

\$100,000,000 (adjusted for inflation) or more in any one year. Though this proposed rule would not result in such an expenditure, we do discuss the potential effects of this proposed rule elsewhere in this preamble.

#### F. Environment

We have analyzed this proposed rule under Department of Homeland Security Directive 023–01, Rev. 1, associated implementing instructions, and Environmental Planning COMDTINST 5090.1 (series), which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321–4370f), and have made a preliminary determination that this action is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. This proposed rule involves a safety zone from the New Jersey Turnpike/I–95 Fixed Bridge (River Mile 5.3) and 150 feet south of the existing Portal Bridge (River Mile 5.0) on the Hackensack River. Normally such actions are categorically excluded from further review under paragraph L60 (a) of Appendix A, Table 1 of DHS Instruction Manual 023–01–001–01, Rev. 1. A preliminary Record of Environmental Consideration supporting this determination is available in the docket. For instructions on locating the docket, see the **ADDRESSES** section of this preamble. We seek any comments or information that may lead to the discovery of a significant environmental impact from this proposed rule.

#### G. Protest Activities

The Coast Guard respects the First Amendment rights of protesters. Protesters are asked to call or email the person listed in the **FOR FURTHER INFORMATION CONTACT** section to coordinate protest activities so that your message can be received without jeopardizing the safety or security of people, places, or vessels.

#### V. Public Participation and Request for Comments

We view public participation as essential to effective rulemaking and will consider all comments and material received during the comment period. Your comment can help shape the outcome of this rulemaking. If you submit a comment, please include the docket number for this rulemaking, indicate the specific section of this document to which each comment applies, and provide a reason for each suggestion or recommendation.

**Submitting comments.** We encourage you to submit comments through the

Federal Decision-Making Portal at <https://www.regulations.gov>. To do so, go to <https://www.regulations.gov>, type USCG–2024–0404 in the search box and click “Search.” Next, look for this document in the Search Results column, and click on it. Then click on the Comment option. If you cannot submit your material by using <https://www.regulations.gov>, call or email the person in the **FOR FURTHER INFORMATION CONTACT** section of this proposed rule for alternate instructions.

**Viewing material in docket.** To view documents mentioned in this proposed rule as being available in the docket, find the docket as described in the previous paragraph, and then select “Supporting & Related Material” in the Document Type column. Public comments will also be placed in our online docket and can be viewed by following instructions on the <https://www.regulations.gov> Frequently Asked Questions web page. Also, if you click on the Dockets tab and then the proposed rule, you should see a “Subscribe” option for email alerts. The option will notify you when comments are posted, or a final rule is published.

We review all comments received, but we will only post comments that address the topic of the proposed rule. We may choose not to post off-topic, inappropriate, or duplicate comments that we receive.

**Personal information.** We accept anonymous comments. Comments we post to <https://www.regulations.gov> will include any personal information you have provided. For more about privacy and submissions to the docket in response to this document, see DHS’s eRulemaking System of Records notice (85 FR 14226, March 11, 2020).

#### List of Subjects in 33 CFR Part 165

Harbors, Marine Safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

For the reasons discussed in the preamble, the Coast Guard is proposing to amend 33 CFR part 165 as follows:

#### PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

1. The authority citation for part 165 continues to read as follows:

**Authority:** 46 U.S.C. 70034, 70051, 70124; 33 CFR 1.05–1, 6.04–1, 6.04–6, and 160.5; Department of Homeland Security Delegation No. 00170.1, Revision No. 01.3.

2. Add § 165.T01–0404 to read as follows:

#### § 165.T01–0404 Safety Zone; Hackensack River, Kearny and Secaucus, NJ.

(a) **Location.** The following area is a safety zone: All the navigable waters of the Hackensack River between the New Jersey Turnpike/I–95 Fixed Bridge (River Mile 5.3) and 150 feet south of the existing Portal Bridge (River Mile 5.0).

(b) **Definitions.** As used in this section, *designated representative* means a Coast Guard Patrol Commander, including a Coast Guard coxswain, petty officer, or other officer operating a Coast Guard vessel and a Federal, State, and local officer designated by or assisting the Captain of the Port New York (COTP) in the enforcement of the safety zone.

(c) **Regulations.** (1) Under the general safety zone regulations in subpart C of this part, you may not enter the safety zone described in paragraph (a) of this section unless authorized by the COTP or the COTP’s designated representative.

(2) To seek permission to enter, contact the COTP or the COTP’s representative via VHF Channel 16 or by phone at (718) 354–4353 (Sector New York Command Center). Those in the safety zone must comply with all lawful orders or directions given to them by the COTP or the COTP’s designated representative.

(d) **Enforcement period.** This section is effective from November 15, 2024, through December 31, 2025, but will only be enforced during periods when heavy lift operations at the new bridge are in progress.

**Jonathan A. Andrechik,**

*Captain, U.S. Coast Guard, Captain of the Port, Sector New York.*

[FR Doc. 2024–16762 Filed 7–31–24; 8:45 am]

**BILLING CODE 9110–04–P**

#### ENVIRONMENTAL PROTECTION AGENCY

#### 40 CFR Part 52

[EPA–R07–OAR–2024–0224; FRL–11566–01–R7]

#### Disapproval and Promulgation of Air Quality Implementation Plan; Nebraska; Regional Haze State Implementation Plan; Federal Implementation Plan for Regional Haze; Completion of Remand

**AGENCY:** Environmental Protection Agency.

**ACTION:** Proposed rule.

**SUMMARY:** Pursuant to the Federal Clean Air Act (CAA or Act), the Environmental Protection Agency (EPA)

is proposing this action to address the voluntary remand of a portion of a final rulemaking published in the **Federal Register** on July 6, 2012, addressing regional haze obligations for the first planning period in Nebraska.

Specifically, we are revisiting and implementing a Federal Implementation Plan (FIP) applicable to the Gerald Gentleman Station, owned and operated by the Nebraska Public Power District (NPPD). In this action, the EPA is proposing a revised FIP that will limit sulfur dioxide (SO<sub>2</sub>) emissions at the Gerald Gentleman Station. The EPA proposes to determine that SO<sub>2</sub> emission reductions are needed to make reasonable progress toward Congress' natural-visibility goal at Class I areas affected by visibility-impairing emissions from Nebraska. This proposal addresses only the remanded portion of the Nebraska FIP.

**DATES:** Comments must be received on or before September 30, 2024. The EPA will hold an in-person public hearing in Nebraska and a separate virtual public hearing. For more information on the in-person and virtual public hearings, see **SUPPLEMENTARY INFORMATION**.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R07-OAR-2024-0224, to the Federal eRulemaking Portal: <https://www.regulations.gov>. For additional submission methods, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section.

**Docket:** The docket for this action is available electronically at <https://www.regulations.gov>. Some information in the docket may not be publicly available via the online docket due to docket file size restrictions, or content (e.g., CBI). To request a copy of the files, please send a request via email to [vit.wendy@epa.gov](mailto:vit.wendy@epa.gov). For questions about a document in the docket please contact individual listed in the **FOR FURTHER INFORMATION CONTACT** section.

**Confidential Business Information (CBI):** Do not submit information containing CBI to the EPA through <https://www.regulations.gov>. To submit information claimed as CBI, please contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section. Clearly mark the part or all of the information that you claim to be CBI. In addition to one complete version of the comments that includes information claimed as CBI, you must submit a copy of the comments that does not contain the information claimed as CBI directly to the public docket through the procedures outlined in Instructions earlier. Information not marked as CBI will be included in the public docket

and the EPA's electronic public docket without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 Code of Federal Regulations (CFR) part 2. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www2.epa.gov/dockets/commenting-epa-dockets>.

To pre-register to attend or speak at the virtual public hearing, please use the online registration form available at <https://www.epa.gov/ne/state-nebraska> or contact us via email at [wolkins.jed@epa.gov](mailto:wolkins.jed@epa.gov). For more information on the virtual public hearing, see **SUPPLEMENTARY INFORMATION**.

**FOR FURTHER INFORMATION CONTACT:** Jed D. Wolkins, Environmental Protection Agency, Air Planning and Development Branch, 11201 Renner Boulevard, Lenexa, Kansas 66219; telephone number: (913) 551-7588; email address: [wolkins.jed@epa.gov](mailto:wolkins.jed@epa.gov).

**SUPPLEMENTARY INFORMATION:** Throughout this document "we," "us," or "our" refer to the EPA.

**Virtual public hearing:** The EPA is holding a virtual public hearing to provide interested parties the opportunity to present data, views, or arguments concerning the proposal. The virtual public hearing will be on September 3, 2024 at 1:00 p.m. Central Time (CT) and will conclude at 5:00 p.m. CT or 15 minutes after the last pre-registered presenter in attendance has presented if there are no additional presenters.

The EPA will begin pre-registering speakers and attendees for the hearing upon publication of this document in the **Federal Register**. To pre-register to attend or speak at the virtual public hearing, please use the online registration form available at <https://www.epa.gov/ne/state-nebraska> or contact us via email at [wolkins.jed@epa.gov](mailto:wolkins.jed@epa.gov). The last day to preregister to speak at the hearing will be August 26, 2024. The EPA will post a general agenda for the hearing that will list pre-registered speakers in approximate order at <https://www.epa.gov/ne/state-nebraska>. Additionally, requests to speak will be taken on the day of the hearing as time allows.

The EPA will make every effort to follow the schedule as closely as possible on the day of the hearing; however, please plan for the hearing to run either ahead of schedule or behind schedule. Each commenter will have approximately 3 to 5 minutes to provide oral testimony. The EPA encourages

commenters to provide the EPA with a written copy of their oral testimony electronically by emailing it to [wolkins.jed@epa.gov](mailto:wolkins.jed@epa.gov). The EPA may ask clarifying questions during the oral presentations but will not respond to the presentations at that time. Written statements and supporting information submitted during the comment period will be considered with the same weight as oral comments and supporting information presented at the virtual public hearing. A transcript of the virtual public hearing, as well as written copies of oral presentations submitted to the EPA, will be included in the docket for this action.

The EPA is asking all hearing attendees to pre-register, even those who do not intend to speak. The EPA will send information on how to join the public hearing to pre-registered attendees and speakers. Please note that any updates made to any aspect of the hearing will be posted online at <https://www.epa.gov/ne/state-nebraska>. While the EPA expects the hearing to go forward as set forth above, please monitor our website or contact us via email at [wolkins.jed@epa.gov](mailto:wolkins.jed@epa.gov) to determine if there are any updates. The EPA does not intend to publish a document in the **Federal Register** announcing updates.

If you require the services of a translator or a special accommodation such as audio description/closed captioning, please pre-register for the hearing and describe your needs by August 8, 2024. The EPA may not be able to arrange accommodations without advance notice.

## Table of Contents

- I. Executive Summary
- II. Background
  - A. Regional Haze
    - 1. Determination of Baseline, Natural, and Current Visibility Conditions
  - 2. Reasonable Progress and Long-Term Strategy (LTS)
  - 3. Federal Land Manager (FLM) Consultation
  - B. Previous Actions Related to Nebraska Regional Haze Long-Term Strategy Requirements for the First Planning Period
  - C. Prior Litigation and EPA's Motion for Voluntary Remand
- III. Overview of Proposed Action
- IV. Legal Authority for This Action
- V. EPA's Review of the 2012 Federal Implementation Plan on Remand
  - A. Factor 1—The Costs of Compliance
    - 1. EPA's Evaluation of Costs for BART in the 2012 Proposed and Final Rule
    - 2. EPA's Updated Cost Evaluation
  - B. Factor 2—The Time Necessary for Compliance
  - C. Factor 3—The Energy and Non-Air Quality Environmental Impacts of Compliance

- D. Factor 4—The Remaining Useful Life of the Source
- E. Evaluation of Potential Visibility Impacts and Improvements
- VI. Amending the FIP on Remand—Long-Term Strategy Determination for Gerald Gentleman Station
- VII. The EPA's FLM Consultation
- VIII. Proposed Action
- IX. Environmental Justice Considerations
- X. Statutory and Executive Order Reviews
  - A. Executive Order 12866: Regulatory Planning and Review and Executive Order 14094: Modernizing Regulatory Review
  - B. Paperwork Reduction Act
  - C. Regulatory Flexibility Act
  - D. Unfunded Mandates Reform Act (UMRA)
  - E. Executive Order 13132: Federalism
  - F. Executive Order 13175: Coordination With Indian Tribal Governments
  - G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks
  - H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution or Use
  - I. National Technology Transfer Advancement Act
  - J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations and Executive Order 14096: Revitalizing Our Nation's Commitment to Environmental Justice for All

## I. Executive Summary

The CAA's visibility protection program was created in the 1977 CAA Amendments. In CAA section 169A, Congress declared a national goal to remedy any existing and prevent any future visibility impairment in certain national parks, such as Badlands in South Dakota and Rocky Mountain in Colorado, and national wilderness areas, such as the Wichita Mountains Wilderness in Oklahoma. Vistas in these areas (referred to as Class I areas) are often obscured by visibility impairment such as regional haze, which is caused by emissions from numerous sources located over a wide geographic area.

In response to a Congressional directive to provide regulations to the states, the EPA promulgated regulations to address visibility impairment in 1999. These regulations, which are commonly referred to as the Regional Haze Rule, established an iterative process for achieving Congress's national goal by providing for multiple, approximately 10-year "planning periods" in which state air agencies must submit to the EPA plans that address sources of visibility-impairing pollution in their states. The first state plans were due in 2007 for the planning period that ended in 2018. The second state plans were due in 2021 for the period that ends in 2028. This proposal

focuses on remaining obligations from the first planning period of the regional haze program.

The CAA and Regional Haze Rule require states to submit a long-term strategy (LTS) that includes such measures as may be necessary to make reasonable progress toward the national visibility goal for each Class I area. A central element of the LTS for the first planning period state plans was the requirement for certain older stationary sources to install the Best Available Retrofit Technology (BART) for the purpose of eliminating or reducing visibility impairment within our nation's most treasured lands. The other central element of a state's LTS is the requirement to include any additional control measures that are necessary to make "reasonable progress" towards the national goal. To determine what control measures are necessary to make reasonable progress and therefore must be included in the LTS, the four statutory factors must be considered: (1) the costs of compliance, (2) the time necessary for compliance, (3) the energy and nonair quality environmental impacts of compliance, and (4) the remaining useful life of any existing source subject to such requirements. This statutory requirement is often referred to as a "four-factor analysis." Additionally, when visibility-impairing emissions from multiple states impact the same national park or wilderness area, the Regional Haze Rule requires those states to coordinate and consult with one another to ensure that each state is making reasonable progress toward the national goal.

Gerald Gentleman Station, located in western Nebraska, is one of the highest emitters of visibility-impairing pollutants, specifically SO<sub>2</sub>, in the nation. These emissions cause or contribute to visibility impairment in such iconic places as Wind Cave and Badlands National Parks in South Dakota and Rocky Mountain National Park in Colorado. To address this visibility impairment, Nebraska submitted its first regional haze state implementation plan (SIP) on July 13, 2011. Nebraska included a BART determination for SO<sub>2</sub> emissions from the Gerald Gentleman Station. In July 2012, the EPA disapproved portions of the state's SIP, including the BART determination for Gerald Gentleman Station, finding significant flaws in several aspects of the state's analysis of potential emission control technologies. The EPA also disapproved the state's LTS for SO<sub>2</sub> at Gerald Gentleman Station to the extent that it relied on the flawed BART determination. The EPA promulgated a FIP in place of the

elements of the SIP that it disapproved. The EPA determined that BART for Gerald Gentleman Station was satisfied by the facility's participation in the Cross-State Air Pollution Rule (CSAPR) national trading program. The EPA further found that the gap left in the state's LTS by the EPA's partial disapproval were also satisfied by the CSAPR.

The NPPD, who owns and operates the Gerald Gentlemen Station, and several environmental groups filed petitions for review of various aspects of the EPA's 2012 final action. The EPA sought and received a voluntary remand without vacatur to reconsider the portion of the final action relating to the LTS for SO<sub>2</sub> at the Gerald Gentleman Station.<sup>1</sup> After considering relevant facts, the EPA is proposing to amend its FIP.

Nebraska remains one of the few states in the nation that does not have a complete first planning period regional haze plan in place to protect the national parks and wilderness areas impacted by its sources. With this action, the EPA is proposing a new FIP that will satisfy the regional haze statutory and regulatory requirements for the first planning period.

## II. Background

### A. Regional Haze

Regional haze is visibility impairment that is produced by a multitude of sources and activities which are located across a broad geographic area. These sources and activities emit fine particulate matter (PM<sub>2.5</sub>) (e.g., sulfates, nitrates, organic carbon, elemental carbon, and soil dust) and its precursors (e.g., SO<sub>2</sub>, nitrogen oxides (NO<sub>x</sub>), and, in some cases, ammonia (NH<sub>3</sub>) and volatile organic compounds (VOCs)). Fine particle precursors react in the atmosphere to form PM<sub>2.5</sub>, which, in addition to direct sources of PM<sub>2.5</sub>, impairs visibility by scattering and absorbing light. Visibility impairment (i.e., light scattering) reduces the clarity, color, and visible distance that one can see.

In section 169A of the 1977 Amendments to the CAA, Congress created a program for protecting visibility in the nation's national parks and wilderness areas. This section of the CAA establishes as a national goal the prevention of any future, and the remedying of any existing, anthropogenic (manmade) impairment of visibility in 156 national parks and wilderness areas designated as

<sup>1</sup> The remainder of the 2012 final rule was upheld by the Eighth Circuit. *Nebraska v. EPA*, 812 F.3d 662 (8th Cir. 2016).

mandatory Class I areas.<sup>2</sup> Congress added section 169B to the CAA in 1990 to address regional haze issues, and the EPA promulgated the Regional Haze Rule, codified at 40 CFR 51.308,<sup>3</sup> on July 1, 1999.<sup>4</sup> The Regional Haze Rule established a requirement for all states, the District of Columbia, and the Virgin Islands to submit a regional haze SIP.<sup>5</sup> The primary purpose of the Regional Haze Rule is to outline the requirements for states to develop programs that assure reasonable progress toward meeting the national goal of preventing any future, and remedying any existing, impairment of visibility in mandatory Class I areas which impairment results from manmade air pollution.<sup>6</sup>

To address regional haze visibility impairment, the Regional Haze Rule established an iterative planning process that requires states to periodically submit SIP revisions (each periodic revision referred to as a “planning period”) to address regional haze visibility impairment at Class I areas.<sup>7</sup> Under the CAA, each SIP submission must contain “a long-term (ten to fifteen years) strategy for making

reasonable progress toward meeting the national goal,” and the initial round of SIP submissions also had to address the statutory requirement that certain older, larger sources of visibility-impairing pollutants install and operate BART.<sup>8</sup> States’ first regional haze SIPs were due by December 17, 2007, with subsequent SIP submissions containing revised long-term strategies originally due July 31, 2018, and every ten years thereafter.<sup>9</sup>

#### 1. Determination of Baseline, Natural, and Current Visibility Conditions

The Regional Haze Rule establishes the deciview (dv) as the principal metric for measuring visibility.<sup>10</sup> This visibility metric expresses uniform changes in the degree of haze in terms of common increments across the entire range of visibility conditions, from pristine to extremely hazy conditions. Visibility is also sometimes expressed in terms of the visual range or light extinction. Visual range is the greatest distance, in kilometers or miles, at which a dark object can just be distinguished against the sky. Light extinction, expressed in units of inverse megameters ( $\text{Mm}^{-1}$ ), is the amount of light lost as it travels over distance. The haze index, in units of dv, is calculated directly from the total light extinction. The dv is a useful measure for tracking progress in improving visibility because each dv change is approximately an equal incremental change in visibility perceived by the human eye. Most people can detect a change in visibility of one dv.<sup>11</sup>

The dv is used in expressing Reasonable Progress Goals (RPGs) (which are interim visibility goals towards meeting the national visibility goal), defining baseline, current, and natural conditions and tracking changes in visibility. The regional haze SIPs must contain measures that ensure “reasonable progress” toward the national goal of preventing and remedying visibility impairment in Class I areas caused by manmade air pollution by reducing anthropogenic emissions that cause regional haze.

To track changes in visibility over time at each of the 156 Class I areas covered by the visibility program (40 CFR 81.401–437), and as part of the

process for determining reasonable progress, states with Class I areas, must calculate the degree of existing visibility impairment at each Class I area at the time of each regional haze SIP submittal and periodically review progress every five years midway through each 10-year implementation period. To do this, the Regional Haze Rule requirements for the first planning period<sup>12</sup> provide that states must determine the degree of impairment (in dv) for the average of the 20 percent least impaired (“best”) and 20 percent most impaired (“worst”) visibility days over a specified time period at each of their Class I areas. In addition, states must also develop an estimate of natural visibility conditions for the purpose of comparing progress toward the national goal. Natural visibility is determined by estimating the natural concentrations of pollutants that cause visibility impairment and then calculating total light extinction based on those estimates. The EPA provided guidance to states regarding how to calculate baseline, natural, and current visibility conditions in the first planning period.<sup>13</sup>

For the regional haze SIPs for the first planning period, “baseline visibility conditions” were the starting points for assessing “current” visibility impairment. Baseline visibility conditions represent the degree of visibility impairment for the 20 percent least impaired days and 20 percent most impaired days for each calendar year from 2000 to 2004. Using monitoring data for 2000 through 2004, states are required to calculate the average degree of visibility impairment for each Class I area on the 20 percent least and most impaired days, based on the average of annual values over the five-year period. The comparison of initial baseline visibility conditions to natural visibility conditions indicates the amount of improvement necessary to attain natural visibility, while the future comparison of baseline conditions to the then current conditions will indicate the amount of progress made. In general, the 2000–2004 baseline period is considered the starting point from

<sup>2</sup> Areas designated as mandatory Class I areas consist of National Parks exceeding 6,000 acres, wilderness areas and national memorial parks exceeding 5,000 acres, and all international parks that were in existence on August 7, 1977. 42 U.S.C. 7472(a). In accordance with section 169A of the CAA, EPA, in consultation with the Department of Interior, promulgated a list of 156 areas where visibility is identified as an important value. 44 FR 69122 (November 30, 1979). The extent of a mandatory Class I area includes subsequent changes in boundaries, such as park expansions. 42 U.S.C. 7472(a). Although states and tribes may designate as Class I additional areas which they consider to have visibility as an important value, the requirements of the visibility program set forth in section 169A of the CAA apply only to “mandatory Class I Federal areas.” Each mandatory Class I Federal area is the responsibility of a “Federal Land Manager.” 42 U.S.C. 7602(i). When we use the term “Class I area” in this action, we mean a “mandatory Class I Federal area.”

<sup>3</sup> In addition to the generally applicable regional haze provisions at 40 CFR 51.308, the EPA also promulgated regulations specific to addressing regional haze visibility impairment in Class I areas on the Colorado Plateau at 40 CFR 51.309. The latter regulations are not relevant here.

<sup>4</sup> See 64 FR 35714 (July 1, 1999). On January 10, 2017, the EPA promulgated revisions to the Regional Haze Rule that apply for the second and subsequent implementation periods. See 82 FR 3078 (Jan. 10, 2017).

<sup>5</sup> 40 CFR 51.300(b).

<sup>6</sup> *Id.* at 51.300(a).

<sup>7</sup> See 42 U.S.C. 7491(b)(2); 40 CFR 51.308 (b) and (f); see also 64 FR at 35768. The EPA established in the Regional Haze Rule that all states either have Class I areas within their borders or “contain sources whose emissions are reasonably anticipated to contribute to regional haze in a Class I area;” therefore, all states must submit regional haze SIPs. See 64 FR at 35721. In addition to each of the 50 states, the EPA also concluded that the Virgin Islands and District of Columbia contain a Class I area and/or contain sources whose emissions are reasonably anticipated to contribute regional haze in a Class I area. See 40 CFR 51.300(b) and (d)(3).

<sup>8</sup> See 42 U.S.C. 7491(b)(2)(A); 40 CFR 51.308 (d) and (e).

<sup>9</sup> See 40 CFR 51.308(b). The 2017 Regional Haze Rule revisions changed the second period SIP due date from July 31, 2018, to July 31, 2021, and maintained the existing schedules for the subsequent implementation periods. See 40 CFR 51.308(f).

<sup>10</sup> See 64 FR 35714, 35725–27 (July 1, 1999).

<sup>11</sup> The preamble to the Regional Haze Rule provides additional details about the deciview. 64 FR at 35725.

<sup>12</sup> The applicable requirements of the Regional Haze Rule for the first planning period are found in 40 CFR 51.308(d).

<sup>13</sup> *Guidance for Estimating Natural Visibility Conditions Under the Regional Haze Rule*, September 2003, EPA–454/B–03–005, available at [https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20030901\\_oaqps\\_epa-454\\_b-03-005\\_estimating\\_natural%20\\_visibility\\_regional\\_haze.pdf](https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20030901_oaqps_epa-454_b-03-005_estimating_natural%20_visibility_regional_haze.pdf) (hereinafter referred to as “our 2003 Natural Visibility Guidance”); and *Guidance for Tracking Progress Under the Regional Haze Rule*, EPA–454/B–03–004, September 2003, available at <https://www.epa.gov/sites/default/files/2021-03/documents/tracking.pdf> (hereinafter referred to as our “2003 Tracking Progress Guidance”).

which improvement in visibility is measured in the first planning period.

## 2. Reasonable Progress and Long-Term Strategy (LTS)

The vehicle for ensuring continuing progress towards achieving the natural visibility goal is the submission of a series of regional haze SIPs, including a LTS, from the states that have emissions expected to impact visibility in any Class I area. Additionally, states with Class I areas must establish two reasonable progress goals (RPGs) (*i.e.*, one for the “best” and one for the “worst” days) for each Class I area within the state for each (approximately) 10-year planning period.<sup>14</sup> The Regional Haze Rule does not mandate specific milestones or rates of progress, but instead calls for states to establish goals that provide for “reasonable progress” toward achieving natural visibility conditions. In establishing RPGs, states must provide for an improvement in visibility for the most impaired days over the (approximately) 10-year period of the SIP and ensure no degradation in visibility for the least impaired days over the same period.<sup>15</sup>

Further, CAA section 169A(b)(2)(B) requires all states to include in their regional haze SIP a long-term (10-to-15-year) strategy for making reasonable progress towards the national goal. Consistent with this statutory obligation, 40 CFR 51.308(d)(3) requires all states (both downwind and upwind) to “submit a long-term strategy that addresses regional haze visibility impairment for each mandatory Class I Federal area within the state and each mandatory Class I Federal area located outside the state which may be affected by emissions from the state.”<sup>16</sup> A state’s LTS is therefore inextricably linked to the RPGs<sup>17</sup> because it “must include enforceable emission limitations, compliance schedules, and other measures as necessary to achieve the RPGs established by states having mandatory Class I Federal areas.”<sup>18</sup>

In establishing its LTS, a state must meet a number of requirements. First, as a corollary to § 51.308(d)(1)(iv), when a state’s emissions are reasonably anticipated to cause or contribute to visibility impairment in a Class I area located in another state, the Regional Haze Rule requires the downwind state to coordinate with the upwind states in order to develop coordinated emissions

management strategies.<sup>19</sup> The purpose of the consultation requirement is to ensure that the upwind states adopt control measures sufficient to address their apportionment of emission reductions necessary to achieve reasonable progress and that the downwind state’s RPGs properly account for the visibility improvement that will result from the reasonable control measures identified and included in the upwind state’s LTS.

Second, where multiple states contribute to visibility impairment in a Class I area, each state “must demonstrate that it has included in its implementation plan all measures necessary to obtain its share of the emission reductions needed to meet the progress goal for the area.”<sup>20</sup> This requirement addresses situations where an upwind state agrees to achieve certain emission reductions during the consultation process, and downwind states rely upon those reductions when setting their RPGs, but the upwind state ultimately fails to include sufficient control measures in its LTS to ensure that the emission reductions will be achieved. In such a situation, the upwind state’s LTS would not meet the statutory or regulatory requirements.

Finally, each state “must document the technical basis, including modeling, monitoring and emissions information on which the state is relying to determine its apportionment of emission reduction obligations necessary for achieving reasonable progress in each mandatory Class I area it affects.”<sup>21</sup> Section 169(A)(g)(1) of the CAA requires states to determine “reasonable progress” by considering the four statutory factors: (1) The costs of compliance; (2) the time necessary for compliance; (3) the energy and non-air quality environmental impacts of compliance; and (4) the remaining useful life of any potentially affected sources.<sup>22</sup> Therefore, this provision requires states to consider downwind Class I areas when they develop the technical basis underlying their four-factor analysis to determine which control measures are necessary to make reasonable progress, and thus need to be a part of their LTS. The regulations further provide that, “States may meet this requirement by relying on technical analyses developed by the regional planning organization and approved by all State participants.”<sup>23</sup> Thus, states have the option of meeting this

requirement by relying on four-factor analyses and associated technical documentation prepared by a regional planning organization on behalf of its member states,<sup>24</sup> to the extent that such analyses and documentation were conducted. In situations where a regional planning organization’s analyses are limited, incomplete or do not adequately assess the four factors, however, then states must fill in any remaining gaps to meet this requirement. States should consider all types of anthropogenic sources of visibility impairment in developing their LTS, including stationary, minor, mobile, and area sources.<sup>25</sup> At a minimum, states must describe how each of the following seven factors listed below are taken into account in developing their LTS: (1) Emission reductions due to ongoing air pollution control programs, including measures to address “reasonably attributable visibility impairment” (RAVI); (2) measures to mitigate the impacts of construction activities; (3) emissions limitations and schedules for compliance to achieve the RPG; (4) source retirement and replacement schedules; (5) smoke management techniques for agricultural and forestry management purposes including plans as currently exist within the state for these purposes; (6) enforceability of emissions limitations and control measures; (7) the anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the LTS.<sup>26</sup>

## 3. Federal Land Manager (FLM) Consultation

The Regional Haze Rule requires that a state, or the EPA if promulgating a FIP, consult with FLMs before adopting and submitting a required SIP or SIP revision or a required FIP or FIP revision. Under 40 CFR 51.308(i)(2), a state, or the EPA if promulgating a FIP, must provide an opportunity for consultation no less than 60 days prior to holding any public hearing or other public comment opportunity on a SIP or SIP revision, or FIP or FIP revision, for regional haze. The EPA must include a description of how it addressed comments provided by the FLMs when considering a FIP or FIP revision.

<sup>24</sup> See *WildEarth Guardians v. EPA*, 77 F.3d 919 at 944 (10th Cir. Oct. 21, 2014) (explaining that 40 CFR 51.308(d)(3)(iii) “permits a State conducting a reasonable-progress determination” “to rely on [a regional planning organization’s] four-factor analysis.”).

<sup>25</sup> 40 CFR 51.308(d)(3)(iv); See also 40 CFR 51.301.

<sup>26</sup> 40 CFR 51.308(d)(3)(v).

<sup>14</sup> See 64 FR at 35730–37.

<sup>15</sup> *Id.*

<sup>16</sup> 40 CFR 51.308(d)(3).

<sup>17</sup> 40 CFR 51.308(d)(1).

<sup>18</sup> 40 CFR 51.308(d)(3).

<sup>19</sup> 40 CFR 51.308(d)(3)(i).

<sup>20</sup> 40 CFR 51.308(d)(3)(ii).

<sup>21</sup> 40 CFR 51.038(d)(3)(iii).

<sup>22</sup> 42 U.S.C. 7491(g)(1).

<sup>23</sup> 40 CFR 51.308(d)(3)(iii).

### *B. Previous Actions Related to Nebraska's Regional Haze Long-Term Strategy for the First Planning Period*

On July 6, 2012, the EPA took final action on Nebraska's Regional Haze SIP for the first planning period.<sup>27</sup> In that final action, the EPA partially approved and partially disapproved the state's SIP. The EPA disapproved the state's SO<sub>2</sub> BART determinations for Gerald Gentleman Station Units 1 and 2 and the state's LTS, which had relied on the state's flawed BART determinations.<sup>28</sup> The reasons for the EPA's disapproval are outlined in both the proposed rule and the final rule.<sup>29</sup> In the same action, the EPA also promulgated a FIP to address the deficiencies in Nebraska's Regional Haze Plan. For those deficiencies associated with the state's SO<sub>2</sub> control decisions for Gerald Gentleman Station Units 1 and 2, the EPA relied on the CSAPR to meet both the BART requirement and the LTS requirement to make reasonable progress.<sup>30</sup> Specifically, the EPA relied on its finding in a separate national rulemaking that CSAPR provides for greater reasonable progress on average across all affected Class I areas than source-specific BART in those states covered by the CSAPR (the "Better than BART Rule").<sup>31</sup> In that separate national rulemaking, the EPA revised the Regional Haze Rule to provide that states could choose to rely on the CSAPR as an alternative to BART. Consistent with this regulatory provision, the EPA relied on the CSAPR as an alternative to BART for SO<sub>2</sub> emissions from the Gerald Gentleman Station. In addition, the EPA concluded in the FIP that reliance on the CSAPR would remedy the deficiency in Nebraska's LTS for SO<sub>2</sub> at the Gerald Gentlemen Station.

### *C. Prior Litigation and EPA's Motion for Voluntary Remand*

Sierra Club, the NPCA, the State of Nebraska, and NPPD filed petitions for review challenging EPA's final action in the Eighth Circuit Court of Appeals.<sup>32</sup> In response to arguments raised by the Sierra Club and NPCA during briefing on the petitions, the EPA moved for a voluntary remand without vacatur of the

LTS portion of the FIP for Nebraska as it related to SO<sub>2</sub> emissions from the Gerald Gentleman Station.<sup>33</sup> The EPA explained in its motion that the Agency's rationale for declining to require additional SO<sub>2</sub> controls at the Gerald Gentleman Station as part of the LTS in its FIP was not fully or clearly explained. The EPA also stated that the explanation in the record could potentially be construed in a manner that was inconsistent with the EPA's interpretation of the relevant statutory requirements. As a result, the EPA determined that a remand was appropriate to afford the Agency an opportunity to amend or further explain its rationale for declining to require additional SO<sub>2</sub> controls beyond the CSAPR in the LTS, more fully respond to comments submitted by the public, or to take further action if necessary. The Court granted the remand on March 19, 2015. On January 19, 2017, the EPA Region 7 Administrator signed a proposed FIP that would have addressed the remanded portion of the Nebraska FIP for the first planning period. However, subsequent to the Administration change, the Office of Management and Budget published a memorandum requesting that any action that had been sent to the **Federal Register**, but had not yet published, be immediately withdrawn for review and approval by the new administration.<sup>34</sup> After being withdrawn, no action was taken on the FIP. Therefore, the EPA now is proposing a similar, updated action to address the remanded portion of the Nebraska FIP for the first planning period.

### **III. Overview of Proposed Action**

To address the voluntary remand, we are proposing to revise our FIP so that the LTS adequately addresses SO<sub>2</sub> emissions from Gerald Gentlemen Station. Specifically, the EPA is proposing an SO<sub>2</sub> emission limit of 0.06 lb/MMBtu on a 30-day rolling average basis for the Gerald Gentleman Station Unit 1 and Unit 2 to ensure that multiple Class I areas impacted by the Station's emissions can make reasonable progress toward Congress's natural-visibility goal. The EPA is also taking comment on the control options and limits analyzed in this action.

### **IV. Legal Authority for This Action**

The EPA has the authority to revisit its prior FIP actions on remand. As previously stated, the EPA moved for a

partial voluntary remand of the FIP without admitting error. The Eighth Circuit granted the motion and remanded the action to the EPA on March 19, 2015. Thus, the EPA has an obligation to complete its action on remand.

On remand, the EPA is taking this action pursuant to CAA sections 110(c)(1), 110(k)(3), and 169A(b)(2). CAA section 169A(b)(2) requires states to revise their SIPs to contain such measures as may be necessary to make reasonable progress towards the national visibility goal. Additionally, CAA section 110(k)(3) authorizes the EPA to approve, disapprove, or partially approve and partially disapprove a SIP or SIP revision, and CAA section 110(c)(1) authorizes the EPA to promulgate a FIP where "the Administrator . . . disapproves a state implementation plan submission in whole or in part." The EPA's authority to take such actions under the CAA necessarily provides it the inherent authority to revisit and amend such actions as necessary. *See Trujillo v. Gen Elec. Co.*, 621 F.2d 1084, 1086 (10th Cir. 1980). It is well established that agencies have inherent authority to revisit past decisions and to revise, replace, or repeal a decision to the extent permitted by law and supported by a reasoned explanation. *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009); *Motor Vehicle Manufacturers Ass'n of the United States, Inc. v. State Farm Mutual Automobile Insurance Co.*, 463 U.S. 29, 42 (1983); *see also Encino Motorcars, LLC v. Navarro*, 579 U.S. 211, 221–22 (2016). Further, the Eighth Circuit granted the EPA's request for a voluntary remand, and this action responds to that remand.

### **V. EPA's Review of the 2012 Federal Implementation Plan on Remand**

In this action, the EPA is proposing to act on the remanded portion of our FIP as it relates to LTS requirements for SO<sub>2</sub> for the Gerald Gentleman Station. Specifically, the EPA is supplementing the record with a four-factor analysis for SO<sub>2</sub> at Gerald Gentleman Station. As a result of this analysis, the EPA is proposing a new FIP with a 0.06 lb/MMBtu emissions limit for SO<sub>2</sub> as a part of Nebraska's LTS. In EPA's final 2012 action, the EPA relied on the implementation of the previously adopted CSAPR FIP for all Nebraska Electric Generating Units (EGUs) to satisfy the LTS requirements of the Regional Haze Rule for SO<sub>2</sub>, including for the Gerald Gentleman Station. At the time of the final action, the EPA did not further evaluate whether, with respect

<sup>27</sup> 77 FR 40149.

<sup>28</sup> The EPA approved rest of the Nebraska SIP including these elements of the LTS. See 77 FR 12770 (March 2, 2012) (proposed rule); 77 FR 40149 (July 6, 2012) (final rule).

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

<sup>31</sup> 77 FR 33642.

<sup>32</sup> NPPD dismissed its petition voluntarily but remained as an intervenor in the other petitions. *See Order, Neb. Pub. Power Dist. v. EPA*, No. 12–3061 (8th Cir. November 4, 2014).

<sup>33</sup> EPA's Motion for Partial Voluntary Remand, *Nebraska v. EPA*, 812 F.3d 662 (8th Cir. 2015) (No.12–3084).

<sup>34</sup> 82 FR 8346.

to the Gerald Gentleman Station, the CSAPR was an appropriate and sufficient measure needed in its LTS for making reasonable progress towards natural visibility conditions at the Class I areas it impacts; that is, the Badlands, Wind Cave, and Rocky Mountain National Parks. The environmental petitioners pointed out this deficiency in their challenge of EPA's final action. The EPA agreed, and thus requested and was granted a remand.

For the first planning period, Nebraska participated in the Central Regional Air Planning Association (CENRAP) and incorporated the CENRAP-developed visibility modeling into their regional haze SIP. The SIP relied on the CENRAP modeling, which assumed SO<sub>2</sub> controls at a rate of 0.15 lb/MMBtu at Gerald Gentleman Station.<sup>35</sup> As explained in our 2012 final action on the Nebraska regional haze SIP, source-specific CALPUFF modeling shows a significant visibility impact from Gerald Gentleman Station on South Dakota's Class I areas, Wind Cave and Badlands National Parks.<sup>36</sup> The Colorado Department of Public Health and the Environment also commented on Nebraska's regional haze SIP, requesting that the state reconsider the question of whether the Gerald Gentleman Station should install SO<sub>2</sub> controls, given Gerald Gentleman Station's CALPUFF modeled impacts on Rocky Mountain National Park.<sup>37</sup> Nebraska consulted with both South Dakota and Colorado during the first planning period. Based on their BART determination, Nebraska did not require source-specific BART controls at Gerald Gentleman Station as part of their LTS in their regional haze SIP. As explained in our partial disapproval of the state's regional haze SIP, Nebraska did not include an adequate justification explaining why controls at the Gerald Gentleman Station were not included as part of the LTS, nor did Nebraska

provide an adequate explanation or documentation of why their conclusions otherwise satisfied the requirements of 40 CFR 51.308(d)(3)(iii) to "determine its apportionment of emission reduction obligations necessary for achieving reasonable progress."

In addition to the CALPUFF modeling used in its BART determination, Nebraska also used CENRAP CAMx photochemical source apportionment modeling to identify the pollutants (*e.g.*, sulfates, nitrates) and source categories (*e.g.*, elevated point EGUs) that most impact visibility at Class I areas located in surrounding states. A summary of the annual emissions used for Nebraska elevated point sources and Gerald Gentleman Station in the 2002 base year and 2018 future year CENRAP modeling is shown in table 1 of the Analysis and Modeling Technical Support Document (Analysis and Modeling TSD) for this action.

The EPA reviewed both the 2018 CENRAP CAM<sub>x</sub> source apportionment modeling used by Nebraska and the Western Resources Air Partnership (WRAP) 2018 CAM<sub>x</sub> source apportionment used by South Dakota and Colorado to establish RPGs at their respective Class I areas. In setting their RPGs, both South Dakota and Colorado used the WRAP 2018 PRP18b modeling platform, which assumed an SO<sub>2</sub> control rate of 0.15 lb/MMBtu at Gerald Gentleman, which is similar to the 2018 CENRAP modeling. The modeled combined emissions at Gerald Gentleman Station Units 1 and 2 showed SO<sub>2</sub> emissions decreasing from 32,152 ton per year (tpy) in 2002 to 8,732 tpy in 2018 (with controls to achieve the 0.15 lb/MMBtu SO<sub>2</sub> emission limit assumed to be in operation in 2018).<sup>39</sup> This reduction of the CAM<sub>x</sub> modeled SO<sub>2</sub> emissions at Gerald Gentleman Station helps lower the projected SO<sub>2</sub>-caused light extinction at Badlands National Park contributed by Nebraska elevated point sources from 0.98 Mm<sup>-1</sup> in 2002 to 0.47 Mm<sup>-1</sup> in 2018. The decrease in the SO<sub>2</sub> extinction at Badlands National Park from Nebraska elevated point sources is due to the decrease in modeled emissions from 2002 to 2018, and in particular the decrease in modeled SO<sub>2</sub> emissions at Gerald Gentleman Station

due to the assumption of the achievement of a 0.15 lb/MMBtu emission rate in 2018. The EPA therefore finds that the CAM<sub>x</sub> modeling performed by both CENRAP and WRAP shows that emissions from Gerald Gentleman Station contribute to visibility impairment at the Badlands Class I area in South Dakota.

In 2012, the EPA evaluated Nebraska's SIP and determined it did not appropriately address the LTS requirements of the Regional Haze Rule related to Gerald Gentleman Station. Although there were modeled visibility impacts and improvements from the installation of cost-effective controls at Gerald Gentleman Station at Class I areas, Nebraska did not require any reduction in SO<sub>2</sub> emissions from Gerald Gentleman Station. The EPA partially disapproved Nebraska's LTS based on the state's reliance on the deficient SO<sub>2</sub> control determination for Gerald Gentleman Station. The EPA also promulgated a FIP in which we relied on the CSAPR to address this deficiency in Nebraska's SIP, but the EPA did not conduct a four factor analysis to evaluate whether additional controls beyond the CSAPR at Gerald Gentleman Station were required to ensure the SIP included all measures necessary to obtain Nebraska's share of the emission reductions needed to make reasonable progress towards the national goal at the Class I areas its emissions impact. Therefore, in order to provide a more thorough rationale on its LTS determination, the EPA requested and was granted a remand in order to provide a more robust explanation.

To properly evaluate whether the CSAPR was sufficient to satisfy Nebraska's obligation to address the visibility impacts of their emissions at the Class I areas it affects, the EPA has reviewed the record from the proposed and final actions. The EPA has found that the reductions expected (and now observed) from the implementation of the CSAPR do not equate to the reductions presumed by the CENRAP and WRAP modeling that were found to be achievable at a reasonable cost by both Nebraska and the EPA. We are therefore proposing to conclude that the CSAPR budgets for Nebraska are inadequate to ensure reasonable progress at neighboring Class I areas.

<sup>35</sup> For comparison, the SO<sub>2</sub> emission rate at Gerald Gentleman Station was about 0.58 lb/MMBtu during 2002, which was the period used as the baseline by Nebraska when it developed its SIP. In 2015 the emission rate was 0.57 lb/MMBtu. In 2022, the emission rate was 0.57 lb/MMBtu.

<sup>36</sup> 77 FR at 12776.

<sup>37</sup> 77 FR 12776–12777.

<sup>38</sup> Gerald Gentleman Station CALPUFF modeling visibility impacts were 1.15 deciview at Rocky Mountain. The source-specific CALPUFF modeling approach and results are provided in EPA's Analysis and Modeling TSD.

<sup>39</sup> WRAP–RMC\_2002–18\_Modeling\_Gerald\_Gentleman.xlsx in the docket.



The EPA's determination in 2012 that the CSAPR provides for greater reasonable progress than BART was based on an assessment that the CSAPR would provide for greater visibility improvement, on average, across all affected Class I areas.<sup>40</sup> In our assessment of the relative impacts of the CSAPR and BART on visibility, the EPA considered separately the average visibility improvement across the 60 Class I areas in the eastern portion of the CSAPR modeling domain and the average impact across all 140 Class I areas in the 48 contiguous states with sufficiently complete monitoring data to support our analysis.<sup>41</sup> In both cases, the Agency concluded that the CSAPR would provide for greater reasonable progress than BART on a regional basis. Both assessments showed, however, that source-specific BART would provide for greater visibility improvement than participation in the CSAPR in a number of Class I areas west of the Mississippi River and east of the Rocky Mountains, including at the Wind Cave and Badlands National Parks in South Dakota.<sup>42</sup>

That being said, as mentioned previously, in addition to the BART requirements, first planning period regional haze SIPs also have LTS requirements that are separate and apart from BART. The fact that a BART alternative provides for greater reasonable progress on average across a number of Class I areas in order to be considered a valid BART alternative, does not inherently mean that the same BART alternative can also be used, without additional explanation or analysis, to automatically satisfy the LTS requirements to ensure reasonable progress.<sup>43</sup> As stated above, like the BART requirements laid out in CAA 169A(b)(2)(A) and 40 CFR 51.308(e), in order to show that a state's SIP is also making reasonable progress toward the national goal pursuant to CAA 169A(a)(1) & (b)(2)(B), it must also meet separate requirements outlined in 40 CFR 51.308(d). For example, each state must document the information upon which it is relying to determine its apportionment of emission reduction obligations necessary for achieving reasonable progress in each Class I area it affects, which includes considering the four statutory factors set forth in section 169(A)(g)(1).<sup>44</sup>

In assessing the impacts of the CSAPR on SO<sub>2</sub> emissions from Nebraska, the CSAPR did not drive comparable SO<sub>2</sub> reductions at the Gerald Gentleman Station to those achievable from SO<sub>2</sub> controls. Prior to the CSAPR, Gerald Gentleman Station had a five-year annual average SO<sub>2</sub> emissions of 27,600 tons. After the CSAPR implementation on January 1, 2015, Gerald Gentleman Station has had annual SO<sub>2</sub> emission ranging from 18,200 to 27,700 tons with an annual average of 22,400 tons from 2015 to 2022.<sup>45</sup> In the most recent year (2022) of available data, Gerald Gentleman Station's facility-wide annual SO<sub>2</sub> emissions were 21,228 tons, which ranks 3rd nationally across electrical generating units. Currently, Nebraska receives 68,162 tons of SO<sub>2</sub> allowances under the CSAPR and 28,896 tons of SO<sub>2</sub> allowances are given annually to Gerald Gentleman Station. Despite the CSAPR being a valid BART alternative to fulfill Nebraska's first planning period BART requirements, because of the amount of the CSAPR allowances provided to Nebraska, as it relates to its LTS requirements, the CSAPR has not resulted in any additional SO<sub>2</sub> emissions reductions from Gerald Gentleman Station. Instead, the year-to-year variability seen in annual emissions is primarily driven by fluctuations in coal sulfur content and utilization. As an example, if Nebraska had implemented the 0.15 lb/MMBtu presumptive SO<sub>2</sub> limit used in the CENRAP and WRAP modeling, as relied upon by other CENRAP and WRAP states, Gerald Gentleman Station would have had annual SO<sub>2</sub> emissions ranging from 5,500 to 8,300 tons.<sup>46</sup> Given the lack of reductions required by the CSAPR in Nebraska coupled with the history outlined above regarding Nebraska's consultation with neighboring states, the EPA is proposing that it is inappropriate to rely on the CSAPR to ensure reasonable progress toward natural visibility without further consideration of appropriate SO<sub>2</sub> control measures for Gerald Gentleman Station.

Therefore, in this action, the EPA has provided an analysis of the LTS in accordance with 40 CFR 51.308(d) and the CAA 169A(b)(2)(B). This analysis includes a discussion of the four statutory factors outlined in CAA 169A(g)(1) to determine whether additional emission reduction measures are necessary at the Gerald Gentleman Station to fulfill the LTS requirements

of the Regional Haze Rule to ensure reasonable progress towards the national goal.

To complete the reasonable progress four-factor analysis the EPA must look at the following: the costs of compliance; the time necessary for compliance; the energy and non-air environmental impacts of compliance; and the remaining useful life of any potentially affected sources.<sup>47</sup> The Guidance for Setting Reasonable Progress Goals under the Regional Haze Program<sup>48</sup> notes the similarity between some of the reasonable progress factors and the BART factors contained in 40 CFR 51.308(e)(1)(ii)(A), and suggests that the BART Guidelines be consulted regarding cost, energy and non-air quality environmental impacts, and remaining useful life. We are therefore relying on our BART Guidelines for assistance in quantifying and considering those reasonable progress factors, as applicable.

Each of the elements of the four-factor analysis is discussed below.

#### A. Factor 1—The Costs of Compliance

##### 1. EPA's Evaluation of Costs for BART in the 2012 Proposed and Final Rule

In the 2012 proposed and final action, the EPA and Nebraska evaluated the cost of installation of wet FGD on Gerald Gentleman Station. Nebraska, in their SIP, concluded that these costs were reasonable on a cost per ton basis for both units combined (\$2,726/ton).<sup>49</sup> Nebraska also evaluated controls at Gerald Gentleman Station on a dollars per dv basis.<sup>50</sup> Nebraska determined that while costs on a dollar per ton basis

<sup>47</sup> 40 CFR 51.308(d)(1)(i); 42 U.S.C. 7491(g)(1).

<sup>48</sup> Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program, June 1, 2007. The 2019 Guidance includes the June 1, 2007 in its list of other guidance and does not contradict it. While the 2019 Guidance discusses reasonable progress and the four-factor analysis, the EPA is using the June 1, 2007 Guidance since this is a first Planning Period action.

<sup>49</sup> The Nebraska cost analysis was done using a dollar year prior to 2012. The state analysis and the prior EPA cost analysis were completed using a dollar year at least ten years earlier than the cost analysis in this document. Inflation has been factored into EPA's current cost analysis based on 2022 dollars.

<sup>50</sup> As explained in the final action in 2012, the BART Guidelines require the costs of controls to be evaluated on a dollar per ton basis. In their BART determinations, Nebraska used a threshold of \$40 million/dv/year; in their review of the BART analysis for Gerald Gentleman Station, the EPA concluded that Nebraska had overestimated the cost of control and underestimated the control efficiency of scrubbers and ignored the cumulative visibility impacts of controls at Gerald Gentleman Station. If Nebraska had appropriately estimated the cost of control and considered cumulative benefits, scrubbers would have been found to be cost effective on a dollars per deciview basis under the threshold set by Nebraska. See 77 FR 40157.

<sup>40</sup> 77 FR 33642 (June 7, 2012).

<sup>41</sup> 76 FR 82219, 82225–82227 (December 30, 2011).

<sup>42</sup> 77 FR at 33650; TSD for CSAPR Better-than-BART found at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2011-0729-0014>.

<sup>43</sup> 70 FR 39104, 39143–144 (July 6, 2005).

<sup>44</sup> 40 CFR 51.308(d)(3)(iii); 42 U.S.C. 7491(g)(1).

<sup>45</sup> Based on CAMD information. See the file "CAMD SO<sub>2</sub> annual emissions from GCS20152022.csv" in the docket for this action.

<sup>46</sup> Based on a conservative 70% reduction in emissions.



were reasonable, costs on a dollar per dv basis were not reasonable.<sup>51</sup> Nebraska also saw water consumption of wet flue-gas desulfurization (FGD) controls as significant and concluded that because of this unique situation, wet FGD controls were unreasonable for Gerald Gentleman Station Units 1 and 2.<sup>52</sup>

The EPA agreed with Nebraska that the cost per ton for FGD was reasonable and that Nebraska's analysis showed significant visibility improvement both at Badlands National Park and on a cumulative basis.<sup>53</sup> The EPA also found that Nebraska inappropriately ruled out dry sorbent injection (DSI), because the EPA found that costs were reasonable and visibility improvement was significant.<sup>54</sup>

The EPA also found that Nebraska made several errors in determining the cost of controls.<sup>55</sup> The EPA determined that Nebraska made incorrect assumptions about Gerald Gentleman Station's SO<sub>2</sub> emissions and the capability of certain controls. Nebraska also deviated from the EPA's Cost Control Manual when evaluating costs.<sup>56</sup> The EPA did our own evaluation in accordance with the Cost Control Manual and found that the cost per ton of SO<sub>2</sub> controls ranged from \$1,972 to \$2,310 for each Gerald Gentleman Station unit.<sup>57</sup> The EPA determined that the costs for control were reasonable and visibility improvement was significant and disapproved Nebraska's SO<sub>2</sub> BART determination for Gerald Gentleman Station.<sup>58</sup> The EPA's partial disapproval of Nebraska's SIP was upheld by the 8th Circuit and we are not reconsidering that decision in this proposed rulemaking.<sup>59</sup> In 2011 and 2012, neither Nebraska in their SIP submission nor the EPA in its action analyzed whether any control measures beyond BART were necessary to make reasonable progress at the affected Class I areas and thus a part of Nebraska's LTS.

## 2. EPA's Updated Cost Evaluation

In this action, as the EPA reviewed the LTS requirements under the CAA

and its regulations, the EPA evaluated the feasibility and costs of installing several types of SO<sub>2</sub> control systems at Gerald Gentleman Station. Specifically, the EPA has analyzed costs for DSI, spray dry absorber (SDA), and wet FGD. We have looked at each of these control technologies at various control rates to determine which rate/control scenarios are cost effective. The cost evaluation and methodologies are described in detail in the Cost Analysis Technical Support Document (Cost TSD), available in the docket of this proposed action.<sup>60</sup>

In developing cost estimates for the Gerald Gentleman Station units, we relied on the methodologies described in the EPA's Air Pollution Control Cost Manual (the Control Cost Manual, or Manual).<sup>61</sup> To estimate the costs for SDA scrubbers and wet FGD scrubbers, we used the "Air Pollution Control Cost Estimation Spreadsheet For Wet and Dry Scrubbers for Acid Gas Control"<sup>62</sup> prepared by EPA's Office of Air Quality Planning and Standards (OAQPS) Air Economics Group following methods in the Cost Control Manual. The methodologies for wet FGD and SDA scrubbers are based on those from EPA's CAMPD Integrated Planning Model (IPM) Model Version 6. To estimate the cost for DSI, we used the 2023 version of the EPA's Retrofit Cost Analyzer (RCA),<sup>64</sup> which is an Excel-based tool

that can be used to estimate the cost of building and operating air pollution controls and also employs Version 6 of our IPM model. These cost algorithms calculate the Total Capital Investment (TCI) and Total Annual Direct and Indirect Annual Costs. They also calculate the annualized costs per ton of SO<sub>2</sub> removed (\$/ton).

The EPA evaluated the cost of DSI using the default RCA cost models based on 2021 dollars. In order to maintain consistency with other cost numbers presented in this proposal, we escalated these costs to the most recent year (2022) dollars.<sup>65</sup> We used the RCA Tool<sup>66</sup> to analyze the cost of DSI at Gerald Gentleman Station for SO<sub>2</sub> emission rates of 0.10 lb/MMBtu and 0.30 lb/MMBtu. We chose these rates based on documentation from the RCA tool. The tool does not recommend application of DSI for SO<sub>2</sub> emission rates below 0.10 lb/MMBtu without unit specific analysis, and we are absent site-specific information for Gerald Gentleman Station.<sup>67</sup> As discussed in more detail in the Cost TSD (appendix A), we are not able to find information showing that any coal-fired units in the U.S. are currently achieving the 0.06 lb/MMBtu rate and 0.04 lb/MMBtu rate we reviewed for the other control options, with the use of DSI alone.

The corresponding DSI control efficiency rates at Gerald Gentleman Station Unit 1 for 0.30 lb/MMBtu and 0.10 lb/MMBtu was 52 and 84 percent SO<sub>2</sub> removal, while Unit 2 had corresponding control rates of 53 and 84 percent, respectively, for SO<sub>2</sub> removal.<sup>68</sup> The slight difference in control efficiency at the 0.3 lb/MMBtu rate is due to differences in the utilization of the two units over the time period analyzed (2018–2022). A summary of our DSI cost analysis is shown in table 1. We conclude DSI is cost-effective at

*20Cost%20Methodology\_Final\_2023.pdf* and <https://www.epa.gov/power-sector-modeling/retrofit-cost-analyzer>.

<sup>65</sup> *Ibid.*, p.4: "The data was converted to 2021 dollars based on an escalation factor of 2.5% based on the industry trends over the last ten years (2010–2020) excluding the current market conditions. To escalate prices from January 2021 to July 2022 costs, an escalation factor of 19.5% should be used, based on the Handy Whitman steam production plant index."

<sup>66</sup>

<sup>67</sup> IPM Model—Updates to Cost and Performance for APC Technologies, Dry Sorbent Injection for SO<sub>2</sub>/HCl Control Cost Development Methodology, Final March 2023, Project 13527–002, Eastern Research Group, Inc., Prepared by Sargent & Lundy, p.1–2.

<sup>68</sup> The 52–53 percent rate for DSI was selected based on easily achieved known operating performance of installed DSI systems. The 84 percent rate for DSI was selected based on the use of milled trona along with a baghouse. Both Gerald Gentleman Station units have baghouses installed.

<sup>51</sup> 77 FR 12770 at 12779.

<sup>52</sup> *Id.*

<sup>53</sup> 77 FR 12770 at 12780.

<sup>54</sup> *Id.*

<sup>55</sup> *Id.*

<sup>56</sup> *Id.*

<sup>57</sup> *Id.* This analysis and determination were conducted consistent with previous actions where cost of control analyses were submitted with deviations from the Control Cost Manual. 77 FR 12770 (March 2, 2012); 77 FR 40149 (July 6, 2012); 79 FR 74817 (December 26, 2014); 81 FR 295 (January 5, 2016).

<sup>58</sup> *Id.*; 77 FR 40149.

<sup>59</sup> *State of Nebraska v. EPA*, 812 F.3d 662 (8th Cir. 2015).

<sup>60</sup> The use of the IPM cost model is consistent with the other EPA Regional Haze actions and is based on reliable and accurate technical tools widely utilized by the EPA to assess control scenarios at electric generating units and other large sources.

<sup>61</sup> The EPA Air Pollution Control Cost Manual, Seventh Edition, April 2021, downloaded from <https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/cost-reports-and-guidance-air-pollution>.

<sup>62</sup> IPM Model—Updates to Cost and Performance for APC Technologies, SDA FGD Cost Development Methodology, Final January 2017, Project 13527–001, Eastern Research Group, Inc., Prepared by Sargent & Lundy. Downloaded from <https://www.epa.gov/system/files/documents/2023-03/Attachment%205-2%20SDA%20FGD%20Cost%20Development%20Methodology.pdf> and <https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/cost-reports-and-guidance-air-pollution>.

<sup>63</sup> IPM Model—Updates to Cost and Performance for APC Technologies, Wet FGD Cost Development Methodology, Final January 2017, Project 13527–001, Eastern Research Group, Inc., Prepared by Sargent & Lundy. Downloaded from <https://www.epa.gov/system/files/documents/2023-03/Attachment%205-1%20Wet%20FGD%20Cost%20Development%20Methodology.pdf> and <https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/cost-reports-and-guidance-air-pollution>.

<sup>64</sup> IPM Model—Updates to Cost and Performance for APC Technologies, Dry Sorbent Injection for SO<sub>2</sub>/HCl Control Cost Development Methodology, Final March 2023, Project 13527–002, Eastern Research Group, Inc., Prepared by Sargent & Lundy. Downloaded from [https://www.epa.gov/system/files/documents/2023-04/13527-002%20DSI%](https://www.epa.gov/system/files/documents/2023-04/13527-002%20DSI%20Cost%20Methodology_Final_2023.pdf)

\$2,491/ton and \$2,486/ton for Unit 1 and Unit 2, respectively at the 0.10 lb/MMBtu rate analyzed.<sup>69</sup> We invite

comment on the feasibility and cost-effectiveness of the control efficiencies and emission rate used for DSI at Gerald

Gentleman Station, supported by evidence.

TABLE 1—DSI COSTS

Unit	Control	Removal efficiency (90%)	Controlled SO <sub>2</sub> rate (lb/MMBtu)	2022\$ Cost effectiveness (/ton)
GERALD GENTLEMAN STATION Unit 1 .....	DSI (milled trona) .....	52	0.30	\$2,383
	w/BGH .....	84	0.10	\$2,491
GERALD GENTLEMAN STATION Unit 2 .....	DSI (milled trona) .....	53	0.30	\$2,362
	w/BGH .....	84	0.10	\$2,486

As previously mentioned, we used the “Air Pollution Control Cost Estimation Spreadsheet for Wet and Dry Scrubbers for Acid Gas Control,” to estimate the cost of SDA scrubbers. This is an Excel-based tool that can be used to estimate the costs for installing and operating scrubbers for reducing SO<sub>2</sub> and acidic gas emissions from fossil fuel-fired combustion units and other industrial sources of acid gases.<sup>70</sup> The size and costs of SDA scrubbers are based primarily on the size of the combustion unit and the sulfur content of the coal burned. The calculation methodologies used in the “Air Pollution Control Cost Estimation Spreadsheet for Wet and Dry Scrubbers for Acid Gas Control” are consistent with those presented in the U.S. EPA’s Air Pollution Control Cost

Manual. The “Air Pollution Control Cost Estimation Spreadsheet for Wet and Dry Scrubbers for Acid Gas Control” employs version 6 of our IPM model.<sup>71</sup> The cost models used in IPM version 6 were based on 2016 dollars. In performing the cost calculations in this action,<sup>72</sup> we have escalated the costs to 2022 dollars. The “Air Pollution Control Cost Estimation Spreadsheet for Wet and Dry Scrubbers for Acid Gas Control” allows the user to enter a different dollar-year for costs and the corresponding cost index if a different dollar-year is desired. Using this capability, we entered the 2022 Chemical Engineering Plant Cost Index (CEPCI)<sup>73</sup> into the spreadsheet to estimate the cost of SDA scrubbers in 2022 dollars.

We evaluated the cost of SDA using a control efficiency rate of 90 and 91 percent SO<sub>2</sub> removal at Gerald Gentleman Station Units 1 and 2, corresponding to an SO<sub>2</sub> emission rate of 0.06 lb/MMBtu at both Units. The EPA analyzed the cost of SDA scrubbers using this removal rate and emission limit because the lowest available SO<sub>2</sub> emission guarantees from original equipment manufacturers of SDA systems are 0.06 lb/MMBtu. A summary of our SDA scrubber cost analysis is shown in table 2. We conclude SDA scrubbers are cost-effective at \$4,073/ton and \$4,002/ton for Unit 1 and Unit 2, respectively at the 0.06 lb/MMBtu rate analyzed.<sup>74</sup>

TABLE 2—SDA COSTS

Unit	Control	Removal efficiency (%)	Controlled SO <sub>2</sub> Rate (lb/MMBtu)	2022\$ Cost effectiveness (/ton)
GERALD GENTLEMAN STATION Unit 1 .....	SDA .....	90	0.06	\$4,073
GERALD GENTLEMAN STATION Unit 2 .....	SDA .....	91	0.06	4,002

The cost of a baghouse to collect the particles from the operation of the SDA scrubbers was not included in our cost estimate because Gerald Gentleman Station currently operates a baghouse on both units. The EPA invites comment on the feasibility and cost-effectiveness of a higher control efficiency, and lower emission rate, using dry scrubbing at

Gerald Gentleman, supported by evidence.

We also evaluated the cost of a wet FGD at Gerald Gentleman Station Units 1 and 2. The size and costs of wet FGD scrubbers are based primarily on the size of the combustion unit and the sulfur content of the coal burned. The wet FGD scrubber cost methodology includes cost algorithms for capital and

operating cost for wastewater treatment consisting of chemical pretreatment, low hydraulic residence time biological reduction, and ultrafiltration to treat wastewater generated by the wet FGD system.<sup>75</sup>

Similar to our SDA analysis and approach, the cost models used in IPM version 6 were based on 2016 dollars and we escalated the costs to 2022

<sup>69</sup> The EPA recently proposed a BART FIP for Texas that references past BART decisions, specifically that several controls were required by either the EPA or States as BART with average cost-effectiveness values in the \$4,200 to \$5,100/ton range (escalated to 2020 dollars). In 2022 dollars, this range is \$5,700/ton to \$7,000/ton. See 88 FR 28918, 28963. For 2020 the CEPCI value is 596.2. For 2022 the CEPCI value 816.0.

<sup>70</sup> Air Pollution Control Cost Estimation Spreadsheet for Wet and Dry Scrubbers for Acid Gas Control, U.S. Environmental Protection Agency, Air Economics Group, Health and Environmental Impacts Division, Office of Air Quality Planning

and Standards (January 2023), downloaded from <https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/cost-reports-and-guidance-air-pollution>.

<sup>71</sup> Documentation for EPA’s Power Sector Modeling Platform v6 Using the Integrated Planning Model, dated March 2023. Documentation for v6 downloaded from <https://www.epa.gov/power-sector-modeling/documentation-post-ira-2022-reference-case>.

<sup>72</sup> Spreadsheets containing our cost calculations are located in our Docket.

<sup>73</sup> <http://www.chemengonline.com/pci-home>.

<sup>74</sup> The EPA recently proposed a BART FIP for Texas that references past BART decisions, specifically that several controls were required by either the EPA or States as BART with average cost-effectiveness values in the \$4,200 to \$5,100/ton range (escalated to 2020 dollars). In 2022 dollars, this range is \$5,700/ton to \$7,000/ton. See 88 FR 28918, 28963. For 2020 the CEPCI value is 596.2. For 2022 the CEPCI value 816.0.

<sup>75</sup> The methodologies had not been updated to incorporate the May 9, 2024 Steam Electric Power Generation Effluent Limitation Guidelines and Standards.

dollars to estimate the cost of wet FGD scrubbers in 2022 dollars. As shown in table 3, the EPA used SO<sub>2</sub> control efficiencies of 90–91 percent and 94 percent corresponding to emission rates

of 0.06 and 0.04 lb/MMBtu, respectively.<sup>76</sup> We conclude wet FGD are cost-effective at \$4,283/ton and \$4,145/ton for Unit 1 at 90% and 94% SO<sub>2</sub> removal rate (respectively) and

\$4,267/ton and \$4,132/ton for Unit 2 at 91% and 94% SO<sub>2</sub> removal rate (respectively).

TABLE 3—WET FGD COSTS

Unit	Control	Removal efficiency (%)	Controlled SO <sub>2</sub> Rate (lb/MMBtu)	2022\$ Cost effectiveness (/ton)
GERALD GENTLEMAN STATION Unit 1 .....	Wet FGD .....	90	0.06	\$4,283
		94	0.04	4,145
GERALD GENTLEMAN STATION Unit 2 .....	Wet FGD .....	91	0.06	4,267
		94	0.04	4,132

We acknowledge that the remaining useful life affects the cost effectiveness estimates for the control technologies analyzed in this section. As discussed in more detail in appendix A of the TSD, available in the docket of this proposal, and in section IV.A.4. below, the EPA has used 30 years as the remaining useful life of the units and any new controls installed on them. The EPA believes that even if the remaining useful life of the units is as short as 20 years, the proposed control rate and associated control technologies are still cost effective.

Based on our assessment, we are concluding that cost effective controls of SO<sub>2</sub> are available using DSI, SDA scrubbers and wet FGD scrubbers.

#### B. Factor 2—The Time Necessary for Compliance

The EPA believes five years is the appropriate time period for installation of wet FGD or SDA except where there are unusual circumstances. Five years for installation is consistent with our experience regarding FGD installations at power plants generally. In response to a section 114 information request, NPPD submitted several documents that demonstrate that between 2009 and 2014, NPPD considered installing wet FGD controls on Gerald Gentleman Station Units 1 and 2.<sup>77</sup> The engineering documents and requests for bids from this process included a timeline of five years from design to completion. The EPA believes this is an appropriate timeframe for installation of wet FGD

controls at Gerald Gentleman Station. We believe that SDA could be installed within the same timeframe. DSI may be able to be installed in a time frame of two to three years. This is consistent with the previous EPA actions.<sup>78</sup>

#### C. Factor 3—The Energy and Non-Air Quality Environmental Impacts of Compliance

The Guidance for Setting Reasonable Progress Goals under the Regional Haze Program advises, “In assessing energy impacts, you may want to consider whether the energy requirements associated with a control technology result in energy penalties.” “To the extent that these considerations are quantifiable they should be included in the engineering analyses supporting compliance cost estimates”, and to consult the BART Guidelines.<sup>79</sup> To analyze energy impacts, the BART Guidelines advise, “You should examine the energy requirements of the control technology and determine whether the use of that technology results in energy penalties or benefits.”<sup>80</sup> As discussed above in our cost analyses for DSI, SDA, and wet FGD, our cost model allows for the cost of additional auxiliary power required for pollution controls to be included in the variable operating costs. The EPA chose to include this additional auxiliary power in all cases. Further, the cost of electricity is negligible compared to the capacity of Gerald Gentleman Station and the grid as a whole. For WFGD, the cost of electricity is

approximately 1.25% of energy output. For SDA, the cost of electricity is approximately 1.32% of energy output. For DSI, the cost of electricity is 0.28% of energy output. Consequently, we believe that any energy impacts of compliance have been adequately considered in our analyses.

The Guidance for Setting Reasonable Progress Goals under the Regional Haze Program also advises the consideration of “the effects of the waste stream that may be generated by a particular control technology, and/or other resource consumption rates such as water, water supply, and wastewater disposal. To the extent that these considerations are quantifiable, they should also be included in the analyses supporting compliance cost estimates” and to also consult the BART Guidelines for additional guidance on applying this factor to stationary sources.<sup>81</sup> Regarding the analysis of non-air quality environmental impacts, the BART Guidelines advise “Such environmental impacts include solid or hazardous waste generation and discharges of polluted water from a control device. You should identify any significant or unusual environmental impacts associated with a control alternative that have the potential to affect the selection or elimination of a control alternative. Some control technologies may have potentially significant secondary environmental impacts. Scrubber effluent, for example, may affect water quality or land use. Alternatively, water availability may affect the feasibility

<sup>76</sup> The EPA analyzed the cost of wet scrubbers based on limits of 0.04 and at 0.06 lb/MMBtu. The first analysis at 0.04 lb/MMBtu evaluates wet FGD which is the lowest rate that vendors of the technology will guarantee. The IPM presumptive control model uses a removal efficiency of 98 percent. Because a 98 percent removal efficiency results in SO<sub>2</sub> rates less than 0.04 lb/MMBtu for the Gerald Gentleman Station units, we limited the control efficiency in the cost algorithm to just under 94 percent to assure that NPPD can obtain a performance guarantee for the wet scrubber. The

second analysis allows direct comparison to SDA at similar reduction efficiencies of 90–91 percent.

<sup>77</sup> See NPPD CAA section 114 Response: NPPDRH114\_0000892, NPPDRH114\_0001321, NPPDRH114\_0001584, NPPDRH114\_0002059, NPPDRH114\_0005017.

<sup>78</sup> See 76 FR 81729, 81758 (December 28, 2011) and 81 FR 66332, 66416 (September 27, 2016), where we promulgated regional haze FIPs for Oklahoma and Arkansas, respectively. These FIPs required BART SO<sub>2</sub> emission limits on coal-fired EGUs based on new scrubber retrofits with a

compliance date of no later than five years from the effective date of the final rule. Also see 88 FR 28918 (May 4, 2023), where we proposed BART SO<sub>2</sub> emission limits with a compliance date not later than three years or DSI and five years for wet FGD.

<sup>79</sup> Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program, June 1, 2007, available at [https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20070601\\_wehrum\\_reasonable\\_progress\\_goals\\_reghaze.pdf](https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20070601_wehrum_reasonable_progress_goals_reghaze.pdf).

<sup>80</sup> 70 FR 39168 (July 6, 2005).

<sup>81</sup> Id.

and costs of wet FGD. Other examples of secondary environmental impacts could include hazardous waste discharges, such as spent catalysts or contaminated carbon. Generally, these types of environmental concerns become important when sensitive site-specific receptors exist, or when the incremental emission reductions potential of the more stringent control is only marginally greater than the next most-effective option. However, the fact that a control device creates liquid and solid waste that must be disposed of does not necessarily argue against selection of that technology as BART, particularly if the control device has been applied to similar facilities elsewhere and the solid or liquid waste is similar to those other applications. On the other hand, where you or the source owner can show that unusual circumstances at the proposed facility create greater problems than experienced elsewhere, this may provide a basis for the elimination of that control alternative as BART.”<sup>82</sup>

The SO<sub>2</sub> control technologies the EPA considered in our analyses—DSI, SDA, and wet FGD—are in wide use in the coal-fired electricity generation industry. All three technologies would add spent reagent to the waste stream already generated by Gerald Gentleman Station, but do not present any unusual environmental waste impacts. In the case of DSI, the use of sodium-based sorbents makes fly ash unsaleable. The EPA has calculated that this would result in revenue loss of approximately \$0.07/MWh (\$1/ton fly ash estimate converted to \$/MWh) and additional disposal costs of approximately \$2/MWh. As discussed in our cost analyses for DSI, SDA, and wet FGD, our cost model includes waste disposal costs in the variable operating costs.

Non-air environmental impacts may also take into account water use to operate to the SO<sub>2</sub> controls evaluated, in particular wet FGD scrubbers. While the cost of incorporating a wastewater treatment facility at Gerald Gentleman Station is factored into our cost analysis for Wet FGD, we recognize water quality concerns associated with the waste stream for wet FGD as compared to the installation of SDA scrubbers and DSI. The wet FGD scrubber methodology includes cost algorithms for capital and operating cost for wastewater treatment consisting of chemical pretreatment, low hydraulic residence time biological reduction, and ultrafiltration to treat wastewater generated by the wet FGD system. The calculation methodologies used in the “Air Pollution Control Cost

Estimation Spreadsheet for Wet and Dry Scrubbers for Acid Gas Control,” are those presented in the U.S. EPA’s Air Pollution Control Cost Manual.

The cost algorithm used in the “Air Pollution Control Cost Estimation Spreadsheet for Wet and Dry Scrubbers for Acid Gas Control” calculates the Total Capital Investment, Direct Annual Cost, and Indirect Annual Cost. The Total Capital Investment for wet FGD is a function of the absorber island capital costs, reagent preparation equipment costs, waste handling equipment costs, balance of plant costs, and wastewater treatment facility costs.

Regarding water related impacts, we recognize that wet FGD requires additional amounts of water as compared to SDA and DSI. Furthermore, based on Effluent Limitation Guidelines (ELG), it is expected that all future wet FGD installations will require the facility to incorporate a wastewater treatment facility.<sup>83</sup> While this cost is factored into our cost analysis, it also highlights water quality concerns associated with the waste stream for wet FGD as compared to the installation of dry scrubbers and DSI.

Gerald Gentleman Station is located in western Nebraska, a semi-arid region dominated by agriculture. While we are aware of water availability concerns in the area surrounding Gerald Gentleman Station, we believe water resources are available to operate all control technologies evaluated in our cost analysis. This is based on Nebraska’s Regional Haze SIP, the record for our previous actions on Nebraska’s SIP, and information obtained from NPPD in 2017, which contain extensive information about water availability in the area of Gerald Gentleman Station. In our 2012 action, the EPA found that the cost of purchasing additional water at \$234 per ton of SO<sub>2</sub> and that this cost was reasonable.<sup>84</sup>

#### *D. Factor 4—The Remaining Useful Life of the Source*

The Guidance for Setting Reasonable Progress Goals under the Regional Haze Program advises, “If the remaining useful life of the source will clearly exceed” the standard time period listed in the EPA Air Pollution Control Cost Manual, “the remaining useful life factor has essentially no effect on

control costs and on the reasonable progress determination process. Where the remaining useful life of the source is less than the time period for amortizing the costs of the retrofit control, you may wish to use this shorter time period in your cost calculations. For additional guidance on applying this factor to stationary sources, you may wish to consult the BART Guidelines”.<sup>85</sup> Regarding the analysis of remaining useful life, the BART Guidelines advise “The “remaining useful life” of a source, if it represents a relatively short time period, may affect the annualized costs of retrofit controls. For example, the methods for calculating annualized costs in EPA’s OAQPS Control Cost Manual requires the use of a specified time period for amortization that varies based upon the type of control. If the remaining useful life will clearly exceed this time period, the remaining useful life essentially has no effect on control costs and on the BART determination process. Where the remaining useful life is less than the time period for amortizing costs, you should use the shorter time period in your cost calculations.”<sup>86</sup>

In determining the cost of scrubbers in the original SIP submission, Nebraska did not provide a specific useful life for the Gerald Gentleman Station.<sup>87</sup> NPPD also did not provide additional insight regarding the remaining useful life of the Gerald Gentleman Station in their section 114 response from 2016. Therefore, in line with the EPA’s approach in prior actions,<sup>88</sup> we used 30 years in the cost module of the IPM model when calculating costs for scrubber controls at the Gerald Gentleman Station in this action.

Similarly, the EPA sees no reason to assume that a DSI system installation, which is a much less complex and costly (capital costs) as opposed to annualized costs) technology in comparison to a scrubber installation, should have a shorter lifetime. As with a wet FGD or SDA, we expect the boiler to be the limiting factor when considering the lifetime of a coal-fired power plant. The EPA has therefore

<sup>85</sup> Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program, June 1, 2007.

<sup>86</sup> 70 FR 39168 (July 6, 2005).

<sup>87</sup> “The useful remaining life of Gerald Gentleman Station Units 1 and 2 is greater than 20 years under the current NPPD energy resource plan. Therefore, the remaining useful life has no impact on the annualized estimated control technology cost at this time.” Nebraska Regional Haze SIP, section 10.6.4.9.

<sup>88</sup> See 76 FR 52388 (August 22, 2011); 76 FR 81728 (December 28, 2011); *Oklahoma v. EPA*, 723 F.3d 1201 (July 19, 2013), cert. denied (U.S. May 27, 2014).

<sup>83</sup> IPM Model—Updates to Cost and Performance for APC Technologies, Wet FGD Cost Development Methodology, Final January 2017, Project 13527–001, Eastern Research Group, Inc., Prepared by Sargent & Lundy, p. 1. This Model is prior to the May 9, 2024 Steam Electric Power Generation Effluent Limitation Guidelines and Standards.

<sup>84</sup> 77 FR 33642 (June 7, 2012). Note we are not using this number in our current cost analysis.

<sup>82</sup> 70 FR 39169 (July 6, 2005).

similarly assumed that the lifetime of a DSI system is 30 years.

When considering the remaining useful life of a source, we must consider the useful life of any additional controls we could require and the remaining useful life of the source itself. All the examined control options have useful lives of 30 years, therefore, we propose to conclude that Units 1 and 2 have a remaining useful life of 30 years. In the NPPD 2023 Integrated Resource Plan, NPPD analyzed several continued operation scenarios. In the “SD-05” scenario, Gerald Gentleman Station continues to operate as is until at least 2050.<sup>89</sup> While NPPD has indicated a possible shortening of its EGUs’ lifespans, including Gerald Gentleman Station, NPPD has also indicated continued operation of Gerald Gentleman Station. Without a federally enforceable shutdown included in the SIP, the EPA must conclude that NPPD will continue operating Gerald Gentleman Station and must use the 30-year lifetime in the EPA cost analyses.

#### *E. Evaluation of Potential Visibility Impacts and Improvements*

Although visibility is not a required element of the four-factor analysis, we reviewed the visibility information from the original Nebraska Regional Haze SIP record to verify the impacts of Gerald Gentleman Station on the nearest Class I areas of Badlands, Wind Cave, and Rocky Mountain National Parks. In addition, we provide an updated meteorological back-trajectory analysis on the 20% most impaired monitored days for the period from 2008 through 2021 at Badlands, Wind Cave and Rocky Mountain Class I areas in our Analysis and Modeling TSD, which is included in the docket. In this back-trajectory analysis, we run 72-hour HYSPLIT model back-trajectories originating at Class I area at three different height levels (100 meters, 500 meters and 1,000 meters). We created composite HYSPLIT density plots for multi-year periods and the plots show a consistent pattern of the air mass over or near the location of Gerald Gentleman Station on the 20% most impaired days for the Badlands and Wind Cave Class I areas. We also generated daily back trajectory plots accompanied by plots of Gerald Gentleman Station SO<sub>2</sub> emissions data and show that Gerald Gentleman Station was operating and emitting SO<sub>2</sub> on, or leading up to, the most impaired days when back trajectories traveled near Gerald Gentleman Station.

In summary, we confirmed the CENRAP and Nebraska CALPUFF modeling associated with Nebraska’s first planning period SIP, and our updated back-trajectory analysis shows that Gerald Gentleman Station likely impacts the visibility at the affected Class I areas. Please see our Analysis and Modeling TSD for the detailed analysis linking emissions from Gerald Gentleman Station to visibility impairment at nearby Class I areas.

Both the CENRAP and WRAP CAMx modeling and BART CALPUFF modeling relied upon in the Nebraska’s first planning period SIP indicate a visibility improvement with the installation of SO<sub>2</sub> controls at Gerald Gentleman Station. The projected 2018 modeling shows improvements in the visibility impairment contribution from Nebraska elevated sources at Badlands due to decreases in emissions from the SO<sub>2</sub> BART controls assumed at Gerald Gentleman Station in the modeling. CALPUFF modeling with either wet FGD or DSI at a control rate of 0.15 lb/MMBtu produced significant visibility improvements at the two South Dakota Class I areas and Rocky Mountain National Park when averaged over the 2001–2003 modeling period. All control options with this level of control rate or lower will achieve significant emission reductions and visibility improvements, with lower control rates (*i.e.*, below the modeled 0.15 lb/MMBtu) leading to greater visibility improvement.

Therefore, although visibility is not a required element of the four-factor analysis, we propose to conclude there will be significant visibility benefit to the Class I areas as a result of installation of cost-effective SO<sub>2</sub> controls at Gerald Gentleman Station.

#### **VI. Amending the FIP on Remand—Long-Term Strategy Determination for Gerald Gentleman Station**

In light of the significant emission reductions achieved by a 0.06 lb/MMBtu SO<sub>2</sub> emission limit, leading to significant visibility improvements, the proven ability of both FGD and SDA to achieve a rate of 0.06 lb/MMBtu SO<sub>2</sub> consistently over a long period of time, the controls being cost effective, the ability to reasonably obtain water to operate controls, the lower amount of wastewater generated, and the lack of certainty surrounding DSI being able to achieve the proposed limit at Gerald Gentleman Station, to address the remand for LTS for SO<sub>2</sub> at Gerald Gentleman Station, the EPA is proposing that Gerald Gentleman Station Unit 1 and Unit 2 meet an SO<sub>2</sub> emission limit of 0.06 lb/MMBtu

averaged over a rolling 30 boiler-operating-day period for each unit.<sup>90</sup>

Further, the EPA notes that all SO<sub>2</sub> control technologies analyzed in this action are cost effective at all analyzed control percentages. While a 0.06 lb/MMBtu SO<sub>2</sub> limit would achieve a high level of visibility improvement, the EPA nonetheless acknowledges that all the emission control technologies evaluated in this action will reduce SO<sub>2</sub> emissions, thus resulting in improved visibility at the affected Class I areas.

The EPA also notes that all the SO<sub>2</sub> control technologies discussed in this action can be installed within 5 years and DSI can be installed as quickly as two years. Therefore, the time necessary for compliance for all emission rates can be considered equivalent and reasonable.

In considering the relevant energy and nonair environmental concerns, the cost of electricity is negligible compared to the capacity of Gerald Gentleman Station and the grid as a whole, as included in our cost analysis. Additionally, more waste will be generated but not at a rate that would be considered unusual or unreasonable. The EPA notes that DSI and SDA generate less wastewater than wet FGD, for the same emission limit. Finally, while there is water scarcity in the region, NPPD has access to water to operate the controls and water costs are included in our cost analysis.

The EPA also proposes to find that there are no permanent and enforceable limitations on the continued operation of Gerald Gentleman Station. The EPA is therefore proposing that the remaining useful life of the source is at least thirty years.

Therefore, we also invite comment on all the control technologies and other emission limits analyzed within this action. The EPA is choosing to propose an SO<sub>2</sub> emission limit of 0.06 lb/MMBtu based on multiple factors outlined at the beginning of this section. This limit was selected based on the operation of SDA. We find SDA can meet the 0.06 lb/MMBtu limit at a reasonable, cost-effective level and will result in large emissions reductions and visibility improvements with less water usage and wastewater than wet FGD. As discussed in more detail in the Cost TSD (Appendix A), we are not able to find information showing that any coal-fired units in the U.S. are currently meeting the 0.06 lb/MMBtu rate limit proposed in this action with the use of DSI alone.

<sup>89</sup> See “NPPD2023IntegratedResourcePlan.pdf” in the docket for this action.

<sup>90</sup> A boiler operating day is any 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time at the steam generating unit.

Therefore, we do not have a sufficient basis to conclude that DSI can be used to meet a 0.06 lb/MMBtu limit at Gerald Gentleman Station. However, the EPA's analysis shows that NPPD can achieve this emission rate utilizing SDA or wet FGD technology, both of which are cost-effective based on the EPA's analysis outlined throughout this action. Therefore, rather than proposing a specific control technology, the EPA believes it is appropriate to only propose an emission limit because it may be possible to meet the proposed limit with SDA or FGD. As stated above, we do not have sufficient information to determine whether DSI can meet this limit on a consistent, long-term basis. By proposing a limit only, the EPA is providing the source with greater flexibility to select the control technology that best meets its needs while also providing emissions reductions which will result in visibility benefits at the affected Class I areas.

## VII. The EPA's FLM Consultation

The EPA consulted with the FLMs (specifically, U.S. Fish and Wildlife Service, U.S. Forest Service, and the National Park Service) on April 23, 2024 to May 10, 2024. During the consultation we provided an overview of our proposed actions and drafts of our technical support documents. The FLMs signaled general support for our action.

## VIII. Proposed Action

Based on the EPA's review of the LTS requirements along with its analysis of the four statutory factors, the EPA proposes that NPPD Gerald Gentleman Station Unit 1 and Unit 2 each meet an emission limit of 0.06 lb/MMBtu averaged over a rolling 30 boiler-operating-day period. This emission limit would apply at all times, including periods of startup and shut down. We are also taking comment on the other control technologies and emissions limits analyzed in this action.

## IX. Environmental Justice Considerations

This section summarizes environmental justice data for areas that would be impacted by this proposed action and is intended for informational and transparency purposes only. Whereas, environmental justice data is not a key determinate for this action, the CAA and applicable implementing regulations neither prohibit nor require an evaluation of environmental justice. This action is perceived to have a positive benefit on environmental justice areas. The EPA defines environmental justice (EJ) as "the fair

treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." The EPA further defines the term fair treatment to mean that "no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations or programs and policies."<sup>91</sup> Recognizing the importance of these considerations to local communities, the EPA conducted an environmental justice screening analysis around the location of Gerald Gentleman Station to identify potential environmental stressors on these communities and the potential impacts of this action. However, the EPA is providing the information associated with this analysis for informational purposes only. The information provided herein is not a basis of the proposed action. The EPA conducted the screening analyses using EJScreen, an EJ mapping and screening tool that provides the EPA with a nationally consistent dataset and approach for combining various environmental and demographic indicators.<sup>92</sup> The EJScreen tool presents these indicators at a Census block group (CBG) level or a larger user specified "buffer" area that covers multiple CBGs.<sup>93</sup> An individual CBG is a cluster of contiguous blocks within the same census tract and generally contains between 600 and 3,000 people. EJScreen is not a tool for performing in depth risk analysis, but is instead a screening tool that provides an initial representation of indicators related to EJ and is subject to uncertainty in some underlying data (e.g., some environmental indicators are based on monitoring data which are not uniformly available; others are based on self-reported data).<sup>94</sup> EJScreen environmental indicators help screen for locations where residents may experience a higher overall pollution

burden than would be expected for a block group with the same total population in the U.S. These indicators of overall pollution burden include estimates of ambient particulate matter (PM<sub>2.5</sub>) and ozone concentration, a score for traffic proximity and volume, percentage of pre-1960 housing units (lead paint indicator), and scores for proximity to Superfund sites, risk management plan (RMP) sites, and hazardous waste facilities.<sup>95</sup> EJScreen also provides information on demographic indicators, including percent low-income, communities of color, linguistic isolation, and less than high school education. The EPA prepared an EJScreen report covering a buffer area of approximately 6-mile radius around Gerald Gentleman Station. From this report, no EJ indices were greater than the 80th national percentiles.<sup>96</sup> The full, detailed EJScreen report is provided in the docket for this rulemaking. This action is proposing to promulgate a FIP to address LTS requirements that are not adequately satisfied by the Nebraska Regional Haze SIP. The proposed rule is proposing SO<sub>2</sub> limits on Gerald Gentleman Station in Nebraska to fulfill regional haze program requirements. Exposure to SO<sub>2</sub> is associated with significant public health effects. Short-term exposures to SO<sub>2</sub> can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO<sub>2</sub>.<sup>97</sup> Therefore, we expect that these requirements for Gerald Gentleman Station in Nebraska, if finalized, and resulting emissions reductions will contribute to reduced environmental and health impacts on all populations impacted by emissions from these sources, including populations experiencing a higher overall pollution burden, people of color and low-income populations. There is nothing in the record which indicates that this proposed action, if finalized, would have disproportionately high or adverse human health or environmental effects

<sup>91</sup> See <https://www.epa.gov/environmentaljustice/learn-about-environmentaljustice>.

<sup>92</sup> The EJSCREEN tool is available at <https://www.epa.gov/ejscreen>.

<sup>93</sup> See <https://www.census.gov/programssurveys/geography/about/glossary.html>.

<sup>94</sup> In addition, EJSCREEN relies on the five-year block group estimates from the U.S. Census American Community Survey. The advantage of using five-year over single-year estimates is increased statistical reliability of the data (i.e., lower sampling error), particularly for small geographic areas and population groups. For more information, see [https://www.census.gov/content/dam/Census/library/publications/2020/acs/acs\\_general\\_handbook\\_2020.pdf](https://www.census.gov/content/dam/Census/library/publications/2020/acs/acs_general_handbook_2020.pdf).

<sup>95</sup> For additional information on environmental indicators and proximity scores in EJSCREEN, see "EJSCREEN Environmental Justice Mapping and Screening Tool: EJSCREEN Technical Documentation," Chapter 3 and Appendix C (September 2019) at [https://www.epa.gov/sites/default/files/2021-04/documents/ejscreen\\_technical\\_document.pdf](https://www.epa.gov/sites/default/files/2021-04/documents/ejscreen_technical_document.pdf).

<sup>96</sup> For a place at the 80th percentile nationwide, that means 20% of the U.S. population has a higher value. The EPA identified the 80th percentile filter as an initial starting point for interpreting EJScreen results. The use of an initial filter promotes consistency for the EPA programs and regions when interpreting screening results.

<sup>97</sup> See <https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#effects>.

on communities with environmental justice concerns.

#### **X. Statutory and Executive Order Reviews**

##### *A. Executive Order 12866: Regulatory Planning and Review and Executive Order 14094: Modernizing Regulatory Review*

This action is exempt from review under Executive Order 12866, as amended by Executive Order 14094, because it is not a “significant regulatory action” under the terms of Executive Order 12866<sup>98</sup> and is therefore not subject to review under Executive Orders 12866 and 14094.<sup>99</sup> The proposed FIP only applies to one facility. It is therefore not a rule of general applicability.

##### *B. Paperwork Reduction Act*

This proposed action does not impose an information collection burden under the provisions of the Paperwork Reduction Act because it is not a rule of general applicability and affects fewer than 10 entities. See 5 CFR 1320(c).

##### *C. Regulatory Flexibility Act*

I certify that this action will not have a significant impact on a substantial number of small entities. This proposed rule does not impose any requirements or create impacts on small entities. Nebraska Public Power District is not a small entity.

##### *D. Unfunded Mandates Reform Act (UMRA)*

This action contains no Federal mandates under the provisions of Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 2 U.S.C. 1531–1538 for state, local, or tribal governments or the private sector. The EPA has determined that Title II of UMRA does not apply to this proposed rule. In 2 U.S.C. 1502(1) all terms in Title II of UMRA have the meanings set forth in 2 U.S.C. 658, which further provides that the terms “regulation” and “rule” have the meanings set forth in 5 U.S.C. 601(2). Under 5 U.S.C. 601(2), “the term ‘rule’ does not include a rule of particular applicability relating to . . . facilities.” Because this proposed rule is a rule of particular applicability relating to specific EGUs located at one named facility, the EPA has determined that it is not a “rule” for the purposes of Title II of UMRA.

##### *E. Executive Order 13132: Federalism*

This action does not have Federalism implications. It will not have substantial

direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. This proposed rule does not impose significant economic costs on state or local governments. Thus, Executive Order 13132 does not apply to this proposed action. In the spirit of Executive Order 13132, and consistent with the EPA policy to promote communications between the EPA and state and local governments, the EPA specifically solicits comment on this proposed rule from state and local officials.

##### *F. Executive Order 13175: Coordination With Indian Tribal Governments*

This action does not have tribal implications as specified in Executive Order 13175. This action applies to one facility in Nebraska and will affect Federal Class I areas in South Dakota and Colorado. This action does not apply on any Indian reservation land or any other areas where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction, or non-reservation areas of Indian country. Thus Executive Order 13175 does not apply to this action.

##### *G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks*

Executive Order 13045: Protection from Environmental Health Risks and Safety Risks applies to any rule that: (1) is determined to be economically significant as defined under Executive Order 12866; and (2) concerns an environmental health or safety risk that we have reason to believe may have a disproportionate risk to children. Moreover, “regulation” or “rule” is defined in Executive Order 12866 as “an agency statement of general applicability and future effect.” E.O. 12866 does not define “statement of general applicability” but this term commonly refers to statements that apply to groups or classes, as opposed to statements which apply only to named entities. The proposed FIP, therefore, is not a rule of general applicability because its requirements apply and are tailored to only one individually identified facility. Thus it is not a “rule” or “regulation” within in the meaning of E.O. 12866. However, as this action will limit emissions of SO<sub>2</sub>, it will have a beneficial effect on children’s health by reducing air pollution.

##### *H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution or Use*

This proposed action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

##### *I. National Technology Transfer Advancement Act*

This proposed action involves technical standards. Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (“NTTAA”), Public Law 104–113, 12(d) (15 U.S.C. 272 note) directs the EPA to use voluntary consensus standards in its regulatory activities, unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs the EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards. This proposed rule would require the affected facility to meet the applicable monitoring requirements of 40 CFR part 75. Part 75 already incorporates a number of voluntary consensus standards. Consistent with the Agency’s Performance Based Measurement (PBMS), part 75 sets forth performance criteria that allow the use of alternative methods to the ones set forth in part 75. The PBMS approach is intended to be more flexible and cost-effective for the regulated community; it is also intended to encourage innovation in analytical technology and improved data quality. At this time, the EPA is not recommending any revisions to part 75; however, the EPA periodically revises the test procedures set forth in part 75. When the EPA revises the test procedures set forth in part 75 in the future, the EPA will address the use of any new voluntary consensus standards that are equivalent. Currently, even if a test procedure is not set forth in part 75, the EPA is not precluding the use of any method, whether it constitutes a voluntary consensus standard or not, as long as it meets the performance criteria specified; however any alternative methods must be approved through the petition process under 40 CFR 75.66 before they are used.

<sup>98</sup> 58 FR 51735 (October 4, 1993).

<sup>99</sup> 88 FR 21879 (April 11, 2023).



*J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations and Executive Order 14096: Revitalizing Our Nation's Commitment to Environmental Justice for All*

The EPA believes that the human health and environmental conditions, around Gerald Gentelman Station, that exist prior to this action do not result in disproportionate and adverse effects on communities with Environmental Justice concerns.

The EPA believes that this action is not likely to result in new disproportionate and adverse effects on communities with environmental justice concerns. This proposed FIP limits emissions of SO<sub>2</sub> from one facility in Nebraska.

The information supporting this Executive Order review is contained in Section IX Environmental Justice Considerations of this action and the file GGS6mileEJScreen Community Report.pdf in the docket for this action.

The EPA believes the human health or environmental risk addressed by this proposed action will not have potential disproportionately high and adverse human health or environmental effects on communities with environmental justice concerns because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any communities with environmental justice concerns.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Interstate transport of pollution, Nitrogen dioxide, Ozone, Particulate matter, Regional haze, Reporting and

recordkeeping requirements, Sulfur oxides, Visibility.

Michael S. Regan,  
Administrator.

For the reasons stated in the preamble, the EPA proposes to amend 40 CFR part 52 as set forth below:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

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

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

Subpart CC—Nebraska

■ 2. Amend § 52.1437 by revising paragraph (b) and adding paragraph (c) to read as follows:

§ 52.1437 Visibility protection.

\* \* \* \* \*

(b) *Measures addressing partial disapproval associated with SO<sub>2</sub>.* The deficiencies associated with the SO<sub>2</sub> BART determination for NPPD, Gerald Gentleman Station, Units 1 and 2 identified in EPA's partial disapproval of the regional haze plan submitted by Nebraska on July 13, 2011, are satisfied by § 52.1429. The deficiencies associated with the SO<sub>2</sub> LTS addressing SO<sub>2</sub> emissions for NPPD, Gerald Gentleman Station, Units 1 and 2 identified in EPA's partial disapproval of the regional haze plan submitted by Nebraska on July 13, 2011, are satisfied by paragraph (c) of this section.

(c) *Requirements for Gerald Gentleman Station Units 1 and 2 affecting visibility.*

(1) *Applicability.* The provisions of this section shall apply to each owner, operator, or successive owners or operators of the coal burning equipment designated as Gerald Gentleman Station Units 1 and 2.

(2) *Compliance dates.* Compliance with the requirements of this section is required by 5 years from the effective date of this rule for Gerald Gentleman Station Units 1 and 2.

(3) *Definitions.* All terms used in this part but not defined herein shall have the meaning given to them in the Clean Air Act and in parts 51 and 60 of this title. For the purposes of this section:

*24-hour period* means the period of time between 12:01 a.m. and 12 midnight.

*Air pollution control equipment* includes baghouses, particulate or gaseous scrubbers, sorbent injection systems, and any other apparatus utilized to control emissions of regulated air contaminants which would be emitted to the atmosphere.

*Boiler-operating-day* means any 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in a steam generating unit.

*Daily average* means the arithmetic average of the hourly values measured in a 24-hour period.

*Heat input* means heat derived from combustion of fuel in a unit and does not include the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources. Heat input shall be calculated in accordance with 40 CFR part 75.

*Owner or Operator* means any person who owns, leases, operates, controls, or supervises any of the coal burning equipment designated in paragraph (a) of this section.

*Regional Administrator* means the Regional Administrator of Region 7 or his/her authorized representative.

*Unit* means each individual coal-fired boiler covered under paragraph (a) of this section.

(4) *Emissions limitations.* SO<sub>2</sub> emission limit. The owner/operator of the units listed below shall not emit or cause to be emitted pollutants in excess of the following limitations in pounds per million British thermal units (lb/MMBtu) as averaged over a rolling 30 boiler-operating-day period from the subject unit. Compliance with the requirements of this section is required as listed below. The sulfur dioxide (SO<sub>2</sub>) emission limit for each individual unit shall be as listed in the following table.

Unit	SO <sub>2</sub> Emission limit (lbs/MMBtu)	Compliance date
Gerald Gentleman Station Unit 1 .....	0.06	Five years from effective date of the final rule.
Gerald Gentleman Station Unit 2 .....	0.06	Five years from effective date of the final rule.

(5) *Testing and monitoring.*

(i) No later than the compliance date of this regulation, the owner or operator shall install, calibrate, maintain and operate Continuous Emissions Monitoring Systems (CEMS) for SO<sub>2</sub>,

diluent (%CO<sub>2</sub> or %O<sub>2</sub>) and flow, for each unit listed in section (1) in accordance with 40 CFR 60.8 and 60.13 (e), (f), and (h), and appendix B of part 60. The owner or operator shall comply with the quality assurance procedures

for CEMS found in 40 CFR part 75. The SO<sub>2</sub>, diluent, and flow CEMS data, expressed in units of the standard, shall be used to verify compliance for each unit.

(ii) Continuous emissions monitoring shall apply during all periods of operation of the coal burning equipment including periods of startup, shutdown, and malfunction, except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments. Continuous monitoring systems for measuring SO<sub>2</sub> and diluent gas shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. Hourly averages shall be computed using at least one data point in each 15-minute quadrant of an hour. Notwithstanding this requirement, an hourly average may be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant in an hour) if data are unavailable as a result of performance of calibration, quality assurance, preventative maintenance activities, or backups of data from data acquisition and handling system, and recertification events. When valid pounds per million Btu emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks or zero and span adjustments, emission data must be obtained by using other monitoring systems approved by the EPA to provide emission data for a minimum of 18 hours in each 24-hour period and at least 22 out of 30 successive boiler operating days.

(6) *Recordkeeping and reporting requirements.* Unless otherwise stated all requests, reports, submittals, notifications and other communications to the Regional Administrator required by this section shall be submitted unless instructed otherwise to the Director, Air and Radiation Division, U.S. Environmental Protection Agency, Region 7, 11201 Renner Boulevard, Lenexa, Kansas 66219. For each unit subject to the emissions limitation in this section and upon completion of CEMS as required in this section, the owner or operator shall comply with the following requirements:

(i) The following information shall be reported to the Regional Administrator, EPA Region 7, and the Nebraska Department of Energy and the Environmental, for each boiler operating day. The report shall be submitted no later than 30 days following the end of each semi-annual calendar period (e.g., June 30, December 31).

(ii) For each SO<sub>2</sub> emission limit in paragraph (c)(1) of this section, comply with the notification, reporting, and recordkeeping requirements for CEMS compliance monitoring in 40 CFR 60.7 (c) and (d).

(iii) For each day, provide the total SO<sub>2</sub> emitted that day by each emission unit covered under (c)(1). For any hours on any unit where data for hourly pounds or heat input is missing, identify the unit number and monitoring device that did not produce valid data that caused the missing hour.

(iv) For the unit covered under (c)(2) and (d)(2), records sufficient to demonstrate that the fuel for the unit is pipeline natural gas.

(v) Records for demonstrating compliance with the SO<sub>2</sub> and PM emission limitations in this section shall be maintained for at least five years.

(A) Calendar date.

(B) The average SO<sub>2</sub> emission rates, in lb/MMBtu, for each 30 successive boiler operating day period, ending with the last 30-day period in the semi-annual reporting period; reasons for non-compliance with the emission standards; and, description of corrective actions taken.

(C) Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 75 percent of the hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken.

(D) Identification of the “F” factor used for calculations, method of determination, and type of fuel combusted.

(E) Identification of times when hourly averages have been obtained based on manual sampling methods.

(F) Identification of the times when the pollutant concentration exceeded full span of the CEMS.

(G) Description of any modifications to CEMS which could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of 40 CFR 60.51, subpart Da.

(7) *Equipment operations.* At all times, including periods of startup, shutdown, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate the unit including the associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Regional Administrator which may include, but is not limited to, monitoring results, review of operating and maintenance procedures, and inspection of the unit.

(8) *Enforcement.*

(i) Notwithstanding any other provision in this implementation plan,

any credible evidence or information relevant as to whether the unit would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed, can be used to establish whether or not the owner or operator has violated or is in violation of any standard or applicable implementation plan.

(ii) Emissions in excess of the level of the applicable emission limit or requirement that occur due to startup, shutdown or malfunction shall constitute a violation of the applicable emission limit.

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## DEPARTMENT OF THE INTERIOR

### Fish and Wildlife Service

#### 50 CFR Part 17

[Docket No. FWS–R2–ES–2023–0069; FXES1111090FEDR–245–FF09E21000]

RIN 1018–BE77

#### Endangered and Threatened Wildlife and Plants; 6-Month Extension of Final Determination on the Proposed Endangered Species Status for the Toothless Blindcat and the Widemouth Blindcat

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Proposed rule; reopening of comment period.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), announce a 6-month extension of the final determinations of whether to list the toothless blindcat (*Trogloglanis pattersoni*) and the widemouth blindcat (*Satan eurystomus*) as endangered species under the Endangered Species Act of 1973, as amended (Act). We are taking this action based on substantial disagreement regarding the sufficiency and accuracy of the available data relevant to the proposed listing rule, making it necessary to solicit additional information. Therefore, we are also reopening the comment period on the proposed rule for an additional 30 days. Comments previously submitted need not be resubmitted, as they are already incorporated into the public record and will be fully considered in our final determinations.

**DATES:** The comment period on the proposed rule that published August 22, 2023, at 88 FR 57046, is reopened. We will accept comments received or postmarked on or before September 3,