

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R06-OAR-2016-0611; FRL-_____Region 6]

Promulgation of Air Quality Implementation Plans; State of Texas; Regional Haze and

Interstate Visibility Transport Federal Implementation Plan

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: Pursuant to the Federal Clean Air Act (CAA or Act), the Environmental Protection Agency (EPA) is finalizing a partial approval of the 2009 Texas Regional Haze State Implementation Plan (SIP) submission and a Federal Implementation Plan (FIP) for Texas to address certain outstanding requirements. Specifically, the EPA is finalizing determinations regarding best available retrofit technology (BART) for electric generating units (EGUs) in the State of Texas. To address the BART requirement for sulfur dioxide (SO₂), the EPA is finalizing an alternative to BART that consists of an intrastate trading program addressing the SO₂ emissions from certain EGUs. To address the BART requirement for oxides of nitrogen (NO_x), we are finalizing our proposed determination that Texas' participation in the Cross-State Air Pollution Rule's (CSAPR) trading program for ozone-season NO_x qualifies as an alternative to BART. We are approving Texas' determination that its EGUs are not subject to BART for particulate matter (PM). Finally, we are disapproving portions of several SIP revisions submitted to satisfy the CAA requirement to address interstate visibility transport for six national ambient air quality standards (NAAQS): (1) 1997 8-hour ozone, (2) 1997 fine particulate matter (PM_{2.5}) (annual and 24-hour), (3) 2006 PM_{2.5} (24-hour), (4) 2008 8-hour ozone, (5) 2010 1-hour nitrogen dioxide (NO₂) and (6) 2010 1-hour SO₂. We are finding that the BART alternatives to address

SO₂ and NO_x BART at Texas' EGUs meet the interstate visibility transport requirements for these NAAQS.

DATES: This final rule is effective on **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. . EPA-R06-OAR-2016-0611. All documents in the docket are listed on the *<http://www.regulations.gov>* web site. Although listed in the index, some information is not publicly available, *e.g.*, Confidential Business Information (CBI) or other information whose disclosure is restricted by statute therefore is not posted to regulations.gov. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy. Publicly available docket materials are available either electronically through *<http://www.regulations.gov>* or in hard copy at EPA Region 6, 1445 Ross Avenue, Suite 700, Dallas, Texas 75202-2733.

FOR FURTHER INFORMATION CONTACT: Michael Feldman at Feldman.Michael@epa.gov or 214-665-9793

SUPPLEMENTARY INFORMATION: Throughout this document wherever “we,” “us,” or “our” is used, we mean the EPA.

Table of Contents:

I. Background

A. Regional Haze

B. Interstate Transport of Pollutants that Affect Visibility

C. Previous Actions Related to Texas Regional Haze

II. Our Proposed Actions

A. Regional Haze

B. Interstate Transport of Pollutants that Affect Visibility

III. Summary of Our Final Decisions

A. Regional Haze

1. BART-Eligible Units

2. Subject to BART Sources

3. SO₂ BART

4. PM BART

5. NO_x BART

B. Interstate Transport of Pollutants that Affect Visibility

C. Reasonable Progress

IV. Summary and Analysis of Major Issues Raised by Commenters

A. Comments on Relying on CSAPR for SO₂ BART or Developing an Intrastate SO₂ Trading Program

B. Comments on Source-Specific BART

C. Comments on EPA's Proposed SIP Disapprovals

D. Legal Comments

E. Comments on Identification of BART-eligible Sources

F. Comments on PM BART

G. Comments on EPA's Source-Specific SO₂ BART Cost Analyses

H. Comments on EPA's Modeling

I. Comments on Affordability and Grid Reliability

V. SO₂ Trading Program and Its Implications for Interstate Visibility Transport, EGU BART, and Reasonable Progress

A. Background on CSAPR as an Alternative to BART Concept

B. Texas SO₂ Trading Program

1. Identification of Sources Participating in the Trading Program

2. Texas SO₂ Trading Program as a BART Alternative

C. Specific Texas SO₂ Trading Program Features

VI. Final Action

VII. Statutory and Executive Order Reviews

I. Background

A. Regional Haze

Regional haze is visibility impairment that is produced by a multitude of sources and activities that are located across a broad geographic area and emit PM_{2.5} (e.g., sulfates, nitrates, organic carbon (OC), elemental carbon (EC), and soil dust), and its precursors (e.g., SO₂, NO_x, and, in some cases, ammonia (NH₃) and volatile organic compounds (VOCs)). Fine particle precursors react in the atmosphere to form PM_{2.5}, which impairs visibility by scattering and absorbing light. Visibility impairment reduces the clarity, color, and visible distance that can be seen. PM_{2.5} can also cause serious health effects and mortality in humans and contributes to environmental effects, such as acid deposition and eutrophication.

Data from the existing visibility monitoring network, the “Interagency Monitoring of Protected Visual Environments” (IMPROVE) monitoring network, show that visibility impairment caused by air pollution occurs virtually all the time at most national parks and

wilderness areas. In 1999, the average visual range¹ in many Class I areas (i.e., national parks and memorial parks, wilderness areas, and international parks meeting certain size criteria) in the western United States was 100-150 kilometers, or about one-half to two-thirds of the visual range that would exist without anthropogenic air pollution. In most of the eastern Class I areas of the United States, the average visual range was less than 30 kilometers, or about one-fifth of the visual range that would exist under estimated natural conditions.² CAA programs have reduced some haze-causing pollution, lessening some visibility impairment and resulting in partially improved average visual ranges.³

CAA requirements to address the problem of visibility impairment are continuing to be addressed and implemented. In Section 169A of the 1977 Amendments to the CAA, Congress created a program for protecting visibility in the nation's national parks and wilderness areas. This section of the CAA establishes as a national goal the prevention of any future, and the remedying of any existing man-made impairment of visibility in 156 national parks and wilderness areas designated as mandatory Class I Federal areas.⁴ On December 2, 1980, EPA promulgated regulations to address visibility impairment in Class I areas that is "reasonably attributable" to a single source or small group of sources, i.e., "reasonably attributable visibility

¹ Visual range is the greatest distance, in kilometers or miles, at which a dark object can be viewed against the sky.

² 64 FR 35715 (July 1, 1999).

³ An interactive "story map" depicting efforts and recent progress by EPA and states to improve visibility at national parks and wilderness areas may be visited at: <http://arcg.is/29tAbS3>.

⁴ Areas designated as mandatory Class I Federal areas consist of National Parks exceeding 6,000 acres, wilderness areas and national memorial parks exceeding 5,000 acres, and all international parks that were in existence on August 7, 1977. 42 U.S.C. 7472(a). In accordance with section 169A of the CAA, EPA, in consultation with the Department of Interior, promulgated a list of 156 areas where visibility is identified as an important value. 44 FR 69122 (November 30, 1979). The extent of a mandatory Class I area includes subsequent changes in boundaries, such as park expansions. 42 U.S.C. 7472(a). Although states and tribes may designate as Class I additional areas which they consider to have visibility as an important value, the requirements of the visibility program set forth in section 169A of the CAA apply only to "mandatory Class I Federal areas." Each mandatory Class I Federal area is the responsibility of a "Federal Land Manager." 42 U.S.C. 7602(i). When we use the term "Class I area" in this action, we mean a "mandatory Class I Federal area."

impairment.”⁵ These regulations represented the first phase in addressing visibility impairment. EPA deferred action on regional haze that emanates from a variety of sources until monitoring, modeling, and scientific knowledge about the relationships between pollutants and visibility impairment were improved.

Congress added section 169B to the CAA in 1990 to address regional haze issues, and we promulgated regulations addressing regional haze in 1999.⁶ The Regional Haze Rule revised the existing visibility regulations to integrate into the regulations provisions addressing regional haze impairment and established a comprehensive visibility protection program for Class I areas. The requirements for regional haze, found at 40 CFR 51.308 and 51.309, are included in our visibility protection regulations at 40 CFR 51.300–309. The requirement to submit a regional haze SIP applies to all 50 states, the District of Columbia, and the Virgin Islands. States were required to submit the first implementation plan addressing regional haze visibility impairment no later than December 17, 2007.⁷

Section 169A of the CAA directs states to evaluate the use of retrofit controls at certain larger, often under-controlled, older stationary sources in order to address visibility impacts from these sources. Specifically, section 169A(b)(2)(A) of the CAA requires states to revise their SIPs to contain such measures as may be necessary to make reasonable progress toward the natural visibility goal, including a requirement that certain categories of existing major stationary sources⁸ built between 1962 and 1977 procure, install and operate the “Best Available Retrofit Technology” (BART). Larger “fossil-fuel fired steam electric plants” are included among the

⁵ 45 FR 80084 (Dec. 2, 1980).

⁶ 64 FR 35714 (July 1, 1999), codified at 40 CFR part 51, subpart P (Regional Haze Rule).

⁷ See 40 CFR 51.308(b). EPA’s regional haze regulations require subsequent updates to the regional haze SIPs. 40 CFR 51.308(g)–(i).

⁸ See 42 U.S.C. 7491(g)(7) (listing the set of “major stationary sources” potentially subject-to-BART).

BART source categories. Under the Regional Haze Rule, states are directed to conduct BART determinations for “BART-eligible” sources that may be anticipated to cause or contribute to any visibility impairment in a Class I area. The evaluation of BART for EGUs that are located at fossil-fuel-fired power plants having a generating capacity in excess of 750 megawatts must follow the “Guidelines for BART Determinations Under the Regional Haze Rule” at appendix Y to 40 CFR Part 51 (hereinafter referred to as the “BART Guidelines”). Rather than requiring source-specific BART controls, states also have the flexibility to adopt an emissions trading program or alternative program as long as the alternative provides greater reasonable progress towards improving visibility than BART. 40 CFR 51.308(e)(2) specifies how a state must conduct the demonstration to show that an alternative program will achieve greater reasonable progress than the installation and operation of BART. 40 CFR 51.308(e)(2)(i)(E) requires a determination under 40 CFR 51.308 (e)(3) or otherwise based on the clear weight of evidence that the trading program or other alternative measure achieves greater reasonable progress than would be achieved through the installation and operation of BART at the covered sources. Specific criteria for determining if an alternative measure achieves greater reasonable progress than source-specific BART are set out in 40 CFR 51.308(e)(3). Finally, 40 CFR 51.308(e)(4) states that states participating in CSAPR need not require BART-eligible fossil fuel-fired steam electric plants to install, operate, and maintain BART for the pollutant covered by CSAPR.

Under section 110(c) of the CAA, whenever we disapprove a mandatory SIP submission in whole or in part, we are required to promulgate a FIP within two years unless the state corrects the deficiency and we approve the new SIP submittal.

B. Interstate Transport of Pollutants that Affect Visibility

Section 110(a) of the CAA directs states to submit a SIP that provides for the implementation, maintenance, and enforcement of each NAAQS, which is commonly referred to as an infrastructure SIP. Among other things, CAA section 110(a)(2)(D)(i)(II) requires that SIPs contain adequate provisions to prohibit interference with measures required to protect visibility in other states. This is referred to as “interstate visibility transport.” SIPs addressing interstate visibility transport are due to the EPA within three years after the promulgation of a new or revised NAAQS (or within such shorter period as we may prescribe). A state’s failure to submit a complete, approvable SIP for interstate visibility transport creates an obligation for the EPA to promulgate a FIP to address this requirement.

C. Previous Actions Related to Texas Regional Haze

On March 31, 2009, Texas submitted a regional haze SIP to the EPA that included reliance on Texas’ participation in the Clean Air Interstate Rule (CAIR) as an alternative to BART for SO₂ and NO_x emissions from EGUs.⁹ This reliance was consistent with the EPA’s regulations at the time that Texas developed its regional haze plan,¹⁰ but at the time that Texas submitted this SIP to the EPA, the D.C. Circuit had remanded CAIR (without vacatur).¹¹ The court left CAIR and our CAIR FIPs in place in order to “temporarily preserve the environmental values covered by CAIR” until we could, by rulemaking, replace CAIR consistent with the court's opinion. The EPA promulgated CSAPR, a revised multi-state trading program to replace

⁹ CAIR required certain states, including Texas, to reduce emissions of SO₂ and NO_x that significantly contribute to downwind nonattainment of the 1997 NAAQS for fine particulate matter and ozone. See 70 FR 25152 (May 12, 2005).

¹⁰ See 70 FR 39104 (July 6, 2005).

¹¹ See *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008), *modified*, 550 F.3d 1176 (D.C. Cir. 2008).

CAIR, in 2011¹² (and revised it in 2012¹³). CSAPR established FIP requirements for a number of states, including Texas, to address the states' interstate transport obligation under CAA section 110(a)(2)(D)(i)(I). CSAPR requires affected EGUs in these states to participate in the CSAPR trading programs and establishes emissions budgets that apply to the EGUs' collective annual emissions of SO₂ and NO_x, as well as seasonal emissions of NO_x. Following issuance of CSAPR, the EPA determined that CSAPR would achieve greater reasonable progress towards improving visibility than would source-specific BART in CSAPR states.¹⁴ We revised the Regional Haze Rule to allow states that participate in CSAPR to rely on participation in the trading programs in lieu of requiring EGUs in the state to install BART controls.

In the same action that EPA determined that states could rely on CSAPR to address the BART requirements for EGUs, EPA issued a limited disapproval of a number of states' regional haze SIPs, including the 2009 SIP submittal from Texas, due to the states' reliance on CAIR, which had been replaced by CSAPR.¹⁵ The EPA did not immediately promulgate a FIP to address the limited disapproval of Texas' regional haze SIP in order to allow more time for the EPA to assess the remaining elements of the 2009 Texas SIP submittal. In December 2014, we proposed an action to address the remaining regional haze obligations for Texas.¹⁶ In that action, we proposed, among other things, to rely on CSAPR to satisfy the NO_x and SO₂ BART requirements for Texas' EGUs; we also proposed to approve the portions of the SIP addressing PM BART requirements for the state's EGUs. Before that rule was finalized, however, the D.C.

¹² 76 FR 48207 (Aug. 8, 2011).

¹³ CSAPR was amended three times in 2011 and 2012 to add five states to the seasonal NO_x program and to increase certain state budgets. 76 FR 80760 (December 27, 2011); 77 FR 10324 (February 21, 2012); 77 FR 34830 (June 12, 2012).

¹⁴ 77 FR 33641 (June 7, 2012).

¹⁵ *Id.*

¹⁶ 79 FR 74818 (Dec. 16, 2014).

Circuit issued a decision on a number of challenges to CSAPR, denying most claims, but remanding the CSAPR emissions budgets of several states to the EPA for reconsideration, including the Phase 2 SO₂ and seasonal NO_x budget for Texas.¹⁷ Due to potential impacts of the remanded budgets on the EPA's 2012 determination that CSAPR would provide for greater reasonable progress than BART, we did not finalize our decision to rely on CSAPR to satisfy the SO₂ and NO_x BART requirements for Texas EGUs.¹⁸ Additionally, because our proposed action on the PM BART provisions for EGUs was dependent on how SO₂ and NO_x BART were satisfied, we did not take final action on the PM BART elements of Texas' regional haze SIP. In January 2016, we finalized action on the remaining aspects of the December 2014 proposal. That rulemaking was challenged, however, and in December 2016, following the submittal of a request by the EPA for a voluntary remand of the parts of the rule under challenge, the Fifth Circuit Court of Appeals remanded the rule in its entirety.¹⁹

On October 26, 2016, the EPA finalized an update to CSAPR to address the interstate transport requirements of CAA section 110(a)(2)(D)(i)(I) with respect to the 2008 ozone NAAQS (CSAPR Update).²⁰ The EPA also responded to the D.C. Circuit's remand of certain CSAPR seasonal NO_x budgets in that action. As to Texas, the EPA withdrew Texas's seasonal NO_x budget finalized in CSAPR to address the 1997 ozone NAAQS. However, in that same action, the EPA promulgated a FIP with a revised seasonal NO_x budget for Texas to address the

¹⁷ *EME Homer City Generation, L.P. v. EPA*, 795 F.3d 118, 132 (D.C. Cir. 2015).

¹⁸ 81 FR 296 (Jan. 5, 2016).

¹⁹ *Texas v. EPA*, 829 F.3d 405 (5th Cir. 2016).

²⁰ 81 FR 74504 (Oct. 26, 2016).

2008 ozone NAAQS.²¹ Accordingly, Texas remains subject to the CSAPR seasonal NO_x requirements.

On November 10, 2016, in response to the D.C. Circuit's remand of Texas's CSAPR SO₂ budget, we proposed to withdraw the FIP provisions requiring EGUs in Texas to participate in the CSAPR trading programs for annual emissions of SO₂ and NO_x.²² We also proposed to reaffirm that CSAPR continues to provide for greater reasonable progress than BART following our actions taken to address the D.C. Circuit's remand of several CSAPR emissions budgets. On September 21, 2017, we finalized the withdrawal of the FIP provisions for annual emissions of SO₂ and NO_x for EGUs in Texas²³ and affirmed our proposed finding that the EPA's 2012 analytical demonstration remains valid and that participation in CSAPR as it now exists meets the Regional Haze Rule's criteria for an alternative to BART.

II. Our Proposed Actions

A. Regional Haze

On January 4, 2017, we proposed a FIP to address the BART requirements for Texas' EGUs. In that action, we proposed to replace Texas' reliance on CAIR with reliance on CSAPR to address the NO_x BART requirements for EGUs.²⁴ This portion of our proposal was based on the CSAPR Update and our separate November 10, 2016 proposed finding that the EPA's actions in response to the D.C. Circuit's remand would not adversely impact our 2012

²¹ 81 FR 74504, 74524-25.

²² 81 FR 78954.

²³ Texas continues to participate in CSAPR for ozone season NO_x. See final action signed September 21, 2017 available at regulations.gov in Docket No. EPA-HQ-OAR-2016-0598

²⁴ 82 FR 912, 914-15 (Jan. 4, 2017).

demonstration that participation in CSAPR meets the Regional Haze Rule's criteria for alternatives to BART.²⁵ We noted that we could not finalize this portion of our proposed FIP unless and until we finalized our proposed finding that the set of actions taken by the EPA in response to the D.C. Circuit's remand of certain CSAPR budgets would not adversely impact our prior determination that CSAPR provides for greater reasonable progress than BART. As noted in section I.C, on September 21, 2017, we finalized our proposed finding that EPA's 2012 analytical demonstration remains valid and that participation in CSAPR as it now exists meets the Regional Haze Rule's criteria for an alternative to BART.

Also as noted in section I.C, as part of our November 10, 2016 proposed action in response to the D.C. Circuit's remand of Texas' SO₂ CSAPR budget, we also proposed to withdraw the FIP provisions requiring EGUs in Texas to participate in the CSAPR trading programs for annual emissions of SO₂ and NO_x.²⁶ In our January 4, 2017 proposed action on BART requirements for Texas EGUs, we accordingly proposed that because Texas would no longer be participating in the CSAPR program for SO₂, and thus would no longer be eligible to rely on participation in CSAPR as an alternative to source-specific EGU BART for SO₂ under 40 CFR 51.308(e)(4), our regional haze FIP would need to include the identification of BART-eligible EGU sources, screening of sources to identify subject-to-BART sources, and source-by-source determinations of SO₂ BART controls as appropriate. For those EGU sources we proposed to find subject to BART, we proposed to promulgate source-specific SO₂ requirements. We also proposed to disapprove Texas' BART determinations for PM from EGUs. In place of these determinations, we proposed to promulgate source-specific PM BART requirements for

²⁵ 81 FR 74504 (Nov. 10, 2016).

²⁶ 81 FR 78954.

EGUs that we proposed to find subject to BART. Previously, we proposed to approve the EGU BART determinations for PM in the Texas regional haze SIP and this proposal has never been withdrawn.²⁷ At that time, CSAPR was an appropriate alternative for SO₂ and NO_x BART for EGUs. The Texas Regional Haze SIP included a pollutant-specific screening analysis for PM to demonstrate that Texas EGUs were not subject to BART for PM. In a 2006 guidance document,²⁸ the EPA stated that pollutant-specific screening can be appropriate where a state is relying on a BART alternative to address both NO_x and SO₂ BART.

B. Interstate Transport of Pollutants that Affect Visibility

In our January 5, 2016 final action²⁹ we disapproved the portion of Texas' SIP revisions intended to address interstate visibility transport for six NAAQS, including the 1997 8-hour ozone and 1997 PM_{2.5}.³⁰ That rulemaking was challenged, however, and in December 2016, following the submittal of a request by the EPA for a voluntary remand of the parts of the rule under challenge, the Fifth Circuit Court of Appeals remanded the rule in its entirety without vacatur.³¹ In our January 4, 2017 proposed action we proposed to reconsider the basis of our prior disapproval of Texas' SIP revisions addressing interstate visibility transport under CAA section 110(a)(2)(D)(i)(II) for six NAAQS. We proposed that Texas' SIP submittals addressing interstate visibility transport for the six NAAQS were not approvable because they relied solely

²⁷ 79 FR 74817, 74853-54 (Dec. 16, 2014).

²⁸ See discussion in Memorandum from Joseph Paisie to Kay Prince, "Regional Haze Regulations and Guidelines for Best Available Retrofit Technology (BART) Determinations," July 19, 2006.

²⁹ 81 FR 296 (Jan. 5, 2016).

³⁰ Specifically, we previously disapproved the relevant portion of these Texas' SIP submittals: April 4, 2008: 1997 8-hour Ozone, 1997 PM_{2.5} (24-hour and annual); May 1, 2008: 1997 8-hour Ozone, 1997 PM_{2.5} (24-hour and annual); November 23, 2009: 2006 24-hour PM_{2.5}; December 7, 2012: 2010 NO₂; December 13, 2012: 2008 8-hour Ozone; May 6, 2013: 2010 1-hour SO₂ (Primary NAAQS). 79 FR 74818, 74821; 81 FR 296, 302.

³¹ *Texas v. EPA*, 829 F.3d 405 (5th Cir. 2016).

on Texas' 2009 Regional Haze SIP to ensure that emissions from Texas did not interfere with required measures in other states. Texas' Regional Haze SIP, in turn, relied on the implementation of CAIR as an alternative to EGU BART for SO₂ and NO_x.³² We proposed a FIP to fully address Texas' interstate visibility transport obligations for: (1) 1997 8-hour ozone, (2) 1997 PM_{2.5} (annual and 24-hour), (3) 2006 PM_{2.5} (24-hour), (4) 2008 8-hour ozone, (5) 2010 1-hour NO₂ and (6) 2010 1-hour SO₂. The proposed FIP was based on our finding that our proposed action to fully address the BART requirements for Texas EGUs was adequate to ensure that emissions from Texas do not interfere with measures to protect visibility in nearby states in accordance with CAA section 110(a)(2)(D)(i)(II).

III. Summary of Our Final Decisions

A. Regional Haze

When we finalized a limited disapproval of Texas' 2009 regional haze SIP for its reliance on CAIR participation as a BART alternative, we did not immediately finalize a CSAPR-better-than-BART FIP for Texas, as we had proposed for Texas and ultimately finalized for twelve other states. Instead of finalizing a CSAPR-better-than-BART FIP for Texas, the EPA acknowledged that we needed more time to assess the Texas regional haze SIP in regard to aspects other than its reliance on CAIR as an alternative to BART.³³ As the EPA has continued to assess how best to address the regional haze obligations for Texas, Texas has not submitted a SIP revision to address the prior disapproval, so the EPA has a remaining obligation to address BART requirements for Texas EGUs.

³² *EME Homer City Generation, L.P. v. EPA*, 795 F.3d 118, 133-34 (D.C. Cir. 2015) (holding that SIPs based on CAIR were unapprovable to fulfill good neighbor obligations).

³³ 77 FR 33641, 33654 (June 7, 2012).

After assessing how we should address BART for Texas EGUs, we believe that our initial 2011 proposal, to treat Texas like other similarly situated CSAPR states, was an appropriate and regionally consistent approach. As discussed above, in 2014, we proposed that CSAPR would satisfy the NO_x and SO₂ BART requirements for Texas EGUs.³⁴ However, we did not finalize this part of the 2014 proposal in the action taken on January 5, 2016.³⁵ Given EPA's response to the D.C. Circuit remand of certain CSAPR emission budgets, we can no longer rely on CSAPR for Texas' SO₂ BART requirements. Based on comments we received in response to our January 2017 proposal, and giving particular weight to the views expressed by Texas, we are finalizing various determinations to ensure satisfaction of the BART requirement for EGUs in Texas. Of particular note, in making our final decision for the SO₂ BART requirement for EGUs, we centered our focus on a timely comment letter received from the Texas Commission on Environmental Quality (TCEQ) and the Public Utility Commission of Texas (PUC). This comment urged us to consider as a BART alternative the concept of emission caps using CSAPR allocations. We also received similar comments from Luminant and American Electric Power (AEP). Based upon the comments, we are proceeding to address the SO₂ BART requirement for EGUs under a BART alternative. The EPA finds that, because this BART alternative will result in SO₂ emissions from Texas EGUs that will be similar to emissions anticipated under CSAPR, the alternative is an appropriate approach for addressing Texas' SO₂ BART obligations.

³⁴ 79 FR 74817, 74823 (December 16, 2014) ("We propose to replace Texas' reliance on CAIR to satisfy the BART requirement for EGUs with reliance on CSAPR."). This part of the 2014 proposal was not finalized in the action taken on January 5, 2016, that has since been remanded by the Fifth Circuit Court of Appeals. 81 FR 295.

³⁵ Final action taken on January 5, 2016, that has since been remanded by the Fifth Circuit Court of Appeals. 81 FR 295.

Specifically, the BART alternative is justified “based on the clear weight of the evidence” that the alternative achieves greater reasonable progress than would be achieved through BART. *See* 40 CFR 51.308(e)(2)(E). The program is designed to accomplish environmental and visibility results by achieving emission levels that will be the same as or better than the emission levels that would have been obtained by state participation in the interstate CSAPR program as finalized and amended in 2011 and 2012, which EPA first deemed to be better than BART for NO_x and SO₂ in a 2012 regulatory action.³⁶ The TCEQ and EPA recently signed a memorandum of agreement (MOA) to work together to develop a SIP revision addressing interstate visibility transport requirements and BART requirements for EGUs with a BART alternative trading program starting from CSAPR as allowed under the Regional Haze Rule (40 C.F.R. 51.308(e)).³⁷ Texas envisions that the FIP measures that serve to satisfy this BART requirement will be replaced by a future SIP submission following the approach described in the MOA that may be approved as meeting the requirements of the CAA and the Regional Haze Rule. EPA policy consistently favors that states will exercise their SIP authority to avoid need for promulgation and continued implementation of measures under FIP authority. In the absence of a SIP to address the SO₂ BART requirement for Texas EGUs, however, EPA finds it necessary to address the requirement under its FIP authority, and the details of how this is addressed and the accompanying justification are further discussed below under Section III.A.3, “SO₂ BART.”

³⁶ 77 FR 33641 (June 7, 2012).

³⁷ See Memorandum of Agreement Between the Texas Commission on Environmental Quality and the Environmental Protection Agency Regarding a State Implementation Plan to Address Certain Regional Haze and Interstate Visibility Transport Requirements Pursuant to Sections 110 and 169A of the Clean Air Act, Signed August 14, 2017.

The Regional Haze Rule requires that SIP or FIP measures be in place to ensure that BART is satisfied for all subject-to-BART EGUs and all haze-causing pollutants. For ease of summarization, we will detail the relevant final decisions for each of the haze-causing pollutants: PM, NO_x, and SO₂.³⁸ In our final decisions today, the relevant BART requirement for all BART-eligible coal-fired units and a number of BART-eligible gas- or gas/fuel oil-fired units will be encompassed by BART alternatives for NO_x and SO₂ such that we do not deem it necessary to finalize subject-to-BART findings for these EGUs for these pollutants. The remaining BART-eligible EGUs not covered by the SO₂ BART alternative have been determined to be not subject to BART based on the methodologies utilizing model plants and CALPUFF modeling as described in our proposed rule and BART Screening technical support document (TSD). Therefore, we are approving the portion of the Texas Regional Haze SIP that addresses the BART requirement for EGUs for PM, we are relying upon Texas EGUs' continued participation in the CSAPR program to serve as a BART alternative for NO_x, and we are promulgating an intrastate trading FIP to address the SO₂ BART requirements for EGUs.

1. BART-Eligible Units

BART-eligible sources are those sources which have the potential to emit 250 tons per year or more of a visibility-impairing air pollutant, which were "in existence" on August 7, 1977 but not "in operation" before August 7, 1962, and whose operations fall within one or more of 26 specifically listed source categories.³⁹ As discussed in detail in our proposal and the BART FIP TSD, our analysis of BART-eligible EGUs started with the list of BART-eligible sources

³⁸ In this action, we did not consider VOCs and ammonia among visibility-impairing pollutants for several reasons, as discussed in the TSD.

³⁹ 40 CFR 51.301.

provided by TCEQ in the 2009 Texas Regional Haze SIP. Based on additional information from potential BART-eligible sources and the U.S. Energy Information Administration (EIA), we converted Texas’ facility-specific BART-eligible EGU list to a unit-specific BART-eligible EGU list, eliminated those units that have retired, and verified the BART-eligibility of each remaining unit. We noted in our proposal that Texas’ list omitted some sources that we had identified as BART-eligible. We are finalizing the identification of BART-eligible units as proposed. A “BART-eligible source” is the collection of BART-eligible units at a facility. Table 1 shows the list of EGUs in Texas that are BART-eligible:

Table 1. Summary of BART-Eligible Units

Facility	Unit
Barney M. Davis (Talen/Topaz)	1
Big Brown (Luminant)	1
Big Brown (Luminant)	2
Cedar Bayou (NRG)	CBY1
Cedar Bayou (NRG)	CBY2
Coletto Creek (Dynegy ⁴⁰)	1
Dansby (City of Bryan)	1
Decker Creek (Austin Energy)	1
Decker Creek (Austin Energy)	2
Fayette (LCRA)	1
Fayette (LCRA)	2
Graham (Luminant)	2
Greens Bayou (NRG)	5

⁴⁰ Dynegy purchased the Coletto Creek power plant from Engie in February, 2017. Note that Coletto Creek may still be listed as being owned by Engie in some of our supporting documentation which was prepared before that sale.

Handley (Exelon)	3
Handley (Exelon)	4
Handley (Exelon)	5
Harrington Station (Xcel)	061B
Harrington Station (Xcel)	062B
J T Deely (CPS Energy)	1
J T Deely (CPS Energy)	2
Jones Station (Xcel)	151B
Jones Station (Xcel)	152B
Knox Lee Power Plant (AEP)	5
Lake Hubbard (Luminant)	1
Lake Hubbard (Luminant)	2
Lewis Creek (Entergy)	1
Lewis Creek (Entergy)	2
Martin Lake (Luminant)	1
Martin Lake (Luminant)	2
Martin Lake (Luminant)	3
Monticello (Luminant)	1
Monticello (Luminant)	2
Monticello (Luminant)	3
Newman (El Paso Electric)	2
Newman (El Paso Electric)	3
Newman (El Paso Electric)	4
Nichols Station (Xcel)	143B
O W Sommers (CPS Energy)	1
O W Sommers (CPS Energy)	2
Plant X (Xcel)	4
Powerlane (City of Greenville)	ST1
Powerlane (City of Greenville)	ST2

Powerlane (City of Greenville)	ST3
R W Miller (Brazos Elec. Coop)	1
R W Miller (Brazos Elec. Coop)	2
R W Miller (Brazos Elec. Coop)	3
Sabine (Entergy)	2
Sabine (Entergy)	3
Sabine (Entergy)	4
Sabine (Entergy)	5
Sim Gideon (LCRA)	1
Sim Gideon (LCRA)	2
Sim Gideon (LCRA)	3
Spencer (City of Garland)	4
Spencer (City of Garland)	5
Stryker Creek (Luminant)	ST2
Trinidad (Luminant)	6
Ty Cooke (City of Lubbock)	1
Ty Cooke (City of Lubbock)	2
V H Braunig (CPS Energy)	1
V H Braunig (CPS Energy)	2
V H Braunig (CPS Energy)	3
WA Parish (NRG)	WAP4
WA Parish (NRG)	WAP5
WA Parish (NRG)	WAP6
Welsh Power Plant (AEP)	1
Welsh Power Plant (AEP)	2
Wilkes Power Plant (AEP)	1
Wilkes Power Plant (AEP)	2
Wilkes Power Plant (AEP)	3

2. Subject-to-BART Sources

As discussed elsewhere, it is unnecessary to finalize the subject-to-BART determinations for BART-eligible sources that are covered by the BART alternatives for SO₂ and NO_x. The BART alternatives cover both BART-eligible and non-BART eligible sources. This combination provides for greater reasonable progress than source-specific BART. Even if a unit were individually found to not be subject to BART, its participation in the BART alternative contributes to the finding that the program provides greater reasonable progress than BART. We note that all BART-eligible EGUs in Texas are either covered by the BART alternative or have screened out of being subject to BART. The section below that discusses our final SO₂ BART determination lists those units covered by the BART alternative program and identifies which of those units are BART-eligible. As discussed in section III.A.4 below, we are approving the portion of the 2009 Texas Regional Haze SIP that determined that no PM BART determinations are needed for BART-eligible EGUs in Texas.

For those BART-eligible EGUs that are not covered by the BART alternative for SO₂, we are finalizing determinations that those EGUs are not subject-to-BART for NO_x, SO₂ and PM as proposed, based on the methodologies utilizing model plants and CALPUFF modeling as described in our proposed rule and BART Screening TSD.

The following sources are determined to be BART-eligible, but not subject-to-BART:

Table 2. Sources Determined to Be BART-Eligible But Not Subject-to-BART for NO_x, SO₂, and PM

Facility	Units
Barney M. Davis (Talen/Topaz)	1
Cedar Bayou (NRG)	CBY1 & CBY2
Dansby (City of Bryan)	1

Decker Creek (Austin Energy)	1 & 2
Greens Bayou (NRG)	5
Handley (Exelon)	3, 4 & 5
Jones (Xcel)	151B & 152B
Knox Lee (AEP)	5
Lake Hubbard (Luminant)	1 & 2
Lewis Creek (Entergy)	1 & 2
Nichols Station (Xcel)	143B
Plant X (Xcel)	4
Powerlane (City of Greenville)	ST1, ST2 & ST3
R W Miller (Brazos Elec. Coop)	1, 2 & 3
Sabine (Entergy)	2, 3, 4 & 5
Sim Gideon (LCRA)	1, 2 & 3
Spencer (City of Garland)	4 & 5
Trinidad (Luminant)	6
Ty Cooke (City of Lubbock)	1 & 2
V H Braunig (CPS Energy)	1, 2 & 3

3. SO₂ BART

The BART alternative will achieve SO₂ emission levels that are functionally equivalent to those projected for Texas' participation in the original CSAPR program. The BART alternative applies the CSAPR allowance allocations for SO₂ to all BART-eligible coal-fired EGUs, several additional coal-fired EGUs, and several BART-eligible gas-fired and gas/fuel oil-fired EGUs. In addition to being a sufficient alternative to BART, it secures reductions consistent with visibility transport requirements and is part of the long-term strategy to meet the reasonable progress requirements of the Regional Haze Rule.

The combination of the source coverage for this program, the total allocations for EGUs covered by the program, and recent and foreseeable emissions from EGUs not covered by the program will result in future EGU emissions in Texas that are similar to the SO₂ emission levels forecast in the 2012 better-than-BART demonstration for Texas EGU emissions assuming

CSAPR participation. In line with the comment from the TCEQ/PUC, we are finalizing a BART alternative that will encompass the SO₂ BART requirements for coal-fired EGUs and a number of gas- and gas/fuel oil-fired EGUs under a program that will include the sources in the following table. See Section V.B for a discussion on identification of participating sources.

Table 3. Texas EGUs Subject to the FIP SO₂ Trading Program

Owner/Operator	Units	BART-Eligible
AEP	Welsh Power Plant Unit 1	Yes
	Welsh Power Plant Unit 2	Yes
	Welsh Power Plant Unit 3	No
	H W Pirkey Power Plant Unit 1	No
	Wilkes Unit 1*	Yes
	Wilkes Unit 2*	Yes
	Wilkes Unit 3*	Yes
CPS Energy	JT Deely Unit 1	Yes
	JT Deely Unit 2	Yes
	Sommers Unit 1*	Yes
	Sommers Unit 2*	Yes
Dynegy	Coleto Creek Unit 1	Yes
LCRA	Fayette / Sam Seymour Unit 1	Yes
	Fayette / Sam Seymour Unit 2	Yes
Luminant	Big Brown Unit 1	Yes
	Big Brown Unit 2	Yes
	Martin Lake Unit 1	Yes
	Martin Lake Unit 2	Yes
	Martin Lake Unit 3	Yes
	Monticello Unit 1	Yes
	Monticello Unit 2	Yes
	Monticello Unit 3	Yes
	Sandow Unit 4	No
	Stryker ST2*	Yes
	Graham Unit 2*	Yes
NRG	Limestone Unit 1	No
	Limestone Unit 2	No

	WA Parish Unit WAP4*	Yes
	WA Parish Unit WAP5	Yes
	WA Parish Unit WAP6	Yes
	WA Parish Unit WAP7	No
Xcel	Tolk Station Unit 171B	No
	Tolk Station Unit 172B	No
	Harrington Unit 061B	Yes
	Harrington Unit 062B	Yes
	Harrington Unit 063B	No
El Paso Electric	Newman Unit 2*	Yes
	Newman Unit 3*	Yes
	Newman Unit 4*	Yes

* Gas-fired or gas/fuel oil-fired units

This BART alternative includes all BART-eligible coal-fired units in Texas, additional coal-fired EGUs, and some additional BART-eligible gas and gas/fuel oil-fired units. Moreover, we believe that the differences in source coverage between CSAPR and this BART alternative are either not significant or, in fact, work to demonstrate the relative stringency of the BART alternative as compared to CSAPR (See Section V of this notice for detailed information). This relative stringency can be understood in reference to the following points:

- A. Covered sources under the BART alternative in this FIP represent 89%⁴¹ of all SO₂ emissions from all Texas EGUs in 2016, and approximately 85% of CSAPR allocations for existing units in Texas.
- B. The remaining 11 % (100 minus 89) of 2016 emissions from sources not covered by the BART alternative come from gas units that rarely burn fuel oil or coal-fired units that on

⁴¹ In 2016, 218,291 tons of SO₂ were emitted from sources included in the program and 27,446 tons from other EGUs (11.1%).

average are better controlled for SO₂ than the covered sources and generally are less relevant to visibility impairment. (A fuller discussion of this point is provided in Section V of this notice.) As such, any shifting of generation to non-covered sources, as might occur if a covered source reduces its operation in order to remain within its SO₂ emissions allowance allocation, would result in less emissions to generate the same amount of electricity.

- C. Furthermore, the non-inclusion of a large number of gas-fired units that rarely burn fuel oil reduces the amount of available allowances for units that would typically and collectively be expected to use only a fraction of CSAPR emissions allowances. Many of these sources typically emit at levels much lower than their allocation level. Sources not participating in the program may choose to opt in, thereby increasing the number of available allowances. This will serve to make the program more closely resemble CSAPR.
- D. The BART alternative does not allow purchasing of allowances from out-of-state sources. Emission projections under CAIR and CSAPR showed that Texas sources were anticipated to purchase allowances from out-of-state sources.⁴²

Based on these points, and borrowing to the greatest extent possible from the rules and program design of CSAPR, but applying them for Texas only, we are proceeding with the commenters', including the State of Texas', suggested consideration for SO₂ BART coverage for EGUs by means of a BART alternative under an intrastate trading program. As with any FIP, we

⁴² See CAIR 2018 emission projections of approximately 350,000 tons SO₂ emitted from Texas EGUs compared to CAIR budget for Texas of 225,000 tons. See section 10 of the 2009 Texas Regional Haze SIP.

also would welcome Texas submitting a future SIP, as discussed in the MOA, that meets the Regional Haze Rule and the Act's requirements so as to enable future withdrawal of this FIP-based BART alternative.⁴³

In 2014 we had originally proposed that CSAPR would satisfy the SO₂ BART requirement for Texas EGUs.⁴⁴ Although we never finalized that proposal, functionally, the final decision relies on substantially the same technical elements. In contrast to the 2014 proposal, however, we are not finalizing this SO₂ BART alternative as meeting the terms of 40 CFR 51.308(e)(4), as amended, because that regulatory provision, by its terms, provides BART coverage for pollutants covered by the CSAPR trading program in the State but on September 21, 2017, EPA finalized its proposed action to remove Texas from the CSAPR SO₂ trading program.⁴⁵ Instead we are relying on the BART alternative option provided under 40 CFR 51.308(e)(2). The BART alternative being finalized today is supported by our determination that the clear weight of the evidence is that the trading program achieves greater reasonable progress than BART. The BART alternative is designed to achieve SO₂ emission levels from Texas sources similar to the SO₂ emission levels that would have been achieved under CSAPR. By a quantitative and qualitative assessment of the operation of the BART alternative, we are able to conclude that emission levels will be on average no greater than the emission levels from Texas EGUs that would have been realized from the SO₂ trading program under CSAPR. (See Section V of this notice for detailed information). Accordingly, by the measure of CSAPR better than

⁴³ See Memorandum of Agreement Between the Texas Commission on Environmental Quality and the Environmental Protection Agency Regarding a State Implementation Plan to Address Certain Regional Haze and Interstate Visibility Transport Requirements Pursuant to Sections 110 and 169A of the Clean Air Act, signed August 14, 2017.

⁴⁴ 79 FR 74817, 74823 (December 16, 2014) ("We propose to replace Texas' reliance on CAIR to satisfy the BART requirement for EGUs with reliance on CSAPR."). This part of the 2014 proposal was not finalized in the action taken on January 5, 2016, that has since been remanded by the Fifth Circuit Court of Appeals. 81 FR 295.

⁴⁵ See final action signed September 21, 2017 available at *regulations.gov* in Docket No. EPA-HQ-OAR-2016-0598

BART, the SO₂ BART FIP for Texas' BART-eligible EGUs participating in the trading program will achieve greater reasonable progress than BART with respect to SO₂. BART-eligible EGUs not participating in the program are demonstrated to not cause or contribute to visibility impairment, and we are finalizing our determination in this action that these units are not subject to BART.

The Regional Haze Rule at 40 CFR 51.308(e)(2)(iii) requires that the emission reductions from BART alternatives occur "during the period of the first long-term strategy for regional haze." The SO₂ BART alternative that EPA is finalizing here will be implemented beginning in January 2019, and thus emission reductions needed to meet the allowance allocations must take place by the end of 2019. For the purpose of evaluating Texas's BART alternative, the end of the first planning period of the first long-term strategy for Texas is 2021. This is a result of recent changes to the regional haze regulation, revising the requirement for states to submit revisions to their long-term strategy from 2018 to 2021.⁴⁶ Therefore, the emission reductions from the Texas SO₂ trading program will be realized prior to that date and within the period of Texas' first long-term strategy for regional haze.

In promulgating the regulatory terms and rules for implementing the BART alternative, we are mindful of the minimally required elements for a BART alternative emissions trading program that are specified in the provisions of 40 CFR 51.308(e)(2)(vi)(A)-(L). In general, these types of provisions are foundational, in a generic sense, to the establishment of allowance markets. CSAPR is a prominent example of such an allowance market, and by transferring and generally incorporating program rules and terms from the well-tested provisions of CSAPR we have ensured that the BART alternative will conform in detail and coverage to the breadth of

⁴⁶ 82 FR 3078 (Jan. 10, 2017).

provisions that are needed for an emissions trading program covered by a cap (See Section V of this notice for additional discussion). To the extent that Texas would submit a future SIP revision under its SIP authority to implement SO₂ BART or an SO₂ BART alternative for its EGUs as described in the MOA to meet the Regional Haze Rule and CAA requirements, it may look to the provisions promulgated under FIP authority or it may examine its flexibilities and the extent of its discretion regarding essential provisions detailed at 40 CFR 51.308(e)(2)(vi).

4. PM BART

In our January 2017 proposal, we proposed to disapprove Texas' technical evaluation and determination that PM BART emission limits are not required for any of Texas' EGUs. The Texas Regional Haze SIP included a pollutant-specific screening analysis for PM to demonstrate that Texas EGUs were not subject to BART for PM. This approach was consistent with a 2006 guidance document⁴⁷ in which the EPA stated that pollutant-specific screening can be appropriate where a state is relying on a BART alternative to address both NO_x and SO₂ BART. Because we proposed to address SO₂ BART on a source-specific basis, however, Texas' pollutant-specific screening was not appropriate and we proposed source-specific PM BART emission limits consistent with existing practices and controls. In this final action, we are not finalizing source-specific SO₂ BART determinations. Instead, for the majority of Texas' BART-eligible EGUs, we are relying on BART alternatives for both SO₂ and NO_x emissions. Therefore, we now conclude that Texas' pollutant-specific screening analysis was appropriate. All of the BART-eligible sources participating in the intrastate trading program have visibility impacts

⁴⁷ See discussion in Memorandum from Joseph Paisie to Kay Prince, "Regional Haze Regulations and Guidelines for Best Available Retrofit Technology (BART) Determinations," July 19, 2006.

from PM alone below the subject-to-BART threshold of 0.5 deciviews (dv).⁴⁸ Furthermore, the BART-eligible sources not participating in the intrastate trading program screened out of BART for all visibility impairing pollutants. As such, we are approving the portion of the Texas Regional Haze SIP that determined that PM BART emission limits are not required for any Texas EGUs.

As we explained in the January 2017 proposal, the Texas Regional Haze SIP did not evaluate PM impacts from all BART-eligible EGUs. We have evaluated and determined this omission does not affect Texas' conclusion that no BART-eligible EGUs should be subject-to-BART for PM emissions. In our proposal, we identified several facilities as BART-eligible that Texas did not identify as BART eligible in the Texas Regional Haze SIP. Specifically, we identified the following additional BART-eligible sources: Coletto Creek Unit 1 (Dynegy), Dansby Unit 1 (City of Bryan), Greens Bayou Unit 5 (NRG), Handley Units 3,4, and 5 (Excelon), Lake Hubbard Units 1 and 2 (Luminant), Plant X Unit 4 (Xcel), Powerlane Units ST1, ST2, and ST3 (City of Greenville), R W Miller Units 1, 2, and 3 (Brazos Elec.), Spencer Units 4 and 5 (City of Garland), and Stryker Creek Unit ST2 (Luminant). In our proposal, we used CALPUFF modeling and a model-plant analysis and found that all of these facilities except Coletto Creek and Stryker Creek had impacts from NO_x, SO₂ and PM below the BART screening level.⁴⁹ CALPUFF modeling showed that Stryker Creek Unit ST2 had a visibility impact of 0.786 dv from NO_x, SO₂ and PM. However, Stryker Creek Unit ST2 is now covered by a BART alternative for NO_x and SO₂, so we evaluated the visibility impact of Stryker Creek Unit ST2's

⁴⁸ Stryker Creek is covered by CSAPR for NO_x and by the SO₂ trading program but was not included in the 2009 Regional Haze SIP. How Stryker Creek is screened out for PM is discussed below.

⁴⁹ EPA's Proposal screened out Dansby, Greens Bayou, Handley, Lake Hubbard, Plant X, Powerlane, R W Miller, and Spencer using CALPUFF direct modeling and Model Plants.

PM emissions alone. The CALPUFF modeling files and spreadsheets included in our proposal indicate that light extinction from PM (PM_{Fine} and PM_{Coarse}) is less than 1% of total light extinction at all Class I areas. Therefore, because the visibility impact of PM emissions from Stryker Creek Unit ST2 would be a small fraction of 0.786 dv (roughly 1%), the source is not subject to BART for PM under EPA's 2006 guidance.

We also evaluated the potential visibility impact of PM emissions from Coletto Creek Unit 1 using the CAMx modeling that Texas used for PM BART screening of its EGU sources in its SIP.⁵⁰ Specifically, we evaluated the modeling results for two facilities (LCRA Fayette and Sommers Deely) with stack parameters similar to Coletto Creek's, but which are located closer to Class I Areas than Coletto Creek. Texas grouped the LCRA Fayette Facility in Group 2 of their PM screening modeling along with other sources and found that their maximum aggregate impacts at all Class I areas were less than 0.25 deciviews (dv). Texas also explicitly modeled the City Public Service Sommers Deely Facility's PM impacts. Maximum impacts at all Class I areas from Sommers Deely were less than 0.32 dv. To extend these model results to Coletto Creek, we used the Q/D ratio where Q is the maximum annual PM emissions⁵¹ and D is the distance to the nearest receptor of a Class I area. If the Q/D ratio of Coletto Creek is smaller than the ratios for the two modeling results (Fayette and Sommers Deely) then Coletto Creek impacts can be estimated as less than the impacts of these source(s) and thus be screened out. We evaluated the closest Class I Areas (Big Bend, Guadalupe Mountains, Carlsbad, Wichita Mountains, and Caney Creek)

⁵⁰ Environ Report – “Final Report Screening Analysis of Potential BART-Eligible Sources in Texas”, September 27, 2006; “Addendum 1 – BART Exemption Screening Analysis”, Draft December 6, 2006; and “BARTmodelingparameters V2.csv”.

⁵¹ This is calculated by using the maximum daily PM_{10} daily emission rate, adding the maximum daily $PM_{2.5}$ emission rate and then calculating the total emissions in tons per year if this max daily rate happened every day.

and the Q/D ratios were: Coletto Creek (0.59-0.86), Fayette (4.25-6.1), and Sommers Deely (6.0-10.05).⁵² The Q/D ratio for Fayette is 6 to 8 times larger than for Coletto Creek, while the Q/D ratio for Sommers Deely is 9 to 11.6 times higher than for Coletto Creek. Therefore, if we were to model the PM impacts from Coletto Creek, they would be an order of magnitude smaller than the impacts from these facilities, which are well below the threshold of 0.5 dv. Therefore, Coletto Creek is not subject to BART for PM emissions.

In finalizing an approval of Texas' determinations regarding PM BART, we offer one additional note. We originally proposed to approve Texas' screening approach in 2014,⁵³ and our final action today essentially conforms to our technical evaluation in that proposal.

5. NO_x BART

We are finalizing our proposed determination that Texas EGUs' continued participation in the CSAPR program for interstate transport for ozone will serve as a BART alternative for NO_x for EGUs in the State of Texas. Our action to address NO_x BART for EGUs as it applies to Texas is based on two other recent rulemakings concerning CSAPR. The first is the rulemaking to update CSAPR to address interstate transport of ozone pollution with respect to the 2008 ozone NAAQS, which established a new ozone season budget for NO_x emissions in Texas.⁵⁴ The second is the determination that CSAPR continues to be a better than BART alternative, on a pollutant specific basis, for states that participate in the CSAPR program as it now exists.⁵⁵ Because our FIP relies on CSAPR as a BART alternative for NO_x for Texas EGUs, we are not

⁵² See 'Coletto_Creek_Screen_analysis.xlsx'

⁵³ See 79 FR 74817, 74848 (Dec. 16, 2014).

⁵⁴ 81 FR 74504 (Oct. 16, 2016).

⁵⁵ See final action signed September 21, 2017 available at *regulations.gov* in Docket No. EPA-HQ-OAR-2016-0598

required in this action to promulgate source-specific NO_x BART determinations for those sources.

We note that Texas may opt to use its SIP planning authority, as was noted in its 2009 Regional Haze SIP in a similar context, to address the NO_x BART requirement for EGUs without relying on CSAPR. If Texas instead wishes to rely upon the CSAPR program to address the NO_x BART requirement, it may submit a SIP revision to establish its reliance on the program to satisfy the requirement for NO_x BART for EGUs. By using the SIP pathway, Texas would be exercising the primary responsibility for air pollution control that is embodied in the Act. *See* CAA section 101(a)(3). Recognizing that the 2009 Regional Haze SIP did not, by its terms, provide an approvable means to address the requirement, however, we are now required to exercise our FIP authority to address it.⁵⁶ We are therefore finalizing the determination as proposed.

B. Interstate Transport of Pollutants that Affect Visibility

We are finalizing our proposal to disapprove Texas' SIP revisions addressing interstate visibility transport under CAA section 110(a)(2)(D)(i)(II) for six NAAQS. As explained further in our proposal, Texas' infrastructure SIPs for these six NAAQS relied on the 2009 Regional Haze SIP, including its reliance on CAIR as an alternative to EGU BART for SO₂ and NO_x to meet the interstate visibility transport requirements.⁵⁷ We are finalizing a FIP to fully address

⁵⁶ As explained in our proposal, our ongoing authority and obligation to address the NO_x BART requirement for Texas EGUs under CAA section 110(c) traces to EPA's limited disapproval of the 2009 Texas Regional Haze SIP in 2012 due to the State's reliance on the remanded and replaced CAIR as an alternative to NO_x BART. *See also EME Homer City Generation, L.P. v. EPA*, 795 F.3d 118, 133-34 (D.C. Cir. 2015) holding that SIPs based on CAIR were unapprovable to fulfill good neighbor obligations.

⁵⁷ 82 FR 912, 916 (Jan. 4, 2017).

Texas' interstate visibility transport obligations for the following six NAAQS: (1) 1997 8-hour ozone, (2) 1997 PM_{2.5} (annual and 24 hour), (3) 2006 PM_{2.5} (24-hour), (4) 2008 8-hour ozone, (5) 2010 1-hour NO₂ and (6) 2010 1-hour SO₂.

An EPA guidance document (2013 Guidance) on infrastructure SIP elements states that CAA section 110(a)(2)(D)(i)(II)'s interstate visibility transport requirements can be satisfied by approved SIP provisions that the EPA has found to adequately address a state's contribution to visibility impairment in other states.⁵⁸ The EPA interprets interstate visibility transport to be pollutant-specific, such that the infrastructure SIP submission need only address the potential for interference with protection of visibility caused by the pollutant (including precursors) to which the new or revised NAAQS applies.⁵⁹ The 2013 Guidance lays out two ways in which a state's infrastructure SIP submittal may satisfy interstate visibility transport. One way is through a state's confirmation in its infrastructure SIP submittal that it has an EPA approved regional haze SIP in place. In the absence of a fully approved regional haze SIP, a demonstration that emissions within a state's jurisdiction do not interfere with other states' plans to protect visibility meets this requirement. Such a demonstration should point to measures that limit visibility-impairing pollutants and ensure that the resulting reductions conform with any mutually agreed emission reductions under the relevant regional haze regional planning organization (RPO) process.⁶⁰

To develop its 2009 Regional Haze SIP, TCEQ worked through its RPO, the Central Regional Air Planning Association (CENRAP), to develop strategies to address regional haze,

⁵⁸ See "Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and (2)" included in the docket for this action.

⁵⁹ See *Id.*, at 33.

⁶⁰ See *Id.*, at 34, and 76 FR 22036 (April 20, 2011) containing EPA's approval of the visibility requirement of 110(a)(2)(D)(i)(II) based on a demonstration by Colorado that did not rely on the Colorado Regional Haze SIP.

which at that time were based on emissions reductions from CAIR. To help states in establishing reasonable progress goals for improving visibility in Class I areas, the CENRAP modeled future visibility conditions based on the mutually agreed emissions reductions from each state. The CENRAP states then relied on this modeling in setting their respective reasonable progress goals.

This FIP is adequate to ensure that emissions from Texas do not interfere with measures to protect visibility in nearby states because the BART FIP emission reductions are consistent with the level of emissions reductions relied upon by other states during consultation. The 2009 Texas Regional Haze SIP relied on CAIR to meet SO₂ and NO_x BART requirements. Under CAIR, Texas EGU sources were projected to emit approximately 350,000 tpy of SO₂. As discussed elsewhere, Texas EGU emissions for sources covered by the trading program will be constrained by the number of available allowances. Average annual emissions for the covered sources will be less than or equal to 248,393 tons with some year to year variability constrained by the number of banked allowances and number of allowances that can be allocated in a control period from the supplemental pool. Sources not covered by the program emitted less than 27,500 tons of SO₂ in 2016 and are not projected to significantly increase from this level. Any new units would be required to be well controlled and similar to the existing units not covered by the program, they would not significantly increase total emissions of SO₂. Additionally, this FIP relies on CSAPR as an alternative to EGU BART for NO_x, which exceeds the emissions reductions relied upon by other states during consultation. As such, this BART FIP is sufficient to address the interstate visibility transport requirement under CAA section 110(a)(2)(D)(i)(II) for the six NAAQS.

C. Reasonable Progress

This final action is part of the long-term strategy for Texas and will contribute to making reasonable progress toward natural visibility conditions at Texas' and downwind Class I areas. However, the EPA is not determining at this time that this final action fully resolves the EPA's outstanding obligations with respect to reasonable progress that resulted from the Fifth Circuit's remand of our reasonable progress FIP. We intend to take future action to address the Fifth Circuit's remand.

IV. Summary and Analysis of Major Issues Raised by Commenters

We received both written and oral comments at the public hearings we held in Austin. We also received comments by the internet and the mail. The full text of comments received from these commenters, except what was claimed as CBI, is included in the publicly posted docket associated with this action at www.regulations.gov. The CBI cannot be posted to www.regulations.gov, but is part of the record of this action. We reviewed all public comments that we received on the proposed action. Below we provide a summary of certain comments and our responses. First, we provide a summary of all of the relevant technical comments we received and our responses to these comments. We do not consider some of the technical comments as relevant to the final action. For these comments we provide a brief summary of the comments and a discussion as to why they are not relevant. Second, we provide a summary below of the more significant legal comments with a summary of our responses. All of the legal comments we received that are relevant to our final action are found in a separate document, titled the Legal Response To Comments (RTC) document. Therefore, if additional information is desired concerning how we addressed a particular legal comment, the reader should refer to the Legal RTC document. Third, we provide a summary of the more significant/relevant modeling

related comments with a summary of our responses. The entirety of the modeling comments and our responses thereto are contained in a separate document titled the Modeling RTC document.

A. Comments on Relying on CSAPR for SO₂ BART or Developing an Intrastate SO₂ Trading Program

Comment: We received comments from TCEQ that our proposed SO₂ controls for the coal-fired power plants represents more control than is necessary to satisfy BART. The EPA should consider an alternate control approach for these BART-affected units using source or system caps. Because the CSAPR level of control is better than BART, the EPA should have considered an equivalent control level in its BART analysis. For example, a potential alternative is the concept of system-wide emission caps using CSAPR allocations. A SO₂ system-cap approach for BART would be based on establishing a cap on all the BART subject units under common ownership and control based on CSAPR allocations to those specific units. System-wide caps for these BART subject units based on CSAPR allocations would provide flexibility while actually being more stringent than CSAPR because the companies would not have the ability to trade allocations with non-BART facilities or with companies in other states. Furthermore, the EPA has approved system-cap approaches under the TCEQ's Chapter 117 rules for NO_x. If such an approach using CSAPR allocations or some other similar variation can be demonstrated to be more stringent than CSAPR itself, then the EPA's CSAPR-is-better-than-BART determination should satisfy some of the demonstration requirements for BART alternatives. Even if not based on CSAPR allocations, the EPA should consider a source-cap or system cap approach as an alternative to unit-by-unit rate-based standards. Source and system cap strategies achieve equivalent reductions by setting mass-based limits (e.g., ton per day) for a

group of units derived from rate-based standards and baseline levels of activity for the units. In this context, the rate-based standards used to set the caps would be the emission rates determined to represent BART. These types of cap approaches allow companies to consider a broader range of alternative strategies. Under a FIP with only unit-by-unit rate-based limits, as proposed by EPA, such an alternative strategy would not be allowed and EPA would have to revise its FIP to allow the company to pursue the alternative. A similar approach using system-caps would provide additional flexibility for companies. If the EPA is averse to creating a system-cap trading program for a single state, an alternative would be to allow for a state system-cap trading program that would allow companies to trade between systems once the EPA has approved the state program.

We received a comment from American Electric Power (AEP) stating that in the proposed Texas BART FIP, EPA states that it encourages Texas to consider adopting SIP provisions that would allow EPA to fully approve the Regional Haze SIP with respect to Regional Haze and Interstate Visibility Transport. AEP also suggests that alternatively, Texas may also elect to satisfy its obligations by demonstrating an alternative. Although AEP views the most expeditious resolution for satisfying BART is finalization of CSAPR as a better-than-BART alternative, AEP would also welcome and support working with the State and EPA to develop a satisfactory BART compliance alternative. For example, AEP is open to consideration of a cap and trade program or other option for BART compliance. AEP is prepared to engage in such discussions as soon as possible.

We also received a comment from Luminant stating that the EPA can and should address BART for Texas, not through EPA-mandated controls on individual units but through one of several available BART alternatives that will ensure equivalent or greater benefits at far less

costs, as demonstrated by EPA's own prior analyses of Texas EGUs' emissions. Among those available alternatives is EPA's original proposed BART plan for EGUs in Texas—reliance on Texas EGUs' participation in the CSAPR annual SO₂ and NO_x trading programs as BART compliance. Since CSAPR became effective in 2015, SO₂ emissions from Texas EGUs have declined substantially and are well below the levels that EPA previously determined are “better-than-BART.” EPA itself calculated “major visibility improvements at Class I areas in and around Texas” from the CSAPR-for-BART alternative for Texas. The CSAPR-for-BART alternative remains the most expeditious and cost effective path for finalizing a BART solution for Texas EGUs. Indeed, EPA's only lawful path forward to finalize a BART FIP for Texas by the current September 9, 2017 deadline in EPA's consent decree with Sierra Club is to finalize a CSAPR-for-BART FIP for Texas EGUs, as EPA proposed to do in December 2014. That proposal was not withdrawn, remains a valid and defensible alternative, is supported by the record and prior EPA technical analyses, and has been fully vetted with substantial public review and comments.

Response: Due to these comments requesting a BART alternative in lieu of source-specific EGU BART, we are finalizing an intrastate SO₂ trading program as an alternative to source-by-source BART and to meet the interstate visibility transport requirements. This program will provide the commenters, and other owners of covered EGUs, with many of the benefits that they attributed to CSAPR. The premise in the comment that Texas EGUs are subject to CSAPR's SO₂ trading program is no longer true, given our recent action to remove Texas from that trading program.⁶¹ Hence, we cannot take the commenter's recommended action of addressing SO₂ BART through reliance on CSAPR.

⁶¹ See final action signed September 21, 2017 available at regulations.gov in Docket No. EPA-HQ-OAR-2016-0598

B. Comments on Source-Specific BART

Comment: We received a number of comments in favor or against our proposals regarding BART-eligibility status, subject-to-BART status, and source-specific BART technologies and emission limits. Some were general and some were very specific.

Response: Due to the comments we received requesting a BART alternative in lieu of source-specific BART determinations, we are finalizing an intrastate SO₂ trading program as an alternative to source-by-source BART and to meet the interstate visibility transport requirements. As a consequence, we believe that it is not necessary to respond to comments concerning the merits of the proposed source-specific BART technologies and emission limits. Comments related to BART-eligibility status and subject-to-BART status are addressed elsewhere in this notice.

C. Comments on EPA's Proposed SIP Disapprovals

Comment: The root of EPA's flawed proposal is EPA's departure from the cooperative federalism principles underlying the Clean Air Act. The State of Texas developed its regional haze SIP after years of work, technical analysis, and coordination with other States. For BART, Texas relied on the participation of Texas EGUs in CAIR and EPA's determination that CAIR was better-than-BART. EPA should have approved Texas's SIP at the time because it complied with all statutory requirements and was supported by EPA's own modeling. In no way does the Proposed Texas BART FIP—which starts over from scratch and creates an entirely new approach to BART for Texas EGUs—respect the State's primary role under the statute. At a minimum, to more closely align with the State of Texas's original choice to meet BART through

a regional trading program, EPA should now finalize its prior proposal that CSAPR serve as a complete BART alternative for Texas EGUs.

Response: Our action in 2012 to disapprove Texas' 2009 SIP submission due to its reliance on CAIR is not the subject of this rulemaking and we do not address here the comment opposing that final action. We agree that CSAPR continues to be available on a pollutant-specific basis as a BART alternative for participating states for those pollutants subject to trading by CSAPR program participation; hence, we are finalizing a determination that CSAPR is better than BART for NO_x at Texas EGUs. However, the premise in the comment that Texas EGUs are subject to CSAPR's SO₂ trading program is no longer true, given our recent action to remove them from that trading program.⁶² Hence, we cannot take the specific action recommended in this comment. Due to these comments requesting a BART alternative in lieu of source-specific EGU BART determinations, we are, however, finalizing a SO₂ trading program as an alternative to source-by-source BART and as meeting the interstate visibility requirements.

D. Legal Comments

We received comments addressing EPA's authority to promulgate a Federal Implementation Plan (FIP), the use of CSAPR as a better-than-BART alternative, cooperative federalism, deference to the State, the new Administration's policies, Executive Orders, and litigation. These comments, and the response to comments, can be found in the document titled Legal RTC in the docket for this action. Below is a summary of some of the more significant

⁶² See final action signed September 21, 2017 available at *regulations.gov* in Docket No. EPA-HQ-OAR-2016-0598

comments we received. For a detailed review of all legal comments and responses, we refer the reader to this separate document.

1. EPA's Obligation and Authority to Promulgate a FIP

Comment: Texas' and industry's challenge to CSAPR does not relieve EPA of its mandatory duty to issue a source-specific BART FIP for Texas. Although EPA would have permitted Texas to rely on CSAPR's modest cap-and-trade program to avoid source-specific BART controls, Texas, Luminant, AEP, and Southwestern Public Service Company all chose to challenge CSAPR. They were ultimately successful in defeating EPA's inclusion of Texas in the program for SO₂ and ozone-season NO_x. Ever since the D.C. Circuit remanded the Texas NO_x and SO₂ budgets to EPA in July 2015, Texas has been on notice that source-specific BART could well be necessary to meet its BART obligations. Yet Texas has not put forward either a new interstate transport SIP to replace CSAPR or a new BART SIP to address the Regional Haze Rule.

Response: We agree that we have a mandatory duty to address the BART requirements for Texas EGUs but we do not agree that we must address these requirements through a FIP establishing source specific BART limits. We understand the comment to be referencing the court action, *EME Homer City Generation v. EPA*, 795 F.3d 118 (D.C. Cir., July 28, 2015). At all times since the original submission of the 2009 Regional Haze SIP, Texas has been entitled to submit updated or new SIP revisions to address BART or interstate transport. A State is also entitled to submit a SIP that may be approved to replace a FIP after a FIP's promulgation. When

and whether Texas has been “on notice” regarding a potential need for source-specific BART is not material to the present need to address the EGU BART requirements through either a SIP or FIP. We do note that the 2009 Regional Haze SIP stated, “The TCEQ will take appropriate action if CAIR is not replaced with a system that the US EPA considers to be equivalent to BART.” See 2009 SIP at 9-1. The 2009 SIP further acknowledged, “Some EGUs may become subject to BART pending resolution of the CAIR at the federal level.” See 2009 SIP at 9-17. As circumstances now apply to Texas (and, as this comment suggests, may have been earlier projected), the State can take appropriate action to develop a SIP to address the EGU BART and interstate visibility transport requirements. The TCEQ and EPA recently signed a MOA to work together to develop a SIP revision addressing interstate visibility transport requirements and BART requirements for EGUs with a BART alternative trading program starting from CSAPR.⁶³ However, without such a SIP, the Clean Air Act requires a promulgation of a FIP to address the outstanding BART and interstate transport requirements.

Comment: Texas’s decision to not meet the BART requirements for its EGUs through voluntary participation in CSAPR does not relieve EPA of its mandatory duty to issue a source-specific BART FIP for Texas. Even if Texas were willing to voluntarily incorporate EPA’s invalidated CSAPR emission budgets into its SIP, the state cannot simply opt in and avoid source-specific BART. Because Texas cannot reverse course and adopt emissions budgets that it demonstrated were unnecessary, as a matter of law, and because the agency cannot achieve “all”

⁶³ See Memorandum of Agreement Between the Texas Commission on Environmental Quality and the Environmental Protection Agency Regarding a State Implementation Plan to Address Certain Regional Haze and Interstate Visibility Transport Requirements Pursuant to Sections 110 and 169A of the Clean Air Act, Signed August 14, 2017.

of the CSAPR reductions by 2018 (the end of the first planning period), it cannot voluntarily adopt CSAPR.

Response: We agree that we have a mandatory duty to address the BART requirement for Texas EGUs, but we do not agree that we must address it through a source-specific BART FIP. We understand this comment to refer to a hypothetical scenario based on the development and submission of a SIP by Texas providing for voluntary participation in CSAPR as a means of addressing the SO₂ and/or NO_x BART requirements for Texas EGUs. The possibility of such an option was detailed in a June 27, 2016 memorandum entitled, “The U.S. Environmental Protection Agency’s Plan for Responding to the Remand of the Cross-State Air Pollution Rule Phase 2 SO₂ Budgets for Alabama, Georgia, South Carolina and Texas.” That memorandum was provided and available to Texas and other states. Several other states have pursued this option, but Texas has not, and it is not within the scope of our proposal. We are not opining on the operation of state law or otherwise responding to this comment. We address the issue of whether emission reductions from a BART alternative must be achieved by 2018 in our response to another comment.

Comment: EPA withdrawal of Texas from CSAPR does not relieve EPA of its mandatory duty to issue a source-specific BART FIP for Texas. After having given Texas four months’ notice of its intent to fully withdraw the state from the CSAPR program, and made clear the implication that there would no longer be any doubt that Texas sources would need to comply with source-specific BART obligations, EPA formally issued its proposal to withdraw its federal plan to include Texas in the CSAPR emissions trading program one month before issuing the

BART proposal. 81 Fed. Reg. 78,954 (Nov. 10, 2016). EPA again made clear the situation: “[I]f and when this [CSAPR withdrawal] proposal is finalized, Texas will no longer be eligible to rely on CSAPR participation as an alternative to certain regional haze obligations including the determination and application of source-specific SO₂ BART. Any such remaining obligations are not addressed in this proposed action and would be addressed through other state implementation plan (SIP) or FIP actions as appropriate.” *Id.* at 78,956. EPA has informed the U.S. District Court for the District of Columbia that it intends to finalize this proposal by October 31, 2017.

After challenging the state’s inclusion in CSAPR for years, industry has done an about face in response to EPA’s Texas BART Proposal and now opposes EPA’s withdrawal of Texas from CSAPR. But EPA has gone on record that the agency does not currently have an analytical basis to support new CSAPR budgets for Texas. As EPA has noted, there was no such thing as a legally compliant CSAPR budget for Texas following the remand. Texas has had many years to submit a state SIP equivalent to CSAPR or other BART alternative to avoid source-specific BART, but Texas has taken no action to address its contribution to interstate pollution or regional haze.

Response: We agree that we have a mandatory duty to address the BART requirement for Texas EGUs, but we do not agree that we must address it through a source-specific BART FIP. We also have a mandatory duty to address the interstate visibility transport requirements.

Comment: We have strongly opposed the CSAPR-Better-than-BART rule since its inception. It is unlawful and unsupported by the scientific record. Legal challenges to EPA’s rule which purports to authorize reliance on CSAPR to satisfy BART are currently pending in the

D.C. Circuit Court of Appeals. Until the D.C. Circuit rules on the validity of the CSAPR-Better-than-BART rule, neither EPA nor Texas should assume that CSAPR is an appropriate substitute for BART.

Response: The legal and technical determinations of the CSAPR-Better-than-BART rule are subject to judicial review under existing challenges and a separate administrative record, as indicated by the comment. Any challenges raised with regard to the present rulemaking and outside that litigation may be time-barred or directed to the wrong forum. As such, we do not believe that the incorporation of arguments from a brief filed with the D.C. Circuit concerning a separate regulatory determination warrants responses here, in this rulemaking, and that to offer responses here would suggest some basis for collateral, time-barred arguments that are out of the scope of this action.

Comment: In addition to the legal uncertainty surrounding the national CSAPR-Better-than-BART rule, it is too late for Texas to rely on a BART alternative like CSAPR or any other program. Under EPA's Regional Haze Rule, any BART *alternative* must include a "requirement that all necessary emission reductions take place during the period of the first long-term strategy for regional haze"—*i.e.*, no later than 2018. There are no plans in place, or even in development, for any federal or state program that would ensure the necessary reductions take place by the end of the first planning period in 2018.

With the exception of a BART alternative approved for the Navajo Generating Station, which relied on the Tribal Authority Rule to provide additional flexibility, EPA has never proposed or approved a BART alternative that would allow the necessary emission reductions to

be delayed past 2018. In *Texas v. EPA*, 829 F.3d 405 (5th Cir. 2016), Texas and industry persuaded the Fifth Circuit of a likelihood that EPA could not require controls beyond the first planning period for reasonable progress. While neither the statute nor regulation precludes emission reductions relative to *reasonable progress requirements* to occur beyond the planning period deadline, the *BART alternative requirements* contain a provision directly on point. Accordingly, emission reductions under a BART alternative must be implemented by the end of the first planning period.

Response: The Regional Haze Rule at 40 CFR 51.308(e)(2)(iii) requires that the emission reductions from BART alternatives occur “during the period of the first long-term strategy for regional haze.” The SO₂ BART alternative that EPA is finalizing here will be implemented beginning in January 2019, and thus emission reductions needed to meet the allowance allocations must take place by the end of 2019. For the purpose of evaluating Texas’s BART alternative, the end of the first planning period of the first long-term strategy for Texas is 2021. This is a result of recent changes to the regional haze regulation, revising the requirement for states to submit revisions to their long-term strategy from 2018 to 2021.⁶⁴ Therefore, the emission reductions from the Texas SO₂ trading program will be realized prior to that date and within the period of Texas’ first long-term strategy for regional haze. Moreover, we expect that source owners in 2018 will already be taking steps, including appropriate source-level compliance planning (e.g., purchase contracts for coal), to be ready for the compliance year beginning on January 1, 2019. Adding to this, the State has already experienced reductions in SO₂ emissions in response to market conditions and, to some extent, periods of compliance with

⁶⁴ 82 FR 3078 (Jan. 10, 2017).

CSAPR, including its allocations for SO₂, when those measures were in effect or otherwise part of source owner planning considerations.

We note that the BART alternative is projected to be implemented before any of the earlier-proposed compliance dates for source-specific SO₂ BART for coal-fired units.

The last year for which Texas EGUs must meet CSAPR requirements for SO₂ is 2016. We considered and decided not to make the Texas SO₂ trading program effective for 2017 because that would be unreasonably short notice to the affected EGUs in light of the late date in 2017 on which this action will become effective. We considered and decided not to make the program effective for 2018 because that also would be unreasonably short notice given that affected EGU owners should be allowed more than a few months to determine their strategy for compliance with the program in light of it having some features that are different from the CSAPR trading program they have been operating under until recently, for example the fact that they will no longer be able to purchase and use allowances from out-of-state EGUs.

Comment: Adopting an emissions trading program for Texas that allows anywhere close to the tonnage of SO₂ permitted by the emissions caps in CSAPR would also fail to meet the substantive requirements for a BART alternative. While the D.C. Circuit is considering whether CSAPR meets these substantive requirements in the CSAPR-Better-than-BART litigation, Texas's situation is unique in that EPA has actually completed a source-specific BART proposal that can be directly compared with the CSAPR program. Thus, even if the CSAPR-Better-than-BART rule is upheld as a national rule that EPA has the option of relying upon in certain states, and even if Texas were to join CSAPR or voluntarily adopt its budgets, it would be arbitrary for EPA to rely on CSAPR as a BART alternative without actually comparing the CSAPR or

CSAPR-like program with its BART proposal. When comparing the two head-to-head, it is obvious as a practical matter that allowing Texas's coal-fired power fleet to essentially continue emitting the same levels of SO₂ as the status quo is not going to achieve equivalent visibility gains as the BART proposal would. As detailed in "EPA's Fact Sheet for the Open House on EPA's Clean Air Plan Proposal for Texas Regional Haze", the proposed BART limits are expected to reduce emissions of SO₂ from 16 EGUs and would cut emissions from approximately 89 to 98 percent – a reduction of over 194,000 tons of SO₂ every year.

To satisfy the requirements for a BART "alternative," an emissions trading program must make a technical demonstration that the trading program "will achieve greater reasonable progress [towards natural visibility] than would have resulted from the installation and operation of BART at all sources subject to BART." *Id.* § 51.308(e)(2)(i). Under EPA's regulations, if the distribution of emissions is different under an alternative program, a state "must conduct dispersion modeling" to determine differences in visibility between BART and the trading program for each impacted Class I area, for the worst and best 20 percent of days. The modeling only demonstrates "greater reasonable progress" if both of the following two criteria are met: (i) Visibility does not decline in any Class I area, and (ii) There is an overall improvement in visibility, determined by comparing the average differences between BART and the alternative over all affected Class I areas. *Id.* § 51.308(e)(3).

Response: The comment addresses the approvability of a hypothetical SIP offered to meet the requirements of 40 CFR § 51.308(e)(2). First, we do not agree with the premise of the comment that merely proposed determinations of BART in the context of a possible FIP set a stringency threshold for a demonstration set forth in a hypothetical SIP. Proposed determinations

are only proposals and the facts put forth to support those proposals are themselves subject to correction via public comment and new information. Second, we also do not agree with any extension of the commenter's assertion to a FIP. While the comment does not address all the pertinent requirements for a BART alternative, we have done so elsewhere in this notice. For example, as allowed by the requirements for a BART alternative in 51.308(e)(2)(i)(C), we are declining to conduct the analysis that would include making determinations of BART for each source subject to BART and we are instead exercising the exception allowed when the alternative measure "has been designed to meet a requirement other than BART (such as the core requirement to have a long-term strategy to achieve the reasonable progress goals established by States)."⁶⁵ Third, we disagree that 51.308(e)(3) applies to this action. Rather, we find justification for the BART alternative under the "clear weight of the evidence" that the trading program will provide greater reasonable progress than would be achieved through the installation and operation of BART at the covered sources. This means of validating a BART alternative, described by one Court as the "catch-all," is permitted by 40 CFR 51.308(e)(2)(i)(E). We are allowed but not required to validate the BART alternative under the test set out in 40 CFR 51.308(e)(3). Although we are not applying that test here, we believe this intrastate trading program meets the intent of (e)(3). When promulgating the 2012 CSAPR-Better-than-BART rule, the EPA relied on an analysis showing that CSAPR would result in greater reasonable progress than BART under the test in 40 CFR 51.308(e)(3). In this action we are relying, in part, on that demonstration to show that the clear weight of evidence demonstrates that the SO₂ Trading Program will provide for greater reasonable progress than BART in Texas. This is based on a showing that the emissions in Texas under the BART alternative will be on average no

⁶⁵ See 40 CFR 51.308(e)(2)(i)(C).

greater than the emission levels from Texas EGUs that was forecast in the demonstration for Texas EGU emissions assuming CSAPR participation.

2. Statutory or Regulatory Text

Comment: A state should be able to independently rely on EPA's CSAPR-is-better-than-BART determination if the state can demonstrate that a state-only program for EGUs is more stringent than CSAPR. While the TCEQ has not proposed any action to implement a Texas-only program for EGUs based in some way on CSAPR as a means of satisfying BART, and these comments in no way represent a commitment to propose such an action, the TCEQ should be able to rely on the EPA's CSAPR-is-better-than-BART determination to satisfy certain aspects of the BART alternative provisions in 40 CFR Part 51, §51.308(e)(2) if such a program can be demonstrated to be more stringent than CSAPR. Specifically, the state should be able to rely on the EPA's determination that CSAPR resulted in greater reasonable progress than source-specific BART to satisfy the requirements of §51.308(e)(2)(i)(E) and (e)(3).

We acknowledge that other requirements of §51.308(e)(2) would still need to be satisfied, such as monitoring, recordkeeping, reporting, and provisions for emission trading programs. While the CSAPR option is specifically listed at §51.308(e)(4), the EPA's Regional Haze rules do not prohibit a state from relying on EPA's modeling demonstration that CSAPR resulted in greater reasonable progress when using an alternative under §51.308(e)(2). If a state-only program is more stringent than CSAPR, for example a program based on CSAPR allocations but without interstate trading, requiring a state to conduct extensive modeling to demonstrate what the EPA has already demonstrated for a less stringent program is illogical and places an unnecessary and wasteful burden on states.

Response: We agree with this comment. In response to this comment, our final FIP establishes an intrastate trading program that operates much like the CSAPR program did in Texas. This program is discussed in more detail elsewhere.

3. EPA's Reliance on CSAPR for NO_x BART

Comment: Agree with EPA's proposal regarding CSAPR as a BART alternative for NO_x which is proposed for separate finalization. EPA could have followed the D.C. Circuit's directive and updated NO_x (and SO₂) budgets for Texas. EPA could have but declined to do so. EPA notes that finalization of CSAPR as better-than-BART for NO_x is contingent on a separate finalization that the D.C. Circuit remands would not adversely impact 2012 demonstrations. Uncertainty in this proposal does not seem to be an issue for NO_x and EPA is again basing a proposal on an action yet to be finalized.

Response: Whether we were in a position to provide updated annual NO_x and SO₂ budgets for Texas is not relevant to this rulemaking. Because Texas EGUs are required to continue participation in CSAPR for ozone transport, which involves NO_x trading, we are determining that the NO_x BART requirement for EGUs continues to be met through our determination that CSAPR is better than BART.

We interpret the comment as supporting this action, even as it appears to criticize our reference to another proposed action, which has since been finalized, as part of the proposal for the NO_x aspect of this action. Our proposed and finalized action for the NO_x BART requirement addresses the Act's requirements for Texas. This action and our recent action to remove Texas

EGUs from CSAPR's SO₂ trading program are distinct actions, but we have provided appropriate transparency and notice regarding how the proposed actions relate and have given careful consideration to comments received that have bearing on each of the actions.

Comment: EPA's proposal is unlawful because it exempts sources from installing BART controls without going through the exemption process Congress prescribed. The visibility protection provisions of the Clean Air Act include a "requirement" that certain sources "install, and operate" BART controls. 42 U.S.C. § 7491(b)(2)(A). Congress specified the standard by which sources could be exempted from the BART requirements, which is that the source is not reasonably anticipated to cause or contribute to a significant impairment of visibility in any Class I area. Appropriate federal land managers must concur with any proposed exemption. EPA has not demonstrated that any of the Texas EGUs subject to BART meet the standards for an exemption, nor has EPA obtained the concurrence of federal land managers. Therefore, EPA must require source-specific BART for each power plant subject to BART.

Response: To the extent the comment is directed to the prior rules that determined and redetermined that CSAPR is better than BART and may be relied upon as an alternative to BART, we disagree that relying on CSAPR is in conflict with the CAA provision regarding exemptions from BART. In addition, the commenter's objection does not properly pertain to this action, but instead to our past action that established 40 CFR 51.308(e)(4). We believe this comment to fall outside of the scope of our action here. To the extent the comment objects to BART alternatives generally, we also disagree. In addition, that objection does not properly

pertain to this action, but instead to our past regulatory action that provided for BART alternatives.

Comment: Even if EPA could use a BART alternative without going through the statutory exemption process, the CSAPR-Better-than-BART Rule was fatally flawed, and even if it were valid in 2012, is now woefully outdated. EPA's regulations purport to allow the use of an alternative program in lieu of source-specific BART only if the alternative makes "greater reasonable progress" than would BART. 40 C.F.R. § 51.308(e)(2). To demonstrate greater reasonable progress, a state or EPA must show that the alternative program does not cause visibility to decline in any Class I area and results in an overall improvement in visibility relative to BART at all affected Class I areas. *Id.* § 51.308(e)(3)(i)-(ii).

EPA compared CSAPR to BART in the Better-than-BART Rule by using CSAPR allocations that are more stringent than now required as well as by using presumptive BART limits that are less stringent than are actually required under the statute. Even under EPA's skewed 2012 comparison, CSAPR achieves barely more visibility improvement than BART at Big Bend and Guadalupe Mountains. The NO_x emissions allowed under CSAPR from Texas EGUs are higher than would be allowed under BART. This was true even before EPA revised CSAPR to increase the emissions allocations for all Texas EGUs.

If it were assumed that the CSAPR-Better-than-BART Rule were valid in 2012, it is based on assumptions for both CSAPR and BART emissions which are now woefully outdated. The CSAPR-Better-than-BART Rule's reliance on presumptive BART emission limits is now outdated, given that EPA has issued or approved source-specific BART determinations for dozens of sources since 2012. In particular, for Texas sources, EPA has proposed SO₂ BART

limits which are far below the presumptive BART limits EPA used in the Better-than-BART Rule. For units other than Martin Lake, EPA proposes SO₂ BART limits of 0.04 to 0.06 lbs/MMBtu, which are well below the presumptive SO₂ BART limit of 0.15 lbs/MMBtu; even at Martin Lake, EPA proposes limits of 0.11 to 0.12, which are still below presumptive BART for SO₂.

Similarly, the CSAPR-Better-than-BART Rule is based on a version of CSAPR that no longer exists. Accordingly, any conclusion that EPA made in the 2012 Better than BART rule regarding whether CSAPR achieves greater reasonable progress than BART is no longer valid. Since 2012, EPA has significantly changed the allocations and the compliance deadlines for CSAPR. Of particular relevance here, after 2012, EPA dramatically increased the CSAPR allocations for every covered EGU in Texas. EPA later withdrew the February 21, 2012 rule revision, but issued a new rule that included both the changes in the February 21, 2012 rule as well as additional changes to state budgets.

By the time EPA finalized the Better-than-BART-Rule in June 2012, EPA had changed the state emissions budgets by tens of thousands of tons, yet EPA proceeded to finalize the Better-than-BART Rule based solely on the emissions budgets in the original, 2011 CSAPR rule. EPA also extended the compliance deadlines by three years, such that the phase 1 emissions budgets take effect in 2015-2016 and the phase 2 emissions budgets take effect in 2017 and beyond. Even more changes to CSAPR have occurred as a result of the D.C. Circuit's decision in *EME Homer City II Generation*, including the proposed withdrawal of Texas from the annual NO_x and SO₂ trading programs. Given the large number of final BART determinations made since 2012, and the significant changes to CSAPR budgets since 2012, it is arbitrary and

capricious to rely on the outdated assumptions about emissions which were made in the CSAPR-Better-than-BART Rule.

Response: As we had proposed, our finalized determination that CSAPR participation will resolve NO_x BART requirements for Texas EGUs is based on a separately proposed and finalized action. This comment falls outside of the scope of our action here.

Comment: EPA's November 2016 "Sensitivity Analysis" purports to update its CSAPR-Better-than-BART analysis to show that CSAPR still makes greater reasonable progress than BART. We agree with EPA that the 2016 Sensitivity Analysis is not a proper legal basis for demonstrating that CSAPR makes greater reasonable progress than BART, because the 2016 analysis is merely a proposed rule. It would be unlawful to issue a final BART rule relying on CSAPR to satisfy the NO_x BART requirements in the absence of a final rule demonstrating that the CSAPR Update makes greater reasonable progress than BART.

To demonstrate that CSAPR makes greater reasonable progress than BART, EPA must show that (1) visibility does not decline in any Class I area under CSAPR, and (2) there is an overall improvement in visibility, based on comparing the average differences between CSAPR and BART across all affected Class I areas. EPA's analysis falls well short of making such a demonstration, as we noted in our prior comments on EPA's 2016 Sensitivity Analysis.

EPA's 2016 analysis is markedly different from the CSAPR-Better-than-BART Rule, which relied on quantitative modeling of electric power section emissions, using the Integrated Planning Model, and quantitative modeling of visibility at all affected Class I areas, using

CAMx. Instead of updating that modeling, EPA's 2016 analysis consists of a back-of-the-envelope, qualitative discussion. This is wholly insufficient. There have been enormous changes in the electric power sector since EPA issued the Better-than-BART Rule in 2012, including changes in regulatory requirements (*e.g.*, CSAPR revisions, NAAQS updates, etc.) and changes in unit operations caused by changes in fuel prices, demand, etc. Given that EPA believed in 2012 that it was necessary to conduct quantitative modeling of power sector emissions and the visibility impacts of such emissions, EPA must update that modeling in order to prove that CSAPR still makes greater reasonable progress than BART.

EPA's failure to update the modeling upon which it relied in the 2012 Better than BART Rule is even more arbitrary given EPA's assumption, in the 2016 Sensitivity Analysis, that no trading of CSAPR allowances would occur across state lines. The Sensitivity Analysis uses "emissions that would occur if the state budgets are increased as proposed assuming that all of the additional allowances are used by sources in the respective state (*i.e.*, we did not re-model trading)." This assumption bears no relationship to reality, in which CSAPR—both the original rule, and the updated rule—expressly allows trading across state lines. EPA's failure to create a realistic depiction of the geographic distribution of emissions under the updated CSAPR budgets dooms its Sensitivity Analysis, as EPA must demonstrate that visibility does not decline in any Class I area. Trading across state lines can increase emissions from particular sources, which in turn can degrade visibility at particular Class I areas. Having failed to consider how inter-state trading will affect the distribution of emissions under CSAPR, EPA cannot possibly show that visibility will not decline in any Class I area under CSAPR.

Similarly, EPA failed to account for intra-state trading under CSAPR. Even assuming all changes in budgets would apply only within the affected state – that is, assuming interstate

emissions trading did not change at all – EPA has not accounted for trading within the states. A 20% reduction in statewide emissions does not imply that each unit will reduce its emissions by 20%; indeed, some units could increase emissions while statewide emissions went down. EPA does not seem to have accounted for this in its analysis. Thus, even within EPA’s scenario whereby no changes to reflect current conditions need to be made, EPA’s *ad hoc* analysis fails to demonstrate that the “Better-than-BART” test above would be met because EPA has failed to account for changes in emissions distribution based on the altered budgets.

In addition, EPA cannot simply assume that the visibility improvement averaged across all Class I areas, 40 C.F.R. § 51.308(e)(3)(ii), will still be better under the updated CSAPR than under BART. Without updated visibility modeling, EPA has no data to demonstrate that the second prong of the BART alternative test will be met in spite of the substantial changes in coverage and budgets under CSAPR.

Response: In part, the comment makes the point that this final action cannot rely on another action that has only been proposed. We agree with this aspect of the comment, but this part of the comment is no longer relevant because the other action has now been finalized. As we had proposed, our finalized determination that CSAPR participation will resolve NO_x BART requirements for Texas EGUs is based on a separately proposed and now finalized action. This comment in its discussion of the 2016 sensitivity analysis and other particulars raises issues that are addressed in the record for that separately finalized action. This comment falls outside of the scope of our action here.

Comment: Under the updated version of CSAPR, Texas will not have allowances for annual NO_x emissions. Instead, Texas will have a CSAPR budget for NO_x for only the ozone season, which runs a few months each year. But BART is not a seasonal requirement; BART requires continuous operation of pollution controls. “The determination of BART must be based on an analysis of the best system of continuous emission control technology available and associated emission reductions achievable for each BART-eligible source that is subject to BART within the State.” It violates EPA’s regulations to use seasonal emissions reductions under CSAPR to satisfy the BART requirement to install and operate “continuous emission control technology.”

Response: We disagree with this comment, but also note that it should not be directed to this action but rather to the past rulemaking determination that provided BART coverage for pollutant trading under CSAPR as specified at 40 CFR 51.308(e)(4). In any event, the argument that BART must be based on “continuous” control does not transfer to the application and operation of a BART alternative. Sources that would operate under an annual trading program that provides tons per year allocations for a unit are not necessarily applying “continuous” controls either. In fact, they are also free to operate seasonally or with intermittent use of controls so long as they operate within the allocation or purchase allowances whenever emissions may exceed that allocation. We necessarily disagree that EPA regulations would bar seasonal emissions reductions to satisfy requirements for a BART alternative.

4. Other CSAPR Comments

Comment: The EPA should proceed to finalize CSAPR as a better-than-BART alternative not only as to NO_x but also as to SO₂. In the Texas Regional Haze SIP, Texas relied on EPA's Regional Haze Rule that allows states to implement an alternative to BART as long as the alternative has been demonstrated to achieve greater reasonable progress toward the national visibility goal than BART. EPA made such a demonstration for CAIR and many states, including Texas, relied on CAIR's cap and trade programs as a BART alternative for EGU emissions of SO₂ and NO_x in their SIP submittals. Following EPA's demonstration in 2005 that CAIR is better-than-BART and after Texas submitted the Regional Haze SIP, the D.C. Circuit Court remanded CAIR to EPA but ultimately did not vacate the CAIR rule. EPA approved certain States' SIPs that implemented CAIR as a BART alternative, yet, EPA did not do so for Texas.

CSAPR was issued to replace CAIR and because of EPA's action on CAIR, EPA subsequently withdrew reliance on CAIR as a BART alternative and finalized the demonstration that compliance with CSAPR is better than application of BART. This action occurred after Texas had submitted its SIP.

On December 16, 2014, EPA published a proposed FIP program to "replace reliance on CAIR with reliance on the trading programs of CSAPR as an alternative to BART for SO₂ and NO_x emissions for EGUs." The CSAPR rule had been challenged in the D.C. Circuit and the court held that EPA had over-controlled certain States' budgets and remanded the CSAPR rule without vacatur for further revision by EPA. In January 2016, EPA did not finalize BART controls for EGUs, citing uncertainty. EPA issued the CSAPR Update on October 24, 2016 but did not revise SO₂ or NO_x annual budgets for Texas.

EPA's Proposed FIP and the imposition of source-specific BART relies on the EPA's proposed rulemaking for the withdrawal of Texas from the CSAPR Phase 2 trading budgets for

SO₂. In November 2016, EPA published a proposal to withdraw the FIP provisions that required affected EGUs to participate in Phase 2 of the CSAPR trading programs for annual emissions of SO₂ and NO_x purportedly to address a decision of the U.S. Court of Appeals for the District of Columbia Circuit that had remanded for further consideration the CSAPR Phase 2 SO₂ budgets for Texas and other states.

EPA's proposed withdrawal of Texas from the Phase 2 CSAPR program for SO₂ included a "sensitivity analysis" indicating that removal of Texas from the Phase 2 SO₂ budget trading program (and including the removal of the Florida trading program) would not adversely impact the demonstration that CSAPR participation continued to qualify as an alternative to compliance with BART, in other states that were relying on CSAPR for BART compliance.

EPA also noted that "[n]o changes to the Regional Haze Rule are proposed as part of the rulemaking." *Id.* However, in support of this FIP proposal addressing Regional Haze, EPA notes that it, "had earlier proposed to rely on CSAPR participation to address these BART - related deficiencies in Texas' SIP submittals referencing its December, 2014 proposed FIP." EPA did not address the D.C. Circuit Court's remand as directed.

The D.C. Circuit had remanded without vacatur the Phase 2 budgets in *EME Homer City Generation, L.P. v. EPA*, 795 F.3d 1118 (D.C. Circuit 2015) and directed the EPA to reconsider the emission budgets and propose revised budgets. AEP said they did not support EPA's proposal to withdraw Texas from CSAPR, stating that the EPA had provided insufficient justification and explanation for the proposal and had not considered the impact on the trading market. AEP noted that the court had specifically not vacated the Phase 2 budgets due to concerns that such a decision would disrupt the trading markets. AEP also expressed concern that withdrawing Texas from CSAPR would impact the compliance strategies facilities have

developed for compliance with BART, as BART eligible facilities had developed compliance strategies assuming BART compliance would be achieved through compliance with CSAPR. AEP said they supported the CSAPR trading programs because of their flexibility and administrative convenience, cost-effectiveness and the “remarkable reductions that have occurred across the electric utility industry.” AEP also considered EPA’s analysis of the impact of sources in Texas on nonattainment areas in other states was inadequate and the explanation provided by EPA for its decision to change the initial determination was insufficient and potentially exposed Texas EGUs to future liability for the impact of PM_{2.5} emissions on Madison County and other upwind locations. AEP concluded their comments on 81 FR 78954 by recommending the EPA finalize CSAPR as a compliance alternative to BART for SO₂ and revise the Phase 2 budgets, instead of withdrawing Texas from CSAPR.

The D.C. Circuit requires EPA to propose acceptable budgets consistent and confirm that those budgets are a BART alternative and allow Texas to remain in the CSAPR trading program. Source specific controls, then, would no longer be necessary since CSAPR as a BART alternative would provide a more cost-effective, less burdensome and flexible program for compliance with Texas’ visibility obligations.

By EPA’s reliance on the proposed withdrawal of Texas from the CSAPR trading program for SO₂ as the basis for the proposed Texas BART FIP, EPA is illegally proposing BART controls on facilities premised on a proposed rule. Buttressing the proposed FIP on a proposed-not-yet-finalized rule is inconsistent with the APA. EPA seems concerned with uncertainty created by the remand yet, this action by EPA creates its own uncertainty with regard to whether the proposed withdrawal will be finalized as proposed. The APA requires that an agency provide notice and an opportunity to comment on proposed rules. 5 U.S.C. § 553 (c). An

agency must be open to taking comments and responding to them. This necessarily requires that EPA must consider comments from the public *before* finalizing a proposed rule. In fact, the comment period for the proposed withdrawal of Texas from the SO₂ CSAPR budgets ended *after* the date of the proposed BART FIP. Clearly, EPA gave itself no opportunity to consider public comment on the proposed withdrawal prior to relying on it as if it were final as proposed to justify the need for proposing source-specific BART. EPA's actions demonstrate that it had no intention of accepting public comment and had already made up its mind that the proposal would be finalized as proposed, a direct contravention of the APA.

Response: Several contentions provided by this commenter are relevant to the action withdrawing Texas from Phase 2 CSAPR program budget, but given the finalization of that action they are not relevant to this action. We are required to address the BART requirements for both pollutants under our CAA FIP authority, in the absence of an approvable SIP. We are finalizing our proposal that NO_x BART is met by continued participation in CSAPR and we are finalizing a BART alternative to address the SO₂ BART requirement. The BART alternative applies the CSAPR allowance allocations for SO₂ to all BART-eligible coal-fired EGUs, several additional coal-fired EGUs, and several BART-eligible gas-fired and gas/fuel oil-fired EGUs. In addition to being a sufficient alternative to BART, it secures reductions consistent with visibility transport requirements and is part of the long-term strategy to meet the reasonable progress requirements of the Regional Haze Rule.

We do not agree with the commenter's suggestion that we were not open to the consideration of comments in our proposed action or in any related actions in violation of the APA. Moreover, the assertion that EPA had made up its mind that any proposal would be

finalized as proposed regardless of comments that might be offered is not correct. For efficiency and because of time constraints, our proposal for the NO_x aspect of this action was based on a scenario of later finalization of the CSAPR remand response rule, but that does not mean that we did not fairly consider all comments on the CSAPR remand response rule or pre-decided the outcome of that rule. Our final decisions in this action reflect the final CSAPR remand rule, and consideration of comments on our proposal for this action.

Comment: Recommend the CSAPR budgets be revised. Revising the CSAPR budgets is supported by actual SO₂ emissions. The Texas EGU SO₂ and NO_x emissions have steadily decreased and have fallen well below 2017 CSAPR budgets. These emissions are well below the original better-than-BART budgets for SO₂. EPA's determinations that CSAPR is better-than-BART is still valid and supported even if emissions were increased.

We anticipate that EPA may respond that a September 9, 2017 Consent Decree deadline (derived from a case in which the EGUs were not party) did not permit time to consider comments before proposing the Texas BART FIP. Clearly, the most expeditious approach would be for EPA to revise the invalid Phase 2 CSAPR budgets for Texas and propose that reliance on the revised budgets satisfies BART compliance. Any delays in addressing Texas' BART obligations are the result of EPA not establishing an acceptable CAIR or CSAPR program, and EPA's refusal to revise CSAPR Phase 2 budgets and not Texas' failure to agree to accept invalid CSAPR budgets. In fact, the D.C. Circuit instructed EPA to act "promptly" in revising the budgets.

Additionally, EPA's attempt to comply with a court deadline does not justify noncompliance with the APA. With its current proposal (Texas BART FIP), EPA has done

nothing but create further uncertainty and violate the APA. EPA could have requested an extension of the deadline to revise the budgets, but did not. Consistent with the Administration's Executive Order on Reducing Regulation and Controlling Regulatory Costs, EPA could revise the CSAPR budgets adhere to CSAPR is better-than-BART, as they have in many other states, and remove two proposed regulations in doing so without the promulgation of another rule (proposed withdrawal of Texas from the CSAPR Phase 2 program and proposed source-specific BART for Texas source.) EPA should update the Phase 2 SO₂ budgets as directed and post-haste proceed to finalize CSAPR as a better an alternative to the application of source-specific BART.

Response: Texas declined to submit a SIP to voluntarily participate in CSAPR and we have addressed our remand obligations for Phase 2 SO₂ budgets by ending Texas EGU participation in CSAPR for PM_{2.5} transport. We agree, however, that Texas sources can continue NO_x BART coverage under CSAPR and we are finalizing a BART alternative for SO₂ instead of establishing source-specific SO₂ BART determinations for units at those sources. The BART alternative applies the CSAPR allowance allocations for SO₂ to all BART-eligible coal-fired EGUs, several additional coal-fired EGUs, and several BART-eligible gas-fired and gas/fuel oil-fired EGUs. In addition to being a sufficient alternative to BART, it secures reductions consistent with visibility transport requirements and is part of the long-term strategy to meet the reasonable progress requirements of the Regional Haze Rule.

Comment: EPA is now proposing to require stringent emission control technology on units that have already met the BART obligations by participation in the regional trading programs, CAIR, and its replacement, CSAPR. In this proposal, EPA has effectively removed a

cost-effective compliance mechanism which has been in place for the duration of the first planning period, with costs and reductions that far exceed the regulatory obligation, with limited or no benefit to visibility. Because it was only late last week that EPA made available the technical documents that it claims would support its action and EPA has yet to provide us with the specific modeling supporting the proposal that we requested several weeks ago, We have not yet had an opportunity to thoroughly evaluate EPA's technical justification for the proposal.

Response: Our proposal did not effectively remove CSAPR, and we disagree with the comment's characterization of how and when CSAPR has been "in place." Regardless, we agree with the premise of the comment that SO₂ BART and NO_x BART for Texas EGUs can be addressed by the BART alternatives we rely on in our final action. We also disagree that our proposal would have provided limited or no benefit to visibility to the extent it suggests our final action is not providing visibility benefits. Visibility benefits are being secured and preserved into the future by the final FIP measures.

Comment: Texas' SO₂ emissions are below the levels that EPA has found to be better-than-BART, and any reasonable assessment would conclude that trends of anticipated emissions in Texas will remain below those levels. EPA conducted two sensitivity analyses that both demonstrate that revised CSAPR emission levels for Texas are better-than-BART. We compared actual Texas EGU SO₂ emissions in 2015 and 2016 to the SO₂ emission levels that EPA found are better-than-BART. In both cases, Texas' actual emissions are well below the budgets that EPA has determined are better-than-BART.

Response: We are finalizing a BART alternative that applies the CSAPR allowance allocations for SO₂ to all BART-eligible coal-fired EGUs, several additional coal-fired EGUs, and several BART-eligible gas-fired and gas/fuel oil-fired EGUs. In addition to being a sufficient alternative to BART, it secures reductions consistent with visibility transport requirements and is part of the long-term strategy to meet the reasonable progress requirements of the Regional Haze Rule. To the extent, the comment suggests that current and anticipated emissions alone are enough to satisfy requirements for BART or a BART alternative, we disagree. As a fundamental matter, emissions reductions must be enforceable to prevent undesired and unexpected increases in future years. Pointing to “trends”—i.e., unenforceable emissions levels without legal requirements against future increases--does not meet CAA requirements.

Comment: EPA must promulgate or approve a BART alternative for Texas, and must not finalize the unlawful and cost-prohibitive proposed Texas BART FIP. EPA should not, and lawfully may not, finalize its Proposed Texas BART FIP. The Proposed Texas BART FIP—like the predecessor Reasonable Progress Rule that is stayed and was remanded by the Fifth Circuit for reconsideration—is fundamentally flawed, cost-prohibitive to implement, and contrary to reasoned decision-making. EPA should address BART for Texas—not through federally-mandated specific controls on individual units—but through one of several available BART alternatives that will achieve equivalent or greater benefits at far less costs, as demonstrated by EPA’s own prior modeling and sensitivity analyses.

Among those available alternatives is EPA’s original proposed BART action for EGUs in Texas—reliance on Texas EGUs’ participation in CSAPR’s annual SO₂ and NO_x trading Programs as BART compliance. That alternative remains the most expeditious and defensible

path for finalizing a BART solution for Texas EGUs, and it is fully supported by EPA's previous CSAPR better-than BART modeling and sensitivity analyses. Indeed, EPA's *only* lawful path forward to finalize a BART FIP for Texas by the current September 9, 2017 deadline in EPA's consent decree with Sierra Club is to finalize a CSAPR-for-BART FIP for Texas EGUs, as EPA signed in December 2014. For the many reasons discussed in Section II of these comments, EPA would be acting unlawfully were it to finalize the Proposed Texas BART FIP as issued in December 2016.

As an alternative to finalizing a CSAPR-for-BART FIP in September 2017, EPA could seek an extension of the consent decree deadline and proceed to work cooperatively with the State of Texas and Texas EGU operators to develop and propose for comment a different BART alternative for Texas, as it has done in other states. Such an alternative could, for example, establish SO₂ emission caps for Texas EGUs that are comparable to CSAPR budgets and would thus fall squarely within EPA's previous CSAPR=BART demonstration and sensitivity analyses for Texas. EPA has frequently worked with states and stakeholders to develop workable BART alternatives for EGUs, and it should do the same here with Texas and Texas stakeholders, including Luminant.

Promulgation of a CSAPR-for-BART FIP is EPA's only lawful option for meeting the September 9, 2017 consent decree deadline. If EPA believes that it must finalize a BART rule for Texas EGUs by September 2017, EPA's only valid legal option is to finalize its 2014 proposed CSAPR-for-BART FIP. In that proposal, EPA specifically stated that it was proposing "a FIP to replace reliance on CAIR with reliance on the trading programs of CSAPR as an alternative to BART for SO₂ and NO_x emissions from EGUs in the regional haze plan for Texas." In support, EPA explained that it "determined that [1] CSAPR provides for greater reasonable progress

towards the national goal than would BART and [2] Texas is included in CSAPR for NO_x and SO₂.” The same is true today, and, indeed, recent emission trends and EPA’s sensitivity analyses for Texas confirm that CSAPR is and remains better-than-BART for Texas EGUs. Texas remains in the CSAPR annual programs for NO_x and SO₂, and EPA’s determination that CSAPR provides for greater reasonable progress than the installation of BART remains scientifically sound. EPA has determined that “[CSAPR] achieves greater reasonable progress towards the national goal of achieving natural visibility conditions than source-specific BART.” That conclusion remains valid today, and EPA has not undertaken any action to revise or rescind that rulemaking. In fact, the Eighth Circuit recently upheld EPA’s conclusion that CSAPR is better than BART, stating that “EPA’s explanation that the Transport Rule is better than source-specific BART is rational.” There is no legal or technical barrier to EPA finalizing its original proposal of CSAPR-for-BART for Texas EGUs, and, indeed, that is EPA’s only lawful current option if it were to meet the September 2017 deadline.

EPA’s consent decree with Sierra Club does not prevent EPA from finalizing its original CSAPR-for-BART proposal in Texas. The consent decree that EPA entered into with Sierra Club was revised in December 2015 to provide two alternative deadlines for issuing a final rule that implements BART for Texas. First, the revised consent decree provides that by “[n]o later than December 9, 2016,” EPA was to promulgate a final BART FIP for Texas, unless EPA had approved Texas’s SIP or promulgated “a partial SIP” meeting the BART requirements under the regional haze program. Alternatively, the December 2016 deadline would be “extended to September 9, 2017,” if EPA signed a new proposed rule for BART by December 9, 2016. EPA signed the Proposed Texas BART FIP on December 9, 2016, thereby triggering the extension in the consent decree.

The consent decree, however, does not (and cannot) dictate the substance of EPA's final BART rulemaking under the extended deadline of September 9, 2017; the only prerequisite to invoking this extension is the signing of a proposal by December 9, 2016. EPA is not bound by the consent decree to finalize the terms of the current proposal or any similar source-specific BART rule; in fact, established principles of administrative law require EPA to remain open-minded during the rulemaking process. The consent decree merely established deadlines for EPA's pending course of action. Accordingly, for purposes of meeting the upcoming deadline of September 9, 2017, EPA is not prohibited by the consent decree from reverting to its 2014 proposal to finalize CSAPR as a BART alternative for Texas EGUs.

Response: We agree that the existence of the consent decree deadline does not dictate the substance of our action to address Clean Air Act requirements to meet the deadline. We disagree that our only possible lawful action for meeting the deadline is to impose a FIP based on CSAPR. 40 CFR 51.308(e) requires that states submit a SIP containing emission limitations that represent BART for BART eligible sources that may reasonably be anticipated to cause or contribute to any impairment of visibility in any mandatory Class I Federal area. Alternatively, 40 CFR 51.308(e) allows states to establish an emissions trading program or other alternative as long as the trading program or other alternative will achieve greater reasonable progress toward natural visibility conditions than BART. Where a state has failed to submit a SIP by the applicable deadline or has submitted a SIP that has been disapproved by the EPA, the CAA authorizes and requires EPA to promulgate a FIP that meets the requirements of the applicable federal statutes and regulations. Thus, EPA has the authority to promulgate a FIP containing emission limits that represent BART for BART eligible sources that may reasonably be

anticipated to cause or contribute to any impairment of visibility in any mandatory Class I Federal area. Alternatively, EPA may establish an emissions trading program or other alternative which will achieve greater reasonable progress than BART. We are meeting requirements with valid use of discretion where appropriate to finalize NO_x BART as proposed, and to finalize a BART alternative with emission levels similar to CSAPR to address SO₂ BART. We are not able to revive the 2014 proposal to satisfy SO₂ BART for Texas EGUs because remand obligations have led to the removal of SO₂ trading requirements for Texas. We agree that this might have been a viable solution, but Texas declined to submit a SIP to voluntarily participate in CSAPR to fully preserve and accommodate this option.

Comment: The Proposed Texas BART FIP is not only cost-prohibitive, it is not necessary to achieve the goals of the Regional Haze Program and satisfy the requirements of the CAA. EPA's own prior modeling and analysis show that BART for these units is more than met by current SO₂ emission levels from Texas EGUs, and the stringent additional limits in the Proposed Texas BART FIP are not necessary.

EPA's sensitivity analyses for Texas's SO₂ CSAPR budgets and recent emission trends in Texas demonstrate that CSAPR remains better-than-BART. EPA's sensitivity analyses definitively confirm that EPA's determination that CSAPR is better-than-BART in Texas remains scientifically sound. When EPA issued the final rule promulgating the CSAPR-for-BART provision in June 2012, EPA confirmed that the upward adjustments to Texas's budgets under CSAPR did not adversely impact visibility conditions in nearby Class I areas. EPA initially calculated visibility improvements for nearby Class I areas based on a SO₂ budget for Texas of 243,954 tons/year. Following EPA's upward adjustments to the CSAPR budget due to

errors in EPA's initial calculation, EPA revised its visibility improvement estimates based on a SO₂ budget of 294,471 tons/year. EPA's methodology demonstrates the expected visibility improvement as a result of implementing the CSAPR is better-than-BART provision under the original budget and the revised budget. Even with an SO₂ budget of nearly 300,000 tons for Texas, visibility at these Class I areas was projected to improve (not degrade).

Recent emissions data confirm EPA's prior determination—*i.e.*, that Texas's emissions are well below the threshold that was previously determined to be better-than-BART.

Implementation of CSAPR Phase 1 began in 2015, and implementation of Phase 2 began in 2017. For 2015 and 2016—during CSAPR Phase 1—Texas maintained its annual emissions of SO₂ and NO_x well under the budgets established by EPA. The state-wide budget for annual SO₂ in Texas is 294,471 tons, and the state-wide budget for annual NO_x in Texas is 137,701 tons. These same budgets will apply during Phase 2, and there is no expectation that Texas EGUS will exceed these thresholds. In fact, EPA's own data demonstrate that Texas has not exceeded, or even approached, its annual allowance allocations for either SO₂ or NO_x during Phase I of CSAPR. Emissions of SO₂ from Texas EGUs were 260,122 tons in 2015 and 244,233 tons in 2016. As for NO_x, emissions from Texas EGUs were 107,921 tons in 2015 and 106,625 tons in 2016. Once CSAPR became effective in Texas in 2015, SO₂ emissions from Luminant's coal-fired EGUs dropped dramatically and have trended downward. There is no reason to believe, and EPA presented no reason, that this trend will reverse—and certainly not to a degree that Texas EGU SO₂ emissions would exceed CSAPR budgets or call into question EPA's CSAPR better-than-BART demonstration.

Texas has maintained its emissions well below the budgets established by CSAPR. The record establishes that BART for these units can be no more stringent than current emission

levels, which are well below CSAPR budgets. In 2012, EPA concluded that “[CSAPR] achieves greater reasonable progress towards the national goal of achieving natural visibility conditions than source-specific BART.” EPA confirmed this determination in subsequent sensitivity analyses. So long as Texas’s emissions remain below the CSAPR budgets, the operation of Texas EGUs in such a manner will continue to be better-than- BART.

Thus, the Proposed Texas BART FIP is based on a fundamental flaw by EPA—that BART for Texas EGUs must be “more emission reductions than projected under CAIR or CSAPR.” To the contrary, because Texas validly remains in the annual CSAPR programs for SO₂ and NO_x combined with the fact that Texas EGU SO₂ emissions are well below the annual allocations, EPA has no valid basis to change course from its 2014 proposal to finalize CSAPR for BART in Texas in order to impose more stringent source-specific BART controls. EPA should proceed to finalize a FIP for Texas that approves CSAPR as a BART alternative for Texas EGUs.

Response: We agree that emissions similar to the CSAPR budgets would be better than BART and can be justified as a BART alternative. To the extent the comment suggests that merely pointing to current emissions level can satisfy the requirements of a BART alternative, we disagree. Those emissions levels must be made enforceable, and our final action accomplishes that. NO_x BART for EGUs is addressed by continued participation in CSAPR program for ozone transport. With regard to SO₂, the BART alternative is designed to achieve SO₂ emission levels from Texas EGUs similar to the SO₂ emission levels that would have been realized from the SO₂ trading program under CSAPR. These measures will assure Texas’ recent reductions of SO₂ and NO_x will be maintained and improved upon in the future.

Comment: The D.C. Circuit’s remand of CSAPR budgets does not create “uncertainty” that prevents EPA from finalizing CSAPR-for-BART for Texas EGUs. EPA says that it did not finalize its initial CSAPR-for-BART proposal for Texas EGUs because it noted some “uncertainty arising from the remand of Texas’ CSAPR budgets” by the D.C. Circuit. EPA made that claim in the now-stayed January 2016 Reasonable Progress Rule. That claim was wrong when it was made then, and it is clearly wrong now. There is no “uncertainty.” The D.C. Circuit’s remand does not prevent EPA from finalizing CSAPR as an SO₂ BART alternative for Texas EGUs.

First, EPA’s claim that there is an “absence of CSAPR coverage for SO₂” in Texas following the D.C. Circuit’s remand is simply wrong. Texas EGUs are and have been regulated by a BART equivalent trading program for the entirety of the first planning period to date—first through CAIR and, after CAIR’s replacement and up to the present day, through CSAPR. Texas EGUs are presently subject to CSAPR’s annual SO₂ and NO_x programs under the budgets remanded by the D.C. Circuit, which are budgets that EPA has confirmed as better-than-BART. EPA’s prior determination that CSAPR is better-than-BART for all states, including Texas, is scientifically sound and remains a binding part of EPA’s regulations. EPA may properly respond to the D.C. Circuit’s remand by revising Texas’s annual SO₂ budget (as instructed by the D.C. Circuit) *after* it finalizes the proposed CSAPR-for-BART FIP for Texas.

Second, regardless of when EPA responds to the D.C. Circuit’s remand, EPA’s own sensitivity analyses confirm that were EPA to properly respond to the remand by increasing Texas’s annual SO₂ budgets so they do not over-control as instructed by the D.C. Circuit, those revised budgets would remain better-than-BART. EPA established a multi-step methodology to

analyze whether increases in Texas's SO₂ annual budgets would change EPA's CSAPR better-than-BART determination (which remains part of EPA's binding regulations). First, EPA's methodology for conducting a revised sensitivity analysis requires the identification of the Class I areas in and near Texas that are most likely affected by Texas emissions. Second, EPA's analysis then "employ[s] [the] very conservative" assumption that "all of the visibility improvement" that EPA's CSAPR better-than-BART modeling predicted for these nine areas as a result of *all* CSAPR reductions from *all* covered states is "solely due to [reductions] from Texas." Third, with this conservative assumption, EPA then "proportionally reduce[s]" the modeled visibility improvements at these nine Class I areas based on the corrected higher SO₂ budget for Texas. For example, if, in response to the D.C. Circuit's remand, EPA were to adjust Texas's budget to 350,000 tons, CSAPR would still be better-than-BART for Texas and other states. Such an adjustment would be equivalent to a 57% reduction in the number of SO₂ tons reduced compared to the original Texas CSAPR reductions that were modeled for EPA's original CSAPR better-than-BART modeling. EPA's methodology would thus reduce the visibility benefit accordingly by multiplying the visibility improvement at the Class I areas affected by Texas by a factor of 0.43. Thus, for example, the visibility improvement at Wichita Mountains from CSAPR, even after increasing Texas's budget to 350,000 tons, would be 0.688 deciview [1.6 deciview x 0.43 = 0.688]. This methodology could be applied to other budgets as well. Visibility improvements at nine Class I areas in or around Texas result from the application of EPA's sensitivity analysis of a hypothetical adjustment of Texas's CSAPR SO₂ budget to 350,000 tons per year. Thus, EPA's own modeling shows that visibility at these Class I areas is projected to improve (not degrade) and that the BART requirements are met even if the CSAPR budgets are increased.

Response: We have completed our response to the CSAPR remand by withdrawing Texas EGUs from CSAPR requirements for PM_{2.5} transport. We did not act to upward adjust Texas' SO₂ budget. Whether that was a proper response to the remand or whether upward adjustments would have preserved the analytic demonstration that CSAPR is better than BART are not issues of concern with the present finalized action. To the extent the comment asserts that CSAPR budgets can be used to support a better than BART alternative, we agree with the comment and this concept is part of the BART alternative and weight of the evidence that we deem to justify it.

Comment: The proposed rule is legally dependent on other pending proposed rulemakings. EPA may not proceed with this action without first finalizing other proposed rules under the CAA on which this action is based.

Since 2009, Texas EGUs have been subject to federal regulatory programs that have resulted in substantial reductions in the NO_x and SO₂ emissions that have been targeted by EPA as contributing to interstate transport and haze. In compliance with EPA rules and precedent, Texas relied on CAIR, and then its replacement CSAPR as achieving reductions in haze precursors from EGUs that are "better than BART" in its Texas Regional Haze SIP submittal. In the unlawful proposed rule, EPA rejects its prior position that Texas EGUs are exempt from BART due to participation in CSAPR. Yet, Texas EGUs continue to this day to be subject to CSAPR requirements for NO_x and SO₂. While EPA has proposed to withdraw CSAPR SO₂ requirements for Texas EGUs, it has not yet done so and those EGUs remain subject to CSAPR allocations for both NO_x and SO₂ under federal and state laws and permits. Additionally, EPA's

proposal to withdraw the CSAPR FIP with respect to SO₂ has been challenged in that rulemaking docket as unlawful and not in accordance with the court decision remanding that action to EPA.

As a result, EPA may not proceed with the disapproval of Texas' reliance on CSAPR as "better than BART" until such time that the proposal is legally finalized in compliance with the Court decision that remanded that rule to EPA. Once that rule is legally finalized, then Texas should be given an opportunity to address whether and how that affects the state's regional haze program before a FIP is considered.

Response: As was made clear by our proposal, we agree our rule is dependent on other proposed and now finalized rulemakings. Nothing in our proposal or final action prevents Texas from addressing the State's regional haze program under its SIP planning authorities. Texas did not request that we withhold our action to withdraw CSAPR SO₂ requirements for Texas EGUs, and it did not submit comments to oppose that action. We disagree that anything in the sequencing of actions would allow us to suspend our FIP obligations when there is no SIP to address the requirements.

Comment: The effort to impose BART controls is the result of the proposed withdrawal of Texas from the CSAPR Phase 2 or annual trading program for SO₂. Compliance with regional haze obligations for BART-eligible facilities in Texas has depended on CAIR-equal BART and CSAPR-equal BART and removing Texas from CSAPR results in significant disruption and costs to planned future compliance for these facilities. EPA seeks these excessive controls which will achieve limited visibility benefits. EPA should take the proper approach and follow the

remand without vacatur of the D.C. Circuit, revise the trading budgets and then finalize CSAPR as compliance strategy for BART in lieu of this proposal.

Response: We completed our response to the CSAPR remand in a separate action and refer Commenter there. We are finalizing a BART alternative for SO₂ BART.

E. Comments on the Identification of BART-eligible Sources

Comment: We received comment from the owners of Coletto Creek stating that in the Texas Regional Haze SIP, TCEQ determined that Coletto Creek Unit 1 was not a BART-eligible source, based on its interpretation and application of its SIP-approved regional haze rules at 30 TAC Chapter 116, Subchapter M. In implementing its rules, TCEQ prepared questionnaires that sought the information needed to render its BART-eligibility determinations.⁶⁶ As a result of this TCEQ-led process, TCEQ determined that Coletto Creek Unit 1 was not BART-eligible because it was not built, and did not commence operation, until 1980, which is well after the August 7, 1977 applicability date. Coletto Creek Unit 1 has reasonably relied on the state's eligibility determination in evaluating its obligations under the Regional Haze Rule program. EPA's decision to reject TCEQ's BART-eligibility determination for Coletto Creek Unit 1 under 30 TAC 116.1500 is unsupported.

Response: The commenter states that because Coletto Creek Unit 1 did not commence operations until 1980, it should be determined to be not BART-eligible, as was determined by

⁶⁶ See October 24, 2005 letter from Al Espinosa, Coletto Creek Power Station, #TX187-0023-0001, Docket Item No. EPA-R06-OAR-2016-0611-0023 at p. 6.

the TCEQ. However, we believe the TCEQ erred in not listing Coletto Creek Unit 1 as being BART-eligible. The date test for BART-eligibility is whether the units was “in existence on August 7, 1977,” and began operation after August 7, 1962. The BART rule defines as “in existence on August 7, 1977” as follows (70 FR 39159):

What does “in existence on August 7, 1977” mean?

2. The regional haze rule defines “in existence” to mean that:

“the owner or operator has obtained all necessary preconstruction approvals or permits required by Federal, State, or local air pollution emissions and air quality laws or regulations and either has (1) begun, or caused to begin, a continuous program of physical on-site construction of the facility or (2) entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the facility to be completed in a reasonable time.” 40 CFR 51.301.

The owner of Coletto Creek Unit 1 provided information that onsite construction began prior to August 7, 1977. Thus, Coletto Creek Unit 1 satisfies the above criteria as being “in existence on August 7, 1977.” Therefore, we disagree with the commenter and continue to find that Coletto Creek Unit 1 is BART-eligible. The NO_x BART requirement for Coletto Creek is met by relying on CSAPR as an alternative to EGU BART for NO_x. The SO₂ BART requirement is met by the intrastate trading program FIP that we are finalizing in this action and to which Coletto Creek will be subject. The PM BART requirement is met by our determination that the visibility impacts of PM emissions from Coletto Creek are too small to be considered to cause or

contribute to visibility impairment at any Class I area and we determined the facility screens out and is not subject to PM BART.

F. Comments on PM BART

We previously proposed to disapprove the SIP's subject-to-BART determinations for PM, on the grounds that the SIP had based these determinations on reliance on a BART alternative for SO₂ and NO_x and, as a result, considered only the contribution of PM emissions to visibility impairment, and to adopt source-specific PM emission limits to fill the SIP gap. In that context, we received several comments related to PM BART issues. Now, however, we have determined it is appropriate to adopt a BART alternative to address SO₂ and NO_x and therefore find Texas' original SIP was correct in considering only the contribution of PM emissions. Considering only PM emissions, all sources considered in the Texas SIP were demonstrated to screen out of the need for source specific PM BART emission limits.

Also, as explained above, we have identified additional sources as BART-eligible that were not considered in the 2009 Texas Regional Haze SIP. As discussed elsewhere, we have determined that the impact due to PM emissions from these additional sources are also below the BART screen level. Thus, the SIP's determination that none of the BART-eligible EGUs are subject-to-BART for PM is correct and approvable. As a consequence, there is no SIP gap needing to be filled by a FIP. Because we are approving EGU PM BART screening determinations that result in no EGUs being subject to PM BART analysis, comments supporting or alleging errors in the details of our PM BART five-factor analysis and our proposed PM BART technology selections and emission limits are not relevant. We address in this section comments that are relevant to whether it is appropriate to approve the portion of this 2009 SIP

submission and EPA's analysis in our proposal that determined that no PM emission limits for Texas EGUs are needed to satisfy the BART requirement because the visibility impacts of PM emissions from BART-eligible EGUs do not cause or contribute to visibility impairment. The information in section III.A. on the history of our proposals regarding the EGU PM BART element of the 2009 Texas SIP submission and EPA's proposals is useful background for understanding the comments and our responses on this topic.

Although we are not finalizing the MATS-based PM limits proposed as PM BART for the coal-fired EGUs, this regional haze action does not affect the existing MATS requirements for these units. We are also not finalizing the fuel oil sulfur percentage limits that we proposed for gas/fuel oil-fired EGUs; the same limits in existing permits for these sources are not affected by our action.

Comments: AEP states that we provide no basis for not approving the TCEQ's PM BART determination in 2016 or logical support for our decision to proceed with modeling PM in the proposed Texas BART FIP. AEP believes that when a state is provided statutory deference in implementing the Regional Haze program, EPA must support its decision for not approving the state's determination. While AEP also agrees that current PM requirements for sources complying with MATS are sufficient for meeting PM BART for Welsh Unit 1, it disagrees that PM BART is even warranted at all or that EPA has provided adequate basis for declaring that TCEQ's screening analysis is no longer reliable. AEP says that buried in a footnote, EPA grasps at some claim of error that Texas' PM BART determinations only looked at the impact of PM emissions on visibility, that Texas can only take this approach when the BART requirements of NO_x and SO₂ are satisfied, and that Texas' error of not identifying several PM BART eligible

sources is grounds for disapproval. AEP believes this logic is unfounded and the situation is created by EPA's piecemeal approach to rulemaking. AEP agrees with EPA's conclusion that gas-fired units that occasionally burn fuel oil should have no further control. AEP will limit burning fuel oil with a sulfur content of 0.7% as currently required by its permit. However, EPA has not provided sufficient reasons to be addressing PM BART. EPA should finalize its earlier proposal to approve Texas' determination that sources in Texas are not subject to PM BART.

The Lower Colorado River Authority disagrees with the disapproval of the Texas PM BART demonstration.

The TCEQ and the Public Utilities Commission of Texas stated that our reliance on language in a guidance memo⁶⁷ to bar TCEQ from conducting pollutant-specific modeling to determining BART eligibility was incorrect. The TCEQ believes this memo did not state that the TCEQ's pollutant-specific modeling is only appropriate when BART for other pollutants is satisfied with a BART alternative such as the CAIR or CSAPR. The TCEQ believes the memo states that such modeling may be appropriate where an alternative program is used for other pollutants. The TCEQ also believes we incorrectly claimed that its SIP acknowledges PM-only modeling is inappropriate where an alternative to BART is not employed.⁶⁸

The TCEQ states that our CAMx modeling supports the conclusions from the screening modeling conducted by it that shows these same units did not meet the 0.5 deciview (dv) threshold.⁶⁹ Furthermore, the TCEQ states that we found that for gas-fired units, PM emissions are "inherently low," and that existing controls plus compliance with the MATS filterable PM

⁶⁷ Regional Haze Regulations and Guidelines for Best Available Retrofit Technology (BART) Determinations, Joseph Paisie, EPA Geographic Strategies Group, July 19, 2006.

⁶⁸ Technical Support Document for the Texas Regional Haze BART Federal Implementation Plan, BART FIP TSD, Docket ID No. EPA-R06-OAR-2016-0611-004, page 26, footnote 39.

⁶⁹ *Id.*, at 82.

limit of 0.03 lb/MMBtu is already BART, further supporting its conclusion that there are no significant visibility impacts from PM emissions from these sources and BART controls for PM are unnecessary. Thus, the TCEQ reasons, a FIP for PM BART is unnecessary and the EPA should approve the screening modeling the TCEQ conducted, as we proposed to do in January 2015.

Luminant provided comments similar to those above. Luminant added that it believes that Texas remains in CSAPR so there is no basis for us to deviate from our prior proposal to approve Texas's PM BART determination. Luminant also stated that our reliance on a Ninth Circuit Court decision to support our rejection of pollutant-specific BART screening is incorrect because the case in point relied upon the BART de minimis exemption, which does not apply in this instance.

Response: We are approving the EGU PM BART element of Texas's 2009 SIP submittal. Under the combination of reliance on the CSAPR ozone-season NO_x trading program to satisfy NO_x BART and reliance on the FIP's intrastate trading program for SO₂ emissions to satisfy SO₂ BART, it is appropriate for determinations of whether a BART-eligible EGU is subject to BART for PM to be based only on the visibility impact of the source's PM emissions. It is not necessary for us to respond to the comments stating that a PM-only analysis would be appropriate even if both SO₂ and NO_x were not addressed by trading programs.

In particular, TCEQ's comments are correct that the BART Guidelines do not prohibit pollutant-specific screening. The July 19, 2006 guidance memo states that EPA does not generally recommend a pollutant-specific screening approach, however, such a screening approach may be appropriate for PM in certain situations. The memo provides the situation of a state relying on

CAIR for NO_x and SO₂ BART as an example where pollutant-specific screening for PM may be appropriate. We agree with TCEQ that the memo's intention is not to limit PM-only analysis to SIPs that rely on CAIR. While we disagree with TCEQ's position that a PM-only analysis is appropriate in a situation involving source-specific SO₂ BART emission limits, the approaches promulgated here for SO₂ and NO_x BART are BART alternatives and are similar to the CAIR situation described in the memo. Therefore, we find that the pollutant specific PM screening approach in TCEQ's original 2009 SIP submittal is appropriate and demonstrates that the sources covered by the BART alternative program for SO₂ screen out of PM BART. For BART-eligible EGU sources not participating in the BART alternative program for SO₂, all these sources screened out of BART for all visibility impairing pollutants utilizing model plants and CALPUFF modeling as described in our proposed rule and BART Screening TSD. Therefore, we are approving the determination that no Texas EGUs are required to have source-specific PM emission limits in order for the BART requirement to be met. This approval is consistent with our December 2014 proposal for PM BART, in which EPA proposed to rely on Texas' CSAPR participation for SO₂ and NO_x BART and to approve the SIP's determinations regarding the need for PM emission limits. *See* 79 FR 74817, 74848 (January 13, 2015). We are also determining that other sources that EPA identified in our December 2016 proposal as BART-eligible that were not identified as BART eligible in TCEQ's 2009 Regional Haze SIP are also screened out from PM BART.

Comment: The Sierra Club states that we should finalize our proposed disapproval of Texas's PM BART determinations, which assumed that SO₂ and NO_x emissions contributing to PM formation would be regulated under CSAPR, *see* 82 Fed. Reg. at 935. Following the D.C. Circuit Court's remand of CSAPR, SO₂ emissions from Texas sources are no longer limited by

CSAPR. The assumption underlying Texas’s PM BART determinations—that CSAPR would limit emissions of PM precursors from Texas sources—is now inaccurate; therefore, reasons the Sierra Club, we must disapprove the State’s PM BART determinations.

Response: We note that the D.C. Circuit Court remanded the budget for Texas EGUs in the CSAPR trading program for SO₂ without vacatur, so the commenter’s statement that Texas EGUs are no longer limited by CSAPR was not true at the time the comment was offered. It is true now as a result of our recent action to remove Texas EGUs from the annual SO₂ and NO_x trading programs. However, a large set of Texas EGUs will, under the final FIP, be subject to CSAPR for ozone-season NO_x and the intrastate trading program FIP for SO₂. For these EGUs, the BART guidelines and our guidance allow for the subject-to-BART for PM determination to be based on only the impacts of PM emissions on visibility. For the BART-eligible EGUs that will not be required to participate in the FIP’s intrastate trading program, our analysis indicates that even when all three pollutants are included in the modeling, all of these sources affect visibility at surrounding Class I Areas by less than 0.5 dv, thus screening out of being subject to PM BART.

Comment: EPA in its previous rulemaking on the reasonable progress measures for the Texas and Oklahoma regional haze plans initially proposed to accept Texas’ finding that no PM BART controls were necessary for EGUs “based on a screening analysis of the visibility impacts from just PM emissions....” In its current Texas BART rulemaking, EPA states that “[i]n connection with changed circumstances on how Texas EGUs are able to satisfy NO_x and SO₂ BART, we are now proposing to disapprove the portion of the Texas Regional Haze SIP that

evaluated the PM BART requirements for EGUs.” The changed circumstances EPA refers to is the removal of Texas sources from the SO₂ caps of the CSAPR rule. Unless a source is subject to a BART alternative or is otherwise determined to be exempt from BART for a particular pollutant, EPA’s regulations and BART guidelines do not generally provide for exemptions from a five-factor BART analysis for a specific pollutant. Under EPA’s BART Guidelines and the definition of BART, once a source has been determined to be subject to BART, a five-factor BART analysis must be done for each pollutant pursuant to 40 C.F.R. Part 51, §51.301 and Appendix Y, section IV.A. So, EPA is correct that it must address BART for PM for the BART-subject sources in Texas.

Response: The premise in the comment that EGUs in Texas will not be subject to a BART alternative for both NO_x and SO₂ is incorrect, given the content of this final action.

Comment: Coletto Creek Unit 1 should not be subject to any FIP emission limits, because it should not be determined to be BART-eligible.

Response: Texas’ 2009 SIP submission did not include Coletto Creek Unit 1 as a BART-eligible source and consequently the SIP did not present any analysis of whether it is subject-to-BART, while we are determining in this action that Coletto Creek Unit 1 is BART-eligible. However, we evaluated the available modeling and other analyses and we have concluded that this information shows minimal impacts from PM from this particular BART-eligible source. Modeled PM impacts from Coletto Creek Unit 1 are expected to be much less than 0.32 delta deciviews (see Section III.4).

Comment: Requiring the Stryker and Graham units to switch to ultra-low-sulfur diesel would significantly improve visibility. Requiring this switching at Stryker would improve visibility by more than 0.5 dv at Caney Creek, and switching to ultra-low-sulfur diesel at Graham would improve visibility by 0.85 dv at Wichita Mountains.

Response: Insofar as this is a comment on our proposed source-specific FIP emission limits to address BART for PM, it is not necessary for us to respond because we are approving the SIP and not promulgating any such limits in this action. We note that the cited visibility benefits of switching to low-sulfur fuel reflect assumed reductions in both direct PM emissions and SO₂ emissions from these two sources. The Stryker and Graham units are both covered by the intrastate trading program for SO₂ and CSAPR for NO_x, so it is appropriate that the subject-to-BART determination be made on the basis of the impacts of direct PM emissions alone. Those impacts are less than 0.5 dv.

Comment: Texas identified 126 sources as BART-eligible or potentially BART eligible. Yet Texas ultimately concluded that no BART-eligible source is subject to BART. Texas's determination is based in part on the unsupported selection of 0.5 dv as the threshold for contribution to visibility impairment. EPA must disapprove Texas's determination as to the sources subject to BART. Texas adopted 0.5 dv as the threshold for "contribution" to visibility impairment. Texas provided no justification for using a 0.5 dv threshold. There is no documentation in the record as to how or why Texas selected this threshold, and there is no legal support for such threshold. EPA's BART Guidelines do not authorize states automatically to use

a 0.5 dv contribution threshold. Instead, the BART Guidelines state only that “any threshold that you use for determining whether a source ‘contributes’ to visibility impairment should not be higher than 0.5 deciviews. In the next sentence, the Guidelines instruct each state that it “should consider the number of emissions sources affecting the Class I areas at issue and the magnitude of the individual sources’ impacts.” There is no evidence in the record that Texas ever conducted this analysis. Furthermore, the Guidelines conclude that “a larger number of sources causing impacts in a Class I area may warrant a lower contribution threshold.” As Texas’s list of 126 BART eligible sources indicates, a large number of sources impact the Class I areas in Texas and in neighboring states. Indeed, the subset of sources that screened out of BART based on individual modeling have a combined, baseline impact of nearly 10 deciviews. Thus, the situation in Texas is exactly what EPA had in mind when it noted that a contribution threshold lower than 0.5 dv may be appropriate. Had Texas followed the BART Guidelines, it may well have selected a threshold lower than 0.5 dv. Using a lower contribution threshold would change Texas’s conclusion as to which sources are subject to BART because there are sources with a baseline impact just below 0.5 deciviews. EPA has a statutory responsibility to ensure that a SIP meets all applicable Clean Air Act requirements and is supported by the record. Here, Texas’s use of a 0.5 dv threshold has two fatal flaws: it is not based on the analysis prescribed by the BART Guidelines, and it is not supported by any analysis whatsoever in the record. Therefore, EPA must disapprove Texas’s conclusions that sources are not subject to BART, where Texas screened out sources because of a visibility impact below 0.5 deciviews.⁷⁰

⁷⁰ This comment was submitted to a public docket (separate from the docket established for this action), in response to our December 2014 proposal (79 FR 74817, 74853-54 (Dec. 16, 2014)) to approve the subject-to-BART determinations in Texas’ 2009 SIP submission and to disapprove the reasonable progress and some other elements of that SIP submission. *See* Docket Item No. EPA-R06-OAR-2014-0754-0067. We never took final action on PM

Response: EPA's BART Guidelines allow states conducting source-by-source BART determinations to exempt sources with visibility impacts as high as 0.5 dv. While we agree that a state may choose to use a lower threshold, this should be based on consideration of not only the number of sources, but the proximity to the Class I area and the potential combined visibility impacts from a group of sources. States have the discretion within the CAA, Regional Haze Rule, and BART Guidelines to set an appropriate contribution threshold considering the number of emissions sources affecting the Class I areas at issue and the magnitude of the sources' impacts.

G. Comments on EPA's Source-Specific SO₂ BART Cost Analyses

Comment: We received a large number of comments from the EGU owners covered under our proposal and environmental groups concerning various aspects of the SO₂ BART cost analyses we performed for the coal-fired EGUs. These comments included both criticisms of and support for our basic approach, the tools we used, and various individual aspects of our cost analyses. We also received Confidential Business Information (CBI) comments from the owner of one of the EGUs covering the same areas.

We also received comments from environmental groups stating that we should have required the gas-fired units that occasionally burn fuel oil to minimally switch to Ultra-Low-Sulfur Diesel (ULSD) in lieu of our proposed BART determination that these units be limited to 0.7% fuel oil by weight. These commenters argued that our estimate of the price per gallon for

BART, and did not respond to the comment. We are responding to it today because of its relevance to this final action.

ULSD was too high and that in any case, the total annual cost to make the switch is very low. They also argue that requiring the Stryker and Graham units to switch to ultra-low-sulfur diesel would significantly improve visibility.

Response: Due to the comments we received requesting a BART alternative in lieu of source-specific EGU BART determinations, we are finalizing a SO₂ trading program as an alternative to source-by-source BART. As a consequence, we believe that comments concerning the SO₂ BART cost analyses we performed on the coal-fired EGUs and these gas-fired units that occasionally burn fuel oil are no longer relevant. The trading program, by its nature, provides sources with flexibility in meeting the requirements. As a result, we expect compliance for sources to be extremely cost-effective. The program addresses both BART eligible and non-BART eligible EGUs. The combination addresses 89% of the emissions (based on 2016 annual emissions) that would have been addressed by CSAPR and, as a result, EGU emissions in Texas will be similar to emission levels anticipated in the CSAPR better than BART demonstration and will achieve greater reasonable progress than BART.

H. Comments on EPA's Modeling

1. Modeling Related to Screening out BART-eligible sources based on CALPUFF

Modeling and Model Plant analysis

Comment: We received comments stating that we used an outdated version of CALPUFF and CALMET in our CALPUFF analyses and there are more recent EPA approved versions of CALPUFF and CALMET. The commenter indicated that there are more recent non-regulatory versions of CALPUFF (such as version 6.4) that include a number of technological

improvements that could have been used. The commenter also indicated we did not follow USDA Forest Service Guidance that recommend using Mesoscale Model Interface Program (MMIF) for generating met fields for CALPUFF⁷¹. The commenter concluded that EPA's CALPUFF analysis was less reliable because of these issues.

Response: For those BART-eligible EGUs that are not covered by the BART alternative for SO₂, we are finalizing determinations that those EGUs are not subject-to-BART for NO_x, SO₂ and PM as proposed, based on the methodologies utilizing model plants and CALPUFF modeling as described in our proposed rule and BART Screening TSD. As mentioned in the BART screening TSD, we used versions (CALPUFF v5.8.4 and an existing CALMET data set that utilized CALMET v5.53a) that do not significantly differ from the current regulatory versions of CALPUFF (v5.8.5) and CALMET (v5.8.5). The current regulatory versions do include some additional bug fixes but the bugs that were fixed are not expected to significantly change the results for the modeling assessments we have done. The 2016 USDA Forest Service Guidance was not released until August of 2016 and no BART modeling was conducted by states and RPOs using MMIF. The USDA Forest Service Guidance is more germane for future SIP developments and any visibility analyses for other regulatory assessments in the future.

In considering the comment that we should use a more recent version of CALPUFF (6.4) or an earlier version 6.112, we considered the regulatory status of CALPUFF for visibility analyses and what analyses are needed to utilize an updated CALPUFF modeling system. The requirements of 40 CFR 51.112 and 40 CFR part 51, Appendix W, Guideline on Air Quality

⁷¹ USDA Forest Service, Guidance on the Use of the Mesoscale Model Interface Program (MMIF) for Air Quality Related Values Long Range Transport Modeling Assessments (Aug. 2016).

Models (GAQM) and the BART Guidelines which refers to GAQM as the authority for using CALPUFF, provide the framework for determining the appropriate model platforms and versions and inputs to be used. Because of concern with CALPUFF's treatment of chemical transformations, which affect AQRVs, EPA has not approved the chemistry of CALPUFF's model as a "preferred" model. The use of the regulatory version is approved for increment and NAAQS analysis of primary pollutants only. Currently, CALPUFF Version 5.8, is subject to the requirements of GAQM 3.0(b) and as a screening model, GAQM 4. CALPUFF Versions 6.112 and 6.4 have not been approved by EPA for even this limited purpose. The versions of CALPUFF, version 6.112 or 6.4, that the commenter recommended could be used to provide modeling analyses of BART eligible sources that have not gone through a full regulatory review in accordance with 40 CFR part 51 Appendix W Section 3.2.2. Furthermore, the currently available information does not support the approval of these versions of the CALPUFF model for use in making BART determinations. In addition, if these versions of the model were acceptable for use, EPA would have to reconsider whether using the 98th percentile impact for determining impairment was appropriate. Therefore, EPA does not believe the use of CALPUFF version 6.112 or 6.4 is appropriate for this rulemaking. We believe we have made the appropriate choice in using CALPUFF version 5.8. For further discussion, see our Modeling RTC and the response to comments in our previous New Mexico Final FIP in 2011.⁷²

Comment: We received a number of comments concerning the acceptable distances/range for which CALPUFF modeling results should be used for BART screening. A number of commenters indicated that EPA has repeatedly stated that 300 km should be the

⁷² 76 FR 52388, 52431-52434 (Aug. 22, 2011).

maximum distance for CALPUFF modeling results and even cited to some past actions (several FIPs – Arkansas, Oklahoma, Montana, and New Mexico) where EPA has indicated that 300 km was the general outer distance for CALPUFF. Commenters also raised past promulgation of CALPUFF in 2003 and IWAQM guidance/reports to support the claim that 300 km is the acceptable outer range of CALPUFF. TCEQ commented we should not use CALPUFF for distances beyond 400 km. Two commenters indicated that EPA had inappropriately reported CALPUFF results for distances of 412 km and 436.1 km, well outside of 300 km. Another commenter indicated we included some model plants at distances greater than 400 km in our model plant screening analysis.

Other commenters indicated that we should use the modeling results from CALPUFF for BART screening at ranges much greater than 400 km. They stated that CALPUFF over-predicts visibility impacts at distances greater than 300 km; therefore, CALPUFF is an acceptable and conservative tool for screening BART sources at large distances from Class I areas. We received comments from several different companies (NRG, LCRA, Coleto Creek, and Luminant) that provided contractor (AECOM) analysis with opinions on the acceptable range of CALPUFF. AECOM's report for LCRA included CALPUFF modeling results for 14 Class I areas with distances out to more than 1000 km and asserted that TCEQ and EPA had utilized CALPUFF previously in screening out sources from being subject to a full BART analysis in the 2009 Texas regional haze SIP submission, our 2014 proposal, and our 2015 final action. Some comments were supportive of using CALPUFF results at distances of 400-1000 + km,⁷³ while others

⁷³ For example, see comment from Andrew Gray, Footnote 11, "For example, Texas used CALPUFF to perform BART modeling for Alcoa Inc, RN100221472 (nearest Class I area 490 km); Equistar Chemicals LP, RN 100542281 (nearest Class I area 517 km); ExxonMobil, RN102579307 and RN102450756 (nearest Class I areas 526 and 482 km, respectively); and Invista, RN104392626 and RN102663671 (nearest Class I areas 472 and 614 km,

opposed using CALPUFF beyond 300 km if the results did not screen a facility out of a full BART analysis.

A number of commenters also raised concerns with the accuracy of the CALPUFF model and several uncertainty issues related to the CALPUFF model and results from the model. We also received the comment that CALPUFF's regulatory status as a preferred model recently changed and that this change raises a question of whether CALPUFF should have been used for the Proposed Texas BART FIP.

Response: As previously discussed and included in our record for our proposal we did use direct CALPUFF modeling results of facilities out to 432 km for some very large EGU facilities (very large emissions from tall stacks). We also used CALPUFF for model plants for screening of sources beyond 360 km to a Class I Area, but the actual distance to a Class I Area was 360 km or less for each of the model plants used for screening of sources. In our 2014 proposed action⁷⁴ and the 2015 final action⁷⁵ on Texas regional haze we approved the use of CALPUFF to screen BART-eligible non-EGU sources at distances of 400 to 614 km for some sources. In those actions, we weighed the modeling results that were mostly well below 0.5 delta-dv with the potential uncertainty of CALPUFF results at these greater distances outside the

respectively). See February 25, 2009 Texas Regional Haze Plan, Chapter 9 at pages 9-9 through 9-14, available at https://www.tceq.texas.gov/airquality/sip/bart/haze_sip.html. South Dakota used CALPUFF for Big Stone's BART determination, including its impact on multiple Class I areas further than 400 km away, including Isle Royale, which is more than 600 km away. See 76 Fed. Reg. 76656. Nebraska relied on CALPUFF modeling to evaluate whether numerous power plants were subject to BART where the "Class I areas [were] located at distances of 300 to 600 kilometers or more from" the sources. See Best Available Retrofit Technology Dispersion Modeling Protocol for Selected Nebraska Utilities, p. 3. EPA Docket ID No. EPA-R07-OAR-2012-0158-0008. EPA has approved reliance on these models."

⁷⁴ 79 FR 74818 (Dec. 16, 2014).

⁷⁵ 81 FR 296 (Jan. 5, 2016).

typical range of CALPUFF in deciding how to use the results in screening of facilities. We disagree with the comment that it was inappropriate to rely on CALPUFF to screen BART-eligible EGU sources at ranges beyond 400 km and that it would not be consistent with our past approval of the BART screening modeling included in the 2009 Texas Regional Haze SIP of non-EGU BART sources.⁷⁶

It has been asserted by the commenters that CALPUFF overestimates visibility impacts at greater distances (greater than 300/400 km) and therefore some commenters claimed that use of CALPUFF is conservative and acceptable for screening BART sources. We disagree with this comment. EPA has seen situations of both under-prediction and over-prediction at these greater distances. EPA has indicated historically that use of CALPUFF was generally acceptable at 300 km and for larger emissions sources with elevated stacks. We and FLM representatives have also allowed or supported the use of CALPUFF results beyond 400 km in some cases other than the Texas actions as pointed out by commenters.⁷⁷ EPA has a higher confidence level with results within 300 km and when analysis of impacts at Class I areas within 300 km is sufficient to inform decisions on BART screening and BART determinations, we have often limited the use of CALPUFF results to within 300 km as there are fewer questions about the suitability of the results. However, that does not preclude the use of model results for sources beyond the 300 km range with some additional consideration of relevant issues such as stack height, size of emissions, etc. As one commenter pointed out, EPA and FLM representatives have utilized CALPUFF results in a number of different situations when the range was between 300-450 km.

⁷⁶ We note that the Fifth Circuit Court of Appeals remanded the rule in its entirety. See *Texas v. EPA*, 829 F.3d 405 (5th Cir. 2016).

⁷⁷ See comments from Andrew Gray, n 11 (which is listed in its entirety earlier in this document) citing examples of modeled impacts from sources at distances greater than 300 km in Texas, Nebraska, and South Dakota.

The model plants utilized in our model plant screening analysis were modeled at distances of 300-360 km from the Class I area. In our model plant analysis, we found that in some situations there was a difference in whether or not a source screened out based on the distance between the model plant and the Class I area. Some initial model plant runs were done at distances of 201-300 km from a Class I Area and yielded higher Q/D ratios than the same model plant evaluation with the same modeled visibility impact at 350-360 km (only 20% more than 300 km).⁷⁸ This difference and the lower Q/D modeling for the model plant located at a greater distance from the Class I area indicated that using the model plant modeling at 300 km or less was overly conservative when we are evaluating facilities at distances of 360-600 km. Therefore, we chose the range that we thought was appropriate in the context of the distances of the sources being evaluated with that model plant. A distance of 300-360 km also fell within a range for which we have evaluated CALPUFF results a number of times and felt comfortable with using for large elevated point sources, and in most cases the comparison of Q/D ratios of the facility to model plant were not similar and the facility screened out with a significant safety margin.⁷⁹

We note that we also had direct CALPUFF screening of some coal-fired plants out to 412 km with NO_x, SO₂, and PM in our proposal. The impacts of these facilities in the proposal screening modeling were typically very large and well above the 0.5 del-dv, so even considering that there are more uncertainties at distances greater than 300 km the impacts were large enough that it was clear that these facilities would have impacts above the threshold based on impacts

⁷⁸ We did iterative modeling with the model plants to model emissions at a level that would yield a value just under the screening level of 0.5 del-dv, typically a value around 0.49 del-dv. In these model distance sensitivity runs when we used the same number of sources and stack parameters but varied the emissions to yield 98th percentile max impacts of approximately 0.49 del-dv. We found that model plants at 350-360 km range had lower resulting Q/Ds than the same model plants at 300 km, thus sources more easily screened out using model plants at 350-360 km.

⁷⁹ See our Screening of BART TSD.pdf (EPA-R06-OAR-2016-0611-0005.pdf); most sources had Q/D values on the order 30-50% of the critical Q/D from the model plant.

from the 3 pollutants.⁸⁰ The BART Guidelines indicate other models may be used on a case-by-case basis. CAMx is a photochemical modeling platform with a full chemistry mechanism that is also suited for assessing visibility impacts from single facilities/sources at longer distances where CALPUFF is more uncertain (such as distances much greater than 300 km). Texas and EPA have previously approved the use of CAMx for determining source impacts for BART screening purposes, and we also decided to supplement our CALPUFF analysis for some large coal-fired sources with CAMx modeling. Our CAMx modeling of these coal-fired sources in the proposal further supported the magnitude of the assessed impacts were well above 0.5 del-dv (NO_x, SO₂, and PM) for these facilities that fell into the greater than 300 km range. We note that this screening modeling for these coal-fired facilities directly modeled with CALPUFF beyond 300 km and also modeled with CAMx is not pertinent to this final action since these coal-fired sources are participating in the SO₂ trading program and we are not finalizing subject to BART determinations for these sources.

Due to the comments we received requesting a BART alternative in lieu of source-specific EGU BART determinations, we are finalizing a SO₂ trading program as an alternative to source-by-source BART. With the NO_x BART coverage from CSAPR, all the BART-eligible sources participating in the SO₂ trading program only have PM emissions that have to be assessed for screening and potential subject to PM BART determinations. As discussed elsewhere, we are approving the determination in the 2009 Texas Regional Haze SIP that PM BART emission limits are not required for any Texas EGUs.

⁸⁰ *Id.* For example, Big Brown was 404 km from WIMO and the maximum impacts with NO_x, SO₂, and PM was 4.265 del-dv (over 8 times the 0.5 del-dv threshold).

We disagree with the commenter's characterization of uncertainties raised that invalidate the CALPUFF modeling results. We respond to comments raised briefly here and in our Modeling RTC. We have also responded to a number of these issues in our past FIP actions.⁸¹

In response to the court's 2002 finding in *American Corn Growers Ass'n. v. EPA*⁸² that we failed to provide an option for BART evaluations on an individual source-by-source basis, we had to identify the appropriate analytical tools to estimate single-source visibility impacts. The 2005 BART Guidelines recommended the use of CALPUFF for assessing visibility (secondary chemical impacts) but noted that CALPUFF's chemistry was fairly simple and the model has not been fully tested for secondary formation and thus is not fully approved for secondary-formed particulate. In the preamble of the final 2005 BART guidelines, we identify CALPUFF as the best available tool for analyzing the visibility effects of individual sources, but we also recognized that it is a model that includes certain assumptions and uncertainties.⁸³ Evaluation of CALPUFF model performance for dispersion (no chemistry) to case studies using inert tracers has been performed.⁸⁴ It was concluded from these case studies the CALPUFF dispersion model had performed in a reasonable manner, and had no apparent bias toward over or under

⁸¹ For example, see Arkansas FIP, 81 FR 66332, 66355- 66413 (Sept. 27, 2016) and the Response to Comments, Docket No. EPA-R06-OAR-2015-0189.

⁸² *Am. Corn Growers Ass'n v. EPA*, 291 F.3d 1 (D.C. Cir. 2002).

⁸³ 70 FR 39104, 39121 (July 6, 2005).

⁸⁴ "[M]ore recent series of comparisons has been completed for a new model, CALPUFF (Section A.3). Several of these field studies involved three-to-four hour releases of tracer gas sampled along arcs of receptors at distances greater than 50km downwind. In some cases, short-term concentration sampling was available, such that the transport of the tracer puff as it passed the arc could be monitored. Differences on the order of 10 to 20 degrees were found between the location of the simulated and observed center of mass of the tracer puff. Most of the simulated centerline concentration maxima along each arc were within a factor of two of those observed." 68 FR 18440, 18458 (April 15, 2003), 2003 Revisions to Appendix W, Guideline on Air Quality Models.

prediction, so long as the transport distance was limited to less than 300km.^{85,86} As discussed above EPA has indicated historically that use of CALPUFF was generally acceptable at 300 km and for larger emissions sources with elevated stacks we and FLM representatives have also allowed or supported the use of CALPUFF results beyond 400 km in some cases.

In promulgating the 2005 BART guidelines, we responded to comments concerning the limitations and appropriateness of using CALPUFF.⁸⁷ In the 2005 BART Guidelines the selection of the 98th percentile value rather than the maximum value was made to address concerns that the maximum may be overly conservative and address concerns with CALPUFF's limitations.⁸⁸

In the 2003 revisions to the Guideline on Air Quality Models, CALPUFF was added as an approved model for long range transport of primary pollutants. At that time, we considered approving CALPUFF for assessing the impact from secondary pollutants but determined that it was not appropriate in the context of a PSD review because the impact results could be used as the sole determinant in denying a permit.⁸⁹ However, the use of CALPUFF in the context of the Regional Haze rule provides results that can be used in a relative manner and are only one factor in the overall BART determination. We determined the visibility results from CALPUFF could be used as one of the five factors in a BART evaluation and the impacts should be utilized

⁸⁵ Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 2 Summary Report and Recommendations for Modeling Long-Range Transport Impacts. Publication No. EPA-454/R-98-019. Office of Air Quality Planning & Standards, Research Triangle Park, NC. 1998.

⁸⁶ 68 FR 18440, 18458 (Apr. 15, 2003). (2003 Revisions to Appendix W, Guideline on Air Quality Models).

⁸⁷ 70 FR 39104, 39121 (July 6, 2005).

⁸⁸ *Id.*, at 39121. "Most important, the simplified chemistry in the model tends to magnify the actual visibility effects of that source. Because of these features and the uncertainties associated with the model, we believe it is appropriate to use the 98th percentile— a more robust approach that does not give undue weight to the extreme tail of the distribution."

⁸⁹ 68 FR 18440 (Apr. 15, 2003).

somewhat in a relative sense because CALPUFF was not explicitly approved for full chemistry calculations.⁹⁰ We note that since the BART Guidelines were finalized in 2005 there has been more modeling with CALPUFF for BART and PSD primary impact purposes and the general community has utilized CALPUFF in the 300-450 km range many times (a number of examples were pointed out by a commenter) and EPA and FLM representatives have weighed the additional potential uncertainties with the magnitude of the modeled impacts in comparison to screening/impact thresholds on a case-by-case basis in approving the use of CALPUFF results at these extended ranges.

We disagree with the commenter's general statement that there is an acknowledged over-prediction of the CALPUFF model or an acknowledged inaccuracy at low impact levels, and that the actual visibility impacts from the BART sources are lower. The CALPUFF model can both under-predict and over-predict visibility impacts when compared to predicted visibility impacts from photochemical grid models. See our Modeling RTC for more detailed response.⁹¹

CALPUFF visibility modeling, performed using the regulatory CALPUFF model version and following all applicable guidance and EPA/FLM recommendations, provides a consistent tool for comparison with the 0.5 dv subject-to-BART threshold. The CALPUFF model, as

⁹⁰ 70 FR 39104, 39123-24 (July 6, 2005). “We understand the concerns of commenters that the chemistry modules of the CALPUFF model are less advanced than some of the more recent atmospheric chemistry simulations. To date, no other modeling applications with updated chemistry have been approved by EPA to estimate single source pollutant concentrations from long range transport,” and in discussion of using other models with more advanced chemistry, “A discussion of the use of alternative models is given in the Guideline on Air Quality in appendix W, section 3.2.”

⁹¹ For example, see Comparison of Single-Source Air Quality Assessment Techniques for Ozone, PM_{2.5}, other Criteria Pollutants and AQRVs, ENVIRON, September 2012; and Anderson, B., K. Baker, R. Morris, C. Emery, A. Hawkins, E. Snyder “Proof-of-Concept Evaluation of Use of Photochemical Grid Model Source Apportionment Techniques for Prevention of Significant Deterioration of Air Quality Analysis Requirements” Presentation for Community Modeling and Analysis System (CMAS) 2010. Annual Conference, (October 11–15, 2010) can be found at <http://www.cmascenter.org/conference/2010/agenda.cfm>.

recommended in the BART guidelines, has been used for almost every single-source BART analysis in the country and has provided a consistent basis for assessing the degree of visibility benefit anticipated from controls as one of the factors under consideration in a five factor BART analysis. Since almost all states have completed their BART analyses and have either approved SIPs or FIPs in place, there is a large set of available data on modeled visibility impacts and benefits for comparison with, and this data illuminates how those model results were utilized to screen out sources and as part of the five-factor analysis in making BART control determinations.

The regulatory status of CALPUFF was changed in the recent revisions to the Guideline on Air Quality Models (GAQM) as far as the classification of CALPUFF as a preferred model for transport of pollutants for primary impacts, not impacts based on chemistry. The recent GAQM changes do not alter the original status of CALPUFF as discussed and approved for use in the 2005 BART guidelines. The GAQM changes indicated that the change in model preferred status had no impact on the use of CALPUFF for BART.⁹²

Comment: We received comments stating that we used out-of-date and unrealistic emissions for some units, which artificially inflate the actual visibility impacts. The commenters state that the data used is unrealistic due to the 2000-2004 time period selected and also due to reporting errors to CAMD. Had more recent emissions been utilized in the screening analysis,

⁹² 82 FR 5182, 5196 (Jan. 17, 2017). “As detailed in the preamble of the proposed rule, it is important to note that the EPA’s final action to remove CALPUFF as a preferred appendix A model in this *Guideline* does not affect its use under the FLM’s guidance regarding AQRV assessments (FLAG 2010) nor any previous use of this model as part of regulatory modeling applications required under the CAA. Similarly, this final action does not affect the EPA’s recommendation [See 70 FR 39104, 39122-23 (July 6, 2005)] that states use CALPUFF to determine the applicability and level of best available retrofit technology in regional haze implementation plans.”

these units would have been determined to not be subject to BART by the various screening methods applied by EPA. Commenters also state that a common sense reading of the Clean Air Act, BART regulations, and BART Guidelines indicate that the “subject to BART” analysis should be based on the most recently available emission data, which EPA’s subject-to-BART analysis does not use. Furthermore, the BART Guidelines do not specifically mandate the use of the 2000-2004 emission rates. Although the BART Guidelines recommend that for the purpose of screening BART-eligible sources, “States use the 24-hour average actual emission rate from the highest emitting day of the metrological period modeled,” the BART Guidelines do not state that the time period analyzed must be restricted to 2000-2004. In fact, in the context of analyzing cost effective control options, the BART Guidelines recommend the use of emissions that are a “*realistic depiction of anticipated* annual emissions for the source.”⁴ And “[i]n the absence of enforceable limitations, you calculate baseline emissions based upon *continuation of past practice*.”⁵ EPA must also use realistic emissions when determining whether a unit causes or contributes to visibility impairment for BART. The use of 15-year old NO_x and SO₂ data for purposes of evaluating this threshold question is illogical and arbitrary and capricious.

We also received comments that doubling the annual emissions of PM was conservative and we should have potentially used maximum heat input to estimate PM emission rates for subject to BART modeling. We also received comments that the values we modeled based on CEM data may have included emission rates during upset conditions, thus the emission rates used may be larger than normal operations.

Response: We note that, as discussed elsewhere, we are not making a subject-to-BART determination for those sources covered by the SO₂ trading program. In our final rule, the

relevant BART requirement for these participating units will be encompassed by BART alternatives for NO_x and SO₂ such that we do not deem it necessary to finalize subject-to-BART findings for these EGUs. In addition, we are approving the determination in the 2009 TX RH SIP that none of these sources are subject to BART for PM. Therefore, comments concerning the emissions utilized in our subject to BART modeling for the sources participating in the SO₂ trading program are no longer relevant. For those BART-eligible EGUs that are not covered by the BART alternative for SO₂, we are finalizing determinations that those EGUs are not subject-to-BART for NO_x, SO₂ and PM as proposed, based on the methodologies utilizing model plants and CALPUFF modeling as described in our proposed rule and BART Screening TSD.

We disagree with the commenter and believe using emissions from the 2000-2004 period is appropriate for determining if a source is subject to BART. Our analysis for facilities followed the BART Guidelines and was consistent with the BART analyses done for all BART-eligible sources. The BART Guidelines recommend that for the purpose of screening BART-eligible sources, “States use the 24-hour average actual emission rate from the highest emitting day of the metrological period modeled” unless this rate reflects periods start-up, shutdown, or malfunction. The emissions estimates used in the models are intended to reflect steady-state operating conditions during periods of high capacity utilization. Consistent with this guidance, we utilized the 24-hr maximum emission rate from the 2000-2004 baseline period and modeled using 2001-2003 meteorological data. We based our analysis on the CEM data from the baseline period 2000-2004 and removed what looked like questionably high values that did not occur often as they were potentially upset values. As discussed elsewhere we did review sources to determine if they installed controls during the baseline period and when that occurred we only looked at baseline emission data post controls. We received general comments that the values we used

from CEM data might include upset values, but did not receive comments that indicated the values used were specifically upset values during the baseline period and should not be used. Facilities did not give us specific information to justify that the emission rates we used were not representative maximum 24-hour emission rates during the 2000-2004 period, so EPA considers the emission rates used were acceptable for the BART screening process.

We are not aware of any newly installed controls or limitations on emissions that have been put in place between the 2000-2004 baseline period and now for any of the BART-eligible sources not participating in the SO₂ trading program that would affect the potential visibility impact from the source. Furthermore, because all these sources were shown to have visibility impacts less than the 0.5 dv threshold using the maximum 24-hr actual emissions during the 2000-2004, modeling of lower emissions due to any new controls or emissions limits would also result in the same determination. We were also not provided any specific information where additional emission reductions/controls had been installed and resulted in a short-term (24-hour) maximum emission rate significantly less than modeled at any of these units.

The overall concern of the commenters was that the emissions used in the modeling resulted in some facilities being subject to a full BART analysis, but, as discussed elsewhere, we are not finalizing subject to BART determinations for the sources participating in the SO₂ trading program. For the sources not participating in the trading program, they have been screened out with our baseline emissions modeling, so underlying concerns about emissions being high/non-representative would not result in any differences to the sources being screened out from a full BART analysis.

Comment: We received comments that stated that the proposed PM BART demonstration by Texas only considered PM emissions because SO₂ and NO_x emissions were to be controlled through an alternative BART program, CAIR. Following the same type of approach, EPA in this Proposed Rule finds that CSAPR for ozone season NO_x is better than BART. However, for the screen modeling used in the development of this Proposed Rule, instead of setting the NO_x emission rate consistent with CSAPR, EPA uses the maximum 24-hour NO_x emission rates from the 2000-2004 time period. EPA ignores the continued application of CSAPR ozone season budgets that apply to EGUs in Texas. This methodology is inconsistent with past practices and overestimates cumulative conditions and facility impacts. Commenters also state that because NO_x is to be controlled by CSAPR, NO_x related haze impacts should not be considered in the screening analysis.

Response: As discussed in our response to another comment, the emission rates used in the modeling should reflect maximum 24-hour emission rates from the baseline period. CSAPR for ozone season NO_x is a seasonal NO_x budget but does not effectively limit short-term emission rates such that a newer maximum 24-hour emission rate can be determined. Therefore, even if it were appropriate to consider any potential reductions due to CSAPR, it is not possible to accurately model any reductions/limits due to CSAPR on a short term basis. Furthermore, emissions from a unit can vary greatly over time as the CSAPR program allows sources to meet emission budgets in a given year by using banked allowances from previous years or by purchasing allowances from other sources within or outside of the State allowing emissions from the source to exceed their annual allocation level. We also note that we were not provided specific short-term emission rate limits from commenters that were based on the installation of

new controls or other reductions that were permanent reductions to short-term emission rates. Our proposal did assess if emission controls were installed during the base period and we utilized the maximum short-term emission rate from the base period after the controls were installed where applicable. Regardless of this issue, the underlying concern of the commenters was whether their facility screened out of being subject to a full BART analysis. With CSAPR coverage for NO_x and the SO₂ intrastate trading program coverage for BART for all BART-eligible coal-fired EGUs, and several BART-eligible gas-fired and gas/fuel oil-fired EGUs, all the BART eligible units screen out of a full BART analysis for the pollutants not covered by trading programs, thus the chief concern that the modeling based on 2000-2004 maximum emissions and the inclusion of NO_x contributed to a determination that the source was subject-to-BART, is no longer relevant.

Concerning the inclusion of NO_x emissions in the screening analysis, EPA's position is that the modeling must include both pollutants (NO_x and SO₂) since they both compete for ammonia. If we modeled only SO₂, all of it would convert to ammonia sulfate (based on ammonia availability) and both baseline screening impacts for SO₂ and visibility benefits from any control assessments would also be overestimated. The chemical interaction between pollutants and background species can lead to situations where the reduction of emissions of a pollutant can actually lead to an increase or inaccurate assessment of the visibility impairment, if both NO_x and SO₂ are not included in CALPUFF modeling. Therefore, to fully assess the visibility benefit anticipated from the use of controls, all pollutants should be modeled together.

BART screening modeling would also include the PM emissions. BART screening is meant to be a conservative and inclusive test. We have always considered combined NO_x, SO₂, and PM impacts even if the facility had NO_x coverage or stringent NO_x controls already

installed. The BART guidelines state “You must look at SO₂, NO_x, and direct particulate matter (PM) emissions in determining whether sources cause or contribute to visibility impairment” unless emissions of these pollutants from the source are less than de minimis.⁹³ The BART Guidelines then provide three modeling options to determine which sources and pollutants need to be subject to BART⁹⁴: 1) dispersion modeling to “determine an individual source's impact on visibility as a result of its emissions of SO₂, NO_x *and* direct PM emissions” ; 2) model plants to exempt individual sources with common characteristics as described in our BART Screening TSD; and 3) cumulative modeling on a pollutant by pollutant basis or for all visibility-impairing pollutants to show that no source in the State is subject to BART. The BART guidelines are clear that individual source modeling should evaluate impacts from NO_x, SO₂ and PM in determining if a source is subject to BART and the pollutant-specific analyses are directed as an option to screen out the impacts of all BART sources in the State for a specific pollutant such as VOC or PM (in the case of EGUs covered by trading programs for NO_x and SO₂). The BART Guidelines also state that in assessing the visibility benefits of controls “modeling should be conducted for SO₂, NO_x, *and* direct PM emissions (PM_{2.5} and/or PM₁₀).”⁹⁵ In many cases a state may have only a handful of sources and impacts from more linear species (VOC or PM) may be so small that they make up a very small contribution (on the order of a 0 - 2 % of the NO_x and SO₂ impacts) to the visibility impacts at a Class I Area, therefore it may be acceptable to screen out pollutants that have a minimal impact. This is not the situation with NO_x, SO₂ and PM emissions from EGUs in Texas where some EGUs’ PM modeled impacts were greater than 0.25 del-dv. EPA’s 2006 memorandum on this is clear that you have to model both (NO_x and SO₂) because

⁹³ 40 CFR 51 Appendix Y, Section III.A.2.

⁹⁴ 40 CFR 51 Appendix Y, Section III.A.3.

⁹⁵ 40 CFR 51 Appendix Y, Section IV.D.5 (emphasis added).

of technical and policy concerns, and also reiterated that pollutant specific analysis was for the limited situation of addressing PM when a large group of sources had BART coverage for the non-linear reacting pollutants (NO_x and SO₂) through a BART alternative.⁹⁶ The BART Guidelines specifically indicate that NO_x, SO₂ and PM should be modeled together when modeling BART eligible units at one facility.⁹⁷ This is similar to the BART eligibility test contemplated in the BART guidelines where if the emissions from the identified units at source exceed a potential to emit of 250 tons per year for any single visibility-impairing pollutant, the source is considered BART-eligible and may be subject to a BART review for all visibility impairing pollutants.⁹⁸

As previously discussed the commenter's primary concern with regard to the inclusion of NO_x was that this may have contributed to facilities not screening out from a full BART analysis. Because, in the final rule, trading programs constitute BART alternatives for NO_x and SO₂, the facilities that were proposed as subject to BART now screen out for the pollutants not covered by a trading program.

Comment: We received a comment from TCEQ that EPA should screen out the Newman facility based on CALPUFF modeling or use CAMx to appropriately screen Newman and determine its visibility impacts. We also received comments from the owner of Newman, EPEC, stating that the PM and SO₂ BART limits for those gas-fired units that occasionally burn fuel oil, applicable to Newman 2 and 3, of a fuel oil sulfur content of 0.7% is acceptable, and that

⁹⁶ EPA Memorandum from Joseph W. Paisie OAQPS to Kay Prince EPA Region 4, "Regional Haze Regulations and Guidelines for Best Available Retrofit Technology (BART) Determinations", July 19, 2006.

⁹⁷ 40 CFR 51 Appendix Y, Section III.A.3.

⁹⁸ See first example in 40 CFR 51 Appendix Y, Section II.A.4.

Newman 4 is restricted to burn only natural gas. EPEC has maintained on-site diesel fuel oil with a lesser sulfur content as emergency backup fuel for testing for preparedness purposes, and in the unlikely scenario of a natural gas curtailment event or other situation that may compromise the steady flow of the primary pipeline quality natural gas fuel supply. EPEC also notes that these units are only permitted to operate 876 hours per year.

Response: Based upon the comments we received requesting a BART alternative in lieu of source-specific EGU BART determinations, we are finalizing a SO₂ trading program as an alternative to source-by-source BART. We are not finalizing subject-to-BART determinations for BART eligible sources covered by the BART alternative for SO₂ and NO_x. In our final rule, the relevant BART requirement for these participating units, including the BART-eligible Newman units, will be satisfied by BART alternatives for NO_x and SO₂ such that we do not deem it necessary to finalize subject-to-BART findings for these EGUs. In addition, we are approving a determination that none of these sources are subject to BART for PM. Therefore, we do not find it necessary to respond to the merits of comments concerning screening modeling for this source, because the outcome of that modeling is not dispositive to the source's inclusion in the BART alternative or its allowance thereunder. See discussion above for assessment of previous CAMx PM screening (Texas 2009 RH SIP) where the Newman source was included in Group 2 with a number of other sources and screened out from being subject to BART for PM.

Comment: We received comments that some of the stack parameters were incorrect at facilities in our CALPUFF and CAMx modeling. New stack height, diameter, velocity values were given for some units.

Response: We reviewed the information provided and note that some facilities gave contradicting data within their comments. For those facilities for which we are relying on modeling to determine they are not subject to BART, we have evaluated potential changes where we may have had an inaccurate number in our proposal modeling. We have determined that the impacts from changes to stack parameters would be minimal and not change our current assessment and decisions.

5. Modeling Related to whether Coal-fired Sources are Subject to BART

Comment: We received comments on the CALPUFF and CAMx modeling utilized to determine which coal-fired EGUs are subject to BART. These included comments concerning emissions inputs, the metrics used, the post-processing methodology, and the model performance.

Response: Due to the comments we received requesting a BART alternative in lieu of source-specific EGU BART determinations, we are finalizing a SO₂ trading program as an alternative to source-by-source BART. This trading program includes participation of all BART-eligible coal-fired EGUs such that we do not deem it necessary to finalize subject-to-BART findings for these EGUs except for PM emissions. As a consequence, we believe that it is not necessary to respond to the merits of comments concerning modeled baseline visibility impacts using CALPUFF or CAMx and determination of which coal-fired sources are subject to BART. In this final action we are approving the determination in the Texas RH SIP that all EGU sources screen out of BART for PM. We are also finalizing the determination that all BART-eligible

EGUs not participating in the trading program screen out of BART for NO_x, SO₂ and PM based on upon CALPUFF modeling (direct source and Model Plant). We address all comments pertinent to the use of CALPUFF (direct source and Model Plant) for BART screening for these sources in other responses to comments. We note that the comments expressing concerns about CALPUFF modeling were associated with facilities that did not screen out from a full subject to BART analysis. Since we have determined that no EGU sources are now subject to BART and a source-specific BART control analysis for pollutants not covered by a BART alternative, the specific concerns raised by commenters about being determined to be subject to a BART control analysis because of emissions inputs used, metrics used, etc. are not relevant to this final action. See the Modeling RTC document for the entirety of the modeling comments and our responses.

Comment: The 0.5 dv threshold used by EPA in its proposed determinations based on CAMx modeling of what sources are subject to BART is too low, given the uncertainties in the CAMx modeling methods used to quantify the visibility impacts of sources.

Response: In our proposed action, we utilized CAMx modeling to evaluate visibility impacts from BART-eligible sources that include BART eligible coal-fired EGUs. Due to the comments we received requesting a BART alternative in lieu of source-specific EGU BART determinations, we are finalizing a SO₂ trading program as an alternative to source-by-source BART. This trading program includes participation of all BART-eligible coal-fired EGUs such that we do not deem it necessary to finalize subject-to-BART findings for these sources except for PM emissions.

In this final action the only CAMx modeling we are relying upon is CAMx modeling

performed for TCEQ in screening of EGU emissions of PM that was included in TCEQ's 2009 SIP. Our approval of the CAMx PM screening of EGUs is based on the original CENRAP modeling datasets, agreed modeling protocols and Texas' use of the 0.5 del-dv to screen sources as agreed upon by TCEQ in 2007. Any potential concerns with CAMx bias were considered in 2007 and TCEQ, EPA and FLM representatives agreed to the approach of using 0.5 del-dv to screen groups of sources using CAMx modeling. We note that the BART guidelines specifically state that "as a general matter, any threshold that you use for determining whether a source "contributes" to visibility impairment should not be higher than 0.5 deciviews."⁹⁹ Furthermore, our action on the PM BART determinations in the 2009 Texas SIP submittal would not be any different had we used a higher threshold since all sources screened out based on the use of the 0.5 dv threshold. Since we are not relying on the CAMx modeling we had performed for our proposal, any comments concerning the use of this modeling are not pertinent to this final action and it is not necessary to respond to the merits of those comments.

6. Modeling Related to Visibility Benefit of Sources Subject-to-BART

Comment: We received comments on the CALPUFF and CAMx modeling utilized to estimate the visibility benefits of controls. These included comments concerning the emissions inputs, the metrics used, the post-processing methodology, and the model performance.

Response: Based on the comments we received requesting a BART alternative in lieu of source-specific EGU BART determinations, we are finalizing a SO₂ trading program as an alternative to source-by-source BART. This trading program includes participation of all BART-

⁹⁹ 40 CFR 51 Appendix Y, Section III.A.1.

eligible coal-fired EGUs and a number of BART-eligible gas or gas/fuel oil-fired EGUs. It also includes a number of non-BART eligible EGUs. The combination of the source coverage for this program, the total allocations for EGUs covered by the program, and recent and foreseeable emissions from EGUs not covered by the program will result in future EGU emissions in Texas that are similar to the SO₂ emission levels forecast in the 2012 better-than-BART demonstration for Texas EGU emissions assuming CSAPR participation. We are not finalizing our evaluation of whether individual sources are subject to BART. As a consequence, we believe that it is not necessary to respond to the merits of comments concerning source-specific visibility benefits of controls on these units, because we are not finalizing requirements based on those controls.

I. Comments on Affordability and Grid Reliability

Comment: We received comments from the State, EGU owners covered under our proposal and environmental groups concerning whether our proposal would cause EGUs to retire and thus cause grid reliability issues. These comments included both criticisms of and support for our proposed position. Texas, in particular, stated that recent ERCOT studies have raised concerns that several units in Texas will no longer be economically viable if required to install capital intensive controls. They also indicated that EPA's IPM modeling supports this conclusion. Texas believed that if units shutdown with little notice it could cause reliability concerns.

Response: EPA takes very seriously concerns about grid reliability. We are finalizing a SO₂ trading program as an alternative to source-by-source BART. We believe the program we have designed will help address reliability concerns because it does not require installation of

capital intensive controls and will provide much more flexibility to sources than the source by source compliance we proposed. In fact, aggregate emissions of the covered sources in 2016 were below the level called for by the trading program. In addition, the supplemental allowance pool is expected to provide additional flexibility to allow sources to run, if necessary, in an emergency. We believe that it is not necessary to respond on the merits to specific comments concerning the impacts to grid reliability related to the requirements of the proposed source-specific controls, because we are not finalizing those requirements.

V. SO₂ Trading Program and Its Implications for Interstate Visibility Transport, EGU BART, and Reasonable Progress

The Regional Haze Rule provides each state with the flexibility to adopt an allowance trading program or other alternative measure instead of requiring source-specific BART controls, so long as the alternative measure is demonstrated to achieve greater reasonable progress than BART. As discussed in Section III.A.3 above, based principally on comments submitted by the State of Texas during the comment period urging us to consider as a BART alternative the concept of system-wide emission caps using CSAPR allocations as part of an intrastate trading program,¹⁰⁰ we are acknowledging the State's preference and exercising our authority to promulgate a BART alternative for SO₂ for certain Texas EGUs. The combination of the source coverage for this program, the total allocations for EGUs covered by the program, and recent and foreseeable emissions from EGUs not covered by the program will result in future EGU emissions in Texas that are similar to what was forecast in the 2012 better than BART demonstration for Texas EGU emissions assuming CSAPR participation.

¹⁰⁰ See Docket Item No. EPA-R06-OAR-2016-0611-0070, p. 3.

A. Background on the CSAPR as an Alternative to BART Concept

In 2012, the EPA amended the Regional Haze Rule to provide that participation by a state's EGUs in a CSAPR trading program for a given pollutant – qualifies as a BART alternative for those EGUs for that pollutant.¹⁰¹ In promulgating this CSAPR-better-than-BART rule (also referred to as “Transport Rule as a BART Alternative”), the EPA relied on an analytic demonstration based on an air quality modeling study¹⁰² showing that CSAPR implementation meets the Regional Haze Rule's criteria for a demonstration of greater reasonable progress than BART. In the air quality modeling study conducted for the 2012 analytic demonstration, the EPA projected visibility conditions in affected Class I areas¹⁰³ based on 2014 emissions projections for two control scenarios and on the 2014 base case emissions projections.¹⁰⁴ One control scenario represents “Nationwide BART” and the other represents “CSAPR+BART-elsewhere.” In the base case, neither BART controls nor the EGU SO₂ and NO_x emissions reductions attributable to CSAPR were reflected. To project emissions under CSAPR, the EPA assumed that the geographic scope and state emissions budgets for CSAPR would be implemented as finalized and amended in 2011 and 2012.¹⁰⁵ The results of that analytic demonstration based on

¹⁰¹ 40 CFR 51.308(e)(4); *see also generally* 77 FR 33641 (June 7, 2012). Legal challenges to the CSAPR-better-than-BART rule from conservation groups and other petitioners are pending. *Utility Air Regulatory Group v. EPA*, No. 12-1342 (D.C. Cir. filed August 6, 2012).

¹⁰² *See* Technical Support Document for Demonstration of the Transport Rule as a BART Alternative, Docket ID No. EPA-HQ-OAR-2011-0729-0014 (December 2011) (2011 CSAPR/BART Technical Support Document), and memo entitled “Sensitivity Analysis Accounting for Increases in Texas and Georgia Transport Rule State Emissions Budgets,” Docket ID No. EPA-HQ-OAR-2011-0729-0323 (May 29, 2012), both available in the docket for this action.

¹⁰³ The EPA identified two possible sets of “affected Class I areas” to consider for purposes of the study and found that implementation of CSAPR met the criteria for a BART alternative whichever set was considered. *See* 77 FR 33641, 33650 (June 7, 2012).

¹⁰⁴ For additional detail on the 2014 base case, *see* the CSAPR Final Rule Technical Support Document, available in the docket for this action.

¹⁰⁵ CSAPR was amended three times in 2011 and 2012 to add five states to the seasonal NO_x program and to

this air quality modeling passed the two-pronged test set forth at 40 CFR 51.308(e)(3). The first prong ensures that the alternative program will not cause a decline in visibility at any affected Class I area. The second prong ensures that the alternative program results in improvements in average visibility across all affected Class I areas as compared to adopting source-specific BART. Together, these tests ensure that the alternative program provides for greater visibility improvement than would source-specific BART.

For purposes of the 2012 analytic demonstration that CSAPR as finalized and amended in 2011 and 2012 provides for greater reasonable progress than BART, the analysis included Texas EGUs as subject to CSAPR for SO₂ and annual NO_x (as well as ozone-season NO_x). CSAPR's emissions limitations are defined in terms of emissions "budgets" for the collective emissions from affected EGUs in each covered state. Sources have the ability to purchase allowances from sources outside of the state, so total projected emissions for a state may, in some cases, exceed the state's emission budget, but aggregate emissions from all sources in a state should remain lower than or equal to the state's "assurance level." The final emission budget under CSAPR for Texas was 294,471 tons per year for SO₂, including 14,430 tons of allowances available in the new unit set aside.¹⁰⁶ The State's "assurance level" under CSAPR was 347,476 tons.¹⁰⁷ Under

increase certain state budgets. 76 FR 80760 (Dec. 27, 2011); 77 FR 10324 (Feb. 21, 2012); 77 FR 34830 (June 12, 2012). The CSAPR-better-than-BART final rule reflected consideration of these changes to CSAPR.

¹⁰⁶ Units that are subject to CSAPR but that do not receive allowance allocations as existing units are eligible for a new unit set aside (NUSA) allowance allocation. NUSA allowance allocations are a batch of emissions allowances that are reserved for new units that are regulated by the CSAPR, but weren't included in the final rule allocations. The NUSA allowance allocations are removed from the original pool of regional allowances, and divided up amongst the new units, so as not to exceed the emissions cap set in the CSAPR. Each calendar year, EPA issues three pairs of preliminary and final notices of data availability (NODAs), which are determined and recorded in two "rounds" and are published in the Federal Register. In any year, if the NUSA for a given CSAPR state and program does not have enough new units after completion of the 2nd round, the remaining allowances are allocated to existing CSAPR-affected units.

¹⁰⁷ See 40 CFR 97.710 for state SO₂ Group 2 trading budgets, new unit set-asides, Indian country new unit set-asides, and variability limits.

CSAPR, the projected SO₂ emissions from the affected Texas EGUs in the CSAPR + BART-elsewhere scenario were 266,600 tons per year. In a 2012 sensitivity analysis memo, EPA conducted a sensitivity analysis that confirmed that CSAPR would remain better-than-BART if Texas EGU emissions increased to approximately 317,100 tons.¹⁰⁸

As introduced in Section I.C, in the EPA's final response to the D.C. Circuit's remand of certain CSAPR budgets, we finalized the withdrawal of the requirements for Texas' EGUs to participate in the annual SO₂ and NO_x trading programs and also finalized our determination that the changes to the geographic scope of the CSAPR trading programs resulting from the remand response do not affect the continued validity of participation in CSAPR as a BART alternative. This determination that CSAPR remains a viable BART alternative despite changes in geographic scope resulting from EPA's response to the CSAPR remand was based on a sensitivity analysis of the 2012 analytic demonstration used to support the original CSAPR as better-than-BART rulemaking. A full explanation of the sensitivity analysis is included in the remand response proposal and final rule.¹⁰⁹

B. Texas SO₂ Trading Program

¹⁰⁸ For the projected annual SO₂ emissions from Texas EGUs See Technical Support Document for Demonstration of the Transport Rule as a BART Alternative, Docket ID No. EPA-HQ-OAR-2011-0729-0014 (December 2011) (2011 CSAPR/BART Technical Support Document), available in the docket for this action. at table 2-4. Certain CSAPR budgets were increased after promulgation of the CSAPR final rule (and the increases were addressed in the 2012 CSAPR/BART sensitivity analysis memo. See memo entitled "Sensitivity Analysis Accounting for Increases in Texas and Georgia Transport Rule State Emissions Budgets," Docket ID No. EPA-HQ-OAR-2011-0729-0323 (May 29, 2012), available in the docket for this action. The increase in the Texas SO₂ budget was 50,517 tons which, when added to the Texas SO₂ emissions projected in the CSAPR + BART-elsewhere scenario of 266,600 tons, yields total potential SO₂ emissions from Texas EGUs of approximately 317,100 tons.

¹⁰⁹ 81 FR 78954 (Nov. 10, 2016) and final action signed September 21, 2017 available at *regulations.gov* in Docket No. EPA-HQ-OAR-2016-0598

Texas is no longer in the CSAPR program for annual SO₂ emissions and accordingly cannot rely on CSAPR as a BART alternative for SO₂ under 51.308(e)(4).¹¹⁰ Therefore, informed by the TCEQ comments, we are proceeding to address the SO₂ BART requirement for coal-fired, some gas-fired, and some gas/fuel oil-fired units under a BART alternative, which we are justifying according to the demonstration requirements under 51.308(e)(2).

1. Identification of Sources Participating in the Trading Program

Under 51.308(e)(2), a State may opt to implement or require participation in an emissions trading program or other alternative measure rather than to require sources subject to BART to install, operate, and maintain BART. Such an emissions trading program or other alternative measure must achieve greater reasonable progress than would be achieved through the installation and operation of BART. At the same time, the Texas trading program should be designed so as not to interfere with the validity of existing SIPs in other states that have relied on reductions from sources in Texas. As discussed elsewhere, the Texas trading program is designed to provide the measures that are needed to address interstate visibility transport requirements for several NAAQS and to be part of the long-term strategy needed to meet the reasonable progress requirements of the Regional Haze Rule.¹¹¹ To meet all of these goals, the trading program must not only be inclusive of all BART-eligible sources that are treated as satisfying the BART requirements through participation in a BART alternative, but must also include additional emission sources such that the trading program as a whole can be shown to

¹¹⁰ See final action signed September 21, 2017 available at *regulations.gov* in Docket No. EPA-HQ-OAR-2016-0598

¹¹¹ EPA is not determining at this time that this final action fully resolves the EPA's outstanding obligations with respect to reasonable progress that resulted from the Fifth Circuit's remand of our reasonable progress FIP. We intend to take future action to address the Fifth Circuit's remand.

both achieve greater reasonable progress than would be achieved through the installation and operation of BART, and achieve the emission reductions relied upon by other states during consultation and assumed by other states in their own regional haze SIPs, including their reasonable progress goals for their Class I areas.

The identification of EGUs in the trading program necessarily begins with the list of BART-eligible EGUs for which we intend to address the BART requirements through a BART alternative. As discussed elsewhere, we determined that several BART-eligible gas-fired and gas/oil-fired EGUs are not subject-to-BART for NO_x, SO₂, and PM, therefore those BART-eligible sources are not included in the trading program. The table below lists those BART-eligible EGUs identified for participation in the trading program.

Table 4. BART-Eligible EGUs Participating in the Trading Program

Facility	Unit
Big Brown (Luminant)	1
Big Brown (Luminant)	2
Coleto Creek (Dynegy ¹¹²)	1
Fayette (LCRA)	1
Fayette (LCRA)	2
Graham (Luminant)	2
Harrington Station (Xcel)	061B
Harrington Station (Xcel)	062B
J T Deely (CPS Energy)	1
J T Deely (CPS Energy)	2

¹¹² Dynegy purchased the Coleto Creek power plant from Engie in February, 2017. Note that Coleto Creek may still be listed as being owned by Engie in some of our supporting documentation which was prepared before that sale.

Martin Lake (Luminant)	1
Martin Lake (Luminant)	2
Martin Lake (Luminant)	3
Monticello (Luminant)	1
Monticello (Luminant)	2
Monticello (Luminant)	3
Newman (El Paso Electric)	2
Newman (El Paso Electric)	3
Newman (El Paso Electric)	4
O W Sommers (CPS Energy)	1
O W Sommers (CPS Energy)	2
Stryker Creek (Luminant)	ST2
WA Parish (NRG)	WAP4
WA Parish (NRG)	WAP5
WA Parish (NRG)	WAP6
Welsh Power Plant (AEP)	1
Welsh Power Plant (AEP)	2
Wilkes Power Plant (AEP)	1
Wilkes Power Plant (AEP)	2
Wilkes Power Plant (AEP)	3

For a BART alternative that includes an emissions trading program, the applicability provisions must be designed to prevent any significant potential shifting within the state of production and emissions from sources in the program to sources outside the program. Shifting would be logistically simplest among units in the same facility, because they are under common management and have access to the same transmission lines. In addition, since a coal-fired EGU to which electricity production could shift would have a relatively high SO₂ emission rate

(compared to a gas-fired EGU), such shifting could also shift substantive amounts of SO₂ emissions. To prevent any significant shifting of generation and SO₂ emissions from participating sources to non-participating sources within the same facility, coal-fired EGUs that are not BART-eligible but are co-located with BART-eligible EGUs have been included in the program. While Fayette Unit 3, WA Parish Unit 8 (WAP8), and J K Spruce Units 1 and 2 were identified as coal-fired units that are not BART-eligible but are co-located with BART-eligible EGUs, these units have scrubbers installed to control SO₂ emissions such that a shift in generation from the participating units to these units would not result in a significant increase in emissions. Fayette Unit 3 has a high performing scrubber similar to the scrubbers on Fayette Units 1 and 2,¹¹³ and has a demonstrated ability to maintain SO₂ emissions at or below 0.04 lbs/MMBtu.¹¹⁴ We find that any shifting of generation from the participating units at the facility to Fayette Unit 3 would result in an insignificant shift of emissions. The scrubber at Parish Unit 8 maintains an emission rate four to five times lower than the emission rate of the other coal-fired units at the facility (Parish Units 5,6, and 7) that are uncontrolled.¹¹⁵ Shifting of generation from the participating units at the Parish facility to Parish Unit 8 would result in a decrease in overall emissions from the source. Similarly, J K Spruce Units 1 and 2 have high performing scrubbers and emit at emission rates much lower than the co-located BART-eligible coal-fired units (J T Deely Units 1 and 2).¹¹⁶ In addition, because these units not covered by the program are on average better controlled for SO₂ than the covered sources and emit far less SO₂ per unit of

¹¹³ See the BART FIP TSD, available in the docket for this action (Document Id: EPA-R06-OAR-2016-0611-0004), for evaluation of the performance of scrubbers on Fayette Units 1 and 2.

¹¹⁴ The annual average emission rate for 2016 for this unit was 0.01 lb/MMBtu.

¹¹⁵ Parish Units 5 and 6 are coal-fired BART-eligible units. Parish Unit 7 is not BART-eligible, but is a co-located coal-fired EGU. Unlike Parish Unit 8, these three units do not have an SO₂ scrubber installed.

¹¹⁶ The annual average emission rate for 2016 for J K Spruce Units 1 and 2 was 0.03 lb/MMBtu and 0.01 lb/MMBtu, respectively. The annual average emission rate for 2016 for J T Deely Units 1 and 2 was 0.52 lb/MMBtu and 0.51 lb/MMBtu, respectively.

energy produced, we conclude that in general, based on the current emission rates of the EGUs, should a portion of electricity generation shift to those units not covered by the program, the net result would be a decrease in overall SO₂ emissions, as these non-participating units are on average much better controlled. Relative to current emission levels, should participating units increase their emissions rates and decrease generation to comply with their allocation, emissions from non-participating units may see a small increase. Therefore, we have not included Fayette Unit 3, WA Parish Unit 8 (WAP8), and J K Spruce Units 1 and 2 in the trading program. The table below lists those coal-fired units that are co-located with BART-eligible units that have been identified for inclusion in the trading program.

Table 5. Coal-fired EGUs Co-located with BART-Eligible EGUs and Participating in the Trading Program

Facility	Unit
Harrington Station (Xcel)	063B
WA Parish (NRG)	WAP7
Welsh Power Plant (AEP)	3

In addition to these sources, we also evaluated other EGUs for inclusion in the trading program based on their potential to impact visibility at Class I areas. Addressing emissions from sources with the largest potential to impact visibility is required to make progress towards the goal of natural visibility conditions and to address emissions that may otherwise interfere with measures required to protect visibility in other states. EPA, States, and RPOs have historically used a Q/D analysis to identify those facilities that have the potential to impact visibility at a Class I area based on their emissions and distance to the Class I area. Where,

1. Q is the annual emissions in tons per year (tpy), and
2. D is the nearest distance to a Class I Area in kilometers (km)

We used a Q/D value of 10 as a threshold for identification of facilities that may impact air visibility at Class I areas and could be included in the trading program in order to meet the goals of achieving greater reasonable progress than BART and limiting visibility transport. We selected this value of 10 based on guidance contained in the BART Guidelines, which states:

Based on our analyses, we believe that a State that has established 0.5 deciviews as a contribution threshold could reasonably exempt from the BART review process sources that emit less than 500 tpy of NO_x or SO₂ (or combined NO_x and SO₂), as long as these sources are located more than 50 kilometers from any Class I area; and sources that emit less than 1000 tpy of NO_x or SO₂ (or combined NO_x and SO₂) that are located more than 100 kilometers from any Class I area.¹¹⁷

The approach described above corresponds to a Q/D threshold of 10. This approach has also been recommended by the Federal Land Managers' Air Quality Related Values Work Group (FLAG)¹¹⁸ as an initial screening test to determine if an analysis is required to evaluate the potential impact of a new or modified source on air quality related value (AQRV) at a Class I area. For this purpose, a Q/D value is calculated using the combined annual emissions in tons per

¹¹⁷ See 40 CFR part 51, App. Y, § III (How to Identify Sources "Subject to BART").

¹¹⁸ Federal Land Managers' Air Quality Related Values Work Group (FLAG), Phase I Report—Revised (2010) Natural Resource Report NPS/NRPC/NRR—2010/232, October 2010. Available at http://www.nature.nps.gov/air/Pubs/pdf/flag/FLAG_2010.pdf

year of (SO₂, NO_x, PM₁₀, and sulfuric acid mist (H₂SO₄) divided by the distance to the Class I area in km. A Q/D value greater than 10 requires a Class I area AQRV analysis.¹¹⁹

We considered the results of an available Q/D analysis based on 2009 emissions to identify facilities that may impact air visibility at Class I areas.¹²⁰ The table below summarizes the results of that Q/D analysis for EGU sources in Texas with a Q/D value greater than 10 with respect to the nearest Class I area to the source.

Table 6. Q/D Analysis for Texas EGUs (Q/D Greater Than 10, 2009 annual emissions)

Facility	Maximum Q/D
H.W. Pirkey (AEP)	35.8
Big Brown (Luminant)	182.9
Sommers-Deely (CPS)	56.9
Coleto Creek (Dynegy)	46.0
Fayette (LCRA)	61.0
Gibbons Creek (TMPA)	30.8
Harrington Station (XCEL)	107.8
San Miguel	32.9
Limestone (NRG)	85.1
Martin Lake (Luminant)	367.4
Monticello (Luminant)	425.4
Oklaunion (AEP)	85.0
Sandow (Luminant)	63.0
Tolk Station (XCEL)	148.5
Twin Oaks	14.2
WA Parish (NRG)	84.3
Welsh (AEP)	230.1

¹¹⁹ We also note that TCEQ utilized a Q/D threshold of 5 in its analysis of reasonable progress sources in the 2009 Texas Regional Haze SIP. See Appendix 10-1.

¹²⁰ See the TX RH FIP TSD that accompanied our December 2014 Proposed action 79 FR 74818 (Dec 16, 2014) and 2009statesum_Q_D.xlsx available in the docket for that action.

Based on the above Q/D analysis, we identified additional coal-fired EGUs for participation in the SO₂ trading program due to their emissions, proximity to Class I areas, and potential to impact visibility at Class I areas. While Gibbons Creek is identified by the Q/D analysis, the facility does not include any BART-eligible EGUs and has installed very stringent controls such that current emissions are approximately 1% of what they were in 2009.¹²¹ Therefore, we do not consider Gibbons Creek to have significant potential to impact visibility at any Class I area and do not include it in the trading program. The Twin Oaks facility, consisting of two units, is also identified as having a Q/D greater than 10. However, the Q/D for this facility is significantly lower than that of the other facilities, the facility does not include any BART-eligible EGUs, and the estimated Q/D for an individual unit would be less than 10. We do not consider the potential visibility impacts from these units to be significant relative to the other coal-fired EGUs in Texas with Q/Ds much greater than 10 and do not include it in the trading program. The Oklaunion facility consists of one coal-fired unit that is not BART-eligible. Annual emissions of SO₂ in 2016 from this source were 1,530 tons, less than 1% of the total annual emissions for EGUs in the state. We have determined that the most recent emissions from this facility are small relative to other non-BART units included in the program and we have not included Oklaunion in the trading program. Finally, San Miguel is identified as having a Q/D greater than 10. The San Miguel facility consists of one coal-fired unit that is not BART-eligible. In our review of existing controls at the facility performed as part of our action to address the remaining regional haze obligations for Texas, we found that the San Miguel facility has upgraded its SO₂ scrubber system to perform at the highest level (94% control efficiency)

¹²¹ 2016 annual SO₂ emissions were only 138 tons compared to 11,931 tons in 2009.

that can reasonably be expected based on the extremely high sulfur content of the coal being burned, and the technology currently available.¹²² Since completion of all scrubber upgrades,¹²³ emissions from the facility on a 30-day boiler operating day¹²⁴ rolling average basis have remained below 0.6 lb/MMBtu and the 2016 annual average emission rate was 0.44 lb/MMBtu. Therefore, we have determined that the facility is well controlled and have not included San Miguel in the trading program. Other coal-fired EGUs in Texas that are not included in the trading program either had Q/D values less than 10 based on 2009 emissions or were not yet operating in 2009. New units beginning operation after 2009 would be permitted and constructed using emission control technology determined under either BACT or LAER review, as applicable and we do not consider the potential visibility impacts from these units to be significant relative to those coal-fired EGUs participating in the program. See Table 10 and accompanying discussion in the section below for additional information on coal-fired EGUs not included in the trading program. The table below lists the additional units identified by the Q/D analysis described above as potentially significantly impacting visibility and are included in the trading program. We note that all of the other coal-fired units identified for inclusion in the trading program due to their BART-eligibility or by the fact that they are co-located with BART-eligible coal units would also be identified for inclusion in the trading program if the Q/D analysis were applied to them.

¹²² 79 FR 74818 (Dec. 16, 2014).

¹²³ San Miguel Electric Cooperative FGD Upgrade Program Update, URS Corporation, June 30, 2014. Available in the docket for our December 2014 Proposed action, 79 FR 74818 (Dec 16, 2014) as “TX166-008-066 San Miguel FGD Upgrade Program.”

¹²⁴ A boiler operating day (BOD) is any 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time at the steam generating unit. See 70 FR 39172 (July 6, 2005).

Table 7. Additional Units Identified for Inclusion in the Trading Program

Facility	Unit
H.W. Pirkey (AEP)	1
Limestone (NRG)	1
Limestone (NRG)	2
Sadow (Luminant)	4
Tolk (Xcel)	171B
Tolk (Xcel)	172B

As discussed in more detail below, the inclusion of all of these identified sources (Tables 4, 5, and 7 above) in an intrastate SO₂ trading program will achieve emission levels that are similar to original projected participation by all Texas EGUs in the CSAPR program for trading of SO₂ and achieve greater reasonable progress than BART. In addition to being a sufficient alternative to BART, the trading program secures reductions consistent with visibility transport requirements and is part of the long-term strategy to meet the reasonable progress requirements of the Regional Haze Rule.¹²⁵ The combination of the source coverage for this program, the total allocations for EGUs covered by the program, and recent and foreseeable emissions from EGUs not covered by the program will result in future EGU emissions in Texas that on average will be no greater than what was forecast in the 2012 better-than-BART demonstration for Texas EGU emissions assuming CSAPR participation.

2. Texas SO₂ Trading Program as a BART Alternative

¹²⁵ EPA is not determining at this time that this final action fully resolves the EPA's outstanding obligations with respect to reasonable progress that resulted from the Fifth Circuit's remand of our reasonable progress FIP. We intend to take future action to address the Fifth Circuit's remand.

40 CFR 51.308(e)(2) contains the required plan elements and analyses for an emissions trading program or alternative measure designed as a BART alternative.

As discussed above, consistent with our proposal, we are finalizing our list of all BART-eligible sources, in Texas, which serves to satisfy 51.308(e)(2)(i)(A).

This action includes a list of all EGUs covered by the trading program, satisfying the first requirement of 51.308(e)(2)(i)(B). All BART-eligible coal-fired units, some additional coal-fired EGUs, and some BART-eligible gas-fired and oil-and-gas-fired units are covered by the alternative program.¹²⁶ This coverage and our determinations that the BART-eligible gas-fired and oil-and-gas-fired EGUs not covered by the program are not subject-to-BART for NO_x, SO₂ and PM satisfy the second requirement of 51.308(e)(2)(i)(B).

Regarding the requirements of 40 CFR 51.308(e)(2)(i)(C), we are not making determinations of BART for each source subject to BART and covered by the program. The demonstration for a BART alternative does not need to include determinations of BART for each source subject to BART and covered by the program when the “alternative measure has been designed to meet a requirement other than BART.” The Texas trading program meets this condition, as discussed elsewhere, because it has been designed to meet multiple requirements other than BART. This BART alternative extends beyond all BART-eligible coal-fired units to include a number of additional coal-fired EGUs, and some BART-eligible gas-fired and oil-and-gas-fired units, capturing the majority of emissions from EGUs in the State and is designed to provide the measures that are needed to address interstate visibility transport requirements for several NAAQS. This is because for all sources covered by the Texas SO₂ trading program, those sources’ CSAPR allocations for SO₂ are incorporated into this finalized BART alternative,

¹²⁶ See Table 3 above for list of participating units and identification of BART-eligible participating units.

and the BART FIP obtains more emission reductions of SO₂ and NO_x than the level of emissions reductions relied upon by other states during consultation and assumed by other states in their own regional haze SIPs including their reasonable progress goals for their Class I areas. This BART alternative, addressing emissions from both BART eligible and non-BART eligible sources, that in combination provides for greater reasonable progress than BART, is also designed to be part of the long-term strategy needed to meet the reasonable progress requirements of the Regional Haze Rule, which remain outstanding after the remand of our reasonable progress FIP by the Fifth Circuit Court of Appeals. Since the time of our January 4, 2017 proposal on BART, we note that the Fifth Circuit Court of Appeals has remanded without vacatur our prior action on the 2009 Texas Regional Haze SIP and part of the Oklahoma Regional Haze SIP.¹²⁷ We contemplate that future action on this remand, including action that may merge with new development of SIP revisions by the State of Texas as contemplated in its request for the SO₂ BART alternative, will bring closure to the reasonable progress requirement. For these reasons, we find that it is not necessary for us to make determinations of BART for each source subject to BART and covered by the program. In this context, 51.308(e)(2)(i)(C) provides that we may “determine the best system of continuous emission control technology and associated emission reductions for similar types of sources within a source category based on both source-specific and category-wide information, as appropriate.” In this action, we are relying on the determinations of the best system of continuous emission control technology and associated emission reductions for EGUs as was used in our 2012 determination that showed that CSAPR as finalized and amended in 2011 and 2012 achieves more reasonable progress than BART. These determinations were based on category-wide information.

¹²⁷ *Texas v. EPA*, 829 F.3d 405 (5th Cir. 2016).

Regarding the requirement of 40 CFR 51.308(e)(2)(i)(D), our analysis is that the Texas trading program will effectively limit the aggregate annual SO₂ emissions of the covered EGUs to be no higher than the sum of their allowances. As discussed elsewhere, the average total annual allowance allocation for covered sources is 238,393 tons and an additional 10,000 tons for the Supplemental Allowance pool. In addition, while the Supplemental Allowance pool may grow over time as unused supplemental allowances remain available and allocations from retired units are placed in the supplemental pool, the total number of allowances that can be allocated in a control period from the supplemental pool is limited to a maximum 54,711 tons plus the amount of any allowances placed in the pool that year from retired units and corrections. Therefore, annual average emissions for the covered sources will be less than or equal to 248,393 tons with some year to year variability constrained by the number of banked allowances and number of allowances that can be allocated in a control period from the supplemental pool. The projected SO₂ emission reduction that will be achieved by the program, relative to any selected historical baseline year, is therefore the difference between the aggregate historical baseline emissions of the covered units and the average total annual allocation. For example, the aggregate 2014 SO₂ emissions of the covered EGUs were 309,296 tons per year, while the average total annual allocation for the covered EGUs is 248,393 tons/year.¹²⁸ Therefore, compared to 2014 emissions, the Texas trading program is projected to achieve an average reduction of approximately 60,903 tons per year.¹²⁹ We note that the trading program allows

¹²⁸ Texas sources were subject to CSAPR in 2015 and 2016 but are no longer subject to CSAPR. We therefore select 2014 as the appropriate most recent year for this comparison.

¹²⁹ We note that for other types of alternative programs that might be adopted under 40 CFR 51.308(e)(2), the analysis of achievable emission reductions could be more complicated. For example, a program that involved economic incentives instead of allowances or that involved interstate allowance trading would present a more complex situation in which achievable emission reductions could not be calculated simply by comparing aggregate baseline emissions to aggregate allowances.

additional sources to opt-in to the program. Should sources choose to opt-in in the future, the average total annual allocation could increase up to a maximum of 289,740. For comparison, the aggregate 2014 SO₂ emissions of the covered EGUs including all potential opt-ins were 343,425 tons per year. Therefore, compared to 2014 emissions, the Texas trading program including all potential opt-ins is projected to achieve an average reduction of approximately 53,685 tons per year.

Regarding the requirement of 40 CFR 51.308(e)(2)(i)(E), the BART alternative being finalized today is supported by our determination that the clear weight of the evidence is that the trading program achieves greater reasonable progress than would be achieved through the installation and operation of BART at the covered sources. The 2012 demonstration showed that CSAPR as finalized and amended in 2011 and 2012 meets the Regional Haze Rule's criteria for a demonstration of greater reasonable progress than BART. This 2012 demonstration is the primary evidence that the Texas trading program achieves greater reasonable progress than BART. However, the states participating in CSAPR are now slightly different than the geographic scope of CSAPR assumed in the 2012 analytic demonstration. The changes to states participating in both CSAPR NO_x trading programs resulting from EPA's response to the D.C. Circuit's remand were found by us to have no adverse impact on the 2012 determination that CSAPR participation remains better-than-BART.¹³⁰ Regarding SO₂ emissions from Texas, as detailed below, the BART alternative is projected to accomplish emission levels from Texas EGUs that are similar to the emission levels from Texas EGUs that would have been realized from the SO₂ trading program under CSAPR. The changes to the geographic scope of the NO_x

¹³⁰ 81 FR 78954, 78962 (November 10, 2016) and final action signed September 21, 2017 available at [regulations.gov](http://www.regulations.gov) in Docket No. EPA-HQ-OAR-2016-0598

CSAPR programs combined with the expectation that the Texas trading program will reduce the SO₂ emissions of EGUs in Texas to levels similar to CSAPR-participation levels, despite slight differences in EGU participation between the two SO₂ programs, lead to the finding here that post-remand CSAPR and the Texas BART alternative program are better-than-BART for Texas.

The differences in Texas EGU participation in CSAPR and this BART alternative are either not significant or, in some cases, work to demonstrate the relative stringency of the BART alternative as compared to CSAPR. If Texas EGUs were still required to participate in CSAPR's SO₂ trading program, it would be plainly consistent with previous findings and approvals that CSAPR is an acceptable BART alternative. The Texas trading program will result in emissions from the covered EGUs and other EGUs in Texas that are no higher than if Texas EGUs were still required to participate in CSAPR's SO₂ trading program, and thus the clear weight of evidence is that the Texas trading program will provide more reasonable progress than BART. Still regarding 40 CFR 51.308(e)(2)(i)(E), we have considered the question of whether in applying this portion of the Regional Haze Rule we should take as the baseline the application of source-specific BART at the covered sources. We interpret the rule to not require that approach in this situation, given that 51.308(e)(2)(i)(C) provides for an exception (which we are exercising) to the requirement for source-specific BART determinations for the covered sources. We are not making any source-specific BART determinations in this action, nor did Texas do so in its 2009 SIP submission.

Table 8 below identifies the participating units and their unit-level allocations under the Texas SO₂ trading program. These allocations are the same as under CSAPR.

Table 8. Allocations for Texas EGUs Subject to the FIP SO₂ Trading Program

Owner/Operator	Units	Allocations (tpy)
AEP	Welsh Power Plant Unit 1	6,496
	Welsh Power Plant Unit 2	7,050
	Welsh Power Plant Unit 3	7,208
	H W Pirkey Power Plant Unit 1	8,882
	Wilkes Unit 1	14
	Wilkes Unit 2	2
	Wilkes Unit 3	3
CPS Energy	JT Deely Unit 1	6,170
	JT Deely Unit 2	6,082
	Sommers Unit 1	55
	Sommers Unit 2	7
Dynegy	Coleto Creek Unit 1	9,057
El Paso Electric	Newman Unit 2	1
	Newman Unit 3	1
	Newman Unit 4	2
LCRA	Fayette / Sam Seymour Unit 1	7,979
	Fayette / Sam Seymour Unit 2	8,019
Luminant	Big Brown Unit 1	8,473
	Big Brown Unit 2	8,559
	Martin Lake Unit 1	12,024
	Martin Lake Unit 2	11,580
	Martin Lake Unit 3	12,236
	Monticello Unit 1	8,598
	Monticello Unit 2	8,795
	Monticello Unit 3	12,216
	Sandow Unit 4	8,370
	Stryker ST2	145
	Graham Unit 2	226
NRG	Limestone Unit 1	12,081
	Limestone Unit 2	12,293
	WA Parish Unit WAP4	3
	WA Parish Unit WAP5	9,580
	WA Parish Unit WAP6	8,900
	WA Parish Unit WAP7	7,653
Xcel	Tolk Station Unit 171B	6,900
	Tolk Station Unit 172B	7,062
	Harrington Unit 061B	5,361
	Harrington Unit 062B	5,255
	Harrington Unit 063B	5,055
Total		238,393

The total annual allocation for all sources in the Texas SO₂ trading program is 238,393 tons. In addition, a Supplemental Allowance pool initially holds an additional 10,000 tons for a maximum total annual allocation of 248,393 tons. The Administrator may allocate a limited number of additional allowances from this pool to sources whose emissions exceed their annual allocation, pursuant to 40 CFR 97.912. Under CSAPR, the total allocations for all existing EGUs in Texas is 279,740 tons, with a total of 294,471 tons including the new unit set aside of 14,430 tons and the Indian country new unit set aside.¹³¹ As shown in Table 9 below, the coverage of the Texas SO₂ trading program represents 81% of the total CSAPR allocation for Texas and 85% of the CSAPR allocations for existing units. The Supplemental Allowance pool contains an additional 10,000 tons, compared to the new unit set aside (NUSA) allowance allocation under CSAPR of 14,430 tons. Examining 2016 emissions, the EGUs covered by the program represent 89% of total Texas EGU emissions.

Table 9. Comparison of Texas SO₂ Trading Program Allocations to Previously Applicable CSAPR Allocations and to 2016 Emissions

	Annual Allocations in the Texas Trading Program (Tons per Year)	% of Total Previously Applicable CSAPR Allocations (294,471 Tons per Year)	2016 Emissions (Tons per Year)
Texas SO ₂ Trading program sources	238,393	81%	218,291
Total EGU emissions			245,737

¹³¹ An Indian Country new unit set-aside is established for each state under the CSAPR that provides allowances for future new units locating in Indian Country. The Indian Country new unit set-aside for Texas is 294 tons. See 40 CFR 97.710

Supplemental Allowance pool	10,000	3.4%	
Existing Sources not covered by trading program	No allocation	16%	27,446

The remaining 11% of the total 2016 emissions due to sources not covered by the program come from coal-fired units that on average are better controlled for SO₂ than the covered sources (26,795 tons in 2016) and gas units that rarely burn fuel oil (651 tons in 2016). The table below lists these coal-fired units. The average annual emission rate for 2016 is 0.50 lb/MMBTU for the coal-fired units participating in the trading program compared to 0.12 lb/MMBTU for the coal-fired units not covered by the program. Therefore, we conclude that in general, based on the current emission rates of the EGUs, should a portion of electricity generation shift to units not covered by the program, the net result would be a decrease in overall SO₂ emissions, as these non-participating units are on average much better controlled and emit far less SO₂ per unit of energy produced. Relative to current emission levels, should participating units increase their emissions rates and decrease generation to comply with their allocation, emissions from non-participating units may see a small increase.

Table 10. Coal-fired EGUs Not Covered by the Texas SO₂ Trading Program

	Previously Applicable CSAPR Allocation (tons)	2016 Emissions (tons)	2016 Annual Average Emission Rate (lb/MMBtu)
Fayette/Sam Seymour Unit 3	2,955	231	0.01
Gibbons Creek Unit 1	6,314	138	0.02
JK Spruce Unit 1	4,133	467	0.03

JK Spruce Unit 2	158	151	0.01
Oak Grove Unit 1	1,665	3,334	0.11
Oak Grove Unit 2*		3,727	0.12
Oklaunion Unit 1	4,386	1,530	0.11
San Miguel Unit 1	6,271	6,815	0.44
Sadow Station Unit 5A	773	1,117	0.11
Sadow Station Unit 5B	725	1,146	0.10
Sandy Creek Unit 1*		1,842	0.09
Twin Oaks Unit 1	2,326	1,712	0.21
Twin Oaks Unit 2	2,270	1,475	0.23
WA Parish Unit WAP8	4,071	3,112	0.16
Total	36,047	26,795	

* Oak Grove Unit 2 and Sandy Creek Unit 1 received allocations from the new unit set aside under the CSAPR program.

The exclusion of a large number of gas-fired units that occasionally burn fuel oil further limits allowances in the program as compared to CSAPR because CSAPR allocated these units allowances that are higher than their recent and current emissions. In 2016, these units emitted 651 tons of SO₂, but received allowances for over 5,000 tons. By excluding these sources from the program, those unused allowances are not available for purchase by other EGUs. We note the trading program does allow non-participating sources that previously had CSAPR allocations to opt-in to the trading program and receive an allocation equivalent to the CSAPR level allocation. Should some sources choose to opt-in to the program, the total number of allowances will increase by that amount. This will serve to increase the percentage of CSAPR allowances represented by the Texas SO₂ trading program and increase the portion of emissions covered by the program, more closely resembling the CSAPR program.

Finally, the Texas SO₂ trading program does not allow EGUs to purchase allowances

from sources in other states. Under CSAPR, Texas EGUs were allowed to purchase allowances from other Group 2 states, a fact which could, and was projected to, result in an increase in annual allowances used in the State above the state budget. CSAPR also included a variability limit that was set at 18% of the State budget and an assurance level equal to the State's budget plus variability limit. The assurance level for Texas was set at 347,476 tons. The CSAPR assurance provisions are triggered if the State's emissions for a year exceed the assurance level. These assurance provisions require some sources to surrender two additional allowances per ton beyond the amount equal to their actual emissions, depending on their emissions and annual allocation level. In effect, under CSAPR, EGUs in Texas could emit above the allocation if willing to pay the market price of allowances and the cost associated with each incremental ton of emissions could triple if in the aggregate they exceeded the assurance level. The Texas trading program will have 248,393 tons of allowances allocated every year, with no ability to purchase additional allowances from sources outside of the State, preventing an increase beyond that annual allocation.¹³² This includes an annual allocation of 10,000 allowances to the Supplemental Allowance pool. The Supplemental Allowance pool may grow over time as unused supplemental allowances remain available and allocations from retired units are placed in the supplemental pool but the total number of allowances that can be allocated in a control period from in this supplemental pool is limited to a maximum 54,711 tons plus the amount of any allowances placed in the pool that year from retired units and corrections. The 54,711-ton value is equal to 10,000 tons annually allocated to the pool plus 18% of the total annual allocation for participating units, mirroring the variability limit from CSAPR. The total number of allowances

¹³² We note the trading program does allow non-participating sources that previously had CSAPR allocations to opt-in to the trading program and receive an allocation equivalent to the CSAPR level allocation. Should some sources choose to opt-in to the program, the total number of allowances will increase by that amount.

that can be allocated in a single year is therefore 293,104, which is the sum of the 238,393 budget for existing units plus 54,711. Annual average emissions for the covered sources will be less than or equal to 248,393 tons with some year to year variability constrained by the number of banked allowances and allowances available to be allocated during a control period from the Supplemental Allowance pool. If additional units opt into the program, additional allowances will be available corresponding to the amounts that those units would have been allocated under CSAPR. The projected SO₂ emissions from the affected Texas EGUs in the CSAPR + BART-elsewhere scenario were 266,600 tons per year. In a 2012 sensitivity analysis memo, EPA conducted a sensitivity analysis that confirmed that CSAPR would remain better-than-BART if Texas EGU emissions increased to approximately 317,100 tons.¹³³ Under the Texas SO₂ trading program, annual average EGU emissions are anticipated to remain well below 317,100 tons per year as annual allocations for participating units are held at 248,393 tons per year. Sources not covered by the program emitted less than 27,500 tons of SO₂ in 2016 and are not projected to significantly increase from this level. Any new units would be required to be well controlled and similar to the existing units not covered by the program, they would not significantly increase total emissions of SO₂. Furthermore, as discussed above, any load shifting to these new non-participating units would be projected to result in a net decrease in emissions per unit of electricity generated and at most a small increase in total SO₂ emissions compared to them not

¹³³ For the projected annual SO₂ emissions from Texas EGUs *see* Technical Support Document for Demonstration of the Transport Rule as a BART Alternative, Docket ID No. EPA-HQ-OAR-2011-0729-0014 (December 2011) (2011 CSAPR/BART Technical Support Document), available in the docket for this action, at table 2-4. Certain CSAPR budgets were increased after promulgation of the CSAPR final rule (and the increases were addressed in the 2012 CSAPR/BART sensitivity analysis memo), *See* memo titled “Sensitivity Analysis Accounting for Increases in Texas and Georgia Transport Rule State Emissions Budgets,” Docket ID No. EPA-HQ-OAR-2011-0729-0323 (May 29, 2012), available in the docket for this action. The increase in the Texas SO₂ budget was 50,517 tons which, when added to the Texas SO₂ emissions projected in the CSAPR + BART-elsewhere scenario of 266,600 tons, yields total potential SO₂ emissions from Texas EGUs of approximately 317,100 tons.

having been brought into operation. We note that total emissions of SO₂ from all EGU sources in Texas in 2016 were 245,737 tons.

We also note that state-wide EGU emissions in Texas have decreased considerably since the 2002 baseline period, reflecting market changes and reductions due to requirements such as CAIR/CSAPR. In 2002, Texas EGU emissions were 560,860 tons of SO₂ compared to emissions of 245,737 tons in 2016, a reduction of over 56%. The Texas SO₂ trading program locks in the large majority of these reductions by limiting allocation of allowances to 248,393 tons per year for participating sources. While the Texas program does not include all EGU sources in the State, as discussed above, the EGUs outside of the program contribute relatively little to the total state emissions and these units on average are better controlled for SO₂ than the units subject to the Texas program.

C. Specific Texas SO₂ Trading Program Features

The Texas SO₂ Trading Program is an intrastate cap-and-trade program for listed covered sources in the State of Texas. The EPA is promulgating the Texas SO₂ Trading Program under 40 CFR 52.2312 and subpart FFFFF of part 97. The State of Texas may choose to remain under the Texas SO₂ Trading Program or replace it with an appropriate SIP. If the State of Texas is interested in pursuing delegation of the Texas SO₂ Trading Program, the request would need to provide a demonstration of the State's statutory authority to implement any delegated elements.

The Texas SO₂ Trading Program is modeled after the EPA's CSAPR SO₂ Group 2 Trading Program and satisfies the requirements of 51.308(e)(2)(vi). Similar to the CSAPR SO₂ Group 2 Trading Program, the Texas SO₂ Trading Program sets an SO₂ emission budget for the State of Texas. Authorizations to emit SO₂, known as allowances, are allocated to affected units.

The Texas SO₂ Trading Program provides flexibility to affected units and sources by allowing units and sources to determine their own compliance path; this includes adding or operating control technologies, upgrading or improving controls, switching fuels, and using allowances. Sources can buy and sell allowances and bank (save) allowances for future use as long as each source holds enough allowances to account for its emissions of SO₂ by the end of the compliance period.

Pursuant to the requirements of 51.308(e)(2)(vi)(A), the applicability of the Texas SO₂ Trading Program is defined in 40 CFR 97.904. Section 97.904(a) identifies the subject units, which include all BART-eligible coal-fired EGUs, additional coal-fired EGUs, and several BART-eligible gas-fired and gas/fuel oil-fired EGUs, all of which were previously covered by the CSAPR SO₂ Group 2 Trading Program. Additionally, under 40 CFR 97.904(b), the EPA is providing an opportunity for any other unit in the State of Texas that was subject to the CSAPR SO₂ Group 2 Trading Program to opt-in to the Texas SO₂ Trading Program. We discuss in Section V.B above, how the applicability results in coverage of the Texas SO₂ trading program representing 81% of the total CSAPR allocation for Texas and 85% of the CSAPR allocations for existing units, and how potential shifts in generation would result in an insignificant change in emissions. The Texas SO₂ Trading Program establishes the statewide SO₂ budget for the subject units at 40 CFR 97.910(a). This budget is equal to the allowances for each subject unit identified under 97.904(a) and 97.911(a). As units opt-in to the Texas SO₂ Trading under 97.904(b), the allowances for each of these units will equal their CSAPR SO₂ Group 2 allowances under 97.911(b). Additionally, the EPA has established a Supplemental Allowance Pool with a budget of 10,000 tons of SO₂ to provide compliance assistance to subject units and sources. Section 40 CFR 97.912 establishes how allowances are allocated from the Supplemental

Allowance Pool to sources (collections of participating units at a facility) that have reported total emissions for that control period exceeding the total amounts of allowances allocated to the participating units at the source for that control period (before any allocation from the Supplemental Allowance Pool). For any control period, the maximum supplemental allocation from the Supplemental Allowance Pool that a source may receive is the amount by which the total emissions reported for its participating units exceed the total allocations to its participating units (before any allocation from the Supplemental Allowance Pool). If the total amount of allowances available for allocation from the Supplemental Allowance Pool for a control period is less than the sum of these maximum allocations, sources will receive less than the maximum supplemental allocation from the Supplemental Allowance Pool, where the amount of supplemental allocations for each source is determined in proportion to the sources' respective maximum allocations, with one exception. While all other sources required to participate in the trading program have flexibility to transfer allowances among multiple participating units under the same owner/operator when planning operations, Coleto Creek consists of only one coal-fired unit and is the only coal-fired unit in Texas owned and operated by Dynegy. To provide this source additional flexibility, Coleto Creek will be allocated its maximum supplemental allocation from the Supplemental Allowance Pool as long as there are sufficient allowances in the Supplemental Allowance Pool available for allocation, and its actual allocation will not be reduced in proportion with any reductions made to the supplemental allocations to other sources. Section 97.921 establishes how the Administrator will record the allowances for the Texas SO₂ Trading Program and ensures that the Administrator will not record more allowances than are available under the program consistent with 40 CFR 51.308(e)(2)(vi)(B). The monitoring, recordkeeping, and reporting provisions for the Texas SO₂ Trading Program at 40 CFR 97.930 –

97.935 are consistent with those requirements in the CSAPR SO₂ Group 2 Trading Program. The provisions in 40 CFR 97.930 – 97.935 require the subject units to comply with the monitoring, recordkeeping, and reporting requirements for SO₂ emissions in 40 CFR part 75; thereby satisfying the requirements of 51.308(e)(2)(vi)(C) – (E). The Texas SO₂ Trading Program will be implemented by the EPA using the Allowance Management System. The use of the Allowance Management System will provide a consistent approach to implementation and tracking of allowances and emissions for the EPA, subject sources, and the public consistent with the requirements of 40 CFR 51.308(e)(2)(vi)(F). Additionally, the EPA is promulgating requirements at 40 CFR 97.913 – 97.918 for designated and alternate designated representatives that satisfy the requirements of 40 CFR 51.308(e)(2)(vi)(G) and are consistent with the EPA's other trading programs under 40 CFR Part 97. Allowance transfer provisions for the Texas SO₂ Trading Program at 40 CFR 97.922 and 97.923 provide procedures that allow timely transfer and recording of allowances; these provisions will minimize administrative barriers to the operation of the allowance market and ensure that such procedures apply uniformly to all sources and other potential participants in the allowance market, consistent with 40 CFR 51.308(e)(2)(vi)(H). Compliance provisions for the Texas SO₂ Trading Program at 40 CFR 97.924 prohibit a source from emitting a total tonnage of SO₂ that exceeds the tonnage value of its SO₂ allowance holdings as required by 40 CFR 51.308(e)(2)(vi)(I). The Texas SO₂ Trading Program includes automatic allowance surrender provisions at 40 CFR 97.924(d) that apply consistently from source to source and the tonnage value of the allowances deducted shall equal at least three times the tonnage of the excess emissions, consistent with the penalty provisions at 40 CFR 51.308(e)(2)(vi)(J). The Texas SO₂ Trading Program provides for banking of allowances under 40 CFR 97.926; Texas SO₂ Trading Program allowances are valid for compliance in the control

period of issuance or may be banked for future use, consistent with 40 CFR 51.308(e)(2)(vi)(K). The EPA is promulgating the Texas SO₂ Trading Program as a BART-alternative for Texas' Regional Haze obligations. The CAA and EPA's implementing regulations require periodic review of the state's regional haze approach under 40 CFR 51.308(g) to evaluate progress towards the reasonable progress goals for Class I areas located within the State and Class I areas located outside the State affected by emissions from within the State. Because the Texas SO₂ Trading Program is a BART-alternative for Texas' Regional Haze obligations, this program is required to be reviewed in each progress report. We anticipate this progress report will provide the information needed to assess program performance, as required by 40 CFR 51.308(e)(2)(vi)(L).

As previously discussed, the EPA modeled the Texas SO₂ Trading Program after the EPA's CSAPR SO₂ Group 2 Trading Program. Relying on a trading program structure that is already in effect enables the EPA, the subject sources, and the public to benefit from the use of the Allowance Management System, forms, and monitoring, recordkeeping, and reporting requirements. However, there are a few features of the Texas SO₂ Trading Program that are separate and unique from the EPA's CSAPR. First, the program does not address new units that are built after the inception of the program; these units would be permitted and constructed using emission control technology determined under either BACT or LAER review, as applicable. Second, the Texas SO₂ Trading Program provides that sources that were previously covered under the CSAPR SO₂ Group 2 Trading Program, but are not subject to the requirements of subpart FFFFF of part 97 can opt-in to the Texas SO₂ Trading Program at the allocation level established under CSAPR. Finally, the Texas SO₂ Trading Program includes a Supplemental Allowance Pool to provide some compliance assistance to units whose emissions exceed their

allocations. The amount of allocations to the Supplemental Allowance Pool each year is less than the portion of the Texas budget under the CSAPR SO₂ Group 2 Trading Program that would have been set aside each year for new units (and which would have been allocated to existing units to the extent not needed by new units).

VI. Final Action

A. Regional Haze

We are finalizing our identification of BART-eligible EGUs. We are approving the portion of the Texas Regional Haze SIP that addresses the BART requirement for EGUs for PM. As discussed elsewhere in this notice, we are replacing Texas' reliance on CAIR with reliance on CSAPR to address the NO_x BART requirements for EGUs. To address the SO₂ BART requirements for EGUs, we are promulgating a FIP to replace Texas' reliance on CAIR with reliance on an intrastate SO₂ trading program for certain EGUs identified in Table 11 below. This FIP is codified under 40 CFR 52.2312 and subpart FFFFF of part 97. We are finalizing our determination that BART-eligible EGUs not covered by the intrastate SO₂ trading program are not subject-to-BART. This final action is also part of the long-term strategy to address the reasonable progress requirements for Texas EGUs, which remain outstanding after the remand of our reasonable progress FIP by the Fifth Circuit Court of Appeals. However, further assessment and analysis of the CAA's reasonable progress factors will be needed before the Regional Haze Rule's reasonable progress requirements will be fully addressed for Texas.

Table 11. Texas EGUs Subject to the FIP SO₂ Trading Program

Owner/Operator	Units
AEP	Welsh Power Plant Units 1, 2, and 3
	H W Pirkey Power Plant Unit 1
	Wilkes Units 1*, 2*, and 3*
CPS Energy	JT Deely Units 1 and 2, Sommers Units 1* and 2*
Dynegy	Coletto Creek Unit 1
LCRA	Fayette / Sam Seymour Units 1 and 2
Luminant	Big Brown Units 1 and 2
	Martin Lake Units 1, 2, and 3
	Monticello Units 1, 2, and 3
	Sandow Unit 4
	Stryker ST2*
	Graham Unit 2*
NRG	Limestone Units 1 and 2
	WA Parish Units WAP4*, WAP5, WAP6, WAP7
Xcel	Tolk Station Units 171B and 172B
	Harrington Units 061B, 062B, and 063B
El Paso Electric	Newman Units 2*, 3*, and 4*

* Gas-fired or gas/fuel oil-fired units

B. Interstate Visibility Transport

In our January 5, 2016 final action¹³⁴ we disapproved the portion of Texas' SIP revisions intended to address interstate visibility transport for six NAAQS, including the 1997 8-hour ozone and 1997 PM_{2.5}.¹³⁵ That rulemaking was challenged, however, and in December 2016, following the submittal of a request by the EPA for a voluntary remand of the parts of the rule under challenge, the Fifth Circuit Court of Appeals remanded the rule in its entirety without vacatur.¹³⁶ In our January 4, 2017 proposed action we proposed to reconsider the basis of our

¹³⁴ 81 FR 296 (Jan. 5, 2016).

¹³⁵ Specifically, we previously disapproved the relevant portion of these Texas' SIP submittals: April 4, 2008: 1997 8-hour Ozone, 1997 PM_{2.5} (24-hour and annual); May 1, 2008: 1997 8-hour Ozone, 1997 PM_{2.5} (24-hour and annual); November 23, 2009: 2006 24-hour PM_{2.5}; December 7, 2012: 2010 NO₂; December 13, 2012: 2008 8-hour Ozone; May 6, 2013: 2010 1-hour SO₂ (Primary NAAQS). 79 FR 74818, 74821; 81 FR 296, 302.

¹³⁶ *Texas v. EPA*, 829 F.3d 405 (5th Cir. 2016).

prior disapproval of Texas' SIP revisions addressing interstate visibility transport under CAA section 110(a)(2)(D)(i)(II) for six NAAQS. We have reconsidered the basis of our prior disapproval and are disapproving Texas' SIP revisions addressing interstate visibility transport under CAA section 110(a)(2)(D)(i)(II) for six NAAQS. We are finalizing a FIP to fully address Texas' interstate visibility transport obligations for the following six NAAQS: (1) 1997 8-hour ozone, (2) 1997 PM_{2.5} (annual and 24 hour), (3) 2006 PM_{2.5} (24-hour), (4) 2008 8-hour ozone, (5) 2010 1-hour NO₂ and (6) 2010 1-hour SO₂. The BART FIP emission reductions are consistent with the level of emission reductions relied upon by other states during Regional Haze consultation, and it is therefore adequate to ensure that emissions from Texas do not interfere with measures to protect visibility in nearby states in accordance with CAA section 110(a)(2)(D)(i)(II).

VII. Statutory and Executive Order Reviews

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

This action is not a "significant regulatory action" under the terms of Executive Order 12866 (58 FR 51735, October 4, 1993) and is therefore not subject to review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011).

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is not an Executive Order 13771 regulatory action because this action is not significant under Executive Order 12866.

C. Paperwork Reduction Act

The Office of Management and Budget (OMB) has determined that this action imposes a collection burden that is subject to the Paperwork Reduction Act (PRA). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Therefore, the EPA will obtain a valid OMB control number unless OMB determines that these collection activities are covered under an existing information collection request (ICR) and associated OMB control number. If the EPA obtains a new OMB control number or amends an existing ICR with a valid OMB control number, the EPA will provide notice in the Federal Register as required by the PRA and the implementing regulations, with burden estimates, and, if necessary, publish a technical amendment to 40 CFR part 9 to display the new OMB control number for the information collection activities contained in this final rule.

D. Regulatory Flexibility Act

I certify that this action will not have a significant impact on a substantial number of small entities. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden or otherwise has a positive economic effect on the small entities subject to the rule. This rule does not impose any requirements or create impacts on small entities. This FIP action under Section 110 of the CAA will not create any new requirement with which small entities must comply. Accordingly, it affords no opportunity for the EPA to fashion for small entities less burdensome compliance or reporting requirements or timetables or exemptions from

all or part of the rule. The fact that the CAA prescribes that various consequences (e.g., emission limitations) may or will flow from this action does not mean that the EPA either can or must conduct a regulatory flexibility analysis for this action. We have therefore concluded that, this action will have no net regulatory burden for all directly regulated small entities.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of \$100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This rule does not have tribal implications, as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments. Thus, Executive Order 13175 does not apply to this rule.

H. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

Executive Order 13045: Protection of Children From Environmental Health Risks and

Safety Risks¹³⁷ applies to any rule that: (1) Is determined to be economically significant as defined under Executive Order 12866; and (2) concerns an environmental health or safety risk that we have reason to believe may have a disproportionate effect on children. EPA interprets EO 13045 as applying only to those regulatory actions that concern health or safety risks, such that the analysis required under Section 5-501 of the EO has the potential to influence the regulation. This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action is not subject to EO 13045 because it implements specific standards established by Congress in statutes. However, to the extent this rule will limit emissions of SO₂, the rule will have a beneficial effect on children's health by reducing air pollution.

I. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 (66 FR 28355 (May 22, 2001)), because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA)

This action involves technical standards. The EPA has decided to use the applicable monitoring requirements of 40 CFR part 75. Part 75 already incorporates a number of voluntary consensus standards. Consistent with the Agency's Performance Based Measurement System (PBMS), part 75 sets forth performance criteria that allow the use of alternative methods to the

¹³⁷ 62 FR 19885 (Apr. 23, 1997).

ones set forth in part 75. The PBMS approach is intended to be more flexible and cost-effective for the regulated community; it is also intended to encourage innovation in analytical technology and improved data quality. At this time, EPA is not recommending any revisions to part 75; however, EPA periodically revises the test procedures set forth in part 75. When EPA revises the test procedures set forth in part 75 in the future, EPA will address the use of any new voluntary consensus standards that are equivalent. Currently, even if a test procedure is not set forth in part 75, EPA is not precluding the use of any method, whether it constitutes a voluntary consensus standard or not, as long as it meets the performance criteria specified; however, any alternative methods must be approved through the petition process under 40 CFR 75.66 before they are used.

K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does **not** have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). We have determined that this rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. The rule limits emissions of SO₂ from certain facilities in Texas.

L. Congressional Review Act (CRA)

This rule is exempt from the CRA because it is a rule of particular applicability.

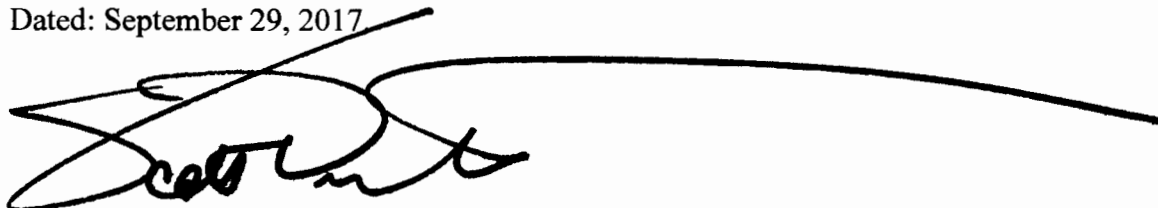
List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxides, Visibility, Interstate transport of pollution, Regional haze, Best available retrofit technology.

List of Subjects in 40 CFR Part 97

Environmental protection, Administrative practice and procedure, Air pollution control, Intergovernmental relations, Nitrogen dioxide, Reporting and recordkeeping requirements, Sulfur dioxides.

Dated: September 29, 2017

A handwritten signature in black ink, appearing to read 'E. Scott Pruitt', with a long horizontal line extending to the right.

E. Scott Pruitt,

Administrator

40 CFR part 52 is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart SS - Texas

2. In § 52.2270, paragraph (e) is amended by adding a new entry for “Texas Regional Haze BART Requirement for EGUs for PM” at the end of the second table in paragraph (e) entitled “EPA Approved Nonregulatory Provisions and Quasi-Regulatory Measures in the Texas SIP.”

3. Section 52.2304 is amended by adding new paragraph (f).

4. Subpart SS is amended by adding new Section 52.2312.

The revisions read as follows:

§ 52.2270 Identification of plan.

* * * * *

(e) * * *

EPA APPROVED NONREGULATORY PROVISIONS AND QUASI-REGULATORY MEASURES IN THE TEXAS SIP

Name SIP provision	Applicable geographic or nonattainment area	State submittal date/ effective date	EPA approval date	Explanation
* * * * *				

Texas Regional Haze BART Requirement for EGUs for PM	Statewide	3/31/2009	[Insert date of publication in the Federal Register] [Insert Federal Register citation]	
--	-----------	-----------	--	--

* * * * *

§ 52.2304 Visibility protection.

* * * * *

(f) Measures Addressing Disapproval Associated with NO_x and SO₂.

(1) The deficiencies associated with NO_x identified in EPA's limited disapproval of the regional haze plan submitted by Texas on March 31, 2009, and EPA's disapprovals in 52.2304(d), are satisfied by § 52.2283(d).

(2) The deficiencies associated with SO₂ identified in EPA's limited disapproval of the regional haze plan submitted by Texas on March 31, 2009, and EPA's disapprovals in 52.2304(d), are satisfied by § 52.2312.

* * * * *

§ 52.2312 – Requirements for the control of SO₂ emissions to address in full or in part requirements related to BART, Reasonable Progress, and Interstate Visibility Transport.

1. The Texas SO₂ Trading Program provisions set forth in subpart FFFFF of part 97 of this chapter constitute the Federal Implementation Plan provisions fully addressing Texas' obligations with respect to best available retrofit technology under section 169A of the Act and the deficiencies associated with EPA's disapprovals in 52.2304(d) and partially addressing Texas' obligations with respect to reasonable progress under section 169A of the Act, as those obligations relate to emissions of sulfur dioxide (SO₂) from electric generating units (EGUs).
2. The provisions of subpart FFFFF of part 97 of this chapter apply to sources in Texas but not sources in Indian country located within the borders of Texas, with regard to emissions in 2019 and each subsequent year.

PART 97 – FEDERAL NO_x BUDGET TRADING PROGRAM, CAIR NO_x AND SO₂ TRADING PROGRAMS, CSAPR NO_x AND SO₂ TRADING PROGRAMS, AND TEXAS SO₂ TRADING PROGRAM

40 CFR part 97 is amended as follows:

3. The authority citation for part 97 continues to read as follows:

Authority: 42 U.S.C. 7401, 7403, 7410, 7426, 7601, and 7651, *et seq.*

4. Part 97 is amended by adding subpart FFFFF and paragraphs 97.901 through 97.935 to read as follows:

Subpart FFFFF - Texas SO₂ Trading Program

97.901 Purpose.

97.902 Definitions.

97.903 Measurements, abbreviations, and acronyms.

97.904 Applicability.

97.905 Retired unit exemptions.

97.906 General provisions.

97.907 Computation of time.

97.908 Administrative appeal procedures.

97.909 [RESERVED]

97.910 Texas SO₂ Trading Program and Supplemental Allowance Pool Budgets.

97.911 Texas SO₂ Trading Program allowance allocations.

97.912 Texas SO₂ Trading Program Supplemental Allowance Pool.

97.913 Authorization of designated representative and alternate designated representative.

97.914 Responsibilities of designated representative and alternate designated representative.

97.915 Changing designated representative and alternate designated representative; changes in owners and operators; changes in units at the source.

97.916 Certificate of representation.

97.917 Objections concerning designated representative and alternate designated representative.

97.918 Delegation by designated representative and alternate designated representative.

97.919 [RESERVED]

97.920 Establishment of compliance accounts and general accounts.

97.921 Recordation of Texas SO₂ Trading Program allowance allocations.

97.922 Submission of Texas SO₂ Trading Program allowance transfers.

97.923 Recordation of Texas SO₂ Trading Program allowance transfers.

97.924 Compliance with Texas SO₂ Trading Program emissions limitations.

97.925 [RESERVED]

97.926 Banking.

97.927 Account error.

97.928 Administrator's action on submissions.

97.929 [RESERVED]

97.930 General monitoring, recordkeeping, and reporting requirements.

97.931 Initial monitoring system certification and recertification procedures.

97.932 Monitoring system out-of-control periods.

97.933 Notifications concerning monitoring.

97.934 Recordkeeping and reporting.

97.935 Petitions for alternatives to monitoring, recordkeeping, or reporting requirements.

§ 97.901 Purpose.

This subpart sets forth the general, designated representative, allowance, and monitoring provisions for the Texas SO₂ Trading Program under sections 110 and 169A of the Clean Air Act and 40 CFR 52.2312, as a means of addressing Texas' obligations with respect to BART, reasonable progress, and interstate visibility transport as those obligations relate to sulfur dioxide emissions from electricity generating units.

§ 97.902 Definitions.

The terms used in this subpart shall have the meanings set forth in this section as follows:

Acid Rain Program means a multi-state SO₂ 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 Texas SO₂ Trading Program allowances, the determination by the Administrator, State, or permitting authority, in accordance with this subpart or any SIP revision submitted by the State approved by the Administrator, of the amount of such Texas SO₂ Trading Program allowances to be initially credited, at no cost to the recipient, to a Texas SO₂ Trading Program unit.

Allowance Management System means the system by which the Administrator records allocations, transfers, and deductions of Texas SO₂ Trading Program allowances under the Texas SO₂ Trading Program. Such allowances are allocated, 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, holding, transfer, or deduction of Texas SO₂ Trading Program allowances.

Allowance transfer deadline means, for a control period in a given year, midnight of March 1 (if it is a business day), or midnight of the first business day thereafter (if March 1 is not a business day), immediately after such control period and is the deadline by which a Texas SO₂

Trading Program allowance transfer must be submitted for recordation in a Texas SO₂ Trading Program source's compliance account in order to be available for use in complying with the source's Texas SO₂ Trading Program emissions limitation for such control period in accordance with §§97.906 and 97.924.

Alternate designated representative means, for a Texas SO₂ Trading Program source and each Texas SO₂ Trading Program 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 Texas SO₂ Trading Program. If the Texas SO₂ Trading Program source is also subject to the Acid Rain Program or CSAPR NO_x Ozone Season Group 2 Trading Program, then this natural person shall be the same natural person as the alternate designated representative as defined in the respective program.

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 Texas SO₂ trading Program allowances held in the general account and, for a Texas SO₂ Trading Program 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.

Business day means a day that does not fall on a weekend or a federal holiday.

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.

Commence commercial operation means, with regard to a Texas SO₂ Trading Program unit, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation.

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 Texas SO₂ Trading Program source under this subpart, in which any Texas SO₂ Trading Program allowance allocations to the Texas SO₂ Trading Program units at the source are recorded and in which are held any Texas SO₂ Trading Program allowances available for use for a control period in a given year in complying with the source's Texas SO₂ Trading Program emissions limitation in accordance with §§97.906 and 97.924.

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 SO₂ emissions, stack gas volumetric flow rate, stack gas moisture content, and O₂ or CO₂ concentration (as applicable), in a manner consistent with part 75 of this chapter and §§97.930 through 97.935. 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 SO₂ monitoring system, consisting of a SO₂ pollutant concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of SO₂ emissions, in parts per million (ppm);

(3) 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 H₂O;

(4) A CO₂ monitoring system, consisting of a CO₂ pollutant concentration monitor (or an O₂ monitor plus suitable mathematical equations from which the CO₂ concentration is derived) and an automated data acquisition and handling system and providing a permanent, continuous record of CO₂ emissions, in percent CO₂; and

(5) An O₂ monitoring system, consisting of an O₂ concentration monitor and an automated data acquisition and handling system and providing a permanent, continuous record of O₂, in percent O₂.

Control period means the period starting January 1 of a calendar year, except as provided in §97.906(c)(3), and ending on December 31 of the same year, inclusive.

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)(i) and (iii), (b)(6) through (11), and (b)(13) 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)(6) or (9) of this chapter), as a means of mitigating interstate transport of ozone and NO_x.

Designated representative means, for a Texas SO₂ Trading Program source and each Texas SO₂ Trading Program 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 Texas SO₂ Trading Program. If the Texas SO₂ Trading Program source is also subject to the Acid Rain Program or CSAPR NO_x Ozone Season Group 2 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 Texas SO₂ Trading Program units at a Texas SO₂ Trading Program source during a control period in a given year that exceeds the Texas SO₂ Trading Program emissions limitation for the source for such control period.

Fossil fuel means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

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, which is not a compliance 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.

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.

Natural person means a human being, as opposed to a legal person, which may be a private (i.e., business entity or non-governmental organization) or public (i.e., government) organization.

Operate or operation means, with regard to a unit, to combust fuel.

Operator means, for a Texas SO₂ Trading Program source or a Texas SO₂ Trading Program unit at a source respectively, any person who operates, controls, or supervises a Texas SO₂ Trading Program unit at the source or the Texas SO₂ Trading Program 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 Texas SO₂ Trading Program source or a Texas SO₂ Trading Program unit at a source, any of the following persons:

(1) Any holder of any portion of the legal or equitable title in a Texas SO₂ Trading Program unit at the source or the Texas SO₂ Trading Program unit;

(2) Any holder of a leasehold interest in a Texas SO₂ Trading Program unit at the source or the Texas SO₂ Trading Program 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 Texas SO₂ Trading Program unit; and

(3) Any purchaser of power from a Texas SO₂ Trading Program unit at the source or the Texas SO₂ Trading Program 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.

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 Texas SO₂ Trading Program allowances, the moving of Texas SO₂ Trading Program allowances by the Administrator into, out of, or between Allowance Management System accounts, for purposes of allocation, 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).

Serial number means, for a Texas SO₂ Trading Program allowance, the unique identification number assigned to each Texas SO₂ Trading Program allowance by the Administrator.

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 Texas.

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.

Texas SO₂ Trading Program means an SO₂ air pollution control and emission reduction program established in accordance with this subpart and 40 CFR 52.2312 (including such a program that is revised in a SIP revision approved by the Administrator), or established in a SIP revision approved by the Administrator, as a means of addressing the State's obligations with respect to BART, reasonable progress, and interstate visibility transport as those obligations relate to emissions of SO₂ from electricity generating units.

Texas SO₂ Trading Program allowance means a limited authorization issued and allocated by the Administrator under this subpart, or by a State or permitting authority under a SIP revision approved by the Administrator, to emit one ton of SO₂ during a control period of the specified calendar year for which the authorization is allocated or of any calendar year thereafter under the Texas SO₂ Trading Program.

Texas SO₂ Trading Program allowance deduction or deduct Texas SO₂ Trading Program allowances means the permanent withdrawal of Texas SO₂ Trading Program allowances by the Administrator from a compliance account (*e.g.*, in order to account for compliance with the Texas SO₂ Trading Program emissions limitation).

Texas SO₂ Trading Program allowances held or hold Texas SO₂ Trading Program allowances means the Texas SO₂ Trading Program 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, Texas SO₂ Trading Program 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, Texas SO₂ Trading Program allowance transfer in accordance with this subpart.

Texas SO₂ Trading Program emissions limitation means, for a Texas SO₂ Trading Program source, the tonnage of SO₂ emissions authorized in a control period by the Texas SO₂ Trading Program allowances available for deduction for the source under § 97.924(a) for such control period.

Texas SO₂ Trading Program source means a source that includes one or more Texas SO₂ Trading Program units.

Texas SO₂ Trading Program unit means a unit that is subject to the Texas SO₂ Trading Program under §97.904.

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.

§ 97.903 Measurements, abbreviations, and acronyms.

Measurements, abbreviations, and acronyms used in this subpart are defined as follows:

BART – best available retrofit technology

Btu—British thermal unit

CO₂—carbon dioxide

CSAPR—Cross-State Air Pollution Rule

H₂O—water

hr—hour

lb—pound

mmBtu—million Btu

MWe—megawatt electrical

NO_x—nitrogen oxides

O₂—oxygen

ppm—parts per million

scfh—standard cubic feet per hour

SIP—State implementation plan

SO₂—sulfur dioxide

§ 97.904 Applicability.

(a) Each of the units in Texas listed in the table in §97.911(a)(1) shall be a Texas SO₂ Trading Program unit, and each source that includes one or more such units shall be a Texas SO₂ Trading Program source, subject to the requirements of this subpart.

(b) *Opt-in provisions.* (1) The provisions of paragraph (b) of this section apply to each unit in Texas that:

(i) Is listed in the table entitled “Unit Level Allocations under the CSAPR FIPs after Tolling,” EPA-HQ-OAR-2009-0491-5028, available at www.regulations.gov;

(ii) Is not a Texas SO₂ Trading Program unit under paragraph (a) of this section; and

(iii) Has not received a determination of non-applicability under 40 CFR 97.404(c), 97.504(c), 97.704(c), or 97.804(c).

(2) The designated representative of a unit described in paragraph (b)(1) of this section may submit an opt-in application seeking authorization for the unit to participate in the Texas SO₂ Trading Program, provided that the unit has operated in the calendar year preceding submission of the opt-in application. Opt-in applications must be submitted in a format specified by the Administrator no later than October 1 of the year preceding the first control period for which authorization to participate in the Texas SO₂ Trading Program is sought.

(3) The Administrator shall review applications for opt-in units and respond in writing to the designated representative within 30 business days. The Administrator will authorize the unit to participate in the Texas SO₂ Trading Program if the provisions of paragraphs (b)(1) and (2) of this section are satisfied.

(4) Following submission of an opt-in application and authorization in accordance with paragraphs (b)(2) and (3) of this section, the unit shall be a Texas SO₂ Trading Program unit, and the source that includes the unit shall be a Texas SO₂ Trading Program source, subject to the requirements of this subpart starting on the next January 1. The unit shall remain subject to the requirements of this subpart for the life of the source, with the exception for retired units under 40 CFR 97.905.

(5) Opt-in units shall receive allowance allocations as provided in paragraph §97.911(b). These allocations shall be recorded into a source's compliance account per the recordation schedule in §97.921.

(6) The Administrator will maintain a publicly accessible record of all units that become Texas SO₂ Trading Program units under paragraph (b) of this section and of all allocations of

allowances to such units. Such public access may be provided through posting of information on a website.

§ 97.905 Retired unit exemptions.

(a)(1) Any Texas SO₂ Trading Program unit that is permanently retired shall be exempt from 97.906(b) and (c)(1), 97.924, and 97.930 through 97.935.

(2) The exemption under paragraph (a)(1) of this section shall become effective the day on which the Texas SO₂ Trading Program 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) *Special provisions.* (1) A unit exempt under paragraph (a) of this section shall not emit any SO₂, 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

Texas SO₂ 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. A retired unit that resumes operation will not receive an allowance allocation under §97.911. The unit may receive allowances from the Supplemental Allowance Pool pursuant to 40 CFR 97.912. All other provisions of Subpart FFFFF regarding monitoring, reporting, recordkeeping and compliance will apply on the first date on which the unit resumes operation.

§ 97.906 General provisions.

(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 §§97.913 through 97.918.

(b) *Emissions monitoring, reporting, and recordkeeping requirements.* (1) The owners and operators, and the designated representative, of each Texas SO₂ Trading Program source and each Texas SO₂ Trading Program unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §§97.930 through 97.935.

(2) The emissions data determined in accordance with §§97.930 through 97.935 shall be used to calculate allocations of Texas SO₂ Trading Program allowances under §97.912 and to determine compliance with the Texas SO₂ Trading Program emissions limitation 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 §§97.930 through 97.935 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero and any fraction of a ton greater than or equal to 0.50 being deemed to be a whole ton.

(c) SO₂ emissions requirements. (1) Texas SO₂ Trading Program emissions limitation. (i)

As of the allowance transfer deadline for a control period in a given year, the owners and operators of each Texas SO₂ Trading Program source and each Texas SO₂ Trading Program unit at the source shall hold, in the source's compliance account, Texas SO₂ Trading Program allowances available for deduction for such control period under §97.924(a) in an amount not less than the tons of total SO₂ emissions for such control period from all Texas SO₂ Trading Program units at the source.

(ii) If total SO₂ emissions during a control period in a given year from the Texas SO₂ Trading Program units at a Texas SO₂ Trading Program source are in excess of the Texas SO₂ Trading Program emissions limitation set forth in paragraph (c)(1)(i) of this section, then:

(A) The owners and operators of the source and each Texas SO₂ Trading Program unit at the source shall hold the Texas SO₂ Trading Program allowances required for deduction under §97.924(d); and

(B) The owners and operators of the source and each Texas SO₂ Trading Program 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) Compliance periods. A Texas SO₂ Trading Program unit shall be subject to the requirements under paragraph (c)(1) of this section for the control period starting on the later of

January 1, 2019 or the deadline for meeting the unit's monitor certification requirements under §97.930(b) and for each control period thereafter.

(3) *Vintage of Texas SO₂ Trading Program allowances held for compliance.* (i) A Texas SO₂ Trading Program 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 Texas SO₂ Trading Program allowance that was allocated for such control period or a control period in a prior year.

(ii) A Texas SO₂ Trading Program allowance held for compliance with the requirements under paragraph (c)(1)(ii)(A) of this section for a control period in a given year must be a Texas SO₂ Trading Program allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(4) *Allowance Management System requirements.* Each Texas SO₂ Trading Program allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with this subpart.

(5) *Limited authorization.* A Texas SO₂ Trading Program allowance is a limited authorization to emit one ton of SO₂ 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 Texas SO₂ 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.

(6) *Property right.* A Texas SO₂ Trading Program 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 Texas SO₂ Trading Program allowances in accordance with this subpart.

(2) A description of whether a unit is required to monitor and report SO₂ emissions using a continuous emission monitoring system (under subpart B 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 §§97.930 through 97.935 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 Texas SO₂ Trading Program source and each Texas SO₂ Trading Program 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 §97.916 for the designated representative for the source and each Texas SO₂ Trading Program 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 §97.916 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 Texas SO₂ Trading Program.

(2) The designated representative of a Texas SO₂ Trading Program source and each Texas SO₂ Trading Program unit at the source shall make all submissions required under the Texas SO₂ Trading Program, except as provided in §97.918. 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 Texas SO₂ Trading Program that applies to a Texas SO₂ Trading Program source or the designated representative of a Texas SO₂ Trading Program source shall also apply to the owners and operators of such source and of the Texas SO₂ Trading Program units at the source.

(2) Any provision of the Texas SO₂ Trading Program that applies to a Texas SO₂ Trading Program unit or the designated representative of a Texas SO₂ Trading Program unit shall also apply to the owners and operators of such unit.

(g) *Effect on other authorities.* No provision of the Texas SO₂ Trading Program or exemption under §97.905 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a Texas SO₂ Trading Program source or Texas SO₂ Trading Program unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

§ 97.907 Computation of time.

(a) Unless otherwise stated, any time period scheduled, under the Texas SO₂ 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 Texas SO₂ 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 Texas SO₂ Trading Program, is not a business day, the time period shall be extended to the next business day.

§ 97.908 Administrative appeal procedures.

The administrative appeal procedures for decisions of the Administrator under the Texas SO₂ Trading Program are set forth in part 78 of this chapter.

§ 97.909 [RESERVED]

§ 97.910 Texas SO₂ Trading Program and Supplemental Allowance Pool Budgets.

(a) The budgets for the Texas SO₂ Trading Program and Supplemental Allowance Pool for the control periods in 2019 and thereafter are as follows:

(1) The Texas SO₂ Trading Program budget for the control period in 2019 and each future control period is 238,393 tons.

(2) The Texas SO₂ Trading Program Supplemental Allowance Pool budget for the control period in 2019 and each future control period is 10,000 tons.

(b) [reserved]

§ 97.911 Texas SO₂ Trading Program allowance allocations.

(a)(1) Except as provided in paragraph (a)(2) of this section, Texas SO₂ Trading Program allowances from the Texas SO₂ Trading Program budget will be allocated, for the control periods in 2019 and each year thereafter, as provided in the following table:

Texas SO ₂ Trading Program Units	ORIS CODE	Texas SO ₂ Trading Program Allocation
Big Brown Unit 1	3497	8,473
Big Brown Unit 2	3497	8,559
Coleto Creek Unit 1	6178	9,057
Fayette / Sam Seymour Unit 1	6179	7,979
Fayette / Sam Seymour Unit 2	6179	8,019
Graham Unit 2	3490	226
H W Pirkey Power Plant Unit 1	7902	8,882
Harrington Unit 061B	6193	5,361
Harrington Unit 062B	6193	5,255
Harrington Unit 063B	6193	5,055
JT Deely Unit 1	6181	6,170
JT Deely Unit 2	6181	6,082
Limestone Unit 1	298	12,081
Limestone Unit 2	298	12,293
Martin Lake Unit 1	6146	12,024
Martin Lake Unit 2	6146	11,580
Martin Lake Unit 3	6146	12,236

Monticello Unit 1	6147	8,598
Monticello Unit 2	6147	8,795
Monticello Unit 3	6147	12,216
Newman Unit 2	3456	1
Newman Unit 3	3456	1
Newman Unit 4	3456	2
Sadow Unit 4	6648	8,370
Sommers Unit 1	3611	55
Sommers Unit 2	3611	7
Stryker Unit ST2	3504	145
Tolk Station Unit 171B	6194	6,900
Tolk Station Unit 172B	6194	7,062
WA Parish Unit WAP4	3470	3
WA Parish Unit WAP5	3470	9,580
WA Parish Unit WAP6	3470	8,900
WA Parish Unit WAP7	3470	7,653
Welsh Power Plant Unit 1	6139	6,496
Welsh Power Plant Unit 2	6139	7,050
Welsh Power Plant Unit 3	6139	7,208
Wilkes Unit 1	3478	14
Wilkes Unit 2	3478	2
Wilkes Unit 3	3478	3

(2) Notwithstanding paragraph (a)(1) of this section, if a unit provided an allocation pursuant to the table in paragraph (a)(1) of this section does not operate, starting after 2018, during the control period in two consecutive years, such unit will not be allocated the Texas SO₂ Trading Program allowances provided in paragraph (a)(1) of this section 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 Texas SO₂ Trading Program allowances that would otherwise have been allocated to such unit will be allocated under the Texas Supplemental Allowance Pool under 40 CFR 97.912.

(b)(1) A unit that becomes a Texas SO₂ Trading Program unit pursuant to §97.904(b) will receive an allocation of Texas SO₂ Trading Program allowances equal to the SO₂ allocation shown for the unit in the table referenced in §97.404(b)(1) (ignoring the years shown in the column headings in the table) for the control period in each year while the unit is a Texas SO₂

Trading Program unit, provided that the unit has operated during the calendar year immediately preceding the year of each such control period.

(2) If a unit that becomes a Texas SO₂ Trading Program unit pursuant to §97.904(b) does not operate during a given calendar year, no Texas SO₂ Trading Program allowances will be allocated to that unit for the control period in the following year or any subsequent year, nor will any allowances that would otherwise have been allocated to such unit under paragraph (b)(1) of this section be made available for use by any other unit under the Texas Supplemental Allowance Pool or otherwise.

(c) Units incorrectly allocated Texas SO₂ Trading Program allowances. (1) For each control period in 2019 and thereafter, if the Administrator determines that Texas SO₂ Trading Program allowances were incorrectly allocated under paragraph (a) or (b) of this section, or under a provision of a SIP revision approved by the Administrator, 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:

(2) Except as provided in paragraph (c)(3) or (4) of this section, the Administrator will not record such Texas SO₂ Trading Program allowances under §97.921.

(3) If the Administrator already recorded such Texas SO₂ Trading Program allowances under §97.921 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 §97.924(b) for such control period, then the Administrator will deduct from the account in which such Texas SO₂ Trading Program allowances were recorded an amount of Texas SO₂ Trading Program allowances allocated for the same or a prior control period equal to the amount of such already recorded Texas SO₂ Trading Program allowances. The authorized account representative shall

ensure that there are sufficient Texas SO₂ Trading Program allowances in such account for completion of the deduction.

(4) If the Administrator already recorded such Texas SO₂ Trading Program allowances under §97.921 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 §97.924(b) for such control period, then the Administrator will not make any deduction to take account of such already recorded Texas SO₂ Trading Program allowances.

(5) With regard to the Texas SO₂ Trading Program 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 (a) of this section, the Administrator will transfer such Texas SO₂ Trading Program allowances to the Texas Supplemental Allowance Pool under 40 CFR 97.912. With regard to the Texas SO₂ Trading Program 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 (b) of this section, the Administrator will retire such Texas SO₂ Trading Program allowances.

§ 97.912 Texas SO₂ Trading Program Supplemental Allowance Pool.

(a) For each control period in 2019 and thereafter, the Administrator will allocate Texas SO₂ Trading Program allowances from the Texas SO₂ Trading Program Supplemental Allowance Pool as follows:

(1) No later than February 15, 2020 and each subsequent February 15, the Administrator will review all the quarterly SO₂ emissions reports provided under § 97.934(d) for each Texas SO₂ Trading Program unit for the previous control period. The Administrator will identify each

Texas SO₂ Trading Program source for which the total amount of emissions reported for the units at the source for that control period exceeds the total amount of allowances allocated to the units at the source for that control period under § 97.911.

(2) For each Texas SO₂ Trading Program source identified under paragraph (a)(1) of this section, the Administrator will calculate the amount by which the total amount of reported emissions for that control period exceeds the total amount of allowances allocated for that control period under § 97.911.

(3)(i) For Coletto Creek (ORIS 6178), if the source is identified under paragraph (a)(1) of this section, the Administrator will allocate and record in the source's compliance account an amount of allowances from the Supplemental Allowance Pool equal to the lesser of the amount calculated for the source under paragraph (a)(2) of this section or the total number of allowances in the Supplemental Allowance Pool available for allocation under paragraph (b) of this section.

(ii) For any Texas SO₂ Trading Program sources identified under paragraph (a)(1) of this section other than Coletto Creek (ORIS 6178), the Administrator will allocate and record allowances from the Supplemental Allowance Pool as follows:

(A) If the total for all such sources of the amounts calculated under paragraph (a)(2) of this section is less than or equal to the total number of allowances in the Supplemental Allowance Pool available for allocation under paragraph (b) of this section that remain after any allocation under paragraph (a)(3)(i) of this section, then the Administrator will allocate and record in the compliance account for each such source an amount of allowances from the Supplemental Allowance Pool equal to the amount calculated for the source under paragraph (a)(2) of this section.

(B) If the total for all such sources of the amounts calculated under paragraph (a)(2) of this section is greater than the total number of allowances in the Supplemental Allowance Pool available for allocation under paragraph (b) of this section that remain after any allocation under paragraph (a)(3)(i) of this section, then the Administrator will calculate each such source's allocation of allowances from the Supplemental Allowance Pool by dividing the amount calculated under paragraph (a)(2) of this section for the source by the sum of the amounts calculated under paragraph (a)(2) of this section for all such sources, then multiplying by the number of allowances in the Supplemental Allowance Pool available for allocation under paragraph (b) of this section that remain after any allocation under paragraph (a)(3)(i) of this section and rounding to the nearest allowance. The Administrator will then record the calculated allocations of allowances in the applicable compliance accounts.

(iii) Any unallocated allowances remaining in the Supplemental Allowance Pool after the allocations determined under paragraphs (a)(3)(i) and (ii) of this section will be maintained in the Supplemental Allowance Pool. These allowances will be available for allocation by the Administrator in subsequent control periods to the extent consistent with paragraph (b) of this section.

(4) The Administrator will notify the designated representative of each Texas SO₂ Trading Program source when the allowances from the Supplemental Allowance Pool have been recorded.

(b) The total amount of allowances in the Texas SO₂ Trading Program Supplemental Allowance Pool available for allocation for a control period is equal to the sum of the Texas SO₂ Trading Program Supplemental Allowance Pool budget under § 97.910(a)(2), any allowances from retired units pursuant to § 97.911(a)(2) and from corrections pursuant to § 97.911(c)(5),

and any allowances maintained in the Supplemental Allowance Pool pursuant to paragraph (a)(3)(iii) of this section, but cannot exceed by more than 44,711 tons the sum of the budget provided under § 97.910(a)(2) and any portion of the budget provided under § 97.910(a)(1) not otherwise allocated for that control period under § 97.911(a)(1). If the number of allowances in the Supplemental Allowance Pool exceeds this level then the Administrator may only allocate allowances up to this level for the control period.

§ 97.913 Authorization of designated representative and alternate designated representative.

(a) Except as provided under §97.915, each Texas SO₂ Trading Program source, including all Texas SO₂ Trading Program units at the source, shall have one and only one designated representative, with regard to all matters under the Texas SO₂ Trading Program.

(1) The designated representative shall be selected by an agreement binding on the owners and operators of the source and all Texas SO₂ Trading Program units at the source and shall act in accordance with the certification statement in §97.916(a)(4)(iii).

(2) Upon and after receipt by the Administrator of a complete certificate of representation under §97.916:

(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 Texas SO₂ Trading Program unit at the source in all matters pertaining to the Texas SO₂ 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 Texas SO₂ Trading Program 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 §97.915, each Texas SO₂ Trading Program 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 Texas SO₂ Trading Program units at the source and shall act in accordance with the certification statement in §97.916(a)(4)(iii).

(2) Upon and after receipt by the Administrator of a complete certificate of representation under §97.916,

(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 Texas SO₂ Trading Program 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, §97.902, and §§97.914 through 97.918, whenever the term “designated representative” is used in this subpart, the term shall be construed to include the designated representative or any alternate designated representative.

§ 97.914 Responsibilities of designated representative and alternate designated representative.

(a) Except as provided under §97.918 concerning delegation of authority to make submissions, each submission under the Texas SO₂ Trading Program shall be made, signed, and certified by the designated representative or alternate designated representative for each Texas SO₂ Trading Program source and Texas SO₂ Trading Program 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 Texas SO₂ Trading Program source or a Texas SO₂ Trading Program unit only if the submission has been made, signed, and certified in accordance with paragraph (a) of this section and §97.918.

§ 97.915 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 §97.916. 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 Texas SO₂ Trading Program source and the Texas SO₂ Trading Program 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 §97.916. 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 Texas SO₂ Trading Program source and the Texas SO₂ Trading Program units at the source.

(c) *Changes in owners and operators.* (1) In the event an owner or operator of a Texas SO₂ Trading Program source or a Texas SO₂ Trading Program unit at the source is not included in the list of owners and operators in the certificate of representation under §97.916, 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 Texas SO₂ Trading Program source or a Texas SO₂ Trading Program 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 §97.916 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 Texas SO₂ Trading Program source (including the addition (see §97.904(b)) or removal of a unit), the designated representative or any alternate designated representative shall submit a certificate of representation under §97.916 amending the list of units to reflect the change.

(1) If the change is the addition of a unit (see §97.904(b)) 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.

§ 97.916 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 Texas SO₂ Trading Program source, and each Texas SO₂ Trading Program 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, and actual date of commencement of commercial operation, and a statement of whether such source is located in Indian country.

(2) The name, address, e-mail 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 Texas SO₂ Trading Program source and of each Texas SO₂ Trading Program 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 Texas SO₂ Trading Program unit at the source.”

(ii) “I certify that I have all the necessary authority to carry out my duties and responsibilities under the Texas SO₂ Trading Program on behalf of the owners and operators of the source and of each Texas SO₂ Trading Program 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.”

(iii) “Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a Texas SO₂ Trading Program unit, or where a utility or industrial customer purchases power from a Texas SO₂ Trading Program 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 Texas SO₂ Trading Program unit at the source; and Texas SO₂ Trading Program allowances and proceeds of transactions involving Texas SO₂ Trading Program 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 Texas SO₂ Trading Program allowances by contract, Texas SO₂ Trading Program allowances and proceeds of transactions involving Texas SO₂ Trading Program allowances will be deemed to be held or distributed in accordance with the contract.”

(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.

§ 97.917 Objections concerning designated representative and alternate designated representative.

(a) Once a complete certificate of representation under §97.916 has been submitted and received, the Administrator will rely on the certificate of representation unless and until a superseding complete certificate of representation under §97.916 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 Texas SO₂ 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 Texas SO₂ Trading Program allowance transfers.

§ 97.918 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, e-mail address, telephone number, and facsimile transmission number (if any) of such designated representative or alternate designated representative;

(2) The name, address, e-mail 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 97.918(d) shall be deemed to be an electronic submission by me.”

(ii) “Until this notice of delegation is superseded by another notice of delegation under 40 CFR 97.918(d), I agree to maintain an e-mail account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 40 CFR 97.918 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.

§ 97.919 [RESERVED]

§ 97.920 Establishment of compliance accounts and general accounts.

(a) *Compliance accounts.* Upon receipt of a complete certificate of representation under §97.916, the Administrator will establish a compliance account for the Texas SO₂ Trading Program 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) *General accounts*—(1) *Application for general account.* (i) Any person may apply to open a general account, for the purpose of holding and transferring Texas SO₂ Trading Program 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 Texas SO₂ Trading Program 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, e-mail 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 Texas SO₂ Trading Program 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 Texas SO₂ Trading Program allowances held in the general account. I certify that I have all the necessary authority to carry out my duties and responsibilities under the Texas SO₂ 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.”

(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.

(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 (b)(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 Texas SO₂ Trading Program

allowances held in the general account in all matters pertaining to the Texas SO₂ 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 Texas SO₂ Trading Program 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 (b)(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 Texas SO₂ Trading Program 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 Texas SO₂ Trading Program 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.

(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 (b)(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 Texas SO₂ Trading Program 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 (b)(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 Texas SO₂ Trading Program allowances in the general account.

(iii)(A) In the event a person having an ownership interest with respect to Texas SO₂ Trading Program 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 Texas SO₂ Trading Program 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 Texas SO₂ Trading Program 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 (b)(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 (b)(1) of this section is received by the Administrator.

(ii) Except as provided in paragraph (b)(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 Texas SO₂ 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 Texas SO₂ Trading Program 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 (b)(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, e-mail address, telephone number, and facsimile transmission number (if any) of such authorized account representative or alternate authorized account representative;

(B) The name, address, e-mail 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 (b)(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 97.920(b)(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 97.920(b)(5)(iv), I agree to maintain an e-mail account and to notify the Administrator immediately of any change in my e-mail address unless all delegation of authority by me under 40 CFR 97.920(b)(5) is terminated.”

(iv) A notice of delegation submitted under paragraph (b)(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 (b)(5)(iii)(D) of this section and made in accordance with a notice of delegation effective under paragraph (b)(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.

(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 Texas SO₂ Trading Program allowance transfer under §97.922 for any Texas SO₂ Trading Program allowances in the account to one or more other Allowance Management System accounts.

(ii) If a general account has no Texas SO₂ Trading Program allowance transfers to or from the account for a 12-month period or longer and does not contain any Texas SO₂ Trading Program 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 Texas SO₂ Trading Program allowance transfer under §97.922 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.

(c) *Account identification.* The Administrator will assign a unique identifying number to each account established under paragraph (a) or (b) of this section.

(d) *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 Texas SO₂ Trading Program allowances in the account, only if the submission has been made, signed, and certified in accordance with §§97.914(a) and 97.918 or paragraphs (b)(2)(ii) and (b)(5) of this section.

§ 97.921 Recordation of Texas SO₂ Trading Program allowance allocations.

(a) By November 1, 2018, the Administrator will record in each Texas SO₂ Trading Program source's compliance account the Texas SO₂ Trading Program allowances allocated to the Texas SO₂ Trading Program units at the source in accordance with §97.911(a) for the control periods in 2019, 2020, 2021, and 2022. The Administrator may delay recordation of Texas SO₂ Trading Program allowances for the specified control periods if the State of Texas submits a SIP revision before the recordation deadline.

(b) By July 1, 2019 and July 1 of each year thereafter, the Administrator will record in each Texas SO₂ Trading Program source's compliance account the Texas SO₂ Trading Program allowances allocated to the Texas SO₂ Trading Program units at the source in accordance with §97.911(a) for the control period in the fourth year after the year of the applicable recordation deadline under this paragraph. The Administrator may delay recordation of the Texas SO₂ Trading Program allowances for the applicable control periods if the State of Texas submits a SIP revision by May 1 of the year of the applicable recordation deadline under this paragraph.

(c) By February 15, 2020, and February 15 of each year thereafter, the Administrator will record in each Texas SO₂ Trading Program source's compliance account the allowances allocated from the Texas SO₂ Trading Program Supplemental Allowance Pool in accordance with §97.912 for the control period in the year of the applicable recordation deadline under this paragraph, .

(d) By July 1, 2019 and July 1 of each year thereafter, the Administrator will record in each Texas SO₂ Trading Program source's compliance account the Texas SO₂ Trading Program allowances allocated to the Texas SO₂ Trading Program units at the source in accordance with §97.911(b).

(e) When recording the allocation of Texas SO₂ Trading Program allowances to a Texas SO₂ Trading Program unit in an Allowance Management System account, the Administrator will assign each Texas SO₂ Trading Program allowance a unique identification number that will include digits identifying the year of the control period for which the Texas SO₂ Trading Program allowance is allocated.

§ 97.922 Submission of Texas SO₂ Trading Program allowance transfers.

(a) An authorized account representative seeking recordation of a Texas SO₂ Trading Program allowance transfer shall submit the transfer to the Administrator.

(b) A Texas SO₂ Trading Program 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 Texas SO₂ Trading Program 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 Texas SO₂ Trading Program allowance identified by serial number in the transfer.

§ 97.923 Recordation of Texas SO₂ Trading Program allowance transfers.

(a) Within 5 business days (except as provided in paragraph (b) of this section) of receiving a Texas SO₂ Trading Program allowance transfer that is correctly submitted under §97.922, the Administrator will record a Texas SO₂ Trading Program allowance transfer by moving each Texas SO₂ Trading Program allowance from the transferor account to the transferee account as specified in the transfer.

(b) A Texas SO₂ Trading Program 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 Texas SO₂ Trading Program allowances allocated 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 §97.924 for the control period immediately before such allowance transfer deadline.

(c) Where a Texas SO₂ Trading Program allowance transfer is not correctly submitted under §97.922, the Administrator will not record such transfer.

(d) Within 5 business days of recordation of a Texas SO₂ Trading Program 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 Texas SO₂ Trading Program allowance transfer that is not correctly submitted under §97.922, 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-recording.

§ 97.924 Compliance with Texas SO₂ Trading Program emissions limitations.

(a) *Availability for deduction for compliance.* Texas SO₂ Trading Program allowances are available to be deducted for compliance with a source's Texas SO₂ Trading Program emissions limitation for a control period in a given year only if the Texas SO₂ Trading Program allowances:

- (1) Were allocated 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 recording, in accordance with §97.923, of Texas SO₂ Trading Program 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 Texas SO₂ Trading Program allowances available under paragraph (a) of this section in order to determine whether the source meets the Texas SO₂ Trading Program emissions limitation for such control period, as follows:

- (1) Until the amount of Texas SO₂ Trading Program allowances deducted equals the number of tons of total SO₂ emissions from all Texas SO₂ Trading Program units at the source for such control period; or
- (2) If there are insufficient Texas SO₂ Trading Program allowances to complete the deductions in paragraph (b)(1) of this section, until no more Texas SO₂ Trading Program allowances available under paragraph (a) of this section remain in the compliance account.

(c)(1) *Identification of Texas SO₂ Trading Program allowances by serial number.* The authorized account representative for a source's compliance account may request that specific Texas SO₂ Trading Program allowances, identified by serial number, in the 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 SO₂ Trading Program source and the appropriate serial numbers.

(2) *First-in, first-out.* The Administrator will deduct Texas SO₂ Trading Program 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 Texas SO₂ Trading Program allowances in such request, on a first-in, first-out accounting basis in the following order:

(i) Any Texas SO₂ Trading Program allowances that were recorded in the compliance account pursuant to §97.921 and not transferred out of the compliance account, in the order of recordation; and then

(ii) Any other Texas SO₂ Trading Program allowances that were transferred to and recorded in the compliance account pursuant to this subpart, in the order of recordation.

(d) *Deductions for excess emissions.* After making the deductions for compliance under paragraph (b) of this section for a control period in a year in which the Texas SO₂ Trading Program source has excess emissions, the Administrator will deduct from the source's compliance account an amount of Texas SO₂ Trading Program allowances, allocated for a

control period in a prior year or the control period in the year of the excess emissions or in the immediately following year, equal to three 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.

§ 97.925 [RESERVED]

§ 97.926 Banking.

(a) A Texas SO₂ Trading Program allowance may be banked for future use or transfer in a compliance account or general account in accordance with paragraph (b) of this section.

(b) Any Texas SO₂ Trading Program allowance that is held in a compliance account or a general account will remain in such account unless and until the Texas SO₂ Trading Program allowance is deducted or transferred under §97.911(c), §97.923, §97.924, §97.927, or §97.928.

§ 97.927 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.

§ 97.928 Administrator's action on submissions.

(a) The Administrator may review and conduct independent audits concerning any submission under the Texas SO₂ Trading Program and make appropriate adjustments of the information in the submission.

(b) The Administrator may deduct Texas SO₂ Trading Program allowances from or transfer Texas SO₂ Trading Program allowances to a compliance account, based on the information in a submission, as adjusted under paragraph (a) of this section, and record such deductions and transfers.

§ 97.929 [RESERVED]

§ 97.930 General monitoring, recordkeeping, and reporting requirements.

The owners and operators, and to the extent applicable, the designated representative, of a Texas SO₂ Trading Program unit, shall comply with the monitoring, recordkeeping, and reporting requirements as provided in this subpart and subparts F and G of part 75 of this chapter. For purposes of applying such requirements, the definitions in §97.902 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 “Texas SO₂ Trading Program unit,” “designated representative,” and “continuous emission monitoring system” (or “CEMS”) respectively as defined in §97.902. The owner or operator of a unit that is not a Texas SO₂ Trading Program unit but that is monitored under §75.16(b)(2) of this chapter shall comply with the same monitoring, recordkeeping, and reporting requirements as a Texas SO₂ Trading Program unit.

(a) *Requirements for installation, certification, and data accounting.* The owner or operator of each Texas SO₂ Trading Program unit shall:

(1) Install all monitoring systems required under this subpart for monitoring SO₂ mass emissions and individual unit heat input (including all systems required to monitor SO₂ concentration, stack gas moisture content, stack gas flow rate, CO₂ or O₂ concentration, and fuel flow rate, as applicable, in accordance with §§75.11 and 75.16 of this chapter);

(2) Successfully complete all certification tests required under §97.931 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 Texas SO₂ Trading Program unit shall meet the monitoring system certification and other requirements of paragraphs (a)(1) and (2) of this section on or before the later 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:

(1) For a Texas SO₂ Trading Program unit under §97.904(a), January 1, 2019; or

(2) For a Texas SO₂ Trading Program unit under §97.904(b), January 1 of the first control period for which the unit is a Texas SO₂ Trading Program unit.

(3) The owner or operator of a Texas SO₂ Trading Program unit for which construction of a new stack or flue or installation of add-on SO₂ emission controls is completed after the applicable deadline under paragraph (b)(1) or (2) 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 §97.930 through §97.935, rather than the monitoring systems required under part 75 of this chapter;

(ii) SO₂ concentration, stack gas moisture content, stack gas volumetric flow rate, and O₂ or CO₂ 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 §97.935, rather than §75.66 of this chapter.

(c) *Reporting data.* The owner or operator of a Texas SO₂ Trading Program 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 SO₂ concentration, stack gas flow rate, stack gas moisture content, fuel flow rate, and any other parameters required to determine SO₂ mass emissions and heat input in accordance with §75.31(b)(2) or (c)(3) of this chapter or section 2.4 of appendix D to part 75 of this chapter, as applicable.

(d) *Prohibitions.* (1) No owner or operator of a Texas SO₂ Trading Program 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 §97.935.

(2) No owner or operator of a Texas SO₂ Trading Program unit shall operate the unit so as to discharge, or allow to be discharged, SO₂ to the atmosphere without accounting for all such SO₂ in accordance with the applicable provisions of this subpart and part 75 of this chapter.

(3) No owner or operator of a Texas SO₂ Trading Program unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording SO₂ 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 Texas SO₂ Trading Program 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 §97.905 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 §97.931(d)(3)(i).

(e) *Long-term cold storage.* The owner or operator of a Texas SO₂ Trading Program unit is subject to the applicable provisions of §75.4(d) of this chapter concerning units in long-term cold storage.

§ 97.931 Initial monitoring system certification and recertification procedures.

(a) The owner or operator of a Texas SO₂ Trading Program unit shall be exempt from the initial certification requirements of this section for a monitoring system under §97.930(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 and D 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 §97.930(a)(1) that is exempt from initial certification requirements under paragraph (a) of this section.

(c) [Reserved]

(d) Except as provided in paragraph (a) of this section, the owner or operator of a Texas SO₂ Trading Program 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 appendix D to part 75 of this chapter) under §97.930(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 §97.930(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 §97.930(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 §97.930(a)(1) that may significantly affect the ability of the system to accurately measure or record SO₂ 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 under §97.930(a)(1) is 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 §97.930(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 with 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 §97.933.

(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 Texas SO₂ 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 Texas SO₂ 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 §97.932(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 SO₂ pollutant concentration monitor and disapproved flow monitor, respectively, the maximum potential concentration of SO₂ and the maximum potential flow rate, as defined in sections 2.1.1.1 and 2.1.4.1 of appendix A to part 75 of this chapter.

(2) For a disapproved moisture monitoring system and disapproved diluent gas monitoring system, respectively, the minimum potential moisture percentage and either the maximum potential CO₂ concentration or the minimum potential O₂ 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.

(3) 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.

(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.

§ 97.932 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 appendix D 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 §97.931 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 §97.931 for each disapproved monitoring system.

§ 97.933 Notifications concerning monitoring.

The designated representative of a Texas SO₂ Trading Program unit shall submit written notice to the Administrator in accordance with §75.61 of this chapter.

§ 97.934 Recordkeeping and reporting.

(a) *General provisions.* The designated representative of a Texas SO₂ Trading Program unit shall comply with all recordkeeping and reporting requirements in paragraphs (b) through (e) of this section, the applicable recordkeeping and reporting requirements in subparts F and G of part 75 of this chapter, and the requirements of §97.914(a).

(b) *Monitoring plans.* The owner or operator of a Texas SO₂ Trading Program unit shall comply with the requirements of §75.62 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 §97.931, including the information required under §75.63 of this chapter.

(d) *Quarterly reports.* The designated representative shall submit quarterly reports, as follows:

(1) The designated representative shall report the SO₂ mass emissions data and heat input data for a Texas SO₂ Trading Program unit, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with the later of:

- (i) The calendar quarter covering January 1, 2019 through March 31, 2019; or
- (ii) The calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under §97.930(b).

(2) 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 §75.64 of this chapter.

(3) For Texas SO₂ Trading Program units that are also subject to the Acid Rain Program or CSAPR NO_x Ozone Season Group 2 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 SO₂ mass emission data, heat input data, and other information required by this subpart.

(4) 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)(2) 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; and

(2) For a unit with add-on SO₂ emission controls and for all hours where SO₂ 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 SO₂ emissions.

§ 97.935 Petitions for alternatives to monitoring, recordkeeping, or reporting requirements.

(a) The designated representative of a Texas SO₂ Trading Program unit may submit a petition under §75.66 of this chapter to the Administrator, requesting approval to apply an alternative to any requirement of §§97.930 through 97.934.

(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.