

these limits is necessary. The original variability analysis performed in the CSAPR rulemaking considered data for 26 states (including all 12 Group 3 states) and reflected over a decade of operational variability (from 2000 through 2010), producing relatively robust standard deviation estimates. EPA would not necessarily view changes of a few percent above or below the previously identified variability level of 21 percent from an updated analysis as significant enough to require establishment of different variability limits in the Group 3 trading program. Nevertheless, in response to the comment, EPA has performed an updated variability analysis for the 12 Group 3 states reflecting data for all control periods from 2000 to 2019. The updated analysis again results in a variability estimate of 21 percent. EPA also considered shorter time periods for the updated analysis and found that the resulting variability estimates are not especially sensitive to the particular time period analyzed. Accordingly, EPA concludes that it is reasonable to finalize the variability limits for the Group 3 trading program at the level of 21 percent as proposed.[185]

3. Unit-Level Allocations of Emissions Allowances

For states participating in the CSAPR Group 3 trading program, EPA is issuing CSAPR NO_X Ozone Season Group 3 allowances to be used for compliance beginning with the 2021 ozone season. This section explains the default process by which EPA is allocating total amounts of these allowances equal to each state's budget amount existing units and new units in the state. Section VII.C.3.a describes the determination of the portions of each state's budget that will be set aside for potential allocation to new units in the state and in any Indian country within the state's borders. Section VII.C.3.b discusses the methodology used to allocate shares of each state's budget not reserved in a set-aside to the existing units in the state, including in some cases to units that have ceased operations. Sections VII.C.3.c and VII.C.3.d discuss the process for

[185] For details on the original variability analysis for 26 states over the 2000-2010 period, including a description of the methodology, see the Power Sector Variability Final Rule TSD from the CSAPR (EPA-HQ-OAR-2009-0491-4454). For the updated variability analysis for the 12 Group 3 states for the 2000-2019 period, see the Excel file "Historical Variability in Heat Input 2000 to 2019.xls." Both documents are available in the docket for this final rule.

allocating the allowances in the new unit set-asides and Indian country new unit set-asides, respectively. to individual units.

As under both the CSAPR and the CSAPR Update, states have several options under this final rulemaking to submit SIP revisions which, if approved, may result in the replacement of EPA's default allocations with state-determined allocations for the 2022 control period and beyond. The provisions described in this section do not prevent any state from employing an alternative allocation methodology for control periods after 2021 through a SIP submission. See section VII.D. for details on the development of approvable SIP submissions.

a. *Set-asides of Portions of State Budgets for New Units*

As part of the default allocation process that will apply where a state does not employ an alternative allocation process pursuant to an approved SIP revision, EPA is promulgating allocations to a new unit set-aside for each state equal to a minimum of 2 percent of the total state budget, plus the projected amount of emissions from planned units in that state. For example, if planned units in a state are projected to emit 3 percent of the state's NO_X ozone season emission budget, then the new unit set-aside for the state would be set at 5 percent, which is the sum of the minimum 2 percent set-aside plus an additional 3 percent for planned units. As further discussed in section VII.C.3.d., for the three Group 3 states with Indian country within their borders (Louisiana, Michigan, and New York), EPA is reserving 5 percent of the minimum 2 percent new unit set-aside, or 0.1 percent of the total state budget, for any new units in Indian country within the borders of state,[186] with no additional amount to address planned units in Indian country.[187] This is the same approach previously used to establish the amounts of new unit

[186] In the CSAPR rulemaking, based on analysis of a set of states that includes all the proposed Group 3 states in this action, EPA determined that among the states analyzed, in the state for which Indian country represented the largest share of the total area within the state's borders, that share was 5 percent. *See* 76 FR 48293 (December 27, 2011). EPA adopted the same 5 percent figure in the CSAPR Update. *See* 81 FR 74565-66 (May 27, 2016).

[187] According to the information available to EPA, there are currently no planned units in Indian country within the borders of any Group 3 state.

set-asides and Indian country new unit set-asides for all the CSAPR and CSAPR Update trading programs. *See, e.g.,* 76 FR 48292 (August 8, 2011). Note that New York has set its NUSA percentage within its approved SIP for the existing Group 2 trading program to 5 percent of the state emission budget without consideration of planned units; therefore, this NUSA percentage is used for New York. As described in greater detail in sections VII.C.3.c and VII.C.3.d, new units are eligible to receive allocations from a new unit set-aside or Indian country new unit set-aside starting with the first year they are subject to the allowance-holding requirements of this rule. If the allowances in the NUSA for a state or the Indian country NUSA for Indian country within the borders of a state are not allocated to new units, the allowances are redistributed to existing units in the state before each compliance deadline.

The process described above for determining the portions of each state budget that will be set aside for potential allocation to new units is unchanged from the process described in the proposed rule. EPA received no comments concerning the portions of the emission budgets established under the new Group 3 trading program that would be set aside for this purpose. One commenter suggested that the amounts of the new unit set-asides should be increased by adding allowances from the existing Group 2 trading program that would have been allocated to retired units under that program. EPA is not implementing this suggestion and responds more fully to the comment in section VII.C.4.b.

Because the budgets under the Group 3 trading program vary across control periods, the amounts of the default new unit set-asides and Indian country new unit set-asides also vary. The amounts for each state for 2021 through 2023 and for 2024 and beyond are set forth in tables VII.C.3-1 through VII.C.3-4.[188]

[188] See section VII.C.4.a. for a discussion of transitional provisions included in the final rule to ensure that the increased stringency of the new budgets will apply only after the rule's effective date, even though the new Group 3 trading program will be implemented as of the start of the 2021 ozone season on May 1, 2021. The supplemental allowances that are being provided for the 2021 control period in accordance with those transitional provisions are not reflected in the emission budget amounts shown in Table VII.C.3-1.

Table VII.C.3-1: CSAPR NO_X Ozone Season Group 3 New Unit Set-Aside (NUSA) Amounts for 2021

State	Emission Budgets (tons)	New unit set-aside amount (percent)	Total new unit set-aside amount for new units (tons)	New unit set-aside amount for new units not in Indian country (tons)	Indian country new unit set-aside amount (tons)
Illinois	9,102	3	265	265	
Indiana	13,051	2	262	262	
Kentucky	15,300	2	309	309	
Louisiana	14,818	3	445	430	15
Maryland	1,499	9	135	135	
Michigan	12,727	4	513	500	13
New Jersey	1,253	2	27	27	
New York	3,416	5	171	168	3
Ohio	9,690	3	291	291	
Pennsylvania	8,379	4	335	335	
Virginia	4,516	4	185	185	
West Virginia	13,334	2	266	266	

Table VII.C.3-2: CSAPR NO_X Ozone Season Group 3 New Unit Set-Aside (NUSA) Amounts for 2022

State	Emission Budgets (tons)	New unit set-aside amount (percent)	Total new unit set-aside amount for new units (tons)	New unit set-aside amount for new units not in Indian country (tons)	Indian country new unit set-aside amount (tons)
Illinois	9,102	3	265	265	
Indiana	12,582	2	254	254	
Kentucky	14,051	2	283	283	
Louisiana	14,818	3	445	430	15
Maryland	1,266	9	115	115	
Michigan	12,290	4	494	482	12
New Jersey	1,253	2	27	27	
New York	3,416	5	171	168	3
Ohio	9,773	3	290	290	
Pennsylvania	8,373	4	339	339	
Virginia	3,897	4	161	161	
West Virginia	12,884	2	261	261	

Table VII.C.3-3: CSAPR NO_X Ozone Season Group 3 New Unit Set-Aside (NUSA) Amounts for 2023

State	Emission Budgets (tons)	New unit set-aside amount (percent)	Total new unit set-aside amount for new units (tons)	New unit set-aside amount for new units not in Indian country (tons)	Indian country new unit set-aside amount (tons)
Illinois	8,179	3	248	248	
Indiana	12,553	2	249	249	
Kentucky	14,051	2	283	283	
Louisiana	14,818	3	445	430	15
Maryland	1,266	9	115	115	
Michigan	9,975	4	398	388	10
New Jersey	1,253	2	27	27	
New York	3,421	5	171	168	3
Ohio	9,773	3	290	290	
Pennsylvania	8,373	4	339	339	
Virginia	3,980	4	166	166	
West Virginia	12,884	2	261	261	

Table VII.C.3-4: CSAPR NO_X Ozone Season Group 3 New Unit Set-Aside (NUSA) Amounts for 2024 and Beyond

State	Emission Budgets (tons)	New unit set-aside amount (percent)	Total new unit set-aside amount for new units (tons)	New unit set-aside amount for new units not in Indian country (tons)	Indian country new unit set-aside amount (tons)
Illinois	8,059	3	244	244	
Indiana	9,564	2	190	190	
Kentucky	14,051	2	283	283	
Louisiana	14,818	3	445	430	15
Maryland	1,348	9	122	122	
Michigan	9,786	4	392	382	10
New Jersey	1,253	2	27	27	
New York	3,403	5	170	167	3
Ohio	9,773	3	290	290	
Pennsylvania	8,373	4	339	339	
Virginia	3,663	4	150	150	
West Virginia	12,884	2	261	261	

b. *Allocations to Existing Units, Including Units that Cease Operation*

The portion of a state budget remaining after the portions reserved for new units have been set aside is allocated among the existing units in the state. EPA in this action is generally allocating allowances to existing units in the Group 3 states following the same methodology for allowance allocation that was used in the CSAPR Update, which relies on historical heat input data and historical emissions data for each eligible existing unit in the state. *See* 81 FR 74564-65. For the new Group 3 trading program, EPA is applying this methodology using historical data through 2019. In response to comments, EPA is also making one change to the approach used to determine which existing units are eligible to receive allocations for a given control period, specifically by excluding certain units with scheduled future retirements from receiving allocations for control periods after the years in which the scheduled retirements are reflected in adjustments to the respective states' emission budgets. For the amounts of the allocations to existing units, see the TSD "Unit Level Allocations and Underlying Data for the Revised CSAPR Update for the 2008 Ozone NAAQS," in the docket for this final rule. Note that this final rule addresses allocations of only the newly created CSAPR NO_X Ozone Season Group 3 allowances issued under and used for compliance in the Group 3 trading program. EPA is not changing allocations of allowances used in the CSAPR NO_X Ozone Season Group 1 or Group 2, NO_X Annual, or SO_2 Group 1 or Group 2 trading programs and is not reopening the previously established default allocations under these programs.

For the purpose of allocations, the CSAPR considered an "existing unit" to be a unit that commenced commercial operation prior to January 1, 2010, and the CSAPR Update considered an "existing unit" to be a unit that commenced commercial operation prior to January 1, 2015. For the 12 states subject to new or amended FIPs in this rulemaking, EPA is considering an "existing unit" for purposes of the Group 3 trading program to be a unit that commenced commercial operation prior to January 1, 2019 (although only existing units that did not cease operation before January 1, 2021 will be eligible to receive allocations of Group 3 allowances as

existing units). This change will allow units commencing commercial operation between 2015 and 2019 to be directly allocated allowances from each state's budget as existing units and will allow the full amounts of the new unit set-asides and Indian country new unit set-asides to be available for any future new units locating in covered states or Indian country. Using data available at the time of the proposed rule's development, EPA identified which units in the proposed Group 3 states that currently submit quarterly emissions reports to EPA appear to be eligible or ineligible to receive allowance allocations as existing units;[189] for this final rule, EPA has updated the lists of units with the most recent data. EPA is not reconsidering which units are "existing units" for purposes of any other CSAPR trading program. Sources in most of the Group 3 states also participate in the CSAPR NO_X Annual and SO_2 Group 1 trading programs, for which an "existing unit" is a unit that commenced commercial operation before January 1, 2010. Thus, a unit that is located in one of these states and that commenced commercial operation between January 1, 2010, and January 1, 2019, would be considered an "existing unit" for purposes of default allowance allocations under the Group 3 trading program but would continue to be considered a "new unit" for purposes of default allowance allocations under the CSAPR NO_X Annual and SO_2 Group 1 trading programs.

As noted earlier in this section, in response to comments EPA is finalizing a change from the allocation methodology used in the existing CSAPR trading programs with respect to which existing units are eligible to receive allocations from the budget for a given control period following retirement. Specifically, in cases where, before finalization of this rule, a unit was scheduled to retire with sufficient certainty for the retirement to be taken into account in EPA's process in this rule for setting the emission budgets for the state where the unit is located, EPA is not providing allocations of allowances to the unit as an existing unit from the budget for any control period starting with the first control period for which the state's emission budget has

[189] *See* "CSAPR NO_X OS Group 3 - Unit Level Allocations and Underlying Data.xls", available in the docket.

been adjusted to reflect the unit's scheduled retirement. This approach to determining eligibility to receive allocations as an existing unit does not apply to other units that may cease operations but whose upcoming retirements were not scheduled as of finalization of this action with sufficient certainty to be reflected in the process for setting the emission budgets. These other units would continue to receive allowance allocations as existing units for five control periods of non-operation, consistent with the allocation methodology used in the existing CSAPR trading programs. EPA provides additional discussion of these aspects of the allocation methodology in the responses to comments at the end of this section. The criteria that EPA has applied to determine whether a unit's scheduled retirement is sufficiently certain to serve as a basis for adjusting emission budgets and unit-level allocations are discussed in section VII.B and in the Ozone Transport Policy Analysis Final Rule TSD.

EPA is applying the default methodology finalized in the CSAPR Update for allocating emission allowances to existing units, updated to use more recent historical data. This methodology allocates allowances to each unit based on the unit's share of the state's heat input, limited by the unit's maximum historical emissions. As discussed in the CSAPR Update, *see* 81 FR 74563-65, EPA finds this allowance allocation approach to be fuel-neutral, control-neutral, transparent, based on reliable data, and similar to allocation methodologies previously used in the CSAPR, the NO_X SIP Call, and the Acid Rain Program.[190] EPA is therefore continuing the application of this default methodology for allocating allowances to existing sources in this final rule.

This final rule uses the average of the three highest years of heat input data out of the most recent five-year period that is considered representative to establish the heat input baseline for each unit.[191] These heat input data are used to calculate each unit's proportion of state-level heat

[190] *See* 40 CFR parts 72-78.

[191] As described in the Unit Level Allowance Allocations TSD and done in prior CSAPR actions, the allocation method uses a five-year baseline in order to improve representation of a unit's normal operating conditions. Using the three highest, non-zero ozone season heat input values

input (the average of the unit's three highest non-zero years of heat input divided by the total of such averages for all eligible units within the given state). In general, EPA applies this proportion to the total amount of existing unit allowances to be allocated to quantify unit-level allocations. However, EPA also constrains each unit's allocation so as not to exceed the unit's maximum historical baseline emissions, calculated as the highest year of emissions out of the most recent eight-year period that is considered representative.[192] In other words, if the allocation that a unit would receive from the emission budget for its state based solely on consideration of the unit's share of the state-level heat input exceeds that unit's maximum historical baseline emissions, the unit's allocation is capped at its maximum historical baseline emissions and the excess allowances are instead allocated to other units in the state whose allocations do not exceed their respective maximum historical baseline emissions, again in proportion to those other units' shares of the state-level heat input. Like the proposed rule, this final rulemaking uses 2015-2019 heat input data and 2012-2019 emissions data for purposes of computing unit-level allocations. Although EPA proposed to update the data used in this action to include 2016-2020 heat input data and 2013-2020 emission data, most comments received on this topic opposed the use of 2020 data as potentially unrepresentative because of changes in economic conditions related to the COVID-19 pandemic. EPA is persuaded that in the unusual circumstance of the pandemic, 2020 data have the potential to be less representative for at least some units than data from earlier control periods, and accordingly EPA is not updating the periods of the data used in the allocation calculations for the final rule to include 2020 data.

Under the CSAPR Update, if, at the time the rule was finalized, a state had already submitted a SIP revision addressing the allocation of CSAPR NO_X ozone season allowances among the

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within the five-year baseline reduces the likelihood that any particular single year's operations (which might not be representative due to outages or other unusual events) determine a unit's allocation.

[192] EPA's allocation methodology also considers whether unit-level allocations should be limited because they would otherwise exceed emission levels that are permissible under the terms of consent decrees. However, in this instance EPA's analysis indicates that consideration of consent decree limits does not alter the unit-level allocations.

units in the state, and if the SIP submission's allocation provisions could be applied to an updated budget, EPA applied the state's preferred allocation methodology to determine the allocation of allowances among that state's units under the final CSAPR Update. Two of the Group 3 states (Indiana and New York) have such methodologies for allocating CSAPR NO_X Ozone Season Group 2 allowances among their units. As under the CSAPR Update, in this final rule EPA is carrying out the intent of these SIPs by establishing initial allowance allocations to existing units under the FIPs for these two states using the allocation methodologies already adopted by the states. EPA received no comments opposing this approach to establishing the default allocation methodologies for these states. EPA notes that, consistent with the approach taken for other states, when applying these states' allocation methodologies, the set of units deemed eligible to receive allocations for each control period as existing units is updated to eliminate any units whose scheduled retirements were considered sufficiently certain to be reflected in the budget-setting process with respect to that control period.

Comment: EPA received a comment suggesting modifications to the proposed methodology for calculating allowance allocations in the event that a unit has fewer than three years of operating history for use in calculating allocations. The commenter suggests that EPA either revise the allocation methodology for existing units so as to recompute existing unit-level allocations for each ozone season through 2024 to take account of additional years of heat input data for units in this situation or else allow units in this situation to receive allocations from new unit set-asides to the extent that their allocations as existing units are less than their actual emissions.

Response: EPA disagrees that the revisions to the allocation approach suggested by the commenter are needed in order to effectuate a reasonable allocation of allowances among all of the units in a given state. The suggested revisions would require promulgating new allocation methodologies for either all existing units or all new units that would differ from the allocation methodologies used in all of the existing CSAPR trading programs and that would change the

allocation to the commenter's unit by at most one allowance for the 2021 control period. EPA notes that any state may submit SIP revisions to replace EPA's default allocations with state-determined allocations if the state would prefer that allowances be allocated differently among the state's units.

Comment: Commenters expressed diverse views on questions concerning allocations of allowances to units with unscheduled future retirements, ranging from recommendations that EPA end such allocations immediately upon a unit's retirement to recommendations that EPA continue allocations to retired units indefinitely.

Response: With respect to units with unscheduled future retirements, EPA proposed to provide allocations of allowances according to the methodology used in the existing CSAPR trading programs. Under this methodology, when a unit ceases operation for two consecutive control periods, it continues to receive allocations for five control periods starting with the first control period of non-operation. After the fifth control period, allowances that would otherwise have been allocated to the unit for future control periods are instead directed to the state's new unit set-aside for each control period, and if the unit happens to resume operation in a future control period, it is eligible to receive allocations only as a "new" unit from the new unit set-aside for that control period. The rationale for continuing to make allocations to sources that have ceased operations for five control periods, rather than ending allocations immediately or extending the allocations indefinitely, is to balance two concerns. The first concern, which tends to suggest reallocating allowances more quickly, is to ensure that allowances are available for new units as the generating fleet evolves. The second concern, which tends to suggest reallocating allowances less quickly, is to ensure that the program's allowance allocation provisions do not distort a unit owner's incentives to pursue what would otherwise be the most economic compliance strategy. Such distortion could occur if a predicted immediate loss of allowance allocations upon closure would give the owner of an otherwise uneconomic unit an incentive to keep the unit in operation just to receive allowance allocations.

None of the comments recommending a change to the approach for allocating allowances to units with unscheduled future retirements advocate allocating the allowances to other units instead. Rather, all of these comments appear to either explicitly or implicitly incorporate an assumption that the recommended change in allocations to the units with unscheduled future retirements would be accompanied by a corresponding change in the total number of allowances made available collectively to all units in the state under the Group 3 trading program. In other words, the comments recommending earlier discontinuation of allocations to retired units are actually advocating for reduced emission budgets implemented through the mechanism of reduced allocations to retired units, while the comments recommending more extended allocations to retired units are actually advocating for increased emission budgets implemented through the mechanism of increased allocations to retired units. EPA was unable to identify any comments advocating for changes in the methodology establishing the allocations to units with unscheduled retirements that were not effectively comments advocating for changes in the amounts of the emission budgets, which EPA considers a different issue. Comments on the amounts of the emission budgets are addressed elsewhere.

Comment: EPA received several comments regarding the question of when to treat a unit with an unscheduled future retirement as retired for purposes of triggering the count of the five control periods for which the unit would continue to receive allocations. One comment suggested that EPA begin counting the five control periods following the unit's announced retirement date rather than when the unit has ceased operating for two consecutive control periods. Other comments suggested that EPA evaluate non-operation on the basis of full calendar years rather than on the basis of control periods (i.e., the ozone season portions of calendar years).

Response: EPA disagrees with these comments. With respect to the suggestion to wait for a retirement announcement even if a unit has ceased operation for two control periods, EPA sees no reason to also wait for a retirement announcement before taking observed information about a unit's actual non-operation into account for purposes of determining allowance allocations. With

respect to the suggestion that EPA evaluate non-operation over full calendar years instead of control periods, EPA has followed the approach of considering a unit's non-operation during the relevant control period for each trading program – in other words, the calendar year for annual programs and the ozone season for seasonal NO_X programs – in all of the existing CSAPR trading programs since 2015 without encountering any problems. Commenters have not identified any new issues with the existing procedures that would justify establishing different procedures for the new Group 3 trading program. The example cited by commenters where a unit might operate during the non-ozone season portion but not the ozone season portion of two consecutive calendar years is neither a new issue nor a significant problem. If such a unit loses its allocation as an existing unit but then operates in a subsequent ozone season, under the Group 3 trading program (as under the other seasonal NO_X trading programs) the unit becomes eligible to receive allocations from the new unit set-aside.

Comment: EPA received several comments concerning units that have already retired. Some commenters recommended that these units should receive allocations under the Group 3 trading program at least until the units had received allocations for a total of five years of operation under the current Group 2 trading program and the new Group 3 trading program, generally citing the rationale described above for why EPA continues to provide allocations for a limited amount of time in the case of units with unscheduled future retirements.

Response: EPA disagrees with these comments. With respect to units that permanently retired before January 1, 2021, EPA will not provide allocations of Group 3 allowances. As noted above, the reason that the existing CSAPR trading programs have provided allowances to units for a period of time following their retirement is to avoid a distortion that immediate discontinuation of allocations otherwise could cause to the owner's incentives in making decisions about the unit's future. Where a unit's owners have already retired a unit, this reason for continuing allowance allocations for some period after retirement no longer applies. Thus, including a provision in the new Group 3 trading program that would allocate allowances to past

retirements would simply redistribute allowances from operating units to retired units for no useful purpose. EPA again notes that any state may submit SIP revisions to replace EPA's default allocations with state-determined allocations if the state would prefer that allowances be allocated differently among the state's units.

Comment: Another commenter on units that have already retired recommended not only that the units continue to receive allocations for a combined five-year period under the Group 2 and Group 3 trading programs but also that after the end of the five-year period EPA should add an equivalent quantity of allowances to the states' new unit set-asides to ensure that sufficient allowances are available for new units.

Response: EPA disagrees with this additional recommendation. As discussed above with respect to the comments received on the methodology for allocating allowances to units with unscheduled future retirements, the recommendation to add allowances to the new unit set-asides is effectively a comment on the amounts of the emission budgets rather than on the allocation methodology, and comments on the amounts of the emission budgets are addressed elsewhere. EPA notes that the process for setting the emission budgets already includes a procedure to ensure that the emission budgets account for estimated emissions from planned new units.

Comment: With respect to units with scheduled future retirements, in the proposed rule EPA proposed to treat the units identically to units with unscheduled future retirements, allocating allowances to these units for five years starting with their first year of non-operation. Commenters observed that EPA was proposing to account for units with scheduled future retirements by reducing emission budgets in the control periods immediately following the retirements and suggested that it would be inconsistent for EPA to treat these units differently for purposes of the budget-setting process and the unit-level allocation process. The commenters implied that allowance markets might not be sufficiently liquid to facilitate the transfer of allowances from retired units to units that continue to operate, and suggested that the reductions

in allocations to the operating units caused by the reductions in the overall emission budgets would constitute an increase in program stringency for the operating units.

Response: EPA disagrees with commenters' implicit assumption that allowance markets will be illiquid and with the suggestion that changes in how allowances are allocated among operating and retired units, as opposed to changes in state emission budgets, represent changes in overall program stringency. However, EPA agrees that it is reasonable to treat the units with scheduled future retirements more consistently across the budget-setting and unit-level allocation processes. Accordingly, in the final action, EPA is accounting for units with scheduled future retirements not only by reducing emission budgets in the control periods immediately following the retirements but also by ending allocations to those retired units in the control periods immediately following the retirements. Just as units that have already retired before 2021 are not included in the set of existing units to which allowances are allocated for 2021 under EPA's default methodology, in the final rule units with scheduled retirements before 2022, 2023, and 2024 are not included in the sets of existing units to which allowances are allocated for 2022, 2023, and 2024, respectively. As with EPA's rationale for not allocating allowances to units that have already retired, allocating allowances to a unit for control periods after the control period in which the unit is already scheduled to retire serves no useful purpose, because in such circumstances there is no potential distortion of economic incentives that needs to be considered. The effect of this change in the final rule is to ensure that allocations to a state's units that continue to operate do not change from control period to control period based solely on the retirements of other units in the state, where those retirements are known and already factored into the budgets. EPA notes that in the unlikely event that one of these retiring units operates in a control period after the control period in which it was scheduled to retire, it would be eligible to receive an allocation of allowances as a "new" unit from the state's new unit set-aside for the control period.

Finally, EPA notes that because this change addresses scheduled future retirements occurring in 2021, 2022, and 2023 that are first reflected in the state emission budgets for the 2022, 2023, and 2024 control periods, respectively, the change first affects unit-level allocations as of the 2022 control period. Under this final rule, every Group 3 state has the ability to establish state-determined unit-level allocations to replace EPA's default unit-level allocations through SIP revisions for any control period after 2021. Thus, any state that that would prefer to allocate allowances for control periods after 2021 to units with scheduled future retirements has the ability to do so through SIP revisions.

c. *Allocations to New Units*

Consistent with the updates to which units are considered to be "existing units" described in section VII.C.3.b, for purposes of this final rule a "new unit" that is eligible to receive allocations from the new unit set-aside (NUSA) for a state includes any covered unit that commences commercial operation on or after January 1, 2019, as well as a unit that becomes covered by meeting applicability criteria subsequent to January 1, 2019; a unit that relocates to a different state covered by a FIP promulgated by this rule; and an "existing" covered unit that loses its allocation as an existing unit due to a scheduled retirement or by otherwise ceasing operation but that resumes operation at some point thereafter. The amounts of allowances initially placed in each new unit set-aside for potential allocation to new units are determined as described in section VII.C.3.a. In addition, any allowances that would otherwise have been allocated to a unit with an unscheduled future retirement that is no longer eligible to receive allocations as an existing unit are redirected to the new unit set-aside for the state in which the unit is located. Units qualifying to receive allocations from a new unit set-aside may receive such allocations starting with the first year they are subject to the allowance-holding requirements of the rule. If the allowances in the NUSA for a given state are not allocated to new units, the allowances are redistributed to the existing units in the state before each compliance deadline.

In the final rule, under the new Group 3 trading program EPA will allocate allowances from each new unit set-aside using a one-round approach that will be carried out after the end of the control period at issue. Under the one-round approach, any eligible units in the state that operated during the control period will be allocated allowances in proportion to their respective emissions during the control period, up to the amounts of those emissions if the NUSA contains sufficient allowances, and not exceeding those emissions. Any allowances remaining in a new unit set-aside after the allocations to new units will be reallocated to the existing units in the state. EPA will issue a notice of data availability concerning the proposed allocations by March 1 following the control period, provide an opportunity for submission of objections, and issue a final notice of data availability and record the allocations by May 1 following the control period, one month before the June 1 compliance deadline. EPA believes this one-round approach for allocating allowances from each state's NUSA to eligible units is both simpler and more equitable that the two-round approach that EPA historically used in all the previous CSAPR trading programs. The existing CSAPR trading programs are being amended to also adopt the one-round approach starting with the 2021 control periods. The differences between the two-round and one-round procedures and reasons for adopting the revisions are discussed in section VII.C.8.b.[193]

Comment: EPA received comments concerning allocation of the portions of new unit set-asides composed of allowances redirected to the new unit set-asides from existing units that have retired and lost their allocations. Some commenters suggested that while EPA should make these allowances available to new units, EPA should not reallocate these allowances to existing units after the completion of allocations to eligible new units, or should reallocate allowances only where the existing units demonstrated emission rates at or below the levels EPA used in setting

[193] EPA proposed and requested comment on implementing the simplified NUSA allocation procedure as of the 2023 and 2021 control periods, respectively. No comments were received, and EPA is clarifying the regulations by implementing the simplified procedure as of the 2021 control period. For further discussion, see section VII.C.8.b.

the state budgets. Other commenters supported the proposed approach of reallocating the allowances to existing units, as provided under the existing CSAPR trading programs.

Response: After consideration of the comments, EPA is finalizing the provisions that allow all allowances in the new unit set-asides, including allowances redirected from retired units, to be reallocated to existing units. As with many of the comments received concerning allocations to existing units, these comments are effectively advocating for reductions in the overall emission budgets through the mechanism of reduced allocations to certain units. In the final rule, this issue applies only the allowances no longer allocated to units with unscheduled future retirements, because the allowances formerly allocated to units with scheduled future retirements will be removed from the budgets for control periods after the scheduled retirements instead of being added to the new unit set-asides for the future control periods. EPA has not included a mechanism in this rule to adjust the emission budgets over time to account for either units with unscheduled future retirements or the construction of unplanned new units and is not prepared at this time to reduce the budgets for units with unscheduled future retirements without consideration of whether and how to increase the budgets for the construction of unplanned new units. Although EPA has determined that it is reasonable in this rule to reduce the emission budgets over time to account for units with scheduled future retirements, this is in part because EPA's budget-setting process also accounts for the construction of planned new units over time.

d. Allocations to New Units in Indian Country.

Clean Air Act programs in Indian reservations and other areas of Indian country over which a tribe or EPA has demonstrated that a tribe has jurisdiction generally may be implemented either by a tribe through an EPA-approved tribal implementation plan (TIP) or by EPA through a FIP. Tribes may, but are not required to, submit TIPs. Under EPA's Tribal Authority Rule (TAR), 40 CFR 49.1-49.11, EPA is authorized to promulgate FIPs for sources in Indian country as necessary or appropriate to protect air quality if a tribe does not submit and receive EPA approval of a TIP. *See* 40 CFR 49.11(a); *see also* 42 U.S.C. 7601(d)(4). To date, no tribes have

sought approval of a TIP implementing the good neighbor provision at CAA section 110(a)(2)(D)(i)(I) with respect to the 2008 ozone NAAQS. EPA has therefore determined that it is necessary and appropriate for EPA to implement the FIPs in any affected Indian reservations or other areas of Indian country over which a tribe has jurisdiction. However, there are no existing units that would qualify as "covered units" in Indian country located in the Group 3 states under this final rule.

EPA is generally applying the CSAPR Update approach for allocating allowances to any new units located in Indian country, with parallel modifications to those described above with respect to unit-level allocations from the new unit set-asides for units not in Indian country. Under this approach, allowances to possible future new units located in Indian Country will be allocated by EPA from an Indian country new unit set-aside established for the Indian country (if any) within each state's borders. The amounts of allowances initially placed in each Indian country new unit set-aside for potential allocation to new units are determined as described in section VII.C.3.a. Because states generally have no SIP authority in these areas, EPA will continue to administer the allocation of allowances to any sources that locate in such areas of Indian country within a state's borders over which a tribe or EPA has demonstrated that a tribe has jurisdiction, even if the state submits a SIP to replace the applicable FIP for the sources in the state.

EPA will allocate allowances from each Indian country new unit set-aside using a one-round approach that will be carried out after the end of the control period at issue. Under the one-round approach, any eligible units in the area of Indian country that operated during the control period will be allocated allowances in proportion to their respective emissions during the control period, up to the amounts of those emissions if the Indian country NUSA contains sufficient allowances, and not exceeding those emissions. Unallocated allowances from the Indian country new unit set-aside for Indian country within a particular state's borders will be returned to the state's new unit set-aside and allocated according to the methodology for that new unit set-aside. EPA believes this one-round approach for allocating allowances from each Indian country NUSA to

eligible units is both simpler and more equitable than the two-round approach that EPA historically used in all the previous CSAPR trading programs. The existing CSAPR trading programs are being amended to also adopt the one-round approach starting with the 2021 control periods. The differences between the two-round and one-round procedures and reasons for adopting the revisions are discussed in section VII.C.8.b.[194]

Comment: Some commenters suggested alternatives to the provisions concerning the Indian country new unit set-asides. These commenters suggested that EPA should consolidate all allowances held back from all state budgets for potential new sources in Indian country into a single newly-created new unit set-aside for all Indian country within the borders of all states covered by the new Group 3 trading program in order to provide a clearer separation between state and tribal jurisdictions. The commenters further suggested that if any allowances in the consolidated Indian country set-aside are not allocated to new units, the allowances either should be retired or should be sold, with the sale proceeds dedicated to tribes through grant programs.

Response: EPA disagrees with these comments. There are no existing EGUs in Indian country within the borders of any state covered by the Group 3 trading program. All of the allowances being held back for potential allocation to new units in Indian country are being held back from state emission budgets. These budgets were determined based on the projected emissions of the existing units in the states after accounting for emission reductions achievable through implementation of the selected control strategy (with adjustments for known changes to the fleet of units such as scheduled future retirements of existing units and construction of planned new units). Because the allowances added to the Indian country new unit set-asides are being held back from the overall state budget amounts that would otherwise be allocated among each state's existing units, EPA believes the most reasonable disposition for these allowances if

[194] EPA proposed and requested comment on implementing the simplified NUSA allocation procedure as of the 2023 and 2021 control periods, respectively. No comments were received, and EPA is clarifying the regulations by implementing the simplified procedure as of the 2021 control period. For further discussion, see section VII.C.8.b.

they are not allocated to potential new units in Indian country is to return them to the states from whose emission budgets the allowances were held back, after which the allowances can be redistributed in accordance with the procedures used to allocate the remainder of those states' budgets.

With respect to maintaining separation between state and tribal jurisdictions, EPA believes that the regulations for the new Group 3 trading program already maintain a clear separation between the new unit set-asides for each state and the Indian country new unit set-asides for Indian country within the borders of certain states, with the consequence that no greater clarity of separation would be achieved by consolidating the various Indian country new unit set-asides established under the new trading program into a single new unit set-aside for all Indian country within the borders of all states covered by the Group 3 trading program. Further, EPA believes such an approach would be likely to cause confusion because it would differ from the established approach already being implemented in all the existing CSAPR trading programs, where a separate Indian country new unit set-aside is established for any Indian country within the borders of any individual state covered by the trading program.

4. Transitioning from Existing CSAPR NO_X Ozone Season Group 2 Trading Program

This section discusses four sets of provisions that EPA is implementing in order to address the transition of sources from the Group 2 trading program to the Group 3 trading program. First, to address the fact that the effective date for the final action in this rulemaking will fall after the start of the ozone season on May 1, 2021, and to ensure that under these circumstances the Group 3 trading program can be implemented for the full May-September ozone season in 2021 without imposing retroactive emission reduction requirements, EPA will allocate additional allowances, and make corresponding adjustments to states' 2021 assurance levels, so as to offset the otherwise applicable emission reduction requirements under this rulemaking for the portion of the 2021 ozone season occurring before the final rule's effective date. Second, in order to facilitate the continued use of market-based trading programs as the

compliance mechanism for sources covered by this action while ensuring an appropriate level of stringency in the Group 3 trading program, EPA is implementing a process by which an initial bank of CSAPR NO_X Ozone Season Group 3 allowances will be created through the conversion of certain banked CSAPR NO_X Ozone Season Group 2 allowances allocated for the control periods in 2017 through 2020. Third, to provide additional compliance flexibility in extreme circumstances, EPA is creating a safety valve mechanism that would allow Group 3 sources to exchange additional 2017-2020 Group 2 allowances for Group 3 allowances at a higher conversion ratio. Finally, to maintain the previously established levels of stringency of the Group 2 trading program for the states and sources that remain subject to that program, CSAPR NO_X Ozone Season Group 2 allowances equivalent in amount and usability to the vintage year 2021-2024 CSAPR NO_X Ozone Season Group 2 allowances previously recorded in the compliance accounts for sources in the new Group 3 region are being recalled.

a. *Supplemental Allowance Allocations to Avoid Retroactive Emission Reduction Requirements*.

Although EPA anticipates that this final rule will be published in the *Federal Register* by early April 2021, before the start of the 2021 ozone season on May 1, 2021, the effective date of the rule will fall after May 1, 2021 because of the requirements of the Congressional Review Act (CRA), 5 U.S.C. 801-808. Under CRA section 801(a)(3), a "major rule," as defined under the CRA, generally may not take effect sooner than 60 days after the date of publication in the *Federal Register* (or, if later, 60 days after the date on which Congress receives a report on the final rule from EPA). Under CRA section 804(2), a "major rule" includes any rule that the Office of Management and Budget (OMB) finds is "economically significant" under Executive Order 12866, that is, a rule likely to result in an annual effect on the economy of $100 million or more. Because this rule is projected to result in annualized benefits greater than $100 million per year, as discussed in section VIII of the preamble, OMB has found that the rule is "economically significant." It is thus a "major rule" for CRA purposes, with the result that the rule's effective date will occur after the start of the 2021 ozone season.

EPA finds that, notwithstanding that the final rule's effective date will be after May 1, 2021, it will nevertheless serve the public interest and greatly aid in administrative efficiency for most elements of the Group 3 trading program – specifically, all elements of the trading program other than the elements designed to establish more stringent emissions limitations for the sources in Group 3 states – to start on May 1, 2021. This will facilitate implementation of the Group 3 trading program in an orderly manner for the entire 2021 ozone season and reduce compliance burdens and potential confusion. Each of the CSAPR trading programs for ozone season NO_X is designed to be implemented over an entire ozone season. Implementing the transition from the Group 2 trading program to the Group 3 trading program in a manner that required the covered sources to participate in the Group 2 trading program for part of the 2021 ozone season and the Group 3 trading program for the remainder of that ozone season would be complex and burdensome for sources. Attempting to address the issue by splitting the Group 2 and Group 3 requirements into separate years is not a viable approach, because EPA has no legal basis for releasing the Group 3 sources from the emission reduction requirements found to be necessary in the CSAPR Update for a portion of the 2021 ozone season, and EPA similarly has no legal basis for deferring implementation of the 2021 emission reduction requirements found to be necessary under this rule until 2022. Moreover, the requirements of the Group 2 trading program and the Group 3 trading program are substantively identical as to almost all provisions, such that with respect to those provisions, a source will not need to alter its operations in any manner or face different compliance obligations as a consequence of a transition from the Group 2 trading program to the Group 3 trading program. Thus, EPA believes that no substantive concerns regarding retroactivity arise from implementing the Group 3 trading program starting on May 1, 2021, so long as those aspects of the Group 3 trading program that *do* meaningfully differ from the analogous aspects of the Group 2 trading program – that is, the relative stringencies of the two trading programs, as reflected in the emissions budgets and associated assurance levels – are applied only as of the effective date of the final rule.

Thus, with respect to two aspects of the final rule, EPA is making the following adjustments in 2021 ozone season obligations in order to ensure that no new requirements are imposed on any regulated parties prior to the effective date of the final rule.

To cause the more stringent budgets of the Group 3 trading program to apply only after the effective date of the final rule, EPA will make supplemental allocations of Group 3 allowances to Group 3 sources for the portion of the 2021 ozone season occurring before the effective date of the final rule. The total amounts of the supplemental allowances available for allocation to the sources in each state will be calculated by multiplying the difference between the state's Group 2 and Group 3 budgets by the fraction of the 2021 ozone season, measured in days, occurring before the final rule's effective date. The state's total amount of supplemental allowances will then be allocated among the state's existing units as if the supplemental allowances had been included in the state's 2021 emissions budget for the Group 3 trading program. The allocations of supplemental allowances will be recorded at the same time as the allocations from the budget.

To cause the more stringent assurance levels of the Group 3 trading program to apply only after the effective date of the final rule, EPA will include an increment in each state's assurance level for 2021 in addition to the state's emissions budget and variability limit for 2021. The amount of the increment will be computed as 1.21 times the total amount of supplemental allowances determined for the state as described above, where 1.21 is the ratio of the Group 2 state assurance levels to the Group 2 state budgets and is also the ratio of the Group 3 state assurance levels to the Group 3 state budgets. In the event of an exceedance of a state's assurance level, the allocations of supplemental allowances and the increment to the state's variability limit will also be taken into account for purposes of the calculations used to apportion responsibility for any exceedance of a state's assurance level among the owners and operators of the state's sources.

In all respects other than the allocation of supplemental Group 3 allowances and the addition of an increment to the states' assurance levels, EPA is implementing the Group 3 trading

program for the 2021 control period exactly as the program would be implemented for any other control period. Thus, allocations of Group 3 allowances from each state's emissions budget to existing and new units are being made for the entire 2021 ozone season (i.e., May 1, 2021, through September 30, 2021), emissions will be monitored and reported for the entire 2021 ozone season, and as of the allowance transfer deadline for the 2021 control period (i.e., June 1, 2022) each source will be required to hold in its compliance account vintage-year 2021 Group 3 allowances not less than the source's emissions of NO_X during the entire 2021 ozone season. Because of the supplemental allowances allocated for the portion of the 2021 ozone season before the rule's effective date, EPA finds that implementing the program in this manner will substantively apply the final rule's emission reduction requirements only from the rule's effective date. Similarly, because of the increment to the states' assurance levels for 2021, EPA finds that implementing the trading program in this manner will substantively apply the final rule's more stringent assurance levels only from the rule's effective date. Moreover, any efforts undertaken by a source to reduce its emissions during the portion of the 2021 ozone season before the effective date of the rule will aid the source's compliance by reducing the amount of Group 3 allowances that the source will need to hold in its compliance account as of the allowance transfer deadline, increasing the range of options available to the source for meeting its compliance obligations under the Group 3 trading program.

EPA requested comment on this approach for implementing the Group 3 trading program in a manner that would apply the substantive increases in stringency established under the final rule on and after, but not before, the final rule's effective date. No commenters opposed this approach.

b. *Creation of Initial Group 3 Allowance Bank*

For this rulemaking, EPA is creating a limited initial bank of allowances that can be used for compliance in the CSAPR NOx Ozone Season Group 3 Trading Program by converting certain allowances banked in 2017-2020 under the CSAPR NOx Ozone Season Group 2 Trading

Program at a conversion ratio determined by a formula. Any such conversion of banked allowances from the Group 2 trading program for use in the Group 3 trading program must ensure that implementation of the Group 3 trading program will result in NO_X emission reductions sufficient to address significant contribution in the 12 linked Group 3 states, while also providing industry certainty (and obtaining an environmental benefit) through continued recognition of the value of saving allowances through early reductions in emissions. EPA's approach to balancing these concerns in the CSAPR Update through the conversion of banked allowances from the CSAPR trading program for ozone season NO_X emissions was upheld in *Wisconsin v. EPA*, *see* 938 F.3d at 321.

Similar to the approach taken in the CSAPR update, EPA is creating the initial bank of allowances for the Group 3 trading program through a one-time conversion of banked Group 2 allowances. The allowances in the initial Group 3 bank will be allocated for the 2021 control period and will therefore be useable in that control period or any subsequent control period. Because the purpose of an initial bank is to assist in compliance flexibility without relaxing the program stringency identified as appropriate to address states' obligations under the good neighbor provision, EPA's objective is to set the target amount for the initial bank at a level high enough to accommodate year-to-year variability in operations and emissions, as reflected in states' variability limits, but not high enough to allow sources collectively to plan to emit in excess of the collective state budgets. For this rulemaking, as proposed, EPA is determining that an initial bank amount approximately equal to the sum of the states' variability limits is a reasonable level to accomplish this objective, given the expectation that sources would generally seek to carry a bank of roughly that amount forward from year to year in order to retain a comparable degree of compliance flexibility in subsequent control periods.[195] Further, because

[195] When establishing a similar initial bank under the CSAPR Update, EPA set the target bank amount at 1.5 times the sum of the states' variability limits. *See* 81 FR at 74557-60. Experience under that trading program indicates that a smaller initial bank would have provided sufficient flexibility, as the bank grew in each control period of the trading program and the prices of

emission reductions from some of the emission controls that EPA has identified as appropriate to use in setting budgets are first reflected in the 2022 state budgets rather than the 2021 state budgets, EPA is basing the initial bank target amount on the sum of the states' 2022 variability limits rather than the 2021 variability limits. This approach results in an initial bank target amount of 21,777 allowances, computed on the basis of a full ozone season.

As discussed in section VII.C.4.a, the effective date of this rule will occur after the start of the 2021 ozone season, and adjustments are being made to ensure that the increased stringency of this rule's state budgets and state assurance levels (i.e., the sums of the budgets and variability limits) takes effect only after the rule's effective date. Consistent with these other adjustments, and as proposed, the initial bank target amount will be similarly prorated. For example, if the effective date of the final rule is June 1, 2021, which would be after the first 31 days of the 153-day ozone season have passed, the full-season initial bank target amount of 21,777 allowances would be prorated to an initial bank target amount of 17,365 allowances.[196] EPA notes that prorating the bank amount in this manner will not reduce sources' compliance flexibility for the 2021 ozone season, because the amounts of Group 3 allowances that sources will receive for the portion of the 2021 ozone season before the rule's effective date will be based on the existing Group 2 trading program budgets. The Group 2 budgets exceed the sources' collective 2019 emissions by over 38,000 tons (and exceed the sources' 2020 emissions by almost 60,000 tons), indicating potentially surplus allowances well above the full-season initial bank target amount of 21,777 allowances. Thus, although the prorating procedure will reduce the amount of Group 3

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allowances remained well below the estimated control costs EPA used to establish the budgets under that rule. Additionally, allowance prices under that trading program were $500-$600 per allowance when initially recorded (roughly one-third of the $1,600/ton cost threshold used in developing the Group 2 budgets), indicating that the initial bank created by the conversion may have been too large to ensure incentives for continuing implementation of the control strategies contemplated under that rulemaking.

[196] The portion of the ozone season from June 1 through September 30 has 122 days (153 – 31 = 122), which is 79.74 percent of all the days in the ozone season (122 ÷ 153 = 0.7974). Multiplying the full-season initial bank target amount of 21,777 allowances by 79.74 percent yields a prorated target amount for the initial bank of 17,365 allowances.

allowances that sources will receive in the form of an initial bank, the reduction in the quantity of these allowances will be more than offset by the supplemental Group 3 allowances that will be allocated in excess of sources' recent historical emission levels for the portion of the ozone season before this final rule's effective date.

Taking the same approach as was followed in the CSAPR Update, EPA will allocate the new Group 3 allowances constituting the initial bank through a conversion process in which Group 2 allowances allocated for the 2017 through 2020 control periods and banked under the existing Group 2 trading program will be exchanged for Group 3 allowances allocated for the 2021 control period at a uniform conversion ratio determined by a formula. The conversions will be carried out at the level of individual sources and general accounts, in each case using the same uniform conversion ratio. By creating the new Group 3 allowances through the conversion of previously banked Group 2 allowances, the bank creation mechanism rewards holders of banked Group 2 allowances for conducting emission reduction activities that contributed to the creation of those banked allowances as well as for financially supporting emission reductions activities at other sources through allowance purchases. Creating the new Group 3 allowances through conversion of previously banked Group 2 allowances also helps preserve the stringency of the Group 2 trading program for the states that remain covered by that trading program at levels consistent with the stringency found to be appropriate to address those states' good neighbor obligations with respect to the 2008 ozone NAAQS in the CSAPR Update.

Under EPA's proposed approach for creation of the bank, the conversion formula would have used the total quantity of 2017-2020 Group 2 allowances being converted as the numerator and the total quantity of 2021 Group 3 allowances being created as the denominator. EPA also proposed to give holders of 2017-2020 Group 2 allowances complete flexibility to choose how many of those allowances they wanted to include in the conversion process, making the formula numerator entirely dependent on those choices. An unavoidable consequence of this proposed flexibility was that EPA would have been unable to predict the conversion ratio until holders

finalized their choices shortly before the conversion date. In the proposed rule, the formula denominator was also uncertain to a lesser degree because of the then-unknown magnitude of the prorating adjustment affecting the quantity of 2021 Group 3 allowances being created, although this uncertainty will be resolved as of publication of the final rule in the *Federal Register*. Commenters requested that EPA provide greater certainty concerning the conversion process, as discussed later in this section; further, commenters submitted no comments asking EPA to finalize the proposed flexibility for Group 2 allowance holders.

After consideration of comments, EPA is not finalizing the proposed flexibility for Group 2 allowance holders to decide how many Group 2 allowances to include in the conversion process and is instead finalizing a formula for the conversion ratio based on an alternative offered for comment that provides greater certainty. Under the alternative being finalized, the formula numerator is the portion of the total existing bank of 2017-2020 Group 2 allowances attributable to the Group 3 states, which is more specifically defined as: (1) The sum of the budgets of the Group 3 states under the Group 2 trading program for the 2017-2020 control periods, plus (2) the portion of the initial Group 2 bank target amount attributable to the Group 3 states, minus (3) the emissions of sources in the Group 3 states for the 2017-2020 control periods.[197] The formula denominator in the final rule continues to be based on the initial Group 3 bank target amount, but reflects the full-season target amount instead of the target amount after the prorating adjustment. The final rule also provides for the value computed from the formula to be rounded down to the nearest whole number. Using data as of January 2021, the formula numerator will be 186,014 allowances[198] and the formula denominator will be 21,777

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[197] As stated in the proposed rule, the rationale for defining the formula numerator in this particular way is to preserve the intended stringency of the Group 2 trading program for the states and sources that will continue to participate in that program. *See* 85 FR at 69018.

[198] Under the Group 2 trading program, the sum of the 2017-2020 state budgets for the 12 Group 3 states is 680,872 tons (the sum of the budgets for the Group 3 states for 2017 is 170,218, and 170,218 × 4 = 680,872). The portion of the initial Group 2 bank target amount attributable to the Group 3 states is 53,619 tons (the sum of the variability limits for the Group 3 states for 2017 is 35,746, and 35,746 × 1.5 = 53,619). The sum of the Group 3 states' reported ozone season NO_X

allowances, yielding a rounded conversion ratio of 8:1. In other words, the result of applying the formula in the final rule is that eight 2017-2020 Group 2 allowances will be exchanged for each 2021 Group 3 allowance created in the initial bank.[199] Continuing the previous example, if the rule's effective date is June 1, 2021 and the initial Group 3 bank target amount after prorating is therefore 17,365 allowances, then 138,920 Group 2 allowances[200] would be removed from the accounts where those allowances are held and 17,365 Group 3 allowances would be recorded in the same accounts.

In addition to requesting greater certainty about the conversion process, commenters also indicated an interest in receiving the allowances in the initial Group 3 bank more quickly than would have occurred under the proposed rule. In response to these comments, EPA has advanced the conversion process schedule such that the conversions will be completed more than two months earlier than proposed and shortly after recordation of Group 3 allowance allocations from the state budgets for the 2021 control period for most sources. Approximately 45 days after the rule's effective date, EPA will temporarily suspend acceptance of transfers of Group 2 allowances. Before resuming acceptance of such transfers, EPA will allocate Group 3 allowances up to the initial Group 3 bank target amount to Group 3 sources at the 8:1 conversion ratio in proportion to the amounts of 2017-2020 Group 2 allowances held in each such source's compliance account immediately before the conversion.[201] If the Group 3 sources' compliance accounts do not collectively hold enough Group 2 allowances to exchange for the full target amount of the initial Group 3 bank at the 8:1 conversion ratio, EPA will allocate Group 3

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emissions for 2017 through 2020 is approximately 548,477 tons. Based on these data, the formula numerator would be 680,782 + 53,619 – 548,477 = 186,014 allowances.

[199] 186,014 ÷ 21,777 = 8.54, which rounds down to 8.

[200] 17,365 × 8 = 138,920. EPA notes that under this example, the deducted Group 2 allowances would constitute roughly half of all banked 2017-2020 Group 2 allowances projected to remain in all accounts (including the compliance accounts for sources that will continue to be covered under the Group 2 trading program in control periods after 2020) after deductions for compliance with the Group 2 trading program for the 2020 control period.

[201] Group 2 allowances held in Group 2 sources' compliance accounts will not be affected by the conversion process.

allowances up to the remainder of the initial Group 3 bank target amount to general accounts at the same 8:1 conversion ratio in proportion to each such general account's holdings of 2017-2020 Group 2 allowances immediately before the conversion.[202] For each Group 3 allowance allocated ard recorded in a given account, EPA will deduct from the same account eight 2017-2020 Group 2 allowances on a first-in, first-out basis. After recording the Group 3 allowance allocations and the 2017-2020 Group 2 allowance deductions, EPA will resume acceptance of transfers of Group 2 allowances.

Comment: Some commenters stated that EPA should not create an initial bank of Group 3 allowances because of a consequent reduction in stringency of the rule.

Response: EPA disagrees with the comment that it should not create an initial bank of Group 3 allowances under the new trading program. EPA believes creating an initial bank of Group 3 allowances will provide Group 3 sources flexibility to comply with the stringency of the new trading program in light of year-to-year variability in unit operations and emissions. Creating the initial bank of Group 3 allowances through the conversion of banked 2017-2020 Group 2 allowances also provides sources within the Group 3 states with an opportunity to benefit under the Group 3 trading program from their efforts to bank allowances under the Group 2 trading program. Failure to establish an initial bank could reduce the incentive to achieve early reductions and bank allowances in the future by signaling to market participants that banked allowances accrued under existing trading programs will hold no value in any future new or modified trading program. EPA's approach of establishing an initial Group 3 bank in an amount equal to the sum of the new trading program's aggregate variability limits is similar to the

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[202] If the Group 3 sources' compliance accounts and the general accounts combined do not collectively hold enough Group 2 allowances to exchange for the full target amount of the initial Group 3 bank at the 8:1 conversion ratio, the total quantity of Group 3 allowances created would be less than the initial Group 3 bank target amount. However, the outcome would be reasonable because it would occur only if owners of Group 3 sources in fact were not sufficiently interested in receiving banked Group 3 allowances to hold the required quantity of 2017-2020 Group 2 allowances in the appropriate accounts.

methodology followed in the CSAPR Update that was upheld against challenge in the *Wisconsin* decision.

Comment: Some commenters stated that EPA should create a larger bank, possibly by allowing some or all banked Group 2 allowances to be used for compliance in the Group 3 trading program on a 1-for-1 basis instead of being converted to Group 3 allowances at a conversion ratio greater than 1:1.

Response: EPA disagrees with these comments. Creating an overly large initial bank of Group 3 allowances, regardless of the conversion ratio used, would dilute the intended control stringency and emission budgets established in this rule to address Group 3 states' obligations under the good neighbor provision with respect to the 2008 ozone NAAQS. Certainly, given the large existing bank of 2017-2020 Group 2 allowances, allowing these Group 2 allowances to be used for compliance in the Group 3 trading program at a 1:1 ratio would unacceptably dilute the control stringency and emission budgets established by EPA in this rulemaking. As explained earlier in this section, EPA believes that creating an initial bank of Group 3 allowances in an amount not exceeding the sum of the Group 3 state's variability limits, and doing so through conversion of Group 2 allowances at an 8:1 ratio, is consistent with both achieving the requisite level of stringency and encouraging continued use of banking.

Comment: A commenter suggested that EPA should base the initial Group 3 bank target amount not on the sum of Group 3 states' variability limits for 2022, but instead on the sum of Group 3 states' variability limits for 2021.

Response: EPA disagrees with this comment. The initial Group 3 allowance bank is intended to accommodate year-to-year variability in operations and emissions, and EPA expects that on average, sources collectively will aim to carry forward the bank from year to year so that in each subsequent control period, sources will continue to have the flexibility needed to accommodate year-to-year variability in operations and emissions. Unlike the 2022 state emission budgets, the 2021 state emission budgets do not reflect emission reductions achievable from application of

the full control stringency that EPA is finding necessary to resolve the Group 3 states' obligations under the good neighbor provision with regard to the 2008 ozone NAAQS. Because the Group 3 bank is intended to be an element of the Group 3 trading program on an ongoing basis, not just in 2021, as a matter of program design EPA considers it appropriate for the amount of the initial Group 3 bank to represent the full control stringency found to be necessary under this rule. For this reason, it is appropriate to base the initial Group 3 bank target amount on the sum of states' variability limits for the 2022 control period rather than the 2021 control period.

EPA also views creation of the larger initial Group 3 bank suggested by the commenter as unnecessary to ensure compliance is achievable. After consideration of the prorating adjustment discussed earlier in this section, using the 2021 variability limits instead of the 2022 variability limits as the basis for determining the size of the initial Group 3 bank would increase the size of the bank by less than 600 allowances. In the very unlikely event that Group 3 sources are unable to reduce their emissions in the 2021 control period sufficiently to meet their compliance obligations by holding the Group 3 allowances allocated from the state emission budgets and from the initial Group 3 bank, sources would be able to obtain well over 600 additional Group 3 allowances for 2021 compliance by electing to use the safety valve mechanism discussed in section VII.C.4.c.

Comment: Some commenters stated that under the proposed conversion procedures, sources would not know the quantities of Group 3 allowances they would receive in sufficient time to rely on that information for purposes of planning their compliance activities.

Response: EPA acknowledges that the large degree of flexibility offered to holders of Group 2 allowances under the proposed rule created uncertainty regarding one aspect of the process for creating the initial Group 3 bank – specifically, the conversion ratio that would be used to create the initial Group 3 bank. As discussed above, the final rule modifies the formula for the conversion ratio so that the value of the ratio (i.e., 8:1 based on 2017-2020 data) is knowable as

of the date of this final rule. In the final rule EPA has also advanced the schedule for carrying out the conversion process so that the allowances in the initial Group 3 bank will be recorded in accounts by 120 days after publication of the final rule in the *Federal Register*, or roughly two months before the end of the 2021 ozone season.

However, EPA disagrees that uncertainty regarding either the conversion ratio or the amount of Group 3 allowances received by any individual source from the initial bank has any meaningful effect on sources' ability to plan their compliance activities. As an initial matter, under a trading program, the most cost-effective compliance strategy for a source is generally to reduce its emissions if it believes it can do so for less than the market price of an allowance and then to purchase allowances as needed to cover its remaining emissions or to sell surplus allowances to other sources that cannot reduce emissions as cheaply. Because allowance prices under any trading program are uncertain, sources must always make these compliance planning decisions based on their best allowance price projections while recognizing the existence of price uncertainty. For purposes of forecasting future allowance prices under the Group 3 trading program, the only relevant question concerning the initial Group 3 bank is the total quantity of allowances that will be created in that bank, because that total amount will factor into the market balance between the overall supply of allowances and the overall demand for allowances. EPA's proposed rule provided essentially complete information about the total quantity of allowances that would be created in the initial Group 3 bank, and the final rule closely follows the proposed rule on this point. In short, nothing about EPA's proposed or final approach to creation of the initial Group 3 bank increased the uncertainty about future Group 3 allowance prices beyond the degree of uncertainty that is inherent in trading program-based approaches to environmental regulation.

Further, even if a particular source decides to not to avail itself of the flexibility provided by a trading program and instead chooses to plan its compliance strategy based on the number of allowances it expects to receive as zero-cost allocations, the quantity of allowances that a source

might receive from the initial Group 3 bank would necessarily play a relatively modest role in such a strategy. Of the total allowances available for 2021 compliance that will be allocated to sources from the state emission budgets and from the initial Group 3 bank, more than 80 percent will come from the state emission budgets, and for subsequent control periods the proportion that will come from the state emission budgets will be 100 percent. In the proposed rule, EPA included extensive information on the proposed unit-level allocations from the proposed state emission budgets, including both a complete description of the allocation methodology and spreadsheets showing the allocations to each individual unit that would result from applying that methodology to the proposed state emission budgets. In the final rule, the only change to the allocation methodology is that, because certain units with scheduled future retirements will no longer receive allocations starting with the 2022, 2023, or 2024 control period when their scheduled retirements are taken into account for budget-setting purposes, the remaining units in those states that continue to operate will receive larger shares of the respective state budgets in those later control periods. It was clear from the proposed rule that any allocations of allowances from the initial Group 3 bank would be considerably smaller and therefore less relevant for an allocation-based compliance planning process than the allocations of allowances from the state emission budgets. This is consistent with the intended purpose of the initial Group 3 bank, which is to accommodate year-to-year variability in operations and emissions but not to allow for collective planned emissions to exceed the state emission budgets.

c. *Opportunity to Obtain Additional Group 3 Allowances Through Further Conversion of Group 2 Allowances ("Safety Valve" Mechanism)*

As discussed in section VI.B.1, in order to further ensure allowance market liquidity and compliance flexibility, in this final rule EPA is creating a "safety valve" mechanism that will allow Group 3 sources to access additional Group 3 allowances for the 2021 control period. The new Group 3 allowances would be created in exchange for banked 2017-2020 Group 2 allowances that have not already been exchanged for Group 3 allowances as part of the process

of creating the initial Group 3 allowance bank described in section VII.C.4.b. The safety valve mechanism will be available for the month of February 2022, which falls approximately midway between October 30, 2021 (the deadline for reporting of emissions for the last three months of the 2021 control period under the Group 3 trading program) and June 1, 2022 (the deadline by which Group 3 sources must hold Group 3 allowances in their compliance accounts sufficient to cover their emissions during the 2021 control period). The conversion ratio used in the safety valve mechanism will be 18:1 – in other words, 18 banked 2017-2020 Group 2 allowances would have to be surrendered in exchange for each Group 3 allowance issued through this mechanism. No Group 2 allowances will be exchanged for Group 3 allowances under the safety valve mechanism except as specifically requested by the designated representative for a Group 3 source.

EPA is establishing the safety valve mechanism and has designed its features to be responsive to comments on the proposed rule. Even without the safety valve mechanism, EPA considers it extremely unlikely that any source would be unable to achieve compliance with the Group 3 trading program's requirements. Sources have a flexible combination of options to achieve compliance, including reducing emission at the source, using the allowances allocated to the source from the applicable state's emissions budget and from the initial Group 3 bank, and purchasing allowances from other sources that have made emission reductions. However, given the short time-frame before implementation of the Group 3 trading program in the 2021 ozone season, inclusion of a safety valve mechanism will increase sources' confidence in their ability to comply. EPA views this as an enhancement to the trading program consistent with mechanisms included in other emissions trading programs, as long as the mechanism is implemented in a manner that does not weaken the ability of the trading program to address Group 3 states' obligations under the good neighbor provision with respect to the 2008 ozone NAAQS. The assurance that the safety valve mechanism does not undermine the purpose of the trading program is provided by the use of the 18:1 conversion ratio.

As discussed in section VII.C.4.b., EPA received comments expressing widely varying perspectives concerning whether and, if so, what quantities of Group 3 allowances should be made available for compliance flexibility beyond the allowances allocated from state budgets. Some industry commenters advocated for a mechanism that would allow them to purchase additional allowances at a price of $1,600 per allowance, consistent with EPA's estimate of the cost per ton of emission reductions achievable through optimization of installed SCR controls. In contrast, some commenters from downwind states advocated for no issuance of any Group 3 allowances beyond the state emission budgets, but one of these commenters also suggested that if any such Group 3 allowances were issued through the exchange of banked Group 2 allowances, the conversion ratio should reflect the relation of the estimated cost of the control strategy reflected in the Group 3 budgets to the market price of Group 2 allowances. The commenter suggested a conversion ratio of 11:1 based on the ratio of the same estimated $1,600 cost per ton of emission reductions available from SCR optimization to an estimated average market price for Group 2 allowances of $137 per Group 2 allowance during 2019 and 2020.[203] After consideration of these comments, EPA is setting the conversion ratio for the safety valve mechanism at 18:1, consistent with the principles underlying the recommendations of the commenters but using updated data. For the numerator of the conversion ratio, EPA is using $1,800 per ton, based on the estimated cost of the emission reductions available from SNCR optimization that are reflected in the final state emissions budgets. For the denominator of the updated ratio, EPA is using $100 per ton, reflecting an estimated average market price over the period from March 2020 through January 2021 for Group 2 allowances allocated for the 2020 control period.[204] EPA finds, first, that this conversion ratio is high enough to avoid interfering

[203] *See* Comments of Delaware Department of Natural Resources and Environmental Control (EPA-HQ-OAR-2020-0272-0122) at 14-15.

[204] According to price index values developed by SNL Energy and reported by S&P Global Market Intelligence, prices for 2020 Group 2 allowances ranged between $58 and $75 from March 2020 until mid-November 2020. The reported price index values then rose to $200 by year-end 2020 and to $475 for part of January 2021. The average of the reported daily price

with incentives for sources to reduce emissions through the use of the control technologies identified as appropriate for establishing states' emissions budgets in this action, and second, that it is low enough to provide additional flexibility that, in extreme circumstances, could facilitate compliance by some sources. Based on the total quantity of banked 2017-2020 Group 2 allowances expected to remain after completion of the deductions necessary for Group 2 trading program compliance for the 2020 control period and the deductions made in the process of creating the initial Group 3 bank, EPA estimates that the maximum quantity of Group 3 allowances that could be created through the safety valve mechanism will be in the range of 7,000 to 9,000 Group 3 allowances. This degree of conversion of Group 2 allowances would be highly unlikely to occur, and indeed, EPA considers it more likely that no source will need to make use of the safety valve mechanism.

Under the final regulations, any use of the safety valve mechanism will be at the initiative of the designated representatives of Group 3 sources. Throughout the month of February 2022, EPA will accept requests from designated representatives for allocations of additional Group 3 allowances under the safety valve mechanism. It will be the responsibility of the Group 3 designated representatives to obtain any Group 2 allowances needed for this purpose, either by using any 2017-2020 Group 2 allowances remaining in the Group 3 source's compliance account after the initial Group 3 bank conversion process, transferring 2017-2020 Group 2 allowances held in the account of a Group 2 source under the control of the same owners and operators, or purchasing 2017-2020 Group 2 allowances from third parties. Holders of Group 2 allowances are not obligated to sell or transfer their allowances to effectuate such conversions if they prefer to retain such allowances for use in the Group 2 trading program.[205] As soon as practicable on or

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index values from March 2, 2020 (the first day of the price index series for Group 2 allowances allocated for the 2020 control period) through January 30, 2021 is $105, which EPA has rounded to $100 for purposes of computing the safety valve mechanism conversion ratio.

[205] EPA sees no reason for concern that the creation of the safety valve mechanism for the Group 3 trading program, based on conversion of Group 2 allowances to Group 3 allowances, would adversely impact sources that will continue to participate in the Group 2 trading program. In both

after March 1, 2022, if a request was received from the designated representative for a particular Group 3 source, EPA will deduct 2017-2020 Group 2 allowances in sets of 18 from the source's compliance accounton a first-in, first-out basis up to the maximum number of sets of 2017-2020 Group 2 allowances available in the account. For each set of 2017-2020 Group 2 allowances deducted from a Group 3 source's compliance account, EPA will record one Group 3 allowance in the account.

d. *Recall of Group 2 Allowances Allocated for Control Periods After 2020*.

To maintain the previously established levels of stringency of the Group 2 trading program for the states and sources that remain subject to that program under this action, EPA is recalling CSAPR NO_X Ozone Season Group 2 allowances equivalent in amount and usability to all vintage year 2021-2024 CSAPR NO_X Ozone Season Group 2 allowances previously allocated to sources in Group 3 states and recorded in the sources' compliance accounts. Consistent with the proposed rule, the recall provisions established in this final rule apply to all sources in Group 3 states in whose compliance accounts CSAPR NO_X Ozone Season Group 2 allowances for a control period from 2021 through 2024 were recorded, including sources where some or all units have permanently retired or where the previously recorded 2021-2024 allowances have been transferred out of the compliance account.[206] However, in response to comments discussed at the end of this section, and as further detailed below, the final rule provides a more flexible

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the 2019 and 2020 control periods, NO_X emissions from the set of states that will continue to participate in the Group 2 trading program were at least 15 percent below the sum of the emission budgets for those states, indicating that continued compliance with the Group 2 trading program's requirements is readily achievable even before consideration of the existing bank of Group 2 allowances. In addition, EPA expects that few if any banked Group 2 allowances will be removed from the Group 2 trading program in order to create additional Group 3 allowances through the safety valve mechanism because it is extremely likely that Group 3 sources will be able to fully comply with the Group 3 trading program's requirements by reducing emissions, using allowances allocated from the Group 3 state emission budgets and from the initial Group 3 allowance bank, and trading with other Group 3 sources.

[206] EPA also proposed to recall Group 2 allowances equivalent to all 2021-2024 Group 2 allowances that were allocated to non-source entities in Group 3 states and recorded in the entities' general accounts. This portion of the proposed rule is not being finalized because EPA has determined that no such allocations of 2021-2024 Group 2 allowances to any non-source entity in a Group 3 state have been recorded.

compliance schedule intended to accommodate any sources that have already transferred the previously recorded 2021-2024 allowances out of their compliance accounts and provides greater flexibility as to the vintage years of Group 2 allowances that sources may surrender to achieve compliance. As requested in comments, the final rule also clarifies how the recall provisions apply in instances where a source and its allowances have been transferred to different parties and adds more specificity regarding the procedures that EPA will follow to implement the recall.

Under the Group 2 trading program regulations, each Group 2 allowance is a "limited authorization to emit one ton of NO_X during the control period in one year," where the relevant limitations include the EPA Administrator's authority "to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act." 40 CFR 97.806(c)(6)(ii). In this action, the Administrator is determining that, in order to effectively implement the Group 2 trading program as a compliance mechanism through which states not subject to the Group 3 trading program may continue to meet their obligations under CAA section 110(a)(2)(D)(i)(I) with regard to the 2008 ozone NAAQS, it is necessary to limit the use of Group 2 allowances equivalent in quantity and usability to all Group 2 allowances previously allocated for the 2021-2024 control periods and recorded in the compliance accounts of sources in Group 3 states. The Group 2 allowances that have already been allocated to sources in Group 3 states for the 2021-2024 control periods and recorded in the sources' compliance accounts represent more than half of the total quantity of Group 2 allowances that have been allocated and recorded for the 2021-2024 control periods. Because allowances can be freely traded, if the use of the 2021-2024 Group 2 allowances previously recorded in Group 3 sources' compliance accounts (or equivalent Group 2 allowances) were not limited, the effect would be the same as if EPA had issued to sources in the states that will remain covered by the Group 2 trading program a quantity of allowances available for compliance under the 2021-2024 control periods more than double the levels that EPA determined to be appropriate emissions budgets for these states in the CSAPR Update.

Through the use of banked allowances, the excess Group 2 allowances would affect compliance under the Group 2 trading program in control periods after 2024 as well. Continued implementation of the Group 2 trading program at levels of stringency consistent with the levels contemplated under the CSAPR Update therefore requires that EPA limit the use of the excess allowances, as EPA is doing in this final rule.

In the recall provisions finalized in this action, limitations on the use of the excess 2021-2024 Group 2 allowances are being implemented through requirements to surrender, for each 2021-2024 Group 2 allowance recorded in a Group 3 source's compliance account, one Group 2 allowance of equivalent usability under the Group 2 trading program. The surrender requirements apply to the owners and operators of the Group 3 sources in whose compliance account the excess 2021-2024 Group 2 allowances were initially recorded. In general, each source's current owners and operators will be required to comply with the surrender requirements for the source by ensuring that sufficient allowances to complete the deductions are available in the source's compliance account by one of two possible deadlines discussed below. However, an exception is provided if it is demonstrated to EPA's satisfaction that a source's current owners and operators obtained ownership and operational control of the source in a transaction that did not include rights to direct the use and transfer of some or all of the 2021-2024 Group 2 allowances allocated and recorded (either before or after that transaction) in the source's compliance account. The final rule provides that in such a circumstance, with respect to the 2021-2024 Group 2 allowances for which rights were not included in the transaction, the surrender requirements apply to the most recent former owners and operators of the source for which such a demonstration is not made. Because in this situation a source's former owners and operators might lack the ability to access the source's compliance account for purposes of complying with the surrender requirements, the former owners and operators will instead be

allowed to meet the surrender requirements with Group 2 allowances held in a general account.[207]

To provide as much flexibility as possible consistent with the need to limit the use of the excess Group 2 allowances, for each 2021-2024 Group 2 allowance recorded in a Group 3 source's compliance account, EPA will accept the surrender of either the same specific 2021-2024 Group 2 allowance or any other Group 2 allowance with equivalent (or greater) usability under the Group 2 trading program. Thus, a surrender requirement with regard to a Group 2 allowance allocated for the 2021 control period may be met through the surrender of any Group 2 allowance allocated for the 2021 control period or the control period in any earlier year – in other words, any 2017-2021 Group 2 allowance.[208] Similarly, the surrender requirement with regard to a 2022 Group 2 allowance, a 2023 Group 2 allowance, or a 2024 Group 2 allowance may be met through the surrender of any 2017-2022 Group 2 allowance, any 2017-2023 Group 2 allowance, or any 2017-2024 Group 2 allowance, respectively.

Owners and operators subject to the surrender requirements can choose from two possible deadlines for meeting the requirements. The first deadline will be [**INSERT DATE 75 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**]. As soon as practicable or after this date, EPA will make a first attempt to complete the deductions of Group 2 allowances required for each Group 3 source from the source's compliance account. EPA will deduct Group 2 allowances first to address any surrender requirements for the 2021 control period, then to address any surrender requirements for the 2022, 2023, and 2024 control periods in turn. When deducting Group 2 allowances to address the surrender requirements for each control period, EPA will first deduct allowances allocated for that control period and then will deduct allowances allocated for each successively earlier control period. This order of deductions

[207] EPA is currently unaware of any source that would need to use this flexibility but, in response to comments, has included the option in the final rule to address the theoretical possibility of such a situation.

[208] The first control period for the Group 2 trading program was in 2017.

is intended to ensure that whatever Group 2 allowances are available in the account are applied to the surrender requirements in a manner that both maximizes the extent to which all of the source's surrender requirements will be met and also ensures that any Group 2 allowances left in the source's compliance account after completion of all required deductions will be the earliest allocated, and therefore most useful, Group 2 allowances possible. Among the Group 2 allowances allocated for a given control period, EPA will first deduct allowances that were initially recorded in that account, in the order of recordation, and will then deduct allowances that were transferred into that account after having been initially recorded in some other account, in the order of recordation.

Following the first attempt to deduct Group 2 allowances to address Group 3 sources' surrender requirements, EPA will send a notification to the designated representative for each such source (as well as any alternate designated representative) indicating whether all required deductions were completed and, if not, the additional amounts of Group 2 allowances usable in the 2021, 2022, 2023, and/or 2024 control periods that must be held in the appropriate account by the second surrender deadline of September 15, 2021. Each notification will be sent to the email addresses most recently provided to EPA for the recipients and will include information on how to contact EPA with any questions. Consistent with the proposed rule, the final rule provides that no allocations of Group 3 allowances will be recorded in a source's compliance account until all the source's surrender requirements with regard to 2021-2024 Group 2 allowances have been met. For this reason, the principal consequence to a source of failure to fully comply with the surrender requirements by the [**INSERT DATE 75 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**] surrender deadline is that any Group 3 allowances allocated to the units at the source for the 2021 and 2022 control periods that would otherwise have been recorded in the source's compliance account by [**INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**] will not be recorded as of that recordation date.

If all surrender requirements of 2021-2024 Group 2 allowances for a source have not been met in EPA's first attempt, EPA will make a second attempt to complete the required deductions from the source's compliance account (or from a specified general account, in the limited circumstance noted above) as soon as practicable on or after September 15, 2021. The order in which Group 2 allowances will be deducted will be the same as described above for the first attempt.

If the second attempt to deduct Group 2 allowances to meet the surrender requirements through deductions from the source's compliance account (or from a specified general account) is unsuccessful for a given source, the final regulations provide that as soon as practicable on or after November 15, 2021, to the extent necessary to address the unsatisfied surrender requirements for the source, EPA will deduct the 2021-2024 Group 2 allowances that were initially recorded in the source's compliance account from whatever accounts the allowances are held in as of the date of the deduction, except for any allowances where, as of January 31, 2021, no person with an ownership interest in the allowances was an owner or operator of the source, was a direct or indirect parent or subsidiary of an owner or operator of the source, or was directly or indirectly under common ownership with an owner or operator of the source. Although this consequence of a source's failure to hold the allowances necessary to comply with the surrender requirements in the source's compliance account (or a specified general account) by the surrender deadline was not expressly stated in the recall provisions in the proposed rule, the provision merely makes explicit a remedy for a source's noncompliance that is inherent in EPA's existing authority under 40 CFR 97.806(c)(6)(ii) to limit the use of any Group 2 allowance as necessary or appropriate to address the requirements of CAA section 110(a)(2)(d)(i)(I). Before making any deduction under this provision, EPA will send a notification to the authorized account representative for the account in which the allowance is held and will provide an opportunity for submission of objections concerning the data upon which EPA is relying. In EPA's view, this provision does not unduly interfere with the legitimate expectations of

participants in the allowance markets because the provision would not be invoked in the case of any allowance that was transferred to an independent party in an arms-length transaction before EPA's intent to recall 2021-2024 Group 2 allowances became widely known. The provision would apply only to a Group 2 allowance that, as of January 31, 2021, was still controlled either by the owners and operators of the source in whose compliance account it was initially recorded or by an entity affiliated with such an owner or operator. EPA believes that by January 31, 2021, which was three months after publication of the proposed rule for this rulemaking in the *Federal Register*, all market participants had ample opportunity to become informed of the proposed rule provisions to recall 2021-2024 Group 2 allowances recorded in Group 3 sources' compliance accounts.[209]

The final rule includes the proposed provision under which failure of a source's owners and operators to comply with the surrender requirements is subject to enforcement as a violation of the Clean Air Act, with each allowance and each day of the control period constituting a separate violation.

To eliminate any possible uncertainty regarding the amounts of Group 2 allowances allocated for the 2021-2024 control periods (or earlier control periods) that the owners and operators of each Group 3 source must surrender under the final rule's recall provisions, EPA has prepared a list of the sources in Group 3 states in whose compliance accounts allocations of 2021-2024 Group 2 allowances were recorded with the amounts of the allocations recorded in each such compliance account for each control period from 2021 through 2024. An additional list shows, for each Group 3 source, the specific Group 2 allowances (batched by serial number) allocated for each control period and recorded in the source's compliance account and indicates whether,

[209] Even before publication of the proposed rule, EPA posted information on its websites to notify market participants that a pending rulemaking could have consequences for the value and usability of Group 2 allowances. The posted locations included the electronic portal that authorized account representatives use to enter allowance transfers for recordation by EPA in the Allowance Management System. Additionally, EPA emailed a notice identifying the possibility of such consequences to the representatives for all Allowance Management System accounts.

as of January 31, 2021, that batch of allowances was held in the source's compliance account, in an account believed to be partially or fully controlled by a related party (i.e., an owner or operator of the source or an affiliate of an owner or operator of the source), or in an account believed to be fully controlled by independent parties. The lists are in a spreadsheet entitled "Recall of CSAPR NO_X Ozone Season Group 2 Allowances", available in the docket for this action. After the first and second surrender deadlines, EPA intends to update the lists to indicate for each Group 3 source whether or not the surrender requirements for the source under the recall provisions have been fully satisfied. EPA will post the updated lists on a publicly accessible website to ensure that all market participants have the ability to determine which specific 2021-2024 Group 2 allowances initially recorded in any given Group 3 source's compliance account do or do not remain subject to potential deduction to address the source's surrender requirements under the recall provisions.

Comment: One commenter requested that EPA provide greater flexibility for complying with the recall provisions in the case of sources that may have already sold the 2021-2024 Group 2 allowances previously recorded in the sources' compliance accounts. The commenter suggested that such sources might have difficulty acquiring the Group 2 allowances needed to comply with the surrender requirements by the proposed surrender date, which would have been 60 days after publication of the final rule in the *Federal Register*.

Response: In the final regulations, EPA has modified the recall provisions to provide two deadlines for compliance with the surrender requirements: [**INSERT DATE 75 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**] and September 15, 2021. The final provisions also provide greater flexibility than the proposed rule by allowing the surrender requirements to be satisfied not only with Group 2 allowances allocated for the same control periods as the excess 2021-2024 Group 2 allowances, but also with Group 2 allowances allocated for earlier control periods. Any source may miss the first surrender deadline with no consequence except that any Group 3 allowances allocated to the units at the source will not be

recorded in the source's compliance account by the otherwise applicable recordation date of [**INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**], but instead will be recorded after the source has fully complied with the surrender requirements. The second surrender deadline is expected to be more than five months after the publication date – and six months after the signature date – of this final rule. EPA believes that the second deadline provides sufficient time for any source that has sold the 2021-2024 Group 2 allowances initially recorded in the source's compliance account to acquire replacement Group 2 allowances for purposes of complying with the recall provisions. Further, because at the time of the proposed rule in this action, the large majority of Group 3 sources subject to the recall provisions still held all 2021-2024 Group 2 allowances initially recorded in their compliance accounts, EPA expects that most sources will be able to easily comply with the first deadline simply by not transferring those Group 2 allowances to another account before that deadline. Inclusion of the first deadline thus ensures that EPA will be able to record most Group 3 allowances within 30 days after the effective date of this final rule.

Comment: One commenter suggested that retired sources that have already sold the 2021-2024 Group 2 allowances recorded in their compliance accounts should not be subject to the recall provisions on the grounds that "requiring already-retired units to purchase allowances would be antithetical to the goal of a trading program, in which allowances can be freely traded." The commenter also suggested that there might be no willing sellers of Group 2 allowances from whom the retired sources could purchase replacement Group 2 allowances to comply with the recall provisions. The commenter further asserted that the proposed rule did not provide adequate notice that the recall provisions would apply to retired sources because the proposed regulatory text included a cross-reference to an existing rule section that addresses retired units.

Response: EPA disagrees with this comment. As explained earlier in this section, recall of Group 2 allowances equivalent in quantity and usability to the 2021-2024 Group 2 allowances allocated to Group 3 sources is necessary to maintain the previously established levels of

stringency of the Group 2 trading program for the states and sources that remain subject to that program, because not recalling the excess allowances would be equivalent to increasing the budgets for the remaining Group 2 states, contrary to the stringency of the requirements established for those states in the CSAPR Update. The necessity of recalling the excess Group 2 allowances exists regardless of whether the sources in whose compliance accounts the excess allowances were initially recorded continue to operate or have retired.

The commenter provides no support for the assertion that requiring retired sources to comply with the recall provisions is somehow inconsistent with a trading program, and EPA sees no basis for the assertion. EPA has made clear that the recall provisions apply to the owners and operators of the sources in whose compliance accounts the excess Group 2 allowances were initially recorded (and who paid nothing for those Group 2 allowances), not to persons who may have purchased the excess Group 2 allowances in arms-length transactions before EPA provided general notice of the proposed recall. By honoring arms-length market transactions for Group 2 allowances, EPA is executing the recall in a manner that is entirely consistent with the normal freedom to trade allowances under EPA's trading programs.

The commenter's suggestion that there might be no willing sellers of Group 2 allowances is speculative and contrary to EPA's experience in administering every trading program implemented by the Agency over the course of the last 25 years, starting with the Acid Rain Program. The commenter's statement that "some Group members are already finding that Group 2 allowances are not readily available because companies are holding onto them" is vague and insufficient to counter EPA's reasonable expectation, supported by decades of experience, that Group 2 allowances will be available for purchase in the six-month period following finalization of this action. To the extent that public notice of proposed changes to regulatory requirements may have temporarily affected activity in the market for Group 2 allowances, any such temporary effects would indicate only that, as intended, public notice made market participants aware of the possibility of changed regulatory requirements. The fact that some market

participants may view waiting for the additional information contained in the final regulatory requirements as sensible does not serve as a reasonable basis for assertions that allowance markets will be illiquid when those final regulatory requirements are made public.

The commenter's assertion that the proposed rule did not provide adequate notice that the recall provisions would apply to retired sources is belied by the fact that the commenter, as well as other commenters, understood that the recall provisions were proposed to apply to retired sources and submitted comments on that aspect of the proposed rule. Moreover, the commenter offers no basis to support the notion that any person reviewing the proposed rule would reasonably have believed that the proposed recall did *not* apply to retired sources. The section of the preamble to the proposed rule that discusses the recall provisions states that the recall was proposed to apply with respect to "all" 2021-2024 Group 2 allowances allocated not only to *sources* in Group 3 states but also to *non-source entities* in Group 3 states. There is no language indicating that any source, retired or not, would be treated differently under the provisions than any other source, and the inclusion of non-source entities left no room for an interpretation that continued production of electricity and emissions was a prerequisite for applicability of the recall. The fact that, in order to be as clear as possible that the recall applied to sources with retired units, the proposed regulatory text included a cross-reference to an existing regulatory text provision identifying permanently retired units, but did not use the exact words "permanently retired units," does not somehow manufacture a lack of notice. The use of cross-references is common and appropriate in regulatory text. Further, the proposed regulatory text would have encompassed 2021-2024 Group 2 allowances allocated to retired units even without the clarifying cross-reference.

Comment: One commenter requested that the regulations lay out in greater detail the specific procedures EPA would follow to administer the recall. The commenter sought clarification specifically as to how the recall provisions would apply in instances where a source or its allowances had been sold, potentially to different purchasers.

Response: As described earlier in this section, the final regulations include more detailed provisions concerning the procedures EPA will follow to deduct Group 2 allowances to implement the surrender requirements. Consistent with the proposed rule, the final surrender requirements apply with respect to all Group 3 sources in whose compliance accounts 2021-2024 Group 2 allowances were recorded, regardless of whether some or all units at the source may have retired or whether the source or its allowances may have been sold. However, in response to the comment, the final regulations provide that if it is demonstrated to EPA's satisfaction that the current owners and operators of a source obtained ownership and operational control of the source in a transaction that did not include rights to direct the use and transfer of some or all of the 2021-2024 Group 2 allowances allocated and recorded (either before or after that transaction) in the source's compliance account, then with regard to the 2021-2024 Group 2 allowances for which such rights were not included in the transaction, the surrender requirements apply to the most recent former owners and operators of the source for which such a demonstration is not made. EPA believes that this provision identifies the appropriate parties to whom the surrender requirements should apply in the situation identified by the commenter, consistent with EPA's intent expressed in the proposed rule for the requirements to apply to the owners and operators of the Group 3 source in whose compliance account the excess 2021-2024 Group 2 allowances were initially recorded.

Comment: One commenter requested that where a Group 3 source has purchased additional 2021-2024 Group 2 allowances beyond those initially recorded in the source's compliance account, the additional 2021-2024 Group 2 allowances should not be subject to the recall provisions but should remain available for transfer to a Group 2 source for future use in the Group 2 trading program. Alternatively, the commenter requested that EPA convert the additional 2021-2024 Group 2 allowances to Group 3 allowances that could be used in the Group 3 trading program.

Response: Under the final procedures for implementing the recall provisions, where a Group 3 source continues to hold the 2021-2024 Group 2 allowances initially recorded in the source's compliance account and also holds additional 2021-2024 Group 2 allowances purchased in an arms-length transaction before January 31, 2021, surrender of the initially recorded 2021-2024 Group 2 allowances would satisfy the recall provisions and the purchased 2021-2024 Group 2 allowances would remain available for transfer to a Group 2 source for future use in the Group 2 trading program. The purchased 2021-2024 Group 2 allowances would not be available for use in the Group 3 trading program, either through conversion to Group 3 allowances or otherwise.

5. Compliance Deadlines

As discussed in section IV.C. of this preamble, the final rule requires sources to comply with the revised respective NO_X emission budgets for the ozone seasons (May 1 through September 30 of each year) in 2021 and subsequent years in order to ensure that these necessary NO_X emission reductions are implemented to assist in downwind states' attainment and maintenance of the 2008 ozone NAAQS. The increased stringency of Group 3 budgets for the 2021 ozone season will take effect on the effective date of this action, which will be part of the way into the 2021 ozone season, but before the July 20, 2021 Serious area attainment date. Thus, under the new CSAPR NOx Ozone Season Group 3 Trading Program established in this rulemaking, the first affected control period is the 2021 ozone season (i.e. May 1, 2021, through September 30, 2021).

Under all CSAPR trading programs, compliance at the source level is achieved by each source surrendering by a compliance deadline—defined in the new Group 3 trading program regulations at 40 CFR 97.1002 as the "allowance transfer deadline"—a number of allowances equal to the source's total emissions for the preceding ozone-season control period.

For previous control periods under the existing CSAPR trading programs, the allowance transfer deadline was March 1 of the year following the control period. In this action, EPA is establishing the allowance transfer deadline for the Group 3 trading program – and for all the

other CSAPR trading programs starting with the 2021 control periods[210] – to be June 1 of the year after the control period.[211] For example, under this coordinated deadline, June 1, 2022, is the date by which Group 3 sources will be required to hold Group 3 allowances for the 2021 control period. The reason for the change from earlier practice is to accommodate the change in the methodology and schedule for allocating allowances to units from the new unit set-asides that will start with the 2021 control periods. Under that revised methodology, allowances from the new unit set-asides will be recorded in sources' compliance accounts by May 1 of the year following the control period, and some additional period after that date is needed to allow for allowance purchases in case a source receives fewer allowances from the new unit set-aside than anticipated. Under the previous regulations at 40 CFR 97.812, the deadline for recording second-round allocations from the new unit set-asides was February 15, two weeks before the March 1 allowance transfer deadline. EPA believes sources will have greater trading flexibility if this interval is extended to a full month, resulting in the allowance transfer deadline of June 1. Extension of the allowance transfer deadline is not expected to have any impact on the achievement of the CSAPR trading programs' environmental objectives because it will not affect the quantities of allowances that sources will be required to hold as of the deadline or the total quantities of allowances that will be made available for compliance in advance of the deadline. Further discussion is provided in sections VII.C.3.c and VII.C.8.b.

EPA received no comments on the Group 3 trading program compliance deadlines for holding allowances after the end of each control period. Comments concerning the

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[210] As discussed in section VII.C.8.b., in order to minimize unnecessary differences between the CSAPR trading programs and the similarly structured Texas SO_2 Trading Program, EPA is revising the allowance transfer deadline under the Texas SO_2 Trading Program. However, EPA did not propose to revise the allowance transfer deadline under the Acid Rain Program for SO_2 emissions (which is February 29 in leap years and March 1 in other years).

[211] EPA proposed and requested comment on implementing the revisions as of the 2023 and 2021 control periods, respectively. No comments were received, and EPA is simplifying the regulations by implementing the revisions as of the 2021 control period. For further discussion, see section VII.C.8.b.

implementation of emission budgets that require emission reductions as of the 2021 ozone season instead of a later ozone season are addressed in sections VI.B.1 and VI.C.1.

6. Monitoring and Reporting

Monitoring and reporting in accordance with the provisions of 40 CFR part 75 are required for all units subject to all the CSAPR trading programs, which includes all units covered under this final rule. Consistent with these existing requirements, the monitoring system certification deadline by which monitors are installed and certified for compliance use under the CSAPR NO_X Ozone Season Group 3 Trading Program generally will be May 1, 2021, the beginning of the first control period in this final rule, with potentially later deadlines for units that commence commercial operation less than 180 days before that date. Units already in compliance with monitoring system certification requirements for the Group 2 trading program will not have to undertake any additional activities to certify their monitoring systems for the Group 3 trading program. Similarly, Group 3 units will not have to undertake additional activities to update any facility account demographic information. All account demographic information of current Group 2 facility accounts will be transitioned to the Group 3 trading program, including an account's designated representative, alternate designated representative, and any agents. The first period in which emission reporting is required under the new Group 3 trading program will be the quarter that includes May 1, 2021, (i.e., the second quarter of the year that covers April, May, and June). These monitoring and reporting requirements and deadlines are analogous to the current deadlines under the CSAPR NO_X Ozone Season Group 2 Trading Program.

Under 40 CFR part 75, a unit has several options for monitoring and reporting, including 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 individual monitoring, recordkeeping, and reporting requirements specified in 40 CFR part 75.

Each CEMS must undergo rigorous initial certification testing and periodic quality assurance testing thereafter, including the use of relative accuracy test audits 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, 40 CFR part 75 requires electronic submission of quarterly emissions reports to the Administrator, in a format prescribed by the Administrator. The reports will contain all of the data required concerning ozone season NO_X emissions.

Units currently subject to the CSAPR NO_X Ozone Season Group 2 Trading Program are required to monitor and report NO_X emissions in accordance with 40 CFR part 75, so covered sources in the Group 3 trading program will simply continue the same monitoring and reporting practices as required by 40 CFR part 75 under the Group 2 trading program.

7. Recordation of Allowances

EPA is establishing a schedule for recording allocations of vintage-year 2021 CSAPR NO_X Ozone Season Group 3 allowances to ensure that affected sources are allocated vintage year 2021 allowances as soon as practicable and well before the 2021 ozone season compliance deadline (June 1, 2022). EPA is also establishing a schedule for recording allocations of vintage-year 2022 CSAPR NO_X Ozone Season Group 3 allowances that accommodates sources' expectation to receive these allowance allocations soon after the publication of this final rule while also ensuring that states have the opportunity to develop and submit to EPA SIP revisions concerning allocations of allowances for vintage year 2022 and later.

Specifically, allocations to existing units for the first control period outlined in this final rule (i.e. the 2021 ozone season) will be recorded by [**INSERT DATE 90 DAYS AFTER THE DATE OF PUBLICATION IN THE FEDERAL REGISTER**]. EPA will also record allocation of vintage year 2022 allowances by this deadline for all units except those in states that provided to EPA, by [**INSERT DATE 60 DAYS AFTER THE DATE OF PUBLICATION IN THE FEDERAL REGISTER**], a letter indicating an intent to submit a

SIP revision that, if approved, would substitute state-determined allocations for the default allocations determined by EPA for the 2022 control period. The deadline for states to submit to EPA such SIP revisions will be September 1, 2021. If a state that notified EPA of its intent to submit a SIP revision fails to submit such a SIP by the SIP submission deadline, EPA will record vintage year 2022 FIP allocations to the sources in the state no later than September 15, 2021. No later than March 1, 2022, EPA will record the SIP allocations of vintage year 2022 Group 3 allowances for states with approved SIP revisions. By this same deadline, EPA will record the FIP allocations of vintage year 2022 Group 3 allowances for states whose SIP revisions are not approved by EPA.

The recordation deadline for vintage year 2021 allowances to existing units is anticipated to be approximately 11 months before the date by which sources are required to hold allowances sufficient to cover their emissions for that first control period (June 1, 2022, as discussed above). This schedule allows sources ample time to engage in allowance trading activities consistent with their preferred compliance strategies. EPA will record vintage year 2023 and 2024 Group 3 allowance allocations to existing units by July 1, 2022, and vintage year 2025 and 2026 Group 3 allowance allocations by July 1, 2023. By July 1 of each year after 2023, EPA will record Group 3 allowance allocations to existing units for the control period in the third year after the year of recordation. The recordation deadlines will apply to recordation of both allocations based on the default allocation provisions and allocations provided by states pursuant to approved SIP revisions.

As an exception to all of the recordation deadlines that would otherwise apply, EPA will not record any allocations of Group 3 allowances in a source's compliance account unless that source has complied with the requirements to surrender previously allocated 2021-2024 Group 2 allowances. The surrender requirements are necessary to maintain the previously established levels of stringency of the Group 2 trading program for the states and sources that remain subject to that program under this final rule. EPA finds that it is reasonable to condition the recordation

of Group 3 allowances on compliance with the surrender requirements because the condition will spur compliance and will not impose an inappropriate burden on sources. EPA considers establishment of this condition, which will facilitate the continued functioning of the Group 2 trading program, to be an appropriate exercise of the Agency's authority under CAA section 301 (42 U.S.C. 7601) to prescribe such regulations as are necessary to carry out its functions under the Act.

EPA notes that recording allocations to existing units generally three years in advance under the new Group 3 trading program represents a change from the historical recordation schedules for allocations to existing units under the other CSAPR trading programs, which have generally provided for such allocations to be recorded four years in advance. In this action, EPA is revising the recordation schedules under the other CSAPR trading programs, as well as the similarly structured Texas SO_2 Trading Program, so as to generally record allocations to existing units three years in advance. This change will take effect with allocations for the 2025 control periods, which will be recorded by July 1, 2022, instead of by July 1, 2021. The reason for the change is the discovery of a timing conflict in all the CSAPR trading programs between the requirement to record four years in advance and the separate provisions governing allocations to existing units that have ceased operations. Under those separate provisions, EPA is unable to determine whether some existing units are entitled to continue to receive their allowance allocations more than three years in advance, and thus EPA does not have the information necessary to record all the allocations four years in advance. Further discussion of this revision to the schedule for recording allocations to existing units is provided in section VII.C.8.a.

With respect to allocations of allowances from the new unit set-asides and Indian country new unit set-asides, in previous control periods under the existing CSAPR trading programs, EPA has recorded these allocations in two rounds, by August 1 of the control period and by February 15 of the year following the control period. In this action, EPA is adopting a new one-round process for determining allocations from the new unit set-asides and Indian country new

unit set-aside, and consistent with that revised allocation process, starting with allocations for the 2021 control periods,[212] EPA will record all allocations from these set-asides as of May 1 in the year following the control period, in both the Group 3 trading program and the existing CSAPR trading programs, and both where the allocations are determined by EPA and where the allocations are provided by states pursuant to approved SIP revisions. Further discussion is provided in sections VII.C.3.c and VII.C.8.b.

8. Conforming Revisions to Regulations for Existing Trading Programs

As discussed elsewhere in this preamble, in most respects, but not in every respect, the provisions of the CSAPR NO_X Ozone Season Group 3 Trading Program at subpart GGGGG of 40 CFR part 97 parallel the provisions that have applied for control periods through 2020 under the other CSAPR trading programs[213] at subparts AAAAA through EEEEE of part 97 established in the CSAPR rulemaking and the CSAPR Update and, to a somewhat lesser extent, the provisions of the similarly structured Texas SO_2 Trading Program established at subpart FFFFF of part 97. This section discusses the provisions of the new Group 3 trading program that differ from the provisions that have applied under the existing CSAPR trading programs, beyond the provisions discussed in section VII.C.4. addressing the transition to the new Group 3 trading program. This section also discusses various minor corrections and clarifications to the regulations.

To clarify and facilitate administration of the regulations for all of EPA's trading programs in 40 CFR part 97, and to maintain their parallel nature to the extent possible, EPA is amending the

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[212] EPA proposed and requested comment on implementing the revisions as of the 2023 and 2021 control periods, respectively. No comments were received, and EPA is simplifying the regulations by implementing the revisions as of the 2021 control period. For further discussion, see section VII.C.8.b.

[213] The existing CSAPR trading programs and their respective subparts of 40 CFR part 97 are: CSAPR NO_X Annual Trading Program (subpart AAAAA), CSAPR NO_X Ozone Season Group 1 Trading Program (subpart BBBBB), CSAPR SO_2 Group 1 Trading Program (subpart CCCCC), CSAPR SO_2 Group 2 Trading Program (subpart DDDDD), and CSAPR NO_X Ozone Season Group 2 Trading Program (subpart EEEEE).

regulations for the existing trading programs to reflect certain revisions as noted in the sections of this preamble describing the new Group 3 trading program. Section VII.C.8.a. addresses the revisions discussed in section VII.C.7. to address a timing conflict in the current regulations for all of the existing programs. Section VII.C.8.b. addresses the revisions discussed in sections VII.C.3.c and VII.C.3.d to simplify and improve the process for allocating allowances from the new unit set-asides and Indian country new unit set-asides under the existing CSAPR programs. Section VII.C.8.c. addresses additional minor revisions and corrections. EPA received no adverse comment regarding any of these conforming revisions or corrections.

In this action, EPA did not reopen or request comment on the regulations for any of the existing trading programs in 40 CFR part 97, subparts AAAAA through FFFFF, except with respect to specific revisions to these subparts identified in this section, as well as the revisions to the regulations for the Group 2 trading program discussed in section VII.C.4. that address the transition from the Group 2 trading program to the Group 3 trading program.

a. *Resolution of Timing Conflict Between Certain Existing Provisions*

Consistent with the provisions of the new CSAPR trading program finalized in this action, EPA is amending the regulations for the existing CSAPR trading programs and the Texas SO_2 Trading Program to resolve a timing conflict between the provisions that set deadlines for recordation of allowances allocated to existing units and the provisions that govern allocations of allowances to units that have ceased operation for the control periods in at least two consecutive years. The recordation provisions in all of the trading programs generally have required EPA to record allocations of allowances to existing units four years in advance of the control periods for which the allowances are being allocated. For example, on July 1, 2020, EPA recorded allocations to most existing units of allowances for use in the 2024 control periods for all the existing trading programs. However, other provisions of all the trading programs require EPA not to record allocations to existing units that do not operate for two consecutive control periods, starting with the fifth control period after the first control period in which the unit did not

operate. For example, if a unit that would otherwise receive allocations as an existing unit does not operate in the 2019 and 2020 control periods, the unit will continue to receive allocations for the control periods in 2019 through 2023 but will no longer be entitled to receive allocations for control periods in 2024 and thereafter. These two sets of timing requirements are in conflict, as demonstrated by the examples just presented: as of the July 1, 2020, deadline to record allocations for the 2024 control periods, EPA could not yet know whether any units that did not operate in 2019 might resume operation later in 2020, and EPA therefore could not yet know whether all such units would lose their eligibility to receive allocations for the 2024 control periods or not.[214]

To address the timing conflict described above, EPA is amending the regulations for each of the CSAPR trading programs and the Texas SO_2 Trading Program to generally require recordation of allowances allocated to existing units to take place three years rather than four years in advance of the control period for which allowances are being allocated. Returning to the examples above, if these amendments had been in effect with respect to allocations for the control periods in 2024, EPA would not have been required to record allocations for the 2024 control period until July 1, 2021, by which time complete information on all units' operations in 2019 and 2020 will be available. Relatedly, for states that determine allocations of allowances to their sources under approved SIP revisions, EPA is amending the deadlines by which the states must submit the allocations to EPA for recordation. Under the amended deadlines, the states' submissions are due three years instead of four years before the applicable control period.[215]

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[214] Because the 4-years-in-advance recordation schedule was phased in, the conflict with the provision addressing units that have ceased operation did not affect recordation activities under any CSAPR program until 2018. To date, EPA has addressed the conflict by deferring recordation of allocations to certain units past the applicable recordation deadlines until all information needed to determine whether the units are entitled to receive the allocations becomes available.

[215] Because states' deadlines for submission of SIP revisions under the CSAPR regulations are based on the deadlines by which they must submit their subsequent state-determined allowance allocations, in some circumstances the revision to the deadline for submitting allowance allocations will also effectively extend the deadline for such a SIP revision. *See, e.g.*, 40 CFR 52.38(a)(4)(ii), (a)(5)(vi).

The amended recordation and submission schedules will be effective beginning with recordation of allocations for control periods in 2025 and will apply to EPA's schedule for recording not only the allocations determined by EPA under the federal CSAPR trading programs but also the allocations determined by states or EPA under state CSAPR trading programs that are similarly recorded by EPA. EPA believes these amendments address the timing conflict in the existing trading program regulations in a manner that is as consistent as possible with the other provisions of the regulations, because while the amendments alter the point in time at which trading program participants receive allowances, the amendments will not alter the quantities of allowances received by any participant in any of the existing trading programs. In contrast, the only two other simple options for resolving the timing conflict – either shortening the period of non-operation that would cause a unit to lose its allocation from two years to one year or lengthening the period for which non-operating units would retain their allowance allocations from five years to six years – would cause changes in the amounts of allowances received by some trading program participants, and some stakeholders might view those changes as inequitable or undesirable for other policy reasons.

Further details on the specific regulatory provisions that are affected by the revisions are provided in section IX.D. of the preamble.

b. Modifications to NUSA Provisions

Consistent with the provisions of the new CSAPR trading program in this action for ozone season emissions of NO_X from sources in Group 3 states, EPA is amending the regulations for the existing CSAPR trading programs governing allocations of allowances to units from NUSAs and Indian country NUSAs to reduce the potential for inequitable outcomes and to clarify and simplify the regulations. In order to ensure maximum consistency across all participants in the trading programs, the amendments will govern EPA's administration of the integrated trading programs not only under FIPs but also under approved SIPs where the NUSA allocation

procedures are specified in provisions of the federal CSAPR trading programs in 40 CFR part 97 that have been incorporated into the SIP by reference.

The regulations applicable to control periods through 2020 under the existing CSAPR trading programs have provided for a two-round allocation process. For purposes of the first round, a unit was generally eligible to receive allocations from the NUSA for its state regardless of when it commenced commercial operation, as long as either no allocation of allowances to the unit as an existing unit was previously determined[216] or the unit was no longer entitled to receive its previously determined allocation as an existing unit. The first-round allocations were calculated during the control period at issue and were proportional to the eligible units' emissions during the preceding control period, up to the amount of allowances available in the NUSA. EPA performed preliminary calculations and published a notice by June 1, provided an opportunity for objections, and then adjusted the calculations as necessary, issued a final notice, and recorded the allocations by August 1 of the control period.

If any allowances remained in the NUSA for a given state after the first round, EPA carried out a second round, for which eligibility was limited to units that commenced commercial operation in the year of the control period at issue or the preceding year. The second-round allocations were calculated early in the year after the year of the control period at issue (very shortly after the January 30 deadline for submission of emissions data for October through December) and were proportional to the positive differences, if any, between the eligible units' emissions during the control period at issue and the amounts of any allocations the units received in the first round, up to the remaining amount of allowances available in the NUSA. Any allowances remaining after the second round were allocated to existing units in the state in proportion to their previous allocations. EPA made a preliminary identification of eligible units and published a notice by December 15, provided an opportunity for objections, and then

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[216] A determination that a unit should be allocated zero allowances is considered an allocation. *See, e.g.*, 40 CFR 97.402 (definition of "allocate or allocation").

performed the calculations, issued a final notice, and recorded the allocations by February 15 following the year of the control period, two weeks before the then-applicable March 1 allowance transfer deadline.

As indicated in the description above, the previous procedures had the potential to produce inequitable results, where some units could receive allowances in the first round (based on their emissions in the preceding control period) that exceeded the amounts needed to cover their emissions during the control period at issue, while other units that commenced operation more recently might not receive any allowances in either the first round (because the units had no covered emissions in the preceding control period) or the second round (because the NUSA may have been exhausted in the first round). Further, based on the experience of administering the two-round NUSA allocation process since 2015, EPA believes the previous procedures were unnecessarily complex and caused confusion for some market participants.

To simplify the NUSA allocation process and eliminate the potential inequities noted, EPA is amending the regulations for the existing CSAPR programs to replace the previous two-round NUSA allocation process with a one-round process that will allocate allowances to all eligible units in proportion to their emissions in the control period at issue. The amended provisions will be effective beginning with NUSA allocations for the control periods in 2021. Under the procedures, which apply to both NUSAs and Indian country NUSAs, EPA will perform preliminary calculations and issue a notice by March 1 of the year after the control period at issue, one month after the January 30 deadline for submission of the required emission data. After providing an opportunity for objections, EPA will make any necessary adjustments, issue a final notice, and record the allowances by May 1. To accommodate this process, the amendments also extend the allowance transfer deadline (i.e., the date by which all covered sources must hold allowances in their compliance accounts sufficient to cover their emissions during the preceding control period) by three months, from March 1 of the year following the control period to June 1. In coordination with the revised recordation deadlines, EPA is also extending the deadline for

states to submit to EPA their state-determined allocations for new units from July 1 in the year of the control period to April 1 in the year following the control period. Finally, although the Texas SO_2 Trading Program does not have NUSA provisions, in order to minimize unnecessary differences between the deadlines for analogous provisions in that program and the CSAPR programs, EPA is also revising the Supplemental Allowance Pool recordation deadline and the allowance transfer deadline under the Texas SO_2 Trading Program to May 1 and June 1, respectively, of the year after the control period. Like the amendments to the NUSA provisions, the amendments to the deadlines described in this paragraph would apply for purposes of EPA's administration of the integrated trading programs under both FIPs and approved SIPs.

The revisions to the NUSA allocation procedures also allow for related simplification of the CSAPR trading programs' assurance provisions. Under the assurance provisions that have applied for control periods through 2020, when emissions in a state for a given control period exceed the state's assurance level, if there are any units in the state that operated during the control period but that did not receive an actual allowance allocation either as an existing unit or from the NUSA, the regulations require EPA to publish a notice calling for the owners and operators of such units to submit certain information which EPA would use to determine imputed allowance allocations for the units. EPA then would use the imputed allowance allocations for these units, together with the actual allowance allocations for other units, to apportion responsibility for the assurance level exceedance among the owners and operators of all the state's units. Under the amendments to the NUSA allocation process, all units that have covered emissions during any control period will receive allocations either as an existing unit or from the NUSA, making the procedures for determining imputed allocations unnecessary. Accordingly, EPA is simplifying the assurance provisions for all of the existing CSAPR trading programs by removing the requirement for EPA to issue the additional notice just discussed, starting with the 2021 control periods.[217] EPA is also revising the date as of which the "common designated

[217] There are currently no analogous provisions in the Texas SO_2 Trading Program.

representative" for a group of sources is determined for purposes of the assurance provisions from April 1 to July 1 of the year following the control period, preserving that date's current position of being one month after the allowance transfer deadline. This revision maintains the existing coordination between these two regulatory deadlines and applies to all the existing CSAPR trading programs, whether administered under FIPs or approved SIPs, as well as the Texas SO_2 Trading Program.

EPA is making the changes to the NUSA allocation provisions, assurance provisions, and related deadlines effective as of the 2021 control period. EPA proposed to make the changes effective as of the 2023 control period, which is the first control period by which it would have been possible for states to fully replace the FIP requirements established in this action with a SIP revision. However, EPA also specifically requested comment on implementing the changes as of the 2021 control period. Having received no comment opposing the substance of the proposed revisions and no comment favoring implementation as of the 2023 control period, EPA is finalizing the amendments as of the 2021 control period in order to simplify the programs and clarify the regulations to the greatest extent possible.

Further details on the specific regulatory provisions that are affected by the revisions are provided in section IX.D. of the preamble.

c. Minor Corrections and Clarifications to Existing Regulations

EPA is implementing a small number of additional minor corrections and clarifications to the NUSA provisions in the existing CSAPR trading programs. First, EPA is amending the provisions that address the disposition of allowances that are determined to have been allocated incorrectly and that consequently are recalled and added to the NUSA for reallocation. The regulations that have applied through the 2020 control periods provided for the recalled allowances to be reallocated through the NUSA allocation process for the same control period for which the allowances were originally allocated incorrectly. Because some corrections may occur after the NUSA allocation process for a control period has already been completed, EPA is

revising these provisions to also allow the recalled allowances to be reallocated as part of the NUSA allocation process for a subsequent control period.

Second, EPA is correcting the specific numbers of allowances identified as the NUSA amounts for several states under the existing CSAPR programs established in the CSAPR rulemaking.[218] Following the promulgation of the CSAPR regulations in August 2011, EPA issued two rules revising the amounts of the emissions budgets, NUSAs, and Indian country NUSAs for several states.[219] Subsequent to these rule revisions, EPA recalculated the allocations to individual existing units and published a notice of data availability establishing the new allocations.[220] However, because of rounding differences, in certain instances the sum of the recalculated allocations to the individual units in a state plus the amounts identified in the regulations for the NUSA and Indian country NUSA for the state does not exactly equal the state budget.[221] In this final action, EPA is adjusting the amounts of the NUSAs identified in the regulations for control periods in future years up or down by the amount needed to eliminate the rounding differences. The sizes of the NUSA adjustments range from 1 to 17 allowances. These revisions do not affect the amounts of any state emissions budgets.

Third, EPA is adding provisions to the regulations for each of the existing CSAPR trading programs addressing the disposition of allowances held in the compliance accounts of sources in states that are no longer covered by those programs. Under the added provisions, EPA would identify or, if necessary, establish a general account controlled by each such source's owners and operators and would transfer any such allowances to that general account. The added provisions

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[218] This revision affects the CSAPR NO_X Annual, NO_X Ozone Season Group 1, SO_2 Group 1, and SO_2 Group 2 trading programs established in the CSAPR rulemaking but does not affect the CSAPR NO_X Ozone Season Group 2 trading program established in the CSAPR Update rulemaking.

[219] *See* 77 FR 10324 (February 21, 2012); 77 FR 34830 (June 12, 2012).

[220] *See* 79 FR 71674 (December 3, 2014).

[221] To date, EPA has addressed the rounding differences through the NUSA administration process by allocating whatever amounts of allowances remain in the states' budgets after allocations to existing units instead of allocating the specific amounts of allowances stated as the amounts of the states' NUSAs in the regulations. Thus, the amendments simply clarify the regulations and bring them into conformance with current practice.

parallel analogous provisions that were proposed and are being finalized in this action to address the disposition of any CSAPR NO_X Ozone Season Group 2 allowances that may remain in the compliance accounts of sources in states covered by the new CSAPR NO_X Ozone Season Group 3 trading program after the various procedures governing conversion or recall of such allowances have been carried out.

Finally, EPA is making non-substantive revisions to the sections of the existing CSAPR trading program regulations that set forth the amounts of the budgets, new unit set-asides, and variability limits. The revisions clarify the regulations by indicating the specific control periods when such amounts no longer apply to the sources in a given state because the state's sources are no longer required to participate in that trading program.

Further details on the specific regulatory provisions that would be affected by the revisions are provided in section IX.D. of the preamble.

D. *Submitting a SIP*

States may replace a FIP with a SIP under the Clean Air Act at any time if the SIP is approved by EPA, *see* CAA section 110(c)(1)(B). EPA has established certain specialized provisions for replacing FIPs with SIPs within all of the CSAPR trading programs, including the use of so-called "abbreviated SIPs" and "full SIPs," *see* 40 CFR 52.38(a)(4) and (5) and (b)(4), (5), (8), and (9); 40 CFR 52.39(e), (f), (h), and (i). Under the new or amended FIPs for the 12 states whose sources are required to participate in the new CSAPR NOx Ozone Season Group 3 Trading Program, "abbreviated" and "full" SIP options continue to be available. An "abbreviated SIP" allows a state to submit a SIP revision that would establish state-determined allowance allocation provisions replacing the default FIP allocation provisions but leaves the remaining FIP provisions in place. 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 revision, rather than a FIP. In addition, as under the CSAPR and the CSAPR Update, EPA is providing states with an opportunity to adopt state-

determined allowance allocations for existing units for the second control period under this rule – in this case, the 2022 control period – through streamlined SIP revisions. *See* 76 FR 48326-48332 for additional discussion on full and abbreviated SIP options and 40 CFR 52.38(b).

1. SIP Option to Modify 2022 Allocations

As under the CSAPR and the CSAPR Update, EPA is allowing a state to submit a SIP revision establishing allowance allocations for existing units in the state for the second control period of the new requirements, in 2022, to replace the EPA-determined default allocations. This process is the same as the process used at the start of other CSAPR trading programs but with updated deadlines, i.e., a state must submit a letter to EPA by [**INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**] indicating its intent to submit a complete SIP revision by September 1, 2021. The SIP would provide in an EPA-prescribed format a list of existing units and their allocations for the 2022 control period. If a state does not submit a letter of intent to submit a SIP revision, the EPA-determined default allocations will be recorded by [**INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**]. If a state submits a timely letter of intent but fails to submit a SIP revision, the EPA-determined default allocations will be recorded by September 15, 2021. If a state submits a timely letter of intent followed by a timely SIP revision that is approved, the approved SIP allocations will be recorded by March 1, 2022.

2. SIP Option to Modify Allocations in 2023 and Beyond

For the 2023 control period and later, states in the CSAPR NO_X Ozone Season Group 3 Trading Program can modify the EPA-determined default allocations with an approved SIP revision. The SIP submittal deadline is December 1, 2021. The deadline for states to submit state-determined allocations beginning with the 2023 and 2024 control periods under an approved SIP would be June 1, 2022, and the deadline for EPA to record those allocations would be July 1, 2022. Similarly, a state can submit a SIP revision beginning with control periods in 2025 and beyond by December 1, 2022, with state allocations for the 2025 and 2026 control

periods due June 1, 2023, and EPA recordation of the allocations by July 1, 2023. For the 2023 control period and later, SIPs can be full or abbreviated SIPs. As discussed in section VII.F.3. below, states will also have the option to expand applicability to include EGUs between 15 MWe and 25 MWe or, in the case of states subject to the NO_X SIP Call, large non-EGU boilers and combustion turbines. Inclusion of the large non-EGUs would serve as a mechanism to address the state's outstanding regulatory obligations under the NO_X SIP Call with respect to those sources, and the state would be allowed to allocate a defined quantity of additional Group 3 allowances because of the expanded set of sources. 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 New Group 3 Trading Program

States can submit SIP revisions to replace the FIP that achieve the necessary emission reductions but do not use the CSAPR NO_X Ozone Season Group 3 Trading Program. For a transport SIP revision that does not use the CSAPR NO_X Ozone Season Group 3 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 necessary emission reductions (i.e., reductions equal to or greater than what the Group 3 trading program will achieve) will be achieved. In order to best ensure its approvability, the SIP revision should include the following general elements: (1) a comprehensive baseline 2021 statewide NO_X emission inventory (which includes existing control requirements), which should be consistent with the 2021 emission inventory that EPA used to calculate the required state budget in this final action (unless the state can explain the discrepancy); (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 2021 and successive control periods; (3) fully-adopted state rules providing for such NO_X controls during the ozone season; (4) for EGUs greater than 25 MWe, monitoring and reporting under 40 CFR part 75, and for other units, monitoring and reporting procedures sufficient to demonstrate that sources are

complying with the SIP (*see* 40 CFR part 51 subpart K ("source surveillance" requirements)); and (5) a projected inventory demonstrating that state measures along with federal measures will achieve the necessary emission reductions in time to meet the 2021 compliance deadline. The SIPs must meet procedural requirements under the Act, such as the requirements for public hearing, be adopted by the appropriate state 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, EPA will evaluate the submission(s) for completeness. EPA's criteria for determining completeness of a SIP submission are codified at 40 CFR part 51 appendix V.

For further information on replacing a FIP with a SIP, see the discussion in the final CSAPR rulemaking (76 FR 48326).

4. No SIP Option for Additional States to Participate in the New Trading Program

EPA is not finalizing the proposed option that would have allowed EPA to approve a SIP submitted by a state whose sources are required to participate in the CSAPR NOx Ozone Season Group 1 Trading Program (i.e., Georgia) or a state whose sources are required to continue to participate in the CSAPR NOx Ozone Season Group 2 Trading Program (Alabama, Arkansas, Iowa, Kansas, Mississippi, Missouri, Oklahoma, Tennessee, Texas, and Wisconsin) requiring its sources to participate instead in the new Group 3 trading program. No comments were received indicating interest in such an option, and elimination of the option facilitates simplification and clarification of several areas of the regulations. A similar option was made available to Georgia in the CSAPR Update (with respect to the Group 2 trading program) to address possible concerns expressed by some commenters in the CSAPR Update rulemaking that if sources in Georgia were not allowed to trade with sources in other states, the allowances issued to the sources in Georgia would otherwise be of limited use. *See* 81 FR 74504, 74588 (former 40 CFR 52.38(b)(6)). Because EPA has already approved a SIP revision under which Georgia adopted a state program requiring its sources to participate in the Group 1 trading program, EPA in this

action is simplifying and clarifying the regulations by removing the option for Georgia to instead adopt a SIP instead requiring its sources to participate in the Group 2 trading program. Relatedly, EPA is removing the provisions in the Group 2 trading program regulations setting forth the amounts of the emissions budget, new unit set-aside, and variability limit that would have applied if EPA had approved a SIP revision from Georgia's requiring the state's sources to participate in that program as well as the provisions in the Group 1 trading program regulations that would have converted all remaining Group 1 allowances into amounts of Group 2 allowances.

E. Title V Permitting

This final rule, like the CSAPR and the CSAPR Update, 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.[222] 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 ensure compliance with the applicable requirements of the CAA, including the requirements of the applicable SIP. 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")).

EPA anticipates that, given the nature of the units subject to this final rule and given that all of the units covered here are already subject to the CSAPR Update, most if not all 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 are applicable to them under the new or amended FIPs would be "applicable requirements" under title V and therefore must be addressed in the title V permits. For example, requirements

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

concerning designated representatives, monitoring, reporting, and recordkeeping, the requirement to hold allowances covering emissions, the assurance provisions, and liability are "applicable requirements" that must 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 the CSAPR and the CSAPR Update and this final rule. 42 U.S.C. 7661a(b); 40 CFR 70.6(a)(8) & (10); 40 CFR 71.6(a)(8) & (10).

In the CSAPR and the CSAPR Update, EPA established standard requirements governing how sources covered by that rule would comply with title V and its regulations.[223] 40 CFR 97.506(d) and 97.806(d). For any new or existing sources under this final rule establishing the Group 3 trading program, identical title V compliance provisions would apply, just as they would have in the CSAPR NOx Ozone Season Group 2 Trading Program. 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 the CSAPR and the CSAPR Update, 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) and 97.806(d)(1). This provision is also included in each title V permit for an affected source. This final rule maintains the approach taken under the CSAPR and the CSAPR Update that allows allowances to be traded (or allocated, held, or deducted) without a revision to the title V permit of any of the sources involved.

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[223] EPA has also issued a guidance document and template that includes instructions describing how to incorporate the applicable requirements into a source's Title V permit. https://www3.epa.gov/airtransport/CSAPR/pdfs/CSAPR_Title_V_Permit_Guidance.pdf.

Similarly, this final rule would also continue to support the means by which a source in a CSAPR trading program can use the title V minor modification procedure to change its 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 the CSAPR and the CSAPR Update (i.e., approaches using a continuous emission monitoring system under subparts B and H of Part 75, 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) and 97.806(d)(2); 40 CFR 70.7(e)(2)(i)(B) and 40 CFR 71.7(e)(1)(i)(B). As described in EPA's 2015 guidance, the Agency suggests in its template that sources may comply with this requirement by including a table of all of the approved monitoring and reporting approaches under the CSAPR and the CSAPR Update trading programs in which the source is required to participate, 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 its chosen monitoring and recordkeeping approach to easily comply with the regulations governing the use of the title V minor modification procedure.

Under the CSAPR and the CSAPR Update, in order to employ a monitoring or reporting approach different from the prior-approved approaches discussed previously, unit owners and operators must submit monitoring system certification applications to 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 EPA. These applications and petitions are subject to EPA review and approval to ensure consistency in monitoring and reporting among all trading program participants. EPA's responses to any petitions for alternative monitoring systems or for alternatives to specific

monitoring or reporting requirements are posted on EPA's website.[224] EPA maintains the same approach in this final rule.

Consistent with EPA's approach under the CSAPR and the CSAPR Update, the applicable requirements resulting from the new and amended FIPs generally will have to be incorporated into affected sources' existing title V permits either pursuant to the provisions for reopening for cause (40 CFR 70.7(f) and 71.7(f)) or the standard permit renewal provisions (40 CFR 70.7(c) and 71.7(c)).[225] For sources newly subject to title V that are affected sources under the FIPs, the initial title V permit issued pursuant to 40 CFR 70.7(a) should address the final FIP requirements.

As was the case in the CSAPR and the CSAPR Update, the new and amended FIPs impose no independent permitting requirements and the title V permitting process will impose no additional burden on sources already required to be permitted under title V and on permitting authorities.

F. Relationship to Other Emission Trading and Ozone Transport Programs

1. Existing Trading Programs

This final rule ends the requirements for sources in certain states to participate in the existing CSAPR NOx Ozone Season Group 2 Trading Program with respect to emissions occurring after 2020 and requires those same sources instead to participate in a new CSAPR NOx Ozone Season Group 3 Trading Program with more stringent emissions budgets with respect to those emissions.[226] As discussed in section VII.C.4. above, the final rule lays out

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[224] https://www.epa.gov/airmarkets/part-75-petition-responses.

[225] A permit is reopened for cause if any new applicable requirements (such as those under a FIP) become applicable to an affected 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).

[226] The sources would remain subject to the Group 2 trading program with respect to emissions occurring in 2020 and earlier years and would also remain subject to various transitional provisions in the Group 2 trading program regulations, including both the provisions at 40 CFR 97.826(c) governing the conversion of certain banked 2017-2020 Group 2 allowances to a

certain requirements associated with this transition, including provisions to accommodate an effective date sometime after the start of the 2021 ozone season, two mechanisms for the creation of limited quantities of Group 3 allowances available for use in the new Group 3 trading program in exchange for certain banked 2017-2020 Group 2 allowances, and the recall of 2021-2024 Group 2 allowances previously allocated to the sources in Group 3 states. In addition, in section VII.C.8. of this document, EPA describes certain features of the new Group 3 trading program that differ from the current features of the other CSAPR trading programs and that EPA is adopting as revisions to the other CSAPR trading programs, as well as a subset of those new features adopted as revisions to the similarly structured Texas SO_2 Trading Program. Beyond these items, nothing else in this rule affects any requirements for any source under the CSAPR NO_X Annual, SO_2 Group 1 or Group 2, or NO_X Ozone Season Group 1 or Group 2 trading programs or the Texas SO_2 Trading Program. These trading programs all remain in place and will continue to be administered by EPA.

2. Title IV Interactions

This final rule does not affect any Acid Rain Program requirements. 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 final rule's provisions. Acid Rain sources will still be required to comply with Title IV requirements, including the requirement to hold Title IV allowances to cover SO_2 emissions after the end of each annual control period. EPA notes that the deadline by which sources affected under the Acid Rain Program must hold Title IV allowances is not affected by this final action and will continue to be 60 days after the end of the control period (i.e., February 29 or March 1 of the following year). Thus, starting with the compliance deadlines in 2022 for the control periods in 2021, the Acid Rain Program deadline will be approximately three months earlier than the corresponding deadline by which sources

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limited quantity of Group 3 allowances and the provisions at 40 CFR 97.811(d) governing the recall of certain previously recorded 2021-2024 Group 2 allowances. *See* section VII.C.4.

affected under all the CSAPR trading programs and the Texas SO_2 Trading Program must hold allowances available for compliance under those programs, which will be June 1 of the year following the year of the control period, as discussed in sections VII.C.5 and VII.C.8.b.

3. NO_X SIP Call Interactions

States affected by both the NO_X SIP Call and this action will be required to comply with the requirements of both rules. This final rule requires NO_X ozone season emission reductions from EGUs larger than 25 MWe in many NO_X SIP Call states and at greater stringency than required by the NO_X SIP Call. Therefore, this final rule will achieve emission reductions sufficient to address the emission reduction requirements of the NO_X SIP Call for these large EGUs.

The NO_X SIP Call states used the NO_X Budget Trading Program to comply with the NO_X SIP Call requirements both for EGUs serving generators with a nameplate capacity greater than 25 MWe and for large non-EGU boilers and combustion turbines with a maximum design heat input greater than 250 mmBtu/hr. (In some states, EGUs serving a generator with a nameplate capacity equal to or smaller than 25 MWe were also part of the NO_X Budget Trading Program as a carryover from the Ozone Transport Commission NO_X Budget Program.) However, EPA discontinued the NO_X Budget Trading Program after 2008 when implementation of the CAIR NO_X Ozone Season Trading Program began. Since that time, states have had to find appropriate alternative ways to continue to show compliance with the NO_X SIP Call, particularly for large non-EGUs. As one option, EPA has allowed states to modify the applicability provisions of the NO_X ozone season trading programs established under CAIR and later the CSAPR Update (although not the CSAPR) to include all NO_X Budget Trading Program units as a way to continue to meet the requirements of the NO_X SIP Call for these sources.

In this action, as under CAIR and the CSAPR Update, EPA is again allowing any NO_X SIP Call state affected by this final rule to voluntarily submit a SIP revision to expand the applicability of the CSAPR NO_X Ozone Season Group 3 Trading Program to include all NO_X

Budget Trading Program units. As part of such a SIP revision, the state would be allowed to issue additional emission allowances capped at a level intended to preserve the stringency of the Group 3 trading program. Analysis shows that the NO_X Budget Trading Program units (mainly large non-EGU boilers, combustion turbines, and combined cycle units with a maximum design heat input greater than 250 mmBtu/hr) continue to emit well below their portions of the NO_X SIP Call state budgets. In order to ensure that the necessary amounts of EGU emission reductions occur for this final rule, the corresponding state ozone-season emissions budget amount can be increased by the lesser of: (1) The relevant non-EGU budget under the NO_X SIP Call or (2) the highest emissions of the relevant set of non-EGUs in the most recent 3 years. EPA believes that the environmental impact would be neutral using this approach, and hourly reporting of emissions under 40 CFR part 75 would continue. This option will address requests by states for help in determining an appropriate way to address the continuing NO_X SIP Call requirement for large boilers and turbines. If a state elects to bring its NO_X SIP Call non-EGUs into the Group 3 trading program, the program's assurance provisions continue to apply only to the EGUs covered by the program, and the amounts of the variability limits and assurance levels established for EGUs will remain unchanged.

The NO_X SIP Call generally requires that states choosing to rely on large EGUs and large non-EGU boilers and turbines for meeting NO_X SIP Call emission reduction requirements must establish a NO_X mass emissions cap on each source and require 40 CFR part 75, subpart H monitoring or alternative 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)(1). If a state submits and EPA approves a SIP expanding the applicability to include all of the

state's NO_X Budget Trading Program units in the CSAPR NO_X Ozone Season Group 3 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 states choose to include NO_X Budget Trading Program units in the CSAPR NO_X Ozone Season Group 3 Trading Program through SIPs or not, EPA will work with states to ensure that NO_X SIP Call obligations continue to be met.

Comment: One commenter questioned the need to allow states to include large non-EGUs of the types that participated in the NO_X Budget Trading Program in the Group 3 trading program since current ozone season NO_X emissions from the large non-EGUs are a small fraction of historical emissions because many units have retired and the remaining ones have moved away from coal as the main fuel and are now largely natural gas-fired.

Response: EPA is not requiring states to include non-EGUs of the types that participated in the NO_X Budget Trading program in the Group 3 trading program. EPA continues to believe that allowing states to include these sources in the Group 3 trading program (or for some states, the Group 2 trading program) provides states a potentially useful option for continued compliance with ongoing NO_X SIP Call requirements.

Comment: A commenter questioned the methodology EPA would use to ensure that including these sources in the Group 3 trading program could be done in an environmentally neutral way. The commenter did not feel EPA had explained how that would work in practice.

Response: EPA has allowed the voluntary inclusion of these sources in the CSAPR programs for a number of years. The methodology for determining the amount of allowances to provide for the additional sources is capped at the lesser of recent historical actual emissions and the allocations from the original NO_X SIP Call program. This methodology accounts for the kinds of overall emission reductions that have occurred as cited by the commenter and holds emissions at actual levels, thus not allowing emissions increases from a decision by a state to voluntarily include these sources in the new CSAPR trading program.

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

In the Regulatory Impact Analysis for the Final Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS (RIA), EPA estimated the health and climate benefits, compliance costs, and emissions changes that may result from the final rule for the analysis period 2021 to 2040. The estimated health and climate benefits and compliance costs are presented in detail in the RIA accompanying this final action. EPA notes that the estimated health and climate benefits and compliance costs are directly associated with optimizing NO_X removal by turning on and optimizing existing idled SCRs; optimizing existing idled selective non-catalytic reduction (SNCRs); and installing state-of-the-art combustion controls. The estimated health and climate benefits and compliance costs also result from a small amount of generation shifting as the power system adjusts to the regulatory requirements.

EPA analyzed this final action's emission budgets, using a uniform control stringency represented by $1,800 per ton of NOx (2016$), as well as a more and a less stringent alternative. The more and less stringent alternatives differ in that they set different NO_X ozone season emission budgets for the affected EGUs. The less stringent alternative uses emission budgets that were developed using uniform control stringency represented by $500 per ton of NOx (2016$). The more stringent alternative uses emission budgets that were developed using uniform control stringency represented by $9,600 per ton of NOx (2016$). Table VIII.1 provides the projected 2021, 2025, 2030, 2035, and 2040 EGU emission reductions for the evaluated regulatory control alternatives.[227] For additional information on emissions changes, see Table 4.5 in Chapter 4 of the RIA.

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[227] EPA relied on Engineering Analysis to account for changes in NOx (annual and ozone season), SO_2, and direct PM. While this approach captures the impact of generation shifting for NOx emissions, it does not fully capture the impact of generation shifting for SO_2 and PM in complying with the budgets established in this final rule. In order to meet the court-ordered timeline for this rulemaking EPA prioritized fully capturing the impact of reductions from generation shifting on NOx and CO_2, but did not account for the relatively small amount of SO_2 and primary PM emissions reductions that would likely occur due to generation shifting. Hence total benefits could be higher than those reported in this RIA. EPA relied on IPM estimates to capture changes in CO_2 emissions, which fully account for the impact of generation shifting.

Table VIII.1. Estimated 2021, 2025, 2030, 2035, and 2040[a] EGU Emissions Reductions in the 12 States of NOx, SO2, and CO2 and More and Less Stringent Alternatives (Tons)[b,c]

2021	Final Rule	More Stringent Alternative	Less Stringent Alternative
NOx (annual)	16,000	16,000	2,000
NOx (ozone season)	16,000	16,000	2,000
SO_2 (annual)*	*	*	*
CO_2 (annual, thousand metric)	--	--	--
2025			
NOx (annual)	21,000	37,000	2,000
NOx (ozone season)	19,000	34,000	2,000
SO_2 (annual)*	*	*	*
CO_2 (annual, thousand metric)	5,000	14,000	4,000
2030			
NOx (annual)	16,000	27,000	2,000
NOx (ozone season)	13,000	25,000	2,000
SO_2 (annual)*	*	*	*
CO_2 (annual, thousand metric)	8,000	19,000	6,000
2035			
NOx (annual)	15,000	26,000	2,000
NOx (ozone season)	13,000	25,000	2,000
SO_2 (annual)*	*	*	*
CO_2 (annual, thousand metric)	8,000	19,000	6,000
2040			
NOx (annual)	14,000	25,000	2,000
NOx (ozone season)	13,000	24,000	2,000
SO_2 (annual)*	*	*	*
CO_2 (annual, thousand metric)	4,000	13,000	3,000

[a] The 2021-2040 emissions reductions estimates are based on IPM projections for CO_2 and engineering analysis for annual and ozone season NOx. SO_2 and $PM_{2.5}$ emissions were only partially analyzed. IPM was run for the following years: 2021, 2023, 2025, 2030, 2035, 2040, 2045 and 2050. For more information, see Chapter 4 and the Ozone Transport Policy Analysis Final Rule TSD.

[b] NO_x emissions are reported in English (short) tons; CO_2 is reported in metric tons.

[c] In addition to no annual SO_2 emissions reductions as shown in the table above, there are no annual direct $PM_{2.5}$ emissions changes.

* There are no annual SO_2 and $PM_{2.5}$ emissions reductions that come from turning on SCRs and SNCRs assuming that nothing else changes, but EPA did not analyze the effects on SO_2 and direct PM that may come from shifting power generation, for example from coal-fired power plants to gas-fired or other types of power plants. EPA does expect some changes in SO_2 and $PM_{2.5}$ emissions due to shifting of power generation.

EPA analyzed ozone-season NO_X emission reductions and the associated costs to the power sector of implementing the EGU NO_X ozone-season emissions budgets in each of the 12 states using the Integrated Planning Model (IPM) and its underlying data and inputs. The estimates of the changes in the cost of supplying electricity for the regulatory control alternatives

are presented in Table VIII.2. Total costs continue to change in later IPM run years as the modeled system responds to projected demand growth and shifts in the power sector under the illustrative scenarios. For a detailed description of these cost trends, please see Chapter 4, Section 4.4.3 of the RIA.

Table VIII.2. National Compliance Cost Estimates (millions of 2016$) for the Regulatory Control Alternatives

	Final Rule	More-Stringent Alternative	Less-Stringent Alternative
2021-2025 (Annualized)	$10.0	$41.4	$(2.9)
2021-2040 (Annualized)	$24.8	$28.5	$19.6
2021 (Annual)	$5.1	$5.2	$1.6
2022 (Annual)	$19.2	$61.5	$5.9
2023 (Annual)	$19.2	$61.5	$5.9
2024 (Annual)	$2.1	$4.5	$(14.9)
2025 (Annual)	$1.6	$4.0	$(14.9)
2030 (Annual)	$63.6	$32.3	$67.0
2035 (Annual)	$18.2	$41.2	$14.3
2040 (Annual)	$8.8	$134.0	$ 18.9

"2021-2025 (Annualized)" reflects total estimated annual compliance costs levelized over the period 2021 through 2025 and discounted using a 4.25 real discount rate.[228] This does not include compliance costs beyond 2025. "2021-2040 (Annualized)" reflects total estimated annual compliance costs levelized over the period 2021 through 2040 and discounted using a 4.25 real discount rate. This does not include compliance costs beyond 2040. "2021 (Annual)" through "2040 (Annual)" costs reflect annual estimates in each of those years.

Tables VIII.3 and VIII.4 report the estimated economic value of avoided premature deaths and illness in each year relative to the baseline along with the 95% confidence interval. In each of these tables, for each discount rate and regulatory control alternative, multiple benefits estimates are presented reflecting alternative ozone and $PM_{2.5}$ mortality risk estimates. For additional information on health benefits, see Chapter 5 of the RIA.

[228] This table reports compliance costs consistent with expected electricity sector economic conditions. An NPV of costs was calculated using a 4.25% real discount rate consistent with the rate used in IPM's objective function for cost-minimization. The NPV of costs was then used to calculate the levelized annual value over a 5-year period (2021-2025) and a 20-year period (2021-2040) using the 4.25% rate as well. Table VIII.7 reports the NPV of the annual stream of costs from 2021-2040 using 3% and 7% consistent with OMB guidance.

Table VIII.3. Estimated Discounted Economic Value of Ozone-Attributable Premature Mortality and Illnesses for the Final Policy Scenarios in 2021 (95% Confidence Interval; millions of 2016$)[a,b]

	Final Rule			More Stringent Alternative			Less Stringent Alternative		
3% Discount Rate	$230 ($58 to $480)[c]	*and*	$1,900 ($210 to $5,000)[d]	$260 ($88 to $520)[c]	*and*	$1,900 ($210 to $5,000)[d]	$22 ($6 to $47)[c]	*and*	$190 ($20 to $490)[d]
7% Discount Rate	$200 ($38 to $460)[c]	*and*	$1,700 ($170 to $4,500)[d]	$200 ($38 to $460)[c]	*and*	$1,700 ($170 to $4,500)[d]	$20 ($4 to $45)[c]	*and*	$170 ($17 to $440)[d]

[a] Values rounded to two significant figures. The two benefits estimates are separated by the word "and" to signify that they are two separate estimates. The estimates do not represent lower- and upper-bound estimates and should not be summed.

[b] We estimated changes in annual mean $PM_{2.5}$ and $PM_{2.5}$ -related benefits in 2024, but not 2021. As discussed in Chapter 4, in 2021, the only control measure expected to be adopted for compliance in the regulatory control alternatives is optimization of existing SCRs, and this measure will operate only during the ozone season. As discussed in Chapter 3, NOx reductions in the ozone season provide minimal $PM_{2.5}$ benefits since $PM_{2.5}$ nitrate concentrations, which result from conversion of NOx emissions to nitrate, are minimal during the warmer temperatures during the ozone season. Conversely, the conversion of nitrates to $PM_{2.5}$ is much greater in cooler (non-ozone season) months, and thus it becomes worthwhile to estimate $PM_{2.5}$ benefits from NOx reductions in those months. In 2024, the presence of additional control measures that operate year-round and other changes in market conditions as a result of the rule lead to notable NOx reductions in the winter months.

[c] Sum of ozone mortality estimated using the pooled Katsouyanni et al. (2009) and Zanobetti and Schwartz (2008) short-term risk estimate and the Di et al. (2017) long-term mortality risk estimate. As PM-related mortality quantified using risk estimates from the Di et al. (2017) and Turner et al. (2016) are within 5% of one another, in the interest of clarity and simplicity, we present the results estimated using the risk estimate from Di et al. (2017) alone.

[d] Sum of ozone mortality estimated using the long-term risk estimate and the Di et al. (2017) long-term mortality risk estimate. As PM-related mortality quantified using risk estimates from the Di et al. (2017) and Turner et al. (2016) are within 5% of one another, in the interest of clarity and simplicity, we present the results estimated using the risk estimate from Di et al. (2017) alone.

Table VIII.4. Estimated Discounted Economic Value of Avoided Ozone and $PM_{2.5}$-Attributable Premature Mortality and Illnesses for the Final Policy Scenario in 2024 (95% Confidence Interval; millions of 2016$)[a,b]

	Final Rule			More Stringent Alternative			Less Stringent Alternative[b]		
3% Discount Rate	$310 ($72 to $680)[c]	*and*	$2,400 ($250 to $6,200)[d]	$530 ($130 to $1,100)[c]	*and*	$4,200 ($450 to $11,000)[d]	$22 ($6 to $47)[c]	*and*	$190 ($20 to $490)[d]
7% Discount Rate	$280 ($48 to $640)[c]	*and*	$2,100 ($210 to $5,600)[d]	$470 ($84 to $1,100)[c]	*and*	$3,800 ($370 to $9,900)[d]	$20 ($4 to $45)[c]	*and*	$170 ($17 to $440)[d]

[a] Values rounded to two significant figures. The two benefits estimates are separated by the word "and" to signify that they are two separate estimates. The estimates do not represent lower- and upper-bound estimates and should not be summed.
[b] No PM-attributable benefits accrue for this scenario.
[c] Sum of ozone mortality estimated using the pooled Katsouyanni et al. (2009) and Zanobetti and Schwartz (2008) short-term risk estimate and the Di et al. (2017) long-term mortality risk estimate. As PM-related mortality quantified using risk estimates from the Di et al. (2017) and Turner et al. (2016) are within 5% of one another, in the interest of clarity and simplicity, we present the results estimated using the risk estimate from Di et al. (2017).
[d] Sum of ozone mortality estimated using the long-term risk estimate and the Di et al. (2017) long-term mortality risk estimate. PM-related mortality quantified using risk estimates from the Di et al. (2017) and Turner et al. (2016) are within 5% of one another. In the interest of clarity and simplicity, we present the results estimated using the risk estimate from Di et al. (2017) alone.

Table VIII.5 shows the estimated monetary value of the estimated changes in CO_2 emissions expected to occur over 2021 - 2040 for the final rule, the more-stringent alternative, and the less-stringent alternative. EPA estimated the dollar value of the CO_2-related effects for each analysis year between 2021 and 2040 by applying the SC-CO2 estimates to the estimated changes in CO_2 emissions in the corresponding year under the regulatory options.[229] For additional information on climate benefits, see Chapter 5 of the RIA.

[229] Under the baseline, CO_2 emissions are projected to rise through 2025 and then taper off through 2035 and rise during the rest of the period, reflecting increasing demand growth, changing generation mix patterns and the impact of retiring capacity. CO_2 emissions reductions as a result of the modeled policies follow a similar trend, which causes total climate benefit estimates to oscillate over time.

Table VIII.5. Estimated Total Annual Global Climate Benefits (2021-40) from Changes in CO_2 Emissions (Millions of 2016$)

Regulatory Alternative	Year	5% Discount Rate	3% Discount Rate	2.5% Discount Rate	3% Discount Rate (95th Percentile)
Final	2021	0	1	1	2
	2022	46	143	206	434
	2023	94	290	417	882
	2024	102	311	444	946
	2025	109	331	473	1,011
	2030	128	373	525	1,146
	2035	98	273	380	838
	2040	127	340	467	1,043
More-Stringent Alternative	2021	1	2	3	7
	2022	76	237	341	720
	2023	156	480	689	1,460
	2024	204	623	892	1,898
	2025	254	771	1,100	2,350
	2030	323	939	1,322	2,885
	2035	316	878	1,222	2,698
	2040	383	1,025	1,410	3,146
Less-Stringent Alternative	2021	0	1	1	3
	2022	39	122	176	371
	2023	80	248	356	754
	2024	81	248	355	755
	2025	82	248	353	755
	2030	93	271	381	831
	2035	73	203	282	623
	2040	91	242	333	743

Note: We emphasize the importance and value of considering the benefits calculated using all four SC-CO2 estimates. As discussed in Chapter 5 of the RIA and in the Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990 (IWG 2021), a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, are also warranted when discounting intergenerational impacts.

In Table VIII.6, EPA presents a summary of the benefits, costs, and net benefits of this final action and the more and less stringent alternatives for 2021. Table VIII.7 presents a summary of these impacts for this final action and the more and less stringent alternatives for

2025. Table VIII.8 presents a summary of these impacts for this final action and the more and less stringent alternatives for 2030. Discussion of the non-monetized health and welfare benefits from these pollutants is found in Chapter 5 of the RIA.

Table VIII.6. Benefits, Costs, and Net Benefits of the Final and More and Less Stringent Alternatives for 2021 for the U.S. (millions of 2016$)[a,b,c]

	Final Rule	More Stringent Alternative	Less Stringent Alternative
Health Benefits (3%)	$230 and $1,900	$260 and $1,900	$20 and $190
Climate Benefits (3%)	$1	$2	$1
Total Benefits	$230 and $1,900	$260 and $1,900	$20 and $190
Costs	$5	$5	$2
Net Benefits	**$230 and $1,900**	**$260 and $1,900**	**$20 and $190**
Health Benefits (7%)	$200 and $1,700	$200 and $1,700	$20 and $170
Climate Benefits (3%)	$1	$2	$1
Total Benefits	$200 and $1,700	$200 and $1,700	$20 and $170
Costs	$5	$5	$2
Net Benefits	**$200 and $1,700**	**$200 and $1,700**	**$20 and $170**

[a] We focus results to provide a snapshot of costs and benefits in 2021, using the best available information to approximate social costs and social benefits recognizing uncertainties and limitations in those estimates. The two benefits estimates are separated by the word "and" to signify that they are two separate estimates. The estimates do not represent lower- and upper-bound estimates and should not be summed.

[b] Benefits include those related to public health and climate. The health benefits are associated with several point estimates and are presented at real discount rates of 3 and 7 percent. Climate benefits are based on changes (reductions) in CO_2 emissions and are calculated using four different estimates of the social cost of carbon (SC-CO_2) (model average at 2.5 percent, 3 percent, and 5 percent discount rates; 95th percentile at 3 percent discount rate). For the presentational purposes of this table, we show the benefits associated with the average SC-CO_2 at a 3 percent discount rate, but the Agency does not have a single central SC-CO_2 point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC-CO_2 estimates; the additional benefit estimates range from $0.24 million to $2.31 million in 2021 for the finalized option and are presented above in Table VIII.5. As discussed in Chapter 5, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, are also warranted when discounting intergenerational impacts. The costs presented in this table are 2021 annual estimates for each alternative analyzed.

[c] Rows may not appear to add correctly due to rounding.

Table VIII.7. Benefits, Costs, and Net Benefits of the Final and More and Less Stringent Alternatives for 2025 for the U.S. (millions of 2016$)[a,b,c]

	Final Rule	More Stringent Alternative	Less Stringent Alternative

Health Benefits (3%)	$320 and $2,400	$540 and $4,200	$20 and $200
Climate Benefits (3%)	$330	$770	$250
Total Benefits	$650 and $2,700	$1,300 and $5,000	$270 and $450
Costs	$2	$4	-$15
Net Benefits	**$650 and $2,700**	**$1,300 and $5,000**	**$280 and $460**
Health Benefits (7%)	$290 and $2,200	$490 and $3,800	$20 and $170
Climate Benefits (3%)	$330	$770	$250
Total Benefits	$620 and $2,500	$1,300 and $4,600	$270 and $420
Costs	$2	$4	-$15
Net Benefits	**$620 and $2,500**	**$1,300 and $4,500**	**$280 and $430**

[a] We focus results to provide a snapshot of costs and benefits in 2025, using the best available information to approximate social costs and social benefits recognizing uncertainties and limitations in those estimates. The two benefits estimates are separated by the word "and" to signify that they are two separate estimates. The estimates do not represent lower- and upper-bound estimates and should not be summed.

[b] Benefits include those related to public health and climate. The health benefits are associated with several point estimates and are presented at real discount rates of 3 and 7 percent. Climate benefits are based on changes (reductions) in CO_2 emissions and are calculated using four different estimates of the social cost of carbon (SC-CO_2) (model average at 2.5 percent, 3 percent, and 5 percent discount rates; 95th percentile at 3 percent discount rate). For the presentational purposes of this table, we show the benefits associated with the average SC-CO_2 at a 3 percent discount rate, but the Agency does not have a single central SC-CO_2 point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC-CO_2 estimates; the additional benefit estimates range from $109 million to $1,011 million in 2025 for the finalized option and are presented above in Table VIII.5. As discussed in Chapter 5, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, are also warranted when discounting intergenerational impacts. The costs presented in this table are 2025 annual estimates for each alternative analyzed.

[c] Rows may not appear to add correctly due to rounding.

Table VIII.8. Benefits, Costs, and Net Benefits of the Final and More and Less Stringent Alternatives for 2030 for the U.S. (millions of 2016$)[a,b,c]

	Final Rule	More Stringent Alternative	Less Stringent Alternative
Health Benefits (3%)	$340 and $2,600	$590 and $4,600	$30 and $210
Climate Benefits (3%)	$370	$940	$270
Total Benefits	$710 and $3,000	$1,500 and $5,500	$300 and $480
Costs	$64	$32	$67
Net Benefits	**$650 and $2,900**	**$1,500 and $5,500**	**$230 and $410**
Health Benefits (7%)	$330 and $2,500	$560 and $3,900	$20 and $180
Climate Benefits (3%)	$370	$940	$270

Total Benefits	\$700 and \$2,900	\$1500 and \$4,800	\$290 and \$450
Costs	\$64	\$32	\$67
Net Benefits	**\$640 and \$2,800**	**\$1,500 and \$4,800**	**\$220 and \$380**

[a] We focus results to provide a snapshot of costs and benefits in 2030, using the best available information to approximate social costs and social benefits recognizing uncertainties and limitations in those estimates. The two benefits estimates are separated by the word "and" to signify that they are two separate estimates. The estimates do not represent lower- and upper-bound estimates and should not be summed.
[b] Benefits include those related to public health and climate. The health benefits are associated with several point estimates and are presented at real discount rates of 3 and 7 percent. Climate benefits are based on changes (reductions) in CO_2 emissions and are calculated using four different estimates of the social cost of carbon (SC-CO_2) (model average at 2.5 percent, 3 percent, and 5 percent discount rates; 95th percentile at 3 percent discount rate). For the presentational purposes of this table, we show the benefits associated with the average SC-CO_2 at a 3 percent discount rate, but the Agency does not have a single central SC-CO_2 point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC-CO_2 estimates; the additional benefit estimates range from \$128 million to \$1,146 million in 2030 for the finalized option and are presented above in Table VIII.5. As discussed in Chapter 5, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, are also warranted when discounting intergenerational impacts. The costs presented in this table are 2030 annual estimates for each alternative analyzed.
[c] Rows may not appear to add correctly due to rounding.

In addition, Table VIII.9 presents estimates of the present value (PV) of the benefits and costs and the equivalent annualized value (EAV), an estimate of the annualized value of the net benefits consistent with the present value, over the twenty-year period of 2021 to 2040. The estimates of the PV and EAV are calculated using discount rates of 3 and 7 percent as directed by OMB's Circular A-4 and are presented in 2016 dollars discounted to 2021.

Table VIII.9. Estimated Health Benefits, Climte Benefits, Compliance Costs, and Net Benefits of the Final Rule, 2021 Through 2040 (Millions 2016\$, Discounted to 2021)

		3% Discount Rate	**7% Discount Rate**
Present Value	Health Benefits[b]	\$4,800 and \$37,000	\$3,200 and \$25,000
	Climate Benefits[b]	\$4,400	\$4,400
	Compliance Costs[c]	\$370	\$260
	Net Benefits	**\$8,800 and \$41,000**	**\$7,300 and \$29,000**
Equivalent Annualized Value			
	Health Benefits	\$320 and \$2,500	\$300 and \$2,400
	Climate Benefits	\$290	\$290
	Compliance Costs	\$25	\$25

Net Benefits	**$590 and $2,800**	**$570 and $2,700**

[a] Numbers may not sum due to independent rounding. The two benefits estimates are separated by the word "and" to signify that they are two separate estimates. The estimates do not represent lower- and upper-bound estimates and should not be summed.
[b] The health benefits are associated with several point estimates and are presented at real discount rates of 3 and 7 percent. Climate benefits are based on changes (reductions) in CO_2 emissions and are calculated using four different estimates of the social cost of carbon (SC-CO_2) (model average at 2.5 percent, 3 percent, and 5 percent discount rates; 95th percentile at 3 percent discount rate). For the presentational purposes of this table, we show the climate benefits associated with the average SC-CO_2 at a 3 percent discount rate, but the Agency does not have a single central SC-CO_2 point estimate. We emphasize the importance and value of considering the benefits calculated using all four SC-CO_2 estimates; the additional benefit estimates are presented above in Table VIII.5. As discussed in Chapter 5 of the Regulatory Impact Analysis for the Final Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS, a consideration of climate benefits calculated using discount rates below 3 percent, including 2 percent and lower, are also warranted when discounting intergenerational impacts.
[c] To estimate these annualized costs, EPA uses a conventional and widely accepted approach that applies a capital recovery factor (CRF) multiplier to capital investments and adds that to the annual incremental operating expenses. Annual costs were calculated using a 4.25% real discount rate consistent with the rate used in IPM's objective function for cost-minimization.

As shown in Table VIII.9, the PV of the health benefits of this final rule, discounted at a 3-percent discount rate, is estimated to be about $4,800 million and $37,000 million, with an EAV of about $320 million and $2,500 million. At a 7-percent discount rate, the PV of the health benefits is estimated to be $3,200 million and $25,000 million, with an EAV of about $300 million and $2,400 million. The two health benefits estimates for each discount rate reflect alternative ozone and $PM_{2.5}$ mortality risk estimates. The PV of the climate benefits of this final rule, discounted at a 3-percent rate, is estimated to be about $4,400 million, with an EAV of about $290 million. The PV of the compliance costs, discounted at a 3-percent rate, is estimated to be about $370 million, with an EAV of about $25 million. At a 7-percent discount rate, the PV of the compliance costs is estimated to be about $260 million, with an EAV of about $25 million. See the RIA for additional discussion on costs, benefits, and impacts.

IX. Summary of Changes to the Regulatory Text for the Federal Implementation Plans and Trading Programs

This section describes the amendments to the regulatory text for the federal implementation plans and the trading program regulations related to the findings and remedy discussed elsewhere

in this document. The primary amendments to the CFR are revisions to the CSAPR Update FIP provisions in 40 CFR part 52 and the creation of a new CSAPR NO_X Ozone Season Group 3 Trading Program in 40 CFR part 97, subpart GGGGG. In addition, amendments are being made to the regulations for the existing CSAPR NO_X Ozone Season Group 2 Trading Program to address the transition of the sources in certain states from the existing Group 2 trading program to the new Group 3 trading program. The existing regulations for the administrative appeal procedures in 40 CFR part 78 are also being revised to reflect the applicability of those procedures to decisions of the EPA Administrator under the new Group 3 trading program.

In addition to these primary amendments, certain revisions are being made to the regulations for the existing CSAPR trading programs and the Texas SO_2 Trading Program for conformity with the proposed provisions of the new Group 3 trading program, as discussed in section VII.C.8, and a cross-reference in the NO_X SIP Call regulations at 40 CFR 51.121 to the CSAPR Update FIP provisions is being updated. This section also describes a small number of minor additional proposed corrections and clarifications to the existing CFR text for the CSAPR trading programs, the Texas SO_2 Trading Program, and the appeal procedures. EPA has included documents in the docket for this final action showing all of the proposed revisions to part 52, part 78, and subparts AAAAA through FFFFF of part 97 in redline-strikeout format.

A. Amended CSAPR Update FIP Provisions

The CSAPR and CSAPR Update FIP provisions related to ozone season NO_X emissions are set forth in § 52.38(b) as well as sections of part 52 specific to each covered state. Amendments to § 52.38(b)(1) expand the overall set of CSAPR trading programs addressing ozone season NO_X emissions to include the new Group 3 trading program in subpart GGGGG of part 97 in addition to the current Group 1 and Group 2 trading programs in subparts BBBBB and EEEEE of part 97, respectively, while amendments to § 52.38(b)(2) identify the states whose sources are required under the new or amended FIPs to participate in each of the respective trading programs with regard to their emissions occurring in particular years. More specifically, for sources in the

states that EPA finds have further good neighbor obligations with respect to the 2008 ozone NAAQS under this rule, new § 52.38(b)(2)(iv) ends the requirement to participate in the Group 2 trading program after the 2020 control period and new § 52.38(b)(2)(v) establishes the requirement to participate in the new Group 3 trading program starting with the 2021 control period.

The changes in FIP requirements set forth in § 52.38(b)(1) and (2) are substantively replicated in the state-specific CFR sections for each of the Group 3 states.[230] In each such CFR section, the current provision indicating that sources in the state are required to participate in the CSAPR NO_X Ozone Season Group 2 Trading Program is revised to end that requirement with respect to emissions after 2020 and to restore previously removed language indicating that participation by those sources in the Group 2 trading program was only a partial remedy for the state's underlying good neighbor obligation.[231] A further provision is added in each section indicating that sources in the state are required to participate in the CSAPR NO_X Ozone Season Group 3 Trading Program with respect to emissions starting in 2021. These added provisions do not contain the partial-remedy language, consistent with EPA's determinations in this rule that participation in the Group 3 trading program by a state's EGUs constitutes a full remedy for each such state's underlying good neighbor obligation. No changes are being made to the CFR sections for the remaining states whose sources currently participate in the Group 2 trading program. For these states, EPA's findings in this action are consistent with and therefore affirm the previous removal of language indicating that participation by the states' sources in the Group

[230] *See* §§ 52.731(b) (Illinois), 52.789(b) (Indiana), 52.940(b) (Kentucky), 52.984(d) (Louisiana), 52.1084(b) (Maryland), 52.1186(e) (Michigan), 52.1584(e) (New Jersey), 52.1684(b) (New York), 52.1882(b) (Ohio), 52.2040(b) (Pennsylvania), 52.2440(b) (Virginia), and 52.2540(b) (West Virginia).

[231] As discussed elsewhere in this document, EPA is correcting the approval of Kentucky's SIP revision that previously led to removal of the partial-remedy language for that state and instead issuing a disapproval. For the remaining states, the partial-remedy language was removed in the CSAPR Close-Out, which has been vacated.

2 trading program was only a partial remedy for the states' underlying good neighbor obligations.[232]

As under the CSAPR and the CSAPR Update, states subject to the FIPs under this rule have several options to revise their SIPs to modify or replace those FIPs while continuing to use the Group 3 trading program as the mechanism for meeting the states' good neighbor obligations. New § 52.38(b)(10), (11), and (12) establish options to replace allowance allocations for the 2022 control period, to adopt an abbreviated SIP revision for control periods in 2023 or later years, and to adopt a full SIP revision for control periods in later years, respectively. The first two options would modify certain provisions of the trading program as applied to a state's sources but leave the FIP in place, while the third option would replace the FIP with largely identical SIP requirements for sources to participate in a state Group 3 trading program integrated with the federal Group 3 trading program. These options closely replicate the analogous current options in § 52.38(b)(7), (8), and (9) with regard to the Group 2 trading program.

Like the analogous options under the Group 2 trading program, the abbreviated and full SIP options under the Group 3 trading program in new § 52.38(b)(11)(i) and (ii) and (b)(12)(i) and (ii) include options for a state to expand applicability to include certain non-EGU boilers and combustion turbines or smaller EGUs in the state that were previously subject to the NO_X Budget Trading Program. As discussed in section VII.F.3 of this document, in conjunction with an expansion to include the non-EGUs, the state would be able to also issue an additional amount of allowances. Revised § 52.38(b)(13)(ii)[233] clarifies that a SIP revision requiring a state's sources – EGUs or non-EGUs – to participate in the Group 3 trading program would satisfy the state's obligations to adopt control measures for such sources under the NO_X SIP Call.

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[232] *See* §§ 52.54(b) (Alabama), 52.184 (Arkansas), 52.840(b) (Iowa), 52.882(b) (Kansas), 52.1284 (Mississippi), 52.1326(b) (Missouri), 52.1930 (Oklahoma), 52.2283(d) (Texas), and 52.2587(e) (Wisconsin).

[233] Redesignated from § 52.38(b)(10)(ii). The corresponding cross-reference in the NO_X SIP Call regulations at § 51.121(r)(2) is being updated to reflect the redesignation.

The proposed option discussed in section VII.D.4 of this preamble for a state whose EGUs currently are required to participate the Group 1 or Group 2 trading program to submit a full SIP revision requiring its sources to instead participate in the Group 3 trading program is not being finalized. The similar option at existing § 52.38(b)(6) for Georgia to submit a full SIP revision requiring its sources to participate in the Group 2 trading program is being removed, along with the provisions governing the associated conversions of Group 1 allowances to Group 2 allowances at existing § 97.526(c)(2) and (3). Language addressing treatment of the converted Group 2 allowances under the Group 2 trading program's assurance provisions is removed from the definition of "common designated representative's share" at § 97.802.

The principal consequences of EPA's approval of a full SIP revision under § 52.38(b) are set forth in § 52.38(13) and (14). Revised § 52.38(b)(13)(i)[234] provides that – with exceptions indicated in other provisions of § 52.38(b) – full and unconditional approval of a state's full SIP revision under new § 52.38(b)(13) as correcting the SIP's deficiency that was the basis for a given FIP would cause the automatic withdrawal of the corresponding FIP requirements with regard to the sources in the state (except sources in Indian country with the borders of the state). New § 52.38(b)(14)(i), which addresses the Group 1 and Group 2 trading programs rather than the Group 3 trading program, identifies specific amended provisions of the federal Group 1 and Group 2 trading programs that will continue to apply to sources in a state Group 1 or Group 2 trading program implemented under a SIP provision in order to provide programmatic consistency across sources participating in the federal trading program and sources participating in integrated state trading programs. Revised § 52.38(b)(14)(ii),[235] which addresses the Group 3 trading program as well as the Group 1 and Group 2 trading programs, preserves EPA's ability to complete allowance allocations for any control period where such allocations were already

[234] Redesignated from § 52.38(b)(10)(i).
[235] Redesignated from § 52.38(b)(11)(i).

underway when the SIP revision was approved. Provisions indicating these consequences of approval of a full SIP revision are also being added to the state-specific CFR sections.

The transition between the Group 2 trading program and the Group 3 trading program, as well as the transition between the Group 1 trading program and the Group 2 trading program or Group 3 trading program, is addressed in § 52.38(b)(14)(iii), which identifies several allowance-related provisions of the federal trading program regulations that continue to apply when the sources in a state transition to a different federal trading program (and also continue to apply under an integrated state trading program). New § 52.38(b)(14)(iii)(A) and revised § 52.38(b)(14)(iii)(B),[236] respectively, preserve EPA's authority under new § 97.526(c) to transfer Group 1 allowances among accounts under common control and EPA's authority under revised § 97.526(d)[237] to carry out conversions of Group 1 allowances to Group 3 allowances in all compliance accounts (as well as all general accounts) following the transition of a state's sources from the Group 2 trading program to the Group 3 trading program or following any SIP revision, adding to the regulations' existing coverage with respect to conversions of Group 1 allowances to Group 2 allowances. New § 52.38(b)(14)(iii)(C) and (D), respectively, preserve EPA's analogous authority under new § 97.826(c) and (d) with respect to transfers of Group 3 allowances among accounts and conversions of Group 2 allowances to Group 3 allowances in analogous circumstances. New § 52.38(b)(14)(iii)(E) similarly preserves EPA's authority under new § 97.811(d), concerning the recall of Group 2 allowances allocated to sources in Group 3 states for control periods after 2020. For clarity, revisions to the state-specific CFR sections substantively replicate the provisions of § 52.38(b)(14)(iii) indicating that the provisions of §§ 97.826(c) and (d) and 97.811(d) continue to apply following the transition of a state's sources from one trading program to another and following approval of any SIP revision under § 52.38(b).

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[236] Redesignated from § 52.38(b)(11)(ii).
[237] Redesignated from § 97.526(c).

New § 52.38(b)(16)(ii) provides that, after the control period in 2020, EPA will stop administering all Group 2 trading program provisions established under SIP revisions previously approved for Group 2 states whose sources are required to participate in the Group 3 trading program starting with the 2021 control period.[238]

Finally, new § 52.38(b)(17) contains updatable lists of states with approved SIP revisions to modify or replace the FIP requirements for the Group 3 trading program, supplementing the analogous lists at § 52.38(b)(15) and (b)(16)(i)[239] for the Group 1 and Group 2 trading programs.

B. New CSAPR NO_X Ozone Season Group 3 Trading Program Provisions

The Group 3 trading program regulations are being promulgated in a new subpart GGGGG of part 97 (40 CFR 97.1001 through 97.1035). Definitions, applicability, standard requirements, and other general provisions are set forth in §§ 97.1001 through 97.1008. State budgets and allocations of allowances to individual units are addressed in §§ 97.1010 through 97.1012, and provisions concerning designated representatives are covered in §§ 97.1013 through 97.1018. Management and use of allowances, including accounts, recordation, transfers, compliance, and banking, are addressed in §§ 97.1020 through 97.1028. Provisions for monitoring, recordkeeping, and reporting are set forth in §§ 97.1030 through 97.1035.

In general, the Group 3 trading program provisions parallel the existing Group 2 trading program regulations in subpart EEEEE of part 97 but reflect the amounts of the budgets, new unit set-asides, Indian country new unit set-asides, and variability limits established in this proposed rulemaking, all of which are set forth in new § 97.1010.

Under § 97.1006(c)(3)(i) and (ii), the obligations to hold one Group 3 allowance for each ton of emissions during the control period and to comply with the Group 3 trading program's assurance provisions begins with the 2021 control period, four years later than the analogous start dates for the Group 2 trading program. The deadlines for certifying monitoring systems

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[238] The states with approved SIP revisions that are affected under this provision are Indiana and New York.

[239] Redesignated from § 52.38(b)(12) and (13).

under § 97.1030(b) and for beginning quarterly reporting under § 97.1034(d)(1) similarly are four years later than the analogous Group 2 trading program deadlines. The allowance recordation deadlines under § 97.1021 begin generally four years later than the comparable recordation deadlines under the Group 2 trading program but will reach the same schedule by July 1, 2023, which is the deadline for recordation of allowances for the control period in 2026 under both trading programs. However, under new § 97.1021(m), EPA will not record any allocations of Group 3 allowances to any unit at a source until all deductions of Group 2 allowances previously allocated to the units at the source for control periods after 2020 have been completed in accordance with new § 97.811(d).

Like the analogous Group 2 regulations, the Group 3 regulations allow a Group 3 allowance that was allocated to any account as a replacement for deducted Group 1 or Group 2 allowances to be used for all of the purposes for which any other Group 3 allowance may be used. This is accomplished by adding references to §§ 97.526(d)[240] and 97.826(d) -- the sections under which the conversions are carried out -- to the definitions of "allocate" and "CSAPR NO_X Ozone Season Group 3 allowance" in § 97.1002 as well as the default order for deducting allowances for compliance purposes under § 97.1024(c)(2).

As is currently allowed under the Group 2 trading program, in order to facilitate NO_X SIP Call compliance, a state is allowed to expand applicability of the Group 3 trading program to include any sources that previously participated in the NO_X Budget Trading Program, and the state can also issue an amount of allowances beyond the state's Group 3 trading program budget if applicability is expanded to include large non-EGU boilers and turbines. Again, like the Group 2 trading program, the assurance provisions apply only to emissions from the sources subject to the Group 3 trading program before any such expansion. Accordingly, the assurance provisions in the proposed Group 3 trading program regulations exclude any additional units and allowances brought into the program through such a SIP revision. Specifically, the definitions of

[240] Redesignated from § 97.526(c).

"base CSAPR NO_X Ozone Season Group 3 unit" and "base CSAPR NO_X Ozone Season Group 3 source" in § 97.1002 exclude units and sources that would not have been included in the program under § 97.1004, and all provisions related to the Group 3 assurance provisions reference only such "base" units and sources.

Sections 97.1016, 97.1018, and 97.1020(c)(1) and (5) reduce the administrative compliance burden for sources in the transition from the Group 2 trading program to the Group 3 trading program by providing that certain one-time or periodic submissions made for purposes of compliance with the Group 1 or Group 2 trading program will be considered valid for purposes of the Group 3 trading program as well. The submissions treated in this manner are a certificate of representation or notice of delegation submitted by a designated representative and an application for a general account or notice of delegation submitted by an authorized account representative.

Finally, in conjunction with promulgation of the new Group 3 trading program, EPA is amending the administrative appeal provisions in part 78 to make the procedures of that part applicable to determinations of the EPA Administrator under the new Group 3 trading program in the same manner as the procedures are applicable to similar determinations under the other CSAPR trading programs and previous EPA trading programs. These amendments add provisions for the Group 3 trading program to: the list in § 78.1(a)(1) of CFR sections (and analogous SIP revisions) generally giving rise to determinations subject to the part 78 procedures; the list in § 78.1(b) of certain determinations that are expressly subject to those procedures; the list in § 78.3(a) of the types of persons who may seek review under the procedures; the list in § 78.3(b) of persons who must be served regarding an appeal; the list in § 78.3(c) of the required contents of petitions for review; the list in § 78.3(d) of matters for which a right of review under part 78 is not provided; and the requirements in § 78.4(a)(1) as to who must sign a filing.

C. Transitional Provisions

As discussed in section VII.C.4., EPA is establishing four sets of transitional provisions to address the transition of sources that currently participate in the CSAPR NO_X Ozone Season Group 2 Trading Program but that, starting with the 2021 control period, will instead participate in the CSAPR NO_X Ozone Season Group 3 Trading Program.

The first set of transitional provisions addresses the practical issues associated with transitioning to a new trading program for the 2021 ozone season given that the effective date for the final action in this rulemaking will fall after the start of the ozone season on May 1, 2021. In order to avoid application of the more stringent emission reduction requirements proposed in this action retroactively before the final rule's effective date, this set of provisions makes supplemental allocations of Group 3 allowances to Group 3 sources in amounts collectively equal to the differences in the respective states' budgets under the Group 2 and Group 3 trading programs for the portion of the 2021 ozone season occurring before that date. The total amounts of supplemental allowances for each state will be determined under new § 97.1010(d). The amount of the allocation to each Group 3 unit will be the incremental amount that each unit would have received if the supplemental allowances had been allocated as part of the respective state's emissions budget for 2021, using the same allocation methodology EPA applies to compute the allocations to existing units from the emissions budget, as set forth in new § 97.1011(a)(3). In addition, to avoid retroactive application of the more stringent Group 3 assurance levels associated with the more stringent Group 3 budgets before the final rule's effective date, the assurance levels for each Group 3 state for the 2021 control period are increased by the product of 1.21 times the total amount of the supplemental allocations to the units in that state. The language implementing this provision is included in new § 97.1006(c)(2)(iii). New paragraph (2)(ii) of the definition of "common designated representative's assurance level" in § 97.1002 includes language that accounts for the allocations of supplemental allowances and the increment to the variability limit when apportioning

responsibility for any exceedance of a state's assurance level among the owners and operators of the state's sources.

The second and third sets of transitional provisions under this final rule address conversions of Group 2 allowances (and in some instances Group 1 allowances) to Group 3 allowances for use in the new Group 3 trading program. These provisions are implemented largely through the addition of new § 97.826(d) to the Group 2 trading program regulations and revisions to the analogous conversion provisions in the Group 1 trading program regulations. Most notably, the one-time conversion of some banked 2017-2020 Group 2 allowances to an initial bank of Group 3 allowances is implemented through the provisions in new § 97.826(d)(1). These provisions set forth the schedule and mechanics for a one-time conversion of Group 2 allowances that were allocated for the control periods in 2017 through 2020 and that that remain banked following the completion of deductions for compliance for the 2020 control period. The conversion will be applied to all banked Group 2 allowances that as of the scheduled conversion date are held in any compliance account for a source located in a Group 3 state and, if necessary, to allowances held in general accounts, but will not be applied to allowances held in a compliance account for a source located in a Group 2 state.

The provisions setting forth the procedures for conversion of additional 2017-2020 Group 2 allowances to Group 3 allowances as a safety valve mechanism are in § 97.826(d)(2). Also, there is a possibility under the Group 2 trading program that some new Group 2 allowances may be issued to a Group 3 source after the conversions to Group 3 allowances have already taken place. Under § 97.826(d)(3), EPA may convert these allowances to Group 3 allowances as if they had been issued and recorded before the general conversion to create an initial Group 3 bank.

Owners and operators of Group 3 sources generally may not retain banked Group 2 allowances in the compliance accounts for those sources after the date when the various transitional provisions have been carried out. If any such Group 2 allowances allocated for a control period before 2021 remain in the compliance account for a Group 3 source after April 1,

2022, new § 97.826(c) allows EPA to identify or, if necessary, establish a general account controlled by the source's owners and operators and to relocate the Group 3 allowances to that account. If obligations to hold Group 2 allowances arise later, such as an obligation to hold additional allowances because of excess emissions, new § 97.826(e) authorizes the use of Group 3 allowances to satisfy such obligations. When held for this purpose, a single Group 3 allowance could satisfy the obligation to hold more than one Group 2 allowance, as though the conversion were reversed. (As an alternative to using these provisions, the owners and operators of a Group 3 source could use Group 2 allowances held in a general account.)

Parallel amendments are being made to the provisions addressing conversions of Group 1 allowances to Group 2 allowances in § 97.526. Specifically, amendments to § 97.526(d)(1)(iv)[241] allow EPA to identify or, if necessary, establish a general account controlled by the source's owners and operators and to relocate to that new account any unclaimed Group 2 allowances resulting from the creation of an initial bank of Group 2 allowances during the first control period under the Group 2 trading program. In addition, there is a possibility under the Group 1 trading program that some new Group 1 allowances may be issued to a Group 3 source after the conversions of Group 1 to Group 2 allowances and then Group 2 to Group 3 allowances have already taken place. Under new § 97.526(d)(2)(ii), EPA may convert these Group 1 allowances to Group 3 allowances as if they had been issued and recorded before the general conversions. New § 97.526(e)(2) authorizes the use of Group 3 allowances to satisfy obligations to hold Group 1 allowances that may arise later, such as an obligation to hold additional allowances because of excess emissions.

The fourth set of transitional provisions under this final rule, which address the recall of Group 2 allowances previously allocated for control periods after 2020 to Group 3 sources, is implemented at new § 97.811(d). The scope of the allowance surrender requirements and assignment of responsibility for compliance are addressed in § 97.811(d)(1) and (2). The

[241] Redesignated from § 97.526(c)(4).

procedures EPA will follow to deduct allowances from sources' compliance accounts (or in exceptional circumstances, from general accounts) are set forth in § 97.811(d)(3) and (4). Clean Air Act violations for noncompliance with the surrender requirements are addressed at § 97.811(d)(5). Provisions addressing recordation and notifications are included at § 97.811(d)(6) and (7).

Finally, in § 78.1(b)(14) and (17), determinations of the EPA Administrator under §§ 97.526(d) and 97.826(d) regarding conversions of Group 1 and Group 2 allowances to Group 3 allowances and determinations of the EPA Administrator under § 97.811(d) regarding the recall of Group 2 allowances previously allocated to Group 3 units for control periods after 2020 are added to the list of determinations expressly subject to the part 78 procedures.

D. Conforming Revisions, Corrections, and Clarifications to Existing Regulations

As discussed in section VII.C.8, EPA is finalizing several amendments to the existing CSAPR trading programs and the Texas SO_2 Trading Program for conformity with the analogous provisions of the new Group 3 trading program.

The amendments providing for EPA to record allocations to existing units three instead of four years in advance of the control period at issue, starting with allocations for the 2025 control periods, are implemented in the existing CSAPR trading programs through revisions to §§ 97.421(f), 97.521(f), 97.621(f), 97.721(f), and 97.821(f).

The amendments switching from a two-round process to a one-round process for allocating allowances from new unit set-asides and Indian country new unit set-asides starting with the 2021 control periods are implemented in the existing CSAPR trading programs through revisions to §§ 97.411(b), 97.511(b), 97.611(b), 97.711(b), and 97.811(b) and 97.412, 97.512, 97.612, 97.712, and 97.812. The changes to the deadlines for EPA to record the allocations determined through the proposed one-round process are implemented through revisions to §§ 97.421(g) through (j), 97.521(g) through (j), 97.621(g) through (j), 97.721(g) through (j), and 97.821(g) through (j). The necessary coordinating revisions to dates included in the definitions of

"allowance transfer deadline" and "common designated representative" are made in §§ 97.402, 97.502, 97.602, 97.702, and 97.802. The simplifications of the assurance provisions made possible by the changes in the new unit set-aside provisions are implemented through revisions to §§ 97.425(b), 97.525(b), 97.625(b), 97.725(b), and 97.825(b) as well as simplification of related definitions ("common designated representative's assurance level") and removal of disused definitions ("allowable NO_X emission rate", "allowable SO_2 emission rate", "coal-derived fuel", and "heat rate") in §§ 97.402, 97.502, 97.602, 97.702, and 97.802. The related extensions to the deadlines for states with approved SIP revisions to submit to EPA any state-determined allowance allocations are implemented through revisions to § 52.38(a)(4) and (5) and (b)(4), (5), (8) and (9) and § 52.39(e), (f), (h), and (i).

As discussed in section VII.C.8., EPA is replicating several of the deadline revisions proposed for the existing CSAPR trading programs in the similarly structured Texas SO_2 Trading Program in order to minimize unnecessary differences between the regulations for the programs. These revisions to the Texas SO_2 Trading Program regulations are implemented at § 97.902 (definitions of "allowance transfer deadline" and "common designated representative"), 97.921(b) and (c), and 97.925(b).

The amendments authorizing EPA to reallocate any incorrectly allocated allowances through the new unit set-aside procedures for a control period after the correction is identified, instead of the new unit set-aside procedures for the control period for which the incorrect allocations were originally made, are implemented in §§ 97.411(c)(5), 97.511(c)(5), 97.611(c)(5), 97.711(c)(5), and 97.811(c)(5).

The amendments correcting the amounts of allowances in the new unit set-asides to address rounding differences from earlier amendments and removing the amounts of budgets, new unit set-asides, and variability limits that no longer apply or that would have applied only in the event of an optional SIP revision are implemented in §§ 97.410, 97.510, 97.610, 97.710, and 97.810.

The amendments addressing the transfer of allowances from compliance accounts to general accounts in instances where the sources in a state are no longer covered by a particular CSAPR trading program are implemented in new §§ 97.426(c), 97.526(c), 97.626(c), 97.726(c), and 97.826(c).

New § 52.38(a)(7)(i) and (b)(14)(i) and § 52.39(k)(1) identify the amended federal trading program provisions that EPA will implement in the existing state CSAPR trading programs to ensure consistent program implementation across all sources, whether the sources participate in the integrated trading programs under FIPs or approved SIP revisions.

EPA is making additional, non-substantive corrections and clarifications in various provisions of the existing CSAPR trading programs in subparts AAAAA through EEEEE of part 97, the Texas SO_2 Trading Program in subpart FFFFF of part 97, and the appeal procedures in part 78. The corrections and clarifications address minor typographical, wording, and formatting errors or update existing cross-references to reflect the new and redesignated provisions in §§ 52.38 and 52.39. In the NO_X SIP Call regulations at 40 CFR 51.121, a cross-reference to the CSAPR Update FIP provisions is being updated. In addition, the proposed corrections and clarifications include the following items:

- *Reorganization of the definitions of "common designated representative's assurance level" and "common designated representative's share" in §§ 97.402, 97.502, 97.602, 97.702, and 97.802*. The revisions clarify the definitions by relocating certain language between them and eliminating provisions that are no longer necessary because of the revisions to the new unit set-aside allocation procedures and the assurance provisions.

- *Addition of a definition of "CSAPR NO_X Ozone Season Group 3 allowance" in §§ 97.502 and 97.802 and addition of definitions of "CSAPR NO_X Ozone Season Group 3 Trading Program" and/or "nitrogen oxides" in §§ 97.402, 97.502, 97.602, 97.702, 97.802, and 97.902*. The new definitions of terms for the Group 3 allowances and trading program are needed for other provisions that reference the Group 3 allowances or trading program, while the definition

of nitrogen oxides corrects a current omission. Nitrogen oxides are defined as "all oxides of nitrogen except nitrous oxide (N_2O), expressed on an equivalent molecular weight basis as nitrogen dioxide (NO_2)", which is consistent both with the definitions used in other EPA programs (*see, e.g.,* 40 CFR 51.50, 51.121(a), and 51.122(a)) and with historical practice in the existing CSAPR programs.

- *Revisions to the descriptions of units and control periods eligible for allocations of allowances from the new unit set-asides and Indian country new unit set-asides in §§ 97.412, 97.512, 97.612, 97.712, and 97.812*. The revisions do not substantively alter which units may receive allocations or the amounts of those allocations. Rather, the revisions more clearly express the existing requirements of the allocation procedures, under which EPA calculates a given unit's allocations considering only the unit's emissions that occur after its deadline for monitor certification (because any earlier emissions would not have occurred in a "control period" for that unit).

- *Revisions to the provisions for identification of specific allowances to be deducted for compliance in §§ 97.424(c), 97.524(c), 97.624(c), 97.724(c), 97.824(c), and 97.924(c)*. The revisions clarify by referencing designated representatives instead of authorized account representatives, consistent with the existing requirement that the authorized account representative for a source's compliance account must be the designated representative for the source.

- *Addition of references in part 78 to the Texas SO_2 Trading Program*. The added references are analogous to the references that are being added to part 78 for the new Group 3 trading program. The applicability of the appeal procedures in part 78 to decisions of the EPA Administrator under the Texas SO_2 Trading Program has already been established in the provisions for that trading program at § 97.908, but the addition of references in part 78 clarifies the regulations.

X. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders ("EO") can be found at https://www.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 final action is an economically significant regulatory action and 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. EPA prepared an analysis of the potential costs and benefits associated with this final action. This analysis, which is contained in the "Regulatory Impact Analysis for the Final Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS" [EPA-452-R-21-002], is available in the docket and is briefly summarized in section VIII of this preamble.

B. Paperwork Reduction Act (PRA)

This final action will not impose any new information collection burden under the PRA. This final action relocates certain existing information collection requirements for certain sources from subpart EEEEE of 40 CFR part 97 to a new subpart GGGGG of 40 CFR part 97, but neither changes the inventory of sources subject to information collection requirements nor changes any existing information collection requirements for any source. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control number 2060-0667.

C. Regulatory Flexibility Act (RFA)

I certify that this final 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 final action are small businesses, small organizations, and small governmental jurisdictions.

EPA has lessened the impacts for small entities by excluding all units serving generators with capacities equal to or smaller than 25 MWe. This exclusion, in 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 12 states for which EPA is issuing FIPs. Within these states, EPA identified seven potentially affected EGUs that are owned by two entities that met the Small Business Administration's criteria for identifying small entities. Neither of these entities is projected to experience compliance costs that exceed 1 percent of generation revenues in 2021. EPA estimated the total net compliance cost to these two small entities to be approximately $0.04 million (in $2016).

EPA has concluded that there will be no significant economic impact on a substantial number of small entities (no SISNOSE) for this final rule. Details of this analysis are presented in the RIA, which is in the public docket.

D. Unfunded Mandates Reform Act (UMRA)

This final action does not contain an unfunded mandate of $100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and will not significantly or uniquely affect small governments. Note that EPA expects the final rule 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 final rule, 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 impact on government entities, refer to the RIA, which is in the public docket.

E. Executive Order 13132: Federalism

This final action does not have federalism implications. As finalized, this final action 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 final action implements EGU NO_X ozone season emission reductions in 12 eastern states (Illinois, Indiana, Kentucky, Louisiana, Maryland, Michigan, New Jersey, New York, Ohio, Pennsylvania, Virginia, and West Virginia.). 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 rule affects air quality.

In developing the CSAPR, which was promulgated on July 6, 2011, to address interstate transport of ozone pollution under the 1997 ozone NAAQS, 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 allow for meaningful and timely tribal input into its development. A summary of that consultation is provided at 76 FR 48346.

In that rulemaking, EPA received comments from several tribal commenters regarding the availability of the 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 the 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 action, 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 rule 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 CSAPR and the CSAPR Update.

EPA consulted with tribal officials early in the process of developing this rule in accordance with the EPA Policy on Consultation and Coordination with Indian Tribes (May 2011). Before proposing this rule, EPA informed tribes of the rule's development on a National Tribal Air Association (NTAA) monthly air policy conference call that took place on June 25, 2020. In a separate NTAA call on October 20, 2020, EPA gave an overview of the proposed rule.

In order to permit tribes to have meaningful and timely input into the development of the final rule, EPA offered consultation to tribal leaders. On October 30, 2020, EPA sent out letters via electronic mail to all 574 federally recognized tribes informing them of this action, offering consultation and requesting comment on this rulemaking. Courtesy copies of the letters were also sent via email to tribal air staff and tribal environmental professionals. EPA also sent courtesy copies to EPA's Regional Tribal Air Coordinators for notification to their tribes. To further provide tribes with the resources that they might require to engage in effective consultation, EPA also held an informational webinar on the rule on November 9, 2020. EPA did not receive any requests for consultation on this rule.

Comment: As part of the public comment process, EPA received comments from the National Tribal Air Association (NTAA), the Keweenaw Bay Indian Community, the Leech Lake Band of Ojibwe, and the Ute Mountain Ute Tribe Environmental Programs Department. Commenters felt that EPA has not complied with its tribal consultation obligations.

Response: EPA recognizes the critical importance of engagement with tribes and believes that it has provided tribes appropriate opportunity to provide input on this rule through NTAA calls, an informational webinar, and requests for consultation. EPA will continue to engage with tribes as part of the outreach strategy for this final rule.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of "covered regulatory action" in section 2-202 of the Executive Order. This action is not subject to Executive Order 13045 because it implements a previously promulgated health-based federal standard. This action's health and risk assessments are contained in Chapter 5 of the accompanying RIA. EPA believes that the ozone

reductions, $PM_{2.5}$ reductions, and CO_2 reductions from this final rule will further improve children's health.

Comment: EPA received comment contending that EPA has failed to identify and assess the health risks to children from its decision to authorize continued interstate ozone pollution that contributes to violations of the 2008 and 2015 ozone air quality standards in downwind states. The commenter states that EPA has consistently recognized that children are disproportionately vulnerable to the environmental health risks of ozone and asserts that by authorizing continued pollution that will harm children, EPA has failed to ensure that its policies, programs, activities, and standards address these risks. The commenter claims that this rule is subject to section 2–202 of the Executive Order, which provides that "covered regulatory action" means "any substantive action in a rulemaking" that is "likely to result in a rule that may" (1) "adversely affect in a material way . . . the environment, public health or safety, or State, local, or tribal governments or communities" and (2) "concern an environmental health risk or safety risk that an agency has reason to believe may disproportionately affect children." The commenter asserts that ozone pollution above the air quality standards EPA has adopted indisputably is a health risk that disproportionately affects children.

Response: According to section 2–202, a rulemaking is a "covered regulatory action" and thus subject to the Executive Order if the action is economically significant under Executive Order 12866 and involves an environmental health risk or safety risk that the agency has reason to believe may disproportionately affect children. While OMB has determined that this rulemaking is economically significant for purposes of Executive Order 12866, the rulemaking does not meet the second criterion. The health-based standard at issue in this action has already been set in a prior rulemaking to promulgate the 2008 ozone NAAQS, wherein EPA did consider the effects of the standard under the Executive Order. *See* 73 FR 16436, 16506–07. Therefore, this action does not concern an environmental health or safety risk because EPA is simply evaluating how to implement an existing health standard.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use

This action is not a "significant energy action" because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. EPA has prepared a Statement of Energy Effects for the regulatory control alternative as follows. The Agency estimates a much less than 1 percent change in retail electricity prices on average across the contiguous U.S. in 2021, and a much less than 1 percent reduction in coal-fired electricity generation in 2021 as a result of this rule. EPA projects that utility power sector delivered natural gas prices will change by less than 1 percent in 2021. 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.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Because of the need to meet the court-ordered signature deadline on this action, EPA did not have sufficient time to undertake a definitive assessment of the impacts of this final rule on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). EPA does not have information at this time that would suggest that this rule has the potential to result in disproportionately high and adverse human health or environmental impacts on vulnerable populations or overburdened communities; however, EPA is also not currently in a position to make a determination to this effect. In this section, EPA outlines the potential impacts of this rule and describes the analytical framework the agency intends to use to evaluate potential environmental justice concerns in future rulemakings.

Ozone pollution from power plants has 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 are transported in the atmosphere over large distances and mix with emissions from other sources. Undertaken to implement CAA section 110(a)(2)(D), this action addresses that "significant" portion of contribution from upwind states to a nonattainment or maintenance receptor. As a result, the rule will reduce exposures to ozone in areas that are struggling to attain or maintain the 2008 ozone NAAQS. By addressing maintenance receptors, this rule reduces the likelihood that areas close to the level of the standard will exceed the current health-based standards in the future. The rule will result in incidental reductions in ozone in other areas, as well as reducing emissions of PM and other pollutants from EGUs that have both localized and distant impacts.

At the same time, this action alone cannot fully resolve any disproportionate impacts of ozone levels in downwind areas. Rather, it eliminates upwind state "significant contribution," thus ameliorating those conditions and improving downwind air quality. While this rule is expected to reduce interstate ozone transport and thus to yield overall health and environmental benefits, further analysis would be required to assess potential environmental justice concerns – including, for example, whether the downwind air quality benefits are equitably distributed.[242]

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. Moreover, CAA section 110(a)(2)(D) addresses transport of criteria pollutants between states and 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.

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[242] A potential environmental justice concern is "the actual or potential lack of fair treatment or meaningful involvement of minority populations, low-income populations, tribes, and indigenous peoples in the development, implementation and enforcement of environmental laws, regulations and policies." EPA, Guidance on Considering Environmental Justice During the Development of Regulatory Actions (May 2015).

EPA informed tribal communities of its development of this rule on a National Tribal Air Association – EPA air policy conference call on June 25, 2020. EPA also held two informational webinars for tribes and environmental justice communities on November 9, 2020 and November 10, 2020, respectively, where EPA presented an overview of the rule and provided tribes and communities with resources that they might require to engage in the public comment process.

While a court-ordered deadline precludes a fulsome environmental justice analysis for this rulemaking, this section describes a framework for assessing potential environmental justice concerns for future rulemakings based on EPA's *Technical Guidance for Assessing Environmental Justice in Regulatory Analysis* (2016). Going forward, EPA is committed to conducting environmental justice analysis for rulemakings based on a framework similar to what is outlined here, in addition to investigating ways to further weave environmental justice into the fabric of the rulemaking process including through enhanced meaningful engagement with environmental justice communities.[243]

When assessing the potential for disproportionately high and adverse health or environmental impacts of regulatory actions on minority populations, low-income populations, tribes, and/or indigenous peoples, EPA strives to answer three broad questions: (1) Is there evidence of potential environmental justice concerns in the baseline (the state of the world absent the regulatory action)? Assessing the baseline will allow EPA to determine whether pre-existing disparities are associated with the pollutant(s) under consideration (e.g., if the effects of the pollutant(s) are more concentrated in some population groups). (2) Is there evidence of potential environmental justice concerns for the regulatory option(s) under consideration? Specifically, how are the pollutant(s) and its effects distributed for the regulatory options under consideration?

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[243] While not the focus of this discussion, meaningful involvement intersects with analytic considerations in several important respects. The use of plain language to explain the regulatory analysis can make it easier for the public to understand what was done and submit comments. Requests for information on unique exposure pathways or end points of concern, as well as data sources, early in the regulatory process can improve the analysis of potential EJ concerns. Specific aspects of the regulatory design may also make it easier to monitor and share information with the public once the rulemaking is in place.

And, (3) do the regulatory option(s) under consideration exacerbate or mitigate environmental justice concerns relative to the baseline?[244] It is not always possible to quantitatively assess all three questions. For instance, in some regulatory contexts it may only be possible to quantitatively characterize the baseline due to data and modeling limitations.

A good starting point for assessing the need for a more detailed environmental justice analysis is to review the available evidence from the published literature and from community input on what factors may make population groups of concern more vulnerable to adverse effects (e.g., unique pathways; cumulative exposure from multiple stressors; behavioral, biological, or environmental factors that increase susceptibility). It is also important to evaluate the data and methods available for conducting an environmental justice analysis. A screening-level analysis is recommended to help characterize population groups of concern in the context of a specific rulemaking, as well as identify potential comparison groups, data, methods and analytical needs.

Current EPA guidance does not prescribe or recommend a specific approach or methodology for conducting screening-level analysis,[245] though a key consideration is consistency with the assumptions underlying other parts of the regulatory analysis when evaluating the baseline and regulatory option(s). Even without a more in-depth analysis of potential environmental justice concerns, the screening-level analysis can be useful for describing the proximity of regulated sources to minority populations, low-income populations,

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[244] Differential impacts on population groups of concern can only be identified in relation to a comparison group. A comparison group can be defined in multiple ways, for instance in terms of individuals with similar socioeconomic characteristics located at a broader geographic level or with different socioeconomic characteristics within an affected area. The goal is to select a comparison group that allows one to identify how the effects of the regulation vary by race, ethnicity, and income separate from other systematic differences across groups or geographic areas.

[245] S*ee* EPA, Guidelines for Preparing Economic Analyses (Dec. 2010, rev. May 2014), available at https://www.epa.gov/sites/production/files/2017-08/documents/ee-0568-50.pdf; EPA, Guidance on Considering Environmental Justice During the Development of Regulatory Actions (May 2015), available at https://www.epa.gov/sites/production/files/2015-06/documents/considering-ej-in-rulemaking-guide-final.pdf; EPA, Technical Guidance for Assessing Environmental Justice in Regulatory Analysis (June 2016) available at https://www.epa.gov/sites/production/files/2016-06/documents/ejtg_5_6_16_v5.1.pdf.

and/or indigenous peoples; the number of sources that may be impacting population groups of concern; the nature and amounts of pollutant(s) that may impact population groups of concern; unique exposure pathways associated with the regulated pollutant(s); stakeholder concern(s) about the potential regulatory action; and any history of environmental justice concerns associated with the pollutant(s) being regulated.

In cases where further investigation of potential environmental justice concerns is warranted, a variety of techniques are available. These techniques are briefly described below, and EPA refers the reader to EPA's *Technical Guidance for Assessing Environmental Justice in Regulatory Analysis* (2016) for more detailed discussion of each approach including their advantages and limitations. The approach taken to conduct environmental justice analysis is informed by the quantitative information generated for the risk and benefits analysis conducted in support of the rulemaking and the analytic opportunities that provides. Building in consideration of environmental justice at the early stages of the analysis – for instance, to ensure that unique exposure pathways are adequately characterized - thus is of paramount importance. When data allow, it is also informative to characterize the distribution of risks, exposures, or outcomes within each population group, not just average impacts, with particular attention paid to the characteristics of populations at the high end of the distribution. Qualitative approaches may also prove a useful complement to quantitative assessment in cases where either data are not available at a sufficiently disaggregated level to conduct distributional analysis or when they offer insight into considerations omitted from quantitative assessment (e.g., how environmental quality interacts with people's values, behaviors, motivations, or cultures).

Two of the most straightforward analytic approaches to environmental justice analysis are summary statistics and visual displays. Summary statistics can be used to characterize the distribution of health and environmental impacts (e.g., county- or census-tract level average) for population groups of concern relative to an appropriate comparison group (e.g., national or state average). Visual displays such as maps can communicate how the geographic distribution of

pollution overlaps with that of population groups of concern and therefore can identify potential areas where additional outreach, data collection, or monitoring may be warranted.

More sophisticated analytic approaches may also be possible when data allow. Proximity-based analysis uses the distance to polluting source(s) as a proxy for risk or exposure. Specifically, it compares the demographic and socioeconomic characteristics of population groups relatively close (e.g., within a certain distance or census tract) to the source of pollution to those living further away. Simple statistical tests are then used identify whether, on average, there are statistically discernible differences between those living close to versus further away from the polluting sources. The validity of the proximity-based approach rests on the appropriateness of several assumptions, such as that the effects of the pollutant(s) occur only within the designated area and that all individuals residing close by are equivalently exposed. When data are available, it may also be possible to conduct risk or exposure analysis to evaluate potential environmental justice concerns. Emissions or other ambient concentration data can be combined with fate and transport modeling. In cases where disaggregated information is available on the types of activities that result in differences in exposure across population groups of concern, it may be possible to characterize differences in health effects due to the regulatory action. It also may be possible to combine exposure data with information on differences in risk across population groups.

K. *Congressional Review Act*

This action is subject to the CRA, and EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is a "major rule" as defined by 5 U.S.C. 804(2), because OMB has determined that this rule is "economically significant."

L. *Determinations Under CAA Section 307(b)(1) and (d)*

Section 307(b)(1) of the CAA indicates which federal courts of appeals are the proper forum for petitions for review of final actions by EPA under the CAA. This section provides, in

part, that petitions for review must be filed in the Court of Appeals for the District of Columbia Circuit for: (i) "any nationally applicable regulations promulgated, or final action taken, by the Administrator," or (ii) locally or regionally applicable final action 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." For locally or regionally applicable final actions, the CAA reserves to EPA complete discretion whether to invoke the exception in (ii).

This final action is "nationally applicable" within the meaning of CAA section 307(b)(1). In the alternative, the Administrator is exercising the complete discretion afforded to her under the CAA to make and publish a finding that this action is based on a determination of "nationwide scope or effect" within the meaning of CAA section 307(b)(1).[246] This final action implements the good neighbor provision in 21 states, 6 EPA regions, and 6 federal appellate court circuits. The final action applies a uniform, nationwide analytical method and interpretation of CAA section 110(a)(2)(D)(i)(I) across these states in a single final action, and the final action is based on a common core of legal, technical, and policy determinations.[247] The rule is based on a common core of statutory and case law analysis, factual findings, and policy determinations concerning the transport of ozone-precursor pollutants from the different states subject to it, as well as the impacts of those pollutants and the impacts of options to address those pollutants in yet other states. In particular, in this action, EPA is applying its 4-step analytic framework to implement the good neighbor provision across these states, using a consistent set of policy and analytical determinations. These determinations include findings identifying downwind

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[246] In deciding whether to invoke the exception by making and publishing a finding that this final action is based on a determination of nationwide scope or effect, the Administrator has also taken into account a number of policy considerations, including her judgment balancing the benefit of obtaining the D.C. Circuit's authoritative centralized review versus allowing development of the issue in other contexts and the best use of agency resources.

[247] In the report on the 1977 Amendments that revised section 307(b)(1) of the CAA, Congress noted that the Administrator's determination that the "nationwide scope or effect" exception applies would be appropriate for any action that has a scope or effect beyond a single judicial circuit. *See* H.R. Rep. No. 95-294 at 323, 324, reprinted in 1977 U.S.C.C.A.N. 1402-03.

nonattainment and maintenance receptors and upwind states linked to those receptors; the use of a common multi-factor test to determine which upwind-state contributions to nonattainment and maintenance receptors are "significant" and must be eliminated; and the promulgation of emissions budgets, an integrated interstate emissions trading program, and a regionally consistent set of other compliance requirements for EGUs across twelve states to implement the necessary emission reductions.

For these reasons, this final action is nationally applicable. Alternatively, the Administrator is exercising the complete discretion afforded to her by the CAA and hereby finds that this final action is based on a determination of nationwide scope or effect for purposes of CAA section 307(b)(1). Pursuant to CAA section 307(b), any petitions for review of this final action must be filed in the D.C. Circuit within 60 days from the date this final action is published in the *Federal Register*.

This final 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, "the promulgation or revision of an implementation plan by the Administrator under [CAA section 110(c)]." 42 U.S.C. 7407(d)(1)(B). This final action promulgates new and revised federal implementation plans pursuant to the authority of section 110(c). To the extent any portion of this rulemaking is not expressly identified under section 307(d)(1)(B), the Administrator has determined that the provisions of section 307(d) apply to this action. *See* CAA section 307(d)(1)(V) (the provisions of section 307(d) apply to "such other actions as the Administrator may determine").

List of Subjects

40 CFR Part 51

Environmental protection, Administrative practice and procedure, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen oxides, Ozone.

40 CFR Part 52

Environmental protection, Administrative practice and procedure, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen oxides, Ozone, Particulate matter, Sulfur dioxide.

40 CFR Part 78

Environmental protection, Administrative practice and procedure, Air pollution control, Electric power plants, Nitrogen oxides, Ozone, Particulate matter, Sulfur dioxide.

40 CFR Part 97

Environmental protection, Administrative practice and procedure, Air pollution control, Electric power plants, Nitrogen oxides, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide.

Dated: March 15, 2021.

Michael Regan,

Administrator

For the reasons stated in the preamble, EPA amends parts 51, 52, 78, and 97 of title 40 of the Code of Federal Regulations as follows:

PART 51—REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

1. The authority citation for part 51 continues to read as follows:

Authority: 23 U.S.C. 101; 42 U.S.C. 7401–7671q.

Subpart G—Control Strategy

§ 51.121 [Amended]

2. In § 51.121, amend paragraph (r)(2) by removing "40 CFR 52.38(b)(10)(ii)," and adding in its place "40 CFR 52.38(b)(13)(ii),".

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

3. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq*.

Subpart A—General Provisions

4. Amend § 52.38 by:

a. Amending paragraph (a) by revising the paragraph heading;;

b. Adding a paragraph heading to paragraph (a)(1) and removing "(NO_X)." and adding in its place "(NO_X), except as otherwise provided in this section.";

c. Adding a paragraph heading to paragraph (a)(2);

d. Adding a paragraph heading to paragraph (a)(3) introductory text and removing "Notwithstanding the provisions of paragraph (a)(1) of this section, a State" and adding in its place "A State";

e. Revising paragraph (a)(4) introductory text;

f. In paragraph (a)(4)(i)(A), removing the period at the end of the paragraph and adding in its place a semicolon;

g. In paragraph (a)(4)(i)(B), removing “the following dates:” and adding in its place “the dates in Table 1 to this paragraph;”, adding a heading to the table, removing the table entry for “2023 and any year thereafter”, and adding table entries for “2023 and 2024” and “2025 and any year thereafter”;

h. In paragraph (a)(4)(i)(C), removing “year of such control period.” and adding in its place “year of such control period, for a control period before 2021, or by April 1 of the year following the control period, for a control period in 2021 or thereafter; and”;

i. Adding a paragraph heading to paragraph (a)(5) introductory text and removing “Notwithstanding the provisions of paragraph (a)(1) of this section, a State” and adding in its place “A State”;

j. In paragraph (a)(5)(i)(A), removing the period at the end of the paragraph and adding in its place a semicolon;

k. In paragraph (a)(5)(i)(B), removing “the following dates:” and adding in its place “the dates in Table 2 to this paragraph;”, adding a heading to the table, removing the table entry for “2023 and any year thereafter”, and adding table entries for “2023 and 2024” and “2025 and any year thereafter”;

l. In paragraph (a)(5)(i)(C), removing “year of such control period.” and adding in its place “year of such control period, for a control period before 2021, or by April 1 of the year following the control period, for a control period in 2021 or thereafter; and”;

m. In paragraph (a)(5)(v), adding “and” after the semicolon at the end of the paragraph;

n. Adding a paragraph heading to paragraph (a)(6) and removing “Following promulgation” and adding in its place “Except as provided in paragraph (a)(7) of this section, following promulgation”;

o. Revising paragraph (a)(7);

p. Adding a paragraph heading to paragraph (a)(8) introductory text;

q. Revising the paragraph heading to paragraph (b);

r. Revising paragraph (b)(1);

s. Adding a paragraph heading to paragraph (b)(2);

t. In paragraph (b)(2)(ii), removing "2016 only:" and adding in its place "2016 only, except as provided in paragraph (b)(14)(iii) of this section:";

u. Revising paragraph (b)(2)(iii);

v. Adding paragraphs (b)(2)(iv) and (v);

w. Adding a paragraph heading to paragraph (b)(3) introductory text and removing "Notwithstanding the provisions of paragraph (b)(1) of this section, a State" and adding in its place "A State";

x. Revising paragraph (b)(4) introductory text;

y. In paragraph (b)(4)(ii)(A), removing the period at the end of the paragraph and adding in its place a semicolon;

z. In paragraph (b)(4)(ii)(B), removing "the following dates:" and adding in its place "the dates in Table 3 to this paragraph;", adding a heading to the table, removing the table entry for "2023 and any year thereafter", and adding table entries for "2023 and 2024" and "2025 and any year thereafter";

aa. In paragraph (b)(4)(ii)(C), removing "year of such control period." and adding in its place "year of such control period, for a control period before 2021, or by April 1 of the year following the control period, for a control period in 2021 or thereafter; and";

bb. Adding a paragraph heading to paragraph (b)(5) introductory text and removing "Notwithstanding the provisions of paragraph (b)(1) of this section, a State" and adding in its place "A State";

cc. In paragraph (b)(5)(ii)(A), removing the period at the end of the paragraph and adding in its place a semicolon;

dd. In paragraph (b)(5)(ii)(B), removing “the following dates:” and adding in its place “the dates in Table 4 to this paragraph;”, adding a heading to the table, removing the table entry for “2023 and any year thereafter”, and adding table entries for “2023 and 2024” and “2025 and any year thereafter”;

ee. In paragraph (b)(5)(ii)(C), removing “year of such control period.” and adding in its place “year of such control period, for a control period before 2021, or by April 1 of the year following the control period, for a control period in 2021 or thereafter; and”;

ff. In paragraph (b)(5)(vi), adding “and” after the semicolon at the end of the paragraph;

gg. Removing and reserving paragraph (b)(6);

hh. Adding a paragraph heading to paragraph (b)(7) introductory text, removing “Notwithstanding the provisions of paragraph (b)(1) of this section, a State” and adding in its place “A State”, and adding “or (iv)” after “(b)(2)(iii)”;

ii. Revising paragraphs (b)(8) introductory text and (b)(8)(ii);

jj. In paragraph (b)(8)(iii)(A)(*2*), removing the period at the end of the paragraph and adding in its place a semicolon;

kk. In paragraph (b)(8)(iii)(B), removing “the following dates:” and adding in its place “the dates in Table 5 to this paragraph;”, adding a heading to the table, and revising the table entry for “2025 and any year thereafter”;

ll. In paragraph (b)(8)(iii)(C), removing “year of such control period.” and adding in its place “year of such control period, for a control period before 2021, or by April 1 of the year following the control period, for a control period in 2021 or thereafter; and”;

mm. In paragraph (b)(8)(iii)(D), removing “§ 97.526(c)” and adding in its place “§ 97.526(d)”;

nn. Adding a paragraph heading to paragraph (b)(9) introductory text, removing "Notwithstanding the provisions of paragraph (b)(1) of this section, a State" and adding in its place "A State", and adding "or (iv)" after "(b)(2)(iii)" each time "(b)(2)(iii)" appears;

oo. Revising paragraph (b)(9)(ii);

pp. In paragraph (b)(9)(iii)(A)(*2*), removing the period at the end of the paragraph and adding in its place a semicolon;

qq. In paragraph (b)(9)(iii)(B), removing "the following dates:" and adding in its place "the dates in Table 6 to this paragraph;", adding a heading to the table, and revising the table entry for "2025 and any year thereafter";

rr. In paragraph (b)(9)(iii)(C), removing "year of such control period." and adding in its place "year of such control period, for a control period before 2021, or by April 1 of the year following the control period, for a control period in 2021 or thereafter; and";

ss. In paragraph (b)(9)(iii)(D), removing "§ 97.526(c)" and adding in its place "§ 97.526(d)";

tt. In paragraph (b)(9)(vii), adding "and" after the semicolon at the end of the paragraph;

uu. Redesignating paragraphs (b)(10) through (13) as paragraphs (b)(13) through (16), respectively, and adding new paragraphs (b)(10) through (12), and further redesignating newly redesignated paragraphs (b)(16)(ii) through (iv) as paragraphs (b)(16)(i)(A) through (C), respectively;

vv. Revising newly redesignated paragraph (b)(13) introductory text;

ww. In newly redesignated paragraph (b)(13)(i), removing "The provisions of paragraph (b)(2)(i) or (iii)" and adding in its place "Except as provided in paragraph (b)(14) of this section, the provisions of paragraph (b)(2)(i), (iii), (iv), or (v)";

xx. In newly redesignated paragraph (b)(13)(ii), adding "or (b)(12)(ii)" after "(b)(9)(ii)" and removing "such sources." and adding in its place "such sources, provided that the Administrator and the State continue to carry out their respective functions under such regulations.";

yy. Revising newly redesignated paragraph (b)(14);

zz. Adding a paragraph heading to newly redesignated paragraph (b)(15) introductory text;

aaa. Revising newly redesignated paragraphs (b)(16) introductory text and (b)(16)(i);

bbb. In newly redesignated paragraph (b)(16)(i)(C), removing "(b)(2)(iii)," and adding in its place "(b)(2)(iii) or (iv),"; and

ccc. Adding paragraphs (b)(16)(ii) and (b)(17).

The additions and revisions 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?

(a) *NO_X annual emissions*—(1) *General requirements*. * * *

(2) *Applicability of CSAPR NO_X Annual Trading Program provisions*. * * *

* * * * *

(3) *State-determined allocations of CSAPR NO_X Annual allowances for 2016*. * * *

* * * * *

(4) *Abbreviated SIP revisions replacing certain provisions of the federal CSAPR NO_X Annual Trading Program*. A State listed in paragraph (a)(2)(i) of this section may adopt and include in a SIP revision, and the Administrator will approve, regulations replacing specified provisions of subpart AAAAA of part 97 of this chapter for the State's sources, and not substantively replacing any other provisions, as follows:

(i) * * *

(B) * * *

Table 1 to Paragraph (a)(4)(i)(B)

Year of the control period for which CSAPR NO_X Annual allowances are allocated or auctioned	**Deadline for submission of allocations or auction results to the Administrator**
* * * * * * *	

2023 and 2024	June 1 of the fourth year before the year of the control period.
2025 and any year thereafter	June 1 of the third year before the year of the control period.

* * * * *

(5) *Full SIP revisions adopting State CSAPR NO_X Annual Trading Programs*. * * *

(i) * * *

(B) * * *

Table 2 to Paragraph (a)(5)(i)(B)

Year of the control period for which CSAPR NO_X Annual allowances are allocated or auctioned	**Deadline for submission of allocations or auction results to the Administrator**
* * * * * * *	
2023 and 2024	June 1 of the fourth year before the year of the control period.
2025 and any year thereafter	June 1 of the third year before the year of the control period.

* * * * *

(6) *Withdrawal of CSAPR FIP provisions relating to NO_X annual emissions*. * * *

(7) *Continued applicability of certain federal trading program provisions for NO_X annual emissions*. (i) Notwithstanding the provisions of paragraph (a)(6) of this section or any State's SIP, when carrying out the functions of the Administrator under any State CSAPR NO_X Annual Trading Program pursuant to a SIP revision approved under this section, the Administrator will apply the following provisions of this section, as amended, and the following provisions of subpart AAAAA of part 97 of this chapter, as amended, with regard to the State and any source subject to such State trading program:

(A) The definitions in § 97.402 of this chapter;

(B) The provisions in § 97.410(a) of this chapter (concerning in part the amounts of the new unit set-asides);

(C) The provisions in §§ 97.411(b)(1) and 97.412(a) of this chapter (concerning the procedures for administering the new unit set-asides), except where the State allocates or auctions CSAPR NO_X Annual allowances under an approved SIP revision;

(D) The provisions in § 97.411(c)(5) of this chapter (concerning the disposition of incorrectly allocated CSAPR NO_X Annual allowances);

(E) The provisions in § 97.421(f), (g), and (i) of this chapter (concerning the deadlines for recordation of allocations or auctions of CSAPR NO_X Annual allowances) and the provisions in paragraphs (a)(4)(i)(B) and (C) and (a)(5)(i)(B) and (C) of this section (concerning the deadlines for submission to the Administrator of State-determined allocations or auction results); and

(F) The provisions in § 97.425(b) of this chapter (concerning the procedures for administering the assurance provisions).

(ii) Notwithstanding the provisions of paragraph (a)(6) of this section, if, at the time of any approval of a State's SIP revision under this section, the Administrator has already started recording any allocations of CSAPR NO_X Annual allowances under subpart AAAAA of part 97 of this chapter to units in the State for a control period in any year, the provisions of such subpart authorizing the Administrator to complete the allocation and recordation of such 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.

(8) *States with approved SIP revisions addressing the CSAPR NO_X Annual Trading Program*.

* * *

* * * * *

(b) *NO_X ozone season emissions*—(1) *General requirements*. The CSAPR NO_X Ozone Season Group 1 Trading Program provisions, the CSAPR NO_X Ozone Season Group 2 Trading Program provisions, and the CSAPR NO_X Ozone Season Group 3 Trading Program provisions set forth respectively in subparts BBBBB, EEEEE, and GGGGG of part 97 of this chapter constitute the CSAPR Federal Implementation Plan provisions that relate to emissions of NO_X

during the ozone season (defined as May 1 through September 30 of a calendar year), except as otherwise provided in this section.

(2) *Applicability of CSAPR NO_X Ozone Season Group 1, Group 2, and Group 3 Trading Program provisions*. * * *

* * * * *

(iii) The provisions of subpart EEEEE of part 97 of this chapter apply to sources in each of the following States and Indian country located within the borders of such States with regard to emissions occurring in 2017 and each subsequent year: Alabama, Arkansas, Iowa, Kansas, Mississippi, Missouri, Oklahoma, Tennessee, Texas, and Wisconsin.

(iv) The provisions of subpart EEEEE of part 97 of this chapter apply to sources in each of the following States and Indian country located within the borders of such States with regard to emissions occurring in 2017 through 2020 only, except as provided in paragraph (b)(14)(iii) of this section: Illinois, Indiana, Kentucky, Louisiana, Maryland, Michigan, New Jersey, New York, Ohio, Pennsylvania, Virginia, and West Virginia.

(v) The provisions of subpart GGGGG of part 97 of this chapter apply to sources in each of the following States and Indian country located within the borders of such States with regard to emissions occurring in 2021 and each subsequent year: Illinois, Indiana, Kentucky, Louisiana, Maryland, Michigan, New Jersey, New York, Ohio, Pennsylvania, Virginia, and West Virginia.

(3) *State-determined allocations of CSAPR NO_X Ozone Season Group 1 allowances for 2016*.

* * *

* * * * *

(4) *Abbreviated SIP revisions replacing certain provisions of the federal CSAPR NO_X Ozone Season Group 1 Trading Program*. A State listed in paragraph (b)(2)(i) of this section may adopt and include in a SIP revision, and the Administrator will approve, regulations replacing specified provisions of subpart BBBBB of part 97 of this chapter for the State's sources, and not substantively replacing any other provisions, as follows:

* * * * *

(ii) * * *

(B) * * *

Table 3 to Paragraph (b)(4)(ii)(B)

Year of the control period for which CSAPR NO_X Ozone Season Group 1 allowances are allocated or auctioned	**Deadline for submission of allocations or auction results to the Administrator**
* * * * * * *	
2023 and 2024	June 1 of the fourth year before the year of the control period.
2025 and any year thereafter	June 1 of the third year before the year of the control period.

* * * * *

(5) *Full SIP revisions adopting State CSAPR NO_X Ozone Season Group 1 Trading Programs*.

* * *

* * * * *

(ii) * * *

(B) * * *

Table 4 to Paragraph (b)(5)(ii)(B)

Year of the control period for which CSAPR NO_X Ozone Season Group 1 allowances are allocated or auctioned	**Deadline for submission of allocations or auction results to the Administrator**
* * * * * * *	
2023 and 2024	June 1 of the fourth year before the year of the control period.
2025 and any year thereafter	June 1 of the third year before the year of the control period.

* * * * *

(7) *State-determined allocations of CSAPR NO_X Ozone Season Group 2 allowances for 2018*.

* * *

* * * * *

(8) *Abbreviated SIP revisions replacing certain provisions of the federal CSAPR NO_X Ozone Season Group 2 Trading Program*. A State listed in paragraph (b)(2)(iii) or (iv) of this section may adopt and include in a SIP revision, and the Administrator will approve, regulations replacing specified provisions of subpart EEEEE of part 97 of this chapter for the State's sources, and not substantively replacing any other provisions, as follows:

* * * * *

(ii) The State may adopt, as applicability provisions replacing the provisions in § 97.804(a) and (b) of this chapter with regard to the State, provisions substantively identical to those provisions, except that applicability is expanded to include all other units (beyond any units to which applicability could be expanded under paragraph (b)(8)(i) of this section) that would have been subject to any emissions trading program regulations approved as a SIP revision for the State under § 51.121 of this chapter; and

(iii) * * *

(B) * * *

Table 5 to Paragraph (b)(8)(iii)(B)

Year of the control period for which CSAPR NO_X Ozone Season Group 2 allowances are allocated or auctioned	**Deadline for submission of allocations or auction results to the Administrator**
* * * * * * *	
2025 and any year thereafter	June 1 of the third year before the year of the control period.

* * * * *

(9) *Full SIP revisions adopting State CSAPR NO_X Ozone Season Group 2 Trading Programs*.

* * *

* * * * *

(ii) May adopt, as applicability provisions replacing the provisions in § 97.804(a) and (b) of this chapter with regard to the State, provisions substantively identical to those provisions,

except that applicability is expanded to include all other units (beyond any units to which applicability could be expanded under paragraph (b)(9)(i) of this section) that would have been subject to any emissions trading program regulations approved as a SIP revision for the State under § 51.121 of this chapter;

(iii) * * *

(B) * * *

Table 6 to Paragraph (b)(9)(iii)(B)

Year of the control period for which CSAPR NO_X Ozone Season Group 2 allowances are allocated or auctioned	**Deadline for submission of allocations or auction results to the Administrator**
* * * * * * *	
2025 and any year thereafter	June 1 of the third year before the year of the control period.

* * * * *

(10) *State-determined allocations of CSAPR NO_X Ozone Season Group 3 allowances for 2022*. A State listed in paragraph (b)(2)(v) of this section may adopt and include in a SIP revision, and the Administrator will approve, as CSAPR NO_X Ozone Season Group 3 allowance allocation provisions replacing the provisions in § 97.1011(a) of this chapter with regard to the State and the control period in 2022, a list of CSAPR NO_X Ozone Season Group 3 units and the amount of CSAPR NO_X Ozone Season Group 3 allowances allocated to each unit on such list, provided that the list of units and allocations meets the following requirements:

(i) All of the units on the list must be units that are in the State and commenced commercial operation before January 1, 2019;

(ii) The total amount of CSAPR NO_X Ozone Season Group 3 allowance allocations on the list must not exceed the amount, under § 97.1010(a) of this chapter for the State and the control period in 2022, of the CSAPR NO_X Ozone Season Group 3 trading budget minus the sum of the new unit set-aside and Indian country new unit set-aside;

(iii) The list must be submitted electronically in a format specified by the Administrator; and

(iv) 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 GGGGG of part 97 of this chapter;

(v) Provided that:

(A) By [**INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**], 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)(10)(i) through (iv) of this section by September 1, 2021; and

(B) The State must submit to the Administrator a complete SIP revision described in paragraph (b)(10)(v)(A) of this section by September 1, 2021.

(11) *Abbreviated SIP revisions replacing certain provisions of the federal CSAPR NO_X Ozone Season Group 3 Trading Program*. A State listed in paragraph (b)(2)(v) of this section may adopt and include in a SIP revision, and the Administrator will approve, regulations replacing specified provisions of subpart GGGGG of part 97 of this chapter for the State's sources, and not substantively replacing any other provisions, as follows:

(i) The State may adopt, as applicability provisions replacing the provisions in § 97.1004(a)(1) and (2) of this chapter with regard to the State, provisions substantively identical to those provisions, except that the words "more than 25 MWe" are replaced, wherever such words appear, by words specifying a uniform lower limit on the amount of megawatts that is not greater than the amount specified by the words "more than 25 MWe" and is not less than the amount specified by the words "15 MWe or more";

(ii) The State may adopt, as applicability provisions replacing the provisions in § 97.1004(a) and (b) of this chapter with regard to the State, provisions substantively identical to those provisions, except that applicability is expanded to include all other units (beyond any units to

which applicability could be expanded under paragraph (b)(11)(i) of this section) that would have been subject to any emissions trading program regulations approved as a SIP revision for the State under § 51.121 of this chapter; and

(iii) The State may adopt, as CSAPR NO_X Ozone Season Group 3 allowance allocation or auction provisions replacing the provisions in §§ 97.1011(a) and (b)(1) and 97.1012(a) of this chapter with regard to the State and the control period in 2023 or any subsequent year, any methodology under which the State or the permitting authority allocates or auctions CSAPR NO_X Ozone Season Group 3 allowances and may adopt, in addition to the definitions in § 97.1002 of this chapter, one or more definitions that shall apply only to terms as used in the adopted CSAPR NO_X Ozone Season Group 3 allowance allocation or auction provisions, if such methodology—

(A) Requires the State or the permitting authority to allocate and, if applicable, auction a total amount of CSAPR NO_X Ozone Season Group 3 allowances for any such control period not exceeding the amount, under §§ 97.1010(a) and 97.1021 of this chapter for the State and such control period, of the CSAPR NO_X Ozone Season Group 3 trading budget minus the sum of the Indian country new unit set-aside and the amount of any CSAPR NO_X Ozone Season Group 3 allowances already allocated and recorded by the Administrator, plus, if the State adopts regulations expanding applicability to additional units pursuant to paragraph (b)(11)(ii) of this section, an additional amount of CSAPR NO_X Ozone Season Group 3 allowances not exceeding the lesser of:

(*1*) The highest of the sum, for all additional units in the State to which applicability is expanded pursuant to paragraph (b)(11)(ii) of this section, of the NO_X emissions reported in accordance with part 75 of this chapter for the ozone season in the year before the year of the submission deadline for the SIP revision under paragraph (b)(11)(iv) of this section and the corresponding sums of the NO_X emissions reported in accordance with part 75 of this chapter for each of the two immediately preceding ozone seasons, provided that each such seasonal sum

shall exclude the amount of any NO_X emissions reported by any unit for all hours in any calendar day during which the unit did not have at least one quality-assured monitor operating hour, as defined in § 72.2 of this chapter; or

(*2*) The portion of the emissions budget under the State's emissions trading program regulations approved as a SIP revision under § 51.121 of this chapter that is attributable to the units to which applicability is expanded pursuant to paragraph (b)(11)(ii) of this section;

(B) Requires, to the extent the State adopts provisions for allocations or auctions of CSAPR NO_X Ozone Season Group 3 allowances for any such control period to any CSAPR NO_X Ozone Season Group 3 units covered by § 97.1011(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions for such control period (except allocations or results of auctions to such units of CSAPR NO_X Ozone Season Group 3 allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator no later than the dates in Table 7 to this paragraph;

Table 7 to Paragraph (b)(11)(iii)(B)

Year of the control period for which CSAPR NO_X Ozone Season Group 3 allowances are allocated or auctioned	**Deadline for submission of allocations or auction results to the Administrator**
2023	June 1, 2022.
2024	June 1, 2022.
2025	June 1, 2023.
2026	June 1, 2023.
2027 and any year thereafter	June 1 of the third year before the year of the control period.

(C) Requires, to the extent the State adopts provisions for allocations or auctions of CSAPR NO_X Ozone Season Group 3 allowances for any such control period to any CSAPR NO_X Ozone Season Group 3 units covered by §§ 97.1011(b)(1) and 97.1012(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions (except allocations or results of auctions to such units of CSAPR NO_X Ozone Season Group 3

allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator by April 1 of the year following the year of such control period; and

(D) Does not provide for any change, after the submission deadlines in paragraphs (b)(11)(iii)(B) and (C) of this section, in the allocations submitted to the Administrator by such deadlines and does not provide for any change in any allocation determined and recorded by the Administrator under subpart GGGGG of part 97 of this chapter or § 97.526(d) or § 97.826(d) of this chapter;

(iv) Provided that the State must submit a complete SIP revision meeting the requirements of paragraph (b)(11)(i), (ii), or (iii) of this section by December 1 of the year before the year of the deadlines for submission of allocations or auction results under paragraphs (b)(11)(iii)(B) and (C) of this section applicable to the first control period for which the State wants to replace the applicability provisions, make allocations, or hold an auction under paragraph (b)(11)(i), (ii), or (iii) of this section.

(12) *Full SIP revisions adopting State CSAPR NO_X Ozone Season Group 3 Trading Programs*. A State listed in paragraph (b)(2)(v) of this section may adopt and include in a SIP revision, and the Administrator will approve, as correcting the deficiency in the SIP that is the basis for the CSAPR Federal Implementation Plan set forth in paragraphs (b)(1), (b)(2)(v), and (b)(10) and (11) of this section with regard to sources in the State (but not sources in any Indian country within the borders of the State), regulations that are substantively identical to the provisions of the CSAPR NO_X Ozone Season Group 3 Trading Program set forth in §§ 97.1002 through 97.1035 of this chapter, except that the SIP revision:

(i) May adopt, as applicability provisions replacing the provisions in § 97.1004(a)(1) and (2) of this chapter with regard to the State, provisions substantively identical to those provisions, except that the words “more than 25 MWe” are replaced, wherever such words appear, by words specifying a uniform lower limit on the amount of megawatts that is not greater than the amount

specified by the words “more than 25 MWe” and is not less than the amount specified by the words “15 MWe or more”;

(ii) May adopt, as applicability provisions replacing the provisions in § 97.1004(a) and (b) of this chapter with regard to the State, provisions substantively identical to those provisions, except that applicability is expanded to include all other units (beyond any units to which applicability could be expanded under paragraph (b)(12)(i) of this section) that would have been subject to any emissions trading program regulations approved as a SIP revision for the State under § 51.121 of this chapter;

(iii) May adopt, as CSAPR NO_X Ozone Season Group 3 allowance allocation provisions replacing the provisions in §§ 97.1011(a) and (b)(1) and 97.1012(a) of this chapter with regard to the State and the control period in 2023 or any subsequent year, any methodology under which the State or the permitting authority allocates or auctions CSAPR NO_X Ozone Season Group 3 allowances and that—

(A) Requires the State or the permitting authority to allocate and, if applicable, auction a total amount of CSAPR NO_X Ozone Season Group 3 allowances for any such control period not exceeding the amount, under §§ 97.1010(a) and 97.1021 of this chapter for the State and such control period, of the CSAPR NO_X Ozone Season Group 3 trading budget minus the sum of the Indian country new unit set-aside and the amount of any CSAPR NO_X Ozone Season Group 3 allowances already allocated and recorded by the Administrator, plus, if the State adopts regulations expanding applicability to additional units pursuant to paragraph (b)(12)(ii) of this section, an additional amount of CSAPR NO_X Ozone Season Group 3 allowances not exceeding the lesser of:

(*I*) The highest of the sum, for all additional units in the State to which applicability is expanded pursuant to paragraph (b)(12)(ii) of this section, of the NO_X emissions reported in accordance with part 75 of this chapter for the ozone season in the year before the year of the submission deadline for the SIP revision under paragraph (b)(12)(viii) of this section and the

corresponding sums of the NO_X emissions reported in accordance with part 75 of this chapter for each of the two immediately preceding ozone seasons, provided that each such seasonal sum shall exclude the amount of any NO_X emissions reported by any unit for all hours in any calendar day during which the unit did not have at least one quality-assured monitor operating hour, as defined in § 72.2 of this chapter; or

(*2*) The portion of the emissions budget under the State's emissions trading program regulations approved as a SIP revision under § 51.121 of this chapter that is attributable to the units to which applicability is expanded pursuant to paragraph (b)(12)(ii) of this section;

(B) Requires, to the extent the State adopts provisions for allocations or auctions of CSAPR NO_X Ozone Season Group 3 allowances for any such control period to any CSAPR NO_X Ozone Season Group 3 units covered by § 97.1011(a) of this chapter, that the State or the permitting authority submit such allocations or the results of such auctions for such control period (except allocations or results of auctions to such units of CSAPR NO_X Ozone Season Group 3 allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator no later than the dates in Table 8 to this paragraph;

Table 8 to Paragraph (b)(12)(iii)(B)

Year of the control period for which CSAPR NO_X Ozone Season Group 3 allowances are allocated or auctioned	**Deadline for submission of allocations or auction results to the Administrator**
2023	June 1, 2022.
2024	June 1, 2022.
2025	June 1, 2023.
2026	June 1, 2023.
2027 and any year thereafter	June 1 of the third year before the year of the control period.

(C) Requires, to the extent the State adopts provisions for allocations or auctions of CSAPR NO_X Ozone Season Group 3 allowances for any such control period to any CSAPR NO_X Ozone Season Group 3 units covered by §§ 97.1011(b)(1) and 97.1012(a) of this chapter, that the State

or the permitting authority submit such allocations or the results of such auctions (except allocations or results of auctions to such units of CSAPR NO_X Ozone Season Group 3 allowances remaining in a set-aside after completion of the allocations or auctions for which the set-aside was created) to the Administrator by April 1 of the year following the year of such control period; and

(D) Does not provide for any change, after the submission deadlines in paragraphs (b)(12)(iii)(B) and (C) of this section, in the allocations submitted to the Administrator by such deadlines and does not provide for any change in any allocation determined and recorded by the Administrator under subpart GGGGG of part 97 of this chapter or § 97.526(d) or § 97.826(d) of this chapter;

(iv) May adopt, in addition to the definitions in § 97.1002 of this chapter, one or more definitions that shall apply only to terms as used in the CSAPR NO_X Ozone Season Group 3 allowance allocation or auction provisions adopted under paragraph (b)(12)(iii) of this section;

(v) May substitute the name of the State for the term "State" as used in subpart GGGGG of part 97 of this chapter, to the extent the Administrator determines that such substitutions do not make substantive changes in the provisions in §§ 97.1002 through 97.1035 of this chapter; and

(vi) Must not include any of the requirements imposed on any unit in Indian country within the borders of the State in the provisions in §§ 97.1002 through 97.1035 of this chapter and must not include the provisions in §§ 97.1011(b)(2) and (c)(5)(iii), 97.1012(b), and 97.1021(h) of this chapter, all of which provisions will continue to apply under any portion of the CSAPR Federal Implementation Plan that is not replaced by the SIP revision;

(vii) Provided that, if and when any covered unit is located in Indian country within the borders of the State, the Administrator may modify his or her approval of the SIP revision to exclude the provisions in §§ 97.1002 (definitions of "base CSAPR NO_X Ozone Season Group 3 source", "base CSAPR NO_X Ozone Season Group 3 unit", "common designated representative", "common designated representative's assurance level", and "common designated

representative's share"), 97.1006(c)(2), and 97.1025 of this chapter and the portions of other provisions of subpart GGGGG of part 97 of this chapter referencing these sections and may modify any portion of the CSAPR Federal Implementation Plan that is not replaced by the SIP revision to include these provisions; and

(viii) Provided that the State must submit a complete SIP revision meeting the requirements of paragraphs (b)(12)(i) through (vi) of this section by December 1 of the year before the year of the deadlines for submission of allocations or auction results under paragraphs (b)(12)(iii)(B) and (C) of this section applicable to the first control period for which the State wants to replace the applicability provisions, make allocations, or hold an auction under paragraph (b)(12)(i), (ii), or (iii) of this section.

(13) *Withdrawal of CSAPR FIP provisions relating to NO_X ozone season emissions; satisfaction of NO_X SIP Call requirements*. Following promulgation of an approval by the Administrator of a State's SIP revision as correcting the SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan set forth in paragraphs (b)(1), (b)(2)(i), and (b)(3) and (4) of this section, paragraphs (b)(1), (b)(2)(iii) or (iv), and (b)(7) and (8) of this section, or paragraphs (b)(1), (b)(2)(v), and (b)(10) and (11) of this section for sources in the State—

* * * * *

(14) *Continued applicability of certain federal trading program provisions for NO_X ozone season emissions*. (i) Notwithstanding the provisions of paragraph (b)(13)(i) of this section or any State's SIP, when carrying out the functions of the Administrator under any State CSAPR NO_X Ozone Season Group 1 Trading Program or State CSAPR NO_X Ozone Season Group 2 Trading Program pursuant to a SIP revision approved under this section, the Administrator will apply the following provisions of this section, as amended, and the following provisions of subpart BBBBB of part 97 of this chapter, as amended, or subpart EEEEE of part 97 of this chapter, as amended, with regard to the State and any source subject to such State trading program:

(A) The definitions in § 97.502 of this chapter or § 97.802 of this chapter;

(B) The provisions in § 97.510(a) of this chapter (concerning in part the amounts of the new unit set-asides);

(C) The provisions in §§ 97.511(b)(1) and 97.512(a) of this chapter or §§ 97.811(b)(1) and 97.812(a) of this chapter (concerning the procedures for administering the new unit set-asides), except where the State allocates or auctions CSAPR NO_X Ozone Season Group 1 allowances or CSAPR NO_X Ozone Season Group 2 allowances under an approved SIP revision;

(D) The provisions in § 97.511(c)(5) of this chapter or § 97.811(c)(5) of this chapter (concerning the disposition of incorrectly allocated CSAPR NO_X Ozone Season Group 1 allowances or CSAPR NO_X Ozone Season Group 2 allowances);

(E) The provisions in § 97.521(f), (g), and (i) of this chapter or § 97.821(f), (g), and (i) of this chapter (concerning the deadlines for recordation of allocations or auctions of CSAPR NO_X Ozone Season Group 1 allowances or CSAPR NO_X Ozone Season Group 2 allowances) and the provisions in paragraphs (b)(4)(ii)(B) and (C) and (b)(5)(ii)(B) and (C) of this section or paragraphs (b)(8)(iii)(B) and (C) and (b)(9)(iii)(B) and (C) of this section (concerning the deadlines for submission to the Administrator of State-determined allocations or auction results);

(F) The provisions in § 97.525(b) of this chapter or § 97.825(b) of this chapter (concerning the procedures for administering the assurance provisions); and

(G) The provisions in § 97.526(e) of this chapter or § 97.826(e) of this chapter (concerning the use of CSAPR NO_X Ozone Season Group 2 allowances or CSAPR NO_X Ozone Season Group 3 allowances to satisfy requirements to hold CSAPR NO_X Ozone Season Group 1 allowances or the use of CSAPR NO_X Ozone Season Group 3 allowances to satisfy requirements to hold CSAPR NO_X Ozone Season Group 2 allowances).

(ii) Notwithstanding the provisions of paragraph (b)(13)(i) of this section, if, at the time of any approval of a State's SIP revision under this section, the Administrator has already started recording any allocations of CSAPR NO_X Ozone Season Group 1 allowances under subpart

BBBBB of part 97 of this chapter, or allocations of CSAPR NO_X Ozone Season Group 2 allowances under subpart EEEEE of part 97 of this chapter, or allocations of CSAPR NO_X Ozone Season Group 3 allowances under subpart GGGGG of part 97 of this chapter, to units in the State for a control period in any year, the provisions of such subpart authorizing the Administrator to complete the allocation and recordation of such 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.

(iii) Notwithstanding any discontinuation of the applicability of subpart BBBBB or EEEEE of part 97 of this chapter to the sources in a State with regard to emissions occurring in any control period pursuant to paragraph (b)(2)(ii) or (iv) or (b)(13)(i) of this section, the following provisions shall continue to apply with regard to all CSAPR NO_X Ozone Season Group 1 allowances and CSAPR NO_X Ozone Season Group 2 allowances at any time allocated for any control period to any source or other entity in the State and shall apply to all entities, wherever located, that at any time held or hold such allowances:

(A) The provisions of § 97.526(c) of this chapter (concerning the transfer of CSAPR NO_X Ozone Season Group 1 allowances between certain Allowance Management System accounts under common control);

(B) The provisions of § 97.526(d) of this chapter (concerning the conversion of amounts of unused CSAPR NO_X Ozone Season Group 1 allowances allocated for control periods before 2017 to different amounts of CSAPR NO_X Ozone Season Group 2 allowances or CSAPR NO_X Ozone Season Group 3 allowances);

(C) The provisions of § 97.826(c) of this chapter (concerning the transfer of CSAPR NO_X Ozone Season Group 2 allowances between certain Allowance Management System accounts under common control);

(D) The provisions of § 97.826(d) of this chapter (concerning the conversion of amounts of unused CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods before 2021 to different amounts of CSAPR NO_X Ozone Season Group 3 allowances); and

(E) The provisions of § 97.811(d) of this chapter (concerning the recall of CSAPR NO_X Ozone Season Group 2 allowances equivalent in quantity and usability to all CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods after 2020 and recorded in the compliance accounts of sources in States listed in paragraph (b)(2)(iv) of this section).

(15) *States with approved SIP revisions addressing the CSAPR NO_X Ozone Season Group 1 Trading Program*. * * *

* * * * *

(16) *States with approved SIP revisions addressing the CSAPR NO_X Ozone Season Group 2 Trading Program*. (i) The following States have SIP revisions approved by the Administrator under paragraph (b)(7), (8), or (9) of this section:

* * * * *

(ii) Notwithstanding any provision of subpart EEEEE of part 97 of this chapter or any State's SIP, with regard to any State listed in paragraph (b)(2)(iv) of this section and any control period that begins after December 31, 2020, the Administrator will not carry out any of the functions set forth for the Administrator in subpart EEEEE of part 97 of this chapter, except §§ 97.811(d) and 97.826(c) and (d) of this chapter, or in any emissions trading program provisions in a State's SIP approved under paragraph (b)(8) or (9) of this section.

(17) *States with approved SIP revisions addressing the CSAPR NO_X Ozone Season Group 3 Trading Program*. The following States have SIP revisions approved by the Administrator under paragraph (b)(10), (11), or (12) of this section:

(i) For each of the following States, the Administrator has approved a SIP revision under paragraph (b)(10) of this section as replacing the CSAPR NO_X Ozone Season Group 3 allowance

allocation provisions in § 97.1011(a) of this chapter with regard to the State and the control period in 2022: [none].

(ii) For each of the following States, the Administrator has approved a SIP revision under paragraph (b)(11) of this section as replacing the CSAPR NO_X Ozone Season Group 3 applicability provisions in § 97.1004(a) and (b) or § 97.1004(a)(1) and (2) of this chapter or the CSAPR NO_X Ozone Season Group 2 allowance allocation provisions in §§ 97.1011(a) and (b)(1) and 97.1012(a) of this chapter with regard to the State and the control period in 2023 or any subsequent year: [none].

(iii) For each of the following States, the Administrator has approved a SIP revision under paragraph (b)(12) of this section as correcting the SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan set forth in paragraphs (b)(1), (b)(2)(v), and (b)(10) and (11) of this section with regard to sources in the State (but not sources in any Indian country within the borders of the State): [none].

5. Amend § 52.39 by:

a. Adding a paragraph heading to paragraph (a) and removing "(SO_2)." and adding in its place "(SO_2), except as otherwise provided in this section.";

b. Adding paragraph headings to paragraphs (b) and (c);

c. Adding a paragraph heading to paragraph (d) introductory text and removing "Notwithstanding the provisions of paragraph (a) of this section, a State" and adding in its place "A State";

d. Revising paragraph (e) introductory text;

e. In paragraph (e)(1)(i), removing the period at the end of the paragraph and adding in its place a semicolon;

f. In paragraph (e)(1)(ii), removing "the following dates:" and adding in its place "the dates in Table 1 to this paragraph;", adding a heading to the table, removing the table entry for "2023

and any year thereafter", and adding table entries for "2023 and 2024" and "2025 and any year thereafter";

g. In paragraph (e)(1)(iii), removing "year of such control period." and adding in its place "year of such control period, for a control period before 2021, or by April 1 of the year following the control period, for a control period in 2021 or thereafter; and";

h. Adding a paragraph heading to paragraph (f) introductory text and removing "Notwithstanding the provisions of paragraph (a) of this section, a State" and adding in its place "A State";

i. In paragraph (f)(1)(i), removing the period at the end of the paragraph and adding in its place a semicolon;

j. In paragraph (f)(1)(ii), removing "the following dates:" and adding in its place "the dates in Table 2 to this paragraph;", adding a heading to the table, removing the table entry for "2023 and any year thereafter", and adding table entries for "2023 and 2024" and "2025 and any year thereafter";

k. In paragraph (f)(1)(iii), removing "year of such control period." and adding in its place "year of such control period, for a control period before 2021, or by April 1 of the year following the control period, for a control period in 2021 or thereafter; and";

l. In paragraph (f)(5), adding "and" after the semicolon at the end of the paragraph;

m. Adding a paragraph heading to paragraph (g) introductory text and removing "Notwithstanding the provisions of paragraph (a) of this section, a State" and adding in its place "A State";

n. Revising paragraph (h) introductory text;

o. In paragraph (h)(1)(i), removing the period at the end of the paragraph and adding in its place a semicolon;

p. In paragraph (h)(1)(ii), removing “the following dates:” and adding in its place “the dates in Table 3 to this paragraph;”, adding a heading to the table, removing the table entry for “2023 and any year thereafter”, and adding table entries for “2023 and 2024” and “2025 and any year thereafter”;

q. In paragraph (h)(1)(iii), removing “year of such control period.” and adding in its place “year of such control period, for a control period before 2021, or by April 1 of the year following the control period, for a control period in 2021 or thereafter; and”;

r. Adding a paragraph heading to paragraph (i) introductory text and removing “Notwithstanding the provisions of paragraph (a) of this section, a State” and adding in its place “A State”;

s. In paragraph (i)(1)(i), removing the period at the end of the paragraph and adding in its place a semicolon;

t. In paragraph (i)(1)(ii), removing “the following dates:” and adding in its place “the dates in Table 4 to this paragraph;”, adding a heading to the table, removing the table entry for “2023 and any year thereafter”, and adding table entries for “2023 and 2024” and “2025 and any year thereafter”;

u. In paragraph (i)(1)(iii), removing “year of such control period.” and adding in its place “year of such control period, for a control period before 2021, or by April 1 of the year following the control period, for a control period in 2021 or thereafter; and”;

v. In paragraph (i)(5), adding “and” after the semicolon at the end of the paragraph;

w. Adding a paragraph heading to paragraph (j) and removing “Following promulgation” and adding in its place “Except as provided in paragraph (k) of this section, following promulgation”;

x. Revising paragraph (k); and

y. Adding paragraph headings to paragraphs (l) introductory text and (m) introductory text.

The additions and revisions read as follows:

§ 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?

(a) *General requirements for SO_2 emissions*. * * *

(b) *Applicability of CSAPR SO_2 Group 1 Trading Program provisions*. * * *

(c) *Applicability of CSAPR SO_2 Group 2 Trading Program provisions*. * * *

* * * * *

(d) *State-determined allocations of CSAPR SO_2 Group 1 allowances for 2016*. * * *

* * * * *

(e) *Abbreviated SIP revisions replacing certain provisions of the federal CSAPR SO_2 Group 1 Trading Program*. A State listed in paragraph (b) of this section may adopt and include in a SIP revision, and the Administrator will approve, regulations replacing specified provisions of subpart CCCCC of part 97 of this chapter for the State's sources, and not substantively replacing any other provisions, as follows:

(1) * * *

(ii) * * *

Table 1 to Paragraph (e)(1)(ii)

Year of the control period for which CSAPR SO_2 Group 1 allowances are allocated or auctioned	**Deadline for submission of allocations or auction results to the Administrator**
* * * * * * *	
2023 and 2024	June 1 of the fourth year before the year of the control period.
2025 and any year thereafter	June 1 of the third year before the year of the control period.

* * * * *

(f) *Full SIP revisions adopting State CSAPR SO_2 Group 1 Trading Programs*. * * *

(1) * * *

(ii) * * *

Table 2 to Paragraph (f)(1)(ii)

Year of the control period for which CSAPR SO_2 Group 1 allowances are allocated or auctioned	Deadline for submission of allocations or auction results to the Administrator
* * * * * * *	
2023 and 2024	June 1 of the fourth year before the year of the control period.
2025 and any year thereafter	June 1 of the third year before the year of the control period.

* * * * *

(g) *State-determined allocations of CSAPR SO_2 Group 2 allowances for 2016.* * * *

* * * * *

(h) *Abbreviated SIP revisions replacing certain provisions of the federal CSAPR SO_2 Group 2 Trading Program*. A State listed in paragraph (c)(1) of this section may adopt and include in a SIP revision, and the Administrator will approve, regulations replacing specified provisions of subpart DDDDD of part 97 of this chapter for the State's sources, and not substantively replacing any other provisions, as follows:

(1) * * *

(ii) * * *

Table 3 to Paragraph (h)(1)(ii)

Year of the control period for which CSAPR SO_2 Group 2 allowances are allocated or auctioned	Deadline for submission of allocations or auction results to the Administrator
* * * * * * *	
2023 and 2024	June 1 of the fourth year before the year of the control period.
2025 and any year thereafter	June 1 of the third year before the year of the control period.

* * * * *

(i) *Full SIP revisions adopting State CSAPR SO_2 Group 2 Trading Programs*. * * *

(1) * * *

(ii) * * *

Table 4 to Paragraph (i)(1)(ii)

Year of the control period for which CSAPR SO_2 Group 2 allowances are allocated or auctioned	Deadline for submission of allocations or auction results to the Administrator
* * * * * * *	
2023 and 2024	June 1 of the fourth year before the year of the control period.
2025 and any year thereafter	June 1 of the third year before the year of the control period.

* * * * *

(j) *Withdrawal of CSAPR FIP provisions relating to SO_2 emissions*. * * *

(k) *Continued applicability of certain federal trading program provisions for SO_2 emissions*. (1) Notwithstanding the provisions of paragraph (j) of this section or any State's SIP, when carrying out the functions of the Administrator under any State CSAPR SO_2 Group 1 Trading Program or State CSAPR SO_2 Group 2 Trading Program pursuant to a SIP revision approved under this section, the Administrator will apply the following provisions of this section, as amended, and the following provisions of subpart CCCCC of part 97 of this chapter, as amended, or subpart DDDDD of part 97 of this chapter, as amended, with regard to the State and any source subject to such State trading program:

(i) The definitions in § 97.602 of this chapter or § 97.702 of this chapter;

(ii) The provisions in § 97.610(a) of this chapter or § 97.710(a) of this chapter (concerning in part the amounts of the new unit set-asides);

(iii) The provisions in §§ 97.611(b)(1) and 97.612(a) of this chapter or §§ 97.711(b)(1) and 97.712(a) of this chapter (concerning the procedures for administering the new unit set-asides), except where the State allocates or auctions CSAPR SO_2 Group 1 allowances or CSAPR SO_2 Group 2 allowances under an approved SIP revision;

(iv) The provisions in § 97.611(c)(5) of this chapter or § 97.711(c)(5) of this chapter (concerning the disposition of incorrectly allocated CSAPR SO_2 Group 1 allowances or CSAPR SO_2 Group 2 allowances);

(v) The provisions in § 97.621(f), (g), and (i) of this chapter or § 97.721(f), (g), and (i) of this chapter (concerning the deadlines for recordation of allocations or auctions of CSAPR SO_2 Group 1 allowances or CSAPR SO_2 Group 2 allowances) and the provisions in paragraphs (e)(1)(ii) and (iii) and (f)(1)(ii) and (iii) of this section or paragraphs (h)(1)(ii) and (iii) and (i)(1)(ii) and (iii) of this section (concerning the deadlines for submission to the Administrator of State-determined allocations or auction results); and

(vi) The provisions in § 97.625(b) of this chapter or § 97.725(b) of this chapter (concerning the procedures for administering the assurance provisions).

(2) Notwithstanding the provisions of paragraph (j) of this section, if, at the time of any approval of a State's SIP revision under this section, the Administrator has already started recording any allocations of CSAPR SO_2 Group 1 allowances under subpart CCCCC of part 97 of this chapter, or allocations of CSAPR SO_2 Group 2 allowances under subpart DDDDD of part 97 of this chapter, to units in the State for a control period in any year, the provisions of such subpart authorizing the Administrator to complete the allocation and recordation of such 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.

(l) *States with approved SIP revisions addressing the CSAPR SO_2 Group 1 Trading Program*.

* * *

* * * * *

(m) *States with approved SIP revisions addressing the CSAPR SO_2 Group 2 Trading Program*. * * *

* * * * *

Subpart O—Illinois

6. Amend § 52.731 by:

a. In paragraph (b)(2), removing "2017 and each subsequent year." and adding in its place "2017 through 2020.", and removing the second sentence;

b. Redesignating paragraph (b)(3) as paragraph (b)(4) and adding a new paragraph (b)(3);

c. In newly redesignated paragraph (b)(4), removing "(b)(2)" and adding in its place "(b)(3)" each time it appears, removing "Group 2" and adding in its place "Group 3" each time it appears, and removing "EEEEE" and adding in its place "GGGGG" each time it appears; and

d. Adding paragraph (b)(5).

The additions read as follows:

§ 52.731 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

* * * * *

(b) * * *

(3) The owner and operator of each source and each unit located in the State of Illinois and for which requirements are set forth under the CSAPR NO_X Ozone Season Group 3 Trading Program in subpart GGGGG of part 97 of this chapter must comply with such requirements with regard to emissions occurring in 2021 and each subsequent year. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Illinois' State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan (FIP) under § 52.38(b)(1) and (b)(2)(v), except to the extent the Administrator's approval is partial or conditional.

* * * * *

(5) Notwithstanding the provisions of paragraph (b)(2) of this section, after 2020 the provisions of § 97.826(c) of this chapter (concerning the transfer of CSAPR NO_X Ozone Season

Group 2 allowances between certain accounts under common control), the provisions of § 97.826(d) of this chapter (concerning the conversion of amounts of unused CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods before 2021 to different amounts of CSAPR NO_X Ozone Season Group 3 allowances), and the provisions of § 97.811(d) of this chapter (concerning the recall of CSAPR NO_X Ozone Season Group 2 allowances equivalent in quantity and usability to all such allowances allocated to units in the State for control periods after 2020) shall continue to apply.

Subpart P—Indiana

7. Amend § 52.789 by revising paragraphs (b)(2) and (3) and adding paragraphs (b)(4) and (5) to read as follows:

§ 52.789 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

* * * * *

(b) * * *

(2) The owner and operator of each source and each unit located in the State of Indiana and for which requirements are set forth under the CSAPR NO_X Ozone Season Group 2 Trading Program in subpart EEEEE of part 97 of this chapter must comply with such requirements with regard to emissions occurring in 2017 through 2020. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Indiana's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan (FIP) under § 52.38(b)(1) and (b)(2)(iv), except to the extent the Administrator's approval is partial or conditional, provided that because the CSAPR FIP was promulgated as a partial rather than full remedy for an obligation of the State to address interstate air pollution, the SIP revision likewise will constitute a partial rather than full remedy for the State's obligation unless provided otherwise in the Administrator's approval of the SIP revision.

(3) The owner and operator of each source and each unit located in the State of Indiana and for which requirements are set forth under the CSAPR NO_X Ozone Season Group 3 Trading Program in subpart GGGGG of part 97 of this chapter must comply with such requirements with regard to emissions occurring in 2021 and each subsequent year. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Indiana's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan (FIP) under § 52.38(b)(1) and (b)(2)(v), except to the extent the Administrator's approval is partial or conditional.

(4) Notwithstanding the provisions of paragraphs (b)(2) and (3) of this section, if, at the time of the approval of Indiana's SIP revision described in paragraph (b)(2) or (3) of this section, the Administrator has already started recording any allocations of CSAPR NO_X Ozone Season Group 2 allowances or CSAPR NO_X Ozone Season Group 3 allowances under subpart EEEEE or GGGGG, respectively, of part 97 of this chapter to units in the State for a control period in any year, the provisions of such subpart authorizing the Administrator to complete the allocation and recordation of such 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.

(5) Notwithstanding the provisions of paragraph (b)(2) of this section, after 2020 the provisions of § 97.826(c) of this chapter (concerning the transfer of CSAPR NO_X Ozone Season Group 2 allowances between certain accounts under common control), the provisions of § 97.826(d) of this chapter (concerning the conversion of amounts of unused CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods before 2021 to different amounts of CSAPR NO_X Ozone Season Group 3 allowances), and the provisions of § 97.811(d) of this chapter (concerning the recall of CSAPR NO_X Ozone Season Group 2 allowances equivalent in quantity and usability to all such allowances allocated to units in the State for control periods after 2020) shall continue to apply.

Subpart S—Kentucky

8. Amend § 52.940 by:

a. In paragraph (b)(2), removing "2017 and each subsequent year." and adding in its place "2017 through 2020.", and removing the second sentence;

b. Redesignating paragraph (b)(3) as paragraph (b)(4) and adding a new paragraph (b)(3);

c. In newly redesignated paragraph (b)(4), removing "(b)(2)" and adding in its place "(b)(3)" each time it appears, removing "Group 2" and adding in its place "Group 3" each time it appears, and removing "EEEEE" and adding in its place "GGGGG" each time it appears; and

d. Adding paragraph (b)(5).

The additions read as follows:

§ 52.940 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

* * * * *

(b) * * *

(3) The owner and operator of each source and each unit located in the State of Kentucky and for which requirements are set forth under the CSAPR NO_X Ozone Season Group 3 Trading Program in subpart GGGGG of part 97 of this chapter must comply with such requirements with regard to emissions occurring in 2021 and each subsequent year. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Kentucky's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan (FIP) under § 52.38(b)(1) and (b)(2)(v), except to the extent the Administrator's approval is partial or conditional.

* * * * *

(5) Notwithstanding the provisions of paragraph (b)(2) of this section, after 2020 the provisions of § 97.826(c) of this chapter (concerning the transfer of CSAPR NO_X Ozone Season

Group 2 allowances between certain accounts under common control), the provisions of § 97.826(d) of this chapter (concerning the conversion of amounts of unused CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods before 2021 to different amounts of CSAPR NO_X Ozone Season Group 3 allowances), and the provisions of § 97.811(d) of this chapter (concerning the recall of CSAPR NO_X Ozone Season Group 2 allowances equivalent in quantity and usability to all such allowances allocated to units in the State for control periods after 2020) shall continue to apply.

Subpart T—Louisiana

9. Amend § 52.984 by:

a. In paragraph (d)(2), removing "2017 and each subsequent year." and adding in its place "2017 through 2020.", and removing the second and third sentences;

b. Redesignating paragraph (d)(3) as paragraph (d)(4) and adding a new paragraph (d)(3);

c. In newly redesignated paragraph (d)(4), removing "(d)(2)" and adding in its place "(d)(3)" each time it appears, removing "Group 2" and adding in its place "Group 3" each time it appears, and removing "EEEEE" and adding in its place "GGGGG" each time it appears; and

d. Adding paragraph (d)(5).

The additions read as follows:

§ 52.984 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

* * * * *

(d) * * *

(3) The owner and operator of each source and each unit located in the State of Louisiana and Indian country within the borders of the State and for which requirements are set forth under the CSAPR NO_X Ozone Season Group 3 Trading Program in subpart GGGGG of part 97 of this chapter must comply with such requirements with regard to emissions occurring in 2021 and

each subsequent year. 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 Louisiana's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan (FIP) under § 52.38(b)(1) and (b)(2)(v) for those sources and units, 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 Louisiana's SIP.

* * * * *

(5) Notwithstanding the provisions of paragraph (d)(2) of this section, after 2020 the provisions of § 97.826(c) of this chapter (concerning the transfer of CSAPR NO_X Ozone Season Group 2 allowances between certain accounts under common control), the provisions of § 97.826(d) of this chapter (concerning the conversion of amounts of unused CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods before 2021 to different amounts of CSAPR NO_X Ozone Season Group 3 allowances), and the provisions of § 97.811(d) of this chapter (concerning the recall of CSAPR NO_X Ozone Season Group 2 allowances equivalent in quantity and usability to all such allowances allocated to units in the State for control periods after 2020) shall continue to apply.

Subpart V—Maryland

10. Amend § 52.1084 by:

a. In paragraph (b)(2), removing "2017 and each subsequent year." and adding in its place "2017 through 2020.", and removing the second sentence;

b. Redesignating paragraph (b)(3) as paragraph (b)(4) and adding a new paragraph (b)(3);

c. In newly redesignated paragraph (b)(4), removing "(b)(2)" and adding in its place "(b)(3)" each time it appears, removing "Group 2" and adding in its place "Group 3" each time it appears, and removing "EEEEE" and adding in its place "GGGGG" each time it appears; and

d. Adding paragraph (b)(5).

The additions read as follows:

§ 52.1084 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

* * * * *

(b) * * *

(3) The owner and operator of each source and each unit located in the State of Maryland and for which requirements are set forth under the CSAPR NO_X Ozone Season Group 3 Trading Program in subpart GGGGG of part 97 of this chapter must comply with such requirements with regard to emissions occurring in 2021 and each subsequent year. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Maryland's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan (FIP) under § 52.38(b)(1) and (b)(2)(v), except to the extent the Administrator's approval is partial or conditional.

* * * * *

(5) Notwithstanding the provisions of paragraph (b)(2) of this section, after 2020 the provisions of § 97.826(c) of this chapter (concerning the transfer of CSAPR NO_X Ozone Season Group 2 allowances between certain accounts under common control), the provisions of § 97.826(d) of this chapter (concerning the conversion of amounts of unused CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods before 2021 to different amounts of CSAPR NO_X Ozone Season Group 3 allowances), and the provisions of § 97.811(d) of this chapter (concerning the recall of CSAPR NO_X Ozone Season Group 2 allowances equivalent in quantity and usability to all such allowances allocated to units in the State for control periods after 2020) shall continue to apply.

Subpart X—Michigan

11. Amend § 52.1186 by:

a. In paragraph (e)(2), removing "2017 and each subsequent year." and adding in its place "2017 through 2020.", and removing the second and third sentences;

b. Redesignating paragraph (e)(3) as paragraph (e)(4) and adding a new paragraph (e)(3);

c. In newly redesignated paragraph (e)(4), removing "(e)(2)" and adding in its place "(e)(3)" each time it appears, removing "Group 2" and adding in its place "Group 3" each time it appears, and removing "EEEEE" and adding in its place "GGGGG" each time it appears; and

d. Adding paragraph (e)(5).

The additions read as follows:

§ 52.1186 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

* * * * *

(e) * * *

(3) The owner and operator of each source and each unit located in the State of Michigan and Indian country within the borders of the State and for which requirements are set forth under the CSAPR NO_X Ozone Season Group 3 Trading Program in subpart GGGGG of part 97 of this chapter must comply with such requirements with regard to emissions occurring in 2021 and each subsequent year. 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 Michigan's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan (FIP) under § 52.38(b)(1) and (b)(2)(v) for those sources and units, 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 Michigan's SIP.

* * * * *

(5) Notwithstanding the provisions of paragraph (e)(2) of this section, after 2020 the provisions of § 97.826(c) of this chapter (concerning the transfer of CSAPR NO_X Ozone Season Group 2 allowances between certain accounts under common control), the provisions of § 97.826(d) of this chapter (concerning the conversion of amounts of unused CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods before 2021 to different amounts of CSAPR NO_X Ozone Season Group 3 allowances), and the provisions of § 97.811(d) of this chapter (concerning the recall of CSAPR NO_X Ozone Season Group 2 allowances equivalent in quantity and usability to all such allowances allocated to units in the State for control periods after 2020) shall continue to apply.

Subpart FF—New Jersey

12. Amend § 52.1584 by:

a. In paragraph (e)(2), removing "2017 and each subsequent year." and adding in its place "2017 through 2020.", and removing the second sentence;

b. Redesignating paragraph (e)(3) as paragraph (e)(4) and adding a new paragraph (e)(3);

c. In newly redesignated paragraph (e)(4), removing "(e)(2)" and adding in its place "(e)(3)" each time it appears, removing "Group 2" and adding in its place "Group 3" each time it appears, and removing "EEEEE" and adding in its place "GGGGG" each time it appears; and

d. Adding paragraph (e)(5).

The additions read as follows:

§ 52.1584 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

* * * * *

(e) * * *

(3) The owner and operator of each source and each unit located in the State of New Jersey and for which requirements are set forth under the CSAPR NO_X Ozone Season Group 3 Trading Program in subpart GGGGG of part 97 of this chapter must comply with such requirements with regard to emissions occurring in 2021 and each subsequent year. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to New Jersey's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan (FIP) under § 52.38(b)(1) and (b)(2)(v), except to the extent the Administrator's approval is partial or conditional.

* * * * *

(5) Notwithstanding the provisions of paragraph (e)(2) of this section, after 2020 the provisions of § 97.826(c) of this chapter (concerning the transfer of CSAPR NO_X Ozone Season Group 2 allowances between certain accounts under common control), the provisions of § 97.826(d) of this chapter (concerning the conversion of amounts of unused CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods before 2021 to different amounts of CSAPR NO_X Ozone Season Group 3 allowances), and the provisions of § 97.811(d) of this chapter (concerning the recall of CSAPR NO_X Ozone Season Group 2 allowances equivalent in quantity and usability to all such allowances allocated to units in the State for control periods after 2020) shall continue to apply.

Subpart HH—New York

13. Amend § 52.1684 by:

a. In paragraph (b)(2), removing "2017 and each subsequent year." and adding in its place "2017 through 2020.", and removing the second and third sentences;

b. Redesignating paragraph (b)(3) as paragraph (b)(4) and adding a new paragraph (b)(3);

c. In newly redesignated paragraph (b)(4), removing "(b)(2)" and adding in its place "(b)(3)" each time it appears, removing "Group 2" and adding in its place "Group 3" each time it appears, and removing "EEEEE" and adding in its place "GGGGG" each time it appears; and

d. Adding paragraph (b)(5).

The additions read as follows:

§ 52.1684 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

* * * * *

(b) * * *

(3) The owner and operator of each source and each unit located in the State of New York and Indian country within the borders of the State and for which requirements are set forth under the CSAPR NO_X Ozone Season Group 3 Trading Program in subpart GGGGG of part 97 of this chapter must comply with such requirements with regard to emissions occurring in 2021 and each subsequent year. 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 New York's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan (FIP) under § 52.38(b)(1) and (b)(2)(v) for those sources and units, 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 New York's SIP.

* * * * *

(5) Notwithstanding the provisions of paragraph (b)(2) of this section, after 2020 the provisions of § 97.826(c) of this chapter (concerning the transfer of CSAPR NO_X Ozone Season Group 2 allowances between certain accounts under common control), the provisions of § 97.826(d) of this chapter (concerning the conversion of amounts of unused CSAPR NO_X

Ozone Season Group 2 allowances allocated for control periods before 2021 to different amounts of CSAPR NO_X Ozone Season Group 3 allowances), and the provisions of § 97.811(d) of this chapter (concerning the recall of CSAPR NO_X Ozone Season Group 2 allowances equivalent in quantity and usability to all such allowances allocated to units in the State for control periods after 2020) shall continue to apply.

Subpart KK—Ohio

14. Amend § 52.1882 by:

a. In paragraph (b)(2), removing "2017 and each subsequent year." and adding in its place "2017 through 2020.", and removing the second sentence;

b. Redesignating paragraph (b)(3) as paragraph (b)(4) and adding a new paragraph (b)(3);

c. In newly redesignated paragraph (b)(4), removing "(b)(2)" and adding in its place "(b)(3)" each time it appears, removing "Group 2" and adding in its place "Group 3" each time it appears, and removing "EEEEE" and adding in its place "GGGGG" each time it appears; and

d. Adding paragraph (b)(5).

The additions read as follows:

§ 52.1882 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

* * * * *

(b) * * *

(3) The owner and operator of each source and each unit located in the State of Ohio and for which requirements are set forth under the CSAPR NO_X Ozone Season Group 3 Trading Program in subpart GGGGG of part 97 of this chapter must comply with such requirements with regard to emissions occurring in 2021 and each subsequent year. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Ohio's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the

basis for the CSAPR Federal Implementation Plan (FIP) under § 52.38(b)(1) and (b)(2)(v), except to the extent the Administrator's approval is partial or conditional.

* * * * *

(5) Notwithstanding the provisions of paragraph (b)(2) of this section, after 2020 the provisions of § 97.826(c) of this chapter (concerning the transfer of CSAPR NO_X Ozone Season Group 2 allowances between certain accounts under common control), the provisions of § 97.826(d) of this chapter (concerning the conversion of amounts of unused CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods before 2021 to different amounts of CSAPR NO_X Ozone Season Group 3 allowances), and the provisions of § 97.811(d) of this chapter (concerning the recall of CSAPR NO_X Ozone Season Group 2 allowances equivalent in quantity and usability to all such allowances allocated to units in the State for control periods after 2020) shall continue to apply.

Subpart NN—Pennsylvania

15. Amend § 52.2040 by:

a. In paragraph (b)(2), removing "2017 and each subsequent year." and adding in its place "2017 through 2020.", and removing the second sentence;

b. Redesignating paragraph (b)(3) as paragraph (b)(4) and adding a new paragraph (b)(3);

c. In newly redesignated paragraph (b)(4), removing "(b)(2)" and adding in its place "(b)(3)" each time it appears, removing "Group 2" and adding in its place "Group 3" each time it appears, and removing "EEEEE" and adding in its place "GGGGG" each time it appears; and

d. Adding paragraph (b)(5).

The additions read as follows:

§ 52.2040 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

* * * * *

(b) * * *

(3) The owner and operator of each source and each unit located in the State of Pennsylvania and for which requirements are set forth under the CSAPR NO_X Ozone Season Group 3 Trading Program in subpart GGGGG of part 97 of this chapter must comply with such requirements with regard to emissions occurring in 2021 and each subsequent year. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Pennsylvania's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan (FIP) under § 52.38(b)(1) and (b)(2)(v), except to the extent the Administrator's approval is partial or conditional.

* * * * *

(5) Notwithstanding the provisions of paragraph (b)(2) of this section, after 2020 the provisions of § 97.826(c) of this chapter (concerning the transfer of CSAPR NO_X Ozone Season Group 2 allowances between certain accounts under common control), the provisions of § 97.826(d) of this chapter (concerning the conversion of amounts of unused CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods before 2021 to different amounts of CSAPR NO_X Ozone Season Group 3 allowances), and the provisions of § 97.811(d) of this chapter (concerning the recall of CSAPR NO_X Ozone Season Group 2 allowances equivalent in quantity and usability to all such allowances allocated to units in the State for control periods after 2020) shall continue to apply.

Subpart VV—Virginia

16. Amend § 52.2440 by:

a. In paragraph (b)(2), removing "2017 and each subsequent year." and adding in its place "2017 through 2020.", and removing the second sentence;

b. Redesignating paragraph (b)(3) as paragraph (b)(4) and adding a new paragraph (b)(3);

c. In newly redesignated paragraph (b)(4), removing "(b)(2)" and adding in its place "(b)(3)" each time it appears, removing "Group 2" and adding in its place "Group 3" each time it appears, and removing "EEEEE" and adding in its place "GGGGG" each time it appears; and

d. Adding paragraph (b)(5).

The additions read as follows:

§ 52.2440 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

* * * * *

(b) * * *

(3) The owner and operator of each source and each unit located in the State of Virginia and for which requirements are set forth under the CSAPR NO_X Ozone Season Group 3 Trading Program in subpart GGGGG of part 97 of this chapter must comply with such requirements with regard to emissions occurring in 2021 and each subsequent year. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to Virginia's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan (FIP) under § 52.38(b)(1) and (b)(2)(v), except to the extent the Administrator's approval is partial or conditional.

* * * * *

(5) Notwithstanding the provisions of paragraph (b)(2) of this section, after 2020 the provisions of § 97.826(c) of this chapter (concerning the transfer of CSAPR NO_X Ozone Season Group 2 allowances between certain accounts under common control), the provisions of § 97.826(d) of this chapter (concerning the conversion of amounts of unused CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods before 2021 to different amounts of CSAPR NO_X Ozone Season Group 3 allowances), and the provisions of § 97.811(d) of this chapter (concerning the recall of CSAPR NO_X Ozone Season Group 2 allowances equivalent in

quantity and usability to all such allowances allocated to units in the State for control periods after 2020) shall continue to apply.

Subpart XX—West Virginia

17. Amend § 52.2540 by:

a. In paragraph (b)(2), removing "2017 and each subsequent year." and adding in its place "2017 through 2020.", and removing the second sentence;

b. Redesignating paragraph (b)(3) as paragraph (b)(4) and adding a new paragraph (b)(3);

c. In newly redesignated paragraph (b)(4), removing "(b)(2)" and adding in its place "(b)(3)" each time it appears, removing "Group 2" and adding in its place "Group 3" each time it appears, and removing "EEEEE" and adding in its place "GGGGG" each time it appears; and

d. Adding paragraph (b)(5).

The additions read as follows:

§ 52.2540 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

* * * * *

(b) * * *

(3) The owner and operator of each source and each unit located in the State of West Virginia and for which requirements are set forth under the CSAPR NO_X Ozone Season Group 3 Trading Program in subpart GGGGG of part 97 of this chapter must comply with such requirements with regard to emissions occurring in 2021 and each subsequent year. The obligation to comply with such requirements will be eliminated by the promulgation of an approval by the Administrator of a revision to West Virginia's State Implementation Plan (SIP) as correcting the SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan (FIP) under § 52.38(b)(1) and (b)(2)(v), except to the extent the Administrator's approval is partial or conditional.

* * * * *

(5) Notwithstanding the provisions of paragraph (b)(2) of this section, after 2020 the provisions of § 97.826(c) of this chapter (concerning the transfer of CSAPR NO_X Ozone Season Group 2 allowances between certain accounts under common control), the provisions of § 97.826(d) of this chapter (concerning the conversion of amounts of unused CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods before 2021 to different amounts of CSAPR NO_X Ozone Season Group 3 allowances), and the provisions of § 97.811(d) of this chapter (concerning the recall of CSAPR NO_X Ozone Season Group 2 allowances equivalent in quantity and usability to all such allowances allocated to units in the State for control periods after 2020) shall continue to apply.

PART 78—APPEAL PROCEDURES

18. The authority citation for part 78 is revised to read as follows:

Authority: 42 U.S.C. 7401–7671q.

19. Amend § 78.1 by:

a. In paragraphs (a)(1)(i)(A) and (B), removing the period at the end of the paragraph and adding in its place a semicolon;

b. Revising paragraphs (a)(1)(i)(C) and (D);

c. Removing paragraph (a)(1)(i)(E) and redesignating paragraph (a)(1)(i)(F) as paragraph (a)(1)(i)(E);

d. In paragraph (a)(1)(iv), removing “and subpart EEEEE” and adding in its place “subpart EEEEE of part 97 of this chapter, and subpart GGGGG” and removing “and § 52.38(b)(6), (8), or (9)” and adding in its place “§ 52.38(b)(8) or (9) of this chapter, and § 52.38(b)(11) or (12)”;

e. In paragraph (b)(1) introductory text, removing the semicolon at the end of the paragraph and adding in its place a comma;

f. In paragraph (b)(9)(i), removing “(c)(2)of” and adding in its place “(c)(2) of”;

g. In paragraph (b)(13)(i), removing “and (b)” and adding in its place “or (c) or § 97.412”;

h. In paragraph (b)(13)(iii), removing "§§ 97.424 and 97.425" and adding in its place "§ 97.424 or § 97.425";

i. In paragraph (b)(14)(i), removing "and (b)" and adding in its place "or (c) or § 97.512";

j. In paragraph (b)(14)(iii), removing "§§ 97.524 and 97.525" and adding in its place "§ 97.524 or § 97.525";

k. In paragraph (b)(14)(viii), removing "the removal of" and adding in its place "the deduction of", and removing "under § 97.526(c)" and adding in its place "or CSAPR NO_X Ozone Season Group 3 allowances under § 97.526(d)";

l. In paragraph (b)(15)(i), removing "and (b)" and adding in its place "or (c) or § 97.612";

m. In paragraph (b)(15)(iii), removing "§§ 97.624 and 97.625" and adding in its place "§ 97.624 or § 97.625";

n. In paragraph (b)(16)(i), removing "and (b)" and adding in its place "or (c) or § 97.712";

o. In paragraph (b)(16)(iii), removing "§§ 97.724 and 97.725" and adding in its place "§ 97.724 or § 97.725";

p. In paragraph (b)(17)(i), removing "and (b)" and adding in its place "or (c) or § 97.812";

q. In paragraph (b)(17)(iii), removing "§§ 97.824 and 97.825" and adding in its place "§ 97.824 or § 97.825";

r. Adding paragraphs (b)(17)(viii) and (ix);

s. Redesignating paragraph (b)(18) as paragraph (b)(20) and adding new paragraphs (b)(18) and (19);

t. In newly redesignated paragraph (b)(20)(i), removing "A determination of eligibility for" and adding in its place "The decision on eligibility for a"; and

u. In newly redesignated paragraph (b)(20)(iii), removing "and § 98.448(d)" and adding in its place "or (d)".

The revisions and additions read as follows:

§ 78.1 Purpose and scope.

(a) * * *

(1) * * *

(i) * * *

(C) Subparts AA through II, AAA through III, or AAAA through IIII of part 96 of this chapter; subparts AA through II, AAA through III, or AAAA through IIII of part 97 of this chapter; or State regulations approved under § 51.123(o)(1) or (2) or (aa)(1) or (2) or § 51.124(o)(1) or (2) of this chapter;

(D) Subpart AAAAA, BBBBB, CCCCC, DDDDD, EEEEE, FFFFF, or GGGGG of part 97 of this chapter or State regulations approved under § 52.38(a)(4) or (5) or (b)(4), (5), (8), (9), (11), or (12) or § 52.39(e), (f), (h), or (i) of this chapter; or

* * * * *

(b) * * *

(17) * * *

(viii) The decision on the deduction of CSAPR NO_X Ozone Season Group 2 allowances from an Allowance Management System account and the allocation to such account or another account of CSAPR NO_X Ozone Season Group 3 allowances under § 97.826(d) of this chapter.

(ix) The decision on the recall of allocations of CSAPR NO_X Ozone Season Group 2 allowances and the deduction of such allowances from an Allowance Management System account under § 97.811(d) of this chapter.

(18) Under subpart FFFFF of part 97 of this chapter,

(i) The decision on the allocation of Texas SO_2 Trading Program allowances under § 97.911(a)(2) or (c) or § 97.912 of this chapter.

(ii) The decision on the transfer of Texas SO_2 Trading Program allowances under § 97.923 of this chapter.

(iii) The decision on the deduction of Texas SO_2 Trading Program allowances under § 97.924 or § 97.925 of this chapter.

(iv) The correction of an error in an Allowance Management System account under § 97.927 of this chapter.

(v) The adjustment of information in a submission and the decision on the deduction and transfer of Texas SO_2 Trading Program allowances based on the information as adjusted under § 97.928 of this chapter.

(vi) The finalization of control period emissions data, including retroactive adjustment based on audit.

(vii) The approval or disapproval of a petition under § 97.935 of this chapter.

(19) Under subpart GGGGG of part 97 of this chapter,

(i) The decision on the allocation of CSAPR NO_X Ozone Season Group 3 allowances under § 97.1011(a)(2) or (3) or (c) or § 97.1012 of this chapter.

(ii) The decision on the transfer of CSAPR NO_X Ozone Season Group 3 allowances under § 97.1023 of this chapter.

(iii) The decision on the deduction of CSAPR NO_X Ozone Season Group 3 allowances under § 97.1024 or § 97.1025 of this chapter.

(iv) The correction of an error in an Allowance Management System account under § 97.1027 of this chapter.

(v) The adjustment of information in a submission and the decision on the deduction and transfer of CSAPR NO_X Ozone Season Group 3 allowances based on the information as adjusted under § 97.1028 of this chapter.

(vi) The finalization of control period emissions data, including retroactive adjustment based on audit.

(vii) The approval or disapproval of a petition under § 97.1035 of this chapter.

* * * * *

20. Amend § 78.2 by:

a. Revising paragraph (a)(1);

b. In paragraphs (a)(2)(ii) and (iii), removing “Who submitted” and adding in its place “Any person who submitted”; and

c. In paragraph (b), removing “subpart” and adding in its place “part”.

The revision reads as follows:

§ 78.2 General.

(a) * * *

(1) The terms used in this part with regard to a decision of the Administrator that is appealed under this part shall have the meanings as set forth in the regulations under which the Administrator made such decision and as set forth in paragraph (a)(2) of this section and § 72.2 of this chapter.

* * * * *

21. Amend § 78.3 by:

a. Revising paragraph (a);

b. In paragraph (b)(3)(i)(A), removing “(a)(1), (2), (10), or (11) of this section.” and adding in its place “(a)(1) of this section;”;

c. In paragraph (b)(3)(i)(B), removing “(a)(3) of this section.” and adding in its place “(a)(2) of this section;”;

d. In paragraph (b)(3)(i)(C), removing “(a)(4), (5), (6), (7), (8), or (9) of this section.” and adding in its place “(a)(3) of this section;”;

e. Adding paragraphs (b)(3)(i)(D) and (E);

f. In paragraph (c)(5)(ii), removing the period at the end of the paragraph and adding in its place a semicolon;

g. Revising paragraphs (c)(7)(i) through (v);

h. In paragraph (d)(1), removing the period at the end of the paragraph and adding in its place a semicolon;

i. In paragraph (d)(2)(i), removing "the Acid Rain Program or subpart AAAAA, BBBBB, CCCCC, DDDDD, or EEEEE of part 97 of this chapter." and adding in its place "parts 72, 73, 74, 75, 76, and 77 of this chapter;";

j. In paragraph (d)(2)(ii), removing "the NO_X Budget Trading Program." and adding in its place "subparts A through J of part 97 of this chapter;";

k. In paragraph (d)(2)(iii), removing the period at the end of the paragraph and adding in its place a semicolon;

l. Adding paragraphs (d)(2)(iv) and (v);

m. In paragraphs (d)(3) and (4), removing the period at the end of the paragraph and adding in its place a semicolon;

n. Revising paragraphs (d)(5) and (6); and

o. Removing paragraph (d)(7) and redesignating paragraph (d)(8) as paragraph (d)(7).

The revisions and additions read as follows:

§ 78.3 Petition for administrative review and request for evidentiary hearing.

(a)(1) The following persons may petition for administrative review of a decision of the Administrator that is made under parts 72, 73, 74, 75, 76, and 77 of this chapter and that is appealable under § 78.1(a):

(i) The designated representative for a unit or source covered by the decision or the authorized account representative for any Allowance Tracking System account covered by the decision; or

(ii) Any interested person with regard to the decision.

(2) The following persons may petition for administrative review of a decision of the Administrator that is made under subparts A through J of part 97 of this chapter and that is appealable under § 78.1(a):

(i) The NO_X authorized account representative for a unit or source covered by the decision or any NO_X Allowance Tracking System account covered by the decision; or

(ii) Any interested person with regard to the decision.

(3) The following persons may petition for administrative review of a decision of the Administrator that is made under subparts AA through II, AAA through III, or AAAA through IIII of part 96 of this chapter or subparts AA through II, AAA through III, or AAAA through IIII of part 97 of this chapter and that is appealable under § 78.1(a):

(i) The CAIR designated representative for a unit or source covered by the decision or the CAIR authorized account representative for any CAIR NO_X Allowance Tracking System account, CAIR SO_2 Allowance Tracking System account, or CAIR NO_X Ozone Season Allowance Tracking System account covered by the decision; or

(ii) Any interested person with regard to the decision.

(4) The following persons may petition for administrative review of a decision of the Administrator that is made under subpart AAAAA, BBBBB, CCCCC, DDDDD, EEEEE, FFFFF, or GGGGG of part 97 of this chapter and that is appealable under § 78.1(a):

(i) The designated representative for a unit or source covered by the decision or the authorized account representative for any Allowance Management System account covered by the decision; or

(ii) Any interested person with regard to the decision.

(5) The following persons may petition for administrative review of a decision of the Administrator that is made under subpart RR of part 98 of this chapter and that is appealable under § 78.1(a):

(i) The designated representative for a facility covered by the decision; or

(ii) Any interested person with regard to the decision.

(b) * * *

(3) * * *

(i) * * *

(D) The designated representative or authorized account representative, for a petition under paragraph (a)(4) of this section; or

(E) The designated representative, for a petition under paragraph (a)(5) of this section; and

* * * * *

(c) * * *

(7) * * *

(i) Parts 72, 73, 74, 75, 76, and 77 of this chapter;

(ii) Subparts A through J of part 97 of this chapter;

(iii) Subparts AA through II, AAA through III, or AAAA through IIII of part 96 of this chapter or subparts AA through II, AAA through III, or AAAA through IIII of part 97 of this chapter;

(iv) Subpart AAAAA, BBBBB, CCCCC, DDDDD, EEEEE, FFFFF, or GGGGG of part 97 of this chapter; or

(v) Subpart RR of part 98 of this chapter.

(d) * * *

(2) * * *

(iv) A certificate of representation submitted by a designated representative or an application for a general account submitted by an authorized account representative under subpart AAAAA, BBBBB, CCCCC, DDDDD, EEEEE, FFFFF, or GGGGG of part 97 of this chapter; or

(v) A certificate of representation submitted by a designated representative under part 98 of this chapter;

* * * * *

(5) Any provision or requirement of subparts AA through II, AAA through III, or AAAA through IIII of part 96 of this chapter or subparts AA through II, AAA through III, or AAAA through IIII of part 97 of this chapter, including the standard requirements under § 96.106, § 96.206, or § 96.306 of this chapter or § 97.106, § 97.206, or § 97.306 of this chapter, respectively, and any emission monitoring or reporting requirements;

(6) Any provision or requirement of subpart AAAAA, BBBBB, CCCCC, DDDDD, EEEEE, FFFFF, or GGGGG of part 97 of this chapter, including the standard requirements under § 97.406, § 97.506, § 97.606, § 97.706, § 97.806, § 97.906, or § 97.1006 of this chapter, respectively, and any emission monitoring or reporting requirements; or

* * * * *

22. Amend § 78.4 by:

a. Revising paragraph (a)(1)(i);

b. In paragraph (a)(1)(ii), designating the first sentence as paragraph (a)(1)(ii)(A) and designating the second sentence as paragraph (a)(1)(ii)(B);

c. In paragraph (a)(1)(iii), designating the first sentence as paragraph (a)(1)(iii)(A) and designating the second sentence as paragraph (a)(1)(iii)(B); and

d. Redesignating paragraph (a)(1)(iv) as paragraph (a)(1)(v) and adding a new paragraph (a)(1)(iv).

The revision and addition read as follows:

§ 78.4 Filings.

(a) * * *

(1) * * *

(i)(A) Any filings on behalf of owners and operators of an affected unit or affected source under parts 72, 73, 74, 75, 76, and 77 of this chapter shall be signed by the designated representative.

(B) Any filings on behalf of persons with an ownership interest with respect to allowances in a general account under parts 72, 73, 74, 75, 76, and 77 of this chapter shall be signed by the authorized account representative.

* * * * *

(iv)(A) Any filings on behalf of owners and operators of a CSAPR NO_X Annual unit or CSAPR NO_X Annual source, CSAPR NO_X Ozone Season Group 1 unit or CSAPR NO_X Ozone Season Group 1 source, CSAPR NO_X Ozone Season Group 2 unit or CSAPR NO_X Ozone Season Group 2 source, CSAPR NO_X Ozone Season Group 3 unit or CSAPR NO_X Ozone Season Group 3 source, CSAPR SO_2 Group 1 unit or CSAPR SO_2 Group 1 source, CSAPR SO_2 Group 2 unit or CSAPR SO_2 Group 2 source, or Texas SO_2 Trading Program unit or Texas SO_2 Trading Program source shall be signed by the designated representative.

(B) Any filings on behalf of persons with an ownership interest with respect to CSAPR NO_X Annual allowances, CSAPR NO_X Ozone Season Group 1 allowances, CSAPR NO_X Ozone Season Group 2 allowances, CSAPR NO_X Ozone Season Group 3 allowances, CSAPR SO_2 Group 1 allowances, CSAPR SO_2 Group 2 allowances, or Texas SO_2 Trading Program allowances in a general account shall be signed by the authorized account representative.

* * * * *

§ 78.5 [Amended]

23. In § 78.5, amend paragraph (a) by removing from the second sentence “presented, the issue could not” and adding in its place “presented or the issue could not”.

§ 78.6 [Amended]

24. Amend § 78.6 by:

a. In paragraph (a), removing “of this part”;

b. In paragraph (b)(2) introductory text, removing “in part, it will:” and adding in its place “in part:”;

c. In paragraph (b)(2)(i), removing “Identify the portions” and adding in its place “It will identify the portions”, and removing the comma after “contested”; and

d. In paragraph (b)(2)(ii), removing “Refer the disputed” and adding in its place “It will refer the disputed”.

§ 78.10 [Amended]

25. Amend § 78.10 by:

a. In paragraph (a)(3), removing “this paragraph” and adding in its place “paragraph (a)(1) or (2) of this section”;

b. In paragraph (b), adding a comma after “knowingly caused to be made”; and

c. In paragraph (c), removing “under § 78.9 of this part. This prohibition terminates” and adding in its place “under § 78.9. These prohibitions terminate”.

§ 78.11 [Amended]

26. Amend § 78.11 by:

a. In paragraph (a), removing “of this part” each time it appears; and

b. In paragraph (b) introductory text, removing “of” and adding in its place “or”.

§ 78.12 [Amended]

27. Amend § 78.12 by:

a. In paragraph (a)(1), removing “warrants review.” and adding in its place “warrants review; and”; and

b. In paragraph (a)(2), adding a comma after “Acid Rain permit”.

§ 78.13 [Amended]

28. In § 78.13, amend paragraph (a)(3) by removing “of this part”.

§ 78.14 [Amended]

29. In § 78.14, amend paragraphs (a)(4) and (7) and (c)(4) by removing “of this part”.

§ 78.15 [Amended]

30. In § 78.15, amend paragraphs (a) and (e) by removing “of this part” each time it appears;

§ 78.16 [Amended]

31. In § 78.16, amend paragraph (b) introductory text by removing the period at the end of the paragraph and adding in its place a colon.

§ 78.17 [Amended]

32. Amend § 78.17 by removing “of this part”.

§ 78.18 [Amended]

33. In § 78.18, amend paragraphs (a) and (b)(1) and (2) by removing “of this part”.

§ 78.19 [Amended]

34. Amend § 78.19 by:

a. In paragraph (d), in the second sentence, adding “the” before “Environmental Appeals Board”; and

b. In paragraph (e), removing “of this part”.

§ 78.20 [Amended]

35. Amend § 78.20 by:

a. In paragraph (a)(2), removing “§ 78.12(a) (1) and (2) of this part.” and adding in its place “§ 78.12(a)(1) and (2).”; and

b. In paragraph (c), removing “of this part”.

PART 97—FEDERAL NO_X BUDGET TRADING PROGRAM, CAIR NO_X AND SO_2 TRADING PROGRAMS, CSAPR NO_X AND SO_2 TRADING PROGRAMS, AND TEXAS SO_2 TRADING PROGRAM

36. The authority citation for part 97 continues to read as follows:

Authority: 42 U.S.C. 7401, 7403, 7410, 7426, 7491, 7601, and 7651, *et seq*.

Subpart AAAAA—CSAPR NO_X Annual Trading Program

37. Amend § 97.402 by:

a. Removing the definition of "Allowable NO_X emission rate";

b. Revising the definition of "Allowance transfer deadline";

c. In the definition of "Alternate designated representative", adding "CSAPR NO_X Ozone Season Group 3 Trading Program," before "CSAPR SO_2 Group 1 Trading Program,";

d. In the definition of "Biomass", paragraph (3) introductory text, removing the semicolon and adding in its place a colon;

e. Removing the definition of "Coal-derived fuel";

f. In the definition of "Cogeneration unit", paragraph (2)(i)(B), removing "15 percent of total energy output." and adding in its place "15 percent of total energy output; or";

g. In the definition of "Common designated representative", removing "such control period, the same" and adding in its place "such a control period before 2021, or as of July 1 immediately after such deadline for such a control period in 2021 or thereafter, the same", and removing "located" before "in a State";

h. Revising the definitions of "Common designated representative's assurance level" and "Common designated representative's share";

i. In the definition of "CSAPR NO_X Ozone Season Group 1 Trading Program", removing "(b)(3) through (5), and (b)(10) through (12)" and adding in its place "and (b)(3) through (5) and (13) through (15)";

j. In the definition of "CSAPR NO_X Ozone Season Group 2 Trading Program", removing "(b)(2)(i) and (iii), (b)(6) through (11), and (b)(13)" and adding in its place "(b)(2)(iii) and (iv), and (b)(7) through (9), (13), (14), and (16)", and removing "§ 52.38(b)(6) or (9)" and adding in its place "§ 52.38(b)(9)";

k. Adding in alphabetical order a definition for "CSAPR NO_X Ozone Season Group 3 Trading Program";

l. In the definition of "Designated representative", adding "CSAPR NO_X Ozone Season Group 3 Trading Program," before "CSAPR SO_2 Group 1 Trading Program,";

m. In the definition of "Fossil fuel", paragraph (2), removing "and (ii)," and adding in its place "and (b)(2)(ii),";

n. Removing the definition of "Heat rate"; and

o. Adding in alphabetical order a definition for "Nitrogen oxides".

The revisions and additions read as follows:

§ 97.402 Definitions.

* * * * *

Allowance transfer deadline means, for a control period before 2021, midnight of March 1 immediately after such control period or, for a control period in 2021 or thereafter, midnight of June 1 immediately after such control period (or if such March 1 or June 1 is not a business day, midnight of the first business day thereafter) and is the deadline by which a CSAPR NO_X Annual allowance transfer must be submitted for recordation in a CSAPR NO_X Annual source's compliance account in order to be available for use in complying with the source's CSAPR NO_X Annual emissions limitation for such control period in accordance with §§ 97.406 and 97.424.

* * * * *

Common designated representative's assurance level means, with regard to a specific common designated representative and a State (and Indian country within the borders of such State) and control period in a given year for which the State assurance level is exceeded as described in § 97.406(c)(2)(iii), the amount (rounded to the nearest allowance) equal to the sum of the total amount of CSAPR NO_X Annual allowances allocated for such control period to the group of one or more CSAPR NO_X Annual units in such State (and such Indian country) having

the common designated representative for such control period and the total amount of CSAPR NO_X Annual allowances purchased by an owner or operator of such CSAPR NO_X Annual units in an auction for such control period and submitted by the State or the permitting authority to the Administrator for recordation in the compliance accounts for such CSAPR NO_X Annual units in accordance with the CSAPR NO_X Annual allowance auction provisions in a SIP revision approved by the Administrator under § 52.38(a)(4) or (5) of this chapter, multiplied by the sum of the State NO_X Annual trading budget under § 97.410(a) and the State's variability limit under § 97.410(b) for such control period, and divided by such State NO_X Annual trading budget.

Common designated representative's share means, with regard to a specific common designated representative for a control period in a given year and a total amount of NO_X emissions from all CSAPR NO_X Annual units in a State (and Indian country within the borders of such State) during such control period, the total tonnage of NO_X emissions during such control period from the group of one or more CSAPR NO_X Annual units in such State (and such Indian country) having the common designated representative for such control period.

* * * * *

CSAPR NO_X Ozone Season Group 3 Trading Program means a multi-state NO_X air pollution control and emission reduction program established in accordance with subpart GGGGG of this part and § 52.38(b)(1), (b)(2)(v), and (b)(10) through (14) and (17) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.38(b)(10) or (11) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.38(b)(12) of this chapter), as a means of mitigating interstate transport of ozone and NO_X.

* * * * *

Nitrogen oxides means all oxides of nitrogen except nitrous oxide (N_2O), reported on an equivalent molecular weight basis as nitrogen dioxide (NO_2).

* * * * *

§ 97.404 [Amended]

38. In § 97.404, amend paragraph (b) introductory text by removing "or (2)(i)" and adding in its place "or (b)(2)(i)".

§ 97.405 [Amended]

39. In § 97.405, amend paragraph (b) by removing the paragraph heading.

§ 97.406 [Amended]

40. In § 97.406, amend paragraph (c)(4)(ii) by removing "and (2)(i)" and adding in its place "and (c)(2)(i)".

§ 97.410 [Amended]

41. Amend § 97.410 by:

a. In paragraph (a) introductory text, removing "2015 and thereafter" and adding in its place "the years indicated";

b. In paragraph (a)(1)(v), removing "1,439" and adding in its place "1,441";

c. In paragraph (a)(2)(v), removing "1,075" and adding in its place "1,074";

d. In paragraph (a)(3)(v), removing "3,830" and adding in its place "3,831";

e. In paragraph (a)(4)(v), removing "3,253" and adding in its place "3,256";

f. In paragraph (a)(5)(v), removing "712" and adding in its place "715";

g. In paragraph (a)(8)(v), removing "331" and adding in its place "333";

h. In paragraph (a)(9)(v), removing "1,198" and adding in its place "1,201";

i. In paragraph (a)(10)(v), removing "561" and adding in its place "565";

j. In paragraph (a)(11)(v), removing "2,925" and adding in its place "2,929";

k. In paragraph (a)(12)(v), removing "1,772" and adding in its place "1,771";

l. In paragraph (a)(13)(v), removing "159" and adding in its place "155";

m. In paragraph (a)(14)(v), removing "412" and adding in its place "410";

n. In paragraph (a)(17)(v), removing "2,384" and adding in its place "2,383";

o. In paragraph (a)(18)(v), removing “617” and adding in its place “620”;

p. In paragraph (a)(19)(v), removing “387” and adding in its place “381”;

q. Removing and reserving paragraphs (a)(20)(iv) through (vi);

r. In paragraph (a)(21)(v), removing “1,662” and adding in its place “1,663”;

s. In paragraph (a)(22)(v), removing “2,729” and adding in its place “2,730”; and

t. Removing and reserving paragraph (b)(20).

42. Amend § 97.411 by:

a. Redesignating paragraph (b)(1)(i) as paragraph (b)(1)(i)(A), and in the newly redesignated paragraph, removing “By June 1, 2015 and June 1 of each year thereafter,” and adding in its place “By June 1 of each year from 2015 through 2020,”, and removing “and (12),” and adding in its place “and (12) and §§ 97.406(b)(2) and 97.430 through 97.435,”;

b. Adding paragraph (b)(1)(i)(B);

c. In paragraph (b)(1)(ii)(A), removing “§ 97.412(a)(2) through (7) and (12) and §§ 97.406(b)(2) and 97.430 through 97.435.” and adding in its place “the provisions referenced in paragraph (b)(1)(i)(A) or (B) of this section, as applicable.”;

d. Revising paragraph (b)(1)(ii)(B);

e. In paragraph (b)(1)(iii), removing “such control period contains” and adding in its place “a control period before 2021 contains”;

f. In paragraph (b)(1)(v), removing “of this section,” and adding in its place “of this section for a control period before 2021, or in paragraph (b)(1)(ii) of this section for a control period in 2021 or thereafter,”;

g. Redesignating paragraph (b)(2)(i) as paragraph (b)(2)(i)(A), and in the newly redesignated paragraph, removing “By June 1, 2015 and June 1 of each year thereafter,” and adding in its place “By June 1 of each year from 2015 through 2020,”, and removing “and (12),” and adding in its place “and (12) and §§ 97.406(b)(2) and 97.430 through 97.435,”;

h. Adding paragraph (b)(2)(i)(B);

i. In paragraph (b)(2)(ii)(A), removing "§ 97.412(b)(2) through (7) and (12) and §§ 97.406(b)(2) and 97.430 through 97.435." and adding in its place "the provisions referenced in paragraph (b)(2)(i)(A) or (B) of this section, as applicable.";

j. Revising paragraph (b)(2)(ii)(B);

k. In paragraph (b)(2)(iii), removing "such control period contains" and adding in its place "a control period before 2021 contains";

l. In paragraph (b)(2)(v), removing "of this section," and adding in its place "of this section for a control period before 2021, or in paragraph (b)(2)(ii) of this section for a control period in 2021 or thereafter,";

m. In paragraph (c)(5)(i)(A), adding "(or a subsequent control period)" before "for the State";

n. In paragraph (c)(5)(i)(B), adding "(or a subsequent control period)" before "in accordance with such SIP revision";

o. In paragraph (c)(5)(ii)(A), adding "(or a subsequent control period)" before the semicolon at the end of the paragraph;

p. In paragraph (c)(5)(ii)(B), adding "(or a subsequent control period)" before "in accordance with such SIP revision"; and

q. In paragraph (c)(5)(iii), adding "(or a subsequent control period)" before the period at the end of the paragraph.

The additions and revisions read as follows:

§ 97.411 Timing requirements for CSAPR NO_X Annual allowance allocations.

* * * * *

(b) * * *

(1) * * *

(i) * * *

(B) By March 1, 2022 and March 1 of each year thereafter, the Administrator will calculate the CSAPR NO_X Annual allowance allocation to each CSAPR NO_X Annual unit in a State, in accordance with § 97.412(a)(2) through (7), (10), and (12) and §§ 97.406(b)(2) and 97.430 through 97.435, for the control period in the year before the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) * * *

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(1)(i)(A) or (B) of this section, as applicable. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(i)(A) of this section, or by May 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(i)(B) of this section, the Administrator will promulgate a notice of data availability of the results of the calculations incorporating any adjustments that the Administrator determines to be necessary and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(1)(ii)(A) of this section.

* * * * *

(2) * * *

(i) * * *

(B) By March 1, 2022 and March 1 of each year thereafter, the Administrator will calculate the CSAPR NO_X Annual allowance allocation to each CSAPR NO_X Annual unit in Indian country within the borders of a State, in accordance with § 97.412(b)(2) through (7), (10), and (12) and §§ 97.406(b)(2) and 97.430 through 97.435, for the control period in the year before the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) * * *

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(2)(i)(A) or (B) of this section, as applicable. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(i)(A) of this section, or by May 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(i)(B) of this section, the Administrator will promulgate a notice of data availability of the results of the calculations incorporating any adjustments that the Administrator determines to be necessary and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(ii)(A) of this section.

* * * * *

43. Amend § 97.412 by:

a. Adding a paragraph heading to paragraph (a) introductory text;

b. In paragraph (a)(1)(i), removing "§ 97.411(a)(1);" and adding in its place "§ 97.411(a)(1) and that have deadlines for certification of monitoring systems under § 97.430(b) not later than December 31 of the year of the control period;";

c. In paragraph (a)(1)(iii), removing "control period; or" and adding in its place "control period, for allocations for a control period before 2021, or that operate during such control period, for allocations for a control period in 2021 or thereafter; or";

d. In paragraph (a)(3) introductory text, removing "later" and adding in its place "latest";

e. Revising paragraph (a)(3)(ii);

f. In paragraph (a)(3)(iv), removing "resumes operation." and adding in its place "resumes operation, for allocations for a control period before 2021, or the control period in which the unit resumes operation, for allocations for a control period in 2021 or thereafter.";

g. In paragraph (a)(4)(i), removing "preceding control period." and adding in its place "preceding control period, for allocations for a control period before 2021, or the unit's total tons

of NO_X emissions during the control period, for allocations for a control period in 2021 or thereafter.";

h. In paragraph (a)(5), adding "allocation amounts of" after "sum of the";

i. In paragraph (a)(8), removing "The Administrator" and adding in its place "For a control period before 2021, the Administrator";

j. In paragraph (a)(9) introductory text, removing "If, after completion" and adding in its place "For a control period before 2021, if, after completion";

k. In paragraph (a)(10), removing "for such control period, any unallocated" and adding in its place "for a control period before 2021, or under paragraphs (a)(2) through (7) and (12) of this section for a control period in 2021 or thereafter, any unallocated";

l. Redesignating paragraph (a)(11) as paragraph (a)(11)(i) and in the newly redesignated paragraph, removing "The Administrator" and adding in its place "For a control period before 2021, the Administrator";

m. Adding paragraph (a)(11)(ii);

n. Revising paragraph (a)(12);

o. Adding a paragraph heading to paragraph (b) introductory text and removing "located" before "in Indian country";

p. In paragraph (b)(1)(i), removing "§ 97.411(a)(1); or" and adding in its place "§ 97.411(a)(1) and that have deadlines for certification of monitoring systems under § 97.430(b) not later than December 31 of the year of the control period; or";

q. Revising paragraph (b)(3)(ii);

r. In paragraph (b)(4)(i), removing "preceding control period." and adding in its place "preceding control period, for allocations for a control period before 2021, or the unit's total tons of NO_X emissions during the control period, for allocations for a control period in 2021 or thereafter.";

s. In paragraph (b)(5), adding “allocation amounts of” after “sum of the”;

t. In paragraph (b)(8), removing “The Administrator” and adding in its place “For a control period before 2021, the Administrator”;

u. In paragraph (b)(9) introductory text, removing “If, after completion” and adding in its place “For a control period before 2021, if, after completion”;

v. In paragraph (b)(10) introductory text, removing “for such control period, any unallocated” and adding in its place “for a control period before 2021, or under paragraphs (b)(2) through (7) and (12) of this section for a control period in 2021 or thereafter, any unallocated”;

w. Redesignating paragraph (b)(11) as paragraph (b)(11)(i) and in the newly redesignated paragraph, removing “The Administrator” and adding in its place “For a control period before 2021, the Administrator”;

x. Adding paragraph (b)(11)(ii); and

y. Revising paragraph (b)(12).

The additions and revisions read as follows:

§ 97.412 CSAPR NO_X Annual allowance allocations to new units.

(a) *Allocations from new unit set-asides*. * * *

* * * * *

(3) * * *

(ii)(A) The first control period after the control period in which the CSAPR NO_X Annual unit commences commercial operation, for allocations for a control period before 2021; or

(B) The control period containing the deadline for certification of the CSAPR NO_X Annual unit’s monitoring systems under § 97.430(b), for allocations for a control period in 2021 or thereafter;

* * * * *

(11) * * *

(ii) For a control period in 2021 or thereafter, the Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.411(b)(1)(i), (ii), and (v), of the amount of CSAPR NO_X Annual allowances allocated under paragraphs (a)(2) through (7), (10), and (12) of this section for such control period to each CSAPR NO_X Annual unit eligible for such allocation.

(12) Notwithstanding the requirements of paragraphs (a)(2) through (11) of this section, if the calculations of allocations from a new unit set-aside for a control period before 2021 under paragraph (a)(7) of this section, paragraphs (a)(6) and (a)(9)(iv) of this section, or paragraphs (a)(6), (a)(9)(iii), and (a)(10) of this section, or for a control period in 2021 or thereafter under paragraph (a)(7) of this section or paragraphs (a)(6) and (10) of this section, would otherwise result in total allocations from such new unit set-aside unequal to the total amount of such new unit set-aside, then the Administrator will adjust the results of such calculations as follows. The Administrator will list the CSAPR NO_X Annual units in descending order based on such units' allocation amounts under paragraph (a)(7), (a)(9)(iv), or (a)(10) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant sources' names and numerical order of the relevant units' identification numbers, and will adjust each unit's allocation amount under such paragraph upward or downward by one CSAPR NO_X Annual allowance (but not below zero) in the order in which the units are listed, and will repeat this adjustment process as necessary, until the total allocations from such new unit set-aside equal the total amount of such new unit set-aside.

(b) *Allocations from Indian country new unit set-asides*. * * *

* * * * * *

(3) * * *

(ii)(A) The first control period after the control period in which the CSAPR NO_X Annual unit commences commercial operation, for allocations for a control period before 2021; or

(B) The control period containing the deadline for certification of the CSAPR NO_X Annual unit's monitoring systems under § 97.430(b), for allocations for a control period in 2021 or thereafter.

* * * * *

(11) * * *

(ii) For a control period in 2021 or thereafter, the Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.411(b)(2)(i), (ii), and (v), of the amount of CSAPR NO_X Annual allowances allocated under paragraphs (b)(2) through (7), (10), and (12) of this section for such control period to each CSAPR NO_X Annual unit eligible for such allocation.

(12) Notwithstanding the requirements of paragraphs (b)(2) through (11) of this section, if the calculations of allocations from an Indian country new unit set-aside for a control period before 2021 under paragraph (b)(7) of this section or paragraphs (b)(6) and (b)(9)(iv) of this section, or for a control period in 2021 or thereafter under paragraph (b)(7) of this section, would otherwise result in total allocations from such Indian country new unit set-aside unequal to the total amount of such Indian country new unit set-aside, then the Administrator will adjust the results of such calculations as follows. The Administrator will list the CSAPR NO_X Annual units in descending order based on such units' allocation amounts under paragraph (b)(7) or (b)(9)(iv) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant sources' names and numerical order of the relevant units' identification numbers, and will adjust each unit's allocation amount under such paragraph upward or downward by one CSAPR NO_X Annual allowance (but not below zero) in the order in which the units are listed, and will repeat this adjustment process as necessary, until the total allocations from such Indian country new unit set-aside equal the total amount of such Indian country new unit set-aside.

§ 97.420 [Amended]

44. Amend § 97.420 by:

a. In paragraph (c)(1)(ii)(D), adding "; and" after the closing quotation mark; and

b. In paragraph (c)(3)(iii)(B), removing "to NO_X" and adding in its place "to CSAPR NO_X".

45. Amend § 97.421 by:

a. Redesignating paragraph (f) as paragraph (f)(1) and in the newly redesignated paragraph, removing "By July 1, 2019 and July 1 of each year thereafter," and adding in its place "By July 1, 2019 and July 1, 2020,";

b. Adding paragraph (f)(2);

c. Redesignating paragraph (g) as paragraph (g)(1) and in the newly redesignated paragraph, removing "By August 1, 2015 and August 1 of each year thereafter," and adding in its place "By August 1 of each year from 2015 through 2020,";

d. Adding paragraph (g)(2);

e. Redesignating paragraph (h) as paragraph (h)(1) and in the newly redesignated paragraph, removing "By August 1, 2015 and August 1 of each year thereafter," and adding in its place "By August 1 of each year from 2015 through 2020,";

f. Adding paragraph (h)(2); and

g. In paragraphs (i) and (j), removing "By February 15, 2016 and February 15 of each year thereafter," and adding in its place "By February 15 of each year from 2016 through 2021,".

The additions read as follows:

§ 97.421 Recordation of CSAPR NO_X Annual allowance allocations and auction results.

* * * * *

(f) * * *

(2) By July 1, 2022 and July 1 of each year thereafter, the Administrator will record in each CSAPR NO_X Annual source's compliance account the CSAPR NO_X Annual allowances allocated to the CSAPR NO_X Annual units at the source, or in each appropriate Allowance Management System account the CSAPR NO_X Annual allowances auctioned to CSAPR NO_X

Annual units, in accordance with § 97.411(a), or with a SIP revision approved under § 52.38(a)(4) or (5) of this chapter, for the control period in the third year after the year of the applicable recordation deadline under this paragraph.

(g) * * *

(2) By May 1, 2022 and May 1 of each year thereafter, the Administrator will record in each CSAPR NO_X Annual source's compliance account the CSAPR NO_X Annual allowances allocated to the CSAPR NO_X Annual units at the source, or in each appropriate Allowance Management System account the CSAPR NO_X Annual allowances auctioned to CSAPR NO_X Annual units, in accordance with § 97.412(a), or with a SIP revision approved under § 52.38(a)(4) or (5) of this chapter, for the control period in the year before the year of the applicable recordation deadline under this paragraph.

(h) * * *

(2) By May 1, 2022 and May 1 of each year thereafter, the Administrator will record in each CSAPR NO_X Annual source's compliance account the CSAPR NO_X Annual allowances allocated to the CSAPR NO_X Annual units at the source in accordance with § 97.412(b) for the control period in the year before the year of the applicable recordation deadline under this paragraph.

* * * * *

46. Amend § 97.424 by adding a paragraph heading to paragraph (c) and revising paragraph (c)(1) to read as follows:

§ 97.424 Compliance with CSAPR NO_X Annual emissions limitation.

* * * * *

(c) *Selection of CSAPR NO_X Annual allowances for deduction*—(1) *Identification by serial number.* The designated representative for a source may request that specific CSAPR NO_X Annual allowances, identified by serial number, in the source's compliance account be deducted

for emissions or excess emissions for a control period in a given year in accordance with paragraph (b) or (d) of this section. In order to be complete, such request shall be submitted to the Administrator by the allowance transfer deadline for such control period and include, in a format prescribed by the Administrator, the identification of the CSAPR NO_X Annual source and the appropriate serial numbers.

* * * * *

47. Amend § 97.425 by:

a. Revising paragraphs (b)(1) introductory text and (b)(1)(ii);

b. Removing paragraphs (b)(2) introductory text and (b)(2)(i) and (ii) and redesignating paragraphs (b)(2)(iii) introductory text and (b)(2)(iii)(A) and (B) as paragraphs (b)(2) introductory text and (b)(2)(i) and (ii), respectively;

c. In newly redesignated paragraph (b)(2) introductory text, removing "the notice of data availability required in paragraph (b)(2)(ii) of this section and the calculations referenced by the relevant notice" and adding in its place "each notice";

d. In newly redesignated paragraph (b)(2)(i), removing "the relevant notice required under paragraph (b)(1)(ii) of this section and referenced in the notice required under paragraph (b)(2)(ii) of this section" and adding in its place "such notice";

e. In newly redesignated paragraph (b)(2)(ii), removing "(b)(2)(iii)(A)" and adding in its place "(b)(2)(i)" each time it appears, and adding "results of the" before "calculations incorporating any adjustments";

f. In paragraphs (b)(3), (b)(4)(i), (b)(5), (b)(6) introductory text, and (b)(6)(i), removing "(b)(2)(iii)(B)" and adding in its place "(b)(2)(ii)" each time it appears;

g. Removing and reserving paragraph (b)(6)(ii); and

h. In paragraph (b)(6)(iii) introductory text, removing "paragraphs (b)(6)(i) and (ii)" and adding in its place "paragraph (b)(6)(i)".

The revisions read as follows:

§ 97.425 Compliance with CSAPR NO_X Annual assurance provisions.

* * * * *

(b) * * *

(1) By June 1 of each year from 2018 through 2021 and August 1 of each year thereafter, the Administrator will:

* * * * *

(ii) For the set of any States (and Indian country within the borders of such States) for which the results of the calculations required in paragraph (b)(1)(i) of this section indicate that total NO_X emissions exceed the respective State assurance levels for such control period—

(A) 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 Annual sources and units in such State (and such Indian country), the common designated representative's share of the total NO_X emissions from all CSAPR NO_X Annual units at CSAPR NO_X Annual sources in such State (and such Indian country), the common designated representative's assurance level, and the amount (if any) of CSAPR NO_X Annual allowances that the owners and operators of such group of sources and units must hold in accordance with the calculation formula in § 97.406(c)(2)(i); and

(B) Promulgate a notice of data availability of the results of the calculations required in paragraphs (b)(1)(i) and (b)(1)(ii)(A) of this section, including separate calculations of the NO_X emissions from each CSAPR NO_X Annual source in each such State (and Indian country within the borders of such State).

* * * * *

48. Amend § 97.426 by:

a. In paragraph (b), removing "§ 97.428." and adding in its place "§ 97.428 or paragraph (c) of this section."; and

b. Adding paragraph (c).

The addition reads as follows:

§ 97.426 Banking.

* * * * *

(c) At any time after the allowance transfer deadline for the last control period for which a State NO_X Annual trading budget is set forth in § 97.410(a) for a given State, the Administrator may record a transfer of any CSAPR NO_X Annual allowances held in the compliance account for a source in such State (or Indian country within the borders of such State) to a general account identified or established by the Administrator with the source's designated representative as the authorized account representative and with the owners and operators of the source (as indicated on the certificate of representation for the source) as the persons represented by the authorized account representative. The Administrator will notify the designated representative not less than 15 days before making such a transfer.

§ 97.431 [Amended]

49. In § 97.431, amend paragraph (d)(3) introductory text by removing "with" in the last sentence.

§ 97.434 [Amended]

50. In § 97.434, amend paragraph (d)(3) by adding "CSAPR NO_X Ozone Season Group 3 Trading Program," before "CSAPR SO_2 Group 1 Trading Program,".

Subpart BBBBB—CSAPR NO_X Ozone Season Group 1 Trading Program

51. Amend § 97.502 by:

a. Removing the definition of "Allowable NO_X emission rate";

b. Revising the definition of "Allowance transfer deadline";

c. In the definition of “Biomass”, paragraph (3) introductory text, removing the semicolon and adding in its place a colon;

d. Removing the definition of “Coal-derived fuel”;

e. In the definition of “Cogeneration unit”, paragraph (2)(i)(B), removing “15 percent of total energy output.” and adding in its place “15 percent of total energy output; or”;

f. In the definition of “Common designated representative”, removing “such control period, the same” and adding in its place “such a control period before 2021, or as of July 1 immediately after such deadline for such a control period in 2021 or thereafter, the same”, and removing “located” before “in a State”;

g. Revising the definitions of “Common designated representative’s assurance level” and “Common designated representative’s share”;

h. In the definition of “CSAPR NO_X Ozone Season Group 1 Trading Program”, removing “(b)(3) through (5), and (b)(10) through (12)” and adding in its place “and (b)(3) through (5) and (13) through (15)”;

i. In the definition of “CSAPR NO_X Ozone Season Group 2 allowance”, removing “§ 97.526(c),” and adding in its place “§ 97.526(d),”, and removing “§ 52.38(b)(6), (7), (8), or (9)” and adding in its place “§ 52.38(b)(7), (8), or (9)”;

j. In the definition of “CSAPR NO_X Ozone Season Group 2 Trading Program”, removing “(b)(2)(i) and (iii), (b)(6) through (11), and (b)(13)” and adding in its place “(b)(2)(iii) and (iv), and (b)(7) through (9), (13), (14), and (16)”, and removing “§ 52.38(b)(6) or (9)” and adding in its place “§ 52.38(b)(9)”;

k. Adding in alphabetical order definitions for “CSAPR NO_X Ozone Season Group 3 allowance” and “CSAPR NO_X Ozone Season Group 3 Trading Program”;

l. In the definition of “Fossil fuel”, paragraph (2), removing “and (ii),” and adding in its place “and (b)(2)(ii),”;

m. Removing the definition of "Heat rate";

n. Adding in alphabetical order a definition for "Nitrogen oxides"; and

o. In the definition of "State", removing "(b)(3) through (5), and (b)(10) through (12)" and adding in its place "and (b)(3) through (5) and (13) through (15)".

The revisions and additions read as follows:

§ 97.502 Definitions.

* * * * *

Allowance transfer deadline means, for a control period in 2015 or 2016, midnight of December 1 immediately after such control period or, for a control period in a year from 2017 through 2020, midnight of March 1 immediately after such control period or, for a control period in 2021 or thereafter, midnight of June 1 immediately after such control period (or if such December 1, March 1, or June 1 is not a business day, midnight of the first business day thereafter) and is the deadline by which a CSAPR NO_X Ozone Season Group 1 allowance transfer must be submitted for recordation in a CSAPR NO_X Ozone Season Group 1 source's compliance account in order to be available for use in complying with the source's CSAPR NO_X Ozone Season Group 1 emissions limitation for such control period in accordance with §§ 97.506 and 97.524.

* * * * *

Common designated representative's assurance level means, with regard to a specific common designated representative and a State (and Indian country within the borders of such State) and control period in a given year for which the State assurance level is exceeded as described in § 97.506(c)(2)(iii), the amount (rounded to the nearest allowance) equal to the sum of the total amount of CSAPR NO_X Ozone Season Group 1 allowances allocated for such control period to the group of one or more CSAPR NO_X Ozone Season Group 1 units in such State (and such Indian country) having the common designated representative for such control period and the total amount of CSAPR NO_X Ozone Season Group 1 allowances purchased by an owner or

operator of such CSAPR NO_X Ozone Season Group 1 units in an auction for such control period and submitted by the State or the permitting authority to the Administrator for recordation in the compliance accounts for such CSAPR NO_X Ozone Season Group 1 units in accordance with the CSAPR NO_X Ozone Season Group 1 allowance auction provisions in a SIP revision approved by the Administrator under § 52.38(b)(4) or (5) of this chapter, multiplied by the sum of the State NO_X Ozone Season Group 1 trading budget under § 97.510(a) and the State's variability limit under § 97.510(b) for such control period, and divided by such State NO_X Ozone Season Group 1 trading budget.

Common designated representative's share means, with regard to a specific common designated representative for a control period in a given year and a total amount of NO_X emissions from all CSAPR NO_X Ozone Season Group 1 units in a State (and Indian country within the borders of such State) during such control period, the total tonnage of NO_X emissions during such control period from the group of one or more CSAPR NO_X Ozone Season Group 1 units in such State (and such Indian country) having the common designated representative for such control period.

* * * * *

CSAPR NO_X Ozone Season Group 3 allowance means a limited authorization issued and allocated or auctioned by the Administrator under subpart GGGGG of this part, § 97.526(d), or § 97.826(d), or by a State or permitting authority under a SIP revision approved by the Administrator under § 52.38(b)(10), (11), or (12) of this chapter, to emit one ton of NO_X during a control period of the specified calendar year for which the authorization is allocated or auctioned or of any calendar year thereafter under the CSAPR NO_X Ozone Season Group 3 Trading Program.

CSAPR NO_X Ozone Season Group 3 Trading Program means a multi-state NO_X air pollution control and emission reduction program established in accordance with subpart GGGGG of this part and § 52.38(b)(1), (b)(2)(v), and (b)(10) through (14) and (17) of this chapter (including

such a program that is revised in a SIP revision approved by the Administrator under § 52.38(b)(10) or (11) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.38(b)(12) of this chapter), as a means of mitigating interstate transport of ozone and NO_X.

* * * * *

Nitrogen oxides means all oxides of nitrogen except nitrous oxide (N_2O), reported on an equivalent molecular weight basis as nitrogen dioxide (NO_2).

* * * * *

§ 97.504 [Amended]

52. In § 97.504, amend paragraph (b) introductory text by removing "or (2)(i)" and adding in its place "or (b)(2)(i)".

§ 97.505 [Amended]

53. In § 97.505, amend paragraph (b) by removing the paragraph heading.

§ 97.506 [Amended]

54. In § 97.506, amend paragraph (c)(4)(ii) by removing "and (2)(i)" and adding in its place "and (c)(2)(i)".

§ 97.510 [Amended]

55. Amend § 97.510 by:

a. In paragraph (a) introductory text, removing "2015 and thereafter" and adding in its place "the years indicated";

b. Removing and reserving paragraphs (a)(1)(iv) and (v), (a)(2)(iv) and (v), and (a)(3)(iv) through (vi);

c. In paragraph (a)(4)(v), removing "481" and adding in its place "485"; and

d. Removing and reserving paragraphs (a)(5)(iv) and (v), (a)(6)(iv) and (v), (a)(7)(iv) through (vi), (a)(8)(iv) and (v), (a)(9)(iv) through (vi), (a)(10)(iv) and (v), (a)(11)(iv) through (vi),

(a)(12)(iv) through (vi), (a)(13)(iv) and (v), (a)(14)(iv) and (v), (a)(15)(iv) through (vi), (a)(16)(iv) through (vi), (a)(17)(iv) and (v), (a)(18)(iv) and (v), (a)(19)(iv) and (v), (a)(20)(iv) through (vi), (a)(21)(iv) and (v), (a)(22)(iv) through (vi), (a)(23)(iv) and (v), (a)(24)(iv) and (v), (a)(25)(iv) through (vi), and (b)(1) through (3) and (5) through (25).

56. Amend § 97.511 by:

a. Redesignating paragraph (b)(1)(i) as paragraph (b)(1)(i)(A), and in newly redesignated paragraph, removing "By June 1, 2015 and June 1 of each year thereafter," and adding in its place "By June 1 of each year from 2015 through 2020,", and removing "and (12)," and adding in its place "and (12) and §§ 97.506(b)(2) and 97.530 through 97.535,";

b. Adding paragraph (b)(1)(i)(B);

c. In paragraph (b)(1)(ii)(A), removing "§ 97.512(a)(2) through (7) and (12) and §§ 97.506(b)(2) and 97.530 through 97.535." and adding in its place "the provisions referenced in paragraph (b)(1)(i)(A) or (B) of this section, as applicable.";

d. Revising paragraph (b)(1)(ii)(B);

e. In paragraph (b)(1)(iii)(B), removing "2017 or any subsequent year" and adding in its place "a year from 2017 through 2020";

f. In paragraph (b)(1)(v), removing "of this section," and adding in its place "of this section for a control period before 2021, or in paragraph (b)(1)(ii) of this section for a control period in 2021 or thereafter,";

g. Redesignating paragraph (b)(2)(i) as paragraph (b)(2)(i)(A), and in the newly redesignated paragraph, removing "By June 1, 2015 and June 1 of each year thereafter," and adding in its place "By June 1 of each year from 2015 through 2020,", and removing "and (12)," and adding in its place "and (12) and §§ 97.506(b)(2) and 97.530 through 97.535,";

h. Adding paragraph (b)(2)(i)(B);

i. In paragraph (b)(2)(ii)(A), removing "§ 97.512(b)(2) through (7) and (12) and §§ 97.506(b)(2) and 97.530 through 97.535." and adding in its place "the provisions referenced in paragraph (b)(2)(i)(A) or (B) of this section, as applicable.";

j. Revising paragraph (b)(2)(ii)(B);

k. In paragraph (b)(2)(iii)(B), removing "2017 or any subsequent year" and adding in its place "a year from 2017 through 2020";

l. In paragraph (b)(2)(v), removing "of this section," and adding in its place "of this section for a control period before 2021, or in paragraph (b)(2)(ii) of this section for a control period in 2021 or thereafter,";

m. In paragraph (c)(5)(i)(A), adding "(or a subsequent control period)" before "for the State";

n. In paragraph (c)(5)(i)(B), adding "(or a subsequent control period)" before "in accordance with such SIP revision";

o. In paragraph (c)(5)(ii)(A), adding "(or a subsequent control period)" before the semicolon at the end of the paragraph;

p. In paragraph (c)(5)(ii)(B), adding "(or a subsequent control period)" before "in accordance with such SIP revision"; and

q. In paragraph (c)(5)(iii), adding "(or a subsequent control period)" before the period at the end of the paragraph.

The additions and revisions read as follows:

§ 97.511 Timing requirements for CSAPR NO_X Ozone Season Group 1 allowance allocations.

* * * * *

(b) * * *

(1) * * *

(i) * * *

(B) By March 1, 2022 and March 1 of each year thereafter, the Administrator will calculate the CSAPR NO_X Ozone Season Group 1 allowance allocation to each CSAPR NO_X Ozone Season Group 1 unit in a State, in accordance with § 97.512(a)(2) through (7), (10), and (12) and §§ 97.506(b)(2) and 97.530 through 97.535, for the control period in the year before the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) * * *

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(1)(i)(A) or (B) of this section, as applicable. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(i)(A) of this section, or by May 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(i)(B) of this section, the Administrator will promulgate a notice of data availability of the results of the calculations incorporating any adjustments that the Administrator determines to be necessary and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(1)(ii)(A) of this section.

* * * * *

(2) * * *

(i) * * *

(B) By March 1, 2022 and March 1 of each year thereafter, the Administrator will calculate the CSAPR NO_X Ozone Season Group 1 allowance allocation to each CSAPR NO_X Ozone Season Group 1 unit in Indian country within the borders of a State, in accordance with § 97.512(b)(2) through (7), (10), and (12) and §§ 97.506(b)(2) and 97.530 through 97.535, for the control period in the year before the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) * * *

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(2)(i)(A) or (B) of this section, as applicable. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(i)(A) of this section, or by May 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(i)(B) of this section, the Administrator will promulgate a notice of data availability of the results of the calculations incorporating any adjustments that the Administrator determines to be necessary and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(ii)(A) of this section.

* * * * *

57. Amend § 97.512 by:

a. Adding a paragraph heading to paragraph (a) introductory text ;

b. In paragraph (a)(1)(i), removing "§ 97.511(a)(1);" and adding in its place "§ 97.511(a)(1) and that have deadlines for certification of monitoring systems under § 97.530(b) not later than September 30 of the year of the control period;";

c. In paragraph (a)(1)(iii), removing "control period; or" and adding in its place "control period, for allocations for a control period before 2021, or that operate during such control period, for allocations for a control period in 2021 or thereafter; or";

d. In paragraph (a)(3) introductory text, removing "later" and adding in its place "latest";

e. Revising paragraph (a)(3)(ii);

f. In paragraph (a)(3)(iv), removing "resumes operation." and adding in its place "resumes operation, for allocations for a control period before 2021, or the control period in which the unit resumes operation, for allocations for a control period in 2021 or thereafter.";

g. In paragraph (a)(4)(i), removing "preceding control period." and adding in its place "preceding control period, for allocations for a control period before 2021, or the unit's total tons

of NO_X emissions during the control period, for allocations for a control period in 2021 or thereafter.";

h. In paragraph (a)(5), adding "allocation amounts of" after "sum of the";

i. In paragraph (a)(8), removing "The Administrator" and adding in its place "For a control period before 2021, the Administrator";

j. In paragraph (a)(9) introductory text, removing "If, after completion" and adding in its place "For a control period before 2021, if, after completion";

k. In paragraph (a)(9)(i)(B), removing "2017 or any subsequent year," and adding in its place "2017, 2018, 2019, or 2020,";

l. In paragraph (a)(10), removing "for such control period, any unallocated" and adding in its place "for a control period before 2021, or under paragraphs (a)(2) through (7) and (12) of this section for a control period in 2021 or thereafter, any unallocated";

m. Redesignating paragraph (a)(11) as paragraph (a)(11)(i) and in the newly redesignated paragraph, removing "The Administrator" and adding in its place "For a control period before 2021, the Administrator";

n. Adding paragraph (a)(11)(ii);

o. Revising paragraph (a)(12);

p. Adding a paragraph heading to paragraph (b) introductory text and removing "located" before "in Indian country";

q. In paragraph (b)(1)(i), removing "§ 97.511(a)(1); or" and adding in its place "§ 97.511(a)(1) and that have deadlines for certification of monitoring systems under § 97.530(b) not later than September 30 of the year of the control period; or";

r. Revising paragraph (b)(3)(ii);

s. In paragraph (b)(4)(i), removing "preceding control period." and adding in its place "preceding control period, for allocations for a control period before 2021, or the unit's total tons

of NO_X emissions during the control period, for allocations for a control period in 2021 or thereafter.";

t. In paragraph (b)(5), adding "allocation amounts of" after "sum of the";

u. In paragraph (b)(8), removing "The Administrator" and adding in its place "For a control period before 2021, the Administrator";

v. In paragraph (b)(9) introductory text, removing "If, after completion" and adding in its place "For a control period before 2021, if, after completion";

w. In paragraph (b)(9)(i)(B), removing "2017 or any subsequent year," and adding in its place "2017, 2018, 2019, or 2020,";

x. In paragraph (b)(10) introductory text, removing "for such control period, any unallocated" and adding in its place "for a control period before 2021, or under paragraphs (b)(2) through (7) and (12) of this section for a control period in 2021 or thereafter, any unallocated";

y. Redesignating paragraph (b)(11) as paragraph (b)(11)(i) and in the newly redesignated paragraph, removing "The Administrator" and adding in its place "For a control period before 2021, the Administrator";

z. Adding paragraph (b)(11)(ii); and

aa. Revising paragraph (b)(12).

The additions and revisions read as follows:

§ 97.512 CSAPR NO_X Ozone Season Group 1 allowance allocations to new units.

(a) *Allocations from new unit set-asides*. * * *

* * * * * *

(3) * * *

(ii)(A) The first control period after the control period in which the CSAPR NO_X Ozone Season Group 1 unit commences commercial operation, for allocations for a control period before 2021; or

(B) The control period containing the deadline for certification of the CSAPR NO_X Ozone Season Group 1 unit's monitoring systems under § 97.530(b), for allocations for a control period in 2021 or thereafter;

* * * * *

(11) * * *

(ii) For a control period in 2021 or thereafter, the Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.511(b)(1)(i), (ii), and (v), of the amount of CSAPR NO_X Ozone Season Group 1 allowances allocated under paragraphs (a)(2) through (7), (10), and (12) of this section for such control period to each CSAPR NO_X Ozone Season Group 1 unit eligible for such allocation.

(12) Notwithstanding the requirements of paragraphs (a)(2) through (11) of this section, if the calculations of allocations from a new unit set-aside for a control period before 2021 under paragraph (a)(7) of this section, paragraphs (a)(6) and (a)(9)(iv) of this section, or paragraphs (a)(6), (a)(9)(iii), and (a)(10) of this section, or for a control period in 2021 or thereafter under paragraph (a)(7) of this section or paragraphs (a)(6) and (10) of this section, would otherwise result in total allocations from such new unit set-aside unequal to the total amount of such new unit set-aside, then the Administrator will adjust the results of such calculations as follows. The Administrator will list the CSAPR NO_X Ozone Season Group 1 units in descending order based on such units' allocation amounts under paragraph (a)(7), (a)(9)(iv), or (a)(10) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant sources' names and numerical order of the relevant units' identification numbers, and will adjust each unit's allocation amount under such paragraph upward or downward by one CSAPR NO_X Ozone Season Group 1 allowance (but not below zero) in the order in which the units are listed, and will repeat this adjustment process as necessary, until the total allocations from such new unit set-aside equal the total amount of such new unit set-aside.

(b) *Allocations from Indian country new unit set-asides*. * * *

* * * * *

(3) * * *

(ii)(A) The first control period after the control period in which the CSAPR NO_X Ozone Season Group 1 unit commences commercial operation, for allocations for a control period before 2021; or

(B) The control period containing the deadline for certification of the CSAPR NO_X Ozone Season Group 1 unit's monitoring systems under § 97.530(b), for allocations for a control period in 2021 or thereafter.

* * * * *

(11) * * *

(ii) For a control period in 2021 or thereafter, the Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.511(b)(2)(i), (ii), and (v), of the amount of CSAPR NO_X Ozone Season Group 1 allowances allocated under paragraphs (b)(2) through (7), (10), and (12) of this section for such control period to each CSAPR NO_X Ozone Season Group 1 unit eligible for such allocation.

(12) Notwithstanding the requirements of paragraphs (b)(2) through (11) of this section, if the calculations of allocations from an Indian country new unit set-aside for a control period before 2021 under paragraph (b)(7) of this section or paragraphs (b)(6) and (b)(9)(iv) of this section, or for a control period in 2021 or thereafter under paragraph (b)(7) of this section, would otherwise result in total allocations from such Indian country new unit set-aside unequal to the total amount of such Indian country new unit set-aside, then the Administrator will adjust the results of such calculations as follows. The Administrator will list the CSAPR NO_X Ozone Season Group 1 units in descending order based on such units' allocation amounts under paragraph (b)(7) or (b)(9)(iv) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant sources' names and numerical order of the relevant units' identification numbers, and will adjust each unit's allocation amount under such paragraph

upward or downward by one CSAPR NO_X Ozone Season Group 1 allowance (but not below zero) in the order in which the units are listed, and will repeat this adjustment process as necessary, until the total allocations from such Indian country new unit set-aside equal the total amount of such Indian country new unit set-aside.

§ 97.520 [Amended]

58. Amend § 97.520 by:

a. In paragraph (c)(1)(ii)(D), adding "; and" after the closing quotation mark; and

b. In paragraph (c)(3)(iii)(B), removing "to NO_X" and adding in its place "to CSAPR NO_X".

59. Amend § 97.521 by:

a. Redesignating paragraph (f) as paragraph (f)(1) and in the newly redesignated paragraph, removing "By July 1, 2019 and July 1 of each year thereafter," and adding in its place "By July 1, 2019 and July 1, 2020,";

b. Adding paragraph (f)(2);

c. Redesignating paragraph (g) as paragraph (g)(1) and in the newly redesignated paragraph, removing "By August 1, 2015 and August 1 of each year thereafter," and adding in its place "By August 1 of each year from 2015 through 2020,";

d. Adding paragraph (g)(2);

e. Redesignating paragraph (h) as paragraph (h)(1) and in the newly redesignated paragraph, removing "By August 1, 2015 and August 1 of each year thereafter," and adding in its place "By August 1 of each year from 2015 through 2020,";

f. Adding paragraph (h)(2); and

g. In paragraphs (i)(2) and (j)(2), removing "By February 15, 2018 and February 15 of each year thereafter," and adding in its place "By February 15 of each year from 2018 through 2021,".

The additions read as follows:

§ 97.521 Recordation of CSAPR NO_X Ozone Season Group 1 allowance allocations and auction results.

* * * * *

(f) * * *

(2) By July 1, 2022 and July 1 of each year thereafter, the Administrator will record in each CSAPR NO_X Ozone Season Group 1 source's compliance account the CSAPR NO_X Ozone Season Group 1 allowances allocated to the CSAPR NO_X Ozone Season Group 1 units at the source, or in each appropriate Allowance Management System account the CSAPR NO_X Ozone Season Group 1 allowances auctioned to CSAPR NO_X Ozone Season Group 1 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 period in the third year after the year of the applicable recordation deadline under this paragraph.

(g) * * *

(2) By May 1, 2022 and May 1 of each year thereafter, the Administrator will record in each CSAPR NO_X Ozone Season Group 1 source's compliance account the CSAPR NO_X Ozone Season Group 1 allowances allocated to the CSAPR NO_X Ozone Season Group 1 units at the source, or in each appropriate Allowance Management System account the CSAPR NO_X Ozone Season Group 1 allowances auctioned to CSAPR NO_X Ozone Season Group 1 units, in accordance with § 97.512(a), or with a SIP revision approved under § 52.38(b)(4) or (5) of this chapter, for the control period in the year before the year of the applicable recordation deadline under this paragraph.

(h) * * *

(2) By May 1, 2022 and May 1 of each year thereafter, the Administrator will record in each CSAPR NO_X Ozone Season Group 1 source's compliance account the CSAPR NO_X Ozone Season Group 1 allowances allocated to the CSAPR NO_X Ozone Season Group 1 units at the

source in accordance with § 97.512(b) for the control period in the year before the year of the applicable recordation deadline under this paragraph.

* * * * *

60. Amend § 97.524 by adding a paragraph heading to paragraph (c) and revising paragraph (c)(1) to read as follows:

§ 97.524 Compliance with CSAPR NO_X Ozone Season Group 1 emissions limitation.

* * * * *

(c) *Selection of CSAPR NO_X Ozone Season Group 1 allowances for deduction*—(1) *Identification by serial number.* The designated representative for a source may request that specific CSAPR NO_X Ozone Season Group 1 allowances, identified by serial number, in the source's compliance account be deducted for emissions or excess emissions for a control period in a given year in accordance with paragraph (b) or (d) of this section. In order to be complete, such request shall be submitted to the Administrator by the allowance transfer deadline for such control period and include, in a format prescribed by the Administrator, the identification of the CSAPR NO_X Ozone Season Group 1 source and the appropriate serial numbers.

* * * * *

61. Amend § 97.525 by:

a. Revising paragraphs (b)(1) introductory text and (b)(1)(ii);

b. Removing paragraphs (b)(2) introductory text and (b)(2)(i) and (ii) and redesignating paragraphs (b)(2)(iii) introductory text and (b)(2)(iii)(A) and (B) as paragraphs (b)(2) introductory text and (b)(2)(i) and (ii), respectively;

c. In newly redesignated paragraph (b)(2) introductory text, removing "the notice of data availability required in paragraph (b)(2)(ii) of this section and the calculations referenced by the relevant notice" and adding in its place "each notice";

d. In newly redesignated paragraph (b)(2)(i), removing “the relevant notice required under paragraph (b)(1)(ii) of this section and referenced in the notice required under paragraph (b)(2)(ii) of this section” and adding in its place “such notice”;

e. In newly redesignated paragraph (b)(2)(ii), removing “(b)(2)(iii)(A)” and adding in its place “(b)(2)(i)” each time it appears, and adding “results of the” before “calculations incorporating any adjustments”;

f. In paragraphs (b)(3), (b)(4)(i), (b)(5), (b)(6) introductory text, and (b)(6)(i), removing “(b)(2)(iii)(B)” and adding in its place “(b)(2)(ii)” each time it appears;

g. Removing and reserving paragraph (b)(6)(ii); and

h. In paragraph (b)(6)(iii) introductory text, removing “paragraphs (b)(6)(i) and (ii)” and adding in its place “paragraph (b)(6)(i)”.

The revisions read as follows:

§ 97.525 Compliance with CSAPR NO_X Ozone Season Group 1 assurance provisions.

* * * * *

(b) * * *

(1) By June 1 of each year from 2018 through 2021 and August 1 of each year thereafter, the Administrator will:

* * * * *

(ii) For the set of any States (and Indian country within the borders of such States) for which the results of the calculations required in paragraph (b)(1)(i) of this section indicate that total NO_X emissions exceed the respective State assurance levels for such control period—

(A) 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 Group 1 sources and units in such State (and such Indian country), the common designated representative’s share of the total NO_X emissions

from all CSAPR NO_X Ozone Season Group 1 units at CSAPR NO_X Ozone Season Group 1 sources in such State (and such Indian country), the common designated representative's assurance level, and the amount (if any) of CSAPR NO_X Ozone Season Group 1 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

(B) Promulgate a notice of data availability of the results of the calculations required in paragraphs (b)(1)(i) and (b)(1)(ii)(A) of this section, including separate calculations of the NO_X emissions from each CSAPR NO_X Ozone Season Group 1 source in each such State (and Indian country within the borders of such State).

* * * * *

62. Amend § 97.526 by:

a. Revising the section heading;

b. In paragraph (b), removing "removed under paragraph (c)" and adding in its place "paragraph (c) or (d)";

c. Revising paragraph (c); and

d. Adding paragraphs (d) and (e).

The revisions and additions read as follows:

§ 97.526 Banking and conversion.

* * * * *

(c) At any time after the allowance transfer deadline for the last control period for which a State NO_X Ozone Season Group 1 trading budget is set forth in § 97.510(a) for a given State and after completion of the procedures under paragraph (d)(1) of this section, the Administrator may record a transfer of any CSAPR NO_X Ozone Season Group 1 allowances held in the compliance account for a source in such State (or Indian country within the borders of such State) to a general account identified or established by the Administrator with the source's designated

representative as the authorized account representative and with the owners and operators of the source (as indicated on the certificate of representation for the source) as the persons represented by the authorized account representative. The Administrator will notify the designated representative not less than 15 days before making such a transfer.

(d) Notwithstanding any other provision of this subpart, part 52 of this chapter, or any SIP revision approved under § 52.38(b)(4) or (5) of this chapter:

(1) As soon as practicable after the completion of deductions under § 97.524 for the control period in 2016, but not later than March 1, 2018, the Administrator will temporarily suspend acceptance of CSAPR NO_X Ozone Season Group 1 allowance transfers submitted under § 97.522 and, before resuming acceptance of such transfers, will take the actions in paragraphs (d)(1)(i) through (iii) of this section with regard to every general account and every compliance account except a compliance account for a CSAPR NO_X Ozone Season Group 1 source in a State listed in § 52.38(b)(2)(i) of this chapter (or Indian country within the borders of such a State):

(i) The Administrator will deduct all CSAPR NO_X Ozone Season Group 1 allowances allocated for the control periods in 2015 and 2016 from each such account.

(ii) The Administrator will determine a conversion factor equal to the greater of 1.0000 or the quotient, expressed to four decimal places, of the sum of all CSAPR NO_X Ozone Season Group 1 allowances deducted from all such accounts under paragraph (d)(1)(i) of this section divided by the product of 1.5 multiplied by the sum of the variability limits for the control period in 2017 set forth in § 97.810(b) for all States except a State listed in § 52.38(b)(2)(i) of this chapter.

(iii) The Administrator will allocate and record in each such account an amount of CSAPR NO_X Ozone Season Group 2 allowances for the control period in 2017 computed as the quotient, rounded up to the nearest allowance, of the number of CSAPR NO_X Ozone Season Group 1 allowances deducted from such account under paragraph (d)(1)(i) of this section divided by the conversion factor determined under paragraph (d)(1)(ii) of this section, except as provided in paragraph (d)(1)(iv) of this section.

(iv) Where, pursuant to paragraph (d)(1)(i) of this section, the Administrator deducts CSAPR NO_X Ozone Season Group 1 allowances from the compliance account for a source in a State not listed in § 52.38(b)(2)(iii) or (iv) of this chapter (or Indian country within the borders of such a State), the Administrator will not record CSAPR NO_X Ozone Season Group 2 allowances in that compliance account but instead will allocate and record the amount of CSAPR NO_X Ozone Season Group 2 allowances for the control period in 2017 computed for such source in accordance with paragraph (d)(1)(iii) of this section in a general account identified by the designated representative for such source, provided that if the designated representative fails to identify such a general account in a submission to the Administrator by [**INSERT DATE 75 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**], the Administrator may record such CSAPR NO_X Ozone Season Group 2 allowances in a general account identified or established by the Administrator with the designated representative as the authorized account representative and with the owners and operators of such source (as indicated on the certificate of representation for the source) as the persons represented by the authorized account representative.

(2)(i) After the Administrator has carried out the procedures set forth in paragraph (d)(1) of this section, upon any determination that would otherwise result in the initial recordation of a given number of CSAPR NO_X Ozone Season Group 1 allowances in the compliance account for a source in a State listed in § 52.38(b)(2)(iii) of this chapter (or Indian country within the borders of such a State), the Administrator will not record such CSAPR NO_X Ozone Season Group 1 allowances but instead will allocate and record in such account an amount of CSAPR NO_X Ozone Season Group 2 allowances for the control period in 2017 computed as the quotient, rounded up to the nearest allowance, of such given number of CSAPR NO_X Ozone Season Group 1 allowances divided by the conversion factor determined under paragraph (d)(1)(ii) of this section.

(ii) After the Administrator has carried out the procedures set forth in paragraph (d)(1) of this section and § 97.826(d)(1), upon any determination that would otherwise result in the initial recordation of a given number of CSAPR NO_X Ozone Season Group 1 allowances in the compliance account for a source in a State listed in § 52.38(b)(2)(v) of this chapter (or Indian country within the borders of such a State), the Administrator will not record such CSAPR NO_X Ozone Season Group 1 allowances but instead will allocate and record in such account an amount of CSAPR NO_X Ozone Season Group 3 allowances for the control period in 2021 computed as the quotient, rounded up to the nearest allowance, of such given number of CSAPR NO_X Ozone Season Group 1 allowances divided by the conversion factor determined under paragraph (d)(1)(ii) of this section and further divided by the conversion factor determined under § 97.826(d)(1)(i)(D).

(e) Notwithstanding any other provision of this subpart or any SIP revision approved under § 52.38(b)(4) or (5) of this chapter, CSAPR NO_X Ozone Season Group 2 allowances or CSAPR NO_X Ozone Season Group 3 allowances may be used to satisfy requirements to hold CSAPR NO_X Ozone Season Group 1 allowances under this subpart as follows, provided that nothing in this paragraph alters the time as of which any such allowance holding requirement must be met or limits any consequence of a failure to timely meet any such allowance holding requirement:

(1) After the Administrator has carried out the procedures set forth in paragraph (d)(1) of this section, the owner or operator of a CSAPR NO_X Ozone Season Group 1 source in a State listed in § 52.38(b)(2)(ii) of this chapter (or Indian country within the borders of such a State) may satisfy a requirement to hold a given number of CSAPR NO_X Ozone Season Group 1 allowances for the control period in 2015 or 2016 by holding instead, in a general account established for this sole purpose, an amount of CSAPR NO_X Ozone Season Group 2 allowances for the control period in 2017 (or any later control period for which the allowance transfer deadline defined in § 97.802 has passed) computed as the quotient, rounded up to the nearest allowance, of such

given number of CSAPR NO_X Ozone Season Group 1 allowances divided by the conversion factor determined under paragraph (d)(1)(ii) of this section.

(2) After the Administrator has carried out the procedures set forth in paragraph (d)(1) of this section and § 97.826(d)(1), the owner or operator of a CSAPR NO_X Ozone Season Group 1 source in a State listed in § 52.38(b)(2)(iv) of this chapter (or Indian country within the borders of such a State) may satisfy a requirement to hold a given number of CSAPR NO_X Ozone Season Group 1 allowances for the control period in 2015 or 2016 by holding instead, in a general account established for this sole purpose, an amount of CSAPR NO_X Ozone Season Group 3 allowances for the control period in 2021 (or any later control period for which the allowance transfer deadline defined in § 97.1002 has passed) computed as the quotient, rounded up to the nearest allowance, of such given number of CSAPR NO_X Ozone Season Group 1 allowances divided by the conversion factor determined under paragraph (d)(1)(ii) of this section and further divided by the conversion factor determined under § 97.826(d)(1)(i)(D).

§ 97.531 [Amended]

63. In § 97.531, amend paragraph (d)(3) introductory text by removing "with" in the last sentence.

Subpart CCCCC—CSAPR SO_2 Group 1 Trading Program

64. Amend § 97.602 by:

a. Removing the definition of "Allowable SO_2 emission rate";

b. Revising the definition of "Allowance transfer deadline";

c. In the definition of "Alternate designated representative", removing "or CSAPR NO_X Ozone Season Group 2 Trading Program," and adding in its place "CSAPR NO_X Ozone Season Group 2 Trading Program, or CSAPR NO_X Ozone Season Group 3 Trading Program,";

d. In the definition of "Biomass", paragraph (3) introductory text, removing the semicolon and adding in its place a colon;

e. Removing the definition of “Coal-derived fuel”;

f. In the definition of “Cogeneration unit”, paragraph (2)(i)(B), removing “15 percent of total energy output.” and adding in its place “15 percent of total energy output; or”;

g. In the definition of “Common designated representative”, removing “such control period, the same” and adding in its place “such a control period before 2021, or as of July 1 immediately after such deadline for such a control period in 2021 or thereafter, the same”, and removing “located” before “in a State”;

h. Revising the definitions of “Common designated representative’s assurance level” and “Common designated representative’s share”;

i. In the definition of “CSAPR NO_X Ozone Season Group 1 Trading Program”, removing “(b)(3) through (5), and (b)(10) through (12)” and adding in its place “and (b)(3) through (5) and (13) through (15)”;

j. In the definition of “CSAPR NO_X Ozone Season Group 2 Trading Program”, removing “(b)(2)(i) and (iii), (b)(6) through (11), and (b)(13)” and adding in its place “(b)(2)(iii) and (iv), and (b)(7) through (9), (13), (14), and (16)”, and removing “§ 52.38(b)(6) or (9)” and adding in its place “§ 52.38(b)(9)”;

k. Adding in alphabetical order a definition for “CSAPR NO_X Ozone Season Group 3 Trading Program”;

l. In the definition of “Designated representative”, removing “or CSAPR NO_X Ozone Season Group 2 Trading Program,” and adding in its place “CSAPR NO_X Ozone Season Group 2 Trading Program, or CSAPR NO_X Ozone Season Group 3 Trading Program,”;

m. In the definition of “Fossil fuel”, paragraph (2), removing “and (ii),” and adding in its place “and (b)(2)(ii),”;

n. Removing the definition of “Heat rate”; and

o. Adding in alphabetical order a definition for “Nitrogen oxides”.

The revisions and additions read as follows:

§ 97.602 Definitions.

* * * * *

Allowance transfer deadline means, for a control period before 2021, midnight of March 1 immediately after such control period or, for a control period in 2021 or thereafter, midnight of June 1 immediately after such control period (or if such March 1 or June 1 is not a business day, midnight of the first business day thereafter) and is the deadline by which a CSAPR SO_2 Group 1 allowance transfer must be submitted for recordation in a CSAPR SO_2 Group 1 source's compliance account in order to be available for use in complying with the source's CSAPR SO_2 Group 1 emissions limitation for such control period in accordance with §§ 97.606 and 97.624.

* * * * *

Common designated representative's assurance level means, with regard to a specific common designated representative and a State (and Indian country within the borders of such State) and control period in a given year for which the State assurance level is exceeded as described in § 97.606(c)(2)(iii), the amount (rounded to the nearest allowance) equal to the sum of the total amount of CSAPR SO_2 Group 1 allowances allocated for such control period to the group of one or more CSAPR SO_2 Group 1 units in such State (and such Indian country) having the common designated representative for such control period and the total amount of CSAPR SO_2 Group 1 allowances purchased by an owner or operator of such CSAPR SO_2 Group 1 units in an auction for such control period and submitted by the State or the permitting authority to the Administrator for recordation in the compliance accounts for such CSAPR SO_2 Group 1 units in accordance with the CSAPR SO_2 Group 1 allowance auction provisions in a SIP revision approved by the Administrator under § 52.39(e) or (f) of this chapter, multiplied by the sum of the State SO_2 Group 1 trading budget under § 97.610(a) and the State's variability limit under § 97.610(b) for such control period, and divided by such State SO_2 Group 1 trading budget.

Common designated representative's share means, with regard to a specific common designated representative for a control period in a given year and a total amount of SO_2 emissions from all CSAPR SO_2 Group 1 units in a State (and Indian country within the borders of such State) during such control period, the total tonnage of SO_2 emissions during such control period from the group of one or more CSAPR SO_2 Group 1 units in such State (and such Indian country) having the common designated representative for such control period.

* * * * *

CSAPR NO_X Ozone Season Group 3 Trading Program means a multi-state NO_X air pollution control and emission reduction program established in accordance with subpart GGGGG of this part and § 52.38(b)(1), (b)(2)(v), and (b)(10) through (14) and (17) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.38(b)(10) or (11) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.38(b)(12) of this chapter), as a means of mitigating interstate transport of ozone and NO_X.

* * * * *

Nitrogen oxides means all oxides of nitrogen except nitrous oxide (N_2O), reported on an equivalent molecular weight basis as nitrogen dioxide (NO_2).

* * * * *

§ 97.604 [Amended]

65. In § 97.604, amend paragraph (b) introductory text by removing "or (2)(i)" and adding in its place "or (b)(2)(i)".

§ 97.605 [Amended]

66. In § 97.605, amend paragraph (b) by removing the paragraph heading.

§ 97.606 [Amended]

67. In § 97.606, amend paragraph (c)(4)(ii) by removing "and (2)(i)" and adding in its place "and (c)(2)(i)".

§ 97.610 [Amended]

68. Amend § 97.610 by:

a. In paragraph (a) introductory text, removing "2015 and thereafter" and adding in its place "the years indicated";

b. In paragraph (a)(1)(v), removing "6,206" and adding in its place "6,223";

c. In paragraph (a)(3)(v), removing "1,429" and adding in its place "1,426";

d. In paragraph (a)(4)(v), removing "6,377" and adding in its place "6,381";

e. In paragraph (a)(5)(v), removing "564" and adding in its place "568";

f. In paragraph (a)(6)(v), removing "2,736" and adding in its place "2,743";

g. In paragraph (a)(7)(v), removing "4,978" and adding in its place "4,982";

h. In paragraph (a)(8)(v), removing "111" and adding in its place "110";

i. In paragraph (a)(9)(v), removing "523" and adding in its place "535";

j. In paragraph (a)(10)(v), removing "4,552" and adding in its place "4,559";

k. In paragraph (a)(11)(v), removing "2,845" and adding in its place "2,850";

l. In paragraph (a)(12)(v), removing "2,240" and adding in its place "2,242";

m. In paragraph (a)(13)(v), removing "1,177" and adding in its place "1,181";

n. In paragraph (a)(14)(v), removing "1,402" and adding in its place "1,401";

o. In paragraph (a)(15)(v), removing "5,297" and adding in its place "5,299"; and

p. In paragraph (a)(16)(v), removing "1,867" and adding in its place "1,870".

69. Amend § 97.611 by:

a. Redesignating paragraph (b)(1)(i) as paragraph (b)(1)(i)(A), and in the newly redesignated paragraph, removing "By June 1, 2015 and June 1 of each year thereafter," and adding in its

place “By June 1 of each year from 2015 through 2020,”, and removing “and (12),” and adding in its place “and (12) and §§ 97.606(b)(2) and 97.630 through 97.635,”;

b. Adding paragraph (b)(1)(i)(B);

c. In paragraph (b)(1)(ii)(A), removing “§ 97.612(a)(2) through (7) and (12) and §§ 97.606(b)(2) and 97.630 through 97.635.” and adding in its place “the provisions referenced in paragraph (b)(1)(i)(A) or (B) of this section, as applicable.”;

d. Revising paragraph (b)(1)(ii)(B);

e. In paragraph (b)(1)(iii), removing “such control period contains” and adding in its place “a control period before 2021 contains”;

f. In paragraphs (b)(1)(iv) introductory text and (b)(1)(iv)(A), removing “SO_2 annual” and adding in its place “SO_2 Group 1”;

g. In paragraph (b)(1)(v), removing “of this section,” and adding in its place “of this section for a control period before 2021, or in paragraph (b)(1)(ii) of this section for a control period in 2021 or thereafter,”;

h. Redesignating paragraph (b)(2)(i) as paragraph (b)(2)(i)(A), and in the newly redesignated paragraph, removing “By June 1, 2015 and June 1 of each year thereafter,” and adding in its place “By June 1 of each year from 2015 through 2020,”, and removing “and (12),” and adding in its place “and (12) and §§ 97.606(b)(2) and 97.630 through 97.635,”;

i. Adding paragraph (b)(2)(i)(B);

j. In paragraph (b)(2)(ii)(A), removing “§ 97.612(b)(2) through (7) and (12) and §§ 97.606(b)(2) and 97.630 through 97.635.” and adding in its place “the provisions referenced in paragraph (b)(2)(i)(A) or (B) of this section, as applicable.”;

k. Revising paragraph (b)(2)(ii)(B);

l. In paragraph (b)(2)(iii), removing “such control period contains” and adding in its place “a control period before 2021 contains”;

m. In paragraphs (b)(2)(iv) introductory text and (b)(2)(iv)(A), removing "SO_2 annual" and adding in its place "SO_2 Group 1";

n. In paragraph (b)(2)(v), removing "of this section," and adding in its place "of this section for a control period before 2021, or in paragraph (b)(2)(ii) of this section for a control period in 2021 or thereafter,";

o. In paragraph (c)(5)(i)(A), adding "(or a subsequent control period)" before "for the State";

p. In paragraph (c)(5)(i)(B), adding "(or a subsequent control period)" before "in accordance with such SIP revision";

q. In paragraph (c)(5)(ii)(A), adding "(or a subsequent control period)" before the semicolon at the end of the paragraph;

r. In paragraph (c)(5)(ii)(B), adding "(or a subsequent control period)" before "in accordance with such SIP revision"; and

s. In paragraph (c)(5)(iii), adding "(or a subsequent control period)" before the period at the end of the paragraph.

The additions and revisions read as follows:

§ 97.611 Timing requirements for CSAPR SO_2 Group 1 allowance allocations.

* * * * *

(b) * * *

(1) * * *

(i) * * *

(B) By March 1, 2022 and March 1 of each year thereafter, the Administrator will calculate the CSAPR SO_2 Group 1 allowance allocation to each CSAPR SO_2 Group 1 unit in a State, in accordance with § 97.612(a)(2) through (7), (10), and (12) and §§ 97.606(b)(2) and 97.630 through 97.635, for the control period in the year before the year of the applicable calculation

deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) * * *

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(1)(i)(A) or (B) of this section, as applicable. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(i)(A) of this section, or by May 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(i)(B) of this section, the Administrator will promulgate a notice of data availability of the results of the calculations incorporating any adjustments that the Administrator determines to be necessary and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(1)(ii)(A) of this section.

* * * * *

(2) * * *

(i) * * *

(B) By March 1, 2022 and March 1 of each year thereafter, the Administrator will calculate the CSAPR SO_2 Group 1 allowance allocation to each CSAPR SO_2 Group 1 unit in Indian country within the borders of a State, in accordance with § 97.612(b)(2) through (7), (10), and (12) and §§ 97.606(b)(2) and 97.630 through 97.635, for the control period in the year before the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) * * *

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(2)(i)(A) or (B) of this section, as applicable. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(i)(A) of this section, or by May 1 immediately after the

promulgation of each notice of data availability required in paragraph (b)(2)(i)(B) of this section, the Administrator will promulgate a notice of data availability of the results of the calculations incorporating any adjustments that the Administrator determines to be necessary and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(ii)(A) of this section.

* * * * *

70. Amend § 97.612 by:

a. Adding a paragraph heading to paragraph (a) introductory text;

b. In paragraph (a)(1)(i), removing "§ 97.611(a)(1);" and adding in its place "§ 97.611(a)(1) and that have deadlines for certification of monitoring systems under § 97.630(b) not later than December 31 of the year of the control period;";

c. In paragraph (a)(1)(iii), removing "control period; or" and adding in its place "control period, for allocations for a control period before 2021, or that operate during such control period, for allocations for a control period in 2021 or thereafter; or";

d. In paragraph (a)(3) introductory text, removing "later" and adding in its place "latest";

e. Revising paragraph (a)(3)(ii);

f. In paragraph (a)(3)(iv), removing "resumes operation." and adding in its place "resumes operation, for allocations for a control period before 2021, or the control period in which the unit resumes operation, for allocations for a control period in 2021 or thereafter.";

g. In paragraph (a)(4)(i), removing "SO_2 annual" and adding in its place "SO_2 Group 1", and removing "preceding control period." and adding in its place "preceding control period, for allocations for a control period before 2021, or the unit's total tons of SO_2 emissions during the control period, for allocations for a control period in 2021 or thereafter.";

h. In paragraph (a)(5), adding "allocation amounts of" after "sum of the";

i. In paragraph (a)(8), removing “The Administrator” and adding in its place “For a control period before 2021, the Administrator”;

j. In paragraph (a)(9) introductory text, removing “If, after completion” and adding in its place “For a control period before 2021, if, after completion”;

k. In paragraph (a)(10), removing “for such control period, any unallocated” and adding in its place “for a control period before 2021, or under paragraphs (a)(2) through (7) and (12) of this section for a control period in 2021 or thereafter, any unallocated”;

l. Redesignating paragraph (a)(11) as paragraph (a)(11)(i) and in the newly redesignated paragraph, removing “The Administrator” and adding in its place “For a control period before 2021, the Administrator”;

m. Adding paragraph (a)(11)(ii);

n. Revising paragraph (a)(12);

o. Adding a paragraph heading to paragraph (b) introductory text and removing “located” before “in Indian country”;

p. In paragraph (b)(1)(i), removing “§ 97.611(a)(1); or” and adding in its place “§ 97.611(a)(1) and that have deadlines for certification of monitoring systems under § 97.630(b) not later than December 31 of the year of the control period; or”;

q. Revising paragraph (b)(3)(ii);

r. In paragraph (b)(4)(i), removing “SO_2 annual” and adding in its place “SO_2 Group 1”, and removing “preceding control period.” and adding in its place “preceding control period, for allocations for a control period before 2021, or the unit’s total tons of SO_2 emissions during the control period, for allocations for a control period in 2021 or thereafter.”;

s. In paragraph (b)(5), adding “allocation amounts of” after “sum of the”;

t. In paragraph (b)(8), removing “The Administrator” and adding in its place “For a control period before 2021, the Administrator”;

u. In paragraph (b)(9) introductory text, removing “If, after completion” and adding in its place “For a control period before 2021, if, after completion”;

v. In paragraph (b)(10) introductory text, removing “for such control period, any unallocated” and adding in its place “for a control period before 2021, or under paragraphs (b)(2) through (7) and (12) of this section for a control period in 2021 or thereafter, any unallocated”;

w. Redesignating paragraph (b)(11) as paragraph (b)(11)(i) and in the newly redesignated paragraph, removing “The Administrator” and adding in its place “For a control period before 2021, the Administrator”;

x. Adding paragraph (b)(11)(ii); and

y. Revising paragraph (b)(12).

The additions and revisions read as follows:

§ 97.612 CSAPR SO_2 Group 1 allowance allocations to new units.

(a) *Allocations from new unit set-asides*. * * *

* * * * *

(3) * * *

(ii)(A) The first control period after the control period in which the CSAPR SO_2 Group 1 unit commences commercial operation, for allocations for a control period before 2021; or

(B) The control period containing the deadline for certification of the CSAPR SO_2 Group 1 unit’s monitoring systems under § 97.630(b), for allocations for a control period in 2021 or thereafter;

* * * * *

(11) * * *

(ii) For a control period in 2021 or thereafter, the Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.611(b)(1)(i), (ii), and (v), of the amount of CSAPR SO_2 Group 1 allowances allocated under paragraphs (a)(2)

through (7), (10), and (12) of this section for such control period to each CSAPR SO_2 Group 1 unit eligible for such allocation.

(12) Notwithstanding the requirements of paragraphs (a)(2) through (11) of this section, if the calculations of allocations from a new unit set-aside for a control period before 2021 under paragraph (a)(7) of this section, paragraphs (a)(6) and (a)(9)(iv) of this section, or paragraphs (a)(6), (a)(9)(iii), and (a)(10) of this section, or for a control period in 2021 or thereafter under paragraph (a)(7) of this section or paragraphs (a)(6) and (10) of this section, would otherwise result in total allocations from such new unit set-aside unequal to the total amount of such new unit set-aside, then the Administrator will adjust the results of such calculations as follows. The Administrator will list the CSAPR SO_2 Group 1 units in descending order based on such units' allocation amounts under paragraph (a)(7), (a)(9)(iv), or (a)(10) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant sources' names and numerical order of the relevant units' identification numbers, and will adjust each unit's allocation amount under such paragraph upward or downward by one CSAPR SO_2 Group 1 allowance (but not below zero) in the order in which the units are listed, and will repeat this adjustment process as necessary, until the total allocations from such new unit set-aside equal the total amount of such new unit set-aside.

(b) *Allocations from Indian country new unit set-asides*. * * *

* * * * *

(3) * * *

(ii)(A) The first control period after the control period in which the CSAPR SO_2 Group 1 unit commences commercial operation, for allocations for a control period before 2021; or

(B) The control period containing the deadline for certification of the CSAPR SO_2 Group 1 unit's monitoring systems under § 97.630(b), for allocations for a control period in 2021 or thereafter.

* * * * *

(11) * * *

(ii) For a control period in 2021 or thereafter, the Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.611(b)(2)(i), (ii), and (v), of the amount of CSAPR SO_2 Group 1 allowances allocated under paragraphs (b)(2) through (7), (10), and (12) of this section for such control period to each CSAPR SO_2 Group 1 unit eligible for such allocation.

(12) Notwithstanding the requirements of paragraphs (b)(2) through (11) of this section, if the calculations of allocations from an Indian country new unit set-aside for a control period before 2021 under paragraph (b)(7) of this section or paragraphs (b)(6) and (b)(9)(iv) of this section, or for a control period in 2021 or thereafter under paragraph (b)(7) of this section, would otherwise result in total allocations from such Indian country new unit set-aside unequal to the total amount of such Indian country new unit set-aside, then the Administrator will adjust the results of such calculations as follows. The Administrator will list the CSAPR SO_2 Group 1 units in descending order based on such units' allocation amounts under paragraph (b)(7) or (b)(9)(iv) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant sources' names and numerical order of the relevant units' identification numbers, and will adjust each unit's allocation amount under such paragraph upward or downward by one CSAPR SO_2 Group 1 allowance (but not below zero) in the order in which the units are listed, and will repeat this adjustment process as necessary, until the total allocations from such Indian country new unit set-aside equal the total amount of such Indian country new unit set-aside.

§ 97.620 [Amended]

71. Amend § 97.620 by:

a. In paragraph (c)(1)(ii)(D), adding "; and" after the closing quotation mark; and

b. In paragraph (c)(3)(iii)(B), removing "to SO_2" and adding in its place "to CSAPR SO_2".

72. Amend § 97.621 by:

a. Redesignating paragraph (f) as paragraph (f)(1) and in the newly redesignated paragraph, removing “By July 1, 2019 and July 1 of each year thereafter,” and adding in its place “By July 1, 2019 and July 1, 2020,”;

b. Adding paragraph (f)(2);

c. Redesignating paragraph (g) as paragraph (g)(1) and in the newly redesignated paragraph, removing “By August 1, 2015 and August 1 of each year thereafter,” and adding in its place “By August 1 of each year from 2015 through 2020,”;

d. Adding paragraph (g)(2);

e. Redesignating paragraph (h) as paragraph (h)(1) and in the newly redesignated paragraph, removing “By August 1, 2015 and August 1 of each year thereafter,” and adding in its place “By August 1 of each year from 2015 through 2020,”;

f. Adding paragraph (h)(2); and

g. In paragraphs (i) and (j), removing “By February 15, 2016 and February 15 of each year thereafter,” and adding in its place “By February 15 of each year from 2016 through 2021,”.

The additions read as follows:

§ 97.621 Recordation of CSAPR SO_2 Group 1 allowance allocations and auction results.

* * * * *

(f) * * *

(2) By July 1, 2022 and July 1 of each year thereafter, the Administrator will record in each CSAPR SO_2 Group 1 source’s compliance account the CSAPR SO_2 Group 1 allowances allocated to the CSAPR SO_2 Group 1 units at the source, or in each appropriate Allowance Management System account the CSAPR SO_2 Group 1 allowances auctioned to CSAPR SO_2 Group 1 units, in accordance with § 97.611(a), or with a SIP revision approved under § 52.39(e) or (f) of this chapter, for the control period in the third year after the year of the applicable recordation deadline under this paragraph.

(g) * * *

(2) By May 1, 2022 and May 1 of each year thereafter, the Administrator will record in each CSAPR SO_2 Group 1 source's compliance account the CSAPR SO_2 Group 1 allowances allocated to the CSAPR SO_2 Group 1 units at the source, or in each appropriate Allowance Management System account the CSAPR SO_2 Group 1 allowances auctioned to CSAPR SO_2 Group 1 units, in accordance with § 97.612(a), or with a SIP revision approved under § 52.39(e) or (f) of this chapter, for the control period in the year before the year of the applicable recordation deadline under this paragraph.

(h) * * *

(2) By May 1, 2022 and May 1 of each year thereafter, the Administrator will record in each CSAPR SO_2 Group 1 source's compliance account the CSAPR SO_2 Group 1 allowances allocated to the CSAPR SO_2 Group 1 units at the source in accordance with § 97.612(b) for the control period in the year before the year of the applicable recordation deadline under this paragraph.

* * * * *

73. Amend § 97.624 by adding a paragraph heading to paragraph (c) and revising paragraph (c)(1) to read as follows:

§ 97.624 Compliance with CSAPR SO_2 Group 1 emissions limitation.

* * * * *

(c) *Selection of CSAPR SO_2 Group 1 allowances for deduction*—(1) *Identification by serial number.* The designated representative for a source may request that specific CSAPR SO_2 Group 1 allowances, identified by serial number, in the source's compliance account be deducted for emissions or excess emissions for a control period in a given year in accordance with paragraph (b) or (d) of this section. In order to be complete, such request shall be submitted to the Administrator by the allowance transfer deadline for such control period and include, in a format

prescribed by the Administrator, the identification of the CSAPR SO_2 Group 1 source and the appropriate serial numbers.

* * * * *

74. Amend § 97.625 by:

a. Revising paragraphs (b)(1) introductory text and (b)(1)(ii);

b. Removing paragraphs (b)(2) introductory text and (b)(2)(i) and (ii) and redesignating paragraphs (b)(2)(iii) introductory text and (b)(2)(iii)(A) and (B) as paragraphs (b)(2) introductory text and (b)(2)(i) and (ii), respectively;

c. In newly redesignated paragraph (b)(2) introductory text, removing "the notice of data availability required in paragraph (b)(2)(ii) of this section and the calculations referenced by the relevant notice" and adding in its place "each notice";

d. In newly redesignated paragraph (b)(2)(i), removing "the relevant notice required under paragraph (b)(1)(ii) of this section and referenced in the notice required under paragraph (b)(2)(ii) of this section" and adding in its place "such notice";

e. In newly redesignated paragraph (b)(2)(ii), removing "(b)(2)(iii)(A)" and adding in its place "(b)(2)(i)" each time it appears, and adding "results of the" before "calculations incorporating any adjustments";

f. In paragraphs (b)(3), (b)(4)(i), (b)(5), (b)(6) introductory text, and (b)(6)(i), removing "(b)(2)(iii)(B)" and adding in its place "(b)(2)(ii)" each time it appears;

g. Removing and reserving paragraph (b)(6)(ii); and

h. In paragraph (b)(6)(iii) introductory text, removing "paragraphs (b)(6)(i) and (ii)" and adding in its place "paragraph (b)(6)(i)".

The revisions read as follows:

§ 97.625 Compliance with CSAPR SO_2 Group 1 assurance provisions.

* * * * *

(b) * * *

(1) By June 1 of each year from 2018 through 2021 and August 1 of each year thereafter, the Administrator will:

* * * * *

(ii) For the set of any States (and Indian country within the borders of such States) for which the results of the calculations required in paragraph (b)(1)(i) of this section indicate that total SO_2 emissions exceed the respective State assurance levels for such control period—

(A) 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 SO_2 Group 1 sources and units in such State (and such Indian country), the common designated representative's share of the total SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in such State (and such Indian country), the common designated representative's assurance level, and the amount (if any) of CSAPR SO_2 Group 1 allowances that the owners and operators of such group of sources and units must hold in accordance with the calculation formula in § 97.606(c)(2)(i); and

(B) Promulgate a notice of data availability of the results of the calculations required in paragraphs (b)(1)(i) and (b)(1)(ii)(A) of this section, including separate calculations of the SO_2 emissions from each CSAPR SO_2 Group 1 source in each such State (and Indian country within the borders of such State).

* * * * *

75. Amend § 97.626 by:

a. In paragraph (b), removing "§ 97.628." and adding in its place "§ 97.628 or paragraph (c) of this section."; and

b. Adding paragraph (c).

The addition reads as follows:

§ 97.626 Banking.

* * * * *

(c) At any time after the allowance transfer deadline for the last control period for which a State SO_2 Group 1 trading budget is set forth in § 97.610(a) for a given State, the Administrator may record a transfer of any CSAPR SO_2 Group 1 allowances held in the compliance account for a source in such State (or Indian country within the borders of such State) to a general account identified or established by the Administrator with the source's designated representative as the authorized account representative and with the owners and operators of the source (as indicated on the certificate of representation for the source) as the persons represented by the authorized account representative. The Administrator will notify the designated representative not less than 15 days before making such a transfer.

§ 97.632 [Amended]

76. In § 97.632, amend paragraph (a) by removing "subpart D or appendix D to part 75" and adding in its place "subpart D of, or appendix D to, part 75".

§ 97.634 [Amended]

77. In § 97.634, amend paragraph (d)(3) by removing "or CSAPR NO_X Ozone Season Group 2 Trading Program," and adding in its place "CSAPR NO_X Ozone Season Group 2 Trading Program, or CSAPR NO_X Ozone Season Group 3 Trading Program,".

Subpart DDDDD—CSAPR SO_2 Group 2 Trading Program

78. Amend § 97.702 by:

a. Removing the definition of "Allowable SO_2 emission rate";

b. Revising the definition of "Allowance transfer deadline";

c. In the definition of "Biomass", paragraph (3) introductory text, removing the semicolon and adding in its place a colon;

d. Removing the definition of "Coal-derived fuel";

e. In the definition of “Cogeneration unit”, paragraph (2)(i)(B), removing “15 percent of total energy output.” and adding in its place “15 percent of total energy output; or”;

f. In the definition of “Common designated representative”, removing “such control period, the same” and adding in its place “such a control period before 2021, or as of July 1 immediately after such deadline for such a control period in 2021 or thereafter, the same”, and removing “located” before “in a State”;

g. Revising the definitions of “Common designated representative’s assurance level” and “Common designated representative’s share”;

h. In the definition of “CSAPR NO_X Ozone Season Group 1 Trading Program”, removing “(b)(3) through (5), and (b)(10) through (12)” and adding in its place “and (b)(3) through (5) and (13) through (15)”;

i. In the definition of “CSAPR NO_X Ozone Season Group 2 Trading Program”, removing “(b)(2)(i) and (iii), (b)(6) through (11), and (b)(13)” and adding in its place “(b)(2)(iii) and (iv), and (b)(7) through (9), (13), (14), and (16)”, and removing “§ 52.38(b)(6) or (9)” and adding in its place “§ 52.38(b)(9)”;

j. In the definition of “Fossil fuel”, paragraph (2), removing “and (ii),” and adding in its place “and (b)(2)(ii),”;

k. Removing the definition of “Heat rate”; and

l. Adding in alphabetical order a definition for “Nitrogen oxides”.

The revisions and additions read as follows:

§ 97.702 Definitions.

* * * * *

Allowance transfer deadline means, for a control period before 2021, midnight of March 1 immediately after such control period or, for a control period in 2021 or thereafter, midnight of June 1 immediately after such control period (or if such March 1 or June 1 is not a business day,

midnight of the first business day thereafter) and is the deadline by which a CSAPR SO_2 Group 2 allowance transfer must be submitted for recordation in a CSAPR SO_2 Group 2 source's compliance account in order to be available for use in complying with the source's CSAPR SO_2 Group 2 emissions limitation for such control period in accordance with §§ 97.706 and 97.724.

* * * * *

Common designated representative's assurance level means, with regard to a specific common designated representative and a State (and Indian country within the borders of such State) and control period in a given year for which the State assurance level is exceeded as described in § 97.706(c)(2)(iii), the amount (rounded to the nearest allowance) equal to the sum of the total amount of CSAPR SO_2 Group 2 allowances allocated for such control period to the group of one or more CSAPR SO_2 Group 2 units in such State (and such Indian country) having the common designated representative for such control period and the total amount of CSAPR SO_2 Group 2 allowances purchased by an owner or operator of such CSAPR SO_2 Group 2 units in an auction for such control period and submitted by the State or the permitting authority to the Administrator for recordation in the compliance accounts for such CSAPR SO_2 Group 2 units in accordance with the CSAPR SO_2 Group 2 allowance auction provisions in a SIP revision approved by the Administrator under § 52.39(h) or (i) of this chapter, multiplied by the sum of the State SO_2 Group 2 trading budget under § 97.710(a) and the State's variability limit under § 97.710(b) for such control period, and divided by such State SO_2 Group 2 trading budget.

Common designated representative's share means, with regard to a specific common designated representative for a control period in a given year and a total amount of SO_2 emissions from all CSAPR SO_2 Group 2 units in a State (and Indian country within the borders of such State) during such control period, the total tonnage of SO_2 emissions during such control period from the group of one or more CSAPR SO_2 Group 2 units in such State (and such Indian country) having the common designated representative for such control period.

* * * * *

Nitrogen oxides means all oxides of nitrogen except nitrous oxide (N_2O), reported on an equivalent molecular weight basis as nitrogen dioxide (NO_2).

* * * * *

§ 97.704 [Amended]

79. In § 97.704, amend paragraph (b) introductory text by removing "or (2)(i)" and adding in its place "or (b)(2)(i)".

§ 97.705 [Amended]

80. In § 97.705, amend paragraph (b) by removing the paragraph heading.

§ 97.706 [Amended]

81. In § 97.706, amend paragraph (c)(4)(ii) by removing "and (2)(i)" and adding in its place "and (c)(2)(i)".

§ 97.710 [Amended]

82. Amend § 97.710 by:

a. In paragraph (a) introductory text, removing "Group 1 allowances for the control periods in 2015 and thereafter" and adding in its place "Group 2 allowances for the control periods in the years indicated";

b. In paragraph (a)(2)(v), removing "2,711" and adding in its place "2,721";

c. In paragraph (a)(3)(v), removing "798" and adding in its place "801";

d. In paragraph (a)(4)(v), removing "798" and adding in its place "800";

e. In paragraph (a)(5)(v), removing "2,658" and adding in its place "2,662"; and

f. Removing and reserving paragraphs (a)(7)(iv) through (vi) and (b)(7).

83. Amend § 97.711 by:

a. Redesignating paragraph (b)(1)(i) as paragraph (b)(1)(i)(A), and in the newly redesignated paragraph removing "By June 1, 2015 and June 1 of each year thereafter," and adding in its place

“By June 1 of each year from 2015 through 2020,”, and removing “and (12),” and adding in its place “and (12) and §§ 97.706(b)(2) and 97.730 through 97.735,”;

b. Adding paragraph (b)(1)(i)(B);

c. In paragraph (b)(1)(ii)(A), removing “§ 97.712(a)(2) through (7) and (12) and §§ 97.706(b)(2) and 97.730 through 97.735.” and adding in its place “the provisions referenced in paragraph (b)(1)(i)(A) or (B) of this section, as applicable.”;

d. Revising paragraph (b)(1)(ii)(B);

e. In paragraph (b)(1)(iii), removing “such control period contains” and adding in its place “a control period before 2021 contains”;

f. In paragraphs (b)(1)(iv) introductory text and (b)(1)(iv)(A), removing “SO_2 annual” and adding in its place “SO_2 Group 2”;

g. In paragraph (b)(1)(v), removing “of this section,” and adding in its place “of this section for a control period before 2021, or in paragraph (b)(1)(ii) of this section for a control period in 2021 or thereafter,”;

h. Redesignating paragraph (b)(2)(i) as paragraph (b)(2)(i)(A), and in the newly redesignated paragraph, removing “By June 1, 2015 and June 1 of each year thereafter,” and adding in its place “By June 1 of each year from 2015 through 2020,”, and removing “and (12),” and adding in its place “and (12) and §§ 97.706(b)(2) and 97.730 through 97.735,”;

i. Adding paragraph (b)(2)(i)(B);

j. In paragraph (b)(2)(ii)(A), removing “§ 97.712(b)(2) through (7) and (12) and §§ 97.706(b)(2) and 97.730 through 97.735.” and adding in its place “the provisions referenced in paragraph (b)(2)(i)(A) or (B) of this section, as applicable.”;

k. Revising paragraph (b)(2)(ii)(B);

l. In paragraph (b)(2)(iii), removing “such control period contains” and adding in its place “a control period before 2021 contains”;

m. In paragraphs (b)(2)(iv) introductory text and (b)(2)(iv)(A), removing "SO_2 annual" and adding in its place "SO_2 Group 2";

n. In paragraph (b)(2)(v), removing "of this section," and adding in its place "of this section for a control period before 2021, or in paragraph (b)(2)(ii) of this section for a control period in 2021 or thereafter,";

o. In paragraph (c)(5)(i)(A), adding "(or a subsequent control period)" before "for the State";

p. In paragraph (c)(5)(i)(B), adding "(or a subsequent control period)" before "in accordance with such SIP revision";

q. In paragraph (c)(5)(ii)(A), adding "(or a subsequent control period)" before the semicolon at the end of the paragraph;

r. In paragraph (c)(5)(ii)(B), adding "(or a subsequent control period)" before "in accordance with such SIP revision"; and

s. In paragraph (c)(5)(iii), adding "(or a subsequent control period)" before the period at the end of the paragraph.

The additions and revisions read as follows:

§ 97.711 Timing requirements for CSAPR SO_2 Group 2 allowance allocations.

* * * * *

(b) * * *

(1) * * *

(i) * * *

(B) By March 1, 2022 and March 1 of each year thereafter, the Administrator will calculate the CSAPR SO_2 Group 2 allowance allocation to each CSAPR SO_2 Group 2 unit in a State, in accordance with § 97.712(a)(2) through (7), (10), and (12) and §§ 97.706(b)(2) and 97.730 through 97.735, for the control period in the year before the year of the applicable calculation

deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) * * *

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(1)(i)(A) or (B) of this section, as applicable. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(i)(A) of this section, or by May 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(i)(B) of this section, the Administrator will promulgate a notice of data availability of the results of the calculations incorporating any adjustments that the Administrator determines to be necessary and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(1)(ii)(A) of this section.

* * * * *

(2) * * *

(i) * * *

(B) By March 1, 2022 and March 1 of each year thereafter, the Administrator will calculate the CSAPR SO_2 Group 2 allowance allocation to each CSAPR SO_2 Group 2 unit in Indian country within the borders of a State, in accordance with § 97.712(b)(2) through (7), (10), and (12) and §§ 97.706(b)(2) and 97.730 through 97.735, for the control period in the year before the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) * * *

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(2)(i)(A) or (B) of this section, as applicable. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(i)(A) of this section, or by May 1 immediately after the

promulgation of each notice of data availability required in paragraph (b)(2)(i)(B) of this section, the Administrator will promulgate a notice of data availability of the results of the calculations incorporating any adjustments that the Administrator determines to be necessary and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(ii)(A) of this section.

* * * * *

84. Amend § 97.712 by:

a. Adding a paragraph heading to paragraph (a) introductory text;

b. In paragraph (a)(1)(i), removing "§ 97.711(a)(1);" and adding in its place "§ 97.711(a)(1) and that have deadlines for certification of monitoring systems under § 97.730(b) not later than December 31 of the year of the control period;";

c. In paragraph (a)(1)(iii), removing "control period; or" and adding in its place "control period, for allocations for a control period before 2021, or that operate during such control period, for allocations for a control period in 2021 or thereafter; or";

d. In paragraph (a)(3) introductory text, removing "later" and adding in its place "latest";

e. Revising paragraph (a)(3)(ii);

f. In paragraph (a)(3)(iv), removing "resumes operation." and adding in its place "resumes operation, for allocations for a control period before 2021, or the control period in which the unit resumes operation, for allocations for a control period in 2021 or thereafter.";

g. In paragraph (a)(4)(i), removing "SO_2 annual" and adding in its place "SO_2 Group 2", and removing "preceding control period." and adding in its place "preceding control period, for allocations for a control period before 2021, or the unit's total tons of SO_2 emissions during the control period, for allocations for a control period in 2021 or thereafter.";

h. In paragraph (a)(5), adding "allocation amounts of" after "sum of the";

i. In paragraph (a)(8), removing “The Administrator” and adding in its place “For a control period before 2021, the Administrator”;

j. In paragraph (a)(9) introductory text, removing “If, after completion” and adding in its place “For a control period before 2021, if, after completion”;

k. In paragraph (a)(10), removing “for such control period, any unallocated” and adding in its place “for a control period before 2021, or under paragraphs (a)(2) through (7) and (12) of this section for a control period in 2021 or thereafter, any unallocated”;

l. Redesignating paragraph (a)(11) as paragraph (a)(11)(i) and in the newly redesignated paragraph, removing “The Administrator” and adding in its place “For a control period before 2021, the Administrator”;

m. Adding paragraph (a)(11)(ii);

n. Revising paragraph (a)(12);

o. Adding a paragraph heading to paragraph (b) introductory text and removing “located” before “in Indian country”;

p. In paragraph (b)(1)(i), removing “§ 97.711(a)(1); or” and adding in its place “§ 97.711(a)(1) and that have deadlines for certification of monitoring systems under § 97.730(b) not later than December 31 of the year of the control period; or”;

q. Revising paragraph (b)(3)(ii);

r. In paragraph (b)(4)(i), removing “SO_2 annual” and adding in its place “SO_2 Group 2”, and removing “preceding control period.” and adding in its place “preceding control period, for allocations for a control period before 2021, or the unit’s total tons of SO_2 emissions during the control period, for allocations for a control period in 2021 or thereafter.”;

s. In paragraph (b)(5), adding “allocation amounts of” after “sum of the”;

t. In paragraph (b)(8), removing “The Administrator” and adding in its place “For a control period before 2021, the Administrator”;

u. In paragraph (b)(9) introductory text, removing “If, after completion” and adding in its place “For a control period before 2021, if, after completion”;

v. In paragraph (b)(10) introductory text, removing “for such control period, any unallocated” and adding in its place “for a control period before 2021, or under paragraphs (b)(2) through (7) and (12) of this section for a control period in 2021 or thereafter, any unallocated”;

w. Redesignating paragraph (b)(11) as paragraph (b)(11)(i) and in the newly redesignated paragraph, removing “The Administrator” and adding in its place “For a control period before 2021, the Administrator”;

x. Adding paragraph (b)(11)(ii); and

y. Revising paragraph (b)(12).

The additions and revisions read as follows:

§ 97.712 CSAPR SO_2 Group 2 allowance allocations to new units.

(a) *Allocations from new unit set-asides*. * * *

* * * * *

(3) * * *

(ii)(A) The first control period after the control period in which the CSAPR SO_2 Group 2 unit commences commercial operation, for allocations for a control period before 2021; or

(B) The control period containing the deadline for certification of the CSAPR SO_2 Group 2 unit’s monitoring systems under § 97.730(b), for allocations for a control period in 2021 or thereafter;

* * * * *

(11) * * *

(ii) For a control period in 2021 or thereafter, the Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.711(b)(1)(i), (ii), and (v), of the amount of CSAPR SO_2 Group 2 allowances allocated under paragraphs (a)(2)

through (7), (10), and (12) of this section for such control period to each CSAPR SO_2 Group 2 unit eligible for such allocation.

(12) Notwithstanding the requirements of paragraphs (a)(2) through (11) of this section, if the calculations of allocations from a new unit set-aside for a control period before 2021 under paragraph (a)(7) of this section, paragraphs (a)(6) and (a)(9)(iv) of this section, or paragraphs (a)(6), (a)(9)(iii), and (a)(10) of this section, or for a control period in 2021 or thereafter under paragraph (a)(7) of this section or paragraphs (a)(6) and (10) of this section, would otherwise result in total allocations from such new unit set-aside unequal to the total amount of such new unit set-aside, then the Administrator will adjust the results of such calculations as follows. The Administrator will list the CSAPR SO_2 Group 2 units in descending order based on such units' allocation amounts under paragraph (a)(7), (a)(9)(iv), or (a)(10) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant sources' names and numerical order of the relevant units' identification numbers, and will adjust each unit's allocation amount under such paragraph upward or downward by one CSAPR SO_2 Group 2 allowance (but not below zero) in the order in which the units are listed, and will repeat this adjustment process as necessary, until the total allocations from such new unit set-aside equal the total amount of such new unit set-aside.

(b) *Allocations from Indian country new unit set-asides*. * * *

* * * * *

(3) * * *

(ii)(A) The first control period after the control period in which the CSAPR SO_2 Group 2 unit commences commercial operation, for allocations for a control period before 2021; or

(B) The control period containing the deadline for certification of the CSAPR SO_2 Group 2 unit's monitoring systems under § 97.730(b), for allocations for a control period in 2021 or thereafter.

* * * * *

(11) * * *

(ii) For a control period in 2021 or thereafter, the Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.711(b)(2)(i), (ii), and (v), of the amount of CSAPR SO_2 Group 2 allowances allocated under paragraphs (b)(2) through (7), (10), and (12) of this section for such control period to each CSAPR SO_2 Group 2 unit eligible for such allocation.

(12) Notwithstanding the requirements of paragraphs (b)(2) through (11) of this section, if the calculations of allocations from an Indian country new unit set-aside for a control period before 2021 under paragraph (b)(7) of this section or paragraphs (b)(6) and (b)(9)(iv) of this section, or for a control period in 2021 or thereafter under paragraph (b)(7) of this section, would otherwise result in total allocations from such Indian country new unit set-aside unequal to the total amount of such Indian country new unit set-aside, then the Administrator will adjust the results of such calculations as follows. The Administrator will list the CSAPR SO_2 Group 2 units in descending order based on such units' allocation amounts under paragraph (b)(7) or (b)(9)(iv) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant sources' names and numerical order of the relevant units' identification numbers, and will adjust each unit's allocation amount under such paragraph upward or downward by one CSAPR SO_2 Group 2 allowance (but not below zero) in the order in which the units are listed, and will repeat this adjustment process as necessary, until the total allocations from such Indian country new unit set-aside equal the total amount of such Indian country new unit set-aside.

§ 97.720 [Amended]

85. Amend § 97.720 by:.

a. In paragraph (c)(1)(ii)(D), adding "; and" after the closing quotation mark; and

b. In paragraph (c)(3)(iii)(B), removing "to SO_2" and adding in its place "to CSAPR SO_2".

86. Amend § 97.721 by:

a. Redesignating paragraph (f) as paragraph (f)(1) and in the newly redesignated paragraph, removing “By July 1, 2019 and July 1 of each year thereafter,” and adding in its place “By July 1, 2019 and July 1, 2020,”;

b. Adding paragraph (f)(2);

c. Redesignating paragraph (g) as paragraph (g)(1) and in the newly redesignated paragraph, removing “By August 1, 2015 and August 1 of each year thereafter,” and adding in its place “By August 1 of each year from 2015 through 2020,”;

d. Adding paragraph (g)(2);

e. Redesignating paragraph (h) as paragraph (h)(1) and in the newly redesignated paragraph, removing “By August 1, 2015 and August 1 of each year thereafter,” and adding in its place “By August 1 of each year from 2015 through 2020,”;

f. Adding paragraph (h)(2); and

g. In paragraphs (i) and (j), removing “By February 15, 2016 and February 15 of each year thereafter,” and adding in its place “By February 15 of each year from 2016 through 2021,”.

The additions read as follows:

§ 97.721 Recordation of CSAPR SO_2 Group 2 allowance allocations and auction results.

* * * * *

(f) * * *

(2) By July 1, 2022 and July 1 of each year thereafter, the Administrator will record in each CSAPR SO_2 Group 2 source’s compliance account the CSAPR SO_2 Group 2 allowances allocated to the CSAPR SO_2 Group 2 units at the source, or in each appropriate Allowance Management System account the CSAPR SO_2 Group 2 allowances auctioned to CSAPR SO_2 Group 2 units, in accordance with § 97.711(a), or with a SIP revision approved under § 52.39(h) or (i) of this chapter, for the control period in the third year after the year of the applicable recordation deadline under this paragraph.

(g) * * *

(2) By May 1, 2022 and May 1 of each year thereafter, the Administrator will record in each CSAPR SO_2 Group 2 source's compliance account the CSAPR SO_2 Group 2 allowances allocated to the CSAPR SO_2 Group 2 units at the source, or in each appropriate Allowance Management System account the CSAPR SO_2 Group 2 allowances auctioned to CSAPR SO_2 Group 2 units, in accordance with § 97.712(a), or with a SIP revision approved under § 52.39(h) or (i) of this chapter, for the control period in the year before the year of the applicable recordation deadline under this paragraph.

(h) * * *

(2) By May 1, 2022 and May 1 of each year thereafter, the Administrator will record in each CSAPR SO_2 Group 2 source's compliance account the CSAPR SO_2 Group 2 allowances allocated to the CSAPR SO_2 Group 2 units at the source in accordance with § 97.712(b) for the control period in the year before the year of the applicable recordation deadline under this paragraph.

* * * * *

87. Amend § 97.724 by adding a paragraph heading to paragraph (c) and revising paragraph (c)(1) to read as follows:

§ 97.724 Compliance with CSAPR SO_2 Group 2 emissions limitation.

* * * * *

(c) *Selection of CSAPR SO_2 Group 2 allowances for deduction*—(1) *Identification by serial number.* The designated representative for a source may request that specific CSAPR SO_2 Group 2 allowances, identified by serial number, in the source's compliance account be deducted for emissions or excess emissions for a control period in a given year in accordance with paragraph (b) or (d) of this section. In order to be complete, such request shall be submitted to the Administrator by the allowance transfer deadline for such control period and include, in a format

prescribed by the Administrator, the identification of the CSAPR SO_2 Group 2 source and the appropriate serial numbers.

* * * * *

88. Amend § 97.725 by:

a. Revising paragraphs (b)(1) introductory text and (b)(1)(ii);

b. Removing paragraphs (b)(2) introductory text and (b)(2)(i) and (ii) and redesignating paragraphs (b)(2)(iii) introductory text and (b)(2)(iii)(A) and (B) as paragraphs (b)(2) introductory text and (b)(2)(i) and (ii), respectively;

c. In newly redesignated paragraph (b)(2) introductory text, removing "the notice of data availability required in paragraph (b)(2)(ii) of this section and the calculations referenced by the relevant notice" and adding in its place "each notice";

d. In newly redesignated paragraph (b)(2)(i), removing "the relevant notice required under paragraph (b)(1)(ii) of this section and referenced in the notice required under paragraph (b)(2)(ii) of this section" and adding in its place "such notice";

e. In newly redesignated paragraph (b)(2)(ii), removing "(b)(2)(iii)(A)" and adding in its place "(b)(2)(i)" each time it appears, and adding "results of the" before "calculations incorporating any adjustments";

f. In paragraphs (b)(3), (b)(4)(i), (b)(5), (b)(6) introductory text, and (b)(6)(i), removing "(b)(2)(iii)(B)" and adding in its place "(b)(2)(ii)" each time it appears;

g. Removing and reserving paragraph (b)(6)(ii); and

h. In paragraph (b)(6)(iii) introductory text, removing "paragraphs (b)(6)(i) and (ii)" and adding in its place "paragraph (b)(6)(i)".

The revisions read as follows:

§ 97.725 Compliance with CSAPR SO_2 Group 2 assurance provisions.

* * * * *

(b) * * *

(1) By June 1 of each year from 2018 through 2021 and August 1 of each year thereafter, the Administrator will:

* * * * *

(ii) For the set of any States (and Indian country within the borders of such States) for which the results of the calculations required in paragraph (b)(1)(i) of this section indicate that total SO_2 emissions exceed the respective State assurance levels for such control period—

(A) 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 SO_2 Group 2 sources and units in such State (and such Indian country), the common designated representative's share of the total SO_2 emissions from all CSAPR SO_2 Group 2 units at CSAPR SO_2 Group 2 sources in such State (and such Indian country), the common designated representative's assurance level, and the amount (if any) of CSAPR SO_2 Group 2 allowances that the owners and operators of such group of sources and units must hold in accordance with the calculation formula in § 97.706(c)(2)(i); and

(B) Promulgate a notice of data availability of the results of the calculations required in paragraphs (b)(1)(i) and (b)(1)(ii)(A) of this section, including separate calculations of the SO_2 emissions from each CSAPR SO_2 Group 2 source in each such State (and Indian country within the borders of such State).

* * * * *

89. Amend § 97.726 by:

a. In paragraph (b), removing "§ 97.728." and adding in its place "§ 97.728 or paragraph (c) of this section."; and

b. Adding paragraph (c).

The addition reads as follows:

§ 97.726 Banking.

* * * * *

(c) At any time after the allowance transfer deadline for the last control period for which a State SO_2 Group 2 trading budget is set forth in § 97.710(a) for a given State, the Administrator may record a transfer of any CSAPR SO_2 Group 2 allowances held in the compliance account for a source in such State (or Indian country within the borders of such State) to a general account identified or established by the Administrator with the source's designated representative as the authorized account representative and with the owners and operators of the source (as indicated on the certificate of representation for the source) as the persons represented by the authorized account representative. The Administrator will notify the designated representative not less than 15 days before making such a transfer.

§ 97.731 [Amended]

90. In § 97.731, amend paragraph (d)(3) introductory text by removing in the last sentence the word "with".

§ 97.732 [Amended]

91. In § 97.732, amend paragraph (a) by removing "subpart D or appendix D to part 75" and adding in its place "subpart D of, or appendix D to, part 75".

Subpart EEEEE—CSAPR NO_X Ozone Season Group 2 Trading Program

92. Amend § 97.802 by:

a. In the definition of "Allocate or allocation", introductory text, removing "§ 97.526(c)," and adding in its place "§ 97.526(d),", and removing "§ 52.38(b)(6), (7), (8), or (9)" and adding in its place "§ 52.38(b)(7), (8), or (9)";

b. Removing the definition of "Allowable NO_X emission rate";

c. Revising the definition of "Allowance transfer deadline";

d. In the definitions of “Auction” and “Base CSAPR NO_X Ozone Season Group 2 unit”, removing “§ 52.38(b)(6), (8), or (9)” and adding in its place “§ 52.38(b)(8) or (9)”;

e. In the definition of “Biomass”, paragraph (3) introductory text, removing the semicolon and adding in its place a colon;

f. Removing the definition of “Coal-derived fuel”;

g. In the definition of “Cogeneration unit”, paragraph (2)(i)(B), removing “15 percent of total energy output.” and adding in its place “15 percent of total energy output; or”;

h. In the definition of “Common designated representative”, removing “such control period, the same” and adding in its place “such a control period before 2021, or as of July 1 immediately after such deadline for such a control period in 2021 or thereafter, the same”, and removing “located” before “in a State”;

i. Revising the definitions of “Common designated representative’s assurance level” and “Common designated representative’s share”;

j. Removing the definitions of “CSAPR NO_X Ozone Season Group 1 allowance” and “CSAPR NO_X Ozone Season Group 1 Trading Program”;

k. In the definition of “CSAPR NO_X Ozone Season Group 2 allowance”, removing “§ 97.526(c),” and adding in its place “§ 97.526(d),”, and removing “§ 52.38(b)(6), (7), (8), or (9)” and adding in its place “§ 52.38(b)(7), (8), or (9)”;

l. In the definition of “CSAPR NO_X Ozone Season Group 2 Trading Program”, removing “(b)(2)(i) and (iii), (b)(6) through (11), and (b)(13)” and adding in its place “(b)(2)(iii) and (iv), and (b)(7) through (9), (13), (14), and (16)”, and removing “§ 52.38(b)(6) or (9)” and adding in its place “§ 52.38(b)(9)”;

m. Adding in alphabetical order definitions for “CSAPR NO_X Ozone Season Group 3 allowance” and “CSAPR NO_X Ozone Season Group 3 Trading Program”;

n. Removing the definition of “Heat rate”;

o. Adding in alphabetical order a definition for “Nitrogen oxides”; and

p. In the definition of “State”, removing “(2)(i) and (iii), (6) through (11), and (13)” and adding in its place “(b)(2)(iii) and (iv), and (b)(7) through (9), (13), (14), and (16)”.

The revisions and additions read as follows:

§ 97.802 Definitions.

* * * * *

Allowance transfer deadline means, for a control period before 2021, midnight of March 1 immediately after such control period or, for a control period in 2021 or thereafter, midnight of June 1 immediately after such control period (or if such March 1 or June 1 is not a business day, midnight of the first business day thereafter) and is the deadline by which a CSAPR NO_X Ozone Season Group 2 allowance transfer must be submitted for recordation in a CSAPR NO_X Ozone Season Group 2 source’s compliance account in order to be available for use in complying with the source’s CSAPR NO_X Ozone Season Group 2 emissions limitation for such control period in accordance with §§ 97.806 and 97.824.

* * * * *

Common designated representative’s assurance level means, with regard to a specific common designated representative and a State (and Indian country within the borders of such State) and control period in a given year for which the State assurance level is exceeded as described in § 97.806(c)(2)(iii):

(1) The amount (rounded to the nearest allowance) equal to the sum of the total amount of CSAPR NO_X Ozone Season Group 2 allowances allocated for such control period to the group of one or more base CSAPR NO_X Ozone Season Group 2 units in such State (and such Indian country) having the common designated representative for such control period and the total amount of CSAPR NO_X Ozone Season Group 2 allowances purchased by an owner or operator of such base CSAPR NO_X Ozone Season Group 2 units in an auction for such control period and submitted by the State or the permitting authority to the Administrator for recordation in the

compliance accounts for such base CSAPR NO_X Ozone Season Group 2 units in accordance with the CSAPR NO_X Ozone Season Group 2 allowance auction provisions in a SIP revision approved by the Administrator under§ 52.38(b)(8) or (9) of this chapter, multiplied by the sum of the State NO_X Ozone Season Group 2 trading budget under § 97.810(a) and the State's variability limit under § 97.810(b) for such control period, and divided by the greater of such State NO_X Ozone Season Group 2 trading budget or the sum of all amounts of CSAPR NO_X Ozone Season Group 2 allowances for such control period allocated to or purchased in the State's auction for all such base CSAPR NO_X Ozone Season Group 2 units;

(2) Provided that the allocations of CSAPR NO_X Ozone Season Group 2 allowances for any control period taken into account for purposes of this definition shall exclude any CSAPR NO_X Ozone Season Group 2 allowances allocated for such control period under § 97.526(d).

Common designated representative's share means, with regard to a specific common designated representative for a control period in a given year and a total amount of NO_X emissions from all base CSAPR NO_X Ozone Season Group 2 units in a State (and Indian country within the borders of such State) during such control period, the total tonnage of NO_X emissions during such control period from the group of one or more base CSAPR NO_X Ozone Season Group 2 units in such State (and such Indian country) having the common designated representative for such control period.

* * * * *

CSAPR NO_X Ozone Season Group 3 allowance means a limited authorization issued and allocated or auctioned by the Administrator under subpart GGGGG of this part, § 97.526(d), or § 97.826(d), or by a State or permitting authority under a SIP revision approved by the Administrator under § 52.38(b)(10), (11), or (12) of this chapter, to emit one ton of NO_X during a control period of the specified calendar year for which the authorization is allocated or auctioned or of any calendar year thereafter under the CSAPR NO_X Ozone Season Group 3 Trading Program.

CSAPR NO_X Ozone Season Group 3 Trading Program means a multi-state NO_X air pollution control and emission reduction program established in accordance with subpart GGGGG of this part and § 52.38(b)(1), (b)(2)(v), and (b)(10) through (14) and (17) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.38(b)(10) or (11) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.38(b)(12) of this chapter), as a means of mitigating interstate transport of ozone and NO_X.

* * * * *

Nitrogen oxides means all oxides of nitrogen except nitrous oxide (N_2O), reported on an equivalent molecular weight basis as nitrogen dioxide (NO_2).

* * * * *

§ 97.804 [Amended]

93. In § 97.804, amend paragraph (c) introductory text by removing "§ 52.38(b)(6), (8), or (9)" and adding in its place "§ 52.38(b)(8) or (9)".

§ 97.805 [Amended]

94. In § 97.805, amend paragraph (b) by removing the paragraph heading.

§ 97.810 [Amended]

95. Amend § 97.810 by:

a. In paragraph (a) introductory text, removing "2017 and thereafter" and adding in its place "the years indicated";

b. In paragraphs (a)(1)(i) through (iii), adding "for 2017 and thereafter" before "is";

c. Removing and reserving paragraph (a)(3);

d. In paragraphs (a)(4)(i) and (ii) and (a)(5)(i) and (ii), adding "for 2017 through 2020" before "is";

e. In paragraphs (a)(6)(i) through (iii) and (a)(7)(i) through (iii), adding “for 2017 and thereafter” before “is”;

f. In paragraphs (a)(8)(i) and (ii), (a)(9)(i) through (iii), (a)(10)(i) and (ii), and (a)(11)(i) through (iii), adding “for 2017 through 2020” before “is”;

g. In paragraphs (a)(12)(i) through (iii) and (a)(13)(i) and (ii), adding “for 2017 and thereafter” before “is”;

h. In paragraphs (a)(14)(i) and (ii), (a)(15)(i) through (iii), and (a)(16)(i) and (ii), adding “for 2017 through 2020” before “is”;

i. In paragraphs (a)(17)(i) through (iii), adding “for 2017 and thereafter” before “is”;

j. In paragraphs (a)(18)(i) and (ii), adding “for 2017 through 2020” before “is”;

k. In paragraphs (a)(19)(i) and (ii) and (a)(20)(i) through (iii), adding “for 2017 and thereafter” before “is”;

l. In paragraphs (a)(21)(i) and (ii) and (a)(22)(i) and (ii), adding “for 2017 through 2020” before “is”;

m. In paragraphs (a)(23)(i) through (iii), adding “for 2017 and thereafter” before “is”;

n. In paragraph (b) introductory text, removing “2017 and thereafter” and adding in its place “the years indicated”;

o. In paragraph (b)(1), adding “for 2017 and thereafter” before “is”;

p. Removing and reserving paragraph (b)(3);

q. In paragraphs (b)(4) and (5), adding “for 2017 through 2020” before “is”;

r. In paragraphs (b)(6) and (7), adding “for 2017 and thereafter” before “is”;

s. In paragraphs (b)(8) through (11), adding “for 2017 through 2020” before “is”;

t. In paragraphs (b)(12) and (13), adding “for 2017 and thereafter” before “is”;

u. In paragraphs (b)(14) through (16), adding “for 2017 through 2020” before “is”;

v. In paragraph (b)(17), adding “for 2017 and thereafter” before “is”;

w. In paragraph (b)(18), adding “for 2017 through 2020” before “is”;

x. In paragraphs (b)(19) and (20), adding “for 2017 and thereafter” before “is”;

y. In paragraphs (b)(21) and (22), adding “for 2017 through 2020” before “is”; and

z. In paragraph (b)(23), adding “for 2017 and thereafter” before “is”.

96. Amend § 97.811 by:

a. Redesignating paragraph (b)(1)(i) as paragraph (b)(1)(i)(A), and in the newly redesignated paragraph, removing “By June 1, 2017 and June 1 of each year thereafter,” and adding in its place “By June 1 of each year from 2017 through 2020,”, and removing “and (12),” and adding in its place “and (12) and §§ 97.806(b)(2) and 97.830 through 97.835,”;

b. Adding paragraph (b)(1)(i)(B);

c. In paragraph (b)(1)(ii)(A), removing “§ 97.812(a)(2) through (7) and (12) and §§ 97.806(b)(2) and 97.830 through 97.835.” and adding in its place “the provisions referenced in paragraph (b)(1)(i)(A) or (B) of this section, as applicable.”;

d. Revising paragraph (b)(1)(ii)(B);

e. In paragraph (b)(1)(iii), removing “such control period contains” and adding in its place “a control period before 2021 contains”;

f. In paragraph (b)(1)(v), removing “of this section,” and adding in its place “of this section for a control period before 2021, or in paragraph (b)(1)(ii) of this section for a control period in 2021 or thereafter,”;

g. Redesignating paragraph (b)(2)(i) as paragraph (b)(2)(i)(A), and in the newly redesignated paragraph, removing “By June 1, 2017 and June 1 of each year thereafter,” and adding in its place “By June 1 of each year from 2017 through 2020,”, and removing “and (12),” and adding in its place “and (12) and §§ 97.806(b)(2) and 97.830 through 97.835,”;

h. Adding paragraph (b)(2)(i)(B);

i. In paragraph (b)(2)(ii)(A), removing "§ 97.812(b)(2) through (7) and (12) and §§ 97.806(b)(2) and 97.830 through 97.835." and adding in its place "the provisions referenced in paragraph (b)(2)(i)(A) or (B) of this section, as applicable.";

j. Revising paragraph (b)(2)(ii)(B);

k. In paragraph (b)(2)(iii), removing "such control period contains" and adding in its place "a control period before 2021 contains";

l. In paragraph (b)(2)(v), removing "of this section," and adding in its place "of this section for a control period before 2021, or in paragraph (b)(2)(ii) of this section for a control period in 2021 or thereafter,";

m. In paragraph (c)(1) introductory text, removing "§ 52.38(b)(6), (7), (8), or (9)" and adding in its place "§ 52.38(b)(7), (8), or (9)", and removing "§ 52.38(b)(6), (8), or (9)" and adding in its place "§ 52.38(b)(8) or (9)";

n. In paragraph (c)(1)(i)(A) and (B), removing "§ 52.38(b)(6), (7), (8), or (9)" and adding in its place "§ 52.38(b)(7), (8), or (9)";

o. In paragraph (c)(1)(ii), removing"§ 52.38(b)(6), (8), or (9)" and adding in its place "§ 52.38(b)(8) or (9)";

p. In paragraph (c)(5)(i)(A), adding "(or a subsequent control period)" before "for the State";

q. In paragraph (c)(5)(i)(B), removing "§ 52.38(b)(6), (8), or (9)" and adding in its place "§ 52.38(b)(8) or (9)", and adding "(or a subsequent control period)" before "in accordance with such SIP revision";

r. In paragraph (c)(5)(ii)(A), adding "(or a subsequent control period)" before the semicolon at the end of the paragraph;

s. In paragraph (c)(5)(ii)(B), removing "§ 52.38(b)(6), (8), or (9)" and adding in its place "§ 52.38(b)(8) or (9)", and adding "(or a subsequent control period)" before "in accordance with such SIP revision";

t. In paragraph (c)(5)(iii), adding "(or a subsequent control period)" before the period at the end of the paragraph; and

u. Adding paragraph (d).

The additions and revisions read as follows:

§ 97.811 Timing requirements for CSAPR NO_X Ozone Season Group 2 allowance allocations.

* * * * *

(b) * * *

(1) * * *

(i) * * *

(B) By March 1, 2022 and March 1 of each year thereafter, the Administrator will calculate the CSAPR NO_X Ozone Season Group 2 allowance allocation to each CSAPR NO_X Ozone Season Group 2 unit in a State, in accordance with § 97.812(a)(2) through (7), (10), and (12) and §§ 97.806(b)(2) and 97.830 through 97.835, for the control period in the year before the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) * * *

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(1)(i)(A) or (B) of this section, as applicable. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(i)(A) of this section, or by May 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(i)(B) of this section, the Administrator will promulgate a notice of data availability of the results of the calculations incorporating any adjustments that the Administrator determines to be necessary and the reasons

for accepting or rejecting any objections submitted in accordance with paragraph (b)(1)(ii)(A) of this section.

* * * * *

(2) * * *

(i) * * *

(B) By March 1, 2022 and March 1 of each year thereafter, the Administrator will calculate the CSAPR NO_X Ozone Season Group 2 allowance allocation to each CSAPR NO_X Ozone Season Group 2 unit in Indian country within the borders of a State, in accordance with § 97.812(b)(2) through (7), (10), and (12) and §§ 97.806(b)(2) and 97.830 through 97.835, for the control period in the year before the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) * * *

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(2)(i)(A) or (B) of this section, as applicable. By August 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(i)(A) of this section, or by May 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(i)(B) of this section, the Administrator will promulgate a notice of data availability of the results of the calculations incorporating any adjustments that the Administrator determines to be necessary and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(ii)(A) of this section.

* * * * *

(d) *Recall of CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods after 2020.* (1) Notwithstanding any other provision of this subpart, part 52 of this chapter, or any SIP revision approved under § 52.38(b) of this chapter, the provisions of this paragraph and paragraphs (d)(2) through (7) of this section shall apply with regard to each CSAPR NO_X Ozone

Season Group 2 allowance that was allocated for a control period after 2020 to any unit (including a permanently retired unit qualifying for an exemption under § 97.805) in a State listed in § 52.38(b)(2)(iv) of this chapter (or Indian country within the borders of such a State) and that was initially recorded in the compliance account for the source that includes the unit, whether such CSAPR NO_X Ozone Season Group 2 allowance was allocated pursuant to this subpart or pursuant to a SIP revision approved under § 52.38(b) of this chapter and whether such CSAPR NO_X Ozone Season Group 2 allowance remains in such compliance account or has been transferred to another Allowance Management System account.

(2)(i) For each CSAPR NO_X Ozone Season Group 2 allowance described in paragraph (d)(1) of this section that was allocated for a given control period and initially recorded in a given source's compliance account, one CSAPR NO_X Ozone Season Group 2 allowance that was allocated for the same or an earlier control period and initially recorded in the same or any other Allowance Management System account must be surrendered in accordance with the procedures in paragraphs (d)(3) and (4) of this section.

(ii)(A) The surrender requirement under paragraph (d)(2)(i) of this section corresponding to each CSAPR NO_X Ozone Season Group 2 allowance described in paragraph (d)(1) of this section initially recorded in a given source's compliance account shall apply to such source's current owners and operators, except as provided in paragraph (d)(2)(ii)(B) of this section.

(B) If the owners and operators of a given source as of a given date assumed ownership and operational control of the source through a transaction that did not also provide rights to direct the use or transfer of a given CSAPR NO_X Ozone Season Group 2 allowance described in paragraph (d)(1) of this section with regard to such source (whether recordation of such CSAPR NO_X Ozone Season Group 2 allowance in the source's compliance account occurred before such transaction or was anticipated to occur after such transaction), then the surrender requirement under paragraph (d)(2)(i) of this section corresponding to such CSAPR NO_X Ozone Season

Group 2 allowance shall apply to the most recent former owners and operators of the source before the occurrence of such a transaction.

(C) The Administrator will not adjudicate any private legal dispute among the owners and operators of a source or among the former owners and operators of a source, including any disputes relating to the requirements to surrender CSAPR NO_X Ozone Season Group 2 allowances for the source under paragraph (d)(2)(i) of this section.

(3)(i) As soon as practicable on or after [**INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**], the Administrator will send a notification to the designated representative for each source described in paragraph (d)(1) of this section identifying the amounts of CSAPR NO_X Ozone Season Group 2 allowances allocated for each control period after 2020 and recorded in the source's compliance account and the corresponding surrender requirements for the source under paragraph (d)(2)(i) of this section.

(ii) As soon as practicable on or after [**INSERT DATE 75 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**], the Administrator will deduct from the compliance account for each source described in paragraph (d)(1) of this section CSAPR NO_X Ozone Season Group 2 allowances eligible to satisfy the surrender requirements for the source under paragraph (d)(2)(i) of this section until all such surrender requirements for the source are satisfied or until no more CSAPR NO_X Ozone Season Group 2 allowances eligible to satisfy such surrender requirements remain in such compliance account.

(iii) As soon as practicable after completion of the deductions under paragraph (d)(3)(ii) of this section, the Administrator will identify for each source described in paragraph (d)(1) of this section the amounts, if any, of CSAPR NO_X Ozone Season Group 2 allowances allocated for each control period after 2020 and recorded in the source's compliance account for which the corresponding surrender requirements under paragraph (d)(2)(i) of this section have not been satisfied and will send a notification concerning such identified amounts to the designated representative for the source.

(iv) With regard to each source for which unsatisfied surrender requirements under paragraph (d)(2)(i) of this section remain after the deductions under paragraph (d)(3)(ii) of this section:

(A) Except as provided in paragraph (d)(3)(iv)(B) of this section, not later than September 15, 2021, the owners and operators of the source shall hold sufficient CSAPR NO_X Ozone Season Group 2 allowances eligible to satisfy such unsatisfied surrender requirements under paragraph (d)(2)(i) of this section in the source's compliance account.

(B) With regard to any portion of such unsatisfied surrender requirements that apply to former owners and operators of the source pursuant to paragraph (d)(2)(ii)(B) of this section, not later than September 15, 2021, such former owners and operators shall hold sufficient CSAPR NO_X Ozone Season Group 2 allowances eligible to satisfy such portion of the unsatisfied surrender requirements under paragraph (d)(2)(i) of this section either in the source's compliance account or in another Allowance Management System account identified to the Administrator on or before such date in a submission by the authorized account representative for such account.

(C) As soon as practicable on or after September 15, 2021, the Administrator will deduct from the Allowance Management System account identified in accordance with paragraph (d)(3)(iv)(A) or (B) of this section CSAPR NO_X Ozone Season Group 2 allowances eligible to satisfy the surrender requirements for the source under paragraph (d)(2)(i) of this section until all such surrender requirements for the source are satisfied or until no more CSAPR NO_X Ozone Season Group 2 allowances eligible to satisfy such surrender requirements remain in such account.

(v) When making deductions under paragraph (d)(3)(ii) or (iv) of this section to address the surrender requirements under paragraph (d)(2)(i) of this section for a given source:

(A) The Administrator will make deductions to address any surrender requirements with regard to first the 2021 control period, then the 2022 control period, then the 2023 control period, and finally the 2024 control period.

(B) When making deductions to address the surrender requirements with regard to a given control period, the Administrator will first deduct CSAPR NO_X Ozone Season Group 2 allowances allocated for such given control period and will then deduct CSAPR NO_X Ozone Season Group 2 allowances allocated for each successively earlier control period in sequence.

(C) When deducting CSAPR NO_X Ozone Season Group 2 allowances allocated for a given control period from a given Allowance Management System account, the Administrator will first deduct CSAPR NO_X Ozone Season Group 2 allowances initially recorded in the account under § 97.821 (if the account is a compliance account) in the order of recordation and will then deduct CSAPR NO_X Ozone Season Group 2 allowances recorded in the account under § 97.526(d) or § 97.823 in the order of recordation.

(4)(i) To the extent the surrender requirements under paragraph (d)(2)(i) of this section corresponding to any CSAPR NO_X Ozone Season Group 2 allowances allocated for a control period after 2020 and initially recorded in a given source's compliance account have not been fully satisfied through the deductions under paragraph (d)(3) of this section, as soon as practicable on or after November 15, 2021, the Administrator will deduct such initially recorded CSAPR NO_X Ozone Season Group 2 allowances from any Allowance Management System accounts in which such CSAPR NO_X Ozone Season Group 2 allowances are held, making such deductions in any order determined by the Administrator, until all such surrender requirements for such source have been satisfied or until all such CSAPR NO_X Ozone Season Group 2 allowances have been deducted, except as provided in paragraph (d)(4)(ii) of this section.

(ii) If no person with an ownership interest in a given CSAPR NO_X Ozone Season Group 2 allowance as of January 31, 2021 was an owner or operator of the source in whose compliance account such CSAPR NO_X Ozone Season Group 2 allowance was initially recorded, was a direct or indirect parent or subsidiary of an owner or operator of such source, or was directly or indirectly under common ownership with an owner or operator of such source, the Administrator will not deduct such CSAPR NO_X Ozone Season Group 2 allowance under paragraph (d)(4)(i) of

this section. For purposes of this paragraph, each owner or operator of a source shall be deemed to be a person with an ownership interest in any CSAPR NO_X Ozone Season Group 2 allowance held in that source's compliance account. The limitation established by this paragraph on the deductibility of certain CSAPR NO_X Ozone Season Group 2 allowances under paragraph (d)(4)(i) of this section shall not be construed as a waiver of the surrender requirements under paragraph (d)(2)(i) of this section corresponding to such CSAPR NO_X Ozone Season Group 2 allowances.

(iii) Not less than 45 days before the planned date for any deductions under paragraph (d)(4)(i) of this section, the Administrator will send a notification to the authorized account representative for the Allowance Management System account from which such deductions will be made identifying the CSAPR NO_X Ozone Season Group 2 allowances to be deducted and the data upon which the Administrator has relied and specifying a process for submission of any objections to such data. Any objections must be submitted to the Administrator not later than 15 days before the planned date for such deductions as indicated in such notification.

(5) To the extent the surrender requirements under paragraph (d)(2)(i) of this section corresponding to any CSAPR NO_X Ozone Season Group 2 allowances allocated for a control period after 2020 and initially recorded in a given source's compliance account have not been fully satisfied through the deductions under paragraphs (d)(3) and (4) of this section:

(i) The persons identified in accordance with paragraph (d)(2)(ii) of this section with regard to such source and each such CSAPR NO_X Ozone Season Group 2 allowance shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(ii) Each such CSAPR NO_X Ozone Season Group 2 allowance, and each day in such control period, shall constitute a separate violation of this subpart and the Clean Air Act.

(6) The Administrator will record in the appropriate Allowance Management System accounts all deductions of CSAPR NO_X Ozone Season Group 2 allowances under paragraphs (d)(3) and (4) of this section.

(7)(i) Each submission, objection, or other written communication from a designated representative, authorized account representative, or other person to the Administrator under paragraph (d)(2), (3), or (4) of this section shall be sent electronically to the email address CSAPR@epa.gov. Each such communication from a designated representative must contain the certification statement set forth in § 97.814(a), and each such communication from the authorized account representative for a general account must contain the certification statement set forth in § 97.820(c)(2)(ii).

(ii) Each notification from the Administrator to a designated representative or authorized account representative under paragraph (d)(3) or (4) of this section will be sent electronically to the email address most recently received by the Administrator for such representative. In any such notification, the Administrator may provide information by means of a reference to a publicly accessible website where the information is available.

98. Amend § 97.812 by:

a. Adding a paragraph heading to paragraph (a) introductory text;

b. In paragraph (a)(1)(i), removing "§ 97.811(a)(1);" and adding in its place "§ 97.811(a)(1) and that have deadlines for certification of monitoring systems under § 97.830(b) not later than September 30 of the year of the control period;";

c. In paragraph (a)(1)(iii), removing "control period; or" and adding in its place "control period, for allocations for a control period before 2021, or that operate during such control period, for allocations for a control period in 2021 or thereafter; or";

d. In paragraph (a)(3) introductory text, removing "later" and adding in its place "latest";

e. Revising paragraph (a)(3)(ii);

f. In paragraph (a)(3)(iv), removing "resumes operation." and adding in its place "resumes operation, for allocations for a control period before 2021, or the control period in which the unit resumes operation, for allocations for a control period in 2021 or thereafter.";

g. In paragraph (a)(4)(i), removing “preceding control period.” and adding in its place “preceding control period, for allocations for a control period before 2021, or the unit’s total tons of NO_X emissions during the control period, for allocations for a control period in 2021 or thereafter.”;

h. In paragraph (a)(5), adding “allocation amounts of” after “sum of the”;

i. In paragraph (a)(8), removing “The Administrator” and adding in its place “For a control period before 2021, the Administrator”;

j. In paragraph (a)(9) introductory text, removing “If, after completion” and adding in its place “For a control period before 2021, if, after completion”;

k. In paragraph (a)(10), removing “for such control period, any unallocated” and adding in its place “for a control period before 2021, or under paragraphs (a)(2) through (7) and (12) of this section for a control period in 2021 or thereafter, any unallocated”;

l. Redesignating paragraph (a)(11) as paragraph (a)(11)(i) and in the newly redesignated paragraph, removing “The Administrator” and adding in its place “For a control period before 2021, the Administrator”;

m. Adding paragraph (a)(11)(ii);

n. Revising paragraph (a)(12);

o. Adding a paragraph heading to paragraph (b) introductory text and removing “located” before “in Indian country”;

p. In paragraph (b)(1)(i), removing “§ 97.811(a)(1); or” and adding in its place “§ 97.811(a)(1) and that have deadlines for certification of monitoring systems under § 97.830(b) not later than September 30 of the year of the control period; or”;

q. Revising paragraph (b)(3)(ii);

r. In paragraph (b)(4)(i), removing “preceding control period.” and adding in its place “preceding control period, for allocations for a control period before 2021, or the unit’s total tons

of NO_X emissions during the control period, for allocations for a control period in 2021 or thereafter.";

s. In paragraph (b)(5), adding "allocation amounts of" after "sum of the";

t. In paragraph (b)(8), removing "The Administrator" and adding in its place "For a control period before 2021, the Administrator";

u. In paragraph (b)(9) introductory text, removing "If, after completion" and adding in its place "For a control period before 2021, if, after completion";

v. In paragraph (b)(10) introductory text, removing "for such control period, any unallocated" and adding in its place "for a control period before 2021, or under paragraphs (b)(2) through (7) and (12) of this section for a control period in 2021 or thereafter, any unallocated";

w. In paragraph (b)(10)(ii), removing "§ 52.38(b)(6), (8), or (9)" and adding in its place "§ 52.38(b)(8) or (9)";

x. Redesignating paragraph (b)(11) as paragraph (b)(11)(i) and in the newly redesignated paragraph, removing "The Administrator" and adding in its place "For a control period before 2021, the Administrator";

y. Adding paragraph (b)(11)(ii); and

z. Revising paragraph (b)(12).

The additions and revisions read as follows:

§ 97.812 CSAPR NO_X Ozone Season Group 2 allowance allocations to new units.

(a) *Allocations from new unit set-asides*. * * *

* * * * * *

(3) * * *

(ii)(A) The first control period after the control period in which the CSAPR NO_X Ozone Season Group 2 unit commences commercial operation, for allocations for a control period before 2021; or

(B) The control period containing the deadline for certification of the CSAPR NO_X Ozone Season Group 2 unit's monitoring systems under § 97.830(b), for allocations for a control period in 2021 or thereafter;

* * * * *

(11) * * *

(ii) For a control period in 2021 or thereafter, the Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.811(b)(1)(i), (ii), and (v), of the amount of CSAPR NO_X Ozone Season Group 2 allowances allocated under paragraphs (a)(2) through (7), (10), and (12) of this section for such control period to each CSAPR NO_X Ozone Season Group 2 unit eligible for such allocation.

(12) Notwithstanding the requirements of paragraphs (a)(2) through (11) of this section, if the calculations of allocations from a new unit set-aside for a control period before 2021 under paragraph (a)(7) of this section, paragraphs (a)(6) and (a)(9)(iv) of this section, or paragraphs (a)(6), (a)(9)(iii), and (a)(10) of this section, or for a control period in 2021 or thereafter under paragraph (a)(7) of this section or paragraphs (a)(6) and (10) of this section, would otherwise result in total allocations from such new unit set-aside unequal to the total amount of such new unit set-aside, then the Administrator will adjust the results of such calculations as follows. The Administrator will list the CSAPR NO_X Ozone Season Group 2 units in descending order based on such units' allocation amounts under paragraph (a)(7), (a)(9)(iv), or (a)(10) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant sources' names and numerical order of the relevant units' identification numbers, and will adjust each unit's allocation amount under such paragraph upward or downward by one CSAPR NO_X Ozone Season Group 2 allowance (but not below zero) in the order in which the units are listed, and will repeat this adjustment process as necessary, until the total allocations from such new unit set-aside equal the total amount of such new unit set-aside.

(b) *Allocations from Indian country new unit set-asides*. * * *

* * * * *

(3) * * *

(ii)(A) The first control period after the control period in which the CSAPR NO_X Ozone Season Group 2 unit commences commercial operation, for allocations for a control period before 2021; or

(B) The control period containing the deadline for certification of the CSAPR NO_X Ozone Season Group 2 unit's monitoring systems under § 97.830(b), for allocations for a control period in 2021 or thereafter.

* * * * *

(11) * * *

(ii) For a control period in 2021 or thereafter, the Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.811(b)(2)(i), (ii), and (v), of the amount of CSAPR NO_X Ozone Season Group 2 allowances allocated under paragraphs (b)(2) through (7), (10), and (12) of this section for such control period to each CSAPR NO_X Ozone Season Group 2 unit eligible for such allocation.

(12) Notwithstanding the requirements of paragraphs (b)(2) through (11) of this section, if the calculations of allocations from an Indian country new unit set-aside for a control period before 2021 under paragraph (b)(7) of this section or paragraphs (b)(6) and (b)(9)(iv) of this section, or for a control period in 2021 or thereafter under paragraph (b)(7) of this section, would otherwise result in total allocations from such Indian country new unit set-aside unequal to the total amount of such Indian country new unit set-aside, then the Administrator will adjust the results of such calculations as follows. The Administrator will list the CSAPR NO_X Ozone Season Group 2 units in descending order based on such units' allocation amounts under paragraph (b)(7) or (b)(9)(iv) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant sources' names and numerical order of the relevant units' identification numbers, and will adjust each unit's allocation amount under such paragraph

upward or downward by one CSAPR NO_X Ozone Season Group 2 allowance (but not below zero) in the order in which the units are listed, and will repeat this adjustment process as necessary, until the total allocations from such Indian country new unit set-aside equal the total amount of such Indian country new unit set-aside.

§ 97.820 [Amended]

98. Amend § 97.820 by:

a. In paragraph (c)(1)(ii)(D), adding "; and" after the closing quotation mark; and

b. In paragraph (c)(3)(iii)(B), removing "to NO_X" and adding in its place "to CSAPR NO_X".

99. Amend § 97.821 by:

a. In paragraphs (c), (d), and (e), removing "§ 52.38(b)(6), (8), or (9)" and adding in its place "§ 52.38(b)(8) or (9)";

b. In paragraph (f), removing "By July 1, 2021" and adding in its place "By July 1, 2022", removing "§ 52.38(b)(6), (8), or (9)" and adding in its place "§ 52.38(b)(8) or (9)", and removing "in the fourth year" and adding in its place "in the third year";

c. Redesignating paragraph (g) as paragraph (g)(1), and in the newly redesignated paragraph, removing "By August 1, 2017 and August 1 of each year thereafter," and adding in its place "By August 1 of each year from 2017 through 2020," and removing "§ 52.38(b)(6), (8), or (9)" and adding in its place "§ 52.38(b)(8) or (9)";

d. Adding paragraph (g)(2);

e. Redesignating paragraph (h) as paragraph (h)(1) and in the newly redesignated paragraph, removing "By August 1, 2017 and August 1 of each year thereafter," and adding in its place "By August 1 of each year from 2017 through 2020,";

f. Adding paragraph (h)(2);

g. In paragraphs (i) and (j), removing "By February 15, 2018 and February 15 of each year thereafter," and adding in its place "By February 15 of each year from 2018 through 2021,"; and

h. In paragraph (k), removing "§ 52.38(b)(6), (8), or (9)" and adding in its place "§ 52.38(b)(8) or (9)".

The additions read as follows:

§ 97.821 Recordation of CSAPR NO_X Ozone Season Group 2 allowance allocations and auction results.

* * * * *

(g) * * *

(2) By May 1, 2022 and May 1 of each year thereafter, the Administrator will record in each CSAPR NO_X Ozone Season Group 2 source's compliance account the CSAPR NO_X Ozone Season Group 2 allowances allocated to the CSAPR NO_X Ozone Season Group 2 units at the source, or in each appropriate Allowance Management System account the CSAPR NO_X Ozone Season Group 2 allowances auctioned to CSAPR NO_X Ozone Season Group 2 units, in accordance with § 97.812(a), or with a SIP revision approved under§ 52.38(b)(8) or (9) of this chapter, for the control period in the year before the year of the applicable recordation deadline under this paragraph.

(h) * * *

(2) By May 1, 2022 and May 1 of each year thereafter, the Administrator will record in each CSAPR NO_X Ozone Season Group 2 source's compliance account the CSAPR NO_X Ozone Season Group 2 allowances allocated to the CSAPR NO_X Ozone Season Group 2 units at the source in accordance with § 97.812(b) for the control period in the year before the year of the applicable recordation deadline under this paragraph.

* * * * *

100. Amend § 97.824 by:

a. Adding a paragraph heading to paragraph (c);

b. Revising paragraph (c)(1); and

c. In paragraph (c)(2)(ii), removing "§ 97.526(c)," and adding in its place "§ 97.526(d),".

The addition and revision read as follows:

§ 97.824 Compliance with CSAPR NO_X Ozone Season Group 2 emissions limitation.

* * * * *

(c) *Selection of CSAPR NO_X Ozone Season Group 2 allowances for deduction*—(1) *Identification by serial number.* The designated representative for a source may request that specific CSAPR NO_X Ozone Season Group 2 allowances, identified by serial number, in the source's compliance account be deducted for emissions or excess emissions for a control period in a given year in accordance with paragraph (b) or (d) of this section. In order to be complete, such request shall be submitted to the Administrator by the allowance transfer deadline for such control period and include, in a format prescribed by the Administrator, the identification of the CSAPR NO_X Ozone Season Group 2 source and the appropriate serial numbers.

* * * * *

101. Amend § 97.825 by:

a. Revising paragraphs (b)(1) introductory text and (b)(1)(ii);

b. Removing paragraphs (b)(2) introductory text and (b)(2)(i) and (ii) and redesignating paragraphs (b)(2)(iii) introductory text and (b)(2)(iii)(A) and (B) as paragraphs (b)(2) introductory text and (b)(2)(i) and (ii), respectively;

c. In newly redesignated paragraph (b)(2) introductory text, removing "the notice of data availability required in paragraph (b)(2)(ii) of this section and the calculations referenced by the relevant notice" and adding in its place "each notice";

d. In newly redesignated paragraph (b)(2)(i), removing "the relevant notice required under paragraph (b)(1)(ii) of this section and referenced in the notice required under paragraph (b)(2)(ii) of this section" and adding in its place "such notice";

e. In newly redesignated paragraph (b)(2)(ii), removing "(b)(2)(iii)(A)" and adding in its place "(b)(2)(i)" each time it appears, and adding "results of the" before "calculations incorporating any adjustments";

f. In paragraphs (b)(3), (b)(4)(i), (b)(5), (b)(6) introductory text, and (b)(6)(i), removing "(b)(2)(iii)(B)" and adding in its place "(b)(2)(ii)" each time it appears;

g. Removing and reserving paragraph (b)(6)(ii); and

h. In paragraph (b)(6)(iii) introductory text, removing "paragraphs (b)(6)(i) and (ii)" and adding in its place "paragraph (b)(6)(i)".

The revisions read as follows:

§ 97.825 Compliance with CSAPR NO_X Ozone Season Group 2 assurance provisions.

* * * * *

(b) * * *

(1) By June 1 of each year from 2018 through 2021 and August 1 of each year thereafter, the Administrator will:

* * * * *

(ii) For the set of any States (and Indian country within the borders of such States) for which the results of the calculations required in paragraph (b)(1)(i) of this section indicate that total NO_X emissions exceed the respective State assurance levels for such control period—

(A) 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 base CSAPR NO_X Ozone Season Group 2 sources and units in such State (and such Indian country), the common designated representative's share of the total NO_X emissions from all base CSAPR NO_X Ozone Season Group 2 units at base CSAPR NO_X Ozone Season Group 2 sources in such State (and such Indian country), the common designated representative's assurance level, and the amount (if any) of CSAPR NO_X Ozone Season Group 2

allowances that the owners and operators of such group of sources and units must hold in accordance with the calculation formula in § 97.806(c)(2)(i); and

(B) Promulgate a notice of data availability of the results of the calculations required in paragraphs (b)(1)(i) and (b)(1)(ii)(A) of this section, including separate calculations of the NO_X emissions from each base CSAPR NO_X Ozone Season Group 2 source in each such State (and Indian country within the borders of such State).

* * * * *

102. Amend § 97.826 by:

a. Revising the section heading;

b. In paragraph (b), removing "§ 97.811(c)," and adding in its place "§ 97.811(c) or (d),", and removing "§ 97.828." and adding in its place "§ 97.828 or paragraph (c) or (d) of this section."; and

c. Adding paragraphs (c), (d), and (e).

The revision and additions read as follows:

§ 97.826 Banking and conversion.

* * * * *

(c) At any time after the allowance transfer deadline for the last control period for which a State NO_X Ozone Season Group 2 trading budget is set forth in § 97.810(a) for a given State and after completion of the procedures under paragraphs (d)(1) and (2) of this section, the Administrator may record a transfer of any CSAPR NO_X Ozone Season Group 2 allowances held in the compliance account for a source in such State (or Indian country within the borders of such State) to a general account identified or established by the Administrator with the source's designated representative as the authorized account representative and with the owners and operators of the source (as indicated on the certificate of representation for the source) as the

persons represented by the authorized account representative. The Administrator will notify the designated representative not less than 15 days before making such a transfer.

(d) Notwithstanding any other provision of this subpart, part 52 of this chapter, or any SIP revision approved under § 52.38(b)(8) or (9) of this chapter:

(1) By [**INSERT DATE 105 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**], the Administrator will temporarily suspend acceptance of CSAPR NO_X Ozone Season Group 2 allowance transfers submitted under § 97.822 and, before resuming acceptance of such transfers, will take the following actions:

(i) The Administrator will determine each of the following values:

(A) The total amount of CSAPR NO_X Ozone Season Group 2 allowances allocated for the control periods in 2017 through 2020 attributable to the States listed in § 52.38(b)(2)(iv) of this chapter (and Indian country within the borders of such States), computed as the sum of the State NO_X Ozone Season Group 2 trading budgets under § 97.810(a) for such States for all such control periods plus the product of 1.5 multiplied by the sum of the variability limits under § 97.810(b) for such States for the control period in 2017.

(B) The total tons of NO_X emissions reported in accordance with §§ 97.806(b) and 97.830 through 97.835 for all CSAPR NO_X Ozone Season Group 2 units at CSAPR NO_X Ozone Season Group 2 sources in the States listed in § 52.38(b)(2)(iv) of this chapter (and Indian country within the borders of such States) for the control periods in 2017 through 2020.

(C) The full-season CSAPR NO_X Ozone Season Group 3 allowance bank target, computed as the sum for all States listed in § 52.38(b)(2)(v) of this chapter of the variability limits under § 97.1010(b) for such States for the control period in 2022.

(D) A conversion factor, computed as the quotient, rounded down to the nearest whole number, of the remainder of the total amount of CSAPR NO_X Ozone Season Group 2 allowances determined under paragraph (d)(1)(i)(A) of this section minus the total tons of NO_X emissions determined under paragraph (d)(1)(i)(B) of this section divided by the full-season CSAPR NO_X

Ozone Season Group 3 allowance bank target determined under paragraph (d)(1)(i)(C) of this section.

(E) The adjusted CSAPR NO_X Ozone Season Group 3 allowance bank target, computed as the product, rounded to the nearest allowance, of the full-season CSAPR NO_X Ozone Season Group 3 allowance bank target determined under paragraph (d)(1)(i)(C) of this section multiplied by a fraction whose numerator is the number of days from [**INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**] through September 30, 2021, inclusive, and whose denominator is 153.

(ii) The Administrator will allocate CSAPR NO_X Ozone Season Group 3 allowances for the control period in 2021 to sources in States listed in § 52.38(b)(2)(v) of this chapter (and Indian country within the borders of such States) as follows:

(A) The Administrator will determine for each such source the source's maximum share, computed as the quotient, rounded down to the nearest whole number, of the amount of CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods before 2021 held in the source's compliance account divided by the conversion factor determined under paragraph (d)(1)(i)(D) of this section.

(B) The Administrator will determine a source allocation scaling factor, computed as the lesser of 1.0000 or the quotient, expressed to four decimal places, of the adjusted CSAPR NO_X Ozone Season Group 3 allowance bank target determined under paragraph (d)(1)(i)(E) of this section divided by the sum for all such sources of the maximum shares under paragraph (d)(1)(ii)(A) of this section.

(C) The Administrator will allocate to each such source an amount of CSAPR NO_X Ozone Season Group 3 allowances computed as the product, rounded to the nearest allowance, of such source's maximum share under paragraph (d)(1)(ii)(A) of this section multiplied by the source allocation scaling factor determined under paragraph (d)(1)(ii)(B) of this section.

(iii) If the sum for all sources of the allocations under paragraph (d)(1)(ii)(C) of this section is less than the adjusted CSAPR NO_X Ozone Season Group 3 allowance bank target determined under paragraph (d)(1)(i)(E) of this section, the Administrator will allocate CSAPR NO_X Ozone Season Group 3 allowances for the control period in 2021 to general accounts as follows:

(A) The Administrator will determine for each general account the account's maximum share, computed as the quotient, rounded down to the nearest whole number, of the amount of CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods before 2021 held in the account divided by the conversion factor determined under paragraph (d)(1)(i)(D) of this section.

(B) The Administrator will determine a general account allocation scaling factor, computed as the lesser of 1.0000 or the quotient, expressed to four decimal places, of the remainder of the adjusted CSAPR NO_X Ozone Season Group 3 allowance bank target determined under paragraph (d)(1)(i)(E) of this section minus the sum for all sources of the allocations under paragraph (d)(1)(ii)(C) of this section divided by the sum for all general accounts of the maximum shares under paragraph (d)(1)(iii)(A) of this section.

(C) The Administrator will allocate to each general account an amount of CSAPR NO_X Ozone Season Group 3 allowances computed as the product, rounded to the nearest allowance, of such account's maximum share under paragraph (d)(1)(iii)(A) of this section multiplied by the general account allocation scaling factor determined under paragraph (d)(1)(iii)(B) of this section.

(iv) For the compliance account of each source, and for each general account, to which an amount of CSAPR NO_X Ozone Season Group 3 allowances greater than zero is allocated under paragraph (d)(1)(ii)(C) or (d)(1)(iii)(C) of this section, respectively:

(A) The Administrator will determine the amount of CSAPR NO_X Ozone Season Group 2 allowances required to be deducted from the account, computed as the product of the amount of CSAPR NO_X Ozone Season Group 3 allowances allocated to the source or general account under

paragraph (d)(1)(ii)(C) or (d)(1)(iii)(C) of this section multiplied by the conversion factor determined under paragraph (d)(1)(i)(D) of this section. The Administrator will deduct CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods before 2021 from the account on a first-in, first-out basis in the order set forth in § 97.824(c)(2)(i) and (ii).

(B) The Administrator will record in the account the allocations of CSAPR NO_X Ozone Season Group 3 allowances under paragraph (d)(1)(ii)(C) or (d)(1)(iii)(C) of this section and the deductions of CSAPR NO_X Ozone Season Group 2 allowances under paragraph (d)(1)(iv)(A) of this section.

(2)(i) During the period beginning February 1, 2022 and ending February 28, 2022, the designated representative for a source in a State listed in § 52.38(b)(2)(v) of this chapter (or Indian country within the borders of such a State) may request that the Administrator allocate additional CSAPR NO_X Ozone Season Group 3 allowances for the control period in 2021 to the source pursuant to paragraph (d)(2)(ii) of this section. Any such request shall be submitted to the Administrator electronically at the email address CSAPR@epa.gov.

(ii) For each source covered by a request under paragraph (d)(2)(i) of this section, as soon as practicable on or after March 1, 2022, the Administrator will deduct from the source's compliance account, on a first-in, first-out basis in the order set forth in § 97.824(c)(2)(i) and (ii), the maximum number of sets of 18 CSAPR NO_X Ozone Season Group 2 allowances allocated for control periods before 2021 available in the compliance account. The Administrator will then allocate to the source one CSAPR NO_X Ozone Season Group 3 allowance for the control period in 2021 for each set of 18 CSAPR NO_X Ozone Season Group 2 allowances deducted. The Administrator will record the allocations and deductions under this paragraph in the source's compliance account.

(3) After the Administrator has carried out the procedures set forth in paragraph (d)(1) of this section, upon any determination that would otherwise result in the initial recordation of a given number of CSAPR NO_X Ozone Season Group 2 allowances in the compliance account for a

source in a State listed in § 52.38(b)(2)(v) of this chapter (or Indian country within the borders of such a State), the Administrator will not record such CSAPR NO_X Ozone Season Group 2 allowances but instead will allocate and record in such account an amount of CSAPR NO_X Ozone Season Group 3 allowances for the control period in 2021 computed as the quotient, rounded up to the nearest allowance, of such given number of CSAPR NO_X Ozone Season Group 2 allowances divided by the conversion factor determined under paragraph (d)(1)(i)(D) of this section.

(e) Notwithstanding any other provision of this subpart or any SIP revision approved under § 52.38(b)(8) or (9) of this chapter, CSAPR NO_X Ozone Season Group 3 allowances may be used to satisfy requirements to hold CSAPR NO_X Ozone Season Group 2 allowances under this subpart as follows, provided that nothing in this paragraph alters the time as of which any such allowance holding requirement must be met or limits any consequence of a failure to timely meet any such allowance holding requirement:

(1) Except as provided in paragraph (e)(2) of this section, after the Administrator has carried out the procedures set forth in paragraph (d)(1) of this section, the owner or operator of a CSAPR NO_X Ozone Season Group 2 source in a State listed in § 52.38(b)(2)(iv) of this chapter (or Indian country within the borders of such a State) may satisfy a requirement to hold a given number of CSAPR NO_X Ozone Season Group 2 allowances for the control period in a year from 2017 through 2020 by holding instead, in a general account established for this sole purpose, an amount of CSAPR NO_X Ozone Season Group 3 allowances for the control period in 2021 (or any later control period for which the allowance transfer deadline defined in § 97.1002 has passed) computed as the quotient, rounded up to the nearest allowance, of such given number of CSAPR NO_X Ozone Season Group 2 allowances divided by the conversion factor determined under paragraph (d)(1)(i)(D) of this section.

(2) CSAPR NO_X Ozone Season Group 3 allowances may not be used to satisfy requirements to surrender CSAPR NO_X Ozone Season Group 2 allowances under § 97.811(d).

§ 97.831 [Amended]

103. In § 97.831, amend paragraph (d)(3) introductory text by removing in the last sentence the word "with".

Subpart FFFFF—Texas SO_2 Trading Program

104. Amend § 97.902 by:

a. Revising the definition of "Allowance transfer deadline";

b. In the definition of "Common designated representative", removing "April" and adding in its place "July";

c. In the definition of "CSAPR NO_X Ozone Season Group 2 Trading Program", removing "(b)(2)(i) and (iii), (b)(6) through (11), and (b)(13)" and adding in its place "(b)(2)(iii) and (iv), and (b)(7) through (9), (13), (14), and (16)", and removing "§ 52.38(b)(6) or (9)" and adding in its place "§ 52.38(b)(9)"; and

d. Adding in alphabetical order a definition for "Nitrogen oxides".

The revision and additions read as follows:

§ 97.902 Definitions.

* * * * *

Allowance transfer deadline means, for a control period before 2021, midnight of March 1 immediately after such control period or, for a control period in 2021 or thereafter, midnight of June 1 immediately after such control period (or if such March 1 or June 1 is not a business day, midnight of the first business day thereafter) and is the deadline by which a Texas SO_2 Trading Program allowance transfer must be submitted for recordation in a Texas SO_2 Trading Program source's compliance account in order to be available for use in complying with the source's Texas SO_2 Trading Program emissions limitation for such control period in accordance with §§ 97.906 and 97.924.

* * * * *

Nitrogen oxides means all oxides of nitrogen except nitrous oxide (N_2O), reported on an equivalent molecular weight basis as nitrogen dioxide (NO_2).

* * * * *

§ 97.905 [Amended]

105. In § 97.905, amend paragraph (b) by removing the paragraph heading.

106. Amend § 97.911 by:

a. Adding a paragraph heading to paragraph (a); and

b. In Table 1 to paragraph (a)(1), revising the column headings and the table entries for "Big Brown Unit 1", "Big Brown Unit 2", "Coleto Creek Unit 1", Graham Unit 2", Martin Lake Unit 1", Martin Lake Unit 2", Martin Lake Unit 3", Monticello Unit 1", "Monticello Unit 2", "Monticello Unit 3", "Sandow Unit 4", and "Stryker Unit ST2".

The addition reads as follows:

§ 97.911 Texas SO_2 Trading Program allowance allocations.

(a) *Allocations from the Texas SO_2 Trading Program budget*. * * *

* * * * *

Table 1 to Paragraph (a)(1)—Texas SO_2 Trading Program Allocations

Texas SO_2 Trading Program units	ORIS code	Texas SO_2 Trading Program allocation (tons)	Affiliated ownership group
Big Brown Unit 1	3497	8,473	Vistra.
Big Brown Unit 2	3497	8,559	Vistra.
Coleto Creek Unit 1	6178	9,057	Vistra.
* * * * * * *			
Graham Unit 2	3490	226	Vistra.
* * * * * * *			
Martin Lake Unit 1	6146	12,024	Vistra.
Martin Lake Unit 2	6146	11,580	Vistra.
Martin Lake Unit 3	6146	12,236	Vistra.
Monticello Unit 1	6147	8,598	Vistra.
Monticello Unit 2	6147	8,795	Vistra.

Monticello Unit 3	6147	12,216	Vistra.
* * * * * * *			
Sandow Unit 4	6648	8,370	Vistra.
* * * * * * *			
Stryker Unit ST2	3504	145	Vistra.
* * * * * * *			

* * * * *

§ 97.912 [Amended]

107. Amend § 97.912 by:

a. In paragraph (a)(3)(i), removing "paragraph (b)" and adding in its place "paragraph (d)"; and

b. In paragraph (b)(2), removing "February 15, 2022 and each subsequent February 15," and adding in its place "May 1, 2022 and May 1 of each year thereafter,".

§ 97.920 [Amended]

108. Amend § 97.920 by:

a. In paragraph (c)(1)(ii)(D), adding "; and" after the closing quotation mark; and

b. In paragraph (d), removing "paragraphs (a), (b), and (c)" and adding in its place "paragraph (a), (b), or (c)".

109. Amend § 97.921 by:

a. Redesignating paragraph (b) as paragraph (b)(1) and in the newly redesignated paragraph, removing "By July 1, 2019," and adding in its place "By July 1, 2019 and July 1, 2020,";

b. Adding paragraph (b)(2); and

c. In paragraph (c), removing "By February 15, 2020 and February 15" and adding in its place "By February 15 of 2020 and 2021 and May 1", and removing "control period in the year" and adding in its place "control period in the year before the year".

The addition reads as follows:

§ 97.921 Recordation of Texas SO_2 Trading Program allowance allocations.

* * * * *

(b) * * *

(2) By July 1, 2022 and July 1 of each year thereafter, the Administrator will record in each Texas SO_2 Trading Program source's compliance account the Texas SO_2 Trading Program allowances allocated to the Texas SO_2 Trading Program units at the source in accordance with § 97.911(a) for the control period in the third year after the year of the applicable recordation deadline under this paragraph, unless provided otherwise in the Administrator's approval of a SIP revision replacing the provisions of this subpart.

* * * * *

110. Amend § 97.924 by adding a paragraph heading to paragraph (c) and revising paragraph (c)(1) to read as follows:

§ 97.924 Compliance with Texas SO_2 Trading Program emissions limitations.

* * * * *

(c) *Selection of Texas SO_2 Trading Program allowances for deduction*—(1) *Identification by serial number.* The designated representative for a source may request that specific Texas SO_2 Trading Program allowances, identified by serial number, in the source's compliance account be deducted for emissions or excess emissions for a control period in a given year in accordance with paragraph (b) or (d) of this section. In order to be complete, such request shall be submitted to the Administrator by the allowance transfer deadline for such control period and include, in a format prescribed by the Administrator, the identification of the Texas SO_2 Trading Program source and the appropriate serial numbers.

* * * * *

111. Amend § 97.925 by:

a. In paragraph (b)(1) introductory text, removing “June” and adding in its place “August” each time it appears;

b. In paragraph (b)(1)(i), removing “§ 97.906(c)(2)(iii).” and adding in its place “§ 97.906(c)(2)(iii); and”;

c. Adding paragraph (b)(1)(ii);

d. Removing paragraphs (b)(2) introductory text and (b)(2)(i) and (ii) and redesignating paragraphs (b)(2)(iii) introductory text and (b)(2)(iii)(A) and (B) as paragraphs (b)(2) introductory text and (b)(2)(i) and (ii), respectively;

e. In newly redesignated paragraph (b)(2) introductory text, removing “the notice” and adding in its place “each notice”, and removing “(b)(2)(ii)” and adding in its place “(b)(1)(ii)”;

f. In newly redesignated paragraph (b)(2)(i), removing “the notice required under paragraph (b)(2)(ii) of this section” and adding in its place “such notice”;

g. In newly redesignated paragraph (b)(2)(ii), removing “(b)(2)(iii)(A)” and adding in its place “(b)(2)(i)” each time it appears, and adding “results of the” before “calculations incorporating any adjustments”;

h. In paragraph (b)(3), removing “the notice” and adding in its place “each notice”, and removing “(b)(2)(iii)(B)” and adding in its place “(b)(2)(ii)”; and

i. In paragraphs (b)(4)(i), (b)(5), (b)(6) introductory text, and (b)(6)(i), removing “(b)(2)(iii)(B)” and adding in its place “(b)(2)(ii)” each time it appears.

The addition reads as follows:

§ 97.925 Compliance with Texas SO_2 Trading Program assurance provisions.

* * * * *

(b) * * *

(1) * * *

(ii) If the results of the calculations required in paragraph (b)(1)(i) of this section indicate that total SO_2 emissions exceed the State assurance level for such control period—

(A) Calculate, for such control period and each common designated representative for such control period for a group of one or more Texas SO_2 Trading Program sources and units, the common designated representative's share of the total SO_2 emissions from all Texas SO_2 Trading Program units at Texas SO_2 Trading Program sources, the common designated representative's assurance level, and the amount (if any) of Texas SO_2 Trading Program allowances that the owners and operators of such group of sources and units must hold in accordance with the calculation formula in § 97.906(c)(2)(i); and

(B) Promulgate a notice of data availability of the results of the calculations required in paragraphs (b)(1)(i) and (b)(1)(ii)(A) of this section, including separate calculations of the SO_2 emissions from each Texas SO_2 Trading Program source.

* * * * *

§ 97.932 [Amended]

112. In § 97.932, amend paragraph (a) by removing "subpart D or appendix D to part 75" and adding in its place "subpart D of, or appendix D to, part 75".

113. Add subpart GGGGG, consisting of §§ 97.1001 through 97.1035, to read as follows:

Subpart GGGGG—CSAPR NO_X Ozone Season Group 3 Trading Program

Sec.
97.1001 Purpose.
97.1002 Definitions.
97.1003 Measurements, abbreviations, and acronyms.
97.1004 Applicability.
97.1005 Retired unit exemption.
97.1006 Standard requirements.
97.1007 Computation of time.
97.1008 Administrative appeal procedures.
97.1009 [Reserved]
97.1010 State NO_X Ozone Season Group 3 trading budgets, new unit set-asides, Indian country new unit set-asides, and variability limits.
97.1011 Timing requirements for CSAPR NO_X Ozone Season Group 3 allowance allocations.

97.1012 CSAPR NO_X Ozone Season Group 3 allowance allocations to new units.
97.1013 Authorization of designated representative and alternate designated representative.
97.1014 Responsibilities of designated representative and alternate designated representative.
97.1015 Changing designated representative and alternate designated representative; changes in owners and operators; changes in units at the source.
97.1016 Certificate of representation.
97.1017 Objections concerning designated representative and alternate designated representative.
97.1018 Delegation by designated representative and alternate designated representative.
97.1019 [Reserved]
97.1020 Establishment of compliance accounts, assurance accounts, and general accounts.
97.1021 Recordation of CSAPR NO_X Ozone Season Group 3 allowance allocations and auction results.
97.1022 Submission of CSAPR NO_X Ozone Season Group 3 allowance transfers.
97.1023 Recordation of CSAPR NO_X Ozone Season Group 3 allowance transfers.
97.1024 Compliance with CSAPR NO_X Ozone Season Group 3 emissions limitation.
97.1025 Compliance with CSAPR NO_X Ozone Season Group 3 assurance provisions.
97.1026 Banking.
97.1027 Account error.
97.1028 Administrator's action on submissions.
97.1029 [Reserved]
97.1030 General monitoring, recordkeeping, and reporting requirements.
97.1031 Initial monitoring system certification and recertification procedures.
97.1032 Monitoring system out-of-control periods.
97.1033 Notifications concerning monitoring.
97.1034 Recordkeeping and reporting.
97.1035 Petitions for alternatives to monitoring, recordkeeping, or reporting requirements.

Subpart GGGGG—CSAPR NO_X Ozone Season Group 3 Trading Program

§ 97.1001 Purpose.

This subpart sets forth the general, designated representative, allowance, and monitoring provisions for the Cross-State Air Pollution Rule (CSAPR) NO_X Ozone Season Group 3 Trading Program, under section 110 of the Clean Air Act and § 52.38 of this chapter, as a means of mitigating interstate transport of ozone and nitrogen oxides.

§ 97.1002 Definitions.

The terms used in this subpart shall have the meanings set forth in this section as follows, provided that any term that includes the acronym "CSAPR" shall be considered synonymous with a term that is used in a SIP revision approved by the Administrator under § 52.38 or § 52.39

of this chapter and that is substantively identical except for the inclusion of the acronym "TR" in place of the acronym "CSAPR":

Acid Rain Program means a multi-state SO_2 and NO_X air pollution control and emission reduction program established by the Administrator under title IV of the Clean Air Act and parts 72 through 78 of this chapter.

Administrator means the Administrator of the United States Environmental Protection Agency or the Director of the Clean Air Markets Division (or its successor determined by the Administrator) of the United States Environmental Protection Agency, the Administrator's duly authorized representative under this subpart.

Allocate or *allocation* means, with regard to CSAPR NO_X Ozone Season Group 3 allowances, the determination by the Administrator, State, or permitting authority, in accordance with this subpart, § 97.526(d), § 97.826(d), and any SIP revision submitted by the State and approved by the Administrator under § 52.38(b)(10), (11), or (12) of this chapter, of the amount of such CSAPR NO_X Ozone Season Group 3 allowances to be initially credited, at no cost to the recipient, to:

(1) A CSAPR NO_X Ozone Season Group 3 unit;

(2) A new unit set-aside;

(3) An Indian country new unit set-aside; or

(4) An entity not listed in paragraphs (1) through (3) of this definition;

(5) Provided that, if the Administrator, State, or permitting authority initially credits, to a CSAPR NO_X Ozone Season Group 3 unit qualifying for an initial credit, a credit in the amount of zero CSAPR NO_X Ozone Season Group 3 allowances, the CSAPR NO_X Ozone Season Group 3 unit will be treated as being allocated an amount (*i.e.,* zero) of CSAPR NO_X Ozone Season Group 3 allowances.

Allowance Management System means the system by which the Administrator records allocations, auctions, transfers, and deductions of CSAPR NO_X Ozone Season Group 3 allowances under the CSAPR NO_X Ozone Season Group 3 Trading Program. Such allowances are allocated, auctioned, recorded, held, transferred, or deducted only as whole allowances.

Allowance Management System account means an account in the Allowance Management System established by the Administrator for purposes of recording the allocation, auction, holding, transfer, or deduction of CSAPR NO_X Ozone Season Group 3 allowances.

Allowance transfer deadline means, for a control period in a given year, midnight of June 1 immediately after such control period (or if such June 1 is not a business day, midnight of the first business day thereafter) and is the deadline by which a CSAPR NO_X Ozone Season Group 3 allowance transfer must be submitted for recordation in a CSAPR NO_X Ozone Season Group 3 source's compliance account in order to be available for use in complying with the source's CSAPR NO_X Ozone Season Group 3 emissions limitation for such control period in accordance with §§ 97.1006 and 97.1024.

Alternate designated representative means, for a CSAPR NO_X Ozone Season Group 3 source and each CSAPR NO_X Ozone Season Group 3 unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with this subpart, to act on behalf of the designated representative in matters pertaining to the CSAPR NO_X Ozone Season Group 3 Trading Program. If the CSAPR NO_X Ozone Season Group 3 source is also subject to the Acid Rain Program, CSAPR NO_X Annual Trading Program, or CSAPR SO_2 Group 1 Trading Program, then this natural person shall be the same natural person as the alternate designated representative as defined in the respective program.

Assurance account means an Allowance Management System account, established by the Administrator under § 97.1025(b)(3) for certain owners and operators of a group of one or more base CSAPR NO_X Ozone Season Group 3 sources and units in a given State (and Indian country

within the borders of such State), in which are held CSAPR NO_X Ozone Season Group 3 allowances available for use for a control period in a given year in complying with the CSAPR NO_X Ozone Season Group 3 assurance provisions in accordance with §§ 97.1006 and 97.1025.

Auction means, with regard to CSAPR NO_X Ozone Season Group 3 allowances, the sale to any person by a State or permitting authority, in accordance with a SIP revision submitted by the State and approved by the Administrator under § 52.38(b)(11) or (12) of this chapter, of such CSAPR NO_X Ozone Season Group 3 allowances to be initially recorded in an Allowance Management System account.

Authorized account representative means, for a general account, the natural person who is authorized, in accordance with this subpart, to transfer and otherwise dispose of CSAPR NO_X Ozone Season Group 3 allowances held in the general account and, for a CSAPR NO_X Ozone Season Group 3 source's compliance account, the designated representative of the source.

Automated data acquisition and handling system or *DAHS* means the component of the continuous emission monitoring system, or other emissions monitoring system approved for use under this subpart, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by this subpart.

Base CSAPR NO_X Ozone Season Group 3 source means a source that includes one or more base CSAPR NO_X Ozone Season Group 3 units.

Base CSAPR NO_X Ozone Season Group 3 unit means a CSAPR NO_X Ozone Season Group 3 unit, provided that any unit that would not be a CSAPR NO_X Ozone Season Group 3 unit under § 97.1004(a) and (b) is not a base CSAPR NO_X Ozone Season Group 3 unit notwithstanding the provisions of any SIP revision approved by the Administrator under § 52.38(b)(11) or (12) of this chapter.

Biomass means—

(1) Any organic material grown for the purpose of being converted to energy;

(2) Any organic byproduct of agriculture that can be converted into energy; or

(3) Any material that can be converted into energy and is nonmerchantable for other purposes, that is segregated from other material that is nonmerchantable for other purposes, and that is:

(i) A forest-related organic resource, including mill residues, precommercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or

(ii) A wood material, including pallets, crates, dunnage, manufacturing and construction materials (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

Boiler means an enclosed fossil- or other-fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

Bottoming-cycle unit means a unit in which the energy input to the unit is first used to produce useful thermal energy, where at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

Business day means a day that does not fall on a weekend or a federal holiday.

Certifying official means a natural person who is:

(1) For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function or any other person who performs similar policy- or decision-making functions for the corporation;

(2) For a partnership or sole proprietorship, a general partner or the proprietor respectively; or

(3) For a local government entity or State, federal, or other public agency, a principal executive officer or ranking elected official.

Clean Air Act means the Clean Air Act, 42 U.S.C. 7401, *et seq.*

Coal means "coal" as defined in § 72.2 of this chapter.

Cogeneration system means an integrated group, at a source, of equipment (including a boiler, or combustion turbine, and a generator) designed to produce useful thermal energy for industrial, commercial, heating, or cooling purposes and electricity through the sequential use of energy.

Cogeneration unit means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine that is a topping-cycle unit or a bottoming-cycle unit:

(1) Operating as part of a cogeneration system; and

(2) Producing on an annual average basis—

(i) For a topping-cycle unit,

(A) Useful thermal energy not less than 5 percent of total energy output; and

(B) Useful power that, when added to one-half of useful thermal energy produced, is not less than 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output, or not less than 45 percent of total energy input, if useful thermal energy produced is less than 15 percent of total energy output; or

(ii) For a bottoming-cycle unit, useful power not less than 45 percent of total energy input;

(3) Provided that the requirements in paragraph (2) of this definition shall not apply to a calendar year referenced in paragraph (2) of this definition during which the unit did not operate at all;

(4) Provided that the total energy input under paragraphs (2)(i)(B) and (2)(ii) of this definition shall equal the unit's total energy input from all fuel, except biomass if the unit is a boiler; and

(5) Provided that, if, throughout its operation during the 12-month period or a calendar year referenced in paragraph (2) of this definition, a unit is operated as part of a cogeneration system and the cogeneration system meets on a system-wide basis the requirement in paragraph (2)(i)(B)

or (2)(ii) of this definition, the unit shall be deemed to meet such requirement during that 12-month period or calendar year.

Combustion turbine means an enclosed device comprising:

(1) If the device is simple cycle, a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and

(2) If the device is combined cycle, the equipment described in paragraph (1) of this definition and any associated duct burner, heat recovery steam generator, and steam turbine.

Commence commercial operation means, with regard to a unit:

(1) To have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, except as provided in § 97.1005.

(i) For a unit that is a CSAPR NO_X Ozone Season Group 3 unit under § 97.1004 on the later of January 1, 2005 or the date the unit commences commercial operation as defined in the introductory text of paragraph (1) of this definition and that subsequently undergoes a physical change or is moved to a new location or source, such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit that is a CSAPR NO_X Ozone Season Group 3 unit under § 97.1004 on the later of January 1, 2005 or the date the unit commences commercial operation as defined in the introductory text of paragraph (1) of this definition and that is subsequently replaced by a unit at the same or a different source, such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraph (1) or (2) of this definition as appropriate.

(2) Notwithstanding paragraph (1) of this definition and except as provided in § 97.1005, for a unit that is not a CSAPR NO_X Ozone Season Group 3 unit under § 97.1004 on the later of

January 1, 2005 or the date the unit commences commercial operation as defined in the introductory text of paragraph (1) of this definition, the unit's date for commencement of commercial operation shall be the date on which the unit becomes a CSAPR NO_X Ozone Season Group 3 unit under § 97.1004.

(i) For a unit with a date for commencement of commercial operation as defined in the introductory text of paragraph (2) of this definition and that subsequently undergoes a physical change or is moved to a different location or source, such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit with a date for commencement of commercial operation as defined in the introductory text of paragraph (2) of this definition and that is subsequently replaced by a unit at the same or a different source, such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraph (1) or (2) of this definition as appropriate.

Common designated representative means, with regard to a control period in a given year, a designated representative where, as of July 1 immediately after the allowance transfer deadline for such control period, the same natural person is authorized under §§ 97.1013(a) and 97.1015(a) as the designated representative for a group of one or more base CSAPR NO_X Ozone Season Group 3 sources and units in a State (and Indian country within the borders of such State).

Common designated representative's assurance level means, with regard to a specific common designated representative and a State (and Indian country within the borders of such State) and control period in a given year for which the State assurance level is exceeded as described in § 97.1006(c)(2)(iii):

(1) The amount (rounded to the nearest allowance) equal to the sum of the total amount of CSAPR NO_X Ozone Season Group 3 allowances allocated for such control period to the group of one or more base CSAPR NO_X Ozone Season Group 3 units in such State (and such Indian country) having the common designated representative for such control period and the total amount of CSAPR NO_X Ozone Season Group 3 allowances purchased by an owner or operator of such base CSAPR NO_X Ozone Season Group 3 units in an auction for such control period and submitted by the State or the permitting authority to the Administrator for recordation in the compliance accounts for such base CSAPR NO_X Ozone Season Group 3 units in accordance with the CSAPR NO_X Ozone Season Group 3 allowance auction provisions in a SIP revision approved by the Administrator under § 52.38(b)(11) or (12) of this chapter, multiplied by the sum of the State NO_X Ozone Season Group 3 trading budget under § 97.1010(a) and the State's variability limit under § 97.1010(b) for such control period, and divided by the greater of such State NO_X Ozone Season Group 3 trading budget or the sum of all amounts of CSAPR NO_X Ozone Season Group 3 allowances for such control period allocated to or purchased in the State's auction for all such base CSAPR NO_X Ozone Season Group 3 units;

(2) Provided that—

(i) The allocations of CSAPR NO_X Ozone Season Group 3 allowances for any control period taken into account for purposes of this definition shall exclude any CSAPR NO_X Ozone Season Group 3 allowances allocated for such control period under § 97.526(d) or § 97.826(d); and

(ii) For purposes of this definition for the control period in 2021 only, for each State the amount of the State NO_X Ozone Season Group 3 trading budget shall be deemed to be increased by the supplemental amount of CSAPR NO_X Ozone Season Group 3 allowances determined for the State under § 97.1010(d) and the amount of the State's variability limit shall be deemed to be increased by the product (rounded to the nearest allowance) of 0.21 multiplied by the supplemental amount of CSAPR NO_X Ozone Season Group 3 allowances determined for the State under § 97.1010(d).

Common designated representative's share means, with regard to a specific common designated representative for a control period in a given year and a total amount of NO_X emissions from all base CSAPR NO_X Ozone Season Group 3 units in a State (and Indian country within the borders of such State) during such control period, the total tonnage of NO_X emissions during such control period from the group of one or more base CSAPR NO_X Ozone Season Group 3 units in such State (and such Indian country) having the common designated representative for such control period.

Common stack means a single flue through which emissions from 2 or more units are exhausted.

Compliance account means an Allowance Management System account, established by the Administrator for a CSAPR NO_X Ozone Season Group 3 source under this subpart, in which any CSAPR NO_X Ozone Season Group 3 allowance allocations to the CSAPR NO_X Ozone Season Group 3 units at the source are recorded and in which are held any CSAPR NO_X Ozone Season Group 3 allowances available for use for a control period in a given year in complying with the source's CSAPR NO_X Ozone Season Group 3 emissions limitation in accordance with §§ 97.1006 and 97.1024.

Continuous emission monitoring system or *CEMS* means the equipment required under this subpart to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes and using an automated data acquisition and handling system (DAHS), a permanent record of NO_X emissions, stack gas volumetric flow rate, stack gas moisture content, and O_2 or CO_2 concentration (as applicable), in a manner consistent with part 75 of this chapter and §§ 97.1030 through 97.1035. The following systems are the principal types of continuous emission monitoring systems:

(1) A flow monitoring system, consisting of a stack flow rate monitor and an automated data acquisition and handling system and providing a permanent, continuous record of stack gas volumetric flow rate, in standard cubic feet per hour (scfh);

(2) A NO_X concentration monitoring system, consisting of a NO_X pollutant concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of NO_X emissions, in parts per million (ppm);

(3) A NO_X emission rate (or NO_X-diluent) monitoring system, consisting of a NO_X pollutant concentration monitor, a diluent gas (CO_2 or O_2) monitor, and an automated data acquisition and handling system and providing a permanent, continuous record of NO_X concentration, in parts per million (ppm), diluent gas concentration, in percent CO_2 or O_2, and NO_X emission rate, in pounds per million British thermal units (lb/mmBtu);

(4) A moisture monitoring system, as defined in § 75.11(b)(2) of this chapter and providing a permanent, continuous record of the stack gas moisture content, in percent H_2O;

(5) A CO_2 monitoring system, consisting of a CO_2 pollutant concentration monitor (or an O_2 monitor plus suitable mathematical equations from which the CO_2 concentration is derived) and an automated data acquisition and handling system and providing a permanent, continuous record of CO_2 emissions, in percent CO_2; and

(6) An O_2 monitoring system, consisting of an O_2 concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O_2, in percent O_2.

Control period means the period starting May 1 of a calendar year, except as provided in § 97.1006(c)(3), and ending on September 30 of the same year, inclusive.

CSAPR NO_X Annual Trading Program means a multi-state NO_X air pollution control and emission reduction program established in accordance with subpart AAAAA of this part and § 52.38(a) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.38(a)(3) or (4) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.38(a)(5) of this chapter), as a means of mitigating interstate transport of fine particulates and NO_X.

CSAPR NO_X Ozone Season Group 2 allowance means a limited authorization issued and allocated or auctioned by the Administrator under subpart EEEEE of this part or § 97.526(d), or by a State or permitting authority under a SIP revision approved by the Administrator under § 52.38(b)(7), (8), or (9) of this chapter, to emit one ton of NO_X during a control period of the specified calendar year for which the authorization is allocated or auctioned or of any calendar year thereafter under the CSAPR NO_X Ozone Season Group 2 Trading Program.

CSAPR NO_X Ozone Season Group 2 Trading Program means a multi-state NO_X air pollution control and emission reduction program established in accordance with subpart EEEEE of this part and § 52.38(b)(1), (b)(2)(iii) and (iv), and (b)(7) through (9), (13), (14), and (16) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.38(b)(7) or (8) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.38(b)(9) of this chapter), as a means of mitigating interstate transport of ozone and NO_X.

CSAPR NO_X Ozone Season Group 3 allowance means a limited authorization issued and allocated or auctioned by the Administrator under this subpart, § 97.526(d), or § 97.826(d), or by a State or permitting authority under a SIP revision approved by the Administrator under § 52.38(b)(10), (11), or (12) of this chapter, to emit one ton of NO_X during a control period of the specified calendar year for which the authorization is allocated or auctioned or of any calendar year thereafter under the CSAPR NO_X Ozone Season Group 3 Trading Program.

CSAPR NO_X Ozone Season Group 3 allowance deduction or *deduct CSAPR NO_X Ozone Season Group 3 allowances* means the permanent withdrawal of CSAPR NO_X Ozone Season Group 3 allowances by the Administrator from a compliance account (*e.g.,* in order to account for compliance with the CSAPR NO_X Ozone Season Group 3 emissions limitation) or from an assurance account (*e.g.,* in order to account for compliance with the assurance provisions under §§ 97.1006 and 97.1025).

CSAPR NO_X Ozone Season Group 3 allowances held or *hold CSAPR NO_X Ozone Season Group 3 allowances* means the CSAPR NO_X Ozone Season Group 3 allowances treated as included in an Allowance Management System account as of a specified point in time because at that time they:

(1) Have been recorded by the Administrator in the account or transferred into the account by a correctly submitted, but not yet recorded, CSAPR NO_X Ozone Season Group 3 allowance transfer in accordance with this subpart; and

(2) Have not been transferred out of the account by a correctly submitted, but not yet recorded, CSAPR NO_X Ozone Season Group 3 allowance transfer in accordance with this subpart.

CSAPR NO_X Ozone Season Group 3 emissions limitation means, for a CSAPR NO_X Ozone Season Group 3 source, the tonnage of NO_X emissions authorized in a control period in a given year by the CSAPR NO_X Ozone Season Group 3 allowances available for deduction for the source under § 97.1024(a) for such control period.

CSAPR NO_X Ozone Season Group 3 source means a source that includes one or more CSAPR NO_X Ozone Season Group 3 units.

CSAPR NO_X Ozone Season Group 3 Trading Program means a multi-state NO_X air pollution control and emission reduction program established in accordance with this subpart and § 52.38(b)(1), (b)(2)(v), and (b)(10) through (14) and (17) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.38(b)(10) or (11) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.38(b)(12) of this chapter), as a means of mitigating interstate transport of ozone and NO_X.

CSAPR NO_X Ozone Season Group 3 unit means a unit that is subject to the CSAPR NO_X Ozone Season Group 3 Trading Program.

CSAPR SO_2 Group 1 Trading Program means a multi-state SO_2 air pollution control and emission reduction program established in accordance with subpart CCCCC of this part and

§ 52.39(a), (b), (d) through (f), and (j) through (l) of this chapter (including such a program that is revised in a SIP revision approved by the Administrator under § 52.39(d) or (e) of this chapter or that is established in a SIP revision approved by the Administrator under § 52.39(f) of this chapter), as a means of mitigating interstate transport of fine particulates and SO_2.

Designated representative means, for a CSAPR NO_X Ozone Season Group 3 source and each CSAPR NO_X Ozone Season Group 3 unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with this subpart, to represent and legally bind each owner and operator in matters pertaining to the CSAPR NO_X Ozone Season Group 3 Trading Program. If the CSAPR NO_X Ozone Season Group 3 source is also subject to the Acid Rain Program, CSAPR NO_X Annual Trading Program, or CSAPR SO_2 Group 1 Trading Program, then this natural person shall be the same natural person as the designated representative as defined in the respective program.

Emissions means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the Administrator by the designated representative, and as modified by the Administrator:

(1) In accordance with this subpart; and

(2) With regard to a period before the unit or source is required to measure, record, and report such air pollutants in accordance with this subpart, in accordance with part 75 of this chapter.

Excess emissions means any ton of emissions from the CSAPR NO_X Ozone Season Group 3 units at a CSAPR NO_X Ozone Season Group 3 source during a control period in a given year that exceeds the CSAPR NO_X Ozone Season Group 3 emissions limitation for the source for such control period.

Fossil fuel means—

(1) Natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material; or

(2) For purposes of applying the limitation on "average annual fuel consumption of fossil fuel" in § 97.1004(b)(2)(i)(B) and (b)(2)(ii), natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material for the purpose of creating useful heat.

Fossil-fuel-fired means, with regard to a unit, combusting any amount of fossil fuel in 2005 or any calendar year thereafter.

General account means an Allowance Management System account, established under this subpart, that is not a compliance account or an assurance account.

Generator means a device that produces electricity.

Heat input means, for a unit for a specified period of unit operating time, the product (in mmBtu) of the gross calorific value of the fuel (in mmBtu/lb) fed into the unit multiplied by the fuel feed rate (in lb of fuel/time) and unit operating time, as measured, recorded, and reported to the Administrator by the designated representative and as modified by the Administrator in accordance with this subpart and excluding the heat derived from preheated combustion air, recirculated flue gases, or exhaust.

Heat input rate means, for a unit, the quotient (in mmBtu/hr) of the amount of heat input for a specified period of unit operating time (in mmBtu) divided by unit operating time (in hr) or, for a unit and a specific fuel, the amount of heat input attributed to the fuel (in mmBtu) divided by the unit operating time (in hr) during which the unit combusts the fuel.

Indian country means "Indian country" as defined in 18 U.S.C. 1151.

Life-of-the-unit, firm power contractual arrangement means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract:

(1) For the life of the unit;

(2) For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or

(3) For a period no less than 25 years or 70 percent of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

Maximum design heat input rate means, for a unit, the maximum amount of fuel per hour (in Btu/hr) that the unit is capable of combusting on a steady state basis as of the initial installation of the unit as specified by the manufacturer of the unit.

Monitoring system means any monitoring system that meets the requirements of this subpart, including a continuous emission monitoring system, an alternative monitoring system, or an excepted monitoring system under part 75 of this chapter.

Nameplate capacity means, starting from the initial installation of a generator, the maximum electrical generating output (in MWe, rounded to the nearest tenth) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings) as of such installation as specified by the manufacturer of the generator or, starting from the completion of any subsequent physical change in the generator resulting in an increase in the maximum electrical generating output that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings), such increased maximum amount (in MWe, rounded to the nearest tenth) as of such completion as specified by the person conducting the physical change.

Natural gas means "natural gas" as defined in § 72.2 of this chapter.

Newly affected CSAPR NO_X Ozone Season Group 3 unit means a unit that was not a CSAPR NO_X Ozone Season Group 3 unit when it began operating but that thereafter becomes a CSAPR NO_X Ozone Season Group 3 unit.

Nitrogen oxides means all oxides of nitrogen except nitrous oxide (N_2O), reported on an equivalent molecular weight basis as nitrogen dioxide (NO_2).

Operate or *operation* means, with regard to a unit, to combust fuel.

Operator means, for a CSAPR NO_X Ozone Season Group 3 source or a CSAPR NO_X Ozone Season Group 3 unit at a source respectively, any person who operates, controls, or supervises a CSAPR NO_X Ozone Season Group 3 unit at the source or the CSAPR NO_X Ozone Season Group 3 unit and shall include, but not be limited to, any holding company, utility system, or plant manager of such source or unit.

Owner means, for a CSAPR NO_X Ozone Season Group 3 source or a CSAPR NO_X Ozone Season Group 3 unit at a source respectively, any of the following persons:

(1) Any holder of any portion of the legal or equitable title in a CSAPR NO_X Ozone Season Group 3 unit at the source or the CSAPR NO_X Ozone Season Group 3 unit;

(2) Any holder of a leasehold interest in a CSAPR NO_X Ozone Season Group 3 unit at the source or the CSAPR NO_X Ozone Season Group 3 unit, provided that, unless expressly provided for in a leasehold agreement, "owner" shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based (either directly or indirectly) on the revenues or income from such CSAPR NO_X Ozone Season Group 3 unit; and

(3) Any purchaser of power from a CSAPR NO_X Ozone Season Group 3 unit at the source or the CSAPR NO_X Ozone Season Group 3 unit under a life-of-the-unit, firm power contractual arrangement.

Permanently retired means, with regard to a unit, a unit that is unavailable for service and that the unit's owners and operators do not expect to return to service in the future.

Permitting authority means "permitting authority" as defined in §§ 70.2 and 71.2 of this chapter.

Potential electrical output capacity means, for a unit (in MWh/yr), 33 percent of the unit's maximum design heat input rate (in Btu/hr), divided by 3,413 Btu/kWh, divided by 1,000 kWh/MWh, and multiplied by 8,760 hr/yr.

Receive or *receipt of* means, when referring to the Administrator, to come into possession of a document, information, or correspondence (whether sent in hard copy or by authorized electronic transmission), as indicated in an official log, or by a notation made on the document, information, or correspondence, by the Administrator in the regular course of business.

Recordation, record, or *recorded* means, with regard to CSAPR NO_X Ozone Season Group 3 allowances, the moving of CSAPR NO_X Ozone Season Group 3 allowances by the Administrator into, out of, or between Allowance Management System accounts, for purposes of allocation, auction, transfer, or deduction.

Reference method means any direct test method of sampling and analyzing for an air pollutant as specified in § 75.22 of this chapter.

Replacement, replace, or *replaced* means, with regard to a unit, the demolishing of a unit, or the permanent retirement and permanent disabling of a unit, and the construction of another unit (the replacement unit) to be used instead of the demolished or retired unit (the replaced unit).

Sequential use of energy means:

(1) The use of reject heat from electricity production in a useful thermal energy application or process; or

(2) The use of reject heat from a useful thermal energy application or process in electricity production.

Serial number means, for a CSAPR NO_X Ozone Season Group 3 allowance, the unique identification number assigned to each CSAPR NO_X Ozone Season Group 3 allowance by the Administrator.

Solid waste incineration unit means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine that is a “solid waste incineration unit” as defined in section 129(g)(1) of the Clean Air Act.

Source means all buildings, structures, or installations located in one or more contiguous or adjacent properties under common control of the same person or persons. This definition does not change or otherwise affect the definition of "major source", "stationary source", or "source" as set forth and implemented in a title V operating permit program or any other program under the Clean Air Act.

State means one of the States that is subject to the CSAPR NO_X Ozone Season Group 3 Trading Program pursuant to § 52.38(b)(1), (b)(2)(v), and (b)(10) through (14) and (17) of this chapter.

Submit or *serve* means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

(1) In person;

(2) By United States Postal Service; or

(3) By other means of dispatch or transmission and delivery;

(4) Provided that compliance with any "submission" or "service" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

Topping-cycle unit means a unit in which the energy input to the unit is first used to produce useful power, including electricity, where at least some of the reject heat from the electricity production is then used to provide useful thermal energy.

Total energy input means, for a unit, total energy of all forms supplied to the unit, excluding energy produced by the unit. Each form of energy supplied shall be measured by the lower heating value of that form of energy calculated as follows:

$LHV = HHV - 10.55(W + 9H)$

where:

LHV = lower heating value of the form of energy in Btu/lb,

HHV = higher heating value of the form of energy in Btu/lb,

W = weight % of moisture in the form of energy, and

H = weight % of hydrogen in the form of energy.

Total energy output means, for a unit, the sum of useful power and useful thermal energy produced by the unit.

Unit means a stationary, fossil-fuel-fired boiler, stationary, fossil-fuel-fired combustion turbine, or other stationary, fossil-fuel-fired combustion device. A unit that undergoes a physical change or is moved to a different location or source shall continue to be treated as the same unit. A unit (the replaced unit) that is replaced by another unit (the replacement unit) at the same or a different source shall continue to be treated as the same unit, and the replacement unit shall be treated as a separate unit.

Unit operating day means, with regard to a unit, a calendar day in which the unit combusts any fuel.

Unit operating hour or *hour of unit operation* means, with regard to a unit, an hour in which the unit combusts any fuel.

Useful power means, with regard to a unit, electricity or mechanical energy that the unit makes available for use, excluding any such energy used in the power production process (which process includes, but is not limited to, any on-site processing or treatment of fuel combusted at the unit and any on-site emission controls).

Useful thermal energy means thermal energy that is:

(1) Made available to an industrial or commercial process (not a power production process), excluding any heat contained in condensate return or makeup water;

(2) Used in a heating application (*e.g.,* space heating or domestic hot water heating); or

(3) Used in a space cooling application (*i.e.,* in an absorption chiller).

Utility power distribution system means the portion of an electricity grid owned or operated by a utility and dedicated to delivering electricity to customers.

§ 97.1003 Measurements, abbreviations, and acronyms.

Measurements, abbreviations, and acronyms used in this subpart are defined as follows:

Btu—British thermal unit

CO_2—carbon dioxide

CSAPR—Cross-State Air Pollution Rule

H_2O—water

hr—hour

kWh—kilowatt-hour

lb—pound

mmBtu—million Btu

MWe—megawatt electrical

MWh—megawatt-hour

NO_X—nitrogen oxides

O_2—oxygen

ppm—parts per million

scfh—standard cubic feet per hour

SIP—State implementation plan

SO_2—sulfur dioxide

TR—Transport Rule

yr—year

§ 97.1004 Applicability.

(a) Except as provided in paragraph (b) of this section:

(1) The following units in a State (and Indian country within the borders of such State) shall be CSAPR NO_X Ozone Season Group 3 units, and any source that includes one or more such

units shall be a CSAPR NO_X Ozone Season Group 3 source, subject to the requirements of this subpart: Any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, on or after January 1, 2005, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.

(2) If a stationary boiler or stationary combustion turbine that, under paragraph (a)(1) of this section, is not a CSAPR NO_X Ozone Season Group 3 unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than 25 MWe producing electricity for sale, the unit shall become a CSAPR NO_X Ozone Season Group 3 unit as provided in paragraph (a)(1) of this section on the first date on which it both combusts fossil fuel and serves such generator.

(b) Any unit in a State (and Indian country within the borders of such State) that otherwise is a CSAPR NO_X Ozone Season Group 3 unit under paragraph (a) of this section and that meets the requirements set forth in paragraph (b)(1)(i) or (b)(2)(i) of this section shall not be a CSAPR NO_X Ozone Season Group 3 unit:

(1)(i) Any unit:

(A) Qualifying as a cogeneration unit throughout the later of 2005 or the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit throughout each calendar year ending after the later of 2005 or such 12-month period; and

(B) Not supplying in 2005 or any calendar year thereafter more than one-third of the unit's potential electrical output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale.

(ii) If, after qualifying under paragraph (b)(1)(i) of this section as not being a CSAPR NO_X Ozone Season Group 3 unit, a unit subsequently no longer meets all the requirements of paragraph (b)(1)(i) of this section, the unit shall become a CSAPR NO_X Ozone Season Group 3 unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the

unit no longer meets the requirements of paragraph (b)(1)(i)(B) of this section. The unit shall thereafter continue to be a CSAPR NO_X Ozone Season Group 3 unit.

(2)(i) Any unit:

(A) Qualifying as a solid waste incineration unit throughout the later of 2005 or the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a solid waste incineration unit throughout each calendar year ending after the later of 2005 or such 12-month period; and

(B) With an average annual fuel consumption of fossil fuel for the first 3 consecutive calendar years of operation starting no earlier than 2005 of less than 20 percent (on a Btu basis) and an average annual fuel consumption of fossil fuel for any 3 consecutive calendar years thereafter of less than 20 percent (on a Btu basis).

(ii) If, after qualifying under paragraph (b)(2)(i) of this section as not being a CSAPR NO_X Ozone Season Group 3 unit, a unit subsequently no longer meets all the requirements of paragraph (b)(2)(i) of this section, the unit shall become a CSAPR NO_X Ozone Season Group 3 unit starting on the earlier of January 1 after the first calendar year during which the unit first no longer qualifies as a solid waste incineration unit or January 1 after the first 3 consecutive calendar years after 2005 for which the unit has an average annual fuel consumption of fossil fuel of 20 percent or more. The unit shall thereafter continue to be a CSAPR NO_X Ozone Season Group 3 unit.

(c) A certifying official of an owner or operator of any unit or other equipment may submit a petition (including any supporting documents) to the Administrator at any time for a determination concerning the applicability, under paragraphs (a) and (b) of this section or a SIP revision approved under § 52.38(b)(11) or (12) of this chapter, of the CSAPR NO_X Ozone Season Group 3 Trading Program to the unit or other equipment.

(1) *Petition content.* The petition shall be in writing and include the identification of the unit or other equipment and the relevant facts about the unit or other equipment. The petition and any

other documents provided to the Administrator in connection with the petition shall include the following certification statement, signed by the certifying official: "I am authorized to make this submission on behalf of the owners and operators of the unit or other equipment for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(2) *Response.* The Administrator will issue a written response to the petition and may request supplemental information determined by the Administrator to be relevant to such petition. The Administrator's determination concerning the applicability, under paragraphs (a) and (b) of this section, of the CSAPR NO_X Ozone Season Group 3 Trading Program to the unit or other equipment shall be binding on any State or permitting authority unless the Administrator determines that the petition or other documents or information provided in connection with the petition contained significant, relevant errors or omissions.

§ 97.1005 Retired unit exemption.

(a)(1) Any CSAPR NO_X Ozone Season Group 3 unit that is permanently retired shall be exempt from § 97.1006(b) and (c)(1), § 97.1024, and §§ 97.1030 through 97.1035.

(2) The exemption under paragraph (a)(1) of this section shall become effective the day on which the CSAPR NO_X Ozone Season Group 3 unit is permanently retired. Within 30 days of the unit's permanent retirement, the designated representative shall submit a statement to the Administrator. The statement shall state, in a format prescribed by the Administrator, that the unit was permanently retired on a specified date and will comply with the requirements of paragraph (b) of this section.

(b)(1) A unit exempt under paragraph (a) of this section shall not emit any NO_X, starting on the date that the exemption takes effect.

(2) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under paragraph (a) of this section shall retain, at the source that includes the unit, records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time before the end of the period, in writing by the Administrator. The owners and operators bear the burden of proof that the unit is permanently retired.

(3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under paragraph (a) of this section shall comply with the requirements of the CSAPR NO_X Ozone Season Group 3 Trading Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(4) A unit exempt under paragraph (a) of this section shall lose its exemption on the first date on which the unit resumes operation. Such unit shall be treated, for purposes of applying allocation, monitoring, reporting, and recordkeeping requirements under this subpart, as a unit that commences commercial operation on the first date on which the unit resumes operation.

§ 97.1006 Standard requirements.

(a) *Designated representative requirements.* The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§ 97.1013 through 97.1018.

(b) *Emissions monitoring, reporting, and recordkeeping requirements.* (1) The owners and operators, and the designated representative, of each CSAPR NO_X Ozone Season Group 3 source and each CSAPR NO_X Ozone Season Group 3 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §§ 97.1030 through 97.1035.

(2) The emissions data determined in accordance with §§ 97.1030 through 97.1035 shall be used to calculate allocations of CSAPR NO_X Ozone Season Group 3 allowances under §§ 97.1011(a)(2) and (b) and 97.1012 and to determine compliance with the CSAPR NO_X Ozone Season Group 3 emissions limitation and assurance provisions under paragraph (c) of this section, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§ 97.1030 through 97.1035 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) *NO_X emissions requirements*—(1) *CSAPR NO_X Ozone Season Group 3 emissions limitation.* (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 Group 3 source and each CSAPR NO_X Ozone Season Group 3 unit at the source shall hold, in the source's compliance account, CSAPR NO_X Ozone Season Group 3 allowances available for deduction for such control period under § 97.1024(a) in an amount not less than the tons of total NO_X emissions for such control period from all CSAPR NO_X Ozone Season Group 3 units at the source.

(ii) If total NO_X emissions during a control period in a given year from the CSAPR NO_X Ozone Season Group 3 units at a CSAPR NO_X Ozone Season Group 3 source are in excess of the CSAPR NO_X Ozone Season Group 3 emissions limitation set forth in paragraph (c)(1)(i) of this section, then:

(A) The owners and operators of the source and each CSAPR NO_X Ozone Season Group 3 unit at the source shall hold the CSAPR NO_X Ozone Season Group 3 allowances required for deduction under § 97.1024(d); and

(B) The owners and operators of the source and each CSAPR NO_X Ozone Season Group 3 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions

and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(2) *CSAPR NO_X Ozone Season Group 3 assurance provisions.* (i) If total NO_X emissions during a control period in a given year from all base CSAPR NO_X Ozone Season Group 3 units at base CSAPR NO_X Ozone Season Group 3 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 Group 3 allowances available for deduction for such control period under § 97.1025(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with § 97.1025(b), of multiplying—

(A) The quotient of the amount by which the common designated representative's share of such NO_X emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the State (and Indian country within the borders of such State) for such control period, by which each common designated representative's share of such NO_X emissions exceeds the respective common designated representative's assurance level; and

(B) The amount by which total NO_X emissions from all base CSAPR NO_X Ozone Season Group 3 units at base CSAPR NO_X Ozone Season Group 3 sources in the State (and Indian country within the borders of such State) for such control period exceed the State assurance level.

(ii) The owners and operators shall hold the CSAPR NO_X Ozone Season Group 3 allowances required under paragraph (c)(2)(i) of this section, as of midnight of November 1 (if it is a

business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after the year of such control period.

(iii) Total NO_X emissions from all base CSAPR NO_X Ozone Season Group 3 units at base CSAPR NO_X Ozone Season Group 3 sources in a State (and Indian country within the borders of such State) during a control period in a given year exceed the State assurance level if such total NO_X emissions exceed the sum, for such control period, of the State NO_X Ozone Season Group 3 trading budget under § 97.1010(a), the State's variability limit under § 97.1010(b), and, for the control period in 2021 only, the product (rounded to the nearest allowance) of 1.21 multiplied by the supplemental amount of CSAPR NO_X Ozone Season Group 3 allowances determined for the State under § 97.1010(d).

(iv) It shall not be a violation of this subpart or of the Clean Air Act if total NO_X emissions from all base CSAPR NO_X Ozone Season Group 3 units at base CSAPR NO_X Ozone Season Group 3 sources in a State (and Indian country within the borders of such State) during a control period exceed the State assurance level or if a common designated representative's share of total NO_X emissions from the base CSAPR NO_X Ozone Season Group 3 units at base CSAPR NO_X Ozone Season Group 3 sources in a State (and Indian country within the borders of such State) during a control period exceeds the common designated representative's assurance level.

(v) To the extent the owners and operators fail to hold CSAPR NO_X Ozone Season Group 3 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) of this section:

(A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B) Each CSAPR NO_X Ozone Season Group 3 allowance 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) *Compliance periods.* (i) A CSAPR NO_X Ozone Season Group 3 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, 2021 or the deadline for meeting the unit's monitor certification requirements under § 97.1030(b) and for each control period thereafter.

(ii) A base CSAPR NO_X Ozone Season Group 3 unit shall be subject to the requirements under paragraph (c)(2) of this section for the control period starting on the later of May 1, 2021 or the deadline for meeting the unit's monitor certification requirements under § 97.1030(b) and for each control period thereafter.

(4) *Vintage of CSAPR NO_X Ozone Season Group 3 allowances held for compliance.* (i) A CSAPR NO_X Ozone Season Group 3 allowance held for compliance with the requirements under paragraph (c)(1)(i) of this section for a control period in a given year must be a CSAPR NO_X Ozone Season Group 3 allowance that was allocated or auctioned for such control period or a control period in a prior year.

(ii) A CSAPR NO_X Ozone Season Group 3 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (c)(2)(i) through (iii) of this section for a control period in a given year must be a CSAPR NO_X Ozone Season Group 3 allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) *Allowance Management System requirements.* Each CSAPR NO_X Ozone Season Group 3 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with this subpart.

(6) *Limited authorization.* A CSAPR NO_X Ozone Season Group 3 allowance is a limited authorization to emit one ton of NO_X during the control period in one year. Such authorization is limited in its use and duration as follows:

(i) Such authorization shall only be used in accordance with the CSAPR NO_X Ozone Season Group 3 Trading Program; and

(ii) Notwithstanding any other provision of this subpart, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) *Property right.* A CSAPR NO_X Ozone Season Group 3 allowance does not constitute a property right.

(d) *Title V permit requirements.* (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_X Ozone Season Group 3 allowances in accordance with this subpart.

(2) A description of whether a unit is required to monitor and report NO_X emissions using a continuous emission monitoring system (under subpart H of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under § 75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§ 97.1030 through 97.1035 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with §§ 70.7(e)(2) and 71.7(e)(1) of this chapter, provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with §§ 70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter.

(e) *Additional recordkeeping and reporting requirements.* (1) Unless otherwise provided, the owners and operators of each CSAPR NO_X Ozone Season Group 3 source and each CSAPR NO_X Ozone Season Group 3 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(i) The certificate of representation under § 97.1016 for the designated representative for the source and each CSAPR NO_X Ozone Season Group 3 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under § 97.1016 changing the designated representative.

(ii) All emissions monitoring information, in accordance with this subpart.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_X Ozone Season Group 3 Trading Program.

(2) The designated representative of a CSAPR NO_X Ozone Season Group 3 source and each CSAPR NO_X Ozone Season Group 3 unit at the source shall make all submissions required under the CSAPR NO_X Ozone Season Group 3 Trading Program, except as provided in § 97.1018. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in parts 70 and 71 of this chapter.

(f) *Liability.* (1) Any provision of the CSAPR NO_X Ozone Season Group 3 Trading Program that applies to a CSAPR NO_X Ozone Season Group 3 source or the designated representative of a CSAPR NO_X Ozone Season Group 3 source shall also apply to the owners and operators of such source and of the CSAPR NO_X Ozone Season Group 3 units at the source.

(2) Any provision of the CSAPR NO_X Ozone Season Group 3 Trading Program that applies to a CSAPR NO_X Ozone Season Group 3 unit or the designated representative of a CSAPR NO_X Ozone Season Group 3 unit shall also apply to the owners and operators of such unit.

(g) *Effect on other authorities.* No provision of the CSAPR NO_X Ozone Season Group 3 Trading Program or exemption under § 97.1005 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_X Ozone Season Group

3 source or CSAPR NO_X Ozone Season Group 3 unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

§ 97.1007 Computation of time.

(a) Unless otherwise stated, any time period scheduled, under the CSAPR NO_X Ozone Season Group 3 Trading Program, to begin on the occurrence of an act or event shall begin on the day the act or event occurs.

(b) Unless otherwise stated, any time period scheduled, under the CSAPR NO_X Ozone Season Group 3 Trading Program, to begin before the occurrence of an act or event shall be computed so that the period ends the day before the act or event occurs.

(c) Unless otherwise stated, if the final day of any time period, under the CSAPR NO_X Ozone Season Group 3 Trading Program, is not a business day, the time period shall be extended to the next business day.

§ 97.1008 Administrative appeal procedures.

The administrative appeal procedures for decisions of the Administrator under the CSAPR NO_X Ozone Season Group 3 Trading Program are set forth in part 78 of this chapter.

§ 97.1009 [Reserved]

§ 97.1010 State NO_X Ozone Season Group 3 trading budgets, new unit set-asides, Indian country new unit set-asides, and variability limits.

(a) The State NO_X Ozone Season Group 3 trading budgets, new unit set-asides, and Indian country new unit set-asides for allocations of CSAPR NO_X Ozone Season Group 3 allowances for the control periods in 2021, 2022, 2023, and 2024 and thereafter are as indicated in Tables 1, 2, and 3 to this paragraph, respectively:

Table 1 to Paragraph (a)—State NO_X Ozone Season Group 3 trading budgets by year (tons)

State	2021	2022	2023	2024 and thereafter

Illinois	9,102	9,102	8,179	8,059
Indiana	13,051	12,582	12,553	9,564
Kentucky	15,300	14,051	14,051	14,051
Louisiana	14,818	14,818	14,818	14,818
Maryland	1,499	1,266	1,266	1,348
Michigan	12,727	12,290	9,975	9,786
New Jersey	1,253	1,253	1,253	1,253
New York	3,416	3,416	3,421	3,403
Ohio	9,690	9,773	9,773	9,773
Pennsylvania	8,379	8,373	8,373	8,373
Virginia	4,516	3,897	3,980	3,663
West Virginia	13,334	12,884	12,884	12,884

Table 2 to Paragraph (a)—new unit set-asides by year (tons)

State	2021	2022	2023	2024 and thereafter
Illinois	265	265	248	244
Indiana	262	254	249	190
Kentucky	309	283	283	283
Louisiana	430	430	430	430
Maryland	135	115	115	122
Michigan	500	482	388	382
New Jersey	27	27	27	27
New York	168	168	168	167
Ohio	291	290	290	290
Pennsylvania	335	339	339	339
Virginia	185	161	166	150
West Virginia	266	261	261	261

Table 3 to Paragraph (a)—Indian country new unit set-asides by year (tons)

State	2021	2022	2023	2024 and thereafter
Illinois	-	-	-	-
Indiana	-	-	-	-
Kentucky	-	-	-	-

Louisiana	15	15	15	15
Maryland	-	-	-	-
Michigan	13	12	10	10
New Jersey	-	-	-	-
New York	3	3	3	3
Ohio	-	-	-	-
Pennsylvania	-	-	-	-
Virginia	-	-	-	-
West Virginia	-	-	-	-

(b) The States' variability limits for the State NO_X Ozone Season Group 3 trading budgets for the control periods in 2021, 2022, 2023, and 2024 and thereafter are as indicated in Table 4 to this paragraph:

Table 4 to Paragraph (b)—variability limits by year (tons)

State	2021	2022	2023	2024 and thereafter
Illinois	1,911	1,911	1,718	1,692
Indiana	2,741	2,642	2,636	2,008
Kentucky	3,213	2,951	2,951	2,951
Louisiana	3,112	3,112	3,112	3,112
Maryland	315	266	266	283
Michigan	2,673	2,581	2,095	2,055
New Jersey	263	263	263	263
New York	717	717	718	715
Ohio	2,035	2,052	2,052	2,052
Pennsylvania	1,760	1,758	1,758	1,758
Virginia	948	818	836	769
West Virginia	2,800	2,706	2,706	2,706

(c) Each State NO_X Ozone Season Group 3 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.

(d) For the control period in 2021 only, the Administrator will determine for each State a supplemental amount of CSAPR NO_X Ozone Season Group 3 allowances computed as the product (rounded to the nearest allowance) of the remainder of the State NO_X Ozone Season Group 2 trading budget for the control period in 2020 under § 97.810(a) minus the State NO_X Ozone Season Group 3 trading budget for the control period in 2021 under paragraph (a) of this section multiplied by a fraction whose numerator is the number of days from May 1, 2021 through [**INSERT DATE 59 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**], inclusive, and whose denominator is 153.

§ 97.1011 Timing requirements for CSAPR NO_X Ozone Season Group 3 allowance allocations.

(a) *Existing units.* (1) CSAPR NO_X Ozone Season Group 3 allowances are allocated, for the control periods in 2021 and each year thereafter, as provided in a notice of data availability issued by the Administrator. Providing an allocation to a unit in such notice does not constitute a determination that the unit is a CSAPR NO_X Ozone Season Group 3 unit, and not providing an allocation to a unit in such notice does not constitute a determination that the unit is not a CSAPR NO_X Ozone Season Group 3 unit. For the control period in 2021, a unit's allocation under this paragraph will include the unit's share (if any) of the supplemental amount of CSAPR NO_X Ozone Season Group 3 allowances determined for the State in which the unit is located under § 97.1010(d).

(2) Notwithstanding paragraph (a)(1) of this section, if a unit provided an allocation in the notice of data availability issued under paragraph (a)(1) of this section does not operate, starting after 2020, during the control period in two consecutive years, such unit will not be allocated the CSAPR NO_X Ozone Season Group 3 allowances provided in such notice for the unit for the control periods in the fifth year after the first such year and in each year after that fifth year. All CSAPR NO_X Ozone Season Group 3 allowances that would otherwise have been allocated to such unit will be allocated to the new unit set-aside for the State where such unit is located and

for the respective years involved. If such unit resumes operation, the Administrator will allocate CSAPR NO_X Ozone Season Group 3 allowances to the unit in accordance with paragraph (b) of this section.

(b) *New units*—(1) *New unit set-asides.* (i) By March 1, 2022 and March 1 of each year thereafter, the Administrator will calculate the CSAPR NO_X Ozone Season Group 3 allowance allocation to each CSAPR NO_X Ozone Season Group 3 unit in a State, in accordance with § 97.1012(a)(2) through (7), (10), and (12) and §§ 97.1006(b)(2) and 97.1030 through 97.1035, for the control period in the year before the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) For each notice of data availability required in paragraph (b)(1)(i) of this section, the Administrator will provide an opportunity for submission of objections to the calculations referenced in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(1)(i) of this section and shall be limited to addressing whether the calculations (including the identification of the CSAPR NO_X Ozone Season Group 3 units) are in accordance with the provisions referenced in paragraph (b)(1)(i) of this section.

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(1)(i) of this section. By May 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(1)(i) of this section, the Administrator will promulgate a notice of data availability of the results of the calculations incorporating any adjustments that the Administrator determines to be necessary and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(1)(ii)(A) of this section.

(iii) [Reserved]

(iv) [Reserved]

(v) To the extent any CSAPR NO_X Ozone Season Group 3 allowances are added to the new unit set-aside after promulgation of each notice of data availability required in paragraph (b)(1)(ii) of this section, the Administrator will promulgate additional notices of data availability, as deemed appropriate, of the allocation of such CSAPR NO_X Ozone Season Group 3 allowances in accordance with § 97.1012(a)(10).

(2) *Indian country new unit set-asides.* (i) By March 1, 2022 and March 1 of each year thereafter, the Administrator will calculate the CSAPR NO_X Ozone Season Group 3 allowance allocation to each CSAPR NO_X Ozone Season Group 3 unit in Indian country within the borders of a State, in accordance with § 97.1012(b)(2) through (7), (10), and (12) and §§ 97.1006(b)(2) and 97.1030 through 97.1035, for the control period in the year before the year of the applicable calculation deadline under this paragraph and will promulgate a notice of data availability of the results of the calculations.

(ii) For each notice of data availability required in paragraph (b)(2)(i) of this section, the Administrator will provide an opportunity for submission of objections to the calculations referenced in such notice.

(A) Objections shall be submitted by the deadline specified in each notice of data availability required in paragraph (b)(2)(i) of this section and shall be limited to addressing whether the calculations (including the identification of the CSAPR NO_X Ozone Season Group 3 units) are in accordance with the provisions referenced in paragraph (b)(2)(i) of this section.

(B) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(2)(i) of this section. By May 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(i) of this section, the Administrator will promulgate a notice of data availability of the results of the calculations incorporating any adjustments that the Administrator determines to be necessary and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(ii)(A) of this section.

(iii) [Reserved]

(iv) [Reserved]

(v) To the extent any CSAPR NO_X Ozone Season Group 3 allowances are added to the Indian country new unit set-aside after promulgation of each notice of data availability required in paragraph (b)(2)(ii) of this section, the Administrator will promulgate additional notices of data availability, as deemed appropriate, of the allocation of such CSAPR NO_X Ozone Season Group 3 allowances in accordance with § 97.1012(b)(10).

(c) *Units incorrectly allocated CSAPR NO_X Ozone Season Group 3 allowances.* (1) For each control period in 2021 and thereafter, if the Administrator determines that CSAPR NO_X Ozone Season Group 3 allowances were allocated under paragraph (a) of this section, or under a provision of a SIP revision approved under § 52.38(b)(10), (11), or (12) of this chapter, where such control period and the recipient are covered by the provisions of paragraph (c)(1)(i) of this section or were allocated under § 97.1012(a)(2) through (7) and (12) and (b)(2) through (7) and (12), or under a provision of a SIP revision approved under § 52.38(b)(11) or (12) of this chapter, where such control period and the recipient are covered by the provisions of paragraph (c)(1)(ii) of this section, then the Administrator will notify the designated representative of the recipient and will act in accordance with the procedures set forth in paragraphs (c)(2) through (5) of this section:

(i)(A) The recipient is not actually a CSAPR NO_X Ozone Season Group 3 unit under § 97.1004 as of May 1, 2021 and is allocated CSAPR NO_X Ozone Season Group 3 allowances for such control period or, in the case of an allocation under a provision of a SIP revision approved under § 52.38(b)(10), (11), or (12) of this chapter, the recipient is not actually a CSAPR NO_X Ozone Season Group 3 unit as of May 1, 2021 and is allocated CSAPR NO_X Ozone Season Group 3 allowances for such control period that the SIP revision provides should be allocated only to recipients that are CSAPR NO_X Ozone Season Group 3 units as of May 1, 2021; or

(B) The recipient is not located as of May 1 of the control period in the State from whose NO_X Ozone Season Group 3 trading budget the CSAPR NO_X Ozone Season Group 3 allowances allocated under paragraph (a) of this section, or under a provision of a SIP revision approved under § 52.38(b)(10), (11), or (12) of this chapter, were allocated for such control period.

(ii) The recipient is not actually a CSAPR NO_X Ozone Season Group 3 unit under § 97.1004 as of May 1 of such control period and is allocated CSAPR NO_X Ozone Season Group 3 allowances for such control period or, in the case of an allocation under a provision of a SIP revision approved under § 52.38(b)(11) or (12) of this chapter, the recipient is not actually a CSAPR NO_X Ozone Season Group 3 unit as of May 1 of such control period and is allocated CSAPR NO_X Ozone Season Group 3 allowances for such control period that the SIP revision provides should be allocated only to recipients that are CSAPR NO_X Ozone Season Group 3 units as of May 1 of such control period.

(2) Except as provided in paragraph (c)(3) or (4) of this section, the Administrator will not record such CSAPR NO_X Ozone Season Group 3 allowances under § 97.1021.

(3) If the Administrator already recorded such CSAPR NO_X Ozone Season Group 3 allowances under § 97.1021 and if the Administrator makes the determination under paragraph (c)(1) of this section before making deductions for the source that includes such recipient under § 97.1024(b) for such control period, then the Administrator will deduct from the account in which such CSAPR NO_X Ozone Season Group 3 allowances were recorded an amount of CSAPR NO_X Ozone Season Group 3 allowances allocated for the same or a prior control period equal to the amount of such already recorded CSAPR NO_X Ozone Season Group 3 allowances. The authorized account representative shall ensure that there are sufficient CSAPR NO_X Ozone Season Group 3 allowances in such account for completion of the deduction.

(4) If the Administrator already recorded such CSAPR NO_X Ozone Season Group 3 allowances under § 97.1021 and if the Administrator makes the determination under paragraph (c)(1) of this section after making deductions for the source that includes such recipient under

§ 97.1024(b) for such control period, then the Administrator will not make any deduction to take account of such already recorded CSAPR NO_X Ozone Season Group 3 allowances.

(5)(i) With regard to the CSAPR NO_X Ozone Season Group 3 allowances that are not recorded, or that are deducted as an incorrect allocation, in accordance with paragraphs (c)(2) and (3) of this section for a recipient under paragraph (c)(1)(i) of this section, the Administrator will:

(A) Transfer such CSAPR NO_X Ozone Season Group 3 allowances to the new unit set-aside for such control period (or a subsequent control period) for the State from whose NO_X Ozone Season Group 3 trading budget the CSAPR NO_X Ozone Season Group 3 allowances were allocated; or

(B) If the State has a SIP revision approved under § 52.38(b)(11) or (12) of this chapter covering such control period, include such CSAPR NO_X Ozone Season Group 3 allowances in the portion of the State NO_X Ozone Season Group 3 trading budget that may be allocated for such control period (or a subsequent control period) in accordance with such SIP revision.

(ii) With regard to the CSAPR NO_X Ozone Season Group 3 allowances that were not allocated from the Indian country new unit set-aside for such control period and that are not recorded, or that are deducted as an incorrect allocation, in accordance with paragraphs (c)(2) and (3) of this section for a recipient under paragraph (c)(1)(ii) of this section, the Administrator will:

(A) Transfer such CSAPR NO_X Ozone Season Group 3 allowances to the new unit set-aside for such control period (or a subsequent control period); or

(B) If the State has a SIP revision approved under § 52.38(b)(11) or (12) of this chapter covering such control period, include such CSAPR NO_X Ozone Season Group 3 allowances in the portion of the State NO_X Ozone Season Group 3 trading budget that may be allocated for such control period (or a subsequent control period) in accordance with such SIP revision.

(iii) With regard to the CSAPR NO_X Ozone Season Group 3 allowances that were allocated from the Indian country new unit set-aside for such control period and that are not recorded, or that are deducted as an incorrect allocation, in accordance with paragraphs (c)(2) and (3) of this section for a recipient under paragraph (c)(1)(ii) of this section, the Administrator will transfer such CSAPR NO_X Ozone Season Group 3 allowances to the Indian country new unit set-aside for such control period (or a subsequent control period).

§ 97.1012 CSAPR NO_X Ozone Season Group 3 allowance allocations to new units.

(a) *Allocations from new unit set-asides*. For each control period in 2021 and thereafter and for the CSAPR NO_X Ozone Season Group 3 units in each State, the Administrator will allocate CSAPR NO_X Ozone Season Group 3 allowances to the CSAPR NO_X Ozone Season Group 3 units as follows:

(1) The CSAPR NO_X Ozone Season Group 3 allowances will be allocated to the following CSAPR NO_X Ozone Season Group 3 units, except as provided in paragraph (a)(10) of this section:

(i) CSAPR NO_X Ozone Season Group 3 units that are not allocated an amount of CSAPR NO_X Ozone Season Group 3 allowances in the notice of data availability issued under § 97.1011(a)(1) and that have deadlines for certification of monitoring systems under § 97.1030(b) not later than September 30 of the year of the control period;

(ii) CSAPR NO_X Ozone Season Group 3 units whose allocation of an amount of CSAPR NO_X Ozone Season Group 3 allowances for such control period in the notice of data availability issued under § 97.1011(a)(1) is covered by § 97.1011(c)(2) or (3);

(iii) CSAPR NO_X Ozone Season Group 3 units that are allocated an amount of CSAPR NO_X Ozone Season Group 3 allowances for such control period in the notice of data availability issued under § 97.1011(a)(1), which allocation is terminated for such control period pursuant to § 97.1011(a)(2), and that operate during such control period; or

(iv) [Reserved]

(2) The Administrator will establish a separate new unit set-aside for the State for each such control period. Each such new unit set-aside will be allocated CSAPR NO_X Ozone Season Group 3 allowances in an amount equal to the applicable amount of tons of NO_X emissions as set forth in § 97.1010(a) and will be allocated additional CSAPR NO_X Ozone Season Group 3 allowances (if any) in accordance with § 97.1011(a)(2) and (c)(5) and paragraph (b)(10) of this section.

(3) The Administrator will determine, for each CSAPR NO_X Ozone Season Group 3 unit described in paragraph (a)(1) of this section, an allocation of CSAPR NO_X Ozone Season Group 3 allowances for the latest of the following control periods and for each subsequent control period:

(i) The control period in 2021;

(ii) The control period containing the deadline for certification of the CSAPR NO_X Ozone Season Group 3 unit's monitoring systems under § 97.1030(b);

(iii) For a unit described in paragraph (a)(1)(ii) of this section, the first control period in which the CSAPR NO_X Ozone Season Group 3 unit operates in the State after operating in another jurisdiction and for which the unit is not already allocated one or more CSAPR NO_X Ozone Season Group 3 allowances; and

(iv) For a unit described in paragraph (a)(1)(iii) of this section, the control period in which the unit resumes operation.

(4)(i) The allocation to each CSAPR NO_X Ozone Season Group 3 unit described in paragraphs (a)(1)(i) through (iii) of this section and for each control period described in paragraph (a)(3) of this section will be an amount equal to the unit's total tons of NO_X emissions during the control period.

(ii) The Administrator will adjust the allocation amount in paragraph (a)(4)(i) of this section in accordance with paragraphs (a)(5) through (7) and (12) of this section.

(5) The Administrator will calculate the sum of the allocation amounts of CSAPR NO_X Ozone Season Group 3 allowances determined for all such CSAPR NO_X Ozone Season Group 3 units under paragraph (a)(4)(i) of this section in the State for such control period.

(6) If the amount of CSAPR NO_X Ozone Season Group 3 allowances in the new unit set-aside for the State for such control period is greater than or equal to the sum under paragraph (a)(5) of this section, then the Administrator will allocate the amount of CSAPR NO_X Ozone Season Group 3 allowances determined for each such CSAPR NO_X Ozone Season Group 3 unit under paragraph (a)(4)(i) of this section.

(7) If the amount of CSAPR NO_X Ozone Season Group 3 allowances in the new unit set-aside for the State for such control period is less than the sum under paragraph (a)(5) of this section, then the Administrator will allocate to each such CSAPR NO_X Ozone Season Group 3 unit the amount of the CSAPR NO_X Ozone Season Group 3 allowances determined under paragraph (a)(4)(i) of this section for the unit, multiplied by the amount of CSAPR NO_X Ozone Season Group 3 allowances in the new unit set-aside for such control period, divided by the sum under paragraph (a)(5) of this section, and rounded to the nearest allowance.

(8) [Reserved]

(9) [Reserved]

(10) If, after completion of the procedures under paragraphs (a)(2) through (7) and (12) of this section for a control period, any unallocated CSAPR NO_X Ozone Season Group 3 allowances remain in the new unit set-aside for the State for such control period, the Administrator will allocate to each CSAPR NO_X Ozone Season Group 3 unit that is in the State, is allocated an amount of CSAPR NO_X Ozone Season Group 3 allowances in the notice of data availability issued under § 97.1011(a)(1), and continues to be allocated CSAPR NO_X Ozone Season Group 3 allowances for such control period in accordance with § 97.1011(a)(2), an amount of CSAPR NO_X Ozone Season Group 3 allowances equal to the following: The total amount of such remaining unallocated CSAPR NO_X Ozone Season Group 3 allowances in such

new unit set-aside, multiplied by the unit's allocation under § 97.1011(a) for such control period, divided by the remainder of the amount of tons in the applicable State NO_X Ozone Season Group 3 trading budget minus the sum of the amounts of tons in such new unit set-aside and the Indian country new unit set-aside for the State for such control period, and rounded to the nearest allowance.

(11) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.1011(b)(1)(i), (ii), and (v), of the amount of CSAPR NO_X Ozone Season Group 3 allowances allocated under paragraphs (a)(2) through (7), (10), and (12) of this section for such control period to each CSAPR NO_X Ozone Season Group 3 unit eligible for such allocation.

(12) Notwithstanding the requirements of paragraphs (a)(2) through (11) of this section, if the calculations of allocations from a new unit set-aside for a control period in a given year under paragraph (a)(7) of this section or paragraphs (a)(6) and (10) of this section would otherwise result in total allocations from such new unit set-aside unequal to the total amount of such new unit set-aside, then the Administrator will adjust the results of such calculations as follows. The Administrator will list the CSAPR NO_X Ozone Season Group 3 units in descending order based on such units' allocation amounts under paragraph (a)(7) or (10) of this section, as applicable, and, in cases of equal allocation amounts, in alphabetical order of the relevant sources' names and numerical order of the relevant units' identification numbers, and will adjust each unit's allocation amount under such paragraph upward or downward by one CSAPR NO_X Ozone Season Group 3 allowance (but not below zero) in the order in which the units are listed, and will repeat this adjustment process as necessary, until the total allocations from such new unit set-aside equal the total amount of such new unit set-aside.

(b) *Allocations from Indian country new unit set-asides*. For each control period in 2021 and thereafter and for the CSAPR NO_X Ozone Season Group 3 units in Indian country within the

borders of each State, the Administrator will allocate CSAPR NO_X Ozone Season Group 3 allowances to the CSAPR NO_X Ozone Season Group 3 units as follows:

(1) The CSAPR NO_X Ozone Season Group 3 allowances will be allocated to the following CSAPR NO_X Ozone Season Group 3 units, except as provided in paragraph (b)(10) of this section:

(i) CSAPR NO_X Ozone Season Group 3 units that are not allocated an amount of CSAPR NO_X Ozone Season Group 3 allowances in the notice of data availability issued under § 97.1011(a)(1) and that have deadlines for certification of monitoring systems under § 97.1030(b) not later than September 30 of the year of the control period; or

(ii) [Reserved]

(2) The Administrator will establish a separate Indian country new unit set-aside for the State for each such control period. Each such Indian country new unit set-aside will be allocated CSAPR NO_X Ozone Season Group 3 allowances in an amount equal to the applicable amount of tons of NO_X emissions as set forth in § 97.1010(a) and will be allocated additional CSAPR NO_X Ozone Season Group 3 allowances (if any) in accordance with § 97.1011(c)(5).

(3) The Administrator will determine, for each CSAPR NO_X Ozone Season Group 3 unit described in paragraph (b)(1) of this section, an allocation of CSAPR NO_X Ozone Season Group 3 allowances for the later of the following control periods and for each subsequent control period:

(i) The control period in 2021; and

(ii) The control period containing the deadline for certification of the CSAPR NO_X Ozone Season Group 3 unit's monitoring systems under § 97.1030(b).

(4)(i) The allocation to each CSAPR NO_X Ozone Season Group 3 unit described in paragraph (b)(1)(i) of this section and for each control period described in paragraph (b)(3) of this section will be an amount equal to the unit's total tons of NO_X emissions during the control period.

(ii) The Administrator will adjust the allocation amount in paragraph (b)(4)(i) of this section in accordance with paragraphs (b)(5) through (7) and (12) of this section.

(5) The Administrator will calculate the sum of the allocation amounts of CSAPR NO_X Ozone Season Group 3 allowances determined for all such CSAPR NO_X Ozone Season Group 3 units under paragraph (b)(4)(i) of this section in Indian country within the borders of the State for such control period.

(6) If the amount of CSAPR NO_X Ozone Season Group 3 allowances in the Indian country new unit set-aside for the State for such control period is greater than or equal to the sum under paragraph (b)(5) of this section, then the Administrator will allocate the amount of CSAPR NO_X Ozone Season Group 3 allowances determined for each such CSAPR NO_X Ozone Season Group 3 unit under paragraph (b)(4)(i) of this section.

(7) If the amount of CSAPR NO_X Ozone Season Group 3 allowances in the Indian country new unit set-aside for the State for such control period is less than the sum under paragraph (b)(5) of this section, then the Administrator will allocate to each such CSAPR NO_X Ozone Season Group 3 unit the amount of the CSAPR NO_X Ozone Season Group 3 allowances determined under paragraph (b)(4)(i) of this section for the unit, multiplied by the amount of CSAPR NO_X Ozone Season Group 3 allowances in the Indian country new unit set-aside for such control period, divided by the sum under paragraph (b)(5) of this section, and rounded to the nearest allowance.

(8) [Reserved]

(9) [Reserved]

(10) If, after completion of the procedures under paragraphs (b)(2) through (7) and (12) of this section for a control period, any unallocated CSAPR NO_X Ozone Season Group 3 allowances remain in the Indian country new unit set-aside for the State for such control period, the Administrator will:

(i) Transfer such unallocated CSAPR NO_X Ozone Season Group 3 allowances to the new unit set-aside for the State for such control period; or

(ii) If the State has a SIP revision approved under § 52.38(b)(11) or (12) of this chapter covering such control period, include such unallocated CSAPR NO_X Ozone Season Group 3 allowances in the portion of the State NO_X Ozone Season Group 3 trading budget that may be allocated for such control period in accordance with such SIP revision.

(11) The Administrator will notify the public, through the promulgation of the notices of data availability described in § 97.1011(b)(2)(i), (ii), and (v), of the amount of CSAPR NO_X Ozone Season Group 3 allowances allocated under paragraphs (b)(2) through (7), (10), and (12) of this section for such control period to each CSAPR NO_X Ozone Season Group 3 unit eligible for such allocation.

(12) Notwithstanding the requirements of paragraphs (b)(2) through (11) of this section, if the calculations of allocations from an Indian country new unit set-aside for a control period in a given year under paragraph (b)(7) of this section would otherwise result in total allocations from such Indian country new unit set-aside unequal to the total amount of such Indian country new unit set-aside, then the Administrator will adjust the results of such calculations as follows. The Administrator will list the CSAPR NO_X Ozone Season Group 3 units in descending order based on such units' allocation amounts under paragraph (b)(7) of this section and, in cases of equal allocation amounts, in alphabetical order of the relevant sources' names and numerical order of the relevant units' identification numbers, and will adjust each unit's allocation amount under such paragraph upward or downward by one CSAPR NO_X Ozone Season Group 3 allowance (but not below zero) in the order in which the units are listed, and will repeat this adjustment process as necessary, until the total allocations from such Indian country new unit set-aside equal the total amount of such Indian country new unit set-aside.

§ 97.1013 Authorization of designated representative and alternate designated representative.

(a) Except as provided under § 97.1015, each CSAPR NO_X Ozone Season Group 3 source, including all CSAPR NO_X Ozone Season Group 3 units at the source, shall have one and only one designated representative, with regard to all matters under the CSAPR NO_X Ozone Season Group 3 Trading Program.

(1) The designated representative shall be selected by an agreement binding on the owners and operators of the source and all CSAPR NO_X Ozone Season Group 3 units at the source and shall act in accordance with the certification statement in § 97.1016(a)(4)(iii).

(2) Upon and after receipt by the Administrator of a complete certificate of representation under § 97.1016:

(i) The designated representative shall be authorized and shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the source and each CSAPR NO_X Ozone Season Group 3 unit at the source in all matters pertaining to the CSAPR NO_X Ozone Season Group 3 Trading Program, notwithstanding any agreement between the designated representative and such owners and operators; and

(ii) The owners and operators of the source and each CSAPR NO_X Ozone Season Group 3 unit at the source shall be bound by any decision or order issued to the designated representative by the Administrator regarding the source or any such unit.

(b) Except as provided under § 97.1015, each CSAPR NO_X Ozone Season Group 3 source may have one and only one alternate designated representative, who may act on behalf of the designated representative. The agreement by which the alternate designated representative is selected shall include a procedure for authorizing the alternate designated representative to act in lieu of the designated representative.

(1) The alternate designated representative shall be selected by an agreement binding on the owners and operators of the source and all CSAPR NO_X Ozone Season Group 3 units at the source and shall act in accordance with the certification statement in § 97.1016(a)(4)(iii).

(2) Upon and after receipt by the Administrator of a complete certificate of representation under § 97.1016:

(i) The alternate designated representative shall be authorized;

(ii) Any representation, action, inaction, or submission by the alternate designated representative shall be deemed to be a representation, action, inaction, or submission by the designated representative; and

(iii) The owners and operators of the source and each CSAPR NO_X Ozone Season Group 3 unit at the source shall be bound by any decision or order issued to the alternate designated representative by the Administrator regarding the source or any such unit.

(c) Except in this section, § 97.1002, and §§ 97.1014 through 97.1018, whenever the term "designated representative" (as distinguished from the term "common designated representative") is used in this subpart, the term shall be construed to include the designated representative or any alternate designated representative.

§ 97.1014 Responsibilities of designated representative and alternate designated representative.

(a) Except as provided under § 97.1018 concerning delegation of authority to make submissions, each submission under the CSAPR NO_X Ozone Season Group 3 Trading Program shall be made, signed, and certified by the designated representative or alternate designated representative for each CSAPR NO_X Ozone Season Group 3 source and CSAPR NO_X Ozone Season Group 3 unit for which the submission is made. Each such submission shall include the following certification statement by the designated representative or alternate designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have

personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(b) The Administrator will accept or act on a submission made for a CSAPR NO_X Ozone Season Group 3 source or a CSAPR NO_X Ozone Season Group 3 unit only if the submission has been made, signed, and certified in accordance with paragraph (a) of this section and § 97.1018.

§ 97.1015 Changing designated representative and alternate designated representative; changes in owners and operators; changes in units at the source.

(a) *Changing designated representative.* The designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under § 97.1016. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new designated representative and the owners and operators of the CSAPR NO_X Ozone Season Group 3 source and the CSAPR NO_X Ozone Season Group 3 units at the source.

(b) *Changing alternate designated representative.* The alternate designated representative may be changed at any time upon receipt by the Administrator of a superseding complete certificate of representation under § 97.1016. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate designated representative before the time and date when the Administrator receives the superseding certificate of representation shall be binding on the new alternate designated representative, the designated representative, and the owners and operators of the CSAPR NO_X Ozone Season Group 3 source and the CSAPR NO_X Ozone Season Group 3 units at the source.

(c) *Changes in owners and operators.* (1) In the event an owner or operator of a CSAPR NO_X Ozone Season Group 3 source or a CSAPR NO_X Ozone Season Group 3 unit at the source is not included in the list of owners and operators in the certificate of representation under § 97.1016, such owner or operator shall be deemed to be subject to and bound by the certificate of representation, the representations, actions, inactions, and submissions of the designated representative and any alternate designated representative of the source or unit, and the decisions and orders of the Administrator, as if the owner or operator were included in such list.

(2) Within 30 days after any change in the owners and operators of a CSAPR NO_X Ozone Season Group 3 source or a CSAPR NO_X Ozone Season Group 3 unit at the source, including the addition or removal of an owner or operator, the designated representative or any alternate designated representative shall submit a revision to the certificate of representation under § 97.1016 amending the list of owners and operators to reflect the change.

(d) *Changes in units at the source.* Within 30 days of any change in which units are located at a CSAPR NO_X Ozone Season Group 3 source (including the addition or removal of a unit), the designated representative or any alternate designated representative shall submit a certificate of representation under § 97.1016 amending the list of units to reflect the change.

(1) If the change is the addition of a unit that operated (other than for purposes of testing by the manufacturer before initial installation) before being located at the source, then the certificate of representation shall identify, in a format prescribed by the Administrator, the entity from whom the unit was purchased or otherwise obtained (including name, address, telephone number, and facsimile number (if any)), the date on which the unit was purchased or otherwise obtained, and the date on which the unit became located at the source.

(2) If the change is the removal of a unit, then the certificate of representation shall identify, in a format prescribed by the Administrator, the entity to which the unit was sold or that otherwise obtained the unit (including name, address, telephone number, and facsimile number

(if any)), the date on which the unit was sold or otherwise obtained, and the date on which the unit became no longer located at the source.

§ 97.1016 Certificate of representation.

(a) A complete certificate of representation for a designated representative or an alternate designated representative shall include the following elements in a format prescribed by the Administrator:

(1) Identification of the CSAPR NO_X Ozone Season Group 3 source, and each CSAPR NO_X Ozone Season Group 3 unit at the source, for which the certificate of representation is submitted, including source name, source category and NAICS code (or, in the absence of a NAICS code, an equivalent code), State, plant code, county, latitude and longitude, unit identification number and type, identification number and nameplate capacity (in MWe, rounded to the nearest tenth) of each generator served by each such unit, actual or projected date of commencement of commercial operation, and a statement of whether such source is located in Indian country. If a projected date of commencement of commercial operation is provided, the actual date of commencement of commercial operation shall be provided when such information becomes available;

(2) The name, address, email address (if any), telephone number, and facsimile transmission number (if any) of the designated representative and any alternate designated representative;

(3) A list of the owners and operators of the CSAPR NO_X Ozone Season Group 3 source and of each CSAPR NO_X Ozone Season Group 3 unit at the source;

(4) The following certification statements by the designated representative and any alternate designated representative—

(i) "I certify that I was selected as the designated representative or alternate designated representative, as applicable, by an agreement binding on the owners and operators of the source and each CSAPR NO_X Ozone Season Group 3 unit at the source.";

(ii) "I certify that I have all the necessary authority to carry out my duties and responsibilities under the CSAPR NO_X Ozone Season Group 3 Trading Program on behalf of the owners and operators of the source and of each CSAPR NO_X Ozone Season Group 3 unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the Administrator regarding the source or unit."; and

(iii) "Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a CSAPR NO_X Ozone Season Group 3 unit, or where a utility or industrial customer purchases power from a CSAPR NO_X Ozone Season Group 3 unit under a life-of-the-unit, firm power contractual arrangement, I certify that: I have given a written notice of my selection as the 'designated representative' or 'alternate designated representative', as applicable, and of the agreement by which I was selected to each owner and operator of the source and of each CSAPR NO_X Ozone Season Group 3 unit at the source; and CSAPR NO_X Ozone Season Group 3 allowances and proceeds of transactions involving CSAPR NO_X Ozone Season Group 3 allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of CSAPR NO_X Ozone Season Group 3 allowances by contract, CSAPR NO_X Ozone Season Group 3 allowances and proceeds of transactions involving CSAPR NO_X Ozone Season Group 3 allowances will be deemed to be held or distributed in accordance with the contract."; and

(5) The signature of the designated representative and any alternate designated representative and the dates signed.

(b) Unless otherwise required by the Administrator, documents of agreement referred to in the certificate of representation shall not be submitted to the Administrator. The Administrator shall not be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

(c) A certificate of representation under this section, § 97.516, or § 97.816 that complies with the provisions of paragraph (a) of this section except that it contains the phrase "TR NO_X Ozone Season" or the phrase "CSAPR NO_X Ozone Season Group 2" in place of the phrase "CSAPR NO_X Ozone Season Group 3" in the required certification statements will be considered a complete certificate of representation under this section, and the certification statements included in such certificate of representation will be interpreted for purposes of this subpart as if the phrase "CSAPR NO_X Ozone Season Group 3" appeared in place of the phrase "TR NO_X Ozone Season" or the phrase "CSAPR NO_X Ozone Season Group 2".

§ 97.1017 Objections concerning designated representative and alternate designated representative.

(a) Once a complete certificate of representation under § 97.1016 has been submitted and received, the Administrator will rely on the certificate of representation unless and until a superseding complete certificate of representation under § 97.1016 is received by the Administrator.

(b) Except as provided in paragraph (a) of this section, no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission, of a designated representative or alternate designated representative shall affect any representation, action, inaction, or submission of the designated representative or alternate designated representative or the finality of any decision or order by the Administrator under the CSAPR NO_X Ozone Season Group 3 Trading Program.

(c) The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of any designated representative or alternate designated representative, including private legal disputes concerning the proceeds of CSAPR NO_X Ozone Season Group 3 allowance transfers.

§ 97.1018 Delegation by designated representative and alternate designated representative.

(a) A designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(b) An alternate designated representative may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(c) In order to delegate authority to a natural person to make an electronic submission to the Administrator in accordance with paragraph (a) or (b) of this section, the designated representative or alternate designated representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:

(1) The name, address, email address, telephone number, and facsimile transmission number (if any) of such designated representative or alternate designated representative;

(2) The name, address, email address, telephone number, and facsimile transmission number (if any) of each such natural person (referred to in this section as an "agent");

(3) For each such natural person, a list of the type or types of electronic submissions under paragraph (a) or (b) of this section for which authority is delegated to him or her; and

(4) The following certification statements by such designated representative or alternate designated representative:

(i) "I agree that any electronic submission to the Administrator that is made by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am a designated representative or alternate designated representative, as appropriate, and before this notice of delegation is superseded by another

notice of delegation under 40 CFR 97.1018(d) shall be deemed to be an electronic submission by me."; and

(ii) "Until this notice of delegation is superseded by another notice of delegation under 40 CFR 97.1018(d), I agree to maintain an email account and to notify the Administrator immediately of any change in my email address unless all delegation of authority by me under 40 CFR 97.1018 is terminated."

(d) A notice of delegation submitted under paragraph (c) of this section shall be effective, with regard to the designated representative or alternate designated representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such designated representative or alternate designated representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

(e) Any electronic submission covered by the certification in paragraph (c)(4)(i) of this section and made in accordance with a notice of delegation effective under paragraph (d) of this section shall be deemed to be an electronic submission by the designated representative or alternate designated representative submitting such notice of delegation.

(f) A notice of delegation submitted under paragraph (c) of this section, § 97.518(c), or § 97.818(c) that complies with the provisions of paragraph (c) of this section except that it contains the terms "40 CFR 97.518(d)" and "40 CFR 97.518" or the terms "40 CFR 97.818(d)" and "40 CFR 97.818" in place of the terms "40 CFR 97.1018(d)" and "40 CFR 97.1018", respectively, in the required certification statements will be considered a valid notice of delegation submitted under paragraph (c) of this section, and the certification statements included in such notice of delegation will be interpreted for purposes of this subpart as if the terms "40 CFR 97.1018(d)" and "40 CFR 97.1018" appeared in place of the terms "40 CFR

97.518(d)" and "40 CFR 97.518" or the terms "40 CFR 97.818(d)" and "40 CFR 97.818", respectively.

§ 97.1019 [Reserved]

§ 97.1020 Establishment of compliance accounts, assurance accounts, and general accounts.

(a) *Compliance accounts.* Upon receipt of a complete certificate of representation under § 97.1016, the Administrator will establish a compliance account for the CSAPR NO_X Ozone Season Group 3 source for which the certificate of representation was submitted, unless the source already has a compliance account. The designated representative and any alternate designated representative of the source shall be the authorized account representative and the alternate authorized account representative respectively of the compliance account.

(b) *Assurance accounts.* The Administrator will establish assurance accounts for certain owners and operators and States in accordance with § 97.1025(b)(3).

(c) *General accounts*—(1) *Application for general account.* (i) Any person may apply to open a general account, for the purpose of holding and transferring CSAPR NO_X Ozone Season Group 3 allowances, by submitting to the Administrator a complete application for a general account. Such application shall designate one and only one authorized account representative and may designate one and only one alternate authorized account representative who may act on behalf of the authorized account representative.

(A) The authorized account representative and alternate authorized account representative shall be selected by an agreement binding on the persons who have an ownership interest with respect to CSAPR NO_X Ozone Season Group 3 allowances held in the general account.

(B) The agreement by which the alternate authorized account representative is selected shall include a procedure for authorizing the alternate authorized account representative to act in lieu of the authorized account representative.

(ii) A complete application for a general account shall include the following elements in a format prescribed by the Administrator:

(A) Name, mailing address, email address (if any), telephone number, and facsimile transmission number (if any) of the authorized account representative and any alternate authorized account representative;

(B) An identifying name for the general account;

(C) A list of all persons subject to a binding agreement for the authorized account representative and any alternate authorized account representative to represent their ownership interest with respect to the CSAPR NO_X Ozone Season Group 3 allowances held in the general account;

(D) The following certification statement by the authorized account representative and any alternate authorized account representative: "I certify that I was selected as the authorized account representative or the alternate authorized account representative, as applicable, by an agreement that is binding on all persons who have an ownership interest with respect to CSAPR NO_X Ozone Season Group 3 allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the CSAPR NO_X Ozone Season Group 3 Trading Program on behalf of such persons and that each such person shall be fully bound by my representations, actions, inactions, or submissions and by any decision or order issued to me by the Administrator regarding the general account."; and

(E) The signature of the authorized account representative and any alternate authorized account representative and the dates signed.

(iii) Unless otherwise required by the Administrator, documents of agreement referred to in the application for a general account shall not be submitted to the Administrator. The Administrator shall not be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

(iv) An application for a general account under paragraph (c)(1) of this section, § 97.520(c)(1), or § 97.820(c)(1) that complies with the provisions of paragraph (c)(1) of this section except that it contains the phrase "TR NO_X Ozone Season" or the phrase "CSAPR NO_X Ozone Season Group 2" in place of the phrase "CSAPR NO_X Ozone Season Group 3" in the required certification statement will be considered a complete application for a general account under paragraph (c)(1) of this section, and the certification statement included in such application for a general account will be interpreted for purposes of this subpart as if the phrase "CSAPR NO_X Ozone Season Group 3" appeared in place of the phrase "TR NO_X Ozone Season" or the phrase "CSAPR NO_X Ozone Season Group 2".

(2) *Authorization of authorized account representative and alternate authorized account representative.* (i) Upon receipt by the Administrator of a complete application for a general account under paragraph (c)(1) of this section, the Administrator will establish a general account for the person or persons for whom the application is submitted, and upon and after such receipt by the Administrator:

(A) The authorized account representative of the general account shall be authorized and shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each person who has an ownership interest with respect to CSAPR NO_X Ozone Season Group 3 allowances held in the general account in all matters pertaining to the CSAPR NO_X Ozone Season Group 3 Trading Program, notwithstanding any agreement between the authorized account representative and such person.

(B) Any alternate authorized account representative shall be authorized, and any representation, action, inaction, or submission by any alternate authorized account representative shall be deemed to be a representation, action, inaction, or submission by the authorized account representative.

(C) Each person who has an ownership interest with respect to CSAPR NO_X Ozone Season Group 3 allowances held in the general account shall be bound by any decision or order issued to

the authorized account representative or alternate authorized account representative by the Administrator regarding the general account.

(ii) Except as provided in paragraph (c)(5) of this section concerning delegation of authority to make submissions, each submission concerning the general account shall be made, signed, and certified by the authorized account representative or any alternate authorized account representative for the persons having an ownership interest with respect to CSAPR NO_X Ozone Season Group 3 allowances held in the general account. Each such submission shall include the following certification statement by the authorized account representative or any alternate authorized account representative: "I am authorized to make this submission on behalf of the persons having an ownership interest with respect to the CSAPR NO_X Ozone Season Group 3 allowances held in the general account. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(iii) Except in this section, whenever the term "authorized account representative" is used in this subpart, the term shall be construed to include the authorized account representative or any alternate authorized account representative.

(iv) A certification statement submitted in accordance with paragraph (c)(2)(ii) of this section that contains the phrase "TR NO_X Ozone Season" or the phrase "CSAPR NO_X Ozone Season Group 2" will be interpreted for purposes of this subpart as if the phrase "CSAPR NO_X Ozone Season Group 3" appeared in place of the phrase "TR NO_X Ozone Season" or the phrase "CSAPR NO_X Ozone Season Group 2".

(3) *Changing authorized account representative and alternate authorized account representative; changes in persons with ownership interest.* (i) The authorized account representative of a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under paragraph (c)(1) of this section. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new authorized account representative and the persons with an ownership interest with respect to the CSAPR NO_X Ozone Season Group 3 allowances in the general account.

(ii) The alternate authorized account representative of a general account may be changed at any time upon receipt by the Administrator of a superseding complete application for a general account under paragraph (c)(1) of this section. Notwithstanding any such change, all representations, actions, inactions, and submissions by the previous alternate authorized account representative before the time and date when the Administrator receives the superseding application for a general account shall be binding on the new alternate authorized account representative, the authorized account representative, and the persons with an ownership interest with respect to the CSAPR NO_X Ozone Season Group 3 allowances in the general account.

(iii)(A) In the event a person having an ownership interest with respect to CSAPR NO_X Ozone Season Group 3 allowances in the general account is not included in the list of such persons in the application for a general account, such person shall be deemed to be subject to and bound by the application for a general account, the representation, actions, inactions, and submissions of the authorized account representative and any alternate authorized account representative of the account, and the decisions and orders of the Administrator, as if the person were included in such list.

(B) Within 30 days after any change in the persons having an ownership interest with respect to CSAPR NO_X Ozone Season Group 3 allowances in the general account, including the addition

or removal of a person, the authorized account representative or any alternate authorized account representative shall submit a revision to the application for a general account amending the list of persons having an ownership interest with respect to the CSAPR NO_X Ozone Season Group 3 allowances in the general account to include the change.

(4) *Objections concerning authorized account representative and alternate authorized account representative.* (i) Once a complete application for a general account under paragraph (c)(1) of this section has been submitted and received, the Administrator will rely on the application unless and until a superseding complete application for a general account under paragraph (c)(1) of this section is received by the Administrator.

(ii) Except as provided in paragraph (c)(4)(i) of this section, no objection or other communication submitted to the Administrator concerning the authorization, or any representation, action, inaction, or submission of the authorized account representative or any alternate authorized account representative of a general account shall affect any representation, action, inaction, or submission of the authorized account representative or any alternate authorized account representative or the finality of any decision or order by the Administrator under the CSAPR NO_X Ozone Season Group 3 Trading Program.

(iii) The Administrator will not adjudicate any private legal dispute concerning the authorization or any representation, action, inaction, or submission of the authorized account representative or any alternate authorized account representative of a general account, including private legal disputes concerning the proceeds of CSAPR NO_X Ozone Season Group 3 allowance transfers.

(5) *Delegation by authorized account representative and alternate authorized account representative.* (i) An authorized account representative of a general account may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(ii) An alternate authorized account representative of a general account may delegate, to one or more natural persons, his or her authority to make an electronic submission to the Administrator provided for or required under this subpart.

(iii) In order to delegate authority to a natural person to make an electronic submission to the Administrator in accordance with paragraph (c)(5)(i) or (ii) of this section, the authorized account representative or alternate authorized account representative, as appropriate, must submit to the Administrator a notice of delegation, in a format prescribed by the Administrator, that includes the following elements:

(A) The name, address, email address, telephone number, and facsimile transmission number (if any) of such authorized account representative or alternate authorized account representative;

(B) The name, address, email address, telephone number, and facsimile transmission number (if any) of each such natural person (referred to in this section as an "agent");

(C) For each such natural person, a list of the type or types of electronic submissions under paragraph (c)(5)(i) or (ii) of this section for which authority is delegated to him or her;

(D) The following certification statement by such authorized account representative or alternate authorized account representative: "I agree that any electronic submission to the Administrator that is made by an agent identified in this notice of delegation and of a type listed for such agent in this notice of delegation and that is made when I am an authorized account representative or alternate authorized account representative, as appropriate, and before this notice of delegation is superseded by another notice of delegation under 40 CFR 97.1020(c)(5)(iv) shall be deemed to be an electronic submission by me."; and

(E) The following certification statement by such authorized account representative or alternate authorized account representative: "Until this notice of delegation is superseded by another notice of delegation under 40 CFR 97.1020(c)(5)(iv), I agree to maintain an email account and to notify the Administrator immediately of any change in my email address unless all delegation of authority by me under 40 CFR 97.1020(c)(5) is terminated."

(iv) A notice of delegation submitted under paragraph (c)(5)(iii) of this section shall be effective, with regard to the authorized account representative or alternate authorized account representative identified in such notice, upon receipt of such notice by the Administrator and until receipt by the Administrator of a superseding notice of delegation submitted by such authorized account representative or alternate authorized account representative, as appropriate. The superseding notice of delegation may replace any previously identified agent, add a new agent, or eliminate entirely any delegation of authority.

(v) Any electronic submission covered by the certification in paragraph (c)(5)(iii)(D) of this section and made in accordance with a notice of delegation effective under paragraph (c)(5)(iv) of this section shall be deemed to be an electronic submission by the authorized account representative or alternate authorized account representative submitting such notice of delegation.

(vi) A notice of delegation submitted under paragraph (c)(5)(iii) of this section, § 97.520(c)(5)(iii), or § 97.820(c)(5)(iii) that complies with the provisions of paragraph (c)(5)(iii) of this section except that it contains the terms "40 CFR 97.520(c)(5)(iv)" and "40 CFR 97.520(c)(5)" or the terms "40 CFR 97.820(c)(5)(iv)" and "40 CFR 97.820(c)(5)" in place of the terms "40 CFR 97.1020(c)(5)(iv)" and "40 CFR 97.1020(c)(5)", respectively, in the required certification statements will be considered a valid notice of delegation submitted under paragraph (c)(5)(iii) of this section, and the certification statements included in such notice of delegation will be interpreted for purposes of this subpart as if the terms "40 CFR 97.1020(c)(5)(iv)" and "40 CFR 97.1020(c)(5)" appeared in place of the terms "40 CFR 97.520(c)(5)(iv)" and "40 CFR 97.520(c)(5)" or the terms "40 CFR 97.820(c)(5)(iv)" and "40 CFR 97.820(c)(5)", respectively.

(6) *Closing a general account.* (i) The authorized account representative or alternate authorized account representative of a general account may submit to the Administrator a request to close the account. Such request shall include a correctly submitted CSAPR NO_X Ozone

Season Group 3 allowance transfer under § 97.1022 for any CSAPR NO_X Ozone Season Group 3 allowances in the account to one or more other Allowance Management System accounts.

(ii) If a general account has no CSAPR NO_X Ozone Season Group 3 allowance transfers to or from the account for a 12-month period or longer and does not contain any CSAPR NO_X Ozone Season Group 3 allowances, the Administrator may notify the authorized account representative for the account that the account will be closed after 30 days after the notice is sent. The account will be closed after the 30-day period unless, before the end of the 30-day period, the Administrator receives a correctly submitted CSAPR NO_X Ozone Season Group 3 allowance transfer under § 97.1022 to the account or a statement submitted by the authorized account representative or alternate authorized account representative demonstrating to the satisfaction of the Administrator good cause as to why the account should not be closed.

(d) *Account identification.* The Administrator will assign a unique identifying number to each account established under paragraph (a), (b), or (c) of this section.

(e) *Responsibilities of authorized account representative and alternate authorized account representative.* After the establishment of a compliance account or general account, the Administrator will accept or act on a submission pertaining to the account, including, but not limited to, submissions concerning the deduction or transfer of CSAPR NO_X Ozone Season Group 3 allowances in the account, only if the submission has been made, signed, and certified in accordance with §§ 97.1014(a) and 97.1018 or paragraphs (c)(2)(ii) and (c)(5) of this section.

§ 97.1021 Recordation of CSAPR NO_X Ozone Season Group 3 allowance allocations and auction results.

(a) By [**INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**], the Administrator will record in each CSAPR NO_X Ozone Season Group 3 source's compliance account the CSAPR NO_X Ozone Season Group 3 allowances allocated to the CSAPR NO_X Ozone Season Group 3 units at the source in accordance with § 97.1011(a) for the control period in 2021.

(b) By [**INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**], the Administrator will record in each CSAPR NO_X Ozone Season Group 3 source's compliance account the CSAPR NO_X Ozone Season Group 3 allowances allocated to the CSAPR NO_X Ozone Season Group 3 units at the source in accordance with § 97.1011(a) for the control period in 2022, unless the State in which the source is located notifies the Administrator in writing by [**INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**] of the State's intent to submit to the Administrator a complete SIP revision by September 1, 2021 meeting the requirements of § 52.38(b)(10)(i) through (iv) of this chapter.

(1) If, by September 1, 2021 the State does not submit to the Administrator such complete SIP revision, the Administrator will record by September 15, 2021 in each CSAPR NO_X Ozone Season Group 3 source's compliance account the CSAPR NO_X Ozone Season Group 3 allowances allocated to the CSAPR NO_X Ozone Season Group 3 units at the source in accordance with § 97.1011(a) for the control period in 2022.

(2) If the State submits to the Administrator by September 1, 2021 and the Administrator approves by March 1, 2022 such complete SIP revision, the Administrator will record by March 1, 2022 in each CSAPR NO_X Ozone Season Group 3 source's compliance account the CSAPR NO_X Ozone Season Group 3 allowances allocated to the CSAPR NO_X Ozone Season Group 3 units at the source as provided in such approved, complete SIP revision for the control period in 2022.

(3) If the State submits to the Administrator by September 1, 2021 and the Administrator does not approve by March 1, 2022 such complete SIP revision, the Administrator will record by March 1, 2022 in each CSAPR NO_X Ozone Season Group 3 source's compliance account the CSAPR NO_X Ozone Season Group 3 allowances allocated to the CSAPR NO_X Ozone Season Group 3 units at the source in accordance with § 97.1011(a) for the control period in 2022.

(c) By July 1, 2022, the Administrator will record in each CSAPR NO_X Ozone Season Group 3 source's compliance account the CSAPR NO_X Ozone Season Group 3 allowances allocated to the CSAPR NO_X Ozone Season Group 3 units at the source, or in each appropriate Allowance Management System account the CSAPR NO_X Ozone Season Group 3 allowances auctioned to CSAPR NO_X Ozone Season Group 3 units, in accordance with § 97.1011(a), or with a SIP revision approved under § 52.38(b)(11) or (12) of this chapter, for the control periods in 2023 and 2024.

(d) By July 1, 2023, the Administrator will record in each CSAPR NO_X Ozone Season Group 3 source's compliance account the CSAPR NO_X Ozone Season Group 3 allowances allocated to the CSAPR NO_X Ozone Season Group 3 units at the source, or in each appropriate Allowance Management System account the CSAPR NO_X Ozone Season Group 3 allowances auctioned to CSAPR NO_X Ozone Season Group 3 units, in accordance with § 97.1011(a), or with a SIP revision approved under § 52.38(b)(11) or (12) of this chapter, for the control periods in 2025 and 2026.

(e) [Reserved]

(f) By July 1, 2024 and July 1 of each year thereafter, the Administrator will record in each CSAPR NO_X Ozone Season Group 3 source's compliance account the CSAPR NO_X Ozone Season Group 3 allowances allocated to the CSAPR NO_X Ozone Season Group 3 units at the source, or in each appropriate Allowance Management System account the CSAPR NO_X Ozone Season Group 3 allowances auctioned to CSAPR NO_X Ozone Season Group 3 units, in accordance with § 97.1011(a), or with a SIP revision approved under § 52.38(b)(11) or (12) of this chapter, for the control period in the third year after the year of the applicable recordation deadline under this paragraph.

(g) By May 1, 2022 and May 1 of each year thereafter, the Administrator will record in each CSAPR NO_X Ozone Season Group 3 source's compliance account the CSAPR NO_X Ozone Season Group 3 allowances allocated to the CSAPR NO_X Ozone Season Group 3 units at the

source, or in each appropriate Allowance Management System account the CSAPR NO_X Ozone Season Group 3 allowances auctioned to CSAPR NO_X Ozone Season Group 3 units, in accordance with § 97.1012(a), or with a SIP revision approved under § 52.38(b)(11) or (12) of this chapter, for the control period in the year before the year of the applicable recordation deadline under this paragraph.

(h) By May 1, 2022 and May 1 of each year thereafter, the Administrator will record in each CSAPR NO_X Ozone Season Group 3 source's compliance account the CSAPR NO_X Ozone Season Group 3 allowances allocated to the CSAPR NO_X Ozone Season Group 3 units at the source in accordance with § 97.1012(b) for the control period in the year before the year of the applicable recordation deadline under this paragraph.

(i) [Reserved]

(j) [Reserved]

(k) By the date 15 days after the date on which any allocation or auction results, other than an allocation or auction results described in paragraphs (a) through (h) of this section, of CSAPR NO_X Ozone Season Group 3 allowances to a recipient is made by or are submitted to the Administrator in accordance with § 97.1011 or § 97.1012 or with a SIP revision approved under § 52.38(b)(11) or (12) of this chapter, the Administrator will record such allocation or auction results in the appropriate Allowance Management System account.

(l) When recording the allocation or auction of CSAPR NO_X Ozone Season Group 3 allowances to a CSAPR NO_X Ozone Season Group 3 unit or other entity in an Allowance Management System account, the Administrator will assign each CSAPR NO_X Ozone Season Group 3 allowance a unique identification number that will include digits identifying the year of the control period for which the CSAPR NO_X Ozone Season Group 3 allowance is allocated or auctioned.

(m) Notwithstanding any other provision of this subpart, if, as of the otherwise applicable deadline for recording any CSAPR NO_X Ozone Season Group 3 allowances in any CSAPR NO_X

Ozone Season Group 3 source's compliance account under any other provision of this section, the Administrator has not completed all deductions of CSAPR NO_X Ozone Season Group 2 allowances required for the source under § 97.811(d), such otherwise applicable deadline shall not apply, and the Administrator instead will record such CSAPR NO_X Ozone Season Group 3 allowances in the source's compliance account as expeditiously as practicable after the Administrator has completed all deductions of CSAPR NO_X Ozone Season Group 2 allowances required for the source under § 97.811(d).

§ 97.1022 Submission of CSAPR NO_X Ozone Season Group 3 allowance transfers.

(a) An authorized account representative seeking recordation of a CSAPR NO_X Ozone Season Group 3 allowance transfer shall submit the transfer to the Administrator.

(b) A CSAPR NO_X Ozone Season Group 3 allowance transfer shall be correctly submitted if:

(1) The transfer includes the following elements, in a format prescribed by the Administrator:

(i) The account numbers established by the Administrator for both the transferor and transferee accounts;

(ii) The serial number of each CSAPR NO_X Ozone Season Group 3 allowance that is in the transferor account and is to be transferred; and

(iii) The name and signature of the authorized account representative of the transferor account and the date signed; and

(2) When the Administrator attempts to record the transfer, the transferor account includes each CSAPR NO_X Ozone Season Group 3 allowance identified by serial number in the transfer.

§ 97.1023 Recordation of CSAPR NO_X Ozone Season Group 3 allowance transfers.

(a) Within 5 business days (except as provided in paragraph (b) of this section) of receiving a CSAPR NO_X Ozone Season Group 3 allowance transfer that is correctly submitted under § 97.1022, the Administrator will record a CSAPR NO_X Ozone Season Group 3 allowance

transfer by moving each CSAPR NO_X Ozone Season Group 3 allowance from the transferor account to the transferee account as specified in the transfer.

(b) A CSAPR NO_X Ozone Season Group 3 allowance transfer to or from a compliance account that is submitted for recordation after the allowance transfer deadline for a control period and that includes any CSAPR NO_X Ozone Season Group 3 allowances allocated or auctioned for any control period before such allowance transfer deadline will not be recorded until after the Administrator completes the deductions from such compliance account under § 97.1024 for the control period immediately before such allowance transfer deadline.

(c) Where a CSAPR NO_X Ozone Season Group 3 allowance transfer is not correctly submitted under § 97.1022, the Administrator will not record such transfer.

(d) Within 5 business days of recordation of a CSAPR NO_X Ozone Season Group 3 allowance transfer under paragraphs (a) and (b) of the section, the Administrator will notify the authorized account representatives of both the transferor and transferee accounts.

(e) Within 10 business days of receipt of a CSAPR NO_X Ozone Season Group 3 allowance transfer that is not correctly submitted under § 97.1022, the Administrator will notify the authorized account representatives of both accounts subject to the transfer of:

(1) A decision not to record the transfer; and

(2) The reasons for such non-recordation.

§ 97.1024 Compliance with CSAPR NO_X Ozone Season Group 3 emissions limitation.

(a) *Availability for deduction for compliance.* CSAPR NO_X Ozone Season Group 3 allowances are available to be deducted for compliance with a source's CSAPR NO_X Ozone Season Group 3 emissions limitation for a control period in a given year only if the CSAPR NO_X Ozone Season Group 3 allowances:

(1) Were allocated or auctioned for such control period or a control period in a prior year; and

(2) Are held in the source's compliance account as of the allowance transfer deadline for such control period.

(b) *Deductions for compliance.* After the recordation, in accordance with § 97.1023, of CSAPR NO_X Ozone Season Group 3 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 Group 3 allowances available under paragraph (a) of this section in order to determine whether the source meets the CSAPR NO_X Ozone Season Group 3 emissions limitation for such control period, as follows:

(1) Until the amount of CSAPR NO_X Ozone Season Group 3 allowances deducted equals the number of tons of total NO_X emissions from all CSAPR NO_X Ozone Season Group 3 units at the source for such control period; or

(2) If there are insufficient CSAPR NO_X Ozone Season Group 3 allowances to complete the deductions in paragraph (b)(1) of this section, until no more CSAPR NO_X Ozone Season Group 3 allowances available under paragraph (a) of this section remain in the compliance account.

(c) *Selection of CSAPR NO_X Ozone Season Group 3 allowances for deduction*—(1) *Identification by serial number.* The designated representative for a source may request that specific CSAPR NO_X Ozone Season Group 3 allowances, identified by serial number, in the source's compliance account be deducted for emissions or excess emissions for a control period in a given year in accordance with paragraph (b) or (d) of this section. In order to be complete, such request shall be submitted to the Administrator by the allowance transfer deadline for such control period and include, in a format prescribed by the Administrator, the identification of the CSAPR NO_X Ozone Season Group 3 source and the appropriate serial numbers.

(2) *First-in, first-out.* The Administrator will deduct CSAPR NO_X Ozone Season Group 3 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 Group 3 allowances in such request, on a first-in, first-out accounting basis in the following order:

(i) Any CSAPR NO_X Ozone Season Group 3 allowances that were recorded in the compliance account pursuant to § 97.1021 and not transferred out of the compliance account, in the order of recordation; and then

(ii) Any other CSAPR NO_X Ozone Season Group 3 allowances that were transferred to and recorded in the compliance account pursuant to this subpart or that were recorded in the compliance account pursuant to § 97.526(d) or § 97.826(d), 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 Group 3 source has excess emissions, the Administrator will deduct from the source's compliance account an amount of CSAPR NO_X Ozone Season Group 3 allowances, allocated or auctioned 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, equal to two times the number of tons of the source's excess emissions.

(e) *Recordation of deductions.* The Administrator will record in the appropriate compliance account all deductions from such an account under paragraphs (b) and (d) of this section.

§ 97.1025 Compliance with CSAPR NO_X Ozone Season Group 3 assurance provisions.

(a) *Availability for deduction.* CSAPR NO_X Ozone Season Group 3 allowances are available to be deducted for compliance with the CSAPR NO_X Ozone Season Group 3 assurance provisions for a control period in a given year by the owners and operators of a group of one or more base CSAPR NO_X Ozone Season Group 3 sources and units in a State (and Indian country within the borders of such State) only if the CSAPR NO_X Ozone Season Group 3 allowances:

(1) Were allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year; and

(2) Are held in the assurance account, established by the Administrator for such owners and operators of such group of base CSAPR NO_X Ozone Season Group 3 sources and units in such State (and Indian country within the borders of such State) under paragraph (b)(3) of this section, as of the deadline established in paragraph (b)(4) of this section.

(b) *Deductions for compliance.* The Administrator will deduct CSAPR NO_X Ozone Season Group 3 allowances available under paragraph (a) of this section for compliance with the CSAPR NO_X Ozone Season Group 3 assurance provisions for a State for a control period in a given year in accordance with the following procedures:

(1) By August 1, 2022 and August 1 of each year thereafter, the Administrator will:

(i) Calculate, for each State (and Indian country within the borders of such State), the total NO_X emissions from all base CSAPR NO_X Ozone Season Group 3 units at base CSAPR NO_X Ozone Season Group 3 sources in the State (and Indian country within the borders of such State) during the control period in the year before the year of this calculation deadline and the amount, if any, by which such total NO_X emissions exceed the State assurance level as described in § 97.1006(c)(2)(iii); and

(ii) For the set of any States (and Indian country within the borders of such States) for which the results of the calculations required in paragraph (b)(1)(i) of this section indicate that total NO_X emissions exceed the respective State assurance levels for such control period—

(A) 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 base CSAPR NO_X Ozone Season Group 3 sources and units in such State (and such Indian country), the common designated representative's share of the total NO_X emissions from all base CSAPR NO_X Ozone Season Group 3 units at base CSAPR NO_X Ozone Season Group 3 sources in such State (and such Indian country), the common designated representative's assurance level, and the amount (if any) of CSAPR NO_X Ozone Season Group 3

allowances that the owners and operators of such group of sources and units must hold in accordance with the calculation formula in § 97.1006(c)(2)(i); and

(B) Promulgate a notice of data availability of the results of the calculations required in paragraphs (b)(1)(i) and (b)(1)(ii)(A) of this section, including separate calculations of the NO_X emissions from each base CSAPR NO_X Ozone Season Group 3 source in each such State (and Indian country within the borders of such State).

(2) The Administrator will provide an opportunity for submission of objections to the calculations referenced by each notice of data availability required in paragraph (b)(1)(ii) of this section.

(i) Objections shall be submitted by the deadline specified in such notice and shall be limited to addressing whether the calculations referenced in such notice are in accordance with § 97.1006(c)(2)(iii), §§ 97.1006(b) and 97.1030 through 97.1035, the definitions of "common designated representative", "common designated representative's assurance level", and "common designated representative's share" in § 97.1002, and the calculation formula in § 97.1006(c)(2)(i).

(ii) The Administrator will adjust the calculations to the extent necessary to ensure that they are in accordance with the provisions referenced in paragraph (b)(2)(i) of this section. By October 1 immediately after the promulgation of such notice, the Administrator will promulgate a notice of data availability of the results of the calculations incorporating any adjustments that the Administrator determines to be necessary and the reasons for accepting or rejecting any objections submitted in accordance with paragraph (b)(2)(i) of this section.

(3) For any State (and Indian country within the borders of such State) referenced in each notice of data availability required in paragraph (b)(2)(ii) of this section as having base CSAPR NO_X Ozone Season Group 3 units with total NO_X emissions exceeding the State assurance level for a control period in a given year, the Administrator will establish one assurance account for each set of owners and operators referenced, in the notice of data availability required under

paragraph (b)(2)(ii) of this section, as all of the owners and operators of a group of base CSAPR NO_X Ozone Season Group 3 sources and units in the State (and Indian country within the borders of such State) having a common designated representative for such control period and as being required to hold CSAPR NO_X Ozone Season Group 3 allowances.

(4)(i) As of midnight of November 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(ii) 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 base CSAPR NO_X Ozone Season Group 3 sources, base CSAPR NO_X Ozone Season Group 3 units, and State (and Indian country within the borders of such State) under paragraph (b)(3) of this section a total amount of CSAPR NO_X Ozone Season Group 3 allowances, available for deduction under paragraph (a) of this section, equal to the amount such 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 such notice.

(ii) Notwithstanding the allowance-holding deadline specified in paragraph (b)(4)(i) of this section, if November 1 is not a business day, then such allowance-holding deadline shall be midnight of the first business day thereafter.

(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)(ii) of this section and after the recordation, in accordance with § 97.1023, of CSAPR NO_X Ozone Season Group 3 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 base CSAPR NO_X Ozone Season Group 3 sources, base CSAPR NO_X Ozone Season Group 3 units, and State (and Indian country within the borders of such State) established under paragraph (b)(3) of this section, the amount of CSAPR NO_X Ozone Season Group 3 allowances available under paragraph (a) of this section

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)(ii) of this section.

(6) Notwithstanding any other provision of this subpart and any revision, made by or submitted to the Administrator after the promulgation of the notice of data availability required in paragraph (b)(2)(ii) of this section for a control period in a given year, of any data used in making the calculations referenced in such notice, the amounts of CSAPR NO_X Ozone Season Group 3 allowances that the owners and operators are required to hold in accordance with § 97.1006(c)(2)(i) for such control period shall continue to be such amounts as calculated by the Administrator and referenced in such notice required in paragraph (b)(2)(ii) 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 amounts of CSAPR NO_X Ozone Season Group 3 allowances that owners and operators are required to hold in accordance with the calculation formula in § 97.1006(c)(2)(i) for such control period with regard to the base CSAPR NO_X Ozone Season Group 3 sources, base CSAPR NO_X Ozone Season Group 3 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 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)(ii) of this section.

(ii) [Reserved]

(iii) If the revised data are used to recalculate, in accordance with paragraph (b)(6)(i) of this section, the amount of CSAPR NO_X Ozone Season Group 3 allowances that the owners and

operators are required to hold for such control period with regard to the base CSAPR NO_X Ozone Season Group 3 sources, base CSAPR NO_X Ozone Season Group 3 units, and State (and Indian country within the borders of such State) involved—

(A) Where the amount of CSAPR NO_X Ozone Season Group 3 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 the additional amount of CSAPR NO_X Ozone Season Group 3 allowances in the assurance account established by the Administrator for the appropriate base CSAPR NO_X Ozone Season Group 3 sources, base CSAPR NO_X Ozone Season Group 3 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 amount, 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 amount, as required, as of the new deadline shall be a violation of the Clean Air Act. Each CSAPR NO_X Ozone Season Group 3 allowance 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.

(B) For the owners and operators for which the amount of CSAPR NO_X Ozone Season Group 3 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 Group 3 allowances were transferred by such owners and operators for such control period to the assurance account established by the Administrator for the appropriate base CSAPR NO_X Ozone Season Group 3 sources, base CSAPR NO_X Ozone Season Group 3 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 Group 3 allowances held in such assurance account equal to the amount of the decrease. If CSAPR NO_X Ozone Season Group 3 allowances were transferred to such assurance account from more than one account, the amount of CSAPR NO_X Ozone Season

Group 3 allowances recorded in each such transferor account will be in proportion to the percentage of the total amount of CSAPR NO_X Ozone Season Group 3 allowances transferred to such assurance account for such control period from such transferor account.

(C) Each CSAPR NO_X Ozone Season Group 3 allowance held under paragraph (b)(6)(iii)(A) of this section as a result of recalculation of requirements under the CSAPR NO_X Ozone Season Group 3 assurance provisions for such control period must be a CSAPR NO_X Ozone Season Group 3 allowance allocated for a control period in a year before or the year immediately following, or in the same year as, the year of such control period.

§ 97.1026 Banking.

(a) A CSAPR NO_X Ozone Season Group 3 allowance may be banked for future use or transfer in a compliance account or a general account in accordance with paragraph (b) of this section.

(b) Any CSAPR NO_X Ozone Season Group 3 allowance that is held in a compliance account or a general account will remain in such account unless and until the CSAPR NO_X Ozone Season Group 3 allowance is deducted or transferred under § 97.1011(c), § 97.1023, § 97.1024, § 97.1025, § 97.1027, or § 97.1028 or paragraph (c) of this section.

(c) At any time after the allowance transfer deadline for the last control period for which a State NO_X Ozone Season Group 3 trading budget is set forth in § 97.1010(a) for a given State, the Administrator may record a transfer of any CSAPR NO_X Ozone Season Group 3 allowances held in the compliance account for a source in such State (or Indian country within the borders of such State) to a general account identified or established by the Administrator with the source's designated representative as the authorized account representative and with the owners and operators of the source (as indicated on the certificate of representation for the source) as the persons represented by the authorized account representative. The Administrator will notify the designated representative not less than 15 days before making such a transfer.

§ 97.1027 Account error.

The Administrator may, at his or her sole discretion and on his or her own motion, correct any error in any Allowance Management System account. Within 10 business days of making such correction, the Administrator will notify the authorized account representative for the account.

§ 97.1028 Administrator's action on submissions.

(a) The Administrator may review and conduct independent audits concerning any submission under the CSAPR NO_X Ozone Season Group 3 Trading Program and make appropriate adjustments of the information in the submission.

(b) The Administrator may deduct CSAPR NO_X Ozone Season Group 3 allowances from or transfer CSAPR NO_X Ozone Season Group 3 allowances to a compliance account or an assurance account, based on the information in a submission, as adjusted under paragraph (a) of this section, and record such deductions and transfers.

§ 97.1029 [Reserved]

§ 97.1030 General monitoring, recordkeeping, and reporting requirements.

The owners and operators, and to the extent applicable, the designated representative, of a CSAPR NO_X Ozone Season Group 3 unit, shall comply with the monitoring, recordkeeping, and reporting requirements as provided in this subpart and subpart H of part 75 of this chapter. For purposes of applying such requirements, the definitions in § 97.1002 and in § 72.2 of this chapter shall apply, the terms "affected unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") in part 75 of this chapter shall be deemed to refer to the terms "CSAPR NO_X Ozone Season Group 3 unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") respectively as defined in § 97.1002, and the term "newly affected unit" shall be deemed to mean "newly affected CSAPR NO_X Ozone Season Group 3 unit". The owner or operator of a unit that is not a CSAPR NO_X Ozone Season Group 3 unit but that is monitored under § 75.72(b)(2)(ii) of this chapter shall comply with the same

monitoring, recordkeeping, and reporting requirements as a CSAPR NO_X Ozone Season Group 3 unit.

(a) *Requirements for installation, certification, and data accounting.* The owner or operator of each CSAPR NO_X Ozone Season Group 3 unit shall:

(1) Install all monitoring systems required under this subpart for monitoring NO_X mass emissions and individual unit heat input (including all systems required to monitor NO_X emission rate, NO_X concentration, stack gas moisture content, stack gas flow rate, CO_2 or O_2 concentration, and fuel flow rate, as applicable, in accordance with §§ 75.71 and 75.72 of this chapter);

(2) Successfully complete all certification tests required under § 97.1031 and meet all other requirements of this subpart and part 75 of this chapter applicable to the monitoring systems under paragraph (a)(1) of this section; and

(3) Record, report, and quality-assure the data from the monitoring systems under paragraph (a)(1) of this section.

(b) *Compliance deadlines.* Except as provided in paragraph (e) of this section, the owner or operator of a CSAPR NO_X Ozone Season Group 3 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 under paragraph (a)(1) of this section on and after the latest of the following dates:

(1) May 1, 2021;

(2) 180 calendar days after the date on which the unit commences commercial operation; or

(3) Where data for the unit are reported on a control period basis under § 97.1034(d)(1)(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.

(4) The owner or operator of a CSAPR NO_X Ozone Season Group 3 unit for which construction of a new stack or flue or installation of add-on NO_X emission controls is completed after the applicable deadline under paragraph (b)(1), (2), or (3) of this section shall meet the requirements of § 75.4(e)(1) through (4) of this chapter, except that:

(i) Such requirements shall apply to the monitoring systems required under § 97.1030 through § 97.1035, rather than the monitoring systems required under part 75 of this chapter;

(ii) NO_X emission rate, NO_X concentration, stack gas moisture content, stack gas volumetric flow rate, and O_2 or CO_2 concentration data shall be determined and reported, rather than the data listed in § 75.4(e)(2) of this chapter; and

(iii) Any petition for another procedure under § 75.4(e)(2) of this chapter shall be submitted under § 97.1035, rather than § 75.66 of this chapter.

(c) *Reporting data.* The owner or operator of a CSAPR NO_X Ozone Season Group 3 unit that does not meet the applicable compliance date set forth in paragraph (b) of this section for any monitoring system under paragraph (a)(1) of this section shall, for each such monitoring system, determine, record, and report maximum potential (or, as appropriate, minimum potential) values for NO_X concentration, NO_X emission rate, stack gas flow rate, stack gas moisture content, fuel flow rate, and any other parameters required to determine NO_X mass emissions and heat input in accordance with § 75.31(b)(2) or (c)(3) of this chapter, section 2.4 of appendix D to part 75 of this chapter, or section 2.5 of appendix E to part 75 of this chapter, as applicable.

(d) *Prohibitions.* (1) No owner or operator of a CSAPR NO_X Ozone Season Group 3 unit shall use any alternative monitoring system, alternative reference method, or any other alternative to any requirement of this subpart without having obtained prior written approval in accordance with § 97.1035.

(2) No owner or operator of a CSAPR NO_X Ozone Season Group 3 unit shall operate the unit so as to discharge, or allow to be discharged, NO_X to the atmosphere without accounting for all such NO_X in accordance with the applicable provisions of this subpart and part 75 of this chapter.

(3) No owner or operator of a CSAPR NO_X Ozone Season Group 3 unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording NO_X mass discharged into the atmosphere or heat input, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this subpart and part 75 of this chapter.

(4) No owner or operator of a CSAPR NO_X Ozone Season Group 3 unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved monitoring system under this subpart, except under any one of the following circumstances:

(i) During the period that the unit is covered by an exemption under § 97.1005 that is in effect;

(ii) The owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of this subpart and part 75 of this chapter, by the Administrator for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or

(iii) The designated representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with § 97.1031(d)(3)(i).

(e) *Long-term cold storage.* The owner or operator of a CSAPR NO_X Ozone Season Group 3 unit is subject to the applicable provisions of § 75.4(d) of this chapter concerning units in long-term cold storage.

§ 97.1031 Initial monitoring system certification and recertification procedures.

(a) The owner or operator of a CSAPR NO_X Ozone Season Group 3 unit shall be exempt from the initial certification requirements of this section for a monitoring system under § 97.1030(a)(1) if the following conditions are met:

(1) The monitoring system has been previously certified in accordance with part 75 of this chapter; and

(2) The applicable quality-assurance and quality-control requirements of § 75.21 of this chapter and appendices B, D, and E to part 75 of this chapter are fully met for the certified monitoring system described in paragraph (a)(1) of this section.

(b) The recertification provisions of this section shall apply to a monitoring system under § 97.1030(a)(1) that is exempt from initial certification requirements under paragraph (a) of this section.

(c) If the Administrator has previously approved a petition under § 75.17(a) or (b) of this chapter for apportioning the NO_X emission rate measured in a common stack or a petition under § 75.66 of this chapter for an alternative to a requirement in § 75.12 or § 75.17 of this chapter, the designated representative shall resubmit the petition to the Administrator under § 97.1035 to determine whether the approval applies under the CSAPR NO_X Ozone Season Group 3 Trading Program.

(d) Except as provided in paragraph (a) of this section, the owner or operator of a CSAPR NO_X Ozone Season Group 3 unit shall comply with the following initial certification and recertification procedures for a continuous monitoring system (*i.e.,* a continuous emission monitoring system and an excepted monitoring system under appendices D and E to part 75 of this chapter) under § 97.1030(a)(1). The owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology under § 75.19 of this chapter or that qualifies to use an alternative monitoring system under subpart E of part 75 of this chapter shall comply with the procedures in paragraph (e) or (f) of this section respectively.

(1) *Requirements for initial certification.* The owner or operator shall ensure that each continuous monitoring system under § 97.1030(a)(1) (including the automated data acquisition and handling system) successfully completes all of the initial certification testing required under § 75.20 of this chapter by the applicable deadline in § 97.1030(b). In addition, whenever the

owner or operator installs a monitoring system to meet the requirements of this subpart in a location where no such monitoring system was previously installed, initial certification in accordance with § 75.20 of this chapter is required.

(2) *Requirements for recertification.* Whenever the owner or operator makes a replacement, modification, or change in any certified continuous emission monitoring system under § 97.1030(a)(1) that may significantly affect the ability of the system to accurately measure or record NO_X mass emissions or heat input rate or to meet the quality-assurance and quality-control requirements of § 75.21 of this chapter or appendix B to part 75 of this chapter, the owner or operator shall recertify the monitoring system in accordance with § 75.20(b) of this chapter. Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator shall recertify each continuous emission monitoring system whose accuracy is potentially affected by the change, in accordance with § 75.20(b) of this chapter. Examples of changes to a continuous emission monitoring system that require recertification include replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site. Any fuel flowmeter system, and any excepted NO_X monitoring system under appendix E to part 75 of this chapter, under § 97.1030(a)(1) are subject to the recertification requirements in § 75.20(g)(6) of this chapter.

(3) *Approval process for initial certification and recertification.* For initial certification of a continuous monitoring system under § 97.1030(a)(1), paragraphs (d)(3)(i) through (v) of this section apply. For recertifications of such monitoring systems, paragraphs (d)(3)(i) through (iv) of this section and the procedures in § 75.20(b)(5) and (g)(7) of this chapter (in lieu of the procedures in paragraph (d)(3)(v) of this section) apply, provided that in applying paragraphs (d)(3)(i) through (iv) of this section, the words "certification" and "initial certification" are

replaced by the word “recertification” and the word “certified” is replaced by the word “recertified”.

(i) *Notification of certification.* The designated representative shall submit to the appropriate EPA Regional Office and the Administrator written notice of the dates of certification testing, in accordance with § 97.1033.

(ii) *Certification application.* The designated representative shall submit to the Administrator a certification application for each monitoring system. A complete certification application shall include the information specified in § 75.63 of this chapter.

(iii) *Provisional certification date.* The provisional certification date for a monitoring system shall be determined in accordance with § 75.20(a)(3) of this chapter. A provisionally certified monitoring system may be used under the CSAPR NO_X Ozone Season Group 3 Trading Program for a period not to exceed 120 days after receipt by the Administrator of the complete certification application for the monitoring system under paragraph (d)(3)(ii) of this section. Data measured and recorded by the provisionally certified monitoring system, in accordance with the requirements of part 75 of this chapter, will be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the Administrator does not invalidate the provisional certification by issuing a notice of disapproval within 120 days of the date of receipt of the complete certification application by the Administrator.

(iv) *Certification application approval process.* The Administrator will issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application under paragraph (d)(3)(ii) of this section. In the event the Administrator does not issue such a notice within such 120-day period, each monitoring system that meets the applicable performance requirements of part 75 of this chapter and is included in the certification application will be deemed certified for use under the CSAPR NO_X Ozone Season Group 3 Trading Program.

(A) *Approval notice.* If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of part 75 of this chapter, then the Administrator will issue a written notice of approval of the certification application within 120 days of receipt.

(B) *Incomplete application notice.* If the certification application is not complete, then the Administrator will issue a written notice of incompleteness that sets a reasonable date by which the designated representative must submit the additional information required to complete the certification application. If the designated representative does not comply with the notice of incompleteness by the specified date, then the Administrator may issue a notice of disapproval under paragraph (d)(3)(iv)(C) of this section.

(C) *Disapproval notice.* If the certification application shows that any monitoring system does not meet the performance requirements of part 75 of this chapter or if the certification application is incomplete and the requirement for disapproval under paragraph (d)(3)(iv)(B) of this section is met, then the Administrator will issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the Administrator and the data measured and recorded by each uncertified monitoring system shall not be considered valid quality-assured data beginning with the date and hour of provisional certification (as defined under § 75.20(a)(3) of this chapter).

(D) *Audit decertification.* The Administrator may issue a notice of disapproval of the certification status of a monitor in accordance with § 97.1032(b).

(v) *Procedures for loss of certification.* If the Administrator issues a notice of disapproval of a certification application under paragraph (d)(3)(iv)(C) of this section or a notice of disapproval of certification status under paragraph (d)(3)(iv)(D) of this section, then:

(A) The owner or operator shall substitute the following values, for each disapproved monitoring system, for each hour of unit operation during the period of invalid data specified

under § 75.20(a)(4)(iii), § 75.20(g)(7), or § 75.21(e) of this chapter and continuing until the applicable date and hour specified under § 75.20(a)(5)(i) or (g)(7) of this chapter:

(*1*) For a disapproved NO_X emission rate (*i.e.,* NO_X-diluent) system, the maximum potential NO_X emission rate, as defined in § 72.2 of this chapter.

(*2*) For a disapproved NO_X pollutant concentration monitor and disapproved flow monitor, respectively, the maximum potential concentration of NO_X and the maximum potential flow rate, as defined in sections 2.1.2.1 and 2.1.4.1 of appendix A to part 75 of this chapter.

(*3*) For a disapproved moisture monitoring system and disapproved diluent gas monitoring system, respectively, the minimum potential moisture percentage and either the maximum potential CO_2 concentration or the minimum potential O_2 concentration (as applicable), as defined in sections 2.1.5, 2.1.3.1, and 2.1.3.2 of appendix A to part 75 of this chapter.

(*4*) For a disapproved fuel flowmeter system, the maximum potential fuel flow rate, as defined in section 2.4.2.1 of appendix D to part 75 of this chapter.

(*5*) For a disapproved excepted NO_X monitoring system under appendix E to part 75 of this chapter, the fuel-specific maximum potential NO_X emission rate, as defined in § 72.2 of this chapter.

(B) The designated representative shall submit a notification of certification retest dates and a new certification application in accordance with paragraphs (d)(3)(i) and (ii) of this section.

(C) The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Administrator's notice of disapproval, no later than 30 unit operating days after the date of issuance of the notice of disapproval.

(e) The owner or operator of a unit qualified to use the low mass emissions (LME) excepted methodology under § 75.19 of this chapter shall meet the applicable certification and recertification requirements in §§ 75.19(a)(2) and 75.20(h) of this chapter. If the owner or operator of such a unit elects to certify a fuel flowmeter system for heat input determination, the

owner or operator shall also meet the certification and recertification requirements in § 75.20(g) of this chapter.

(f) The designated representative of each unit for which the owner or operator intends to use an alternative monitoring system approved by the Administrator under subpart E of part 75 of this chapter shall comply with the applicable notification and application procedures of § 75.20(f) of this chapter.

§ 97.1032 Monitoring system out-of-control periods.

(a) *General provisions.* Whenever any monitoring system fails to meet the quality-assurance and quality-control requirements or data validation requirements of part 75 of this chapter, data shall be substituted using the applicable missing data procedures in subpart D or subpart H of, or appendix D or appendix E to, part 75 of this chapter.

(b) *Audit decertification.* Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or other requirement under § 97.1031 or the applicable provisions of part 75 of this chapter, both at the time of the initial certification or recertification application submission and at the time of the audit, the Administrator will issue a notice of disapproval of the certification status of such monitoring system. For the purposes of this paragraph, an audit shall be either a field audit or an audit of any information submitted to the Administrator or any State or permitting authority. By issuing the notice of disapproval, the Administrator revokes prospectively the certification status of the monitoring system. The data measured and recorded by the monitoring system shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests for the monitoring system. The owner or operator shall follow the applicable initial certification or recertification procedures in § 97.1031 for each disapproved monitoring system.

§ 97.1033 Notifications concerning monitoring.

The designated representative of a CSAPR NO_X Ozone Season Group 3 unit shall submit written notice to the Administrator in accordance with § 75.61 of this chapter.

§ 97.1034 Recordkeeping and reporting.

(a) *General provisions.* The designated representative shall comply with all recordkeeping and reporting requirements in paragraphs (b) through (e) of this section, the applicable recordkeeping and reporting requirements under § 75.73 of this chapter, and the requirements of § 97.1014(a).

(b) *Monitoring plans.* The owner or operator of a CSAPR NO_X Ozone Season Group 3 unit shall comply with the requirements of § 75.73(c) and (e) of this chapter.

(c) *Certification applications.* The designated representative shall submit an application to the Administrator within 45 days after completing all initial certification or recertification tests required under § 97.1031, including the information required under § 75.63 of this chapter.

(d) *Quarterly reports.* The designated representative shall submit quarterly reports, as follows:

(1)(i) If a CSAPR NO_X Ozone Season Group 3 unit is subject to the Acid Rain Program or the CSAPR NO_X Annual Trading Program 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 Group 3 unit is not subject to the Acid Rain Program or the CSAPR NO_X Annual Trading Program, then the designated representative shall either:

(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)(1)(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.

(2) The designated representative shall report the NO_X mass emissions data and heat input data for a CSAPR NO_X Ozone Season Group 3 unit, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter indicated under paragraph (d)(1) of this section beginning by the latest of:

(i) The calendar quarter covering May 1, 2021 through June 30, 2021;

(ii) The calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under § 97.1030(b); or

(iii) For a unit that reports on a control period basis under paragraph (d)(1)(ii)(B) of this section, if the calendar quarter under paragraph (d)(2)(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)(2)(ii) of this section.

(3) The designated representative shall submit each quarterly report to the Administrator within 30 days after the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in § 75.73(f) of this chapter.

(4) For CSAPR NO_X Ozone Season Group 3 units that are also subject to the Acid Rain Program, CSAPR NO_X Annual Trading Program, or CSAPR SO_2 Group 1 Trading Program, quarterly reports shall include the applicable data and information required by subparts F through H of part 75 of this chapter as applicable, in addition to the NO_X mass emission data, heat input data, and other information required by this subpart.

(5) The Administrator may review and conduct independent audits of any quarterly report in order to determine whether the quarterly report meets the requirements of this subpart and part 75 of this chapter, including the requirement to use substitute data.

(i) The Administrator will notify the designated representative of any determination that the quarterly report fails to meet any such requirements and specify in such notification any corrections that the Administrator believes are necessary to make through resubmission of the quarterly report and a reasonable time period within which the designated representative must respond. Upon request by the designated representative, the Administrator may specify reasonable extensions of such time period. Within the time period (including any such extensions) specified by the Administrator, the designated representative shall resubmit the quarterly report with the corrections specified by the Administrator, except to the extent the designated representative provides information demonstrating that a specified correction is not necessary because the quarterly report already meets the requirements of this subpart and part 75 of this chapter that are relevant to the specified correction.

(ii) Any resubmission of a quarterly report shall meet the requirements applicable to the submission of a quarterly report under this subpart and part 75 of this chapter, except for the deadline set forth in paragraph (d)(3) of this section.

(e) *Compliance certification.* The designated representative shall submit to the Administrator a compliance certification (in a format prescribed by the Administrator) in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

(1) The monitoring data submitted were recorded in accordance with the applicable requirements of this subpart and part 75 of this chapter, including the quality assurance procedures and specifications;

(2) For a unit with add-on NO_X emission controls and for all hours where NO_X data are substituted in accordance with § 75.34(a)(1) of this chapter, the add-on emission controls were operating within the range of parameters listed in the quality assurance/quality control program under appendix B to part 75 of this chapter and the substitute data values do not systematically underestimate NO_X emissions; and

(3) For a unit that is reporting on a control period basis under paragraph (d)(1)(ii)(B) of this section, the NO_X emission rate and NO_X concentration values substituted for missing data under subpart D of part 75 of this chapter are calculated using only values from a control period and do not systematically underestimate NO_X emissions.

§ 97.1035 Petitions for alternatives to monitoring, recordkeeping, or reporting requirements.

(a) The designated representative of a CSAPR NO_X Ozone Season Group 3 unit may submit a petition under § 75.66 of this chapter to the Administrator, requesting approval to apply an alternative to any requirement of §§ 97.1030 through 97.1034.

(b) A petition submitted under paragraph (a) of this section shall include sufficient information for the evaluation of the petition, including, at a minimum, the following information:

(1) Identification of each unit and source covered by the petition;

(2) A detailed explanation of why the proposed alternative is being suggested in lieu of the requirement;

(3) A description and diagram of any equipment and procedures used in the proposed alternative;

(4) A demonstration that the proposed alternative is consistent with the purposes of the requirement for which the alternative is proposed and with the purposes of this subpart and part 75 of this chapter and that any adverse effect of approving the alternative will be *de minimis;* and

(5) Any other relevant information that the Administrator may require.

(c) Use of an alternative to any requirement referenced in paragraph (a) of this section is in accordance with this subpart only to the extent that the petition is approved in writing by the Administrator and that such use is in accordance with such approval.

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