rule that has federalism implications if the rule either imposes substantial, direct compliance costs on State and local governments, and is not required by statute, or preempts State law, unless the agency meets the consultation and funding requirements of section 6 of the Executive order. These proposed regulations do not have federalism implications and do not impose substantial, direct compliance costs on State and local governments or preempt State law within the meaning of the Executive order.

VI. Small Business Administration

Pursuant to section 7805(f), this notice of proposed rulemaking has been submitted to the Chief Counsel for the Office of Advocacy of the Small Business Administration for comment on its impact on small business.

Comments and Request for a Public Hearing

Before these proposed regulations are adopted as final regulations, consideration will be given to comments that are submitted timely to the IRS as prescribed in the preamble under the **ADDRESSES** section. The Treasury Department and the IRS request comments on all aspects of the proposed regulations. Any comments submitted will be made available at *https://www.regulations.gov* or upon request. Once submitted to the Federal eRulemaking Portal, comments cannot be edited or withdrawn. A public hearing will be scheduled if requested in writing by any person that timely submits written comments. If a public hearing is scheduled, notice of the date, time, and place for the public hearing will be published in the **Federal Register**.

Statement of Availability of IRS Documents

IRS notices and other guidance cited in this preamble are published in the Internal Revenue Bulletin (or Cumulative Bulletin) and are available from the Superintendent of Documents, U.S. Government Publishing Office, Washington, DC 20402, or by visiting the IRS website at *https://www.irs.gov*.

Drafting Information

The principal authors of these proposed regulations are Jeremy Brown and Benjamin Weaver of the Office of Associate Chief Counsel (Passthroughs, Trusts and Estates). However, other personnel from the Treasury Department and the IRS participated in their development.

List of Subjects in 26 CFR Part 1

Income taxes, Reporting and recordkeeping requirements.

Proposed Amendments to the Regulations

Accordingly, the Treasury Department and IRS propose to amend 26 CFR part 1 as follows:

PART 1—INCOME TAXES

■ **Paragraph 1.** The authority citation for part 1 continues to read in part as follows:

Authority: 26 U.S.C. 7805 * * *

* * * * *

Section 1.6050K–1 also issued under 26 U.S.C. 6050K(a).

* * * * *

■ **Par. 2.** Section 1.6050K–1 is amended by:

■ 1. Adding a heading for paragraph (c);

■ 2. Revising the introductory text of paragraph (c)(1);

■ 3. Revising paragraph (c)(1)(i);

■ 4. Removing paragraph (c)(2) and redesignating paragraph (c)(3) as new paragraph (c)(2); and

■ 5. Revising paragraph (h).

The revisions read as follows:

§ 1.6050K–1 Returns relating to sales or exchanges of certain partnership interests.

* * * * *

(c) *Statement to be furnished to transferor and transferee*—(1) *In general.* Every partnership required to file a return under paragraph (a) of this section must furnish to each person whose name is required to be set forth in such return a written statement on or before January 31 of the calendar year following the calendar year in which the section 751(a) exchange occurred to which the return under paragraph (a) relates (or, if later, 30 days after the partnership is notified of the exchange as defined in paragraph (e) of this section). The partnership must use a copy of the Form 8308, filled out in accordance with the instructions accompanying the form, as a statement unless the Form 8308 contains information with respect to more than one section 751(a) exchange (see paragraph (a)(3) of this section). If the partnership does not use a copy of Form 8308 as a statement, the statement shall include the information required to be shown on Form 8308 with respect to the section 751(a) exchange to which the person to whom the statement is furnished is a party. In addition, it shall state that—

(i) The information shown on the statement will be supplied to the Internal Revenue Service.

* * * * *

(h) *Applicability date.* Paragraphs (c)(1) introductory text and (c)(1)(i) of this section apply to returns filed for taxable years ending on or after [date of publication of final regulations in the **Federal Register**]. Paragraph (c)(2) of this section applies to returns filed on or after November 30, 2020. Paragraph (d)(3) of this section applies to transfers that occur on or after November 30, 2020.

Edward T. Killen,

Acting Chief Tax Compliance Officer.

[FR Doc. 2025–15750 Filed 8–18–25; 8:45 am]

BILLING CODE 4830–01–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R04–OAR–2019–0308; FRL–10404–01–R4]

Air Plan Approval; Tennessee; Second Planning Period Regional Haze Plan

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve a regional haze State Implementation Plan (SIP) revision submitted by the Tennessee Department of Environmental Conservation (TDEC), dated February 23, 2022, as satisfying the applicable requirements under the Clean Air Act (CAA or Act) and EPA's Regional Haze Rule (RHR) for the program's second planning period. Tennessee's SIP submission addresses the requirement that states must periodically revise their long-term strategies for making reasonable progress toward the national goal of preventing any future, and remedying any existing, anthropogenic impairment of visibility, including regional haze, in mandatory Class I Federal areas. The SIP submission also addresses other applicable requirements for the second planning period of the regional haze program. EPA is proposing this action pursuant to sections 110 and 169A of the Act.

DATES: Written comments must be received on or before October 20, 2025.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–R04–OAR–2019–0308, at *https://www.regulations.gov.* Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from *Regulations.gov*. 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. 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 *https://www.epa.gov/dockets/commenting-epa-dockets.*

FOR FURTHER INFORMATION CONTACT: Estelle Bae, Air Permits Section, Air Planning and Implementation Branch, Air and Radiation Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW, Atlanta, Georgia 30303–8960. Ms. Bae can be reached via telephone at (404) 562–9143 or electronic mail at *bae.estelle@epa.gov.*

SUPPLEMENTARY INFORMATION:

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I. What action is EPA proposing?

On February 23, 2022, TDEC submitted a SIP to address regional haze for the second planning period (''Haze Plan'' or ''2022 Plan'').[1] [2] TDEC made the SIP submission to satisfy the requirements of the CAA's regional haze program pursuant to CAA sections 169A and 169B and 40 CFR 51.308. On February 9, 2023, Tennessee also submitted a separate SIP revision to adopt source-specific SO_2 emission limits and compliance parameters into the Tennessee SIP for Eastman (''2023 Plan'').[3] EPA is proposing to approve Tennessee's Haze Plan as satisfying applicable statutory and regulatory requirements for the regional haze second planning period. EPA is also proposing to incorporate by reference into Tennessee's SIP permit conditions included in the 2023 Plan for Eastman.[4] EPA is not proposing to take action to approve or disapprove other portions of the 2023 Plan in this Notice.

II. Background and Requirements for Regional Haze Plans

A detailed history and background of the regional haze program is provided in prior EPA proposal actions.[5] For additional background on the 2017 RHR revisions, please refer to Section III. Overview of Visibility Protection Statutory Authority, Regulation, and Implementation of ''Protection of Visibility: Amendments to Requirements for State Plans'' of the 2017 RHR.[6] The following is an abbreviated history and background of the regional haze program and 2017 RHR as it applies to the current proposed action.

A. Regional Haze Background

In the 1977 CAA Amendments, Congress created a program for protecting visibility in the nation's mandatory Class I Federal areas, which include certain national parks and wilderness areas.[7] *See* CAA section 169A. 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.'' *See* CAA section 169A(a)(1). Regional haze is visibility impairment that is produced by a multitude of anthropogenic sources and activities which are located across a broad geographic area and that emit pollutants that impair visibility. Visibility impairing pollutants include fine and coarse particulate matter (PM) (*e.g.,* sulfates, nitrates, organic carbon, elemental carbon, and soil dust) and their precursors (*e.g.,* sulfur dioxide (SO_2), nitrogen oxides (NO_X), and, in some cases, volatile organic compounds (VOC) and ammonia (NH_3)). Fine particle precursors react in the atmosphere to form fine particulate matter (particles less than or equal to 2.5 micrometers (μm) in diameter, $PM_{2.5}$), which impairs visibility by scattering and absorbing light. Visibility impairment reduces the perception of clarity and color, as well as visible distance.[8]

To address regional haze visibility impairment, the 1999 RHR established an iterative planning process that requires both states in which Class I areas are located and states ''the emissions from which may reasonably be anticipated to cause or contribute to any impairment of visibility'' in a Class

[1] Tennessee's February 23, 2022, SIP submission, is included in the docket for this action.

[2] On December 20, 2024, Tennessee sent EPA a letter requesting that EPA incorporate certain permit conditions applicable for Eastman Chemical Company (Eastman) into Tennessee's SIP to support the State's Haze Plan and to strengthen Tennessee's SIP. This letter, received December 20, 2024, is included in the docket for this proposed action.

[3] Tennessee's February 9, 2023, SIP submission, is included in the docket for this action.

[4] Tennessee submitted the 2023 Plan as an SO_2 attainment demonstration SIP for Sullivan County. On December 20, 2024, Tennessee submitted a letter to EPA stating that Tennessee supports EPA adopting certain permit conditions from the 2023 Plan into Tennessee's SIP to support the Haze Plan and to further strengthen Tennessee's SIP. While EPA is proposing to adopt permit conditions from the 2023 Plan into Tennessee's SIP to strengthen Tennessee's SIP, EPA is not proposing to approve, disapprove, or otherwise take action on the 2023 Plan itself. Whether the 2023 Plan is approvable under the CAA—including the permit conditions included with the 2023 Plan—will be the subject of a separate rulemaking process.

[5] *See* 90 FR 13516 (March 24, 2025).

[6] *See* 82 FR 3078 (January 10, 2017), located at *https://www.federalregister.gov/documents/2017/01/10/2017-00268/protection-of-visibility-amendments-to-requirements-for-State-plans#h-16.*

[7] Areas statutorily 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. *See* CAA section 162(a). There are 156 mandatory Class I areas. The list of areas to which the requirements of the visibility protection program apply is in 40 CFR part 81, subpart D.

[8] There are several ways to measure the amount of visibility impairment, *i.e.,* haze. One such measurement is the deciview, which is the principal metric defined and used by the RHR. Under many circumstances, a change in one deciview will be perceived by the human eye to be the same on both clear and hazy days. The deciview is unitless. It is proportional to the logarithm of the atmospheric extinction of light, which is the perceived dimming of light due to its being scattered and absorbed as it passes through the atmosphere. Atmospheric light extinction (b_{ext}) is a metric used for expressing visibility and is measured in inverse megameters (Mm^{-1}). The formula for the deciview is 10 ln (b_{ext})/10 Mm^{-1}). *See* 40 CFR 51.301.

I area to periodically submit SIP revisions to address such impairment. *See* CAA section 169A(b)(2); [9] *see* also 40 CFR 51.308(b), (f) (establishing submission dates for iterative regional haze SIP revisions); 64 FR 35768 (July 1, 1999).

On January 10, 2017, EPA promulgated revisions to the RHR, (82 FR 3078), that apply for the second and subsequent planning periods. The reasonable progress requirements as revised in the 2017 rulemaking (referred to here as the 2017 RHR Revisions) are codified at 40 CFR 51.308(f).

B. Roles of Agencies in Addressing Regional Haze

Because the air pollutants and pollution affecting visibility in Class I areas can be transported over long distances, successful implementation of the regional haze program requires long-term, regional coordination among multiple jurisdictions and agencies that have responsibility for Class I areas and the emissions that impact visibility in those areas. To address regional haze, states need to develop strategies in coordination with one another, considering the effect of emissions from one jurisdiction on the air quality in another. Five regional planning organizations (RPOs),[10] which include representation from state and Tribal governments, EPA, and FLMs, were developed in the lead-up to the first planning period to address regional haze. RPOs evaluate technical information to better understand how emissions from state and Tribal land impact Class I areas across the country, pursue the development of regional strategies to reduce emissions of PM and other pollutants leading to regional haze, and help states meet the consultation requirements of the RHR.

The Southeastern States Air Resource Managers, Inc. (SESARM), one of the five RPOs described above, is a collaborative effort of state and local agencies and Tribal governments established to initiate and coordinate activities associated with the management of regional haze, visibility, and other air quality issues in the Southeast. SESARM's coalition to conduct regional haze work is referred to as Visibility Improvement State and Tribal Association of the Southeast (VISTAS).[11] The member states, local air agencies, and Tribal governments of VISTAS are Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia; the local air agencies, represented by the President of Metro 4 or designee; [12] and the Tribes located within the VISTAS region, represented by the Eastern Band of the Cherokee Indians. The Federal partner members of VISTAS are EPA, the U.S. National Park Service (NPS), the U.S. Fish and Wildlife Service (FWS), and the U.S. Forest Service (USFS).[13]

III. Requirements for Regional Haze Plans for the Second Planning Period

Under the CAA and EPA's regulations, all 50 states, the District of Columbia, and the U.S. Virgin Islands are required to submit regional haze SIPs satisfying the applicable requirements for the second planning period of the regional haze program by July 31, 2021. Each state's SIP must contain an LTS for making reasonable progress toward meeting the national goal of remedying any existing and preventing any future anthropogenic visibility impairment in Class I areas. *See* CAA section 169A(b)(2)(B). To this end, 40 CFR 51.308(f) lays out the process by which states determine what constitutes their LTSs, with the order of the requirements in 40 CFR 51.308(f)(1) through (f)(3) generally mirroring the order of the steps in the reasonable progress analysis [14] and (f)(4) through (f)(6) containing additional related requirements. Broadly speaking, a state first must identify the Class I areas within the state and determine the Class I areas outside the state in which visibility may be affected by emissions from the state. These are the Class I areas that must be addressed in the state's LTS. *See* 40 CFR 51.308(f), (f)(2). For each Class I area within its borders, a state must then calculate the baseline (five-year average period of 2000–2004, current), and natural visibility conditions (*i.e.,* visibility conditions without anthropogenic visibility impairment) for that area, as well as the visibility improvement made to date and the URP. The URP is the linear rate of progress needed to attain natural visibility conditions, assuming a starting point of baseline visibility conditions in 2004 and ending with natural conditions in 2064. This linear interpolation is used as a tracking metric to help states assess the amount of progress they are making towards the national visibility goal over time in each Class I area. *See* 40 CFR 51.308(f)(1). Each state having a Class I area and/or emissions that may affect visibility in a Class I area must then develop an LTS that includes the enforceable emission limitations, compliance schedules, and other measures that are necessary to make reasonable progress in such areas. A reasonable progress determination is based on applying the four factors in CAA section 169A(g)(1) to sources of visibility impairing pollutants that the state has selected to assess for controls for the second planning period.

Additionally, as further explained below, the RHR at 40 CFR 51.3108(f)(2)(iv) separately provides five ''additional factors'' [15] that states must consider in developing their LTSs. *See* 40 CFR 51.308(f)(2). A state evaluates potential emission reduction measures for those selected sources and determines which are necessary to make reasonable progress. Those measures are then incorporated into the state's LTS. After a state has developed its LTS, it then establishes RPGs for each Class I area within its borders by modeling the visibility impacts of all reasonable progress controls at the end of the second planning period, *i.e.,* in 2028, as well as the impacts of other requirements of the CAA. The RPGs include reasonable progress controls not only for sources in the state in which the Class I area is located, but also for sources in other states that contribute to visibility impairment in that area. The RPGs are then compared to the baseline visibility conditions and the URP to ensure that progress is being made towards the statutory goal of preventing any future and remedying any existing anthropogenic visibility impairment in Class I areas. *See* 40 CFR 51.308(f)(2) and (3). There are additional requirements in the rule, including FLM consultation, that apply to all visibility protection SIPs and SIP revisions. *See e.g.,* 40 CFR 51.308(i).

[9] The RHR expresses the statutory requirement for states to submit plans addressing out-of-state Class I areas by providing that states must address visibility impairment ''in each mandatory Class I Federal area located outside the State that may be affected by emissions from within the State.'' *See* 40 CFR 51.308(d), (f).

[10] RPOs are sometimes also referred to as ''multi-jurisdictional organizations,'' or MJOs.

[11] The technical analyses for the development of the Haze Plan were conducted by VISTAS under SESARM and they are available at this website: *https://www.metro4-sesarm.org/content/vistas-regional-haze-program.*

[12] Metro 4 is a Tennessee corporation which represents the local air pollution control agencies in EPA's Region 4 in the Southeast. *See https://www.metro4-sesarm.org/content/metro-4-about-us.*

[13] The NPS, FWS, and USFS are collectively referred to as the ''Federal Land Managers'' or ''FLMs'' throughout this document.

[14] EPA explained in the 2017 RHR Revisions that the Agency was adopting new regulatory language in 40 CFR 51.308(f) that, unlike the structure in 51.308(d), ''tracked the actual planning sequence.'' *See* 82 FR 3091, (January 10, 2017).

[15] The five ''additional factors'' for consideration in 40 CFR 51.308(f)(2)(iv) are distinct from the four factors listed in CAA section 169A(g)(1) and 40 CFR 51.308(f)(2)(i) that states must consider and apply to sources in determining reasonable progress.

A. Long-Term Strategy (LTS) for Regional Haze

While states have discretion to choose any source selection methodology that is reasonable, whatever choices they make should be reasonably explained. To this end, 40 CFR 51.308(f)(2)(i) requires that a state's SIP submission include ''a description of the criteria it used to determine which sources or groups of sources it evaluated.'' The technical basis for source selection, which may include methods for quantifying potential visibility impacts such as emissions divided by distance metrics, trajectory analyses, residence time analyses, and/or photochemical modeling, must also be appropriately documented, as required by 40 CFR 51.308(f)(2)(iii).

Once a state has selected the set of sources, the next step is to determine the emissions reduction measures for those sources that are necessary to make reasonable progress for the second planning period.[16] This is accomplished by considering the four factors—''the costs of compliance, the time necessary for compliance, and the energy and nonair quality environmental impacts of compliance, and the remaining useful life of any existing source subject to such requirements.'' *See* CAA section 169A(g)(1). EPA has explained that the four-factor analysis (FFA) is an assessment of potential emission reduction measures (*i.e.,* control options) for sources; ''use of the terms 'compliance' and 'subject to such requirements' in CAA section 169A(g)(1) strongly indicates that Congress intended the relevant determination to be the requirements with which sources would have to comply in order to satisfy the CAA's reasonable progress mandate.'' *See* 82 FR 3091. Thus, for each source a state has selected for an FFA,[17] it must consider a ''meaningful set'' of technically feasible control options for reducing emissions of visibility impairing pollutants. *Id.* at 3088.

EPA has also explained that, in addition to the four statutory factors, states have flexibility under the CAA and RHR to reasonably consider visibility benefits as an additional factor alongside the four statutory factors.[18] Ultimately, while states have discretion to reasonably weigh the factors and to determine what level of control is needed, 40 CFR 51.308(f)(2)(i) provides that a state ''must include in its implementation plan a description of how the four factors were taken into consideration in selecting the measure for inclusion in its long-term strategy.''

As explained above, 40 CFR 51.308(f)(2)(i) requires states to determine the emission reduction measures for sources that are necessary to make reasonable progress by considering the four factors. Pursuant to 40 CFR 51.308(f)(2), measures that are necessary to make reasonable progress toward the national visibility goal must be included in a state's LTS and in its SIP. If the outcome of an FFA is that an emissions reduction measure is necessary to make reasonable progress towards remedying existing or preventing future anthropogenic visibility impairment, that measure must be included in the SIP.

The characterization of information on each of the factors is also subject to the documentation requirement in 40 CFR 51.308(f)(2)(iii). The reasonable progress analysis is a technically complex exercise, but also a flexible one that provides states with bounded discretion to design and implement approaches appropriate to their circumstances. Given this flexibility, 40 CFR 51.308(f)(2)(iii) plays an important function in requiring a state to document the technical basis for its decision making so that the public and EPA can comprehend and evaluate the information and analysis the state relied upon to determine what emission reduction measures must be in place to make reasonable progress.

The technical documentation must include the modeling, monitoring, cost, engineering, and emissions information on which the state relied to determine the measures necessary to make reasonable progress. Additionally, the RHR at 40 CFR 51.3108(f)(2)(iv) separately provides five ''additional factors'' [19] that states must consider in developing their LTSs: (1) emission reductions due to ongoing air pollution control programs, including measures to address reasonably attributable visibility impairment; (2) measures to reduce the impacts of construction activities; (3) source retirement and replacement schedules; (4) basic smoke management practices for prescribed fire used for agricultural and wildland vegetation management purposes and smoke management programs; and (5) the anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the LTS.

Because the air pollution that causes regional haze crosses state boundaries, 40 CFR 51.308(f)(2)(ii) requires a state to consult with other states that also have emissions that are reasonably anticipated to contribute to visibility impairment in a given Class I area. If a state, pursuant to consultation, agrees that certain measures (*e.g.,* a certain emission limitation) are necessary to make reasonable progress at a Class I area, it must include those measures in its SIP. *See* 40 CFR 51.308(f)(2)(ii)(A). Additionally, the RHR requires that states that contribute to visibility impairment at the same Class I area consider the emission reduction measures the other contributing states have identified as being necessary to make reasonable progress for their own sources. *See* 40 CFR 51.308(f)(2)(ii)(B). If a state has been asked to consider or adopt certain emission reduction measures, but ultimately determines those measures are not necessary to make reasonable progress, that state must document in its SIP the actions taken to resolve the disagreement. *See* 40 CFR 51.308(f)(2)(ii)(C). Under all circumstances, a state must document in its SIP submission all substantive consultations with other contributing states. *See* 40 CFR 51.308(f)(2)(ii)(C).

B. Reasonable Progress Goals (RPGs)

RPGs ''measure the progress that is projected to be achieved by the control measures states have determined are necessary to make reasonable progress based on a four-factor analysis.'' *See* 82 FR 3091.

For the second planning period, the RPGs are set for 2028. RPGs are not enforceable targets, 40 CFR 51.308(f)(3)(iii). While states are not legally obligated to achieve the visibility conditions described in their RPGs, 40

[16] The CAA provides that, ''[i]n determining reasonable progress there shall be taken into consideration'' the four statutory factors. *See* CAA section 169A(g)(1). However, in addition to FFA for selected sources, groups of sources, or source categories, a state may also consider additional emission reduction measures for inclusion in its LTS, *e.g.,* from other newly adopted, on-the-books, or on-the-way rules and measures for sources not selected for FFA for the second planning period.

[17] ''Each source'' or ''particular source'' is used here as shorthand. While a source-specific analysis is one way of applying the four factors, neither the statute nor the RHR requires states to evaluate individual sources. Rather, states have ''the flexibility to conduct four-factor analyses for specific sources, groups of sources or even entire source categories, depending on state policy preferences and the specific circumstances of each state.'' *See* 82 FR 3088.

[18] *See, e.g.,* Responses to Comments on Protection of Visibility: Amendments to Requirements for State Plans; Proposed Rule (81 FR 26942, May 4, 2016) (December 2016), Docket Number EPA–HQ–OAR–2015–0531, U.S. Environmental Protection Agency at 186, available at *www.regulations.gov.*

[19] The five ''additional factors'' for consideration in 40 CFR 51.308(f)(2)(iv) are distinct from the four factors listed in CAA section 169A(g)(1) and 40 CFR 51.308(f)(2)(i) that states must consider and apply to sources in determining reasonable progress.

CFR 51.308(f)(3)(i) requires that ''[t]he long-term strategy and the reasonable progress goals must provide for an improvement in visibility for the most impaired days since the baseline period and ensure no degradation in visibility for the clearest days since the baseline period.''

RPGs may also serve as a metric for assessing the amount of progress a state is making toward the national visibility goal. To support this approach, the RHR requires states with Class I areas to compare the 2028 RPG for the most impaired days to the corresponding point on the URP line (representing visibility conditions in 2028 if visibility were to improve at a linear rate from conditions in the baseline period of 2000–2004 to natural visibility conditions in 2064). If the most impaired days RPG in 2028 is above the URP (*i.e.,* if visibility conditions are improving more slowly than the rate described by the URP), each state that contributes to visibility impairment in the Class I area must demonstrate, based on the FFA required under 40 CFR 51.308(f)(2)(i), that no additional emission reduction measures would be reasonable to include in its LTS. *See* 40 CFR 51.308(f)(3)(ii). To this end, 40 CFR 51.308(f)(3)(ii) requires that each state contributing to visibility impairment in a Class I area that is projected to improve more slowly than the URP provide ''a robust demonstration, including documenting the criteria used to determine which sources or groups [of] sources were evaluated and how the four factors required by paragraph (f)(2)(i) were taken into consideration in selecting the measures for inclusion in its long-term strategy.''

C. Monitoring Strategy and Other State Implementation Plan Requirements

40 CFR 51.308(f)(6) requires states to have certain strategies and elements in place for assessing and reporting on visibility. Individual requirements under this section apply either to states with Class I areas within their borders, states with no Class I areas but that are reasonably anticipated to cause or contribute to visibility impairment in any Class I area, or both. Compliance with the monitoring strategy requirement may be met through a state's participation in the Interagency Monitoring of Protected Visual Environments (IMPROVE) monitoring network, which is used to measure visibility impairment caused by air pollution at the 156 Class I areas covered by the visibility program. *See* 40 CFR 51.308(f)(6), (f)(6)(i), (f)(6)(iv).

All states' SIPs must provide for procedures by which monitoring data and other information are used to determine the contribution of emissions from within the state to regional haze visibility impairment in affected Class I areas, as well as a statewide inventory documenting such emissions. *See* 40 CFR 51.308(f)(6)(ii), (iii), (v). All states' SIPs must also provide for any other elements, including reporting, recordkeeping, and other measures, that are necessary for states to assess and report on visibility. *See* 40 CFR 51.308(f)(6)(vi).

D. Requirements for Periodic Reports Describing Progress Toward the RPGs

40 CFR 51.308(f)(5) requires a state's regional haze SIP revision to address the requirements of paragraphs 40 CFR 51.308(g)(1) through (5) so that the plan revision due in 2021 will serve also as a progress report addressing the period since submission of the progress report for the first planning period. The regional haze progress report requirement is designed to inform the public and EPA about a state's implementation of its existing LTS and whether such implementation is in fact resulting in the expected visibility improvement. *See* 81 FR 26942, 26950 (May 4, 2016), 82 FR 3119 (January 10, 2017). To this end, every state's implementation plan revision for the second planning period is required to assess changes in visibility conditions and describe the status of implementation of all measures included in the state's LTS, including Best Available Retrofit Technology (BART) and reasonable progress emission reduction measures from the first planning period, and the resulting emissions reductions. *See* 40 CFR 51.308(g)(1) and (2).

E. Requirements for State and Federal Land Manager (FLM) Coordination

CAA section 169A(d) requires that before a state holds a public hearing on a proposed regional haze SIP revision, it must consult with the appropriate FLM or FLMs; pursuant to that consultation, the state must include a summary of the FLMs' conclusions and recommendations in the notice to the public. Consistent with this statutory requirement, the RHR also requires that states ''provide the [FLM] with an opportunity for consultation, in person and at a point early enough in the State's policy analyses of its long-term strategy emission reduction obligation so that information and recommendations provided by the [FLM] can meaningfully inform the State's decisions on the long-term strategy.'' *See* 40 CFR 51.308(i)(2). For EPA to evaluate whether FLM consultation meeting the requirements of the RHR has occurred, the SIP submission should include documentation of the timing and content of such consultation. The SIP revision submitted to EPA must also describe how the state addressed any comments provided by the FLMs. *See* 40 CFR 51.308(i)(3). Finally, a SIP revision must provide procedures for continuing consultation between the state and FLMs regarding the state's visibility protection program, including development and review of SIP revisions, five-year progress reports, and the implementation of other programs having the potential to contribute to impairment of visibility in Class I areas. *See* 40 CFR 51.308(i)(4).

IV. EPA's Evaluation of Tennessee's Regional Haze Submission for the Second Planning Period

On February 23, 2022, TDEC submitted the Haze Plan to address the State's regional haze obligations for the second planning period, which runs through 2028, in accordance with CAA section 169A and the RHR at 40 CFR 51.308(f). In addition, on February 9, 2023, Tennessee submitted the 2023 Plan, which is separate from and not part of Tennessee's regional haze SIP submittal. On December 20, 2024, Tennessee provided a letter to EPA requesting that EPA incorporate specific permit conditions applicable to Eastman from the 2023 Plan into Tennessee's SIP to support the State's Haze Plan and to strengthen Tennessee's SIP.

EPA is proposing to approve the Haze Plan. EPA is further proposing to incorporate into Tennessee's SIP specific permit conditions for Eastman from the 2023 Plan. The following sections contain EPA's evaluation of Tennessee's Haze Plan with respect to the requirements of the CAA and RHR for the second planning period of the regional haze program. Where applicable, permit conditions from the 2023 Plan are discussed as well. Tennessee has two Class I areas, both of which are shared with North Carolina: Great Smoky Mountains National Park (''Great Smoky Mountains''); and Joyce Kilmer–Slickrock National Wilderness Area (''Joyce Kilmer''). The following sections describe Tennessee's Haze Plan, including analyses conducted by VISTAS and Tennessee's determination based on those analyses, Tennessee's assessment of progress made since the first planning period in reducing emissions of visibility impairing pollutants, and the visibility improvement progress at its Class I areas and nearby Class I areas. This document also contains EPA's evaluation of

Tennessee's Haze Plan against the requirements of the CAA and RHR for the second planning period of the regional haze program.

A. Identification of Class I Areas

1. RHR Requirement: Section 169A(b)(2) of the CAA requires each state in which any Class I area is located or ''the emissions from which may reasonably be anticipated to cause or contribute to any impairment of visibility'' in a Class I area to have a plan for making reasonable progress toward the national visibility goal. The RHR implements this statutory requirement at 40 CFR 51.308(f), which provides that each state's plan ''must address regional haze in each mandatory Class I Federal area located within the State and in each mandatory Class I Federal area located outside the State that may be affected by emissions from within the State,'' and 40 CFR 51.308(f)(2), which requires each state's plan to include an LTS that addresses regional haze in such Class I areas. To develop a state's LTS, a state must first determine which Class I areas may be affected by its own emissions. Out-of-state Class I area visibility impacts on a statewide basis are discussed in Section IV.A.2 below and impacts on a source-specific basis are discussed in Section IV.C.2 below.

2. State Assessment: To address CFR 51.308(f), Tennessee identified Class I areas affected by Tennessee's statewide emissions of the visibility impairing pollutants and then consulted with states with Class I areas affected by Tennessee's statewide emissions. Specifically, Tennessee presented the results of Particulate Matter Source Apportionment Technology (PSAT) [20] modeling which VISTAS conducted to estimate the projected impact of statewide SO_2 and NO_X emissions across all emissions sectors in 2028 on total light extinction for the 20 percent most impaired days in all Class I areas in the VISTAS modeling domain.[21] In Table 7–12 of the Haze Plan, TDEC lists the total sulfate plus nitrate contribution from all source sectors in Tennessee to total visibility impairment for the 20 percent most impaired days at Class I areas in the VISTAS modeling domain in Mm^{-1}. Tennessee's top three highest sulfate plus nitrate impairment impacts to out-of-state Class I areas are: Great Smoky Mountains (North Carolina/Tennessee) (1.98 Mm^{-1}), Joyce Kilmer (North Carolina/Tennessee) (1.32 Mm^{-1}), Cohutta National Wilderness Area (''Cohutta'') (Georgia) (1.25 Mm^{-1}).[22]

Based on the VISTAS' Area of Influence (AoI) and PSAT modeling, TDEC consulted with the VISTAS states (*see* Sections 10.1 and 10.2 and Appendix F–1 of the Haze Plan), including Kentucky, Georgia, and North Carolina. TDEC also consulted with the Mid-Atlantic/Northeast Visibility Union (MANE–VU) [23] states (*see* Section 10.3 and Appendices F–2 and F–4 of the Haze Plan), as well as Pennsylvania, Missouri, Indiana, and Ohio (*see* Appendix F–2 of the Haze Plan).

3. EPA Evaluation: EPA proposes to find that Tennessee adequately addressed the elements of 40 CFR 51.308(f) regarding identification of its statewide visibility impacts to Class I areas outside of the State and consultation with states with Class I areas which may reasonably be anticipated to cause or contribute to any impairment of visibility due to Tennessee's emissions. The State's approach of focusing on SO_2 and NO_X impacts from Tennessee is reasonable on the basis that for current visibility conditions evaluated for the 2015–2019 period, ammonium sulfate is the dominant visibility-impairing pollutant at most of the VISTAS Class I areas, including the Great Smoky Mountains, followed by organic carbon and ammonium nitrate (depending on the area).[24] VISTAS focused on controllable emissions from point sources and thus, initially considered impacts from sulfates and nitrates on regional haze at Class I areas affected by VISTAS states. EPA finds that Tennessee adequately identified Class I areas outside of Tennessee that may be affected by emissions from within the State and consulted with affected states because the State analyzed its statewide sulfate and nitrate contributions to total visibility impairment at out-of-state Class I areas in Table 7–12 of the Haze Plan. The State completed consultation with VISTAS via the RPO processes and, in some cases, on a state-to-state basis and documented those consultations.[25]

B. Calculations of Baseline, Current, and Natural Visibility Conditions; Progress to Date; and the URP

1. RHR Requirement: 40 CFR 51.308(f)(1) requires states to determine the following for ''each mandatory Class I Federal area located within the State'': baseline visibility conditions for the most impaired and clearest days, natural visibility conditions for the most impaired and clearest days, progress to date for the most impaired and clearest days, the differences between current visibility conditions and natural visibility conditions, and the URP. This section also provides the option for states to propose adjustments to the URP line for a Class I area to account for visibility impacts from anthropogenic sources outside the United States and/or the impacts from wildland prescribed fires that were conducted for certain, specified objectives. *See* 40 CFR 51.308(f)(1)(vi)(B).

2. State Assessment: In the Haze Plan, Tennessee presents the baseline visibility conditions (2000–2004) in Table 2–3; current visibility conditions (2014–2018) in Table 2–5,[26] and natural visibility conditions in Table 2–2 for the 20 percent clearest days and 20 percent most impaired days in deciviews for VISTAS Class I areas, including in-state Class I areas, as shown in Table 1 below.[27]

[20] PSAT is Particulate Matter Source Apportionment Technology, which is an option in the photochemical visibility impact modeling performed by VISTAS that is a methodology to track the fate of both primary and secondary PM. PSAT allows emissions to be tracked (''tagged'') for individual facilities as well as various combinations of sectors and geographic areas (*e.g.,* by state). The PSAT results provide the modeled contribution of each of the tagged sources or groups of sources to the total visibility impacts.

[21] Tennessee did not include primary PM (directly emitted) data in this analysis because the PSAT analyses performed by VISTAS tagged statewide emissions of SO_2 and NO_X and did not tag primary PM emissions in the analysis after concluding that emissions of the PM precursors SO_2 and NO_X, particularly from point sources, are projected to have the largest impact on visibility impairment in 2028 and that SO_2 and NO_X are the most significant visibility impairing pollutants from controllable anthropogenic sources.

[22] In contrast, Tennessee's sulfate plus nitrate impairment impacts to the State's Class I areas are: 1.98 Mm^{-1} and 1.32 Mm^{-1} for Great Smoky Mountains and Joyce Kilmer, respectively.

[23] MANE–VU was established in 2001 to assist the Mid-Atlantic and Northeast states in planning and developing their regional haze SIP revisions. The MANE–VU states are Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

[24] *See* Figures 2–8 and 2–9 of the Haze Plan for the VISTAS Class I areas. *See* also Sections IV.C.2.a and IV.C.3.a of this document.

[25] *See* Section IV.C.2.e of this notice for additional detail regarding interstate consultations.

[26] The period 2014–2018 represents current visibility conditions for Tennessee because it is the most recent five-year period for which visibility monitoring data was available at the time of SIP development.

[27] Joyce Kilmer has no IMPROVE monitor. Visibility at Joyce Kilmer is assumed to be the same as the nearest Class I area monitor located at Great Smoky Mountains.

TABLE 1—BASELINE, CURRENT, AND NATURAL VISIBILITY CONDITIONS IN TENNESSEE'S CLASS I AREAS IN DECIVIEWS (dv)

Class I area	Baseline 20% clearest days (dv)	Baseline 20% most impaired days (dv)	Current 20% clearest days (dv)	Current 20% most impaired days (dv)	Natural 20% clearest days (dv)	Natural 20% most impaired days (dv)
Great Smoky Mountains	13.58	29.11	8.35	17.21	4.62	10.05
Joyce Kilmer	13.58	29.11	8.35	17.21	4.62	10.05

Tennessee also calculated the actual progress made toward natural visibility conditions since the baseline period (current minus baseline), and the additional progress needed to reach natural visibility conditions from current conditions (natural minus current), in deciviews, as shown in Table 2–6 (for the 20 percent most impaired days) and Table 2–7 (for the 20 percent clearest days) Class I areas, as reproduced in part for Tennessee's in-state Class I areas in Table 2, below.

TABLE 2—ACTUAL PROGRESS FOR VISIBILITY CONDITIONS IN TENNESSEE'S CLASS I AREAS IN DECIVIEWS (dv)

Class I area	Current minus baseline for clearest 20% (dv)	Current minus baseline for most impaired 20% (dv)	Natural minus current for clearest 20% (dv)	Natural minus current for most impaired 20% (dv)
Great Smoky Mountains	−5.23	11.90	3.73	7.16
Joyce Kilmer	−5.23	11.90	3.73	7.16

Additionally, Figure 3–1 of Tennessee's Haze Plan provides the URP on the 20 percent most impaired days for Great Smoky Mountains (which also represents the URP for Joyce Kilmer). The URP was developed using EPA guidance [28] and used data collected from the IMPROVE monitoring network which is used to measure visibility impairment caused by air pollution at the 156 Class I areas covered by the visibility program. All Tennessee Class I areas are projected to be below the 2028 URP value for the second planning period based on modeling done by VISTAS.

3. EPA Evaluation: EPA is proposing to find that Tennessee's Haze Plan meets the requirements of 40 CFR 51.308(f)(1) because the State provided for its two Class I areas: baseline, current, and natural visibility conditions for the 20 percent clearest days and most impaired days; progress to date for the 20 percent clearest days and most impaired days; differences between the current visibility conditions and natural visibility conditions; and the URP for each Class I area in Tennessee.

[28] ''Technical Guidance on Tracking Visibility Progress for the Second Implementation Period of the Regional Haze Program.'' EPA Office of Air Quality Planning and Standards, Research Triangle Park (December 20, 2018), available at: *https://www.epa.gov/sites/default/files/2018-12/documents/technical_guidance_tracking_visibility_progress.pdf* and *https://www.epa.gov/sites/default/files/2020-06/documents/memo_data_for_regional_haze_technical_addendum.pdf.*

C. LTS for Regional Haze

1. RHR Requirement: Each state having a Class I area within its borders or emissions that may affect visibility in a Class I area must develop an LTS for making reasonable progress towards the national visibility goal. *See* CAA section 169A(b)(2)(B). After considering the four statutory factors, all measures that are determined to be necessary to make reasonable progress must be in the LTS. In developing its LTS, a state must also consider the five additional factors in 40 CFR 51.308(f)(2)(iv). As part of its reasonable progress determinations, the state must describe the criteria used to determine which sources or group of sources were evaluated (*i.e.,* subjected to FFA) for the second planning period and how the four factors were taken into consideration in selecting the emission reduction measures for inclusion in the LTS. *See* 40 CFR 51.308(f)(2)(iii).

States may rely on technical information developed by the RPOs of which they are members to select sources for FFAs and to satisfy the documentation requirements under 40 CFR 51.308(f). Where an RPO has performed source selection and/or FFAs (or considered the five additional factors in 40 CFR 51.308(f)(2)(iv)) for its member states, those states may rely on the RPO's analyses for the purpose of satisfying the requirements of 40 CFR 51.308(f)(2)(i) so long as the states have a reasonable basis to do so and all state participants in the RPO process have approved the technical analyses. *See* 40 CFR 51.308(f)(2)(iii). States may also satisfy the requirement of 40 CFR 51.308(f)(2)(ii) to engage in interstate consultation with other states that have emissions that are reasonably anticipated to contribute to visibility impairment in a given Class I area under the auspices of intra- and inter-RPO engagement.

The consultation requirements of 40 CFR 51.308(f)(2)(ii) provide that states must consult with other states that are reasonably anticipated to contribute to visibility impairment in a Class I area to develop coordinated emission management strategies containing the emission reductions measures that are necessary to make reasonable progress. Sections 51.308(f)(2)(ii)(A) and (B) require states to consider the emission reduction measures identified by other states as necessary for reasonable progress and to include agreed upon measures in their SIPs, respectively. Section 51.308(f)(2)(ii)(C) speaks to what happens if states cannot agree on what measures are necessary to make reasonable progress. The documentation requirement of 40 CFR 51.308(f)(2)(iii) provides that states may meet their obligations to document the technical bases on which they are relying to determine the emission reductions measures that are necessary to make reasonable progress through an RPO, as long as the process has been ''approved by all State participants.''

Section 51.308(f)(2)(iii) also requires that the emissions information considered to determine the measures that are necessary to make reasonable progress include information on emissions for the most recent year for which the state has submitted triennial emissions data to EPA (or a more recent

year), with a 12-month exemption period for newly submitted data.

2. State Assessment: To develop Tennessee's LTS, TDEC set criteria to identify sources to evaluate for potential controls using the four factors outlined in Section III.A, selected sources based on those criteria, considered the four factors, provided emissions limits and supporting conditions for adoption into the regulatory portion of the SIP, and evaluated the five additional factors at 40 CFR 51.308(f)(2)(iv).

a. Source Selection Criteria: With respect to 40 CFR 51.308(f)(2)(i), Tennessee, through VISTAS, used a two-step source selection process: (1) AoI analysis, and (2) PSAT [29] modeling for sources exceeding an AoI threshold.[30] Tennessee considered the four statutory factors for sources that exceeded both the AoI and PSAT thresholds. Both sulfates and nitrates were considered in the source selection process. To identify sources having the most impact on visibility at Class I areas for PSAT modeling, Tennessee used an AoI threshold of greater than or equal to three percent for sulfate at any Tennessee Class I area for all sources within the State and three percent for sulfate [31] [32] at any Class I area for all sources outside of the State. The State also ran a similar analysis using sulfate plus nitrate visibility impairment, which did not result in any additional sources being selected for PSAT analysis. Sources that exceeded Tennessee's AoI threshold using point source sulfate impairment are listed in Table 7–17 of the Haze Plan. Of these sources, four sources located within Tennessee exceeded the AoI threshold: Tennessee Valley Authority—Cumberland Fossil Plant (TVA-Cumberland), Eastman, Tennessee Valley Authority—Kingston Fossil Plant (TVA-Kingston), and McGhee Tyson Airport. Tennessee removed McGhee Tyson Airport from the list of sources submitted for PSAT tagging, however, for the reasons discussed in Section 7.6.3 of the State's submittal, including the fact that the vast majority of sulfate and nitrate emissions from this facility are from aircraft that cannot be regulated under the regional haze program.

Tennessee, in coordination with the other VISTAS states, then set a PSAT threshold of greater than or equal to one percent for sulfate and a separate PSAT threshold of greater than or equal to one percent for nitrate, by facility.[33] Sources identified based on the State's PSAT threshold are listed in Tables 7–40, 7–41 and 7–42 of the Haze Plan. Of the nine sources identified, seven sources are located in five other states, and two are located in Tennessee. These nine sources exceeded the State's sulfate PSAT threshold, and none exceeded the State's nitrate PSAT threshold, as discussed in Tables 7–23 through 7–29 of the Haze Plan. Therefore, Tennessee selected two in-state sources, Eastman and TVA-Cumberland, for an SO_2 emissions control analysis.[34] The projected 2028 SO_2 emissions from these two sources are 6,420 tons per year (tpy) and 8,427 tpy, respectively, as described in Table 7–43 of the Haze Plan. No sources modeled for PSAT exceeded the one percent PSAT threshold for nitrates.

Initially, PSAT results for TVA Kingston Fossil Plant (TVA-Kingston) also exceeded the State's one percent PSAT threshold for SO_2, which would have resulted in that source being selected for an SO_2 control FFA. However, Tennessee ultimately did not select TVA-Kingston for an FFA based upon revised emission projections submitted by TVA. Specifically, in a letter dated February 28, 2020, TVA stated that ''SO_2 mass emissions at [TVA-Kingston] are projected to be much lower in 2028 (425 tons) than they have been historically. [TVA-Kingston] is currently TVA's most expensive coal asset to operate. Based on capacity factors, [TVA-Kingston] is considered a 'Base Dispatchable/Intermediate' asset now, but is scheduled to transition to a 'Peaking Economic/Reliability' asset beginning in 2026.'' *See* Haze Plan, Appendix G–1b. TVA thus projected that 2028 SO_2 emissions from this facility would be 435 tpy as compared to the 1,866 tpy 2028 projection used in the initial VISTAS modeling.[35] *Id.* Following this letter, TVA's Chief Operating Officer signed a final record of decision on April 8, 2024, stating that ''[c]ontinued operation of [TVA-Kingston] beyond 2027 would create operational, and therefore reliability risks in TVA's system due to the deteriorating condition of the coal units.'' *See* 89 FR 24557–58 (April 8, 2024). Therefore, in that record of decision, TVA took final agency action to ''replace the retiring nine [TVA-Kingston] coal-fired units by the end of 2027.'' *Id.* at 24559.

TDEC adopted the updated emission projections from TVA's February 28, 2020, letter for use in TDEC's source selection process. Based on these updated emission projections, TDEC linearly scaled the PSAT results for TVA-Kingston (as done for other sources in Section 7.6.2 of the Haze Plan), which resulted in PSAT values of 0.35 percent, 0.40 percent, and 0.41 percent for Cohutta, Great Smoky Mountains, and Joyce Kilmer, respectively. Because these revised emission projections resulted in TVA-Kingston no longer exceeding the State's one percent PSAT source selection threshold, TDEC did not select TVA-Kingston for an FFA.

The Haze Plan discusses in detail the PM species that contribute the most to visibility impairment in Tennessee Class I areas and nearby out-of-state Class I areas. In general, ammonium sulfate continues to be the dominant visibility impairing pollutant at the Tennessee Class I areas during the modeling base period of 2009–2013, on nearly all days, and for the 2014–2018 and 2015–2019 periods.[36] Although ammonium sulfate remains the largest contributor to visibility impairment, TDEC noted that NO_X contributions to visibility impairment have become more significant in recent years on some of the 20 percent most impaired days.

[29] PSAT modeling is a type of photochemical modeling which quantifies individual facility visibility impacts to an area. *See* footnote 20.

[30] The AoI represents the geographical area around a Class I area in which emissions sources located in the AoI have the potential to contribute to visibility impairment visibility at that Class I area. Emissions data from sources in the AoI is then evaluated to determine which of those sources are most likely contributing to visibility impairment visibility at that Class I area. VISTAS used AoI analysis for all point source facilities in the VISTAS modeling domain to determine the relative visibility impairment impacts at each Class I area associated with sulfate and nitrate. The results of the facility-level AoI analyses were then used to rank and prioritize facilities for further evaluation via PSAT.

[31] For identifying sources with the most impact in Class I areas, other VISTAS states used sulfates and nitrates for evaluating against the AoI threshold. However, Tennessee only used sulfates in the AoI selection analysis, stating that the inclusion of NO_X in the AoI selection analysis would not have resulted in any additional facilities tagged for PSAT analysis.

[32] Tennessee conducted a similar analysis using sulfate plus nitrate visibility impairment. This analysis indicated that the inclusion of NO_X in the AoI selection analysis would not have resulted in any additional facilities tagged for PSAT analysis.

[33] In the first planning period, VISTAS states had initially set a greater than or equal to one percent PSAT threshold by emission unit when screening sources for reasonable progress evaluation. For the second planning period, VISTAS states changed the threshold from greater than or equal to one percent PSAT, by emission unit, to greater than or equal to one percent PSAT, by facility. Using a facility basis for emission estimates pulled in more facilities compared to an emission unit basis, resulting in more facilities with smaller visibility impacts being examined compared to the first planning period.

[34] Eastman is a chemical manufacturing facility. TVA-Cumberland is currently permitted as a coal-fired steam electric generating plant.

[35] In this same letter, TVA also projected that TVA-Cumberland's 2028 emissions would be higher than projected by VISTAS.

[36] *See* Section 2.6.2 (particularly Figures 2–4 through 2–6 for the 2009–2013 period and Figures 2–7 through 2–9 for the 2014–2018 period).

Figure 2–8 of the Haze Plan shows that for the VISTAS Class I areas, sulfate continues to be the largest contributor to visibility impairment on the 20 percent worst visibility days. As noted, nitrate contributions at VISTAS Class I areas on the 20 percent most impaired days are generally larger in the more recent 2014–2018 period compared to the 2009–2013 period (*see* Figures 2–5 and 2–8 of the Haze Plan). Within Class I areas affected by emissions from Tennessee, Mammoth Cave (''MACA1'' IMPROVE site) has the highest observed absolute and relative nitrate impairment on the 20 percent most impaired days, at over 22 Mm^{-1} and 30 percent of total visibility impairment.

PSAT results indicate that across Tennessee's Class I areas, sulfate visibility impacts per ton are universally higher than nitrate visibility impacts per ton. In the Haze Plan, including in Table 10–10, TDEC notes that the visibility impacts from sulfate as a function of Mm^{-1} per ton are universally higher than the same for nitrate, indicating that reducing SO_2 emissions has a significantly higher benefit in improving visibility at these Class I areas compared to reducing NO_X emissions. Despite some increase in nitrates, for the reasons discussed, TDEC determined that SO_2 emissions reductions have a significantly higher benefit in improving visibility at Tennessee's Class I areas compared to controlling NO_X emissions. Therefore, TDEC requested that facilities perform an FFA only for SO_2 emissions controls for the second planning period. Because no sources exceeded the State's PSAT threshold for nitrates and because ammonium sulfate continues to be the dominant visibility impairing pollutant at Tennessee's Class I areas (as discussed further below), TDEC focused on evaluating potential SO_2 controls for Eastman and TVA-Cumberland to address regional haze in potentially affected Class I areas for this planning period. TDEC notes in the Haze Plan that it may be appropriate in future period haze plans to evaluate NO_X controls depending on what the future data show.

Figure 7–34 in the Haze Plan shows that projected light extinction in 2028 from total sulfate on the 20 percent most impaired days is significantly larger than light extinction from total nitrate for the Tennessee Class I areas. At Joyce Kilmer, 2028 projected total sulfate and 2028 total nitrate extinction are approximately 41.3 percent (19 Mm^{-1}) for sulfate and less than 7.4 percent (less than 3.4 Mm^{-1}) for nitrate, in comparison to the approximately 46 Mm^{-1} of 2028 total visibility impairment on the 20 percent most impaired days).[37] Also, TDEC states that the majority of model-predicted 2028 nitrate light extinction on the 20 percent most impaired days at Great Smoky Mountains and Joyce Kilmer, respectively, is not caused by NO_X emissions from EGU and non-EGU point sources.[38]

In Section 10.4.1, TDEC reviewed more recent visibility monitoring data for the period 2015–2019 from the IMPROVE monitoring network for Great Smoky Mountains, which also represents Joyce Kilmer. Table 3 below summarizes the percent contribution on the 20 percent most impaired days at Great Smoky Mountains (also Joyce Kilmer), for certain PM species (*i.e.,* ammonium sulfate, ammonium nitrate, and organic carbon) in 2009–2013 versus 2015–2019.[39]

TABLE 3—COMPARISON OF FIVE-YEAR AVERAGE (2009–2013 VS. 2015–2019) PERCENT (%) PARTICLE CONTRIBUTIONS TO LIGHT EXTINCTION FOR 20% MOST IMPAIRED DAYS AT GREAT SMOKY MOUNTAINS *

IMPROVE monitor data for Great Smoky Mountains		
PM species	2009–2013	2015–2019
Ammonium Sulfate (In %)	76.3	54.4
Ammonium Nitrate (In %)	5.2	16.6
Organic Carbon	11.1	17.4

* Monitoring data for Great Smoky Mountains serves as the IMPROVE data for Joyce Kilmer.

Figure 7–34 in the 2022 Plan shows that the majority of 2028 predicted nitrate light extinction on the 20 percent most impaired days at Great Smoky Mountains is not caused by NO_X emissions from EGU and non-EGU point sources.[40] At the Great Smoky Mountains, projected 2028 total sulfate extinction is greater than 19 Mm^{-1} and total projected 2028 total nitrate extinction is less than 3.4 Mm^{-1}.

b. Consideration of the Four CAA Factors: Tennessee considered each of the four CAA factors for Eastman and TVA-Cumberland and described how the four factors (cost of compliance, time necessary for compliance, energy and non-air quality impacts, and remaining useful life) were taken into consideration in selecting measures for inclusion in the State's LTS. The following subsections summarize the State's evaluation of these facilities, as discussed in Section 7.8 of the Haze Plan.

i. Eastman: In a letter dated May 15, 2020, TDEC requested that Eastman confirm that the estimated projected SO_2 emissions for 2028 are reasonable and to use the 2028 projected emissions as the baseline emission level for estimating control effectiveness of each control measure in the cost analyses. The letter also requested that Eastman conduct an FFA evaluating potential emissions controls the Boilers 21–24 and Boiler 30.[41]

Regarding the baseline emissions scenario, Appendix G–2b contains a May 28, 2020, letter from Eastman to TDEC commenting on TDEC's 2028 projected emissions of 6,420 tpy for these affected units at Eastman. Eastman projects 2028 SO_2 emissions could be as high as the highest production year in the past ten years, which was calendar year 2011 for a total of 7,510 tons SO_2 from Boilers 18–24, 30, and 31 combined. In Appendix G–2f, TDEC used an emissions baseline of 7,508 tpy of SO_2 combined for Boilers 18–24, 30,

[37] Percent visibility impairment was calculated using 2028 total visibility impairment on the 20 percent most impaired days at Great Smoky Mountains (46 Mm^{-1}) and Joyce Kilmer (45 Mm^{-1}), based on Table 7–10 of the Haze Plan.

[38] *See* Figures 7–33 and 7–34 of the Haze Plan. Figure 7–34 contrasts 2028 total nitrate visibility impairment on the 20 percent most impaired days at Great Smoky Mountains to the point source nitrate contributions from EGUs and non-EGUs.

[39] The data in Table 3 is derived from Figure 10–1 of the Haze Plan.

[40] Figure 7–33 of the Haze Plan provides the 2028 visibility impairment from nitrate on the 20 percent most impaired days for all 18 Class I Areas in VISTAS. The figure shows the EGU and non-EGU contributions to total nitrate derived light extinction in 2028.

[41] The May 15, 2020, letter is included in Appendix G–2a of the Haze Plan. In response to this letter, Eastman provided the FFA for Boilers 21–24 and 30, as well as notified TDEC about the planned shutdown for Boilers 18–20.

and 31.[42] In addition, Appendix G–2f provides the breakdown baseline SO_2 emissions for each unit: Boiler 18 (443 tpy); Boiler 19 (443 tpy); Boiler 20 (443 tpy); Boiler 21 (670 tpy); Boiler 22 (670 tpy); Boiler 23 (1,745 tpy); Boiler 24 (1,745 tpy); Boiler 30 (1,136 tpy); and Boiler 31 (213 tpy).

The FFA for Eastman focused on Boilers 21, 22, 23, 24, and 30. For Boilers 18–20, TDEC determined the permanent shutdown of these three boilers, no later than December 31, 2028, is necessary for reasonable progress, as contained in Operating Permit 079592. This permit was issued by TDEC on February 9, 2022. The final issued permit for the cessation of Boilers 18–20 is found in Appendix G–2g of the Haze Plan, and Tennessee's Haze Plan requests that EPA incorporate this permit into the State's SIP. On June 6, 2025, TDEC informed EPA that Eastman completed the planned shutdown of Boilers 18, 19, and 20, on February 24, 2025, October 21, 2024, and May 20, 2025, respectively.[43] The cessation of operation of Boilers 18–20 before the end of 2028 results in a projected emissions reduction of 1,329 tpy of SO_2.

For Boilers 23 and 24, Eastman previously committed to installing a permanent dry sorbent injection (DSI) system with an SO_2 removal efficiency of approximately 60 percent no later than November 1, 2021. Installing DSI systems on both Boilers 23 and 24 is expected to reduce 2028 projected emissions by 2,094 tpy SO_2.[44] The FFA evaluated replacing the existing electrostatic precipitators (ESPs) with fabric filters in addition to recently constructed DSI controls,[45] which the source states would allow for improved SO_2 removal efficiency of the DSI. Replacing the existing ESP with fabric filters would allow for increased DSI sorbent use and would remove 1,281 tons of SO_2 per year at a cost of $9,004 per ton of SO_2 removed ($/ton), according to Eastman's calculations, and $8,989 per ton based on TDEC's calculations. TDEC states that the $9,004/ton of SO_2 removed is 98 percent more expensive than the highest-cost control selected for Industrial Boilers that have a heat input greater than 100 MMBtu/hr during the first planning period, as discussed in Table 4 of Appendix G–2f of the Haze Plan.[46] TDEC also notes that the cost of this control for TVA-Cumberland would be 3.8 times higher than the next highest-cost option of $2,386/ton in 2020 dollars for spray dryer absorber (SDA) on a boiler at Tasco Nampa Sugar Company in Idaho.[47] Eastman's FFA also noted that the technical feasibility of this option is currently unknown, and that Eastman estimated the cost-effectiveness assuming that the replacement of the existing ESP with fabric filters and the installation of the permanent DSI control is technically feasible.

Regarding Boiler 30, Tennessee notes that the only feasible control technology Eastman identified to add to the existing current SDA and ESP to control SO_2 emissions would be the replacement of the existing ESP with a fabric filter. Eastman calculated a cost effectiveness of $7,834/ton of SO_2 removed for this control option, assuming the control efficiency is 70 percent for the SDA/ESP option. According to the FFA, the replacement of the ESP with a fabric filter (in conjunction with the SDA) increases the control efficiency to 92 percent. TDEC compared first planning period regional haze control costs in 2020 dollars to the Eastman value of $7,834/ton of SO_2 removed ($7,819/ton according to TDEC's calculations). TDEC states that the Eastman value of $7,834/ton is 72 to 73 percent higher than the highest-cost first planning period control option of $4,537/ton for the addition of a caustic scrubber to the now retired unit at Georgia Pacific Big Island in Virginia and 3.3 times higher than the next highest-cost control option of $2,386/ton for SDA on a boiler at Tasco Nampa Sugar Company in Idaho. Regarding Boiler 31, in the FFA, Tennessee notes that this boiler is equipped with an SDA followed by a fabric filter[48] that achieves a control efficiency of greater than 92 percent. Therefore, Boiler 31 was considered to have existing effective controls and was excluded from the State's FFA analysis.

Regarding Boilers 21 and 22, Tennessee notes that units are currently uncontrolled for SO_2. Additional controls evaluated for these units include: installation of DSI; installation of DSI along with the conversion of the existing ESPs to fabric filters; installation of SDA/fabric filter; and installation of a wet scrubber. The option to install an SDA or wet scrubbers and their associated ancillary equipment were eliminated as they were not technically feasible. In the Haze Plan, Eastman determined that the only possible control technology to improve the PM control capability of Boilers 21 and 22 would be the replacement of the existing ESPs with fabric filters. Eastman calculated a cost effectiveness of $8,725/ton of SO_2 removed based on an average control efficiency of 90 percent for the DSI plus fabric filters control option for Boilers 21 and 22. If Eastman installs only a DSI and achieves 60 percent control efficiency for SO_2, the cost effectiveness becomes $9,070/ton. TDEC compared these cost effectiveness values identified in Eastman's FFA with the BART and reasonable progress control determinations from the first regional haze period valued in 2020 dollars. TDEC noted that $8,725/ton of SO_2 removed is 92 percent higher than the highest option of $4,537/ton for the addition of a caustic scrubber to the now retired unit at Georgia Pacific Big Island in Virginia and 3.7 times higher than the next highest-cost option of $2,386/ton in 2020 dollars for SDA on a boiler at Tasco Nampa Sugar Company in Idaho.[49]

For Boilers 21, 22, 23, 24, and 30, TDEC recalculated the cost of compliance factor to reflect comments received from EPA and NPS during the consultation period prior to the public comment period regarding the interest rate and equipment life. Initially, TDEC used an interest rate of 8.5 percent in each of the above-described calculations. TDEC updated the cost calculations to reflect a 3.25 percent interest rate because this was the current bank prime interest rate at the time of SIP development.[50] TDEC also

[42] *See* Table 1 on p.2 of Appendix G–2f for the baseline SO_2 emissions values by emission unit.

[43] Eastman's shutdown documentation form for each of the Boilers 18, 19, and 20 submitted to TDEC are included in the docket for this proposed action.

[44] *See* Table 5 on p.9 of Appendix G–2f for a list of the SO_2 reductions estimated from the control measures evaluated by unit.

[45] Eastman installed temporary DSI controls on Boilers 23 and 24 on June 1, 2019, as an interim measure to address the measured exceedances of the 1-hr SO_2 NAAQS in 2019. Eastman completed installation of the permanent DSI controls on these units, and the units became fully operational in January 2022.

[46] The highest-cost control option from the VISTAS costs sheets for SO_2 control costs in the first planning period was $4,536.72/ton (rounded to $4,537/ton) for the addition of a caustic scrubber to the now retired unit at Georgia Pacific Big Island in Virginia.

[47] Id.

[48] A fabric filter, sometimes referred to as a baghouse, utilizes fabric filtration to remove particles from the contaminated gas stream by depositing the particles on fabric material. *See https://www.epa.gov/air-emissions-monitoring-knowledge-base/monitoring-control-technique-fabric-filters#:~:text=Description, thepercent20particlespercent20onpercent20fabric percent20material.*

[49] *See* Table 4 (''VISTAS Cost Effectiveness for Industrial Boilers >100 MMBtu/hr (SO_2 Controls Only'')) on pp.7–8 of Appendix G–2f for BART and reasonable progress control determinations from the first regional haze period valued in 2020 dollars.

[50] The Cost Manual advises using the current bank prime interest rate as the default or, in the alternative, using a firm-specific rate that is justified by the source. To identify the current bank prime

Continued

lengthened the fabric filter equipment life from 15 to 20 years in response to EPA and NPS comments. These updated cost calculations using an interest rate of 3.25 percent and a fabric filter equipment life of 20 years were $5,475/ton (Boiler 30), $6,342 (Boilers 21–22), and $6,728/ton (Boilers 23–24). TDEC maintained their conclusion that these cost effectiveness values were not sufficient to justify adopting controls beyond those originally proposed in Eastman's FFA.[51]

TDEC also considered the other statutory factors, in addition to cost, in Appendix G–2f of the Haze Plan. Regarding the time necessary for compliance, TDEC outlines several factors to consider when identifying the time necessary for compliance for the control options evaluated in the Eastman FFA. Upon approval of the Tennessee Haze Plan, TDEC notes that Eastman would need time for design, permitting, procurement, control installation, and startup of any new controls selected. Also, any implementation schedule would need to allow a unit's planned outage to accommodate Eastman's steam demand. TDEC estimates that the control strategies could be implemented within five years of Haze Plan approval or by the 2028 planning milestone (*i.e.,* December 31, 2028, which is the end of the second period).

Regarding the remaining useful life of existing sources, TDEC states that the remaining useful life of the source is presented as 15 years for all control options for the emissions units evaluated. During Tennessee's review, Tennessee updated Eastman's estimate by increasing the fabric filter equipment life from 15 years to 20 years and found that the cost effectiveness did not appreciably change.[52]

No remaining useful life is provided for the shutdown of Boilers 18, 19, and 20 because these boilers were excluded from the FFA due to the planned shutdowns occurring prior to December 31, 2028, which are proposed for adoption into the SIP. Eastman submitted the shutdown documentation to TDEC confirming the shutdown of Boilers 18, 19, and 20, which occurred on February 24, 2025, October 21, 2024, and May 20, 2025, respectively. These three boilers have been replaced with natural gas boilers, which TDEC permitted in Construction Permit No. 979100 (State effective October 5, 2021).[53] Based on information received from Tennessee, the three natural gas boilers have begun operation. When each natural gas boiler begins operation, the coal-fired boiler it replaces is required to cease operation per permit condition G18 in Construction Permit No. 979100.

Regarding energy and non-air related impacts, the primary energy and non-air quality environmental impacts associated with these controls is related to the installation of DSI and fabric filters for Boilers 21 and 22, replacement of the ESPs on Boilers 23 and 24 with fabric filters, and replacement of the ESP on Boiler 30 with a fabric filter. The energy and non-air environmental impacts are the same for each option. Eastman estimates $50,000 per year of parasitic energy cost[54] due to the increased pressure drop associated with a fabric filter. In addition, for each of the three control options evaluated, solid waste generation was not identified as a significant non-air environmental impact. With respect to Boilers 21–22, Eastman's FFA states that total ash loading associated with this option would be expected to increase by about 60 percent. With respect to Boilers 23–24, TDEC's analysis of Eastman's FFA also states that there is likely to be an increase in ash loading, offset by a decrease in trona usage. Although total ash loading associated with this option is also expected to increase by approximately 60 percent, the increased ash capture would be partially offset by decreased reagent (trona) usage, because less sorbent is required if a fabric filter is the primary PM control device. With respect to Boiler 30, the FFA did not identify any changes in ash loading with this option. Although there would presumably be an increase in the amount of ash captured for disposal, the increased ash capture would be offset by decreased reagent (lime) usage because less sorbent is required if a fabric filter is the primary PM control device.

Based on the FFA for Eastman and the letter from TDEC to EPA dated December 20, 2024, TDEC is requesting that EPA incorporate into the regulatory portion of the State's SIP the source-specific SO_2 emission limits contained within Permit Condition 1 of Operating Permit Number 079592 (State effective February 9, 2022), which includes the combined SO_2 limit of 1,396 tons per year for Boilers 23 and 24 that Tennessee determined is necessary for reasonable progress for the Eastman facility.[55] [56] Tennessee is also requesting that EPA incorporate into the regulatory portion of the SIP the shutdown of Boilers 18–20 no later than the end of 2028, as specified in Condition 2 of Permit Number 079592.

ii. TVA-Cumberland: The FFA for TVA-Cumberland focused on Units 1 and 2 at the facility. Regarding baseline emissions used in the FFA cost calculations, TVA-Cumberland relied upon the three-year average of actual emissions from 2017–2019 to estimate 2028 SO_2 emissions for each of the facility's selected emission units. Units 1 and 2 are equipped with a wet FGD system. From 2017 to 2023, Units 1 and 2 had average SO_2 scrubber control efficiencies of 97.4 and 97.0 percent, respectively.[57]

In its FFA, TVA identified four potential control measures to further improve the performance of the existing wet FGD systems, including: (1) increasing the limestone stoichiometric ratio, (2) using performance additives, (3) installing wall rings, and (4) redesigning or replacing spray headers and nozzles. Regarding the baseline emissions scenario, Appendix G–1b contains a February 28, 2020, letter from TVA-Cumberland to TDEC commenting on TDEC's 2028 projected emissions of 8,427 tpy of SO_2 for these affected units at TVA-Cumberland. TVA-Cumberland projects 2028 SO_2 emissions for Units 1 and 2 to be 8,633 tpy. TDEC adopted this higher baseline projected emissions estimate of 8,633 tpy in 2028 for use in this facility's FFA.

The FFA determined that two control options were technically feasible: (1) installation of wall rings, which would remove 719 tons of SO_2 per year at a cost of $2,881/ton of SO_2 reduced; and (2) the redesign/replacement of spray headers which would also remove 719 tons of SO_2 per year at a cost of $5,059/ton of SO_2 reduced. In the Haze Plan, TVA evaluated Units 1 and 2 using an eight percent interest rate and a

interest rate, *see* ''bank prime loan'' rate in the table at: *https://www.federalreserve.gov/releases/h15/.*

[51] *See* Table A2 (''Adjustment of Eastman Control Costs Based on NPS Recommendations (3.25 percent Nominal Interest Rate'') of Appendix A on p. 21 of Appendix G–2f.

[52] The adjusted costs from using a 15-year to 20-year fabric filter equipment life for upgrading the ESP to fabric filters for Boiler 30 installing a DSI and fabric filter for Boilers 21 and 22 and upgrading ESP to fabric filters for Boilers 23 and 24 are included in Tables A1 and A2 of Appendix A of Appendix G–2 of the Haze Plan.

[53] Construction Permit No. 979100 is included in the docket for this proposed action.

[54] Parasitic energy refers to the energy used to power the fans and pumps that transfer heating and cooling from central heating and cooling plants to conditioned spaces.

[55] Additional measures relevant to Eastman's boilers are contained in the 2023 Plan and can be found in the docket for this proposed action. These measures are discussed in Section V of this notice.

[56] Title V Operating Permit 079592 is included in the docket for this proposed action.

[57] *See* Tennessee TVA-Cumberland scrubber efficiency data file that is included in the docket for this action titled ''TN_EGU scrubber efficiency analysis 2017–2023_Propose Rule.

remaining useful life of 10 years.[58] TDEC revised these cost of compliance values using a 3.25 percent interest rate, which resulted in control costs of $2,882/ton (wall rings) and $5,059/ton (spray headers).[59] Tennessee indicates in Appendix G–1g of the Haze Plan that the costs of these control options are above the median cost for other scrubber upgrades identified by VISTAS in the first planning period.

TDEC also included an analysis of the other three factors in Appendix G–1g of the Haze Plan. Regarding the time necessary for compliance, TVA estimates the new controls evaluated (wall rings, spray headers) could be installed within five years of approval of the Tennessee Haze Plan, which would allow time for design, permitting, procurement, installation and startup in addition to the time for Units 1 and 2 to be out of service to be retrofitted with controls. TVA notes that an outage of either Unit 1 or 2 would need to accommodate regional electricity demands and to be coordinated with maintenance shutdowns of other regionally affected utilities. If required, TVA estimates that TVA-Cumberland could comply with a new emissions rate by the end of the second planning period (December 31, 2028).

Regarding the remaining useful life of existing sources, Units 1 and 2 were installed in 1972 and are near the end of their useful lives. TVA's projections do not show these units operating past 2035. As specified in Section 7.2.2 of the Haze Plan, TVA has proposed to retire one unit as early as 2026 but no later than 2030, and the second unit as early as 2028 but no later than 2033.[60] Additionally, Tennessee notes in its submittal that TVA initiated the National Environmental Policy Act (NEPA) planning process for these shutdowns at TVA-Cumberland.[61]

Nonetheless, TDEC did not rely on the projected shutdown of Units 1 and 2 to shorten the remaining useful life factor in the FFA. Instead, TDEC determined that a remaining useful life of less than ten years following the installation of either control option is appropriate because EPA's Cost Control Manual specifies a 30-year lifespan for the scrubbers and the scrubbers were installed in 1995.

The energy and non-air quality environmental impacts of compliance for the wall ring installations and redesign/replacement of spray headers and nozzles evaluated for Units 1 and 2 are the associated pressure drop increase of 0.5 and 0.1 inches of water at full load, respectively. These impacts were included in the operating cost estimate. In addition, both control options increase the annual costs associated with maintenance, repair, and replacement for the flue gas duct work. TDEC included these considerations in the cost analyses for these control options.

Based on TVA-Cumberland's FFA, TDEC determined that no measures are necessary for reasonable progress for this planning period and that no measures need to be adopted into regulatory portion of the SIP for this planning period. This demonstration was made based upon consideration of the following: (1) the source's past implementation of its existing measures and its historical emission rate, (2) the source's projected emissions and emission rate, and (3) any enforceable emissions limits or other requirements related to the source's existing measures.

With respect to the first factor, TDEC evaluated SO_2 emissions and emissions rates and heat input from 1999–2020 for Units 1 and 2 to show trends over time. Figures 1 and 2 and Table 1 of Appendix B within Appendix G–1g show that the emission rates at Units 1 and 2 have declined by about 25 percent since the year 2000 and annual emissions have decreased by about 64 percent due to declining heat input. From 2016 to 2020, the SO_2 emission rate for Boilers 1 and 2 at TVA-Cumberland ranged from 0.130 lb/MMBtu to 0.151 lb/MMBtu.

With respect to the second factor, TDEC considered projected emissions and emission rates for Units 1 and 2 and concluded that the emission rates for these units will not increase in the future. TVA projected 8,633 tons of SO_2 in 2028 compared to 7,847 tons of SO_2 for 2016–2019. TDEC also provided documentation of historical SO_2 emission rates for TVA-Cumberland Units 1 and 2 showing consistency of SO_2 emissions.

With respect to the third factor, TDEC summarized the relevant enforceable emissions limits and other related considerations. TVA-Cumberland's title V permit No. 577855 Condition E3–18[62] currently includes three allowable emission rates for SO_2: (a) Tennessee's SO_2 SIP limit (5.0 lbs/MMBtu, 24-hour average), (b) the BART limit established in 2007 (0.50 lb/MMBtu, 30-day rolling average), and (c) the Mercury and Air Toxics Standards (MATS) limit (0.20 lb/MMBtu, 30-day rolling average). TDEC states that because the SIP limit and BART limit are substantially higher than TVA's MATS limit, they are not germane to reasonable progress in the second planning period. Thus, Tennessee believes that Cumberland's existing MATS limit is representative of the application of existing current measures Units 1 and 2.

c. Documentation of Technical Basis: With respect to emissions information documentation pursuant to 40 CFR 51.308(f)(2)(iii), Section 4 of the Haze Plan explains the State's use of emissions inventories to develop the plan with additional documentation provided in Appendix B. Tennessee, through VISTAS, developed a 2011 statewide base year emissions inventory which was used to project emissions out to 2028, the end of the second planning period (*see* Table 4–2 of the Haze Plan). TDEC also evaluated emissions data from 2017, the year of the most recent triennial emissions data available at the time of the development of the Haze Plan, and compared it to 2018, 2019, and 2028 projected emissions, that were used in the modeling.[63] TDEC also provided annual anthropogenic $PM_{2.5}$, NO_X, and SO_2 emissions data from the 2014 and 2017 National Emissions Inventory (NEI) years for Tennessee in Tables 13–10, 13–11, and 13–12, respectively, of the Haze Plan. In Table 13–13, TDEC evaluated annual SO_2 and NO_X emissions from Tennessee's power plants for the period 2014–2019. The 2028 emissions projections were used to develop the 2028 RPGs for Tennessee's Class I areas. The 2011–2019 statewide emissions inventories and 2028 emissions projections were relied upon to satisfy 40 CFR 51.308(f)(6)(v).

[58] The 10-year equipment life for the FGD upgrades is based the remaining useful life of the FGD system TVA-Cumberland which was installed in 1995 and therefore has been used for approximately 30 years already. EPA's Cost Manual states that FGD systems are estimated to have an equipment life of 30 years. *See https://www.epa.gov/system/files/other-files/2023-01/wetanddryscrubbers_controlcostmanualspreadsheet_January%202023.xlsm.* Thus, any FGD upgrades installed are expected to be in use for approximately 10 years.

[59] *See* Table 18 and Appendix A of Appendix G–1g of the Haze Plan.

[60] Tennessee also considered TVA's notice of intent to prepare an environmental impact assessment, under NEPA, for the retirement of TVA-Cumberland. *See* 86 FR 25933 (May 11, 2021).

[61] After the time of TDEC's submittal, this process concluded in a Record of Decision in which TVA concluded that it would shut down these units. *See* 88 FR 3767 (January 20, 2023).

[62] Title V Operating Permit No. 577855 is included in the docket for this proposed action.

[63] A comparison of emissions between 2017, 2018, 2019, and 2028 emissions data is included in the following tables and figures in the Haze Plan: Table 7–43 (SO_2) and 7–44 (NO_X) for facilities in Tennessee; Tables 13–10 ($PM_{2.5}$), 13–11 (NO_X), 13–12 (SO_2), 13–13 (SO_2 emissions from Tennessee EGU for CAMD 2014–2019); Figures 13–4 (Tennessee CAMD Emissions and Heat Input for 2014–2019) and 13–5 VISTAS CAMD Emissions and Heat Input for 2014–2019.

With respect to modeling information documentation pursuant to 40 CFR 51.308(f)(2)(iii), Sections 5 and 6 of the Haze Plan describe the modeling methods used to develop the plan with additional documentation provided in Appendix E and results of the RPG modeling in Section 8 of the plan. Appendix D contains AoI analysis documentation, and Appendix E contains PSAT analysis documentation. VISTAS used the Comprehensive Air Quality Model with Extensions (CAMx) photochemical model to perform visibility modeling for 2028, the end of the second planning period. The VISTAS regional haze modeling used the annual calendar year 2011 modeling period.

With respect to cost and engineering information documentation pursuant to 40 CFR 51.308(f)(2)(iii), Section 7.8 of the Haze Plan details the State's analysis of proposed FFAs for Eastman and TVA-Cumberland located in Appendix G which evaluated the four factors, including the cost of compliance factor, and provided detailed cost calculations for potential new control measures assessed as part of the engineering analyses.

With respect to monitoring information documentation pursuant to 40 CFR 51.308(f)(2)(iii), the State assessed baseline (2000–2004), current (2014–2018), and natural visibility conditions for Tennessee's Class I areas in Section 2 of the Tennessee's Haze Plan with supporting information located in Appendix C. In particular, Table 2–2 provides natural visibility conditions for the VISTAS Class I areas, including Tennessee's areas. Table 2–3 provides 2000–2004 visibility conditions for Tennessee's Class I areas, Table 2–4 provides 2009–2013 visibility conditions, and Table 2–5 provides 2014–2018 visibility conditions for all VISTAS Class I areas, including Tennessee's Class I areas.

d. Assessment of Five Additional Factors in 40 CFR 51.308(f)(2)(iv): With respect to 40 CFR 51.308(f)(2)(iv), Tennessee considered each of the five additional factors in developing the State's LTS and evaluated their relevancy for the second planning period. *See* Haze Plan, Section 7.9. With respect to 40 CFR 51.308(f)(2)(iv)(A), Tennessee referenced the State's emissions inventory development for the base year of 2011 as projected out to 2028 for the requirement to assess emission reductions due to ongoing air pollution control programs, including measures to address reasonably attributable visibility impairment (RAVI). With respect to 40 CFR 51.308(f)(2)(iv)(B), Tennessee summarized the State's existing regulations that mitigate the impacts of construction activities by Tennessee Compilation of Rules & Regulations (hereinafter, ''Rule'') 1200–3–8–.03, which requires additional control measures on source operating permits to control fugitive dust emissions generated within plant boundaries.[64] TDEC notes that benefits from this rule have not been included in the VISTAS modeling runs. TDEC also notes that fine soils were a relatively minor contributor to visibility impairment at the Class I areas in Tennessee during the baseline period of 2000–2004 and that no VISTAS Class I areas experienced significant visibility impairment from soils during this timeframe. TDEC references data in its Haze Plan that fine soils continue to be only a minor contributor to visibility at the Class I areas in Tennessee during the most current period of monitoring data (2014–2018) and that no VISTAS Class I areas experienced significant visibility impairment from soils during the 2014–2018 timeframe.

With respect to 40 CFR 51.308(f)(2)(iv)(C), Tennessee addressed source retirement and replacement schedules by summarizing existing and planned source retirements and describing existing and planned source retirements accounted for in the 2028 projected emissions in Section 7.2.2, Section 13.3.1, and Section 13.3.2 of the Haze Plan. Section 7.2 generally discusses existing and planned emissions control programs which reduce emissions of visibility impairing pollutants between the base year 2011 and the future projection year of 2028.

With respect to 40 CFR 51.308(f)(2)(iv)(D), Tennessee referenced the State's basic smoke management practices, as detailed in Section 7.9.1 of the Haze Plan, for prescribed fire used for agricultural and wildland vegetation management purposes and smoke management programs. In 2012, the State of Tennessee passed the Tennessee Prescribed Burning Act, which requires a written prescription be prepared and followed by a certified prescribed burn manager for each prescribed burn. The Tennessee Division of Forestry within the Tennessee Department of Agriculture has promulgated regulations (in Rule 0080–07–06) for certification of prescribed burn managers and guidelines for a prescribed burn prescription. TDEC has promulgated regulations (in Rule 1200–03–04) that lists the specific circumstances in which open burning is permissible. Among other things, the regulation prohibits the burn site from being within one-half mile of a national reservation, national or state park, wildlife area, national or state forest. On November 24, 2021, the State of Tennessee, Department of Environment and Conservation, Divisions of Air Pollution Control, State Park Operations, and Natural Areas and the State of Tennessee, Department of Agriculture, Division of Forestry entered into a Memorandum of Understanding (MOU) which states that all parties will follow Basic Smoke Management Practices (BSMP) when utilizing prescribed burning.[65] TDEC notes that since significant fire impacts are infrequent at Tennessee Class I areas, these management practices are adequate visibility protection for this SIP submittal period.

With respect to 40 CFR 51.308(f)(2)(iv)(E), Tennessee assessed the anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the LTS in development of the RPGs for the Tennessee Class I areas in Section 8 of the Haze Plan. Section 7.2 identifies control measures included in the VISTAS 2028 inventory and 2028 RPGs and Section 7.2.2 includes source retirements and replacements for Tennessee sources. Section 8.2 summarizes controls that are not accounted for in the 2028 emissions inventory or 2028 RPGs, including the Eastman controls and shutdowns discussed above; out-of-state FFAs, which includes the permanent shutdown of the Zimmer Power Station in Ohio that will result in the reduction of 22,134 tpy of SO_2 emissions; and the April 30, 2021, Cross-State Air Pollution Rule (CSAPR) Update, which will reduce NO_X emissions at power plants in the 12 subject states during the ozone season.[66]

e. Interstate Consultation: Tennessee consulted with other states, as described below, and RPOs that identified Tennessee sources as impacting those states' (or states within the RPOs') Class I areas, and it consulted with the five states with one or more sources

[64] *See https://publications.tnsosfiles.com/rules/1200/1200-03/1200-03-08.20180904.pdf.* The citation of Rule 1200–3–8–.03, which is also available in the docket, is for reference purposes only and is not proposed for adoption into the regulatory portion of the Tennessee SIP.

[65] For purposes of the MOU, BSMP are defined as those specified by Table 1 to 40 CFR 50.14.

[66] Starting in the 2021 ozone season, the CSAPR Update Rule requires additional emissions reductions of NO_X from power plants in 12 states. EPA estimates that the Revised CSAPR Update will reduce NO_X emissions from power plants in 12 states in the eastern United States by 17,000 tons in 2021 compared to projections without the rule. *See https://www.epa.gov/csapr/revised-cross-state-air-pollution-rule-update.*

exceeding Tennessee's PSAT threshold at one or more of Tennessee's Class I areas.

i. State/RPOs Requesting Consultation with Tennessee: Section 10.1.2 and Appendix F–1 of the Haze Plan documents other states' consultations with Tennessee during the development of those states' LTSs regarding impacts from Tennessee's emissions sources on Class I areas outside of the State. Tennessee consulted with each VISTAS state during the development of its LTS. In addition, Tennessee received letters from Missouri, Georgia, and North Carolina requesting a reasonable progress analysis for certain facilities in Tennessee. Specifically, with respect to the effect on Mingo Wilderness Area, a Class I area in Missouri, Missouri requested a reasonable progress analysis for TVA-Cumberland. With respect to the effect on Cohutta, a Class I area in Georgia, Georgia requested a reasonable progress analysis for Eastman. With respect to the effect on Linville Gorge Wilderness Area (Linville Gorge) and Shining Rock Wilderness Area (Shining Rock), Class I areas in North Carolina, North Carolina requested a reasonable progress analysis for TVA-Cumberland. With respect to the effect on Great Smoky Mountains, Joyce Kilmer, Linville Gorge, and Shining Rock, North Carolina also requested a reasonable progress analysis for Eastman. Additionally on April 12, 2021, TDEC and Alabama held a consultation call to discuss TVA-Cumberland, which had a 1.56 percent sulfate impairment impact in 2028 on Sipsey Wilderness Area. As discussed in Section 10.2 of the Haze Plan, VISTAS held a webinar on April 21, 2020, to present to the RPOs and their member states the VISTAS modeling analysis and results to make them aware of the impacts on Class I areas in their states. As discussed in Section 7.6.4 of the Haze Plan, Tennessee selected TVA-Cumberland and Eastman for reasonable progress analysis.

ii. Tennessee's Requests for Consultation with Other States: Regarding Tennessee's sources' impacts on MANE–VU states, MANE–VU developed a set of emissions reduction measures identified as being necessary to make reasonable progress in the five MANE–VU Class I areas. This strategy consists of six Asks for states within MANE–VU and five Asks for states outside the region that were found to impact visibility at Class I areas within MANE–VU. MANE–VU refers to each of the components of its overall strategy as an ''Ask'' of its member states.[67]

The five Asks for identified states outside the region are summarized as follows. Ask 1 is to ensure the most effective use of control technologies on a year-round basis for EGUs with a nameplate capacity larger than or equal to 25 megawatts with already installed NO_X and/or SO_2 controls or obtain equivalent alternative emission reductions. Ask 2 is to perform an FFA for emission sources identified in other states, as modeled by MANE–VU, that have the potential for 3.0 Mm^{-1} or greater visibility impacts at any MANE–VU Class I area. Ask 3 recommends identified states pursue an ultra-low sulfur fuel (ULSF) oil standard as expeditiously as possible and before 2028, depending on supply availability, as specified in the Ask.[68] Ask 4 recommends that identified states pursue updating permits, enforceable agreements, and/or rules to lock-in lower emission rates for SO_2, NO_X and PM at EGUs and other large point emission sources larger than 250 MMBtu per hour heat input that have switched operations to lower emitting fuels.[69] Ask 5 recommends each identified state to consider and report in the SIP measures or programs to: (a) decrease energy demand through the use of energy efficiency and (b) increase the use within their state of combined heat and power and other clean distributed generation technologies including fuel cells, wind, and solar. In Section 10 and Appendices F–4 and F–4a to F–4f of the Haze Plan, Tennessee documents its consultation with MANE–VU.

In a letter dated August 25, 2017, MANE–VU requested consultation with Tennessee on the basis that Tennessee exceeds the 3.0 Mm^{-1} visibility impact threshold for at least one Class I area in the MANE–VU region. In response to MANE–VU's evaluation of TVA-Cumberland, TVA-Gallatin, TVA-John Sevier, TVA-Johnsonville, TVA-Kingston, Cargill Corn Milling, PCA, and Eastman in Tennessee, Tennessee provided additional emission data to MANE–VU on December 22, 2017. In addition, Tennessee provided information regarding TVA's 2011 court settlement which resulted in shutdowns, new controls, and a switch from coal to natural gas at certain facilities. In addition, Tennessee also specified that Cargill Corn Milling facility has switched from coal to natural gas and is essentially shut down.

On January 27, 2018, VISTAS submitted a letter to MANE–VU with concerns regarding MANE–VU's assessment of visibility impairment at MANE–VU Class I areas. The viewpoints are reflected in the letter from VISTAS to MANE–VU. In the letter, VISTAS noted several disagreements with MANE–VU's analysis including:

- MANE–VU used emissions (Q) divided by distance (d), *i.e.,* Q/d, to estimate visibility impacts. TDEC disagrees with use of Q/d in this case because this screening methodology provides conservatively high estimates of potential visibility impacts by not accounting for secondary PM, wind direction, or residence time. TDEC claims that MANE–VU did not provide documentation of how it prepared the 2015 emissions inventory relied upon.
- The modeled back trajectories included states with at least one trajectory originating from the upwind state yet the documentation does not identify the days in which the trajectories originated from Tennessee. TDEC believes for distant sources, a trajectory threshold should be much higher to determine significant contribution to visibility.
- MANE–VU used Eta Data Assimilation System (EDAS). TDEC stated that the North American Mesoscale Forecast System (NAM) model is more widely used by other agencies and EPA and TDEC believes NAM provides a more detailed meteorological grid than EDAS.
- MANE–VU did not explain the technical basis for the visibility impact threshold that was used to determine downwind contributing states like Tennessee.

On January 13, 2021, Tennessee sent a letter to MANE–VU with some preliminary responses to the August 25, 2017, Ask. In the letter, Tennessee also noted that the MANE–VU methodologies resulted in inaccurate conclusions that emissions from Tennessee are contributing to visibility impairment in MANE–VU Class I areas. In addition, in the letter, Tennessee also notes that Tennessee believes that 2028 is the appropriate year to evaluate state contributions to visibility impairment in Class I areas, instead of 2015 or 2011. Tennessee also submitted its modeled

[67] The MANE–VU Ask to states within MANE–VU is available in the docket and at: *https://otcair.org/manevu/Upload/Publication/Formal%20Actions/MANE-VU%20Intra-Regional%20Ask%20Final%208-25-2017.pdf.*

[68] The ULSF standards MANE–VU recommended are as follows: (a) distillate oil to 0.0015 percent sulfur by weight; (b) #4 residual oil to 0.5 percent sulfur by weight; (c) #6 residual oil to 0.5 percent sulfur by weight.

[69] Ask 4 states that the permit, enforcement agreement, and/or rule can allow for suspension of the lower emission rate during natural gas curtailment.

combined impact of sulfate and nitrate on visibility impairment for each of the MANE–VU Class I areas in 2028. The data shows that Tennessee's 2028 contribution is at or below 0.24 percent for the 20 percent most impaired days and at or below 0.03 percent for the 20 percent clearest data for all of the MANE–VU Class I areas, well below the two percent contribution threshold. In addition, Tennessee emphasizes that the use of photochemical and source apportionment models such as CAMx/PSAT provide more accurate estimates of statewide contributions to visibility impairment in Class I areas than the methodologies used by MANE–VU to identify contributing states. Thus, Tennessee states that the State will not be taking the measures outlined in the Inter-RPO Ask.

MANE–VU responded to Tennessee's January 13, 2021, letter on February 17, 2021. In the letter, MANE–VU stated that MANE–VU used a weight of evidence approach in its analysis which is consistent with EPA's 2019 Guidance.[70] In addition, MANE–VU used several technical, quantitative methodologies as screening tools to identify states that are reasonably anticipated to contribute to visibility impairment at MANE–VU Class I areas. Instead of using contributions estimated by one method, MANE–VU used the results of each method to develop a relative ranking of state impacts in determining which states are reasonably anticipated to contribute to visibility impairment at MANE–VU Class I areas. In the letter, MANE–VU continues to request that the states identified by the MANE–VU analyses pursue the measures in the MANE–VU Inter-RPO Ask. In the letter, MANE–VU also submits the following observations as to how the individual Ask elements can be addressed in Tennessee's regional haze SIP submittal: (1) For Ask 1, MANE–VU recognizes the efforts by Tennessee to reduce SO_2 and NO_X, and MANE–VU requests that these emissions reductions be explicitly documented in Tennessee's regional haze SIP with specific consideration for whether and how these emissions reductions meet the MANE–VU Inter-RPO Ask; (2) For Ask 2, MANE–VU notes that there are no such emission sources in Tennessee; (3) For Ask 3, MANE–VU asks Tennessee to consider pursuing such fuel standards as enforceable SIP measures, or to include in its SIP a description of why supply availability makes the adoption of such standards infeasible; (4) For Ask 4, MANE–VU respectfully asks that the emission reductions described in Tennessee's January 13, 2021, letter be documented in Tennessee's regional haze SIP; and (5) For Ask 5, MANE–VU asks that Tennessee document in the regional haze SIP any measures or efforts that it is considering in these areas.

Tennessee believes that the State fulfilled the consultation requirements in 40 CFR 51.308(f)(2)(ii) by the State's active participation in a series of five MANE–VU consultation calls held during the period from October 20, 2017, to March 23, 2018, and its documented responses to MANE–VU. Thus, TDEC determined at the time that no further action is required under the RHR to address MANE–VU's requests.

Lastly, Tennessee consulted with: (a) other states with sources contributing to regional haze at Tennessee's Class I areas, including Georgia, Indiana, Kentucky, Ohio, and Pennsylvania; and (b) states with Class I areas affected by Tennessee sources, which includes MANE–VU. Consultation with other states with sources contributing to regional haze at Tennessee's Class I areas is discussed in Section 10 and Appendix F of the Haze Plan. Tennessee requested an FFA of the following sources in other states because these sources exceeded the sulfate PSAT threshold at one or more of Tennessee's Class I areas: [71] Georgia Power Company's Plant Bowen (Plant Bowen) in Georgia; Tennessee Valley Authority-Shawnee Fossil Plant (TVA-Shawnee) in Kentucky; Gibson and Indiana Michigan Power DBA AEP Rockport in Indiana; Genon NE Mgmt Co/Keystone Station (Keystone) in Pennsylvania; General James M. Gavin Power Plant (Gavin Plant) and Duke Energy Ohio—Wm. H. Zimmer Station (Duke-Zimmer) in Ohio. TDEC expects that any state which received a letter requesting an FFA of one or more of the state's sources will address the request in the state's regional haze plan whether or not the state was able to respond to TDEC prior to Tennessee's submission of its Haze Plan.

3. EPA Evaluation: EPA has reviewed Tennessee's source selection criteria, consideration of the four factors, determinations of controls necessary for reasonable progress, documentation of technical basis, interstate consultation, and consideration of the five additional factors. Based on this review, EPA proposes to find that the LTS meets the requirements of 40 CFR 51.308(f)(2)(i) through (iv).

a. Source Selection Criteria: EPA proposes to find that Tennessee has satisfied the requirements of 40 CFR 51.308(f)(2)(i) with respect to including a description of the criteria that the State used to determine which sources the State evaluated for emissions controls. Tennessee provided in the Haze Plan supporting information such as Appendix C, which includes monitoring and meteorological data used to support selection of sources; Appendix D, which provides documentation supporting the AoI analysis (first step of the State's source selection process); and Appendix E, which details the visibility and source apportionment data and results from the PSAT modeling (second step of the State's source selection process). EPA finds this source selection requirement meets the requirements within 40 CFR 51.308(f)(2).

EPA also proposes to find that Tennessee's source selection methodology was reasonable and resulted in the selection of a reasonable set of sources for FFAs. AoI and PSAT are acceptable and well-established methods for selecting sources for a control analysis.[72] Additionally, Tennessee's application of a three percent AoI threshold and one percent PSAT threshold based on 2028 projected emissions resulted in the selection of the two in-state sources that are projected to have the highest impact on visibility at the end of the second planning period and also identified seven out-of-state sources that have the largest impacts on visibility at Class I areas in Tennessee. Tennessee completed control evaluations for the two in-state sources and requested control evaluations for the seven out-of-state sources.

Apart from AoI and PSAT being well-established methods used in the source selection process, EPA proposes to find that Tennessee's source selection methodology is also reasonable given the specific circumstances present in Tennessee. Statewide SO_2 emissions are expected to decrease in the second planning period from 2017 levels of 46,738 tpy SO_2 to projected 2028 levels of 23,983 tpy SO_2 (a 48.7 percent reduction) which occurred after a 70.8 percent decrease in statewide SO_2 emissions from 2011 to 2017 by 113,585

[70] ''Guidance on Regional Haze State Implementation Plans for the Second Implementation Period.'' EPA Office of Air Quality Planning and Standards, Research Triangle Park (August 20, 2019) available at: *https://www.epa.gov/sites/default/files/2019-08/documents/8-20-2019_-_regional_haze_guidance_final_guidance.pdf*.

[71] Tennessee requested FFAs of non-VISTAS sources through VISTAS.

[72] The State used the AoI process because it identifies the largest sources with potential visibility impacts to Class I areas and then used sophisticated photochemical source apportionment modeling to identify specific sources for control evaluations. *See* also 2019 Guidance, pp. 12–13.

tpy SO_2; and statewide NO_X emissions are expected to decrease in the second planning period from 2017 levels of 200,581 tpy NO_X to projected 2028 levels of 136,954 tpy NO_X (approximately a 31.7 percent reduction), which occurred after a 37.8 percent decrease in statewide NO_X emissions from 2011 to 2018 by 121,984 tpy NO_X.[73]

Tennessee (through VISTAS' analysis) projects that visibility conditions in 2028 are estimated to improve since the 2000–2004 baseline period by 14.1 deciviews for Great Smoky Mountains and Joyce Kilmer. Specific to the second planning period, visibility conditions in Tennessee's Class I areas in 2028 are estimated to improve since the 2014–2018 period by 2.2 deciviews and 2.3 deciviews for the Great Smoky Mountains and Joyce Kilmer, respectively, on the 20 percent most impaired days, and these visibility improvements represent approximately the following amount of visibility improvement from the 2014–2018 period to natural conditions: 30.4 percent and 32.5 percent, respectively, for Great Smoky Mountains and Joyce Kilmer.[74] Using 2018–2022 IMPROVE data[75] for Tennessee's Class I areas on the 20 percent most impaired days, Tennessee has already achieved in the first four years of the second planning period (2019–2022) the following amount of visibility improvement towards natural conditions: 25.3 percent for both Great Smoky Mountains and Joyce Kilmer.[76] EPA thus proposes to find that the State appropriately focused on controlling point source SO_2 emissions based on objective application of the State's PSAT thresholds as well as data showing ammonium sulfate is the dominant visibility impairing pollutant at the Tennessee Class I areas. Based on an objective application of the State's PSAT thresholds as well as data showing ammonium sulfate is the dominant visibility impairing pollutant at the Tennessee Class I areas, EPA proposes to find that the State appropriately focused on evaluating point source SO_2 emissions control measures.

b. Consideration of the Four CAA Factors: In this section of the document, EPA evaluates Tennessee's LTS against the requirements of the CAA and RHR for the second planning period. As detailed further below and for the reasons discussed throughout this Section IV(C)(3)(b) of the NPRM, EPA proposes to approve Tennessee's LTS under 40 CFR 51.308(f)(2).

In this proposed action, EPA notes that it is the Agency's policy, as announced in the recent proposed action for West Virginia's Regional Haze SIP for the second planning period, that, where visibility conditions for a Class I area impacted by a State are below the URP and the State has evaluated potential control measures and considered the four statutory factors, the State will have presumptively demonstrated reasonable progress for the second planning period for that area.[77] [78] EPA acknowledges that this proposed action reflects a change in policy from current guidance as to how the URP should be used in the evaluation of regional haze second planning period SIPs. EPA has the discretion and authority to change policy. In *FCC* v. *Fox Television Stations, Inc.,* the U.S. Supreme Court plainly stated that an agency is free to change a prior policy and ''need not demonstrate . . . that the reasons for the new policy are better than the reasons for the old one; it suffices that the new policy is permissible under the statute, that there are good reasons for it, and that the agency believes it to be better.'' 566 U.S. 502, 515 (2009) (referencing *Motor Vehicle Mfrs. Ass'n of United States, Inc.* v. *State Farm Mut. Auto. Ins. Co.,* 463 U.S. 29 (1983)). *See also Perez* v. *Mortgage Bankers Assn.,* 135 S. Ct. 1199 (2015). EPA believes that this policy aligns with the purpose of the statute and RHR, which is achieving ''reasonable'' progress, not maximal progress, toward Congress' natural visibility goal.

In developing the regulations required by CAA section 169A(b), EPA established the concept of the URP for each Class I area. As discussed above, for each Class I area, there is a regulatory requirement to compare the projected visibility impairment (represented by the RPG) at the end of each planning period to the URP (*e.g.,* in 2028 for the second planning period).[79]

In the 2017 RHR Revisions, EPA addressed the role of the URP as it relates to a state's development of its second planning period SIP. *See* 82 FR 3078 (January 10, 2017). Specifically, in response to comments suggesting that the URP should be considered a ''safe harbor'' and relieve states of any obligation to consider the four statutory factors, EPA explained that the URP was not intended to be such a safe harbor. EPA summarized such comments as follows: ''Some commenters stated a desire for corresponding rule text dealing with situations where RPGs are equal to (''on'') or better than (''below'') the URP or glidepath. Several commenters stated that the URP or glidepath should be a ''safe harbor,'' opining that states should be permitted to analyze whether projected visibility conditions for the end of the implementation period will be on or below the glidepath based on on-the-books or on-the-way control measures, and that in such cases a four-factor analysis should not be required.'' [80]

Other 2017 RHR comments indicated a similar approach, such as ''a somewhat narrower entrance to a 'safe

[73] Tennessee's statewide emissions of SO_2 and NO_X decreased during the period from 2011 to 2018 from 118,721 tpy SO_2 to 43,891 tpy SO_2 and decreased from 369,496 tpy to 231,676 tpy NO_X. *See* Tables 7–9 and 13–12 of the Haze Plan. *See also* Table 5–2 in Appendix B–2a of the Haze Plan.

[74] The additional visibility improvement needed to reach natural conditions at the start of the second planning period based upon 2014–2018 IMPROVE data for the 20 percent most impaired days is calculated as follows: ((2014–2018 visibility conditions) − (2028 RPG))/((2014–2018 visibility conditions) − (natural conditions)) × 100 = percent progress needed to reach natural conditions from the start of the second planning period. For example, using data for Great Smoky Mountains, the calculation is: ((17.21 deciviews − 15.03 deciviews)/(17.21 deciviews − 10.05 deciviews)) × 100 = 30.4 percent.

[75] The 2018–2022 IMPROVE data for the 20 percent most impaired days was obtained from *https://vista.cira.colostate.edu/Improve/rhr-summary-data/* under the header ''Means for Impairment Metric:'' The IMPROVE data includes visibility monitoring data for each Class I area. This data was filtered for each Tennessee Class I area, listed as ''GRSM1'' for both Great Smoky Mountains and Joyce Kilmer, respectively, (in column ''A'', titled ''site''). Then data was filtered for the years 2018 through 2022 (using column ''B'' titled ''year''). These data points were then filtered for the 20 percent most impaired days, indicated by ''90'' (in column ''C'' titled ''impairment_Group''). The resulting five data points for each Tennessee Class I area within the ''haze_dv'' column ''AK'', corresponding to each of the five years, were averaged to determine the 20 percent most impaired days for the 2018–2022 five-year period. The 2018–2022 IMPROVE data for Tennessee's Class I areas are: 15.4 deciviews (Great Smoky Mountains and Joyce Kilmer).

[76] Percentage of progress toward natural conditions = [((2014–2018 IMPROVE data) − (2018–2022 IMPROVE data))/((2014–2018 IMPROVE data) − (Natural visibility conditions))] × 100. Example calculation for Great Smoky Mountains: [(17.21 − 15.4)/(17.21 − 10.05)] × 100 = 25.3 percent.

[77] *See* 90 FR 16478, 16483 (April 18, 2025).

[78] *See also* EPA's May 14, 2025, proposed action for South Dakota's Regional Haze SIP for the second planning period (90 FR 20425).

[79] EPA notes that RPGs are a regulatory construct that EPA developed to address statutory mandate in CAA section 169B(e)(1), which required our regulations to include ''criteria for measuring 'reasonable progress' toward the national goal.'' Under 40 CFR 51.308(f)(3)(ii), RPGs measure the progress that is projected to be achieved by the control measures a state has determined are necessary to make reasonable progress. Consistent with the 1999 RHR, the RPGs are unenforceable, though they create a benchmark that allows for analytical comparisons to the URP and mid-implementation-period course corrections if necessary. *See* 82 FR 3091–3092 (January 10, 2017).

[80] *See* 82 FR 3099 (January 10, 2017).

harbor,' by suggesting that if current visibility conditions are already below the end-of-planning-period point on the URP line, a four-factor analysis should not be required.'' [81] EPA was clear in its response: ''We do not agree with either of these recommendations.'' EPA explained its position as follows: ''The CAA requires that each SIP revision contain long-term strategies for making reasonable progress, and that in determining reasonable progress states must consider the four statutory factors. Treating the URP as a safe harbor would be inconsistent with the statutory requirement that states assess the potential to make further reasonable progress towards natural visibility goal in every implementation period.'' [82]

In EPA's new policy, if the Class I areas impacted by a state are below the URP and the State considers the four factors, the State will have presumptively demonstrated it has made reasonable progress for the second planning period for that area. Indeed, EPA believes this policy also recognizes the considerable improvements in visibility impairment that have been made by a wide variety of state and federal programs in recent decades.

EPA finds that Tennessee considered the four statutory factors in the assessment of the potential for additional controls to make reasonable progress and the projected 2028 visibility conditions for Class I areas influenced by emissions from Tennessee sources are all below the URP. For these reasons and for the reasons discussed throughout this Section IV(C)(3)(b) of the NPRM, Tennessee's SIP submittal is reasonable and meets the requirements of 40 CFR 51.308(f)(2). EPA's specific conclusions regarding the FFAs for Eastman and TVA-Cumberland are discussed in more detail below.

i. Eastman: Regarding Eastman, EPA proposes to find that TDEC's conclusions and analytical methods stated in its FFA for Boilers 21, 22, 23, 24, 30, and 31 are reasonable. EPA also proposes to find the state's conclusions for Boilers 18, 19, and 20 are reasonable.

Regarding Boilers 18–20, as additional context to Tennessee's submittal, EPA notes that these units were constructed in the 1940s and did not provide electricity to the grid. Also, as noted above, the replacement gas boilers for these units have been constructed and are now operational.

EPA agrees with TDEC's determination that the permanent shutdown of these units no later than December 31, 2028, is necessary for reasonable progress. Thus, EPA proposes to adopt into the Tennessee SIP the requirement that Boilers 18, 19, and 20 at Eastman will cease operating no later than December 31, 2028, as specified in Condition 2 of Permit 079592. EPA also notes that these units have fully shut down and are incapable of restarting without undergoing applicable New Source Review permitting for new sources. The replacement gas boilers for these units have been constructed and are now operational.[83] Eastman was required to cease operation of Boilers 18, 19, and 20 based on permit condition G18 in Construction Permit Number 979100, which provides that ''[t]he permittee shall permanently cease operation of Boilers 18, 19, and 20 (82–0003–01/PES B–83–1) as follows:'' ''Boiler 19 shall cease operation on or before the startup date of Boiler 32''; ''Boiler 18 shall cease operation on or before the startup date of Boiler 33''; and ''Boiler 20 shall cease operation on or before the startup date of Boiler 34.'' The condition also includes the following compliance method: ''The permittee shall notify the Technical Secretary in writing of the shutdown date of each boiler no later than 30 days after the date of each shutdown. The notification shall be submitted to the Technical Secretary at the address identified in Condition G3 of this permit.''

Regarding Boilers 23 and 24, EPA proposes to agree with TDEC's conclusions to adopt a combined SO_2 emissions limit which shall not collectively exceed 1,396 tons of SO_2 during any period of 12 consecutive months into the Tennessee SIP. This is a new measure as necessary for reasonable progress as specified in Condition 1 of Permit No. 079592. Eastman plans to meet this limit through installation of permanent DSI, as specified in Section 7.8.1 and Appendix G–2 of the Haze Plan and as specified in Condition 2 of Permit No. 080222.[84]

Because EPA proposes to approve TDEC's conclusions and analytical methods with respect to Boilers 21, 22, 30, and 31. While Boilers 21 and 22 are not currently equipped with any SO_2 controls, based on the cost analyses submitted by Tennessee, EPA agrees with the State's determination to not require any additional SO_2 controls for these units during this planning period. Regarding the cost-effectiveness for each of the controls evaluated in TDEC's adjusted interest rate and equipment life of Eastman's FFA, the lowest cost per ton identified for Boilers 21 and 22 was for the addition of DSI along with the fabric filters at $6,342/ton of SO_2 removed. The State's assessment that this cost is not cost-effective is reasonable.

Regarding Boiler 30, EPA proposes to find that TDEC reasonably determined that the cost of replacing the existing ESP with a fabric filter is not cost-effective and that there is no control option beyond the current controls that is appropriate for Boiler 30 for the second planning period. Regarding Boiler 31, EPA proposes to find that TDEC reasonably determined that this unit is effectively controlled for SO_2, as it is equipped with a SDA followed by a fabric filter, which achieves an SO_2 control efficiency of greater than 92 percent.

Although not included as part of its Regional Haze Plan, Tennessee's 2023 Plan submittal to EPA includes existing measures that apply to Boilers 21, 22, 30, and 31. In the letter submitted to EPA on December 20, 2024, TDEC requested that EPA incorporate these measures into Tennessee's SIP to support Tennessee's regional haze SIP. These measures are discussed separately in Section V of this NPRM.

ii. TVA-Cumberland: Regarding TVA-Cumberland, EPA proposes to find that TDEC's conclusions and analytical methods stated in its FFA for the coal boilers are reasonable. Tennessee determined that no additional emission reduction measures are necessary at TVA-Cumberland to make reasonable progress during the regional haze second planning period. TDEC rejected the installation of wall rings along the scrubber walls and the redesign and replacement of spray headers and nozzles on the basis of cost in comparing the values to the costs identified by VISTAS for similar options, which was adequately explained in Appendix G–1 of the Haze Plan. The installation of wall rings resulted in a cost-effectiveness of $2,881/ton of SO_2 reduced. EPA finds TDEC's determination that no additional controls are needed to be reasonable and agrees with TDEC's conclusions that the cost-effectiveness for installing wall rings is higher than the median cost for similar options and that other comparable emission reduction measures within a similar cost-effectiveness values have substantial emissions reductions and associated co-benefits when compared to the emissions reductions from the installation of the wall wings.

[81] *Id.*

[82] *Id.*

[83] *See* the startup notifications for Boilers 32, 33, and 34 included in the docket of this proposed action.

[84] Title V Operating Permit No. 080222 is included in the docket for this proposed action.

Tennessee also rejected the redesign and replacement of spray headers and nozzles due to the high costs of compliance. As noted in Appendix G–1 of the Haze Plan, Tennessee found that the cost-effectiveness of the redesign and replacement of spray headers and nozzles resulted in a cost-effectiveness of $5,059 per ton of SO_2 reduced. Tennessee also evaluated the other three statutory factors. The time necessary for compliance was considered, and Tennessee did not eliminate any control options from consideration as a result of that factor. Tennessee raised concerns about certain energy and non-air quality impacts, but did not eliminate any controls from consideration solely because of these impacts. Lastly, Tennessee's considered the remaining useful life of Units 1 and 2. Tennessee concluded that no additional measures at TVA-Cumberland are necessary to make reasonable progress for the second planning period. EPA finds that Tennessee has demonstrated that it would make reasonable progress for the second planning period without any additional measures for TVA-Cumberland.

c. Assessment of Five Additional Factors in 40 CFR 51.308(f)(2)(iv): EPA proposes to find that Tennessee has satisfied the requirements of 40 CFR 51.308(f)(2)(iv) because TDEC considered each of the five additional factors under 40 CFR 51.308(f)(2)(iv) in developing Tennessee's LTS, discussed the measures the State has in place to address each factor (or discussed why such measures are not needed), and, where relevant, explained how each factor informed VISTAS' technical analyses for the second planning period.

With respect to 40 CFR 51.308(f)(2)(iv)(A), Tennessee has adequately addressed the requirement to assess emission reductions due to ongoing air pollution control programs, including measures to address RAVI, through the State's emissions inventory work for the base year of 2011 as projected out to 2028.

With respect to 40 CFR 51.308(f)(2)(iv)(B), Tennessee adequately addressed this requirement to evaluate measures to mitigate the impacts of construction activities by describing various state regulations that address control pollution from construction activities and that require subject facilities to control PM from fugitive dust emission sources generated within plant boundaries and explaining that fine soils were a relatively minor contributor to visibility impairment at Great Smoky Mountains (also Joyce Kilmer) during the 2000–2004 baseline period as demonstrated in Figure 2–2 of the Haze Plan, and that no VISTAS Class I areas experienced significant visibility impairment from soils during the baseline timeframe as demonstrated in Figure 2–3. As demonstrated by Figures 2–7, 2–8, 2–9, soils continued to be a minor contributor to visibility impairment at Great Smoky Mountains (also Joyce Kilmer) and other VISTAS Class I areas through the 2014–2018 time period.

With respect to 40 CFR 51.308(f)(2)(iv)(C), EPA proposes to find that Tennessee has adequately addressed source retirement and replacement schedules by summarizing existing and planned source retirements throughout the Haze Plan, including in Section 7.2.2 (retirements accounted for in the 2028 inventory/RPGs).

With respect to 40 CFR 51.308(f)(2)(iv)(D), EPA proposes to find that Tennessee adequately addressed the requirement to consider the State's basic smoke management practices for prescribed fire used for agricultural and wildland vegetation management purposes and smoke management programs. The State describes its promulgated regulations under the Division of Forestry (Tennessee Rule 0080–07–06), which regulates prescribed fires, sets guidelines for prescribed burn prescription and TDEC (Tennessee Rule 1200–03–04), which sets specific circumstances in which open burning is permissible. In addition, the State describes the November 24, 2021, MOU which requires that all parties follow basic smoke management practices when utilizing prescribed burning in order to mitigate $PM_{2.5}$ emissions and regional haze impacts and highlights interagency coordination related to open burning and related topics.

With respect to 40 CFR 51.308(f)(2)(iv)(E), EPA proposes to find that Tennessee assessed the anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the second period in development of the 2028 RPGs for the Tennessee Class I areas in Section 8 of the Haze Plan. TDEC used the 2011 base year emissions inventory to project emissions from various source sectors to 2028, the end of the second planning period. TDEC, through VISTAS, completed CAMx modeling to estimate visibility impairment in 2028 based on projected 2028 emissions from the 2011 base year inventory and using IMPROVE monitoring data for 2009–2013.[85] For Tennessee, estimated visibility improvements by 2028 in each Class I area are based on: estimated emissions reductions associated with existing federal and state measures implemented or expected to be implemented during the second planning period; emissions reductions associated with facility closures that occurred after the 2016 point source emissions base year (*i.e.,* January 1, 2017, through November 18, 2018); and estimates of emissions changes associated with economic growth and other factors.

d. Interstate Consultation: With respect to interstate consultation pursuant to 40 CFR 51.308(f)(2)(ii), EPA proposes to find that Tennessee has met the requirements under 40 CFR 51.308(f)(2)(ii) to consult with those states with Class I areas where Tennessee emissions may reasonably be anticipated to cause or contribute to visibility impairment and to consult with those States whose sources may reasonably be anticipated to cause or contribute to visibility impairment at Tennessee's Class I areas. With respect to other states' requests for Tennessee to complete FFAs for TVA-Cumberland and Eastman, Tennessee did so. With respect to consultation with other States with visibility impacts to Tennessee's Class I areas, Tennessee adequately documented the responses from consulted states in Appendix F, provided a summary of its consultation in Section 10.1.1, and identified whether the State agrees with the conclusions.

With respect to the MANE–VU Ask, Tennessee adequately took actions to address points of disagreements with MANE–VU related to Tennessee's statewide impacts by providing technical analysis and rationale to resolve the varying viewpoints between the two organizations. Tennessee satisfactorily documented in Appendix F–4 of the Haze Plan the State's disagreements by sending a letter dated December 22, 2017, to MANE–VU documenting the response to the points of disagreements in addition to supporting the January 27, 2018, letter from VISTAS to MANE–VU.[86] With respect to consultation with other states with visibility impacts to Tennessee's Class I areas, TDEC adequately

[85] In preparing the 2028 emissions for point sources, TDEC started with a 2016 base year inventory which include emission reductions associated with federal and state control programs and consent decrees included in the LTS for the first planning period.

[86] Appendix F–4 of the Haze Plan contains the January 27, 2018, and January 13, 2021, letters along with a letter dated August 25, 2017, in which MANE–VU requested consultation with Tennessee because Tennessee exceeds the MANE–VU visibility impact threshold for at least one Class I area in the MANE–VU region.

documented the responses from consulted states in Appendix F and as summarized in Section 10.1.1 and identified whether the State agrees with the conclusions.

D. RPGs

1. RHR Requirement: 40 CFR 51.308(f)(3) contains the requirements pertaining to RPGs for each Class I area. 40 CFR 51.308(f)(3)(i) requires a state in which a Class I area is located to establish RPGs—one each for the most impaired and clearest days—reflecting the visibility conditions that will be achieved at the end of the planning period as a result of the emission limitations, compliance schedules, and other measures required under paragraph (f)(2) to be in states' LTSs, as well as implementation of other CAA requirements. The LTSs, as reflected by the RPGs, must provide for an improvement in visibility on the most impaired days relative to the baseline period and ensure no degradation on the clearest days relative to the baseline period. 40 CFR 51.308(f)(3)(ii) applies in circumstances in which a Class I area's RPG for the most impaired days represents a slower rate of visibility improvement than the URP calculated under 40 CFR 51.308(f)(1)(vi). Under 40 CFR 51.308(f)(3)(ii)(A), if the state in which a mandatory Class I area is located establishes an RPG for the most impaired days that provides for a slower rate of visibility improvement than the URP, the state must demonstrate that there are no additional emission reduction measures for anthropogenic sources or groups of sources in the state that would be reasonable to include in its LTS. 40 CFR 51.308(f)(3)(ii)(B) requires that if a state contains sources that are reasonably anticipated to contribute to visibility impairment in a Class I area in *another* state, and the RPG for the most impaired days in that Class I area is above the URP, the upwind state must provide the same demonstration.

2. State Assessment: Tennessee established 2028 RPGs for each of its Class I areas in deciviews for the 20 percent clearest days and the 20 percent most impaired in Tables 8–1 and 8–2, respectively, of the Haze Plan, which are all projected to remain below the URP for each Class I area based on VISTAS' modeling. Table 3 summarizes the 2028 RPGs and 2028 URPs for Tennessee's Class I areas.

TABLE 3—TENNESSEE'S CLASS I AREA RPGS AND URPS FOR 2028 IN DECIVIEWS (dv)

Class I area	2028 RPG 20% clearest (dv)	2028 RPG 20% most impaired (dv)	2028 URP (dv)
Great Smoky Mountains	8.96	15.03	21.49
Joyce Kilmer	8.96	15.03	21.49

Figure 3–1 of the Haze Plan show the URP for the 20 percent most impaired days for Great Smoky Mountains (also Joyce Kilmer).

3. EPA Evaluation: Tennessee provided 2028 RPGs for its Class I area for the most impaired and clearest days. The State established 2028 RPGs expressed in deciviews that reflect the visibility conditions that are projected to be achieved by the end of the second planning period as a result of implementation of the LTS and other CAA requirements. Tennessee's RPGs provide for an improvement in visibility for the 20 percent most impaired days since the baseline period (2000–2004) and demonstrate that there is no degradation in visibility for the 20 percent clearest days since the baseline period. Any additional unanticipated emissions reductions provide further assurances that the State's Class I area will achieve its 2028 RPGs.

For these reasons, the 2028 RPGs for Great Smoky Mountains (also Joyce Kilmer) are reasonable. Additionally, Tennessee has adequately demonstrated that all Class I areas both in Tennessee and out-of-state Class I areas to which Tennessee may reasonably be anticipated to cause or contribute to any impairment of visibility are all below the URP. Therefore, the ''robust demonstration'' provisions in 40 CFR 51.308(f)(3)(ii) are not applicable to this action. As such, EPA is proposing to determine that Tennessee has satisfied all applicable requirements of 40 CFR 51.308(f)(3).

E. Monitoring Strategy and Other Implementation Plan Requirements

1. RHR Requirement: 40 CFR 51.308(f)(6) specifies that each comprehensive revision of a state's regional haze SIP must contain or provide for certain elements, including monitoring strategies, emissions inventories, and any reporting, recordkeeping and other measures needed to assess and report on visibility. A main requirement of this section is for states with Class I areas to submit monitoring strategies for measuring, characterizing, and reporting on visibility impairment. Compliance with this requirement may be met through participation in the IMPROVE network.

40 CFR 51.308(f)(6)(i) requires SIPs to provide for the establishment of any additional monitoring sites or equipment needed to assess whether RPGs to address regional haze for all mandatory Class I areas within the state are being achieved.

40 CFR 51.308(f)(6)(ii) requires SIPs to provide for procedures by which monitoring data and other information are used in determining the contribution of emissions from within the state to regional haze visibility impairment at mandatory Class I areas both within and outside the state.

40 CFR 51.308(f)(6)(iii) applies only to states that do not have a mandatory Class I areas.

40 CFR 51.308(f)(6)(iv) requires the SIP to provide for the reporting of all visibility monitoring data to the Administrator at least annually for each Class I area in the state.

40 CFR 51.308(f)(6)(v) requires SIPs to provide for a statewide inventory of emissions of pollutants that are reasonably anticipated to cause or contribute to visibility impairment, including emissions for the most recent year for which data are available and estimates of future projected emissions. It also requires a commitment to update the inventory periodically.

40 CFR 51.308(f)(6)(v) also requires states to include estimates of future projected emissions and include a commitment to update the inventory periodically. Under 40 CFR 51.308(f)(4), if EPA or the FLM of an affected Class I area has advised a state that additional monitoring is needed to assess RAVI, the state must include in its SIP revision for the second planning period an appropriate strategy for evaluating such impairment.

2. State Assessment: With respect to 40 CFR 51.308(f)(6)(i), Tennessee believes the existing IMPROVE monitor for the State's Class I areas is adequate and does not believe any additional

monitoring sites or equipment are needed to assess whether the RPGs for all Class I areas within the State are being achieved.

With respect to 40 CFR 51.308(f)(6)(ii), data from this IMPROVE monitor will be used for the future haze plans and progress reports.

40 CFR 51.308(f)(6)(iii) does not apply to Tennessee because it has a Class I area.

With respect to 40 CFR 51.308(f)(6)(iv), NPS manages and oversees the IMPROVE monitoring network. The IMPROVE monitoring network samples PM from which the chemical composition of the sampled particles is determined and is then used to calculate visibility. NPS is responsible for collecting, reviewing, validated, and verifying IMPROVE data before submission to EPA's Air Quality System (AQS). Tennessee's participation in the IMPROVE Steering Committee and the IMPROVE monitoring network addresses this requirement. Tennessee believes the existing IMPROVE monitors for the State's Class I areas are sufficient for the purposes of this SIP revision.

With respect to 40 CFR 51.308(f)(6)(v), TDEC provided a statewide, baseline emissions inventory of pollutants for the year 2011 in Table 4–2 of the Haze Plan which includes the following pollutants: NO_X, SO_2, VOC, NH_3, $PM_{2.5}$, and PM_{10}. The 2011 baseline emissions year was used because emissions and modeling work needs to begin three years before haze plans are due because of the significant amount of time required to complete the work one year in advance of preparing the haze plans. The 2011 base year modeling platform was the best platform available at the time the modeling work began in early 2018. TDEC, through VISTAS, discussed the selection of modeling platforms with EPA and reliance on the 2011 base year. Tennessee will continue to participate in SESARM/VISTAS efforts for projecting future emissions and continue to comply with the requirements of the Air Emissions Reporting Requirements (AERR) to periodically update emissions inventories under 40 CFR 51.308(f)(6)(v).[87]

With respect to 40 CFR 51.308(f)(6)(vi), Tennessee affirms that there are no elements, including reporting, recordkeeping, or other measures, necessary to address and report on visibility for Tennessee's Class I areas or Class I areas outside the State that are affected by sources in Tennessee. With respect to 40 CFR 51.308(f)(4), the State did not include a strategy for evaluating RAVI for any Class I areas because no Federal agency requested additional monitoring to assess RAVI.

3. EPA Evaluation: EPA proposes to determine that Tennessee has satisfied the applicable requirements of 40 CFR 51.308(f)(4) and 40 CFR 51.308(f)(6) related to RAVI, visibility monitoring, and emissions inventories. With respect to 40 CFR 51.308(f)(4), EPA proposes to find that this requirement does not apply to Tennessee at this time because neither EPA nor the FLMs requested additional monitoring to assess RAVI.

EPA proposes to determine that Tennessee has satisfied 40 CFR 51.308(f)(6), which is generally met by the State's continued participation in the IMPROVE monitoring network and the VISTAS RPO, for the following reasons. With respect to 40 CFR 51.3089(f)(6)(i), Tennessee stated that the existing IMPROVE monitors relied upon for the State's two Class I areas are adequate, and thus, additional monitoring sites or equipment are not needed to assess whether the RPGs for all Class I areas within the State are being achieved. With respect to 40 CFR 51.308(f)(6)(ii), Tennessee is complying with procedures by which monitoring data and other information are used to determine the contribution of emissions from within the State to regional haze at Class I areas both within and outside the State through Tennessee's continued participation in VISTAS' regional haze work. With respect to 40 CFR 51.308(f)(6)(iii), this provision is applicable for states with no Class I areas and does not apply to Tennessee. Regarding the reporting of visibility monitoring data to EPA at least annually for each Class I area in the State pursuant to 40 CFR 51.308(f)(6)(iv), EPA proposes to find that Tennessee's participation in the IMPROVE Steering Committee and the IMPROVE monitoring network addresses this requirement. With respect to 40 CFR 51.308(f)(6)(v), EPA proposes to find that Tennessee's continued participation in VISTAS' efforts for projecting future emissions and continued compliance with the requirements of the AERR to periodically update emissions inventories satisfies the requirement to provide for an emissions inventory for the most recent year for which data are available. EPA proposes to find that Tennessee adequately documented that no further elements are necessary at this time for the State to assess and report on visibility pursuant to 40 CFR 51.308(f)(6)(vi).

F. Requirements for Periodic Reports Describing Progress Toward the RPGs

1. RHR Requirement: Section 51.308(f)(5) requires that periodic comprehensive revisions of states' regional haze plans also address the progress report requirements of 40 CFR 51.308(g)(1)–(5). The purpose of these requirements is to evaluate progress towards the applicable RPGs for each Class I area within the state and each Class I area outside the state that may be affected by emissions from within that state. 40 CFR 51.308(g)(1) and (2) apply to all states and require a description of the status of implementation of all measures included in a state's first planning period regional haze plan and a summary of the emission reductions achieved through implementation of those measures. 40 CFR 51.308(g)(3) applies only to states with Class I areas within their borders and requires such states to assess current visibility conditions, changes in visibility relative to baseline (2000–2004) visibility conditions, and changes in visibility conditions relative to the period addressed in the first planning period progress report. 40 CFR 51.308(g)(4) applies to all states and requires an analysis tracking changes in emissions of pollutants contributing to visibility impairment from all sources and sectors since the period addressed by the first planning period progress report. This provision further specifies the year or years through which the analysis must extend depending on the type of source and the platform through which its emission information is reported. Finally, 40 CFR 51.308(g)(5), which also applies to all states, requires an assessment of any significant changes in anthropogenic emissions within or outside the state have occurred since the period addressed by the first planning period progress report, including whether such changes were anticipated and whether they have limited or impeded expected progress towards reducing emissions and improving visibility.

2. State Assessment: With respect to the progress report elements pursuant to 40 CFR 51.308(f)(5), the State addressed these elements in Section 13 of the Haze Plan for the period 2013 to 2018, the end of the first period.[88] Tennessee outlines its approach to addressing 40 CFR 51.308(g)(1) through 40 CFR 51.308(g)(5) in Section 13.2 of the Haze Plan.

Regarding 40 CFR 51.308(g)(1) and 40 CFR 51.308(g)(2), the State describes the

[87] *See* Haze Plan at p. 217.

[88] Tennessee's first period progress report covered the period from 2008–2012.

status of the implementation of the measures of the LTS from the first planning period in Section 13.3.1 and provides a summary of the emission reductions achieved by implementing those measures in Sections 13.3 and 13.5 of the Haze Plan.

With respect to 40 CFR 51.308(g)(1), the Haze Plan identifies key Federal and state emissions control measures in Section 13.3.1 that the State relied upon for other emission reduction actions included in the LTS of Tennessee's first regional haze plan submitted on April 4, 2008. Section 13.3.2 identifies measures that contributed to emission reductions during the first planning period but were not a part of the LTS for the first period.[89] In Section 13.3.1.1 of the Haze Plan, Tennessee summarized Federal and state programs which contributed to reductions of EGU and certain non-EGU SO_2 emissions in Tennessee and surrounding states over the 2013–2018 period. The programs examined include, but are not limited to, the 2005 Clean Air Interstate Rule, the Phase I NO_X SIP Call, and consent agreements and voluntary agreements with regional EGUs. In Section 13.3.1.2 of the Haze Plan, the State summarized state EGU control measures which contributed to reductions in SO_2 emissions in Tennessee, North Carolina, and Georgia. The programs examined included the 2002 North Carolina Clean Smokestacks Act, the 2007 Georgia Multi-Pollutant Control for Electric Utility Steam Generating Units, and Tennessee's Reasonable Progress and BART Control Measures.

With respect to 40 CFR 51.308(g)(2), Tennessee continued to focus on SO_2 emissions reductions because the State determined that ammonium sulfate was the most important contributor to visibility impairment and fine particle on the 20 percent best and 20 percent worst visibility days at all the Tennessee Class I areas. Section 13.3 of the Haze Plan identifies control measures included in the LTS for Tennessee's first regional haze plan submitted in 2008 (''2008 Haze Plan''), and Table 13–3 of the Haze Plan separately identifies the Maximum Achievable Control Technology standards relied upon for the 2008 Haze Plan. The controls listed in Section 13.1 and in Table 13–4 also identify actions that were not anticipated when Tennessee prepared the LTS for the 2008 Haze Plan which contributed to emission reductions during the first planning period. Section 13.3.2 identifies which measures were modeled for the 2018 RPGs for the first planning period.

With respect to Tennessee's EGUs, Table 7–1 of the Haze Plan lists the coal-fired EGUs in Tennessee that were projected in the 2008 Haze Plan to have emissions controls installed by 2018. The EGU sector in Tennessee represents over 50 percent of statewide SO_2 emissions from stationary sources. Section 7.2.2 of the Haze Plan also identifies EGU retirement dates, if applicable. The shutdown of Tennessee's coal-fired EGUs (TVA-Allen, TVA-John Sevier, TVA-Johnsonville, summarized in Table 7–1) decreased SO_2 emissions by 91.7 percent from 10,974 tpy to 916 tpy from 2011 to 2018. Tennessee's coal-fired EGUs decreased NO_X emissions by 80.9 percent from 2011 to 2018 from 2,557 tpy to 488 tpy. TDEC identifies the North Carolina Clean Smokestacks Act (CSA)[90] as one of the most important actions that North Carolina implemented to achieve early reductions for improving visibility in North Carolina's Class I areas. The CSA was a component of the LTS of the 2008 Haze Plan. In 2011, these sources emitted only 73,454 tons of SO_2 and 39,284 tons of NO_X, well below the Act's system caps (250,000 tons of SO_2 and 56,000 tons of NO_X).

Section 13.3 of the Haze Plan also provides emissions reductions for the following non-EGUs which were selected for an FFA in the first planning period: Alcoa, Dupont Old Hickory, Eastman, and TVA-Cumberland. In the 2008 Haze Plan, no new SO_2 measures were found reasonable in the first planning period. SO_2 emissions from these five facilities collectively decreased by 75 percent from 2008 to 2018 from 38,409 tpy to 9,775 tpy.

With respect to 40 CFR 51.308(g)(3), in Tables 13–5 through 13–9 of the Haze Plan, TDEC calculated the following for the two Class I areas: current visibility conditions (2014–2018), changes in visibility relative to baseline (2000–2004) visibility conditions, and changes in visibility conditions compared to the last five years. The data show that all Class I areas saw an improvement in visibility on the 20 percent worst days and on the 20 percent clearest days.[91] Additionally, TDEC provided data to demonstrate that the current 2014–2018 monitored values for the Tennessee Class I areas on the 20 percent worst days are below the 2018 RPGs for the 20 percent worst days.

Regarding 40 CFR 51.308(g)(4), TDEC used the 2014 NEI, the 2017 NEI, and the State's Annual Operating Report point source data collected each year and compared the emissions from each source category to the VISTAS 2018 emissions projections in Table 13–10 ($PM_{2.5}$), Table 13–11 (NO_X), and Table 13–12 (SO_2) of the Haze Plan. Regarding $rPM_{2.5}$, NO_X, and SO_2, the overall emissions from all sources (point, area, on-road, non-road, and fires) in the 2017 NEI are 23 percent, 21 percent, and 77 percent lower, respectively, than what VISTAS projections for each pollutant in 2018. TDEC attributes the significant SO_2 emissions reductions from point sources (EGUs and non-EGU point sources). TDEC notes that for compared to the VISTAS projected $PM_{2.5}$ and NO_X emissions in 2018, there have been significant reductions for each source category, except from the fire and on-road category.

With respect to SO_2, the electric utility sector is the dominant source of SO_2 emissions in Tennessee. It accounted for 62 percent and 52 percent of total statewide SO_2 emissions in 2014 and 2017, respectively. With respect to NO_X emissions in Tennessee, emissions from on-road sources account for approximately 50 percent and emissions from point sources account for nearly 23 percent, from the 2017 NEI. Overall, from 2014 through 2019, there was an 81 percent and 54 percent decrease in SO_2 and NO_X emissions, respectively, from EGU sources, with a decrease of 22 percent in heat input over this period.[92] TDEC notes that the reductions from EGU sources are due to the installation of controls and the use of cleaner burning fuels.

Despite significant reductions in SO_2, Tennessee identifies sulfates as continuing to play a significant role in visibility impairment, especially for the most anthropogenically impaired days, as discussed in Section 7.4 of the Haze

[89] For the first planning period, visibility conditions were determined for the average of the 20 percent most impaired visibility days (referred to as the ''worst'' days) and the 20 percent least impaired visibility days (referred to as the ''best'' days).

[90] The CSA is a North Carolina law which required the coal-fired EGUs subject to the CSA to reduce annual NO_X emissions by 77 percent by 2009 and to reduce annual SO_2 emissions by 49 percent by 2009 and 73 percent by 2013. This law set a NO_X emissions cap of 56,000 tpy starting in 2009 and SO_2 emissions caps of 250,000 tpy and 130,000 tpy starting in 2009 and 2013, respectively. The affected EGUs were equipped with scrubbers to control SO_2 and either SCR or selective non-catalytic reduction (SNCR) to control NO_X emissions.

[91] For the first period, visibility conditions were determined for the average of the 20 percent most impaired visibility days (referred to as the ''worst'' days) and the 20 percent least impaired visibility days (referred to as the ''best'' days). These terms were updated to ''clearest'' and ''most impaired,'' respectively, as part of two recent actions by EPA. *See* 82 FR 3078 (January 10, 2017) and ''2018 Visibility Tracking Guidance.''

[92] *See* Table 13–13 and Figure 13–4 of the Haze Plan.

Plan.[93] As SO_2 emissions continue to drop, nitrates may begin to have a larger relative impact on regional haze in future planning periods.

Regarding 40 CFR 51.308(g)(5), TDEC believes that there does not appear to be any significant change in anthropogenic emissions within Tennessee or outside the State that have occurred since the period addressed in the most recent plan that would limit or impede progress in reducing pollutant emissions or improving visibility. TDEC reviewed anthropogenic SO_2 and NO_X emissions trends for the VISTAS states and each of the RPOs based on emissions included in the 2014 and 2017 NEI in Tables 13–10 through 13–13 of the Haze Plan. These data show a decline in SO_2 and NO_X emissions during the 2014 through 2017 period within Tennessee. In Tennessee, SO_2 emissions decreased from 94,201 tpy (2011) to 46,738 tpy (2014) and NO_X emissions decreased from 269,201 tpy (2011) to 200,581 tpy (2014).

Figure 2–8 shows the average light extinction for the 20 percent most impaired days over the period 2014 through 2018 for all Class I areas in the Southeast and in neighboring non-VISTAS states. Figure 2–9 shows the average light extinction for the 20 percent clearest days over the period 2014 through 2018 for all Class I areas in the Southeast and in neighboring non-VISTAS states. These figures demonstrate that on the 20 percent most impaired days and 20 percent clearest days in the Class I areas in Tennessee, sulfates continued to be the major concern during the first planning period. TDEC notes that there have been significant reductions in SO_2 and NO_X emissions in Tennessee as well as in neighboring states which have resulted in significant improvements in visible range in Class I areas in Tennessee and in nearby states. Thus, TDEC concludes that there does not appear to be any anthropogenic emissions within Tennessee that would have limited or impeded progress in reducing pollutant emissions or improving visibility.

3. EPA Evaluation: EPA proposes to find that TDEC has met the requirements of 40 CFR 51.308(g)(1)–(5) because the Haze Plan adequately describes the status of the measures included in the LTS from the first planning period and the emission reductions achieved from those measures; the visibility conditions and changes at the Tennessee Class I areas; an analysis tracking the changes in emissions since the first planning period progress report using available NEI emissions data for 2014 and 2017 and annual EGU SO_2 emissions data from 2014 to 2021; evaluates 2017 NEI data which is the most recent triennial emissions inventory submission from Tennessee prior to submission of the Haze Plan; and assessed whether any significant changes in anthropogenic emissions within or outside the State that have occurred since the end of the period addressed by Tennessee's first planning period progress report, including whether these changes in anthropogenic emissions were anticipated in that most recent plan and whether they have limited or impeded progress in reducing pollutant emissions and improving visibility. Thus, EPA is proposing to find that Tennessee has met the requirements of 40 CFR 51.308(f)(5).

G. Requirements for State and FLM Coordination

1. RHR Requirement: Section 169A(d) of the CAA requires states to consult with FLMs before holding the public hearing on a proposed regional haze SIP, and to include a summary of the FLMs' conclusions and recommendations in the notice to the public. In addition, the FLM consultation provision of 40 CFR 51.308(i)(2) requires a state to provide the FLMs with an opportunity for consultation that is early enough in the state's policy analyses of its emission reduction obligation so that information and recommendations provided by FLMs can meaningfully inform the state's decisions on its LTS. If the consultation has taken place at least 120 days before a public hearing or public comment period, the opportunity for consultation will be deemed early enough. Regardless, the opportunity for consultation must be provided at least 60 days before a public hearing or public comment period at the state level. 40 CFR 51.308(i)(2) also provides two substantive topics on which FLMs must be provided an opportunity to discuss with states: assessment of visibility impairment in any Class I area and recommendations on the development and implementation of strategies to address visibility impairment. 40 CFR 51.308(i)(3) requires states, in developing their implementation plans, to include a description of how they addressed FLMs' comments. Section 40 CFR 51.308(i)(4) requires that the regional haze SIP revision provide procedures for continuing consultation between the state and FLMs regarding the state's visibility protection program.

2. State Assessment: As required by CAA section 169A(d), Tennessee consulted with the FLMs prior to opening the State public comment period[94] on its proposed haze plan and included a summary of the conclusions and recommendations of the FLMs in the proposed plan dated July 2, 2021. The conclusions and recommendations of the FLMs on the proposed plan are included in the Haze Plan in Section 10.4 and Appendix H. [95]

With respect to 40 CFR 51.308(i)(2), TDEC offered to the three FLM agencies the opportunity to consult on the July 2, 2021, draft Tennessee Haze Plan. Additionally, TDEC shared with the FLMs the October 22, 2021, Prehearing Tennessee Haze Plan issued for state public notice and comment with a public hearing held December 1, 2021, with the close of the comment period on December 10, 2021. A summary of this consultation process is discussed in Appendix H of the Haze Plan (FLM comments received) with supporting information in Appendix H–1a through H–1e and Appendix F.[96] Appendix H provides a summary of the FLM comments received on the draft and prehearing haze plans. TDEC received comments from the NPS and USFS. No comments were received from the FWS.

To address 40 CFR 51.308(i)(3), TDEC provided responses to NPS and USFS comments in Section 10.4 and Appendix I of the Haze Plan.

With respect to 40 CFR 51.308(i)(4), Tennessee updated its existing procedures for continuing consultation with the FLMs, including annual discussions with a review of the most recent IMPROVE monitoring data. Records of annual consultations and progress report consultations will be maintained in TDEC's regional haze files.

3. EPA Evaluation: EPA proposes to find that Tennessee addressed all FLM consultation requirements in the CAA and RHR. With respect to CAA section 169A(d), Tennessee consulted with the FLMs prior to the State's public comment period and included a summary of the conclusions and recommendations of the FLMs in the

[93] Figure 13–1 of the Haze Plan provides the breakdown of visibility impairing pollutants for the 20 percent worst visibility days and clearest visibility days in Tennessee's Class I areas over 2011 through 2018 timeframe.

[94] TDEC provided a draft plan to the FLMs on July 2, 2021.

[95] The consultation did not occur in person as stated in the CAA due to the convenience and efficiency of using email, phone calls, and video meetings.

[96] Appendices F–3a–3n include VISTAS consultation outreach with stakeholders, including the FLMs. (*See, in particular,* Appendices F–3b, F–3c, F–3d, and F–3j).

proposed plan issued for public review.[97]

Tennessee fully addressed the requirement for FLM consultation under 40 CFR 51.308(i)(2) because the State offered the draft Tennessee Haze Plan on July 2, 2021. EPA proposes to find that Tennessee has met its requirements under 40 CFR 51.308(i)(2) to consult with the FLMs on its Haze Plan for the second planning period.

EPA proposes to find that Tennessee satisfied 40 CFR 51.308(i)(3) by providing responses to the FLM comments in Section 10.4 of the Haze Plan.

EPA proposes to find that Tennessee satisfied 40 CFR 51.308(i)(4) by establishing in its Haze Plan continuing consultation procedures as summarized above.

V. Other Measures Proposed for Incorporation Into Tennessee's SIP

On February 9, 2023, Tennessee submitted a SIP revision regarding the SO_2 attainment demonstration for Sullivan County, which provides source-specific SO_2 emission limits and associated compliance parameters for incorporation into Tennessee's SIP. This submittal has been referred to throughout this Notice as the ''2023 Plan.'' On December 20, 2024, Tennessee submitted a letter to EPA asking the Agency to incorporate certain permit conditions from the 2023 Plan to generally strengthen Tennessee's SIP, as detailed below.

EPA is proposing to incorporate these SO_2 limits and associated monitoring, recordkeeping, and reporting conditions into Tennessee's SIP as a SIP strengthening measure. Specifically, EPA is proposing to adopt into Tennessee's SIP the combined 30-day rolling average SO_2 emission limit of 1,248 lb/hr for Eastman Boilers 18 through 24, 30, and 31 contained within Condition 1 of Tennessee Operating Permit Number 080222 (State effective March 1, 2023). EPA is further proposing to adopt into Tennessee's SIP supporting monitoring, recordkeeping, and reporting requirements for this 1,248 lb/hr SO_2 limit contained in Condition 3 and Attachment A of Tennessee Operating Permit Number 080222. EPA is also proposing to adopt into Tennessee's SIP Condition 2 of Tennessee Operating Permit Number 080222 (State effective March 1, 2023), which contains a requirement to operate DSI at Boilers 23 and 24.

Tennessee has also requested that EPA incorporate into Tennessee's SIP the 317 lb/hr and 293 lb/hr (30-day rolling average) SO_2 emission limits for Eastman Boilers 30 and 31, respectively, incorporated into Eastman's current title V Operating Permit 576501 (State effective October 1, 2021), along with supporting monitoring, recordkeeping, and reporting requirements.[98] Collectively, these requirements are contained within conditions E3–8, E3–9, E3–20, and Attachment 3 of this permit. These emission limits and the associated monitoring, recordkeeping, and reporting requirements are based upon existing measures to reduce SO_2 emissions from these boilers, including the operation of a DSI at Boilers 23 and 24, an SDA and electrostatic precipitator at Boiler 30, and an SDA and fabric filter at Boiler 31.

While EPA is proposing to incorporate these permit conditions into Tennessee's SIP as a SIP strengthening measure, EPA is not proposing to approve, disapprove, or otherwise take action on other portions of the 2023 Plan. Any determination regarding approvability of the attainment demonstration—including the approvability of the permit conditions proposed for incorporation into the SIP in this Notice of Proposed Rulemaking for the specific purpose of that attainment demonstration—would be subject to a separate rulemaking.

VI. Incorporation by Reference

In this document, EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with the requirements of 1 CFR 51.5, and as discussed above in this preamble, EPA is proposing to incorporate by reference into Tennessee's SIP Operating Permit Number 079592 (State effective February 9, 2022) for Eastman. EPA is also proposing to incorporate by reference into Tennessee's SIP that portion of Condition 1 of Tennessee Operating Permit Number 080222 (State effective March 1, 2023) containing the 30-day rolling average SO_2 emission limit of 1,248 lb/hr for Eastman Boilers 18 through 24, 30, and 31; all of Condition 2 of Tennessee Operating Permit Number 080222 (State effective March 1, 2023); that portion of Condition 3 of Tennessee Operating Permit Number 080222 (State effective March 1, 2023) containing the supporting monitoring, recordkeeping, and reporting requirements for the 1,248 lb/hr SO_2 limit; and Attachment A to Tennessee Operating Permit Number 080222 (State effective March 1, 2023). EPA is further proposing to incorporate by reference into Tennessee's SIP Conditions E3–8 and E3–9 of Tennessee Operating Permit Number 576501 (State effective October 1, 2021), which include the 317 lb/hr and 293 lb/hr SO_2 limits applicable to Boilers 30 and 31; Condition E3–20; and Attachment 3 to this permit. EPA has made, and will continue to make, these materials generally available through *www.regulations.gov* and at the EPA Region 4 Office (please contact the person identified in the For Further Information Contact section of this preamble for more information).

VII. Proposed Action

For the reasons stated herein, EPA is proposing to approve Tennessee's February 23, 2022, SIP submission. EPA is also proposing to incorporate into Tennessee's SIP, as SIP strengthening measures, those portions of Tennessee's February 9, 2023, SIP submission discussed above in Section VI (entitled Incorporation by Reference) of this Notice. EPA is not proposing to approve, disapprove, or otherwise take action on any other aspects of Tennessee's February 9, 2023, submittal in this Notice.

VIII. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. *See* 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this proposed action merely proposes to approve state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Is not subject to Executive Order 14192 (90 FR 9065, February 6, 2025) because SIP actions are exempt from review under Executive Order 12866;
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities

[97] A description of Tennessee's responses to FLM comments can be found in Section 10.4 and Appendix H of the Haze Plan.

[98] Title V Permit No. 576501 is included in the docket for this proposed action.

under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);

- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it approves a state program;
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001); and
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA.

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian Tribe has demonstrated that a Tribe has jurisdiction. In those areas of Indian country, the rule does not have Tribal implications and will not impose substantial direct costs on Tribal governments or preempt Tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects in 40 CFR Part 52

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

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

Dated: July 24, 2025.

Kevin McOmber,

Regional Administrator, Region 4.

[FR Doc. 2025–15748 Filed 8–18–25; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 1

[WT Docket No. 25–217; FCC 25–47; FR ID 309129]

Modernizing the Commission's National Environmental Policy Act Rules

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document, the Federal Communications Commission (the FCC or Commission) seeks comment on how the Commission should revise its rules to streamline the environmental review process and promote efficiency and certainty for Commission applicants to encourage deployment of infrastructure, which in turn will result in more competition and technological innovation in the marketplace.

DATES: Comments are due September 18, 2025; reply Comments are due October 3, 2025.

ADDRESSES: You may submit comments, identified by WT Docket No. 25–217, by any of the following methods:

- *Electronic Filers:* Comments may be filed electronically using the internet by accessing the ECFS: *https://www.fcc.gov/ecfs.*
- *Paper Filers:* Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent by hand or messenger delivery, by commercial courier, or by the U.S. Postal Service. All filings must be addressed to the Secretary, Federal Communications Commission.
- Hand-delivered or messenger delivered paper filings for the Commission's Secretary are accepted between 8 a.m. and 4 p.m. by the FCC's mailing contractor at 9050 Junction Drive, Annapolis Junction, MD 20701. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
- Commercial courier deliveries (any deliveries not by the U.S. Postal Service) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701. Filings sent by U.S. Postal Service First-Class Mail, Priority Mail, and Priority Mail Express must be sent to 45 L Street NE, Washington, DC 20554.
- *People with Disabilities.* To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an email to *fcc504@fcc.gov* or call the Consumer & Governmental Affairs Bureau at 202–418–0530.

FOR FURTHER INFORMATION CONTACT: Jennifer Flynn, Competition and Infrastructure Policy Division, Wireless Telecommunications Bureau, (202) 418–0612, *Jennifer.Flynn@fcc.gov.*

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Notice of Proposed Rulemaking (NPRM), in WT Docket No. 25–217; FCC 25–47, adopted on August 7, 2025, and released on August 14, 2025. The full text of this document is available at *https://docs.fcc.gov/public/attachments/FCC-25-47A1.pdf.* Pursuant to §§ 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998), *https://www.govinfo.gov/content/pkg/FR-1998-05-01/pdf/98-10310.pdf.*

The Commission will treat this proceeding as a ''permit-but-disclose'' proceeding in accordance with the Commission's ex parte rules. Persons making ex parte presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral ex parte presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the ex parte presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda, or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during ex parte meetings are deemed to be written ex parte presentations and must be filed consistent with rule § 1.1206(b). In proceedings governed by rule § 1.49(f) or for which the Commission has made available a method of electronic filing, written ex parte presentations and memoranda summarizing oral ex parte presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (*e.g.,* .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's ex parte rules.

Synopsis

I. Introduction

In this Notice of Proposed Rulemaking (NPRM), we take a fresh look at our environmental rules to account for recent amendments to the National Environmental Policy Act (NEPA) under the 2023 Fiscal