ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R08–OAR–2015–0463; FRL–10003–90–Region 8]

Approval and Promulgation of Air Quality Implementation Plans; Utah; Regional Haze State and Federal Implementation Plans

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to take action pursuant to section 110 of the Clean Air Act (CAA or Act) on State Implementation Plan (SIP) revisions submitted by the State of Utah on July 3, 2019, as supplemented on December 3, 2019, to satisfy certain regional haze requirements for the program's first implementation period. The EPA is proposing to approve the July 2019 SIP revision that provides an alternative to best available retrofit technology (BART) controls for nitrogen oxides (NO_X) at the PacifiCorp Hunter and Huntington power plants. The EPA proposes to find that the Utah NO_X BART Alternative for Hunter and Huntington would provide greater reasonable progress toward natural visibility conditions than BART, in accordance with the requirements of the CAA and the EPA's Regional Haze Rule (RHR). In conjunction with this proposed approval, we propose to withdraw the federal implementation plan (FIP) that addresses NO_X BART for the Hunter and Huntington power plants. The EPA also proposes to approve the December 3, 2019 SIP supplement that would require reporting of all deviations from compliance with the applicable requirements under BART and the BART Alternative, including the emission limits for Hunter and Huntington.

DATES:

Comments: Written comments must be received on or before March 23, 2020.

Public Hearing: A public hearing for this proposal is scheduled to be held on Wednesday, February 12, 2020, in Price, Utah from 1 p.m. until 5 p.m., and again from 6 p.m. until 8 p.m. mountain standard time (MST). See the **SUPPLEMENTARY INFORMATION** section below for the venue address.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–R08–OAR–2015–0463, to the Federal Rulemaking Portal: *https://www.regulations.gov.* Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from *www.regulations.gov.* The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.,* on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *http://www.epa.gov/dockets/commenting-epa-dockets.*

Docket: All documents in the docket are listed in the *www.regulations.gov* index. Although listed in the index, some information is not publicly available, *e.g.,* CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in *www.regulations.gov* or in hard copy at the Air Program, Environmental Protection Agency (EPA), Region 8, 1595 Wynkoop Street, Denver, Colorado 80202–1129. The EPA requests that, if at all possible, you contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section to view the hard copy of the docket. You may view the hard copy of the docket Monday through Friday, 8:00 a.m. to 4:00 p.m., excluding federal holidays.

FOR FURTHER INFORMATION CONTACT: Aaron Worstell, Air Program, EPA, Region 8, Mailcode 8P–AR, 1595 Wynkoop Street, Denver, Colorado 80202–1129, (303) 312–6073, *worstell.aaron@epa.gov.*

SUPPLEMENTARY INFORMATION:

Public Hearing

A public hearing will be held at the Jennifer Leavitt Student Center (JLSC),[1] Utah State University Eastern, 400 North 410 East, Price, UT 84501, on Wednesday, February 12, 2020. The hearing will convene at 1 p.m. and run from 1 p.m. until 5 p.m., and again from 6 p.m. until 8 p.m. (MST). Persons wishing to preregister may be assigned a time according to this schedule. Please register at *https://utah-regional-haze-2020.eventbrite.com* to speak at the hearing. The last day to preregister in advance to speak at the hearing is February 3, 2020. Additionally, requests to speak may be taken the day of the hearing at the hearing registration desk on a first come first serve basis, as time allows. The EPA will make every effort to accommodate all walk-in speakers, however we highly encourage the public to preregister for the hearing in order to be guaranteed speaking time. For questions regarding the public hearing, please contact Clayton Bean at *bean.clayton@epa.gov* or (303) 312–6143.

The public hearing will provide interested parties the opportunity to present data, views, or arguments concerning the proposed action. The EPA may ask clarifying questions during the oral presentations, but will not respond to the presentations at that time. Written statements and supporting information submitted during the comment period will be considered with the same weight as oral comments and supporting information presented at the public hearing. The hearing officer may limit the time available for each commenter to address the proposal to 5 minutes or less if the hearing officer determines it to be appropriate. The limitation is to ensure that everyone who wants to make a comment has the opportunity to do so. We will not be providing equipment for commenters to show overhead slides or make computerized slide presentations. Any person may provide written or oral comments and data pertaining to our proposal at the public hearings. Verbatim transcripts, in English, of the hearings and written statements will be included in the rulemaking docket.

Throughout this document wherever ''we,'' ''us,'' or ''our'' is used, we mean the EPA.

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[1] *See https://usueastern.edu/about/map/_documents/PriceCampusMap.pdf* for a detailed campus map.

I. What action is the EPA proposing?

On July 5, 2016, the EPA promulgated a final rule titled ''Approval, Disapproval and Promulgation of Air Quality Implementation Plans; Partial Approval and Partial Disapproval of Air Quality Implementation Plans and Federal Implementation Plan; Utah; Revisions to Regional Haze State Implementation Plan; Federal Implementation Plan for Regional Haze,'' which approved, in part, a regional haze SIP revision submitted by the State of Utah on June 4, 2015.[2] In the July 2016 final rule, the EPA also disapproved, in part, the Utah regional haze SIP submission, including the NO_X BART Alternative (also ''BART Alternative'' or ''Alternative'') for Hunter Units 1 and 2 and Huntington Units 1 and 2, which are BART units as explained in more detail below. The BART Alternative relied on sulfur dioxide (SO_2), NO_X, and particulate matter (PM) emission reductions stemming from the 2015 closure of PacifiCorp's Carbon power plant, as well as NO_X reductions achieved through combustion control upgrades at Hunter Units 1, 2, and 3 and Huntington Units 1 and 2. (Hunter Unit 3 is not a BART unit.) The combustion control upgrades for Hunter Units 1 and 2 and Huntington Units 1 and 2 include an Alstom TSF 2000™ low-NO_X firing system and two elevations of separated overfire air (SOFA). The combustion upgrades for Hunter Unit 3 include upgraded low-NO_X burners (LNB) and overfire air (OFA). Concurrent with disapproving the NO_X BART Alternative, EPA promulgated a FIP in the July 2016 final rule that imposed a NO_X BART emission limit of 0.07 lb/MMBtu (30-day rolling average) for each of the four BART units based on the emission reductions achievable through the installation and operation of selective-catalytic reduction (SCR) plus upgraded combustion controls.

On July 3, 2019, Utah submitted a revised SIP that, based on new technical information and a different regulatory test, seeks to demonstrate that the previously submitted NO_X BART Alternative achieves greater reasonable progress than BART. The SIP revision also includes amendments to Utah's SO_2 milestone reporting requirements under the SO_2 Backstop Trading Program pursuant to 40 CFR 51.309 so that SO_2 emission reductions resulting from the closure of the Carbon plant are not counted under both the SO_2 Backstop Trading Program and the NO_X BART Alternative. The EPA is proposing to approve the State's July 3, 2019 SIP revision based on this new information and to incorporate the following into Utah's SIP:

- A NO_X emission limit of 0.26 lb/MMBtu (30-day rolling average) each for Hunter Units 1 and 2 and Huntington 1 and 2.
- A NO_X emission limit of 0.34 lb/MMBtu (30-day rolling average) for Hunter Unit 3.
- A requirement to permanently close and cease operation of the Carbon power plant by August 15, 2015.
- The associated amendments to the SO_2 milestone reporting requirements.

Because approval of the NO_X BART Alternative would satisfy Utah's BART obligation for Hunter Units 1 and 2 and Huntington Units 1 and 2, we are also proposing to withdraw the FIP for NO_X BART at these units.

The EPA is also proposing to approve a December 3, 2019 SIP supplement to the July 3, 2019 SIP revision that includes monitoring, recordkeeping and reporting (MRR) requirements for the units subject to the NO_X BART Alternative and PM BART. The supplement also includes amendments that require each source to submit a report of any deviation from applicable emission limits and operating practices, including deviations attributable to upset conditions, the probable cause of such deviations, and any corrective actions or preventive measures taken.

Finally, contingent on our approval of these two SIP revisions, we propose to find that Utah's SIP fully satisfies the

[2] 81 FR 43894 (July 5, 2016).

requirements of section 309 of the RHR and, therefore, that the State has fully complied with the requirements for reasonable progress, including BART, for the first implementation period.

EPA is requesting comment on its proposed approval of Utah's regional haze SIP elements related to the NO_X BART Alternative under 40 CFR 51.309(d)(4)(vii) and 51.308(e)(2)–(3), as well as the MRR elements for the units subject to that BART Alternative and to PM BART. EPA previously approved Utah's regional haze SIP as meeting all other requirements of 40 CFR 51.309,[3] and we are neither reopening nor requesting comment on previously approved elements here.

II. Background

A. Requirements of the Clean Air Act and the EPA's Regional Haze Rule

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, impairment of visibility in mandatory Class I Federal areas which impairment results from manmade air pollution.'' [4] Section 169A directs the EPA to establish regulations for states to submit SIPs to make ''reasonable progress'' toward the national visibility goal through long-term strategies and to implement BART at certain BART-eligible sources. Recognizing the complexity of addressing visibility impacts, Congress enacted section 169B in the 1990 Amendments to the CAA, which, among other things, dedicated greater resources to ''regional haze'' and the problem of visibility impairment due to pollution transport over large distances. Section 169B provided for the creation of ''visibility transport'' regions and commissions, and specifically directed the establishment of a Grand Canyon visibility transport commission at section 169B(f).

The EPA promulgated a rule to address regional haze on July 1, 1999.[5] This RHR revised the existing visibility regulations [6] to integrate provisions addressing regional haze and established a comprehensive visibility protection program for Class I areas. The requirements for regional haze, found at 40 CFR 51.308 and 40 CFR 51.309, are included in the EPA's visibility protection regulations at 40 CFR 51.300 through 40 CFR 51.309. As discussed in more detail below, section 309 is available to certain western states, including Utah, in lieu of certain requirements in section 308. The EPA revised the RHR most recently on January 10, 2017.[7]

The CAA requires each state to develop a SIP to meet various air quality requirements, including protection of visibility.[8] Regional haze SIPs must assure reasonable progress toward the national goal of achieving natural visibility conditions in Class I areas, which, for the first implementation period, includes satisfying the BART requirements. A state must submit its SIP and SIP revisions to the EPA for approval. EPA reviews SIP submissions against the requirements of the CAA and applicable regulations. If EPA finds that a state has failed to make a required submission or that a submission does not satisfy the minimum criteria for completeness, or if EPA disapproves a SIP submission in whole or in part, EPA is required to promulgate a FIP within two years of such finding or disapproval unless the State corrects the deficiency, and the Administrator approves the plan or plan revision, before the Administrator promulgates such FIP.[9] Once approved, a SIP is enforceable by the EPA and citizens under the CAA; that is, the SIP is federally enforceable.

B. Best Available Retrofit Technology (BART)

Section 169A of the CAA directs states as part of their SIPs, or the EPA when developing a FIP in the absence of an approved regional haze SIP, to evaluate the use of retrofit controls at certain larger, often uncontrolled, older stationary sources in order to address visibility impacts from these sources. Specifically, section 169A(b)(2)(A) of the CAA requires states' implementation plans 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 sources built between 1962 and 1977 procure, install, and operate the ''Best Available Retrofit Technology'' as determined by the states through their SIPs, or as determined by the EPA when it promulgates a FIP. Under the RHR, states (or the EPA) are directed to conduct BART determinations for such ''BART-eligible'' sources that may reasonably be anticipated to cause or contribute to any visibility impairment in a Class I area.[10] Sources that are determined to cause or contribute to such impairment pursuant to the BART Guidelines are referred to as ''subject-to-BART'' sources and must undergo a BART determination applying the five BART factors.[11] Rather than requiring source-specific BART controls, states also have the flexibility to adopt an emissions trading program or other alternative program for their subject-to-BART sources, so long as the alternative provides greater reasonable progress towards improving visibility than BART (sometimes referred to as the ''better-than-BART'' test).[12]

C. BART Alternatives

States opting to submit an alternative program in lieu of source-specific BART, whether for a SIP submitted under 40 CFR 51.308 or 51.309,[13] must meet requirements under 40 CFR 51.308(e)(2) and, if applicable, (e)(3). These requirements for alternative programs relate to the ''better-than-BART'' test and fundamental elements of any alternative program.

In order to demonstrate that the alternative program achieves greater reasonable progress than source-specific

[3] See 77 FR 74355 (Dec. 14, 2012); 81 FR 43894 (July 5, 2016).

[4] 42 U.S.C. 7491(a). 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 whose visibility they consider to be 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 section, we mean a ''mandatory Class I Federal area.'' The list of mandatory Class I Federal areas is located in 40 CFR part 81 subpart D.

[5] 64 FR 35714 (July 1, 1999) (codified at 40 CFR part 51, subpart P).

[6] The EPA had previously 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 impairment (RAVI). 45 FR 80084 (December 2, 1980).

[7] 82 FR 3078 (January 10, 2017).

[8] 42 U.S.C. 7410(a), 7491, and 7492(a); CAA sections 110(a), 169A, and 169B.

[9] 42 U.S.C. 7410(c)(1).

[10] 40 CFR 51.308(e). The EPA designed the Guidelines for BART Determinations Under the RHR (Guidelines), 40 CFR part 51, Appendix Y, ''to help States and others (1) identify those sources that must comply with the BART requirement, and (2) determine the level of control technology that represents BART for each source.'' Guidelines, Section I.A. Section II of the Guidelines describes the four steps to identify BART sources, and Section III explains how to identify BART sources (*i.e.,* sources that are ''subject to BART'').

[11] CAA section 169A(g)(2); 40 CFR 51.308(e)(1)(ii)(A).

[12] 40 CFR 51.308(e)(2); *WildEarth Guardians* v. *EPA,* 770 F.3d 919 (10th Cir. 2014).

[13] *See* 40 CFR 51.309(d)(4).

BART, a state, or the EPA if developing a FIP, must demonstrate that its SIP meets the requirements, as applicable, in 40 CFR 51.308(e)(2)(i) through (vi). Among other things, the state or the EPA must conduct an analysis of the best system of continuous emission control technology available and the associated emission reductions achievable for each source subject to BART covered by the alternative program, termed a ''BART benchmark.'' Where the alternative program has been designed to meet requirements other than BART, simplifying assumptions may be used to establish a BART benchmark. The BART benchmark is the basis for comparison in the ''better-than-BART'' test for BART alternatives.

Pursuant to 40 CFR 51.308(e)(2)(i)(E), the state or the EPA must provide a determination that the alternative program achieves greater reasonable progress than BART under 40 CFR 51.308(e)(3) or otherwise based on the clear weight of evidence. 40 CFR 51.308(e)(3), in turn, provides specific tests applicable under specific circumstances for determining whether the alternative achieves greater reasonable progress than BART. If the distribution of emissions under the alternative program is not substantially different than for BART, and the alternative program results in greater emissions reductions of each relevant pollutant than BART, then the alternative program may be deemed to achieve greater reasonable progress. If the distribution of emissions is significantly different, the differences in visibility improvement between BART and the alternative program must be determined by conducting dispersion modeling for each impacted Class I area for the best and worst 20 percent of days. This modeling demonstrates ''greater reasonable progress'' if both of the two following criteria are met: (1) Visibility does not decline in any Class I area; and (2) there is overall improvement in visibility when comparing the average differences between BART and the alternative program across all the affected Class I areas.

Alternately, pursuant to 40 CFR 51.308(e)(2)(i)(E), a third test is available under which States may show that the BART alternative achieves greater reasonable progress than BART ''based on the clear weight of evidence.'' As stated in in the EPA's revisions to the RHR governing alternative to source-specific BART determinations, such demonstrations

attempt to make use of all available information and data which can inform a decision while recognizing the relative strengths and weaknesses of that information in arriving at the soundest decision possible. Factors which can be used in a weight of evidence determination in this context may include, but not be limited to, future projected emissions levels under the program as compared to under BART, future projected visibility conditions under the two scenarios, the geographic distribution of sources likely to reduce or increase emissions under the program as compared to BART sources, monitoring data and emissions inventories, and sensitivity analyses of any models used. This array of information and other relevant data may be of sufficient quality to inform the comparison of visibility impacts between BART and the alternative program. In showing that an alternative program is better than BART and when there is confidence that the difference in visibility impacts between BART and the alternative scenarios are expected to be large enough, a weight of evidence comparison may be warranted in making the comparison. The EPA will carefully consider the evidence before us in evaluating any SIPs submitted by States employing such an approach.[14]

Under 40 CFR 51.308(e)(2)(iii) and (iv), all emission reductions for the alternative program must take place during the period of the first long-term strategy for regional haze, and all the emission reductions resulting from the alternative program must be surplus to those reductions resulting from measures adopted to meet requirements of the CAA as of the baseline date of the SIP. Pursuant to 40 CFR 51.309(e)(2)(v), states have the option of including a provision that the emissions trading program or other alternative measure include a geographic enhancement to the program to address the requirement under 40 CFR 51.302(c) related to BART for RAVI from the pollutants covered under the emissions trading program or other alternative measure.

A SIP or FIP addressing regional haze must include emission limits and compliance schedules for each visibility-impairing pollutant emitted from each source subject to BART. In addition to the RHR's requirements, general SIP requirements mandate that the SIP or FIP include all regulatory requirements related to MRR needed to make emission limits practically enforceable.[15]

D. Requirements for Regional Haze SIPs Submitted Under 40 CFR 51.309

EPA's RHR provides two paths to address regional haze for the first implementation period of the regional haze program. One is through 40 CFR 51.308, requiring, among other things, SIPs to include source-specific BART determinations or BART alternatives, and to contain long-term strategies that include enforceable emission limitations, compliance schedules, and other measures as necessary to achieve reasonable progress in Class I areas inside the state and in Class I areas outside the state that may be affected by emissions from the state. In addition to these requirements, each regional haze SIP or FIP under section 308 must contain measures as necessary to make reasonable progress towards the national visibility goal.[16] The other method for addressing regional haze for the first implementation period is through 40 CFR 51.309, which provides an option for nine states termed the ''Transport Region States'': Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Utah, and Wyoming. Among other things, by meeting the requirements under 40 CFR 51.309, these states can be deemed to be making reasonable progress toward the national goal of achieving natural visibility conditions for the 16 Class I areas on the Colorado Plateau.[17]

Section 309 requires those Transport Region States that choose to participate to adopt regional haze strategies that are based on recommendations from the Grand Canyon Visibility Transport Commission (GCVTC) established under CAA 169B(f) for protecting the 16 Class I areas on the Colorado Plateau. The purpose of the GCVTC was to assess information about the adverse impacts on visibility in and around the 16 Class I areas on the Colorado Plateau and provided policy recommendations to the EPA to address such impacts. The GCVTC determined that all Transport Region States could potentially impact the Class I areas on the Colorado Plateau. The GCVTC submitted a report to the EPA in 1996 containing recommendations for protecting visibility for the Class I areas on the Colorado Plateau, and the EPA codified these recommendations in section 309 as an option available to states as part of the RHR.[18]

The EPA determined that the GCVTC strategies would provide for reasonable progress in mitigating regional haze if supplemented by an annex containing quantitative emission reduction milestones and provisions for a trading program or other alternative measure for SO_2.[19] In September 2000, the Western Regional Air Partnership (WRAP), which is the successor organization to the GCVTC, submitted an annex to EPA.

[14] 71 FR 60612, 60622 (Oct. 13, 2006).

[15] CAA section 110(a); 40 CFR part 51, subpart K; 40 CFR part 51, appendix V.

[16] 40 CFR 51.308(d), (f).

[17] 40 CFR 51.309(a).

[18] 64 FR 35714, 35749 (July 1, 1999).

[19] 64 FR 35714, 35749, 35756 (July 1, 1999).

The annex contained SO_2 emissions reduction milestones and detailed provisions of a backstop trading program to be implemented automatically if voluntary measures failed to achieve the SO_2 milestones (the SO_2 Backstop Trading Program). The EPA codified the annex on June 5, 2003 at 40 CFR 51.309(h).[20]

Five western states, including Utah, submitted implementation plans under section 309 in 2003.[21] However, the EPA was challenged by the Center for Energy and Economic Development (CEED) on the validity of the annex provisions contained in section 309(h). In *CEED* v. *EPA,* the D.C. Circuit Court of Appeals vacated the EPA approval of the WRAP annex.[22] In response to the court's decision, the EPA removed the annex requirements from 40 CFR 51.309(h), but incorporated the provisions allowing for an SO_2 Backstop Trading Program under the stationary source requirements in 40 CFR 51.309(d)(4).[23] The requirements under 40 CFR 51.309(d)(4) contain general requirements pertaining to stationary sources and market trading, and allow states to adopt alternatives to source-specific application of BART.

Under 40 CFR 51.309, states can satisfy the SO_2 BART requirements by adopting SO_2 emissions milestones and the SO_2 Backstop Trading Program as described in 51.309(d)(4)(i)–(vi). Under this approach, states must establish declining SO_2 emissions milestones for each year of the program through 2018. The milestones must be consistent with the GCVTC's goal of 50 to 70 percent reduction in SO_2 emissions by 2040. The SO_2 Backstop Trading Program would be implemented if a milestone is exceeded and the program is triggered.[24]

Section 51.309(d)(4) includes not only provisions for stationary source emissions of SO_2, but also a requirement that Transport Region States' implementation plans contain any necessary long-term strategies and BART requirements for stationary source PM and NO_X emissions. Pursuant to 40 CFR 51.309(d)(4)(vii), any BART provisions may be submitted pursuant to either 51.308(e)(1) or 51.308(e)(2); that is, states may submit either source-specific BART determinations or BART alternatives for PM and NO_X.

E. Monitoring, Recordkeeping and Reporting

The CAA requires that SIPs, including regional haze SIPs, contain elements sufficient to ensure emission limits are practically enforceable. CAA section 110(a)(2) states that the MRR provisions of states' SIPs must:

> (A) include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of this chapter; . . . (C) include a program to provide for the enforcement of the measures described in subparagraph (A), and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D of this subchapter; . . . (F) require, as may be prescribed by the Administrator—(i) the installation, maintenance, and replacement of equipment, and the implementation of other necessary steps, by owners or operators of stationary sources to monitor emissions from such sources, (ii) periodic reports on the nature and amounts of emissions and emissions-related data from such sources, and (iii) correlation of such reports by the State agency with any emission limitations or standards established pursuant to this chapter, which reports shall be available at reasonable times for public inspection.

Accordingly, 40 CFR part 51, subpart K, Source Surveillance, requires the SIP to provide for monitoring the status of compliance with the regulations in it, including ''[p]eriodic testing and inspection of stationary sources,'' [25] and ''legally enforceable procedures'' for recordkeeping and reporting.[26] Furthermore, 40 CFR part 51, appendix V, Criteria for Determining the Completeness of Plan Submissions, states in section 2.2 that complete SIPs contain: ''(g) Evidence that the plan contains emission limitations, work practice standards and recordkeeping/reporting requirements, where necessary, to ensure emission levels''; and ''(h) Compliance/enforcement strategies, including how compliance will be determined in practice.''

F. Consultation With Federal Land Managers (FLMs)

The statute and the RHR require that a state, or the EPA if promulgating a FIP that fills a gap in the SIP with respect to the applicable requirements, consult with FLMs before adopting and submitting a required SIP or SIP revision, or a required FIP or FIP revision.[27] Further, the state when considering a SIP revision (or EPA in a FIP) must include in its proposal a description of how it addressed any comments provided by the FLMs.

G. Summary of State Regional Haze Submittals and EPA Actions

1. 2008 and 2011 Utah Regional Haze SIP Submissions

On May 26, 2011, the State of Utah submitted to EPA a regional haze SIP under 40 CFR 51.309 (''2011 Utah RH SIP''). Consistent with 40 CFR 51.309(d)(4)(vii), this submittal included BART determinations for NO_X and PM at Utah's four subject-to-BART sources: PacifiCorp's Hunter Units 1 and 2 and Huntington Units 1 and 2. All four units are tangentially-fired fossil-fuel electric generating units (EGUs), each with a net generating capacity of 430 MW, permitted to burn bituminous coal. This submittal also included quantitative emissions milestones through 2018 and a backstop trading program for SO_2 intended to meet the requirements of 40 CFR 51.309(d)(4)(i)–(vi). The SO_2 backstop trading program covers Utah, Wyoming, New Mexico and the City of Albuquerque.

Utah had also previously submitted SIPs on December 12, 2003, August 8, 2004, and September 9, 2008, to meet the requirements of the RHR. These submittals were, for the most part, superseded and replaced by the May 26, 2011 submittal as further explained in the next section.

2. 2012 EPA Action on 2011 and 2008 Utah Regional Haze SIP Submissions

On December 14, 2012, EPA partially approved and partially disapproved the 2011 Utah RH SIP.[28] We approved the 2011 Utah RH SIP as meeting the requirements of 40 CFR 51.309, with the exception of the requirements under 40 CFR 51.309(d)(4)(vii) pertaining to NO_X and PM BART. EPA's partial disapproval action was based on the following: (1) Utah did not take into account the five statutory factors in its BART analyses for NO_X and PM; and (2) the 2011 Utah RH SIP submission did not contain the provisions necessary to make the BART limits practically enforceable as required by section 110(a)(2) of the CAA and 40 CFR 51, appendix V.[29]

[20] 68 FR 33764, 33767 (June 5, 2003).

[21] Five states—Arizona, New Mexico, Oregon, Utah and Wyoming—and Albuquerque-Bernalillo County, New Mexico, initially exercised this option by submitting plans to the EPA in December 2003. Oregon elected to cease participation in 2006, and Arizona elected to cease participation in 2010.

[22] *Ctr. for Energy & Econ. Dev.* v. *EPA,* 398 F.3d 653, 654 (DC Cir. 2005).

[23] 71 FR 60612 (October 13, 2006).

[24] 40 CFR 51.309(d)(4)(v).

[25] 40 CFR 51.212(a).

[26] 40 CFR 51.211.

[27] CAA section 169A(d); 40 CFR 51.308(i).

[28] 77 FR 74355, 74357 (Dec. 14, 2012).

[29] *Id.*

We also approved two sections of the 2008 Utah RH SIP submission in the December 13, 2012 action. Specifically, we approved state rules UAR R307–250—Western Backstop Sulfur Dioxide Trading Program and R307–150—Emission Inventories. We took no action on the rest of the 2008 submittal as the 2011 submittal superseded and replaced all other sections. We also took no action on the December 12, 2003 and August 8, 2004 submittals as these were superseded by the 2011 submittal.

On November 8, 2011, we separately proposed approval of Section G—Long-Term Strategy for Fire Programs of the May 26, 2011 submittal and finalized our approval of that action on January 18, 2013.[30]

3. Petitions for Review of the EPA's Approval of the SO_2 Backstop Trading Program

In 2013, conservation organizations challenged EPA's 2012 approval of the SO_2 Backstop Trading Program as an alternative to BART for certain Transport Region States, including Utah, in the U.S. Court of Appeals for the Tenth Circuit. On October 21, 2014, the Tenth Circuit upheld EPA's action, including EPA's finding that the trading program could serve as a BART alternative under a ''clear weight of evidence'' standard.[31]

4. 2015 Utah Regional Haze SIP Submissions

On June 4, 2015, the State of Utah submitted to EPA a revision to its Regional Haze SIP under 40 CFR 51.309 of the RHR (''June 2015 Utah RH SIP'') to address the requirements under 40 CFR 51.309(d)(4)(vii) pertaining to NO_X and PM BART. Utah developed the June 2015 Utah RH SIP in response to EPA's December 14, 2012 partial disapproval of the 2011 Utah RH SIP submission. The June 2015 Utah RH SIP evolved from a draft SIP on which Utah sought public comment in October 2014. After receiving extensive public comments on that draft, Utah decided to pursue a NO_X BART Alternative under the 40 CFR 51.308(e)(2) ''clear weight of evidence'' standard that takes credit for NO_X reductions due to combustion controls installed at PacifiCorp's Hunter and Huntington power plants in addition to NO_X, SO_2, and PM reductions from the August 2015 retirement of PacifiCorp's nearby Carbon power plant. The June 2015 Utah RH SIP submission also included measures to make the SIP requirements practically enforceable and included additional information pertaining to the PM BART determinations for Hunter and Huntington to address deficiencies identified by EPA in our December 2012 partial disapproval.

On October 20, 2015, Utah submitted to EPA another revision to its Regional Haze SIP under 40 CFR 51.309 (''October 2015 Utah RH SIP''). This SIP included an enforceable commitment to provide an additional SIP revision by mid-March 2018 to address concerns raised in public comments that the State would be double counting certain SO_2 emissions reductions under both the Utah NO_X BART Alternative and the milestone reporting for the SO_2 Backstop Trading Program.

5. 2016 EPA Action on 2015 Utah RH SIP Submissions

On July 5, 2016, we partially approved and partially disapproved the revisions to the Utah SIP submitted by the State of Utah on June 4, 2015.[32] We approved the following elements of the State's SIP submittals:[33]

- BART determinations and emission limits for PM at Hunter Units 1 and 2 and Huntington Units 1 and 2.
- MRR requirements for units subject to the PM emission limits, including conditional approval of the requirement that the PM emission limits apply at all times, subject to the state's commitment to adopt reporting requirements for deviations from the emission limits.

We disapproved these aspects of the State's June 4, 2015 SIP:

- NO_X BART Alternative, including emission limits consistent with upgraded combustion controls at Hunter Units 1, 2, and 3 and Huntington Units 1 and 2, and the SO_2, NOx, and PM emission reductions resulting from the shutdown of Carbon Units 1 and 2.
- MRR requirements for units subject to the NO_X BART Alternative.

As noted above, in June 2015 Utah submitted the NO_X BART Alternative under 40 CFR 51.308(e)(2)(i)(E)'s clear-weight-of-evidence test. To support its conclusion that the NO_X BART Alternative makes greater reasonable progress towards the national visibility goal, the SIP submission relied on nine metrics for comparing the Alternative to the BART Benchmark: Aggregate emission reductions, monitoring data, timing of emission reductions, energy and non-air quality impacts, cost, and four visibility-related metrics based on the results of a modeling exercise using the CALPUFF model. In the July 2016 final rule, EPA determined that the evidence provided did not clearly demonstrate that the BART Alternative achieves greater visibility improvement than BART. As part of this evaluation, we determined which metrics were relevant to the assessment of relative visibility benefit, evaluated the strengths and weaknesses of each metric in order to determine which merited more or less weight, and collectively considered the weights assigned to the individual pieces of information in determining whether, on balance, the evidence demonstrated that the NO_X BART Alternative would clearly provide for greater reasonable progress.[34] Based on this assessment, we determined that the evidence before us did not satisfy the standard articulated under 40 CFR 51.308(e)(2)(i)(E) and disapproved the NO_X BART Alternative.

We thus promulgated a FIP in the July 5, 2016 action to address the deficiencies in the Utah regional haze SIP submissions. EPA's FIP includes the following elements:

- NO_X BART determinations and corresponding emission limits for Hunter Units 1 and 2 and Huntington Units 1 and 2 of 0.07 lb/MMbtu (30-day rolling average) each, reflecting installation and operation of SCR plus the existing upgraded combustion controls.
- Monitoring, recordkeeping, and reporting requirements applicable to Hunter Units 1 and 2 and Huntington Units 1 and 2 as needed to implement the NO_X BART determinations and emission limits.

We took no action on the enforceable commitment to revise, at a minimum, SIP Section XX.D.3.c and state rule R307–150 addressing double counting of SO_2 emissions, because there was no need to do so once the NO_X BART Alternative had been disapproved.

6. Petitions for Review of EPA's 2016 SIP Disapproval and FIP

In September 2016, the State of Utah, PacifiCorp, and several other parties challenged EPA's July 5, 2016 disapproval of the NO_X BART Alternative and promulgation of a FIP in the U.S. Court of Appeals for the Tenth Circuit.[35] In addition, the State and PacifiCorp (on behalf of the co-owners of Hunter Units 1 and 2 and Huntington Units 1 and 2) submitted letters to EPA on June 30, 2017, identifying new

[30] 78 FR 4071, 4072 (Jan. 18, 2013).

[31] *WildEarth Guardians* v. *United States EPA,* 770 F.3d 919, 938 (10th Cir. 2014).

[32] 81 FR 43894 (July 5, 2016).

[33] EPA had already approved elements satisfying other applicable requirements in the December 14, 2012 action: Section XX.B.8, Figures 1 and 2, Affected Class I Areas, pp. 8–9; Section XX.D.6.b, Table 3, BART-Eligible Sources in Utah, p. 21; Section XX.D.6.c, Sources Subject to BART, pp. 21–23.

[34] See 81 FR 43894, 43896–43902.

[35] *State of Utah* v. *EPA,* No. 16–9541 (10th Cir.).

information that was not available at the time of EPA's action on Utah's 2015 SIP submission, providing additional explanation of existing information, and stating an intent to develop and submit to EPA additional technical analyses in support of the NO_X BART Alternative.[36] On July 14, 2017, the EPA Administrator sent letters to the State of Utah and PacifiCorp announcing the Agency's intent to reconsider its disapproval of the NO_X BART Alternative.[37] On this basis, EPA asked the Tenth Circuit to put the litigation in abeyance; on September 11, 2017, the court both granted EPA's request to abate the litigation and issued a stay of EPA's July 5, 2016 final rule.[38]

7. 2019 Utah RH SIP Revisions

On July 3, 2019, Utah submitted a SIP revision intended to replace EPA's 2016 FIP provisions for NO_X BART. The measures in the NO_X BART Alternative submitted in July 2019 are identical to those in the Alternative submitted in June 2015 (*i.e.,* Utah submitted the same NO_X BART Alternative in the June 2015 and July 2019 SIPs). However, while the State had previously relied on the clear-weight-of-evidence test under 40 CFR 51.308(e)(2)(i)(E) to demonstrate that the Alternative achieves greater reasonable progress than BART in the June 2015 submission,[39] the July 2019 submission relies solely on the application of the two-prong test under 51.308(e)(3) using photochemical grid modeling. Background on these two approaches to demonstrating greater reasonable progress is provided in section II.C. above.

The July 3, 2019 SIP submittal includes the emission limitations and control measures associated with the NO_X BART Alternative. It also includes the monitoring, recordkeeping, and reporting requirements that EPA previously approved for PM BART, but disapproved as applied to the emission limitations and control measures associated with the NO_X BART Alternative.

On December 3, 2019, Utah submitted a supplement to the July 2019 SIP submission that includes an amendment to the monitoring, record keeping, and reporting requirements submitted on July 3, 2019. Specifically, the amendments require each source to submit a report of any deviation from applicable emission limits and operating practices, including deviations attributable to upset conditions, the probable cause of such deviations, and any corrective actions or preventive measures taken.

This proposed action pertains to the July 3, 2019 SIP submittal as supplemented on December 3, 2019.

Sections 110(a)(2) and 110(*l*) of the CAA and 40 CFR 51.102 and appendix V to part 51 require that a state provide reasonable notice and public hearing before adopting a SIP revision and submitting it to EPA. Utah, after providing notice, accepted comments on the July 2019 Utah RH SIP submission from April 1, 2019 through May 15, 2019. Similarly, Utah accepted comments on the December 3, 2019 RH SIP supplement from October 1, 2019 to October 31, 2019.

III. Utah's Regional Haze SIP Revisions

A. Summary of the Utah NO_X BART Alternative SIP Revision

As noted elsewhere, the EPA previously approved Utah's SIP elements satisfying the requirements of 40 CFR 51.309 to address the State's regional haze obligations for the first implementation period, other than emission limitations corresponding to NO_X BART or an alternative to BART for NO_X and the associated MRR requirements, and certain requirements for MRR related to PM BART.[40] Therefore, in this action we are addressing only these outstanding elements and certain ancillary SIP revisions necessary to effectuate them.

Utah's July 3, 2019 SIP RH submittal, as supplemented on December 3, 2019, includes changes to the following provisions, on which we are proposing to take action:

- Revised SIP Section XX, Regional Haze, Parts A, Executive Summary, and D, Long-Term Strategy for Stationary Sources (revised SIP narrative sections including the BART Assessment for NO^x); adopted by the Utah Air Quality Board on June 24, 2019.
- Revised R307–110–28, General Requirements: State Implementation Plan, Regional Haze (state rule that incorporates by reference most recently amended SIP Section XX); effective August 15, 2019.
- SIP Section IX.H.21 General Requirements: Control Measures for Area and Point Sources, Emission Limits and Operating Practices, Regional Haze Requirements (SIP section laying out MRR requirements for control measures); adopted by the Utah Air Quality Board on November 20, 2019.
- SIP Section IX.H.22 Source Specific Emission Limitations: Regional Haze Requirements, Best Available Retrofit Technology (SIP section containing emission limitations necessary for NO_X BART Alternative); adopted by the Utah Air Quality Board on November 20, 2019.
- Revised R307–110–17, General Requirements: State Implementation Plan. Section IX, Control Measures for Area and Point Sources, Part H, Emissions Limits (state rule that incorporates by reference most recently amended SIP Section IX, Part H); effective on November 25, 2019.
- Revised R307–150–3, Emission Inventories, Applicability (state rule that addresses reporting of SO_2 emissions for Carbon power plant under the Western Backstop SO_2 Trading Program); effective June 25, 2018.

These six provisions are related to the following two outstanding requirements for the first implementation period: NO_X BART for Hunter Units 1 and 2 and Huntington Units 1 and 2; and MRR requirements for the Utah NO_X BART Alternative and PM BART emission limits to make the SIP requirements practically enforceable.

1. Utah NO_X BART Alternative

To satisfy the requirement of 40 CFR 51.309(d)(4)(vii), Utah has opted to establish an alternative to BART for NO_X under 40 CFR 51.308(e)(2). The State's NO_X BART Alternative consists of upgraded combustion controls on all four subject-to-BART units, upgraded combustion controls on Hunter Unit 3, and the shutdown of Carbon Units 1 and 2. The emission limits in the July 3, 2019 Utah RH SIP submittal, as supplemented on December 3, 2019, are provided in Table 1. We further explain the components of the SIP submissions below.

[36] See docket IDs EPA–R08–OAR–2015–0463–0216 (letter from State of Utah) and EPA–R08–OAR–2015–0463–0221 (letter from PacifiCorp).

[37] See docket IDs EPA–R08–OAR–2015–0463–0222 (letter to State of Utah) and EPA–R08–OAR–2015–0463–0223 (letter to PacifiCorp).

[38] *State of Utah* v. *EPA,* No. 16–9541 (10th Cir.), Doc. No. 10496767.

[39] For a summary of the weight-of-evidence contained in Utah's June 2015 SIP, and EPA's evaluation thereof, refer to the July 2016 final rule at 81 FR 43897–43902.

[40] EPA conditionally approved Utah's MRR requirements for the PM BART emission limitations under CAA section 110(k)(4). 81 FR at 43921.

TABLE 1—EMISSION LIMITS AND SHUTDOWN IN THE UTAH BART ALTERNATIVE AND PM SIP [1]

Source	Unit	PM limit [2 3] (lb/MMBtu, three-run test average)	NO_X limit [4] (lb/MMBtu, 30-day rolling average)	SO_2 limit
Hunter	1	0.015	0.26	NA.
	2	0.015	0.26	NA.
	3	NA	0.34	NA.
Huntington	1	0.015	0.26	NA.
	2	0.015	0.26	NA.
Carbon	1	Shutdown by August 15, 2015	Shutdown by August 15, 2015	Shutdown by August 15, 2015.
	2	Shutdown by August 15, 2015	Shutdown by August 15, 2015	Shutdown by August 15, 2015.

[1] Obtained from the July 2019 Utah RH SIP, Section IX.H.22.
[2] Based on annual stack testing.
[3] The BART PM emission limits were previously approved by in our July 2016 final rule. 81 FR 43894 (July 5, 2016).
[4] Based on continuous emission monitoring system (CEMS) measurement.

The State compared the NO_X BART Alternative against a BART Benchmark that consists of SCR plus upgraded combustion controls on all four BART units. The State noted SCR plus upgraded combustion controls would require careful consideration through a source-specific five-factor analysis before determining it is BART for these units. However, the State used those controls as a stringent benchmark for comparison with the NO_X BART Alternative. The State remarked that its use of SCR plus upgraded combustion controls as a benchmark is not a determination that this technology is BART; it is merely a conservative approach to evaluating the effectiveness of the alternative program. The Utah NO_X BART Alternative is generally described in SIP Section XX.D.6 with a detailed demonstration included in the *Staff Review* to support the State's assertion that the Alternative achieves greater reasonable progress than BART.

In addition to combustion controls at the Hunter and Huntington units, the State intends to rely on the emission reductions resulting from the shutdown of a coal-fired power plant. Utah indicated that PacifiCorp shut down the Carbon Power Plant in 2015, due to the high cost to control mercury to meet the requirements of EPA's Mercury and Air Toxics Standards (MATS).[41] The State noted that the MATS rule was finalized in 2011, and the Utah RH SIP contains the requirement for the Carbon Power Plant to shut down in August 2015. The emission reductions occur after the 2002 base year for Utah's RH SIP and thus, Utah asserts, the reductions may be considered as part of an alternative strategy under 40 CFR 51.308(e)(2)(iv).

The State's demonstration is described in more detail in section III.B below. The State's estimates of emissions for the Utah NO_X BART Alternative and the BART Benchmark are provided in Table 2 of section III.B.4 below. EPA developed a summary of the emissions reductions based on Utah's emission estimates and this is presented in Table 3 of section III.B.4 below.

B. Summary of Utah's Demonstration for Alternative Program

As discussed above in Section II, a state may opt to implement an alternative measure rather than to require sources subject to BART to install, operate, and maintain source-specific BART. BART alternatives such as the Utah NO_X BART Alternative that are not emissions trading programs must meet the requirements of 40 CFR 51.308(e)(2)(i)–(iv).[42] Utah has included the following information in its July 2019 SIP revision to address the regulatory criteria for an alternative program: [43]

1. List of All BART-Eligible Sources Within the State

Pursuant to 40 CFR 51.308(e)(2)(i)(A), the SIP must include a list of all BART-eligible sources within the State. Utah included a list of BART-eligible sources and noted the following sources are all covered by the alternative program:

- PacifiCorp Hunter, Unit 1
- PacifiCorp Hunter, Unit 2
- PacifiCorp, Huntington, Unit 1
- PacifiCorp, Huntington, Unit 2

2. List of All BART-Eligible Sources and All BART Source Categories Covered by the Alternative Program

Pursuant to 40 CFR 51.308(e)(2)(i)(B), each BART-eligible source in the State must be subject to the requirements of the alternative program, have a federally enforceable emission limitation determined by the State and approved by EPA as meeting BART, or be otherwise addressed under paragraphs 51.308(e)(1) or (e)(4). In this instance, the alternative program covers all the BART-eligible sources in the state—Hunter Units 1 and 2 and Huntington Units 1 and 2—in addition to three non-BART units—PacifiCorp's Hunter Unit 3 and Carbon Units 1 and 2.

3. Analysis of BART and Associated Emission Reductions Achievable

Pursuant to 40 CFR 51.308(e)(2)(i)(C), the SIP must include an analysis of BART and associated emission reductions achievable at the subject-to-BART units covered by the alternative program, here Hunter Units 1 and 2 and Huntington Units 1 and 2. In the July 2019 Utah RH SIP, the State compared the Utah NO_X BART Alternative to the most stringent NO_X controls, SCR plus upgraded combustion controls, at the four BART units, referred to here as the BART Benchmark. This is consistent with the BART determination made by EPA in our July 2016 final rule.[44]

4. Analysis of Projected Emissions Reductions Achievable Through the BART Alternative

Pursuant to 40 CFR 51. 308(e)(2)(i)(D), the SIP must include ''[a]n analysis of the projected emissions reductions achievable through the . . . alternative measure.'' A summary of the State's estimates of emissions in tons per year (tpy) for the Baseline, NO_X BART Alternative and the BART Benchmark is provided in Table 2. A summary of the emissions reductions based on those emission estimates is presented in Table 3. The emissions and emission reductions were projected for the year

[41] Utah Regional Haze State Implementation Plan, Staff Review of Recommended Alternative to BART for NO_X, May 28, 2019, p. 24.

[42] States may address 40 CFR 51.308(e)(2)(v) at their option.

[43] See Staff Review.

[44] In the July 2016 FIP, EPA determined these same controls—SCR plus LNB/SOFA—constitute BART for each of the four subject-to-BART units. Utah's July 2019 SIP submittal thus refers to the BART Benchmark controls as the ''EPA FIP''; while the controls represented by the BART Benchmark and EPA's FIP are indeed the same, the relevant comparison for the purpose of this analysis is between the BART Benchmark and the BART alternative.

2025 to align with the future year modeling scenarios used to calculate visibility benefits under the BART Benchmark and BART Alternative, as described in the section that follows.[45]

TABLE 2—ESTIMATED EMISSIONS IN 2025 UNDER THE BASELINE SCENARIO, BART BENCHMARK (BART BENCHMARK), AND THE BART ALTERNATIVE [45]

Units	NO_X (tpy)				SO_2 (tpy)			PM (tpy)			Combined	
	Baseline	BART benchmark	BART alt.		Baseline	BART benchmark	BART alt.	Baseline	BART benchmark	BART alt.	Baseline	BART benchmark
Carbon 1	1,312	1,312	0	2,286	2,286	0	120	120	0	3,718	3,718	0
Carbon 2	1,977	1,977	0	3,528	3,528	0	183	183	0	5,688	5,688	0
Hunter 1	6,380	796	3,166	2,535	1,153	1,153	733	733	733	9,648	2,682	5,052
Hunter 2	6,092	798	3,028	2,531	1,408	1,408	717	717	717	9,340	2,923	5,153
Hunter 3	6,530	6,530	4,490	1,204	1,230	1,230	531	531	531	8,265	8,291	6,251
Huntington 1	5,944	793	3,147	2,380	1,254	1,254	517	517	517	8,841	2,564	4,918
Huntington 2	5,816	753	3,366	12,308	1,201	1,201	1,033	1,033	1,033	19,157	2,987	5,600
Total	34,051	12,959	17,197	26,772	12,060	6,246	3,834	3,834	3,531	64,657	28,853	26,974

TABLE 3—EPA SUMMARY OF 2025 PROJECTED EMISSION REDUCTIONS ACHIEVABLE WITH THE UTAH NO_X BART ALTERNATIVE AS COMPARED TO THE BART BENCHMARK

Description	Combined emissions for all units (tpy)			
	NO_X	SO_2	PM	Combined
BART Benchmark	12,959	12,060	3,834	28,853
BART Alternative	17,197	6,246	3,531	26,974
Emission Reduction (BART Benchmark Minus BART Alternative) [1]	−4,238	5,814	303	1,879

[1] A negative value indicates the BART Alternative results in more emissions of the specified pollutant in comparison to the BART Benchmark.

5. A Determination That the Alternative Achieves Greater Reasonable Progress Than Would Be Achieved Through the Installation and Operation of BART

Pursuant to 40 CFR 51.308(e)(2)(i)(E), the State must provide a determination that the alternative program achieves greater reasonable progress than BART under 40 CFR 51.308(e)(3) or otherwise based on the clear weight of evidence.

Utah noted that the Hunter, Huntington, and Carbon plants are all located within 40 miles of each other in central Utah. Because of the close proximity of the three plants, the geographic distribution of emissions will not be substantially different under the alternative program. The combined emissions of NO_X, SO_2, and PM are 1,879 tons/yr lower under the alternative measure. However, the NO_X BART Alternative measure does not result in greater emission reductions of all pollutants—SO_2 emissions are lower by 5,814 tons/yr, PM are lower by 303 tons/yr, but NO_X emissions are higher by 4,238 tons/yr. Therefore, because the NO_X BART Alternative relies on SO_2 reductions, and to a lesser extent PM reductions, in lieu of NO_X reductions, Utah determined that greater reasonable progress must be demonstrated through the two-prong test based on dispersion modeling in 40 CFR 51.308(e)(3) or a clear weight of evidence analysis. The State chose to make this demonstration in the July 3, 2019 submittal using the two-prong test allowed for under 40 CFR 51.308(e)(3). To evaluate the two prongs, Utah relied on air quality modeling performed by a contractor for PacifiCorp using the Comprehensive Air Quality Model with Extensions (CAMx).[46]

The CAMx model is a photochemical grid model that uses and produces complex scientific data, including emissions from all sources, with a realistic representation of formation, transport, and processes that cause visibility degradation, estimating downwind concentrations paired in space and time. The EPA's guidance supports use of this particular model for evaluation of visibility impacts from sources or source categories, such as application of the two-prong test under 40 CFR 51.308(e)(3).[47] The CAMx model simulates air quality over many geographic scales and treats a wide variety of inert and chemically active pollutants, including ozone, PM, inorganic and organic $PM_{2.5}$/PM_{10}, and mercury and other toxics. CAMx also has plume-in-grid and source apportionment capabilities.[48] CAMx has a scientifically current treatment of chemistry to simulate transformation of emissions into visibility-impairing particles of species such as ammonium nitrate and ammonium sulfate, and is often employed in large-scale modeling when many sources of pollution and/or long transport distances are involved. Photochemical grid models like CAMx

[45] Staff Review, Table 2, p. 12. Values rounded to the nearest ton.

[46] CAMx modeling software and User's Guide are available at *http://www.camx.com/download/default.aspx*. CAMx version 6.10 was used for April to December, and CAMx version 6.40 was used for January to March.

[47] *Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, $PM_{2.5}$, and Regional Haze, EPA Office of Air Quality Planning and Standards*, Research Triangle Park, NC (November 2018). The main regional haze section of the guidance is related to setting reasonable progress goals. However, the guidance methods may also be applicable to other regional haze related modeling, including, but not limited to, evaluation of visibility impacts from sources and/or source sectors. *See id.* at 143–145. *https://www3.epa.gov/ttn/scram/guidance/guide/O3-PM-RH-Modeling_Guidance-2018.pdf*. 40 CFR pt. 51, app. Y: IV.D.5 (how to determine visibility impacts from the BART determination); 40 CFR 51.308(e)(3) (use of dispersion modeling for BART alternatives).

[48] Photochemical Air Quality Modeling (*https://www.epa.gov/scram/photochemical-air-quality-modeling*). CAMx is a photochemical grid model, which the EPA describes as follows: Photochemical air quality models have become widely recognized and routinely utilized tools for regulatory analysis and attainment demonstrations by assessing the effectiveness of control strategies. These photochemical models are large-scale air quality models that simulate the changes of pollutant concentrations in the atmosphere using a set of mathematical equations characterizing the chemical and physical processes in the atmosphere. These models are applied at multiple spatial scales, including from local, regional, national and global.

include all emissions sources and have realistic representation of formation, transport, and removal processes of the particulate matter that causes visibility degradation. The use of the CAMx model for analyzing potential cumulative air quality impacts has been well established: The model has been used for previous visibility modeling studies in the U.S., including SIPs.[49] The modeling followed a modeling protocol that was reviewed by the EPA.[50]

The Western Air Quality Study (WAQS)[51] developed and evaluated a photochemical modeling platform for calendar year 2011[52] for use in air quality planning studies in the western U.S. The modeling data sets, called the ''WAQS 2011b platform,'' are available to the public and served as the starting point for the CAMx modeling exercise. The WAQS 2011b modeling included a 2025 future year scenario that was used here to assess visibility impacts from the Baseline, BART Benchmark, and NO_X BART Alternative emissions scenarios.

Because regional haze is affected by natural and anthropogenic emissions from international sources, the WAQS 2011b modeling platform used a series of nested model simulations from the global to the regional scale. Global scale modeling was performed by the National Center for Atmospheric Research (NCAR) using the Model for OZone And Related chemical Tracers (MOZART).[53] The WAQS 2011b used boundary concentrations data from the NCAR MOZART simulation to perform regional scale CAMx simulations using a coarse grid 36x36 km grid resolution for a model domain that included most of North America, a nested 12x12 km grid for a model domain that included all of the western U.S., and a fine scale 4x4 grid for a model domain that included the intermountain west region. The three nested CAMx modeling domains are illustrated in Figure 3.1 of WAQS 2011b model evaluation report.[54]

The PacifiCorp CAMx modeling was based on the WAQS 2011b 4x4 grid modeling domain, but PacifiCorp initially used a smaller modeling domain designed to focus on the nine Class I areas within 300 km of the Hunter and Huntington BART sources that had been used in previous Utah DEQ CALPUFF modeling.[55] In response to comments from the EPA Region 8, PacifiCorp expanded the size of their proposed 4x4 km grid modeling domain to ensure that air parcel trajectories would remain within the model domain as they were transported from the BART sources to the nine Class I areas. The expanded PacifiCorp 4x4 km model domain included 15 Class I areas, as shown in Figure 6 of the Utah DEQ staff report.[56] While some Class I areas are more than 300 km from the BART sources, CAMx is accurate for long range transport and has been used by the EPA for analysis of long range transport of ozone and fine particulates at distances greater than 1,000 km. For completeness, the EPA recommended that PacifiCorp evaluate model results for all 15 Class I areas in the CAMx modeling domain.

The EPA provides guidance for the use of photochemical grid models such as CAMx for evaluating source contributions to regional haze. Because this notice addresses requirements for BART sources as part of the first regional haze planning period, the model results are being evaluated using procedures designed specifically for these requirements as outlined in the RHR and in a EPA Guidance published in 2007.[57] The RHR, 40 CFR 51.308(e)(3), requires that greater reasonable progress demonstrations for BART alternatives be evaluated for the best and worst 20% total haze days, which are selected for Class I areas using data from the IMPROVE monitoring network.[58] The IMPROVE network consists of 110 monitoring sites designed to measure visibility impairment at the 155 mandatory Class I areas. While not all Class I areas have an IMPROVE monitor, the network was designed so that, where needed, measurements of one monitor would be representative of the regional haze conditions at more than one nearby Class I area.[59]

Because models can be subject to bias and error in the simulation of the individual components of $PM_{2.5}$ that contribute to regional haze, the EPA guidance recommends that photochemical model results be used by multiplying the model simulated change in each component of $PM_{2.5}$ by the $PM_{2.5}$ concentration measured by the IMPROVE monitoring network. The EPA has developed software, the Speciated Model Attainment Test (SMAT), that can be used to calculate the model relative response factor (RRF) for each $PM_{2.5}$ species in an emissions control simulation compared to a base case simulation, and to multiply the model RRF by the observed IMPROVE $PM_{2.5}$ concentrations for a five year period at the representative monitor for each Class I area.

As described in the model performance evaluation report for the WAQS 2011b platform, the model generally performed well at most sites in the western U.S. However, CAMx was biased low for ammonia and ammonium nitrate at some sites on the Colorado Plateau, *i.e.,* CAMx predicted lower concentrations of ammonia and ammonium nitrate than were measured at some monitoring sites. Because model predictions for ammonium nitrate at these sites are directly relevant to the comparison of the ammonium nitrate- and ammonium sulfate-related visibility benefits of the BART and BART Alternative scenarios, the EPA recommended that PacifiCorp perform additional model sensitivity simulations and performance evaluation to improve model performance for ammonia and ammonium nitrate on the Colorado Plateau. The EPA recommended that ammonia concentration be increased at the northern boundary of the model domain, located in the Salt Lake City area. Previous winter $PM_{2.5}$ modeling studies performed by Utah DEQ found that winter ammonia emissions were underestimated in the Cache Valley in northern UT, and that model performance for ammonium nitrate improved when ammonia emissions

[49] *See, e.g.,* 84 FR 22711 (May 20, 2019) (Final action for the Laramie River Station in the Regional Haze Plan for Wyoming); 82 FR 46903 (October 10, 2017) (Final action for the Coronado Generating Station in the Regional Haze Plan for Arizona); 81 FR 296 (January 5, 2016) (Final action for Texas and Oklahoma Regional Haze Plans).

[50] *Photochemical Modeling Protocol to Assess Visibility Impacts for PacifiCorp Power Plants Located in Utah.* AECOM Environment, January 2018.

[51] *Memorandum: Recommendations on Use of Intermountain West Data Warehouse for Air Quality 2011b Model Platform.* Intermountain West Data Warehouse—Western Air Quality Study Oversight Committee. July 6, 2016. Available *http://views.cira.colostate.edu/wiki/Attachments/Modeling/IWDW-WAQS_2011b_ModelingPlatform_Release_Memo%20July6_2016final.pdf.*

[52] ''Western Air Quality Modeling Study Photochemical Grid Model Final Model Performance Evaluation'', available in the docket and at: *http://views.cira.colostate.edu/wiki/Attachments/Modeling/WAQS_Base11b_MPE_Final.pdf.*

[53] The MOZART model formulation is described at *https://en.wikipedia.org/wiki/MOZART_.*

[54] *Id.* 56, p. 5.

[55] Model applications using CALPUFF for BART sources typically—but not in all cases—have included Class I areas only up to a distance 300 km because uncertainty in CALPUFF results increases at distances greater than 300 km.

[56] Staff Review, Figure 6, p. 18.

[57] *Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program,* available at: *https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20070601_wehrum_reasonable_progress_goals_reghaze.pdf.*

[58] The IMPROVE monitoring network is described at: *http://vista.cira.colostate.edu/Improve/improve-program/.*

[59] The use of a representative IMPROVE monitor for groups of nearby Class I areas is described at: *http://vista.cira.colostate.edu/Improve/wp-content/uploads/2016/04/Chapter1.pdf.*

were increased so that the model-simulated ammonia matched observed ammonia concentrations. For the sensitivity study, PacifiCorp used the Utah DEQ winter $PM_{2.5}$ model results to define the ammonia concentrations at the northern boundary of the PacifiCorp modeling domain. Additionally, the EPA recommended changes to a model parameter that affects ammonia dry deposition to surfaces.[60]

PacifiCorp adopted both of these recommendations and performed a new base case model simulation and performance evaluation. This resulted in substantial improvements in model performance for ammonia and ammonium nitrate on the Colorado Plateau. Because the new base case model more accurately simulates the observed ammonia and ammonium nitrate concentrations, it is also expected to provide more accurate predictions of the visibility benefits of changes in NO_X emissions for the EPA BART Benchmark and Utah NO_X BART Alternative. These model results are described in Appendix A of the Utah DEQ *Staff Review.* The revised base case model configuration was then used for the 2011 Typical Year model simulation, the 2025 Baseline model simulation, and for the 2025 BART Benchmark and 2025 Utah NO_X BART Alternative model simulations, described below.

Using the WAQS 2011b platform, CAMx was configured to simulate the following modeling scenarios:

- 2011 Typical Year. This 2011 scenario allows for the development of RRFs that are applied to observed concentrations in order to predict future visibility conditions. The Carbon, Hunter and Huntington power plants were modeled at levels representative of the period 2001 to 2003, while all other sources remain at the levels of the 2011 WAQS base year simulation.
- 2025 Baseline. Emissions from Carbon, Hunter and Huntington are identical to the Typical Year modeling Scenario (*i.e.,* 2001–2003). All other emissions sources remain at the levels of the 2025 WAQS future-year simulation.
- BART Benchmark. This 2025 scenario represents the BART Benchmark and simulates the emission control strategy for Hunter and Huntington units required in the 2016 FIP. Specifically, emissions for the four BART units reflect a 30-day rolling average NO_X emission limit of 0.07 lb/MMBtu consistent with the installation and operation of SCR plus upgraded combustion controls. SO_2 emissions for the Hunter and Huntington units reflect representative emissions from 2014–2016 in order to match the BART Alternative scenario. The BART Benchmark scenario also includes the Carbon power plant using the same level of emissions as the Baseline scenario (*i.e.,* 2001–2003). All other emissions sources remain at the levels of the 2025 WAQS future-year simulation.
- Utah NO_X BART Alternative. This 2025 scenario simulates the emission control strategy for Carbon, Hunter and Huntington units required by the BART Alternative SIP as represented in Table 2 above. This scenario simulates representative emissions of NO_X and SO_2 from Hunter and Huntington units during the period 2014 to 2016, which include the emissions controls required under the Alternative (*i.e.,* the upgraded combustion controls). For this scenario, the Carbon power plant emissions were zero since the power plant was decommissioned in April 2015, as required under the Alternative. All other emissions sources remain at the levels of the 2025 WAQS future-year simulation.

All other model inputs, including other regional emissions sources, were held constant for the future-year (Baseline, BART Benchmark, and BART Alternative) scenarios. Thus, any differences in the visibility impacts between the modeled control scenarios and the Baseline, and between the two control scenarios (*i.e.,* BART and the BART Alternative), are attributable solely to differences in the associated emission inputs for the seven PacifiCorp units. The CAMx-modeled concentrations for sulfate, nitrate, and other chemical species were tracked for the Hunter, Huntington, and Carbon power plants using the CAMx Particulate Source Apportionment Technology (PSAT) so that the concentrations and visibility impacts due to the seven PacifiCorp units could be separated out from those due to the total of all other modeled sources. Visibility impacts were assessed at the 15 Class I areas contained inside of the modeling domain.[61] [62]

The visibility impacts derived from the CAMx modeling results are summarized in Tables 4 and 5 of this notice.[63] The tables show the projected contribution to visibility impairment due to emissions from the seven EGUs covered by the Alternative on the 20 percent best days and worst days respectively for the Baseline, the BART Benchmark, and the proposed BART Alternative scenarios at each of the Class I areas analyzed. The last two columns show the predicted visibility benefits from the BART Alternative scenario relative to both the Baseline and the BART Benchmark. At the bottom of each table are the average visibility values from all the Class I areas. Negative values in the last two columns indicate that the BART Alternative has smaller modeled contributions to visibility impairment relative to the Baseline and the BART Benchmark.

Column D in Table 4 shows that emissions from the seven EGUs under the BART Alternative will not result in degradation of visibility on the 20 percent best days compared to the Baseline at any one of the 15 Class I areas. Similarly, Column D in Table 5 shows that, on the 20 percent worst days, visibility impairment is less under the BART Alternative than the Baseline in each of the Class I areas. Based on these results, the State concluded that visibility does not decline at any of the 15 Class I areas and therefore the BART Alternative meets prong 1 of the ''greater reasonable progress using dispersion modeling'' test found in 40 CFR 51.308(e)(3).

The State next made a determination that the BART Alternative meets prong 2 of the ''greater reasonable progress using dispersion modeling'' test found in 40 CFR 51.308(e)(3) by comparing the average difference between the BART Alternative and the BART Benchmark.

[60] In an email dated 9/26/2017, Chris Emery of Ramboll, the developer of the CAMx model, identified an error in the model settings that caused it to overestimate the deposition and removal of gas phase ammonia in the model. The default model configuration included a setting that specified zero surface resistance to ammonia deposition which tends to overestimate ammonia deposition to surfaces and to underestimate the ambient concentrations of ammonia and ammonium nitrate. Mr. Emery recommended changing the model configuration to include surface resistance to ammonia deposition.

[61] *Staff Review,* pp. 17–18. Specifically, see rectangular CAMx modeling domain with 4-kilometer grid resolution in Figure 4–1.

[62] By contrast, in the CALPUFF modeling supporting EPA's 2016 FIP, visibility impacts were assessed for the nine Class I areas within 300 kilometers of the BART units. The rectangular CAMx modeling domain was designed to be large enough to include these nine Class I areas and to include air parcel trajectories from those sources to the Class I areas. In response to EPA Region 8 comments on a draft modeling protocol, the rectangular CAMx model domain was expanded further to the east, north and south to ensure that emissions from the sources would remain within the model domain as they were transported from the sources to the affected Class I areas. For completeness, results for all Class I areas located within the rectangular CAMx domain were included in the analysis.

[63] Staff Review, pp. 16–21.

The last row of column E in Tables 4 and 5 show the average difference in visibility between the BART Alternative and the BART Benchmark for the 20 percent best and worst days respectively. The negative number indicates that the average visibility improvement of the BART Alternative is better than the BART Benchmark in both cases. Relative to the BART Benchmark, the BART Alternative achieves an average visibility improvement of 0.00494 dv across all Class I areas on the 20 percent best days, and of 0.00058 dv on the 20 percent worst days. Therefore, Utah determined that the BART Alternative meets prong 2 of the 40 CFR 51.308(e)(3) test.

Utah noted that the language in 40 CFR 51.308(e)(3)(i) and (ii) indicates allowance of a straight numerical test. The State explained that the regulation does not specify that a minimum difference in deciview between the scenarios must be achieved to determine that a BART Alternative achieves greater reasonable progress. Because the modeling results show that visibility under the BART Alternative does not decline at any of the 15 affected Class I areas compared to the Baseline (prong 1) and will result in improved visibility, on average, across all 15 Class I areas compared to the BART Benchmark (prong 2), Utah asserted that the BART Alternative will achieve greater reasonable progress than the BART Benchmark under the two-prong modeling test in 40 CFR 51.308(e)(3).

TABLE 4—VISIBILITY IMPACTS IN 2025 FOR THE BASELINE, BART BENCHMARK AND BART ALTERNATIVE SCENARIOS ON THE 20 PERCENT BEST DAYS [64]

Class I area	Baseline (dv) [A]	BART Benchmark (dv) [B]	BART alternative (dv) [C]	BART alternative—baseline [D]	BART alternative—BART benchmark [E]
Arches NP	0.10300	0.05607	0.03851	−0.06449	−0.01756
Black Canyon of the Gunnison NM	0.02769	0.01611	0.01162	−0.01607	−0.00449
Bryce Canyon NP	0.00528	0.00254	0.00228	−0.00300	−0.00026
Canyonlands NP	0.10300	0.05607	0.03851	−0.06449	−0.01756
Capitol Reef NP	0.14218	0.07222	0.07140	−0.07078	−0.00082
Flat Tops WA	0.02834	0.01488	0.01115	−0.01719	−0.00373
Grand Canyon NP	0.07136	0.03567	0.03611	−0.03525	0.00044
La Garita WA	0.02769	0.01611	0.01162	−0.01607	−0.00449
Maroon Bells-Snowmass WA	0.02834	0.01488	0.01115	−0.01719	−0.00373
Mesa Verde NP	0.06356	0.03381	0.02749	−0.03607	−0.00632
Mount Zirkel WA	0.04209	0.02060	0.01471	−0.02738	−0.00589
San Pedro Parks WA	0.03627	0.01742	0.01593	−0.02034	−0.00149
Weminuche WA	0.02769	0.01611	0.01162	−0.01607	−0.00449
West Elk WA	0.02834	0.01488	0.01115	−0.01719	−0.00373
Zion NP [1]	0.00612	0.00291	0.00300	−0.00312	0.00009
All Class I area Average	0.04940	0.02602	0.02108	N/A	−0.00494

[1] Results based on incomplete dataset. Zion NP monitor did not meet the 75% data completion SMAT requirement for year 2011.

TABLE 5—VISIBILITY IMPACTS IN 2025 FOR THE BASELINE, BART BENCHMARK, AND BART ALTERNATIVE SCENARIOS ON THE 20 PERCENT WORST DAYS [65]

Class I area	Baseline (dv) [A]	BART Benchmark (dv) [B]	BART alternative (dv) [C]	BART alternative—baseline [D]	BART alternative—BART benchmark [E]
Arches NP	0.25740	0.13780	0.12584	−0.13156	−0.01196
Black Canyon of the Gunnison NM	0.01265	0.00682	0.00540	−0.00725	−0.00142
Bryce Canyon NP	0.04945	0.02184	0.02470	−0.02475	0.00286
Canyonlands NP	0.25740	0.13780	0.12584	−0.13156	−0.01196
Capitol Reef NP	0.26010	0.11672	0.14568	−0.11442	0.02896
Flat Tops WA	0.02703	0.01387	0.01011	−0.01692	−0.00376
Grand Canyon NP	0.00186	0.00089	0.00056	−0.00130	−0.00033
La Garita WA	0.01265	0.00682	0.00540	−0.00725	−0.00142
Maroon Bells-Snowmass WA	0.02703	0.01387	0.01011	−0.01692	−0.00376
Mesa Verde NP	0.06203	0.02524	0.02959	−0.03244	0.00435
Mount Zirkel WA	0.03312	0.01705	0.01198	−0.02114	−0.00507
San Pedro Parks WA	0.00154	0.00074	0.00073	−0.00081	−0.00001
Weminuche WA	0.01265	0.00682	0.00540	−0.00725	−0.00142
West Elk WA	0.02703	0.01387	0.01011	−0.01692	−0.00376
Zion NP [1]	0.00155	0.00051	0.00051	−0.00104	0.00000
All Class I area Average	0.06957	0.03471	0.03413	N/A	−0.00058

[1] Results based on incomplete dataset. Zion NP monitor did not meet the 75% data completion SMAT requirement for year 2011.

6. Requirement That Emission Reductions Take Place During Period of First Long-Term Strategy

Pursuant to 40 CFR 51.308(e)(2)(iii), the State must ensure that all necessary emission reductions take place during the period of the first long-term strategy for regional haze. The RHR further provides that, ''[t]o meet this requirement, the State must provide a detailed description of the . . . alternative measure, including schedules for implementation, the emission reductions required by the program, all necessary administrative and technical procedures for implementing the program, rules for accounting and monitoring emissions, and procedures for enforcement.'' [66]

As noted above, the December 3, 2019 supplement includes revisions to R307–110–17, the State rule that in turn incorporates Section IX, Control Measures for Area and Point Sources, Part H, Emissions Limits, which includes provisions for implementing the Utah NO_X BART Alternative. In addition to the emission limitations for NO_X and PM at Hunter and Huntington [67] and the requirement for shutdown of the Carbon Plant listed in Table 1 above (which the State notes was made enforceable by August 15, 2015), the SIP submission includes compliance dates, operation and maintenance requirements, and MRR requirements. Utah asserts that the alternative measure was fully implemented prior to 2018.

7. Demonstration That Emissions Reductions From Alternative Measure Will Be Surplus

Pursuant to 40 CFR 51.308(e)(2)(iv), the SIP must demonstrate that the emissions reductions resulting from the alternative measure will be surplus to those reductions resulting from measures adopted to meet requirements of the CAA as of the baseline date of the SIP. The baseline date for regional haze SIPs is 2002.[68] Utah developed the 2002 baseline inventory in its 2008 RH SIP for regional modeling, evaluating the impact on Class I areas outside of the Colorado Plateau, and BART as outlined in the EPA Guidance and the BART Guidelines, issued on July 6, 2005. Utah noted that 2002 is the baseline inventory that was used by other states throughout the country when evaluating BART under the provisions of 40 CFR 51.308 and that any measure adopted after 2002 is considered ''surplus'' under 40 CFR 51.308(e)(2)(iv). Utah referenced other EPA actions that are consistent with this interpretation.[69] Utah stated that the BART Benchmark scenario includes measures required before the baseline date of the SIP (*i.e.,* 2002) but does not include later measures that are credited as part of the BART Alternative scenario.

Utah explained that, to address potential concerns with double counting SO_2 emission reductions from the Carbon plant closure under both the 308 and 309 programs, the July 2019 SIP submission includes revisions to the applicability provisions of State Rule State Rule R307–150, Emission Inventories, to prevent double counting. Utah also provided explanation why the emission reductions counted towards the NO_X BART Alternative are surplus to those needed to satisfy the requirements of the SO_2 Backstop Trading Program.[70] The State explained that the WRAP modeling done to support the Utah RH backstop trading program SIP included regional SO_2 emissions based on the 2018 SO_2 milestone and also included NO_X and PM emissions from the Carbon plant. Actual emissions in the three-state region (Utah, Wyoming, and New Mexico) are calculated each year and compared to the milestones. Utah provided the information in Table 6 below to show that since 2011, SO_2 emissions in the three-state region have been below the 2018 milestone (141,849 tpy). Utah noted that the most recent milestone report for 2016 demonstrates that SO_2 emissions are currently 36 percent lower than the 2018 milestone. Utah stated that the Carbon plant was fully operational in the years 2011–2013 when the 2018 milestone was initially achieved for those years. The State noted that the SO_2 emission reductions from the closure of the Carbon plant are surplus to what is needed to meet the 2018 milestone established in Utah's RH SIP.

TABLE 6—SO_2 MILESTONE TRENDS [71]

Year	Milestone (tpy)	Three-year average SO_2 emissions [1] (tpy)	Carbon plant SO_2 emissions (tpy)
2003	303,264	214,780	5,488
2004	303,264	223,584	5,642
2005	303,264	220,987	5,410
2006	303,264	218,499	6,779
2007	303,264	203,569	6,511
2008	269,083	186,837	5,057
2009	234,903	165,633	5,494
2010	200,722	146,808	7,462
2011	200,722	130,935	7,740
2012	200,722	115,115	8,307
2013	185,795	105,084	7,702
2014	170,868	96,302	9,241
2015	155,940	91,310	2,816
2016	155,940	90,591	0
2017	155,940	.....	.....
2018	141,849	.....	.....

[1] The three-year average is based on the emissions averaged for the current and two preceding years.

[64] *Staff Review,* Table 4, p. 19.

[65] *Staff Review,* Table 5, p. 20.

[66] 40 CFR 51.308(e)(2)(iii).

[67] EPA previously approved the BART PM emission limits in our July 2016 final rule. 81 FR 43894 (July 5, 2016).

[68] See Memorandum from Lydia Wegman and Peter Tsirigotis, *2002 Base Year Emission Inventory SIP Planning: 8-hr Ozone, $PM_{2.5}$, and Regional Haze Programs* (Nov. 18, 2002), available at *https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20021118_wegman_2002_base_year_emission_sip_planning.pdf.*

[69] *E.g.,* 79 FR 33438, 33441–33442 (June 11, 2014); 79 FR 56322, 56328 (Sept. 9, 2014).

[70] *Staff Review* at 23–25.

For Hunter Unit 3, Utah also explained that PacifiCorp upgraded the LNB controls in 2008 and that the upgrade was not required under any applicable requirements of the CAA as of the 2002 baseline date of the SIP; the emission reductions from the upgrade are therefore considered surplus and creditable for the BART Alternative under 40 CFR 51.308(e)(2)(iv). Utah noted that prior to the 2008 upgrade, the emission rate for Hunter Unit 3 was 0.46 lb/MMBtu on a 30-day rolling average as required by Phase II of the Acid Rain Program.[72]

To address potential concerns that Utah would be double counting SO_2 emissions reductions for the Carbon plant closure under both the 40 CFR 51.308 and 309 programs, the July 2019 SIP revisions require that the State continue to report the historical emissions for the Carbon plant in the annual milestone reports. Specifically, revisions to the applicability provisions of State rule R307–150 (''Emission Inventories Program'') require that Utah include emissions of 8,005 tons/yr[73] of SO_2 for the Carbon Power Plant in the annual milestone reports.

C. Monitoring, Recordkeeping and Reporting

To address EPA's partial disapproval of the 2011 Utah RH SIP for lack of enforceable measures and MRR requirements,[74] in 2015 Utah added two new subsections to SIP Sections IX, H.21 (General Requirements: Control Measures for Area and Point Sources, Emission Limits and Operating Practices, Regional Haze Requirements) and H.22 (Source Specific Emission Limitations: Regional Haze Requirements, Best Available Retrofit Technology).

Specifically, to remedy the SIP's lack of provisions for ensuring that emission limits are practically enforceable, under H.21 Utah added a new definition for boiler operating day. Utah noted that state rules R307–107–1 and R307–107–2 (applicability, timing, and reporting of breakdowns) apply to sources subject to regional haze requirements under H.22. Utah required that information used to determine compliance shall be recorded for all periods when the source is in operation, and that such records shall be kept for a minimum of five years. Under H.21, Utah specified that emission limitations listed in H.22 shall apply at all times and identified stack testing requirements to show compliance with those emission limitations. Finally, H.21 also specifies the requirements for continuous emission monitoring by listing the requirements and cross-referencing the State's rule for continuous emission monitoring system requirements, R307–170, as well as 40 CFR 13[75] and 40 CFR 60, appendix B—Performance Specifications. Utah included the requirements to calculate hourly average NO_X concentrations for any hour in which fuel is combusted and a new 30-day rolling average emission rate at the end of each boiler operating day. Utah also noted that the hourly average NO_X emission rate is valid only if the minimum number of data points specified in R307–170 is acquired for both the pollutant concentration monitor and diluent monitor.

Under H.22, Utah provided the emission limitations associated with the NO_X BART Alternative and PM BART for Hunter Units 1 through 3 and Huntington Units 1 and 2, a requirement to perform annual stack testing for PM, and a requirement to measure NO_X via continuous emission monitoring for the sources covered under the Utah NO_X BART Alternative. Under H.22, Utah also listed the enforceable conditions related to closing Carbon Units 1 and 2 by August 15, 2015, including PacifiCorp's and Utah's notification and permit rescission obligations.

In our 2016 final rule, EPA approved subsection H.21 and H.22 as they pertain to PM BART, including conditional approval of the reporting requirements. We did not act on the elements of those subsections relating to the NO_X BART Alternative, as EPA disapproved the Alternative in that action. Utah resubmitted subsections H.21 and H.22 as part of their July 3, 2019 SIP submittal. In its December 3, 2019 supplemental submission, to address the issue implicated in the conditional approval, under H.21(e) Utah required each source to submit a report of any deviation from applicable emission limits and operating practices, including deviations attributable to upset conditions, the probable cause of such deviations, and any corrective actions or preventive measures taken.

D. Consultation With FLMs

Utah's SIP submittals do not specifically discuss how it addressed the requirements of 40 CFR 308(i)(2) for providing the FLMs with an opportunity for consultation at least 60 days prior to holding the public hearing for the July 2019 RH SIP. However, we are aware that Utah consulted with the FLMs as explained in section IV.D, and the relevant exchange is included in the docket for this action.

IV. EPA's Evaluation and Proposed Approval of Utah's Regional Haze SIP

A. Basis for Proposed Approval

For the reasons described below, EPA proposes to approve the Utah 2019 RH SIP revisions. Our proposed action is based on an evaluation of Utah's regional haze SIP submittals against the regional haze requirements at 40 CFR 51.300–51.309 and CAA sections 169A and 169B. The revisions were also evaluated against the general SIP requirements contained in CAA section 110, other provisions of the CAA, and our regulations applicable to this action. The EPA proposes to approve these SIP revisions as meeting the relevant CAA requirements. Where appropriate, we provide additional rationale to supplement to the state's analysis and to support our conclusions below.

B. Demonstration of Greater Reasonable Progress for the Alternative Program

As provided under 40 CFR 51.309(d)(4)(vii), Utah has opted to establish an alternative measure (or program) for NO_X emissions from the four subject-to-BART units in accordance with 40 CFR 51.308(e)(2). A description of the Utah NO_X BART Alternative is provided above in section III.A.1. The RHR requires that a SIP revision establishing a BART alternative meet three key requirements (in addition to other elements in section 308(e)(2)) as listed below. We have evaluated the Utah NO_X BART Alternative with respect to each of these requirements.

- A demonstration that the emissions trading program or other alternative measure will achieve greater reasonable progress than would have resulted from the installation and operation of BART at all sources subject to BART in the

[71] *Staff Review,* p 24.

[72] There is an error on page 25 of the *Staff Review.* The reference to Hunter Unit 2 should be Unit 3 based on the section heading as well as confirmed emission limits in Utah Approval Order DAQE–AN0102370012–08.

[73] Note that this value is based on the 2012–2013 actual annual average SO_2 emissions for the Carbon power plant as used in Utah's June 4, 2015 SIP submission. By contrast, Utah's July 3, 2019 SIP submission uses a consistent baseline for Hunter, Huntington and Carbon based on actual annual average emissions from 2001–2003 when the SO_2 emissions for Carbon were 5,814 tons/year. That is, the revisions to the SO_2 milestone reporting requirements attribute a greater amount of tons of SO_2 to the Carbon plant than the State assumed will be reduced from the plant's retirement, for purposes of making the demonstration that the BART Alternative achieves greater reasonable progress than BART. As such, Utah's analysis of its compliance with the SO_2 milestone as well as its demonstration of greater reasonable progress for the BART Alternative are both conservative.

[74] 77 FR 28825, 28842 (May 16, 2012).

[75] This appears to be a typo, and the correct reference should be to 40 CFR 60.13.

State and covered by the alternative program.[76]

- A requirement that all necessary emissions reductions take place during the period of the first long-term strategy for regional haze.[77]
- A demonstration that the emissions reductions resulting from the alternative measure will be surplus to those reductions resulting from measures adopted to meet requirements of the CAA as of the baseline date of the SIP.[78]

As discussed above in section II.C, pursuant to 40 CFR 51.308(e)(2)(i), Utah must demonstrate that the alternative measure will achieve greater reasonable progress than would have resulted from the installation and operation of BART at all sources subject to BART in the State and covered by the alternative program. This demonstration has five parts, each of which is addressed in the July 2019 SIP submittal, including the *Staff Review* support document.

1. List of All BART-Eligible Sources Within the State

As discussed above in section III.B.1, Utah included a list of all BART-eligible sources:

- PacifiCorp Hunter, Unit 1
- PacifiCorp Hunter, Unit 2
- PacifiCorp, Huntington, Unit 1
- PacifiCorp, Huntington, Unit 2

EPA previously approved Utah's BART eligibility determinations in our 2012 rulemaking,[79] and we are now proposing that this same list satisfies the requirements of 40 CFR 51.308(e)(2)(i)(A).

2. List of All BART-Eligible Sources and All BART Source Categories Covered by the Alternative Program

As discussed above in section III.B.2, the Utah NO_X BART Alternative covers all of the BART-eligible sources in the State, Hunter Units 1 and 2 and Huntington Units 1 and 2, in addition to three non-BART units, PacifiCorp's Hunter Unit 3 and Carbon Units 1 and 2. We propose that Utah has satisfied the requirement of 40 CFR 51.308(e)(2)(i)(B).

3. Analysis of BART and Associated Emission Reductions

As noted above in section III.B.3, in the July 2019 Utah RH SIP submittal, the State compared the Utah NO_X BART Alternative to a BART Benchmark that included the most stringent NO_X BART controls, SCR plus upgraded combustion controls, at the four BART units. While the State explicitly noted that it was not determining that SCR plus upgraded combustion controls would constitute source-specific BART at the four subject-to-BART units, it explained that this technology ''can be used as a stringent benchmark for comparison with an alternative program'' and it is ''a conservative approach.'' [80] We are proposing to find that this is a reasonable approach to setting the BART Benchmark for purposes of comparison to a BART alternative program, and is consistent with the streamlined approach described in Step 1 of the BART Guidelines. The BART Guidelines note that a comprehensive BART analysis can be forgone if a source adopts the most stringent controls available for the purpose of implementing BART.[81] Moreover, when EPA established NO_X BART in our 2016 FIP, we also selected SCR plus upgraded combustion controls (with an emission limit of 0.07 lb/MMBtu as a 30-day rolling average), which further reinforces the reasonableness of Utah's decision to treat the most stringent controls as the BART Benchmark.

Utah then used modeling projections for the year 2025 to determine the associated emission reductions that would result under the BART Benchmark. These results are provided above in Table 2 of this notice. The EPA proposes to find that the methodology Utah used to develop the projection of emissions under the BART Benchmark is reasonable because it reflects the most stringent control option.

We propose to find that Utah has met the requirement for an analysis of BART and associated emission reductions achievable at Hunter Units 1 and 2 and Huntington Units 1 and 2 under 40 CFR 51.308(e)(2)(i)(C).

4. Analysis of Projected Emissions Reductions Achievable Through the BART Alternative

Utah's NO_X BART Alternative consists of the following enforceable measures:

- A NO_X emission limit of 0.26 lb/MMBtu (30-day rolling average) each for Hunter Units 1 and 2 and Huntington 1 and 2.
- A NO_X emission limit of 0.34 lb/MMBtu (30-day rolling average) for Hunter Unit 3.
- A requirement to permanently close and cease operation of the Carbon power plant by August 15, 2015.

As discussed above in section III.B.4, a summary of Utah's estimates of emissions for the Utah NO_X BART Alternative and the BART Benchmark is provided above in Table 2. Note that the values in Table 2 differ from the analogous table in our 2016 proposed rule [82] for the following reasons. First, in addition to the BART Benchmark and BART Alternative, the table now includes projections for the Baseline emissions scenario. All three of these projected 2025 scenarios relate to the CAMx modeling used to demonstrate that the BART Alternative will achieve greater progress than BART under the two-prong test of 40 CFR 51.308(e)(3), as discussed in sections III.B.5 and IV.B.5 of this notice. The 2025 Baseline is used in the first prong of the two-prong test to demonstrate that visibility under the BART Alternative does not decline at any of the 15 affected Class I areas. Second, to ensure that the selection of baseline emissions does not bias the determination of whether the BART Alternative achieves greater reasonable progress, the projected emissions for all three 2025 scenarios are calculated from a consistent baseline of 2001–2003 for all BART-eligible and non-BART units covered by the BART Alternative. That is, when establishing emission assumptions for the 2011 Typical Year modeling scenario, annual emission rates for the seven units were set equal to 2001–2003 actual average emissions, and these annual emission rates were then projected to 2025 to reflect the NO_X controls anticipated under each future year scenario. Note that although the 2025 Baseline scenario is a projection of 2025 emissions for all other sources in the modeling domain, the Baseline emissions for the seven units in Table 2 reflect 2001–2003 emissions. This approach was chosen so that the 2025 Baseline reflects emissions at the subject-to-BART units at the Hunter and Hunter power plants prior to the installation of any controls or other measures intended to meet BART requirements. Finally, the 2001–2003 baseline period also aligns with that used by EPA in our evaluation of BART under the FIP in our 2016 final rule.

Relative to the 2025 Baseline, the BART Benchmark and BART Alternative include actual SO_2 reductions from Hunter and Huntington that occurred after the 2001–2003 baseline due to scrubber upgrades. Thus, the CAMx modeling results for the BART Benchmark and BART Alternative shown in Tables 4 and 5 of this notice reflect these SO_2 reductions. The treatment of these SO_2 reductions in the modeling does not affect the determination of greater reasonable

[76] 40 CFR 51.308(e)(2)(i).

[77] 40 CFR 51.308(e)(2)(iii).

[78] 40 CFR 51.308(e)(2)(iv).

[79] 77 FR 74355, 74357 (Dec. 14, 2012).

[80] *Staff Review* at 12.

[81] 40 CFR 51, appendix Y, section IV.D.1.9.

[82] Table 3; 81 FR 2015.

progress under the two-prong test. Under prong 1, while the SO_2 reductions from Hunter and Huntington increase the apparent overall visibility benefit of the BART Alternative relative to the Baseline, there would not be an anticipated decline in visibility relative to the Baseline in the absence of those SO_2 reductions from Hunter and Huntington because the BART Alternative would still result in overall NO_X, SO_2, and PM emissions decreases compared to the Baseline. Under prong 2, because the SO_2 reductions from Hunter and Huntington are equal under the BART Alternative and BART Benchmark, they do not advantage either control scenario. Accordingly, the EPA proposes to find that the methodology Utah used to develop the modeling scenarios, including the projection of emissions under the Utah NO_X BART Alternative, is reasonable and that Utah has met the requirement for an analysis of the projected emissions reductions achievable through the alternative measure under 40 CFR 51.308(e)(2)(i)(D).

5. Determination That the Alternative Achieves Greater Reasonable Progress Than Would Be Achieved Through the Installation and Operation of BART

As discussed above in section III.B.5, Utah used CAMx modeling to assess whether the NO_X BART alternative will achieve greater reasonable progress than the BART Benchmark under the two-prong quantitative test provided for in 40 CFR 51.308(e)(3)(i) and (ii). The CAMx modeling results in Tables 4 and 5 show both prongs of the two-prong test are satisfied: Visibility does not decline in any Class I area under the BART Alternative relative to the Baseline on both the 20% best or 20% worst days, and the average visibility improvement across all affected Class I areas is greater under the BART Alternative than under the BART Benchmark. EPA reviewed the CAMx protocol before the modeling was undertaken. PacifiCorp revised the modeling methods and assumptions to address EPA's concerns. Notably, as discussed above in section III.B.5, PacifiCorp revised the ammonia emission inventory and related input parameters to improve the model's ability to simulate ammonia and ammonium nitrate concentrations on the Colorado Plateau, thus also improving the model's ability to estimate visibility impacts resulting from NO_X emissions. In addition, the analysis was expanded to assess all 15 class I areas in the modeling domain.

As noted above, Utah submitted the same proposed NO_X BART Alternative in its June 2015 submission under the qualitative clear-weight-of-evidence test in 40 CFR 51.308(e)(2)(i)(E). In July 2016, EPA determined that, based on the weight-of-evidence demonstration before us at that time, Utah had not demonstrated that the BART Alternative resulted in greater visibility improvement than would BART. However, as noted by the U.S. Court of Appeals for the Tenth Circuit, under EPA's interpretation of its regulations a state can choose either the quantitative tests (as applicable) in 51.308(e)(3) or the qualitative test in 51.308(e)(2)(i)(E).[83] We believe it follows that a reasonable interpretation of our regulatory scheme allows for a situation in which certain evidence would not be sufficient to make a showing under one ''better-than-BART'' test, but different evidence could support that showing under a separate test. That is, we believe that just because a certain set of evidence failed to show that a BART alternative would achieve greater visibility improvement under the ''clear weight of evidence'' test, that does not necessarily mean that the alternative does not in fact make greater reasonable progress than BART, as demonstrated through dispersion modeling under the two-prong test in section 308(e)(3). Accordingly, we propose to approve Utah's determination that the Utah NO_X BART Alternative would achieve greater reasonable progress than BART under 40 CFR 51.308(e)(3).

6. Requirement That Emission Reductions Take Place During Period of First Long-Term Strategy

As discussed above in section III.B.6, pursuant to 40 CFR 51.308(e)(2)(iii), the State must ensure that all necessary emission reductions take place during the period of the first long-term strategy for regional haze. The RHR further provides that, to meet this requirement, the State must provide a detailed description of the alternative measure, including schedules for implementation, the emission reductions required by the program, all necessary administrative and technical procedures for implementing the program, rules for accounting and monitoring emissions, and procedures for enforcement.[84]

The NO_X controls on which the BART Alternative relies were installed at Hunter and Huntington over a period of years starting in 2006 and finishing in 2014.[85] The associated emissions limits were effective upon installation of the NO_X controls.[86] Carbon shut down in 2015 and its Approval Order has been revoked.[87] Further, as noted above, the Utah SIP submittals include revisions to R307–110–17 and Section IX, Control Measures for Area and Point Sources, Part H, Emissions Limits, which include enforceable provisions for implementing the Utah NO_X BART Alternative. In addition to the emission limitations for NO_X and PM, and the requirement for shutdown of the Carbon plant listed in Table 1 above, the SIP includes compliance dates, operation and maintenance requirements, and monitoring, recordkeeping, and reporting requirements. We propose to find that these provisions meet the requirements of 40 CFR 51.308(e)(2)(iii).

7. Demonstration That Emission Reductions From Alternative Measure Will Be Surplus

As discussed above in section III.B.7, pursuant to 40 CFR 51.308(e)(2)(iv), the SIP must demonstrate that the emissions reductions resulting from the alternative measure will be surplus to those reductions resulting from measures adopted to meet requirements of the CAA as of the baseline date of the SIP. The baseline date for regional haze SIPs is 2002.[88] As discussed in section III.B.7, all of the emission reductions required by the Utah NO_X BART Alternative result from measures applicable to Hunter, Huntington and Carbon that were required pursuant to measures adopted after 2002.

Furthermore, the State's SIP explains that the WRAP modeling for the 2018 Reasonable Progress Goals that was done to support the Utah RH SIP assumed that Carbon would still be operating and emitting SO_2 when it

[83] *WildEarth Guardians* v. *EPA,* 770 F.3d 919, 934 (10th Cir. 2014).

[84] 40 CFR 51.308(e)(2)(iii).

[85] Refer to the Staff Report, Table 6, Implementation Schedule.

[86] Hunter Power Plant Approval Order: Installation of Pollution Control Equipment, Established Plantwide Applicability Limitations and Approval Orders Consolidation, Emery County—CDS A; NSPS; PSD; Title IV; Title V Major; HAPs, March 13, 2018; Huntington Plant Approval Order: Installation of Pollution Control Equipment and Establishing Plant-wide Applicability Limitations, Emery County; CDS A; NSPS (Part 60), PSD, Title IV (Part 72/Acid Rain), Title V (Part 70), Project Number: N010238–0019 (August 6, 2009).

[87] Letter from Utah Department of Environmental Quality, Division of Air Quality, to PacifiCorp, Re: Revocation of Approval Order DAQE–ANO 100810005–08 dated May 16, 2008, Project Number: N10081–0007, January 8, 2016.

[88] See Memorandum from Lydia Wegman and Peter Tsirigotis, 2002 Base Year Emission Inventory SIP Planning: 8-hr Ozone, $PM_{2.5}$, and Regional Haze Programs, November 18, 2002. *https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20021118_wegman_2002_base_year_emission_sip_planning.pdf.*

modeled the 2018 SO_2 milestone; the modeling also included NO_X and PM emissions from the Carbon plant. Thus, WRAP did not rely on post-2002 emission reductions from the Carbon plant in establishing the 2018 SO_2 milestone.

The State's SIP also includes SO_2 trend data that further demonstrate emission reductions from the Carbon plant are most likely not needed for meeting the three-state 2018 milestone of 141,849 tpy. Actual emissions in the three-state region are calculated each year and compared to the milestones. As can be seen in Table 6 above, SO_2 emissions reported each year since 2011 were below the 2018 milestone and the most recent milestone report for 2016 demonstrates that SO_2 emissions are currently 36 percent lower than the 2018 milestone. The Carbon plant was fully operational in the years 2012–2014 when the emissions from the three-state region were below the milestone for those years. In its amendments to the Backstop Trading Program to ensure there would be no double-counting of SO_2 emission reductions from the Carbon plant closure, the State attributed 8,005 tons of SO_2 emissions to the Carbon plant for purposes of demonstrating that even if Carbon continued to emit at that level, the three-state region would still be well below the 2018 Milestone. Therefore, the SO_2 emission reductions from the closure of the Carbon plant are surplus to what is needed to meet the 2018 milestone established in Utah's RH SIP, and can therefore be credited to the Utah NO_X BART Alternative.

As discussed above in section III.B.7, the amendments to the applicability provisions of State rule R307–150–3, Emissions Inventories, Applicability, ensure that there is no double counting SO_2 emissions reductions for the Carbon plant closure under both the 40 CFR 51.308 and 309 programs.

We propose to concur that the reductions from Carbon are surplus and can be considered as part of an alternative strategy under 40 CFR 51.308(e)(2)(iv). We also propose to approve Utah's revision to R307–150–3, amending the SO_2 emissions reported under the milestone, which ensures that these reductions are not double counted.

C. Monitoring, Recordkeeping, and Reporting

EPA has reviewed the MRR measures in Utah's July 3, 2019 SIP submittal, as supplemented on December 3, 2019, which revises Section IX, Part H, of Utah's SIP, and which apply for units subject to the NO_X BART Alternative and PM BART. EPA proposes to approve these measures as meeting the requirements of section 110(a)(2) of the CAA and 40 CFR part 51, subpart K, Source Surveillance, and 40 CFR part 51, appendix V. Generally, these provisions require that SIPs must contain enforceable emission limitations and schedules for compliance, including MRR provisions that allow for the enforcement of those emission limitations. EPA previously approved state rule provisions that Utah has cross-referenced in these new regional haze measures, including terms, conditions and definitions in R307–101–1 (General Requirements—Forward), R307–101–2 General Requirements—Definitions), and R307–170–4 (Continuous Emission Monitoring Program—Definitions), as well as other continuous emission monitoring system (CEMS) requirements referenced in R307–107. These measures contain the requirements that were missing from Utah's prior regional haze submittals [89] and are furthermore consistent with similar MRR requirements that EPA has approved for other states RH SIPs or that we have adopted in federal implementation plans.[90] As described above in section III.C, Utah has provided the emission limitations, MRR requirements for all the units that are part of Utah's BART Alternative for the Hunter, Huntington, and Carbon plants, and we are proposing to approve these provisions as satisfying CAA section 110(a)(2), 40 CFR part 51, subpart K, and 40 CFR part 51, appendix V with regard to MRR requirements to make emission limitations in the SIP practically enforceable.

D. Consultation With FLMs

On December 19, 2018, the State provided the opportunity for the FLMs to review the preliminary draft SIP documents. This was approximately 120 days prior to the public hearing that was held on April 17, 2019, and prior to the public comment period for the proposed SIP revisions submitted to EPA in July 2019, which ran from April 1 through May 15, 2019. The FLMs did not submit comments prior to or during the public comment period. Copies of the correspondence documenting the State's outreach to the FLMs are included in the docket. We propose to find that Utah has met the requirements of 40 CFR 308(i)(2).

[89] 77 FR 74365–74366 (Dec. 14, 2012).

[90] *See, e.g.,* 77 FR 57864 (Sept. 18, 2012); 79 FR 5032 (Jan. 30, 2014).

V. Clean Air Act Section 110(*l*)

Under CAA section 110(*l*), the EPA cannot approve a plan revision ''if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 7501 of this title), or any other applicable requirement of this chapter.'' [91] We propose to find that these revisions satisfy section 110(*l*). The previous sections of the notice explain how the proposed SIP revision and FIP withdrawal will comply with applicable regional haze requirements and general implementation plan requirements such as enforceability. With respect to requirements concerning attainment and reasonable further progress, the Utah Regional Haze SIP, as revised by this action, will allow for greater NO_X emissions at the four subject-to-BART units as compared to the 2016 FIP (which is currently judicially stayed). The change in these emissions compared to the FIP, however, is not anticipated to interfere with any applicable requirements under the CAA. The geographic area where the BART units are located is not part of a nonattainment area for any National Ambient Air Quality Standards (NAAQS). The approved portions of the $PM_{2.5}$ attainment demonstrations and clean data determinations (CDD) for the Salt Lake City, Provo, and Logan, UT–ID nonattainment areas (NAAs) do not rely on the installation of SCR at Hunter or Huntington to achieve attainment of the NAAQS. Similarly, the approved PM_{10} attainment demonstrations for Salt Lake County and Utah County NAAs, and CDD for Ogden City NAA do not rely on the installation of SCR at Hunter or Huntington to achieve attainment of the NAAQS. In addition, there are no other approved attainment demonstrations in other areas of the State or outside of the State that rely on the installation of SCR at Hunter or Huntington to achieve attainment of any of the NAAQS.

[91] Note that ''reasonable further progress'' as used in CAA section 110(*l*) is a reference to that term as defined in section 301(a) (*i.e.,* 42 U.S.C. 7501(a)), and as such means reductions required to attain the National Ambient Air Quality Standards (NAAQS) set for criteria pollutants under CAA section 109. This term as used in section 110(*l*) (and defined in section 301(a)) is *not* synonymous with ''reasonable progress'' as that term is used in the regional haze program. Instead, section 110(*l*) provides that EPA cannot approve plan revisions that interfere with regional haze requirements (including reasonable progress requirements) insofar as they are ''other applicable requirement[s]'' of the Clean Air Act.

VI. The EPA's Proposed Action

A. 2019 Utah Regional Haze SIP Revision

We are proposing to approve these aspects of the 2019 Utah RH SIP revisions:

- NO_X BART Alternative, including NO_X emission reductions from Hunter Units 1, 2, and 3 and Huntington Units 1 and 2, and SO_2, NO_X and PM emission reductions from Carbon Units 1 and 2.
- A NO_X emission limit of 0.26 lb/MMBtu (30-day rolling average) each for Hunter Units 1 and 2 and Huntington 1 and 2.
- A NO_X emission limit of 0.34 lb/MMBtu (30-day rolling average) for Hunter Unit 3.
- A requirement to permanently close and cease operation of the Carbon power plant by August 15, 2015.
- The associated amendments to the SO_2 milestone reporting requirements.
- MRR requirements for units subject to the NO_X BART Alternative and the PM BART emission limits.

We also note that the regulatory text amendments contained in this notice include incorporation of additional parts of SIP section XX (XX.B–C and XX.E–N) and section XXIII, which were not addressed in this proposed action. EPA approved these SIP sections as meeting the requirements of the CAA and applicable regulations in previous actions;[92] however, we inadvertently did not incorporate all approved sections in 40 CFR 52.2320(e). We are remedying this oversight and reorganizing 40 CFR 52.2320(e) to better reflect the structure of Utah's SIP submissions here; however, we are not reopening any of these previously approved SIP sections for comment.

Finally, contingent on our approval of Utah's July 2019 and December 2019 SIP submissions, we propose to find that Utah's SIP fully satisfies the requirements of section 309 of the RHR and therefore the State has fully complied with the requirements for reasonable progress, including BART, for the first implementation period.

B. FIP Withdrawal

Because we are proposing to find that Utah's July 2019 and December 2019 SIP submissions satisfy the NO_X BART and MRR requirements currently addressed by EPA's 2016 FIP, we are also proposing to withdraw in whole the Utah Regional Haze FIP at 40 CFR 52.2336 that imposes NO_X BART requirements on Hunter Units 1 and 2 and Huntington Units 1 and 2.

C. Clean Air Section 110(l)

We are proposing to find that an approval of the 2019 Utah RH SIP revisions and concurrent withdrawal of the corresponding the FIP, as proposed, complies with the CAA's 110(*l*) provisions.

We are requesting comment on the proposed actions in section VI.A–C, *i.e.,* on our proposed approval of Utah's NO_X BART Alternative and of the MRR elements for the units subject the BART Alternative and to PM BART. We are not reopening or requesting comment on any of the previously approved elements of Utah's regional haze SIP, except to the extent expressly reopened in this notice. If we finalize our approval of the July 2019 and December 2019 regional haze SIP submittals, Utah's regional haze SIP for the first implementation period will be fully approved.

VII. Incorporation by Reference

In this document, EPA is proposing to include regulatory text in an EPA final rule that includes incorporation by reference. In accordance with the requirements of 1 CFR 51.5, EPA is proposing to incorporate by reference the SIP amendments described in Sections III.A and VI.A of this preamble and set forth below. The EPA has made, and will continue to make, these materials generally available through *www.regulations.gov* (refer to docket EPA–R08–OAR–2015–0463) and at the EPA Region 8 Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

VIII. Statutory and Executive Order Reviews

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

This action is not a ''significant regulatory action'' under the terms of Executive Order 12866[93] and was therefore not submitted to the Office of Management and Budget (OMB) for review. This proposed rule applies to only 7 units at three facilities in Utah that are individually named in this action. It is therefore not a rule of general applicability.

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

This proposed action does not impose an information collection burden under the provisions of the Paperwork Reduction Act (PRA).[94] A ''collection of information'' under the PRA means ''the obtaining, causing to be obtained, soliciting, or requiring the disclosure to an agency, third parties or the public of information by or for an agency by means of identical questions posed to, or identical reporting, recordkeeping, or disclosure requirements imposed on, ten or more persons, whether such collection of information is mandatory, voluntary, or required to obtain or retain a benefit.''[95] Because this proposed rule revises regional haze requirements reporting requirements for three facilities, the PRA does not apply.

D. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations and small governmental jurisdictions.

For purposes of assessing the impacts of this proposed rule on small entities, small entity is defined as: (1) A small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of this proposed rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This rule does not impose any requirements or create impacts on small entities as no small entities are subject to the requirements of this rule.

[92] 73 FR 16543 (Mar. 28, 2008); 77 FR 74355 (Dec. 14, 2012); 78 FR 4072 (Jan. 18, 2013); 81 FR 43894 (July 5, 2016).

[93] 58 FR 51735, 51738 (October 4, 1993).

[94] 44 U.S.C. 3501 *et seq.*

[95] 5 CFR 1320.3(c) (emphasis added).

E. Unfunded Mandates Reform Act (UMRA)

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, establishes requirements for federal agencies to assess the effects of their regulatory actions on state, local and tribal governments and the private sector. Under section 202 of UMRA, the EPA generally must prepare a written statement, including a cost-benefit analysis, for final rules with ''Federal mandates'' that may result in expenditures to state, local, and tribal governments, in the aggregate, or to the private sector, of $100 million or more (adjusted for inflation) in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of UMRA generally requires the EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 of UMRA do not apply when they are inconsistent with applicable law. Moreover, section 205 of UMRA allows the EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before the EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory actions with significant federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

Under Title II of UMRA, the EPA has determined that this proposed rule does not contain a federal mandate that may result in expenditures that exceed the inflation-adjusted UMRA threshold of $100 million [96] by state, local, or tribal governments or the private sector in any one year. The proposed revisions to the 2014 FIP would reduce private sector expenditures. Additionally, we do not foresee significant costs (if any) for state and local governments. Thus, because the proposed revisions to the 2014 FIP reduce annual expenditures, this proposed rule is not subject to the requirements of sections 202 or 205 of UMRA. This proposed rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments.

F. Executive Order 13132: Federalism

Executive Order 13132, *Federalism,*[97] revokes and replaces Executive Orders 12612 (Federalism) and 12875 (Enhancing the Intergovernmental Partnership). Executive Order 13132 requires the EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' [98] ''Policies that have federalism implications'' is defined in the Executive Order to include regulations that 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.'' [99] Under Executive Order 13132, the EPA may not issue a regulation ''that has federalism implications, that imposes substantial direct compliance costs, . . . and that is not required by statute, unless [the federal government provides the] funds necessary to pay the direct [compliance] costs incurred by the State and local governments,'' or the EPA consults with state and local officials early in the process of developing the final regulation.[100] The EPA also may not issue a regulation that has federalism implications and that preempts state law unless the agency consults with state and local officials early in the process of developing the final regulation.

This action does not have federalism implications. The proposed FIP revisions 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, as specified in Executive Order 13132. Thus, Executive Order 13132 does not apply to this action.

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

Executive Order 13175, entitled ''Consultation and Coordination with Indian Tribal Governments,'' requires the EPA to develop an accountable process to ensure ''meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.'' [101] This proposed 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

This action is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997). The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of ''covered regulatory action'' in section 2–202 of the executive order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

I. Executive Order 13211: Actions Concerning Regulations 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

Section 12 of the National Technology Transfer and Advancement Act (NTTAA) of 1995 requires federal agencies to evaluate existing technical standards when developing a new regulation. Section 12(d) of NTTAA, Public Law 104–113, 12(d) (15 U.S.C. 272 note) directs the EPA to consider and use ''voluntary consensus standards'' in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.,* materials specifications, test methods, sampling procedures and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs the EPA to

[96] Adjusted to 2019 dollars, the UMRA threshold becomes $164 million.

[97] 64 FR 43255, 43255–43257 (August 10, 1999).

[98] 64 FR 43255, 43257.

[99] *Id.*

[100] *Id.*

[101] 65 FR 67249, 67250 (November 9, 2000).

provide Congress, through OMB, explanations when the agency decides not to use available and applicable voluntary consensus standards.

This proposed rulemaking does not involve technical standards. Therefore, EPA is not considering the use of any voluntary consensus standards.

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

Executive Order 12898, establishes federal executive policy on environmental justice.[102] Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority populations and low-income populations in the United States.

I certify that the approaches under this proposed rule will not have potential disproportionately high and adverse human health or environmental effects on minority, low-income or indigenous/tribal populations. As explained previously, the Utah Regional Haze SIP, as revised by this action, will ensure a significant reduction in emissions compared to regional haze baseline levels (2002). In addition, the area where the Hunter, Huntington, and Carbon power plants are located has not been designated nonattainment for any NAAQS. The proposed SIP revisions will not create a disproportionately high and adverse human health or environmental effect on minority, low-income, or indigenous/tribal populations. The EPA, however, will consider any input received during the public comment period regarding environmental justice considerations.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Sulfur oxides.

Dated: January 9, 2020.

Gregory Sopkin,

Regional Administrator, Region 8.

For the reasons set forth in the preamble, 40 CFR part 52 is proposed to be amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

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

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

Subpart TT—Utah

■ 2. Section 52.2320 paragraph (c) is amended as follows:

■ a. Under the heading ''R307–110. General Requirements: State Implementation Plan,'' revise the table entry ''R307–110–17.''

■ b. Under the heading ''R307–110. General Requirements: State Implementation Plan,'' add, in numerical order, the table entry ''R307–110–28.''

■ c. Under the heading ''R307–150. Emission Inventories,'' revise the table entry ''R307–150–3.''

The amendments read as follows:

§ 52.2320 Identification of plan.

* * * * *

(c) * * *

Rule No.	Rule title	State effective date	Final rule citation, date	Comments
*	*	*	*	*
R307–110. General Requirements: State Implementation Plan				
*	*	*	*	*
R307–110–17	Section IX. Control Measures for Area and Point Sources, Part H, Emission Limits.	11/25/2019	[Insert **Federal Register** citation] 1/22/2020.	
*	*	*	*	*
R307–110–28	Section XX. Regional Haze	8/15/2019	[Insert **Federal Register** citation] 1/22/2020.	
*	*	*	*	*
R307–150. Emission Inventories				
*	*	*	*	*
R307–150–3	Applicability	6/25/2019	[Insert **Federal Register** citation] 1/22/2020.	
*	*	*	*	*

■ 3. In § 52.2320 amend paragraph (e) by:

■ a. Under the heading ''IX. Control Measures for Area and Point Sources,'' adding, in numerical order, table entries ''IX.H.21. General Requirements: Control Measures for Area and Point Sources, Emission Limits and Operating Practices, Regional Haze Requirements,'' and ''IX.H.22. Source Specific Emission Limitations: Regional Haze Requirements, Best Available Retrofit Technology.''

■ b. Under the heading ''XVII. Visibility Protection,'' removing the table entries ''Section XX.D.6. Best Available Retrofit Technology (BART) Assessment for

[102] 59 FR 7629 (February 16, 1994).

NO_X and PM,'' and ''Section XX.G. Long-Term Strategy for Fire Programs.''

■ c. Adding a centered heading ''XX. Regional Haze'' after the table entry ''Section XXIII. Interstate Transport.''

■ d. Under the heading ''XX. Regional Haze'' adding the table entries ''Section XX.A. Executive Summary,'' ''Section XX.B. Background on the Regional Haze Rule,'' ''Section XX.C. Long-Term Strategy for the Clean-Air Corridor,'' ''Section XX.D. Long-Term Strategy for Stationary Sources,'' ''Section XX.E. Sulfur Dioxide Milestones and Backstop Trading Program,'' ''Section XX.F. Long-Term Strategy for Mobile Sources,'' ''Section XX.G. Long-Term Strategy for Fire Programs,'' ''Section XX.H. Assessment of Emissions from Paved and Unpaved Road Dust,'' ''Section XX.I. Pollution Prevention and Renewable Energy Programs,'' ''Section XX.J. Other GCVTC Recommendations,'' ''Section XX.K. Projection of Visibility Improvement Anticipated from Long-Term Strategy,'' ''Section XX.L. Periodic Implementation Plan Revisions,'' ''Section XX.M. State Planning/Interstate Coordination and Tribal Implementation,'' and ''Section XX.N. Enforceable Commitments for the Utah Regional Haze SIP.''

The revisions and additions read as follows:

§ 52.2320 Identification of plan.

* * * * *

(e) * * *

Rule title	State effective date	Final rule citation, date	Comments
* * *	*	* * *	*
IX. Control Measures for Area and Point Sources			
* * *	*	* * *	*
IX.H.21. General Requirements: Control Measures for Area and Point Sources, Emission Limits and Operating Practices, Regional Haze Requirements.	11/25/2019	[Insert **Federal Register** citation] 1/22/2020.	
IX.H.22. Source Specific Emission Limitations: Regional Haze Requirements, Best Available Retrofit Technology.	11/25/2019	[Insert **Federal Register** citation] 1/22/2020.	
* * *	*	* * *	*
Section XXIII. Interstate Transport	2/9/2007	73 FR 16543, 3/28/2008	
XX. Regional Haze			
Section XX.A. Executive Summary	8/15/2019	[Insert **Federal Register** citation] 1/22/2020.	
Section XX.B. Background on the Regional Haze Rule	8/15/2019	[Insert **Federal Register** citation] 1/22/2020	
Section XX.C. Long-Term Strategy for the Clean-Air Corridor	8/15/2019	[Insert **Federal Register** citation] 1/22/2020.	
Section XX.D. Long-Term Strategy for Stationary Sources	8/15/2019	[Insert **Federal Register** citation] 1/22/2020.	
Section XX.E. Sulfur Dioxide Milestones and Backstop Trading Program.	8/15/2019	[Insert **Federal Register** citation] 1/22/2020.	
Section XX.F. Long-Term Strategy for Mobile Sources	8/15/2019	[Insert **Federal Register** citation] 1/22/2020.	
Section XX.G. Long-Term Strategy for Fire Programs	4/7/2011	78 FR 4071, 1/18/2013	
Section XX.H. Assessment of Emissions from Paved and Unpaved Road Dust.	8/15/2019	[Insert **Federal Register** citation] 1/22/2020.	
Section XX.I. Pollution Prevention and Renewable Energy Programs.	8/15/2019	[Insert **Federal Register** citation] 1/22/2020.	
Section XX.J. Other GCVTC Recommendations	8/15/2019	[Insert **Federal Register** citation] 1/22/2020.	
Section XX.K. Projection of Visibility Improvement Anticipated from Long-Term Strategy.	8/15/2019	[Insert **Federal Register** citation] 1/22/2020.	
Section XX.L. Periodic Implementation Plan Revisions	8/15/2019	[Insert **Federal Register** citation] 1/22/2020.	
Section XX.M. State Planning/Interstate Coordination and Tribal Implementation.	8/15/2019	[Insert **Federal Register** citation] 1/22/2020.	
Section XX.N. Enforceable Commitments for the Utah Regional Haze SIP.	8/15/2019	[Insert **Federal Register** citation] 1/22/2020.	
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§ 52.2336 [Removed]

■ 4. Remove § 52.2336.

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