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Re: Comments on Proposed Approval and Promulgation of Air Quality Implementation Plans; Oklahoma; Regional Haze State Implementation Plan for the Second Implementation Period, 91 Fed. Reg. 6581 (proposed Feb. 12, 2026) [Docket ID No. EPA-R06-OAR-2022-0736]

Dear Ms. Ruan Lei,

The National Parks Conservation Association, Sierra Club, and the Coalition to Protect America's National Parks (collectively, the Conservation Groups) submit the following comments on the Environmental Protection Agency's (EPA) proposal to approve Oklahoma's 2022 Regional Haze State Implementation Plan (SIP) for the Second Planning Period (2022 SIP).[1] The Conservation Groups submitted public comments to Oklahoma on the State's draft 2022 SIP on July 1, 2022, raising a number of the same issues discussed in these comments.[2] Those comments, along with their relevant exhibits, are incorporated in their entirety into these comments. EPA's proposed approval rests primarily on a recently articulated New Uniform Rate

[1] *See* Approval and Promulgation of Air Quality Implementation Plans; Oklahoma; Regional Haze State Implementation Plan for the Second Implementation Period, 91 Fed. Reg. 6581 (Feb. 12, 2026); Oklahoma Dep't of Envtl. Quality, Oklahoma Regional Haze State Implementation Plan Revision: Planning Period 2 (Aug. 2022), EPA Docket ID No. EPA-R06-OAR-2022-0736-0002, https://downloads.regulations.gov/EPA-R06-OAR-2022-0736-0002/attachment_2.pdf [hereinafter "Oklahoma 2022 SIP"].

[2] Nat'l Parks Conservation Ass'n et al., Public Comments on Oklahoma's Draft Regional Haze State Implementation Plan for the Second Implementation Period (July 1, 2022), EPA Docket No. EPA-R06-OAR-2021-0794, EPA Docket ID No. OK042-02-15 OK RH PP2 Appendix M: Public Comments Received at PDF pp. 78-132, https://downloads.regulations.gov/EPA-R06-OAR-2022-0736-0002/attachment_15.pdf [hereinafter "Conservation Organizations' 2022 Comments"] (exhibits to comment letter attached as Exs. 1.a–1.i).

of Progress (URP) Policy that fundamentally alters the reasonable progress inquiry and, in practice, relieves EPA of its obligation to engage with the technical record before it.

National Parks Conservation Association (NPCA) is a national organization whose mission is to protect and enhance America's national parks for present and future generations. NPCA performs its work through advocacy and education. NPCA has over 1.9 million members and supporters nationwide, including more than 14,700 in Oklahoma, with its main office in Washington, D.C. and 24 regional and field offices. NPCA is active nationwide in advocating for strong air quality requirements to protect our parks, including submission of petitions and comments relating to visibility issues, Regional Haze SIPs, climate change and mercury impacts on parks, and emissions from individual power plants and other sources of pollution affecting national parks and communities. NPCA's members live near, work at, and recreate in all the national parks, including those directly affected by emissions from Oklahoma's sources.

Sierra Club is a national nonprofit organization with 67 chapters and approximately 650,000 members—including more than 2,900 in Oklahoma—dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth's ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Sierra Club has long participated in regional haze rulemakings and litigation across the country to advocate for public health and our nation's national parks.

The Coalition to Protect America's National Parks represents nearly 5,000 current, former, and retired employees and volunteers of the National Park Service, with over 50,000 collective years of stewardship of America's most precious natural and cultural resources. We are protection rangers and interpreters, scientists and maintenance workers, managers and administrators, and specialists in the full spectrum of the parks' resources. Our membership also includes former National Park Service directors, deputy directors, regional directors, and park superintendents. Recognized as the Voices of Experience, the Coalition educates, speaks, and acts for the preservation and protection of the National Park System, and mission-related programs of the National Park Service.

In its 2022 SIP, Oklahoma relied on the Central State Air Resources Agencies (CenSARA) modeling and the Ramboll-Environ Area of Influence (AOI) analysis to select sources for Four-Factor Analysis, ultimately selecting only a handful of facilities for consideration. Oklahoma declined to require any of the sources it analyzed to adopt new or additional measures to reduce their haze-forming emissions, concluding that no additional controls were cost-effective or necessary to make reasonable progress toward the national visibility goal at the Wichita Mountains Wilderness Area—the only mandatory Class I Federal area within Oklahoma's borders.

EPA now proposes to approve Oklahoma's 2022 SIP in its entirety. EPA's proposed approval fails to meaningfully consider deficiencies in Oklahoma's SIP—deficiencies that EPA itself identified during the State's public comment period on the SIP.[3] As explained in detail in

[3] Michael Feldman, Ph.D., Section Chief, SO_2 & Regional Haze Section, Air & Radiation Div., U.S. Envtl. Prot. Agency Region 6, Letter to Melanie Foster, Okla. Dep't of Envtl. Quality re: Proposed Regional Haze State Implementation Plan for the Second Planning Period (July 1, 2022), EPA Docket No. EPA-R06-OAR-2022-0736,

these comments, EPA's proposed approval is contrary to the requirements of the Clean Air Act (CAA) and EPA's Regional Haze Rule (RHR) for the following reasons:

- EPA's articulation of its New URP Policy is incoherent, internally inconsistent, and inadequately explained, rendering the New Policy arbitrary and capricious. The New URP Policy also violates the plain language and statutory scheme set forth by Congress in the Clean Air Act, as well as EPA's own RHR.

- EPA's application of the New URP Policy here, though announced for the first time in a state-specific regional action, on Oklahoma's 2022 SIP violates the Clean Air Act's requirements that EPA regional actions be consistent with national policy and with actions taken by other EPA regions.

- Even if the New URP Policy does not violate the Clean Air Act (it does), EPA fails to demonstrate that Oklahoma's 2022 SIP satisfies that New Policy. Oklahoma's reliance on URP adjustments does not comply with the requirements of the RHR. EPA also ignores that Oklahoma did not address all of the out-of-state Class I areas that are impacted by Oklahoma pollution.

- EPA fails to grapple with the extensive legal deficiencies in Oklahoma's 2022 SIP and entirely ignores that the State accepted public comment on its SIP Revision that identified additional measures that are necessary to make reasonable progress for this planning period. The Conservation Groups raised numerous issues in comments to the State on the State's 2022 SIP, highlighting the myriad ways the State's 2022 SIP violates the Clean Air Act and the RHR. Regardless of EPA's reliance on its New URP Policy, the Agency's proposal to approve the 2022 SIP does not address legal deficiencies raised by the Conservation Groups, and so, is arbitrary and capricious.

To comply with the requirements of the Clean Air Act and RHR, EPA must correct the errors discussed in these comments, withdraw its proposed approval, and disapprove Oklahoma's 2022 SIP.

OK042-02-15 OK RH PP2 Appendix M: Public Comments Received at PDF pp.2-19, https://downloads.regulations.gov/EPA-R06-OAR-2022-0736-0002/attachment_15.pdf (identifying deficiencies in Oklahoma's source selection methodology, Four-Factor Analyses, and supporting documentation) [hereinafter "EPA 2022 Comments"]; *see also* U.S. Envtl. Prot. Agency, *EPA Comments on Pre-Proposal Draft Oklahoma Regional Haze SIP* (Nov. 2021), EPA Docket No. EPA-R06-OAR-2022-0736, OK042-02-11 OK RH PP2 Appendix I: Informal Environmental Protection Agency Comments, https://downloads.regulations.gov/EPA-R06-OAR-2022-0736-0002/attachment_11.pdf.

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I. The Clean Air Act's Regional Haze Program.

To improve air quality in our most treasured landscapes, Congress enacted the Clean Air Act's Regional Haze Program, establishing "as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I Federal areas which impairment results from manmade air pollution."[4] In order to protect the "intrinsic beauty and historical and archeological treasures"[5] found in national parks, wilderness areas, and other "Class I" areas, the Regional Haze Program sets a national regulatory floor and requires states to design and implement programs to curb haze-causing emissions within their jurisdictions. To meet Congress's natural visibility goal, EPA issued the RHR, which requires states (or EPA where a state fails to act) to make "reasonable progress" toward eliminating human-caused visibility impairment at each Class I area.[6]

Together, the Clean Air Act and RHR establish an iterative process that requires states to prepare and submit Regional Haze SIPs every ten years to further reduce visibility-impairing pollution at each Class I area.[7] The RHR sets out a planning sequence that states must follow when developing their SIPs.[8] States first calculate baseline, current, and natural visibility conditions, as well as the URP for each Class I area within their borders, which is the amount of progress that would ensure that natural visibility conditions are achieved if kept constant each year.[9] This calculation shows a straight-line "glidepath" between baseline visibility conditions and natural visibility conditions. Second, states develop their long-term strategies for addressing regional haze pollution.[10] Third, they develop reasonable progress goals and then compare those goals to the URP to track the amount of progress that will be made at each Class I area by the end of the planning period based on the controls included in the long-term strategy.[11] Finally, states adopt monitoring strategies and other measures to ensure compliance with their SIPs.[12]

A. Long-Term Strategy

In developing its long-term strategy, a state must consider its anthropogenic sources of visibility impairment and evaluate different emission reduction strategies to control haze-forming emissions from those sources. In selecting sources for reasonable progress analyses, a state should consider "major and minor stationary sources or groups of sources, mobile sources and area sources."[13] The state's reasonable progress analyses (a.k.a., Four-Factor Analyses) for selected sources, which form the basis for the state's long-term strategy, must address the four factors identified in the Clean Air Act and RHR: (1) the cost 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 the source.[14] Notably, neither the statute nor the

[4] 42 U.S.C. § 7491(a)(1).
[5] H.R. Rep. No. 95-294, at 203-04 (1977), reprinted in 1977 U.S.C.C.A.N. 1077, 1282.
[6] 40 C.F.R. § 51.308(d)(1)-(3), (f)(2)-(3).
[7] *Id.* § 51.308(f).
[8] 82 Fed. Reg. 3078, 3091 (Jan. 10, 2017).
[9] 40 C.F.R. § 51.308(f)(1).
[10] *Id.* § 51.308(f)(2).
[11] *Id.* § 51.308(f)(3).
[12] *Id.* § 51.308(f)(6); 82 Fed. Reg. at 3091.
[13] 40 C.F.R. § 51.308(f)(2)(i).
[14] 42 U.S.C. § 7491(g)(1); 40 C.F.R. § 51.308(f)(2)(i).

RHR lists visibility improvement or visibility conditions as a fifth factor in the reasonable progress analysis. The state "must include in its implementation plan a description of the criteria it used to determine which sources or groups of sources it evaluated and how the four factors were taken into consideration in selecting the measures for inclusion in its long-term strategy."[15]

In addition to reasonable progress analyses for selected sources, states must also consider five additional factors in developing their long-term strategies: (1) emission reductions due to ongoing air pollution control programs; (2) measures to mitigate pollution from construction activities; (3) source retirement and replacement schedules; (4) smoke management techniques for agricultural and forestry management purposes; and (5) the anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the long-term strategy.[16] States must further document the technical basis for the SIP, including monitoring data, modeling, cost, and emission information, and the baseline emission inventory upon which its strategies are based.[17]

A State's long-term strategy must contain "emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress toward meeting the national goal."[18] The emission limits and other measures included in a state's long-term strategy must be sufficient to achieve reasonable progress for the Class I areas within the state's borders, as well as the out-of-state Class I areas affected by the state's emissions.[19] A state cannot exclude sources from a reasonable progress analysis or reject controls identified in an analysis because Class I areas impacted by in-state sources are projected to be at or below their respective URP glidepaths. EPA has made clear that the URP is not a "safe harbor."[20] Rather, the rate of progress that is achieved by the implementation of all reasonable controls as determined by a review of the four statutory factors "is, by definition, a reasonable rate of progress."[21]

B. Reasonable Progress Goals

In addition to long-term strategies, states must also establish in their SIPs reasonable progress goals, expressed in deciviews, that provide for progress towards the natural visibility goal for all in-state Class I areas.[22] The reasonable progress goals must reflect the visibility conditions that will be achieved at the end of the implementation period as a result of the measures included in a state's long-term strategy.[23] As EPA has explained, states must follow the "long-standing" SIP planning sequence whereby states first identify in their long-term strategies the controls that are necessary to make reasonable progress based on an analysis of the four statutory factors *and then* develop reasonable progress goals by determining the amount of visibility improvement that will result from the controls included in the long-term strategies.[24]

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[15] 40 C.F.R. § 51.308(f)(2)(i).
[16] *Id.* § 51.308(f)(2)(iv).
[17] *Id.* § 51.308(f)(2)(iii).
[18] 42 U.S.C. § 7491(b)(2); 40 C.F.R. § 51.308(f)(2)(i).
[19] 40 C.F.R. § 51.308(d)(3), (f)(2).
[20] 82 Fed. Reg. at 3093.
[21] *Id.*
[22] 40 C.F.R. § 51.308(f)(3)(i).
[23] *Id.*
[24] 82 Fed. Reg. at 3091.

Reasonable progress goals must provide for progress on the most impaired days and no degradation on the clearest days by the end of the planning period.[25] If a reasonable progress goal for either an in-state or an out-of-state Class I area impacted by in-state sources reflects a slower rate of improvement than the relevant URP glidepath at the end of the planning period, the state must provide a technically "robust demonstration" that there are no other available control measures that should be included in the SIP.[26]

C. EPA's Review of Regional Haze SIPs

The Clean Air Act's Regional Haze Program provides states with the initial opportunity to develop Regional Haze SIPs that clean up the air in our national parks and wilderness areas. However, EPA must determine if a state's SIP complies with the requirements of the Clean Air Act and RHR and is authorized to approve, disapprove, or partially approve and partially disapprove of a SIP or a SIP revision.[27] As courts have recognized, EPA plays an important role in overseeing the states' implementation of regional haze plans,[28] highlighting EPA's "substantive role in deciding whether state SIPs are compliant with the [Clean Air Act] and its implementing regulations."[29] EPA is not limited to a ministerial role of verifying whether states made the required determinations under the Act but must instead review the substantive content of those same determinations "for consistency with the statute and regulations."[30] To that end, EPA may only approve of those SIPs, or portions of SIPs, that meet all the applicable requirements of the Act and must disapprove of SIPs or portions of SIPs that are based upon analyses that are neither reasoned nor moored to the Act's provisions.[31]

EPA actions on regional haze plans under the Clean Air Act cannot be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law" and cannot be "in excess of" EPA's authority under the Act.[32] EPA's actions on SIPs are subject to the requirements of the Administrative Procedure Act (APA).[33] For any EPA actions under the Clean Air Act that are not subject to the APA, courts apply the "arbitrary and capricious" standard under the Clean Air Act the same way as that under the APA.[34] Agency action is arbitrary and capricious where "the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an

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[25] 40 C.F.R. § 51.308(f)(3)(i).
[26] *Id.* § 51.308(f)(3)(ii).
[27] 42 U.S.C. §§ 7410(c)(1), (k)(3), (l), 7491.
[28] *North Dakota v. EPA*, 730 F.3d 750, 760-62 (8th Cir. 2013); *Oklahoma v. EPA*, 723 F.3d 1201, 1207-10 (10th Cir. 2013).
[29] *Arizona ex rel. Darwin v. EPA*, 815 F.3d 519, 532 (9th Cir. 2016); *see also Alaska Dep't of Envtl. Conservation v. EPA*, 540 U.S. 461, 485-86 (2004).
[30] *Arizona ex rel. Darwin*, 815 F.3d at 525 (citing 42 U.S.C. § 7410(c)(1)(A)); *see also North Dakota*, 730 F.3d at 761; *Nat'l Parks Conservation Ass'n v. U.S. Dep't of Interior*, 794 F. Supp. 2d 39, 41 (D.D.C. 2011) ("EPA must require these SIPs to include 'such emission limits, schedules of compliance, and other measures as may be necessary to make reasonable progress.'").
[31] *Arizona ex rel. Darwin*, 815 F.3d at 531; *North Dakota*, 730 F.3d at 760-62; *Oklahoma*, 723 F.3d at 1207-10.
[32] 42 U.S.C. § 7607(d)(9)(A), (C).
[33] *See id.* § 7607(d) (listing EPA actions that are considered rulemakings under the Clean Air Act but excluding EPA actions approving or disapproving SIPs in full or in part); *see Bahr v. EPA*, 836 F.3d 1218, 1229 (9th Cir. 2016) ("In reviewing a challenge to the EPA's approval of a SIP under § 7607(b)(1), we apply 'the general standard of review for agency actions set forth in the [APA].'").
[34] *Nat'l Ass'n of Clean Air Agencies v. EPA*, 489 F.3d 1221, 1228 (D.C. Cir. 2007).

explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise."[35] Thus, EPA "must examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'"[36]

Moreover, to ensure EPA's SIP actions are reasoned, the Agency must act consistently across SIPs. In 1977, Congress amended the Clean Air Act to direct EPA to promulgate rules of general applicability governing EPA's actions to "assure fairness and uniformity in the criteria, procedures, and policies applied by the various [EPA] regions in implementing and enforcing" the Act and to "provide a mechanism for identifying and standardizing inconsistent or varying criteria, procedures, and policies being employed . . . in implementing and enforcing" the Act.[37] EPA, thus, interprets the statutory provision "as a mandate to assure greater consistency among the Regional Offices in implementing the Act [and] certainly not as a license to institutionalize the kind of inconsistencies that prompted Congress to enact this provision."[38] EPA promulgated final regulations to implement this mandate in 1980, providing a system for assuring fair and consistent application of rules, regulations, and policies throughout the country by establishing procedures and policies that EPA regional staff must follow in implementing the Clean Air Act programs delegated to the regions.[39] Since that time, EPA has issued numerous guidance documents outlining the SIP consistency process Regional Offices must adhere to in their review of state-submitted SIPs to assure consistent application of national programs, policy and guidance.[40]

II. Reducing Haze Pollution from Oklahoma Facilities Will Improve Visibility in Class I Areas and Result in Economic, Public Health, and Environmental Benefits.

Oklahoma is home to one Class I area: the Wichita Mountains Wilderness Area (Wichita Mountains), located in the Wichita Mountains National Wildlife Refuge in Comanche County and managed by the U.S. Fish and Wildlife Service. The Wichita Mountains Wildlife Refuge encompasses roughly 59,000 acres of mixed-grass prairie and granite mountains in southwestern Oklahoma.[41] The refuge provides habitat for numerous wildlife species—including American bison, Texas longhorn cattle, Rocky Mountain elk, white-tailed deer, and hundreds of bird

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[35] *Motor Vehicle Mfrs. Ass'n of the United States v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) ("*State Farm*").
[36] *Id.* (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962)).
[37] 42 U.S.C. § 7601(a)(2).
[38] 44 Fed. Reg. 13043, 13045 (March 9, 1979).
[39] 40 C.F.R. Part 56; *see generally* 45 Fed. Reg. 85400 (Dec. 24, 1980).
[40] *See, e.g.*, Memorandum from Janet McCabe, Deputy Assistant Admin., Off. Air & Radiation, Envtl. Prot. Agency, to Reg'l Admins., Regions I – X (April 6, 2011) [hereinafter "2011 McCabe Consistency Memo"], https://www.epa.gov/ground-level-ozone-pollution/streamlining-sip-process (attached as Ex. 2); Memorandum from William L. Wehrum, Acting Assistant Admin., Off. of Air & Radiation, Envtl. Prot. Agency, to Air Div. Dirs., Region I - X (Sept. 7, 2007) [hereinafter "2007 Wehrum Consistency Memo"], https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20050911_wehrum_revised_consistency_process.pdf (attached as Ex. 3).
[41] U.S. Fish & Wildlife Serv., Wichita Mountains Wildlife Refuge: About Us, https://www.fws.gov/refuge/wichita-mountains/about-us (last visited Mar. 6, 2026) (attached as Ex. 4).

species—and offers a range of recreational opportunities such as hiking, fishing, wildlife viewing, and photography.[42]

Beyond the Wichita Mountains, Oklahoma's pollution sources also impact Class I areas in neighboring states. Oklahoma's 2022 SIP itself acknowledges that Oklahoma emissions may affect visibility at the Caney Creek Wilderness Area and Upper Buffalo Wilderness Area in Arkansas and the Hercules-Glades Wilderness Area in Missouri.[43] These areas similarly provide habitat for diverse wildlife and preserve some of the most beautiful natural landscapes in the south-central United States. Because these areas are designated as "Class I" under the Clean Air Act, their air quality is entitled to the highest level of protection. Yet these areas continue to be affected by sources of pollution in Oklahoma and other states that negatively impact their air quality and viewsheds.

Today, the Wichita Mountains and other Class I areas affected by Oklahoma's pollution are still marred by air pollution that diminishes long-range scenic views and robs visitors of their connection to and appreciation of large landscapes. Much of the air pollution in these Class I areas stems from power plant and other industrial facility emissions of sulfur dioxide (SO_2) and nitrogen oxides (NOx), which react in the atmosphere to form "haze" pollution many miles downwind of the sources. Although visibility at the Wichita Mountains has improved since the baseline period, significant impairment remains: the 2015–2019 current visibility for the most impaired days stands at 17.56 deciviews, still far above the natural visibility condition of 10.19 deciviews.[44] Without additional controls on Oklahoma sources, this gap cannot be closed.

Class I areas are an important component of Oklahoma's economy, as well as the economies of other states in the region. Class I parks and wilderness areas draw hundreds of thousands of visitors from around the world each year, providing a boon to gateway communities and local recreation businesses. In 2024, outdoor recreation activities in Oklahoma contributed over $6 billion in value to the state's economy.[45] When the air at a Class I area and other public lands is polluted, however, visitation can drop by as much as eight percent, directly harming local economies that depend on tourism revenue.[46] A strong regional haze plan for Oklahoma is necessary to improve visibility at Class I areas and other public lands in the region and to protect this critical contributor to local economies.

Reducing air pollution through Oklahoma's regional haze SIP would also improve public health, particularly for communities surrounding the State's various industrial facilities. The same pollutants that mar scenic views at national parks and wilderness areas also cause significant adverse public health impacts. NOx pollution is a precursor to ground-level ozone,

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[42] U.S. Fish & Wildlife Serv., Wichita Mountains Wildlife Refuge, https://www.fws.gov/refuge/wichita-mountains (last visited Mar. 6, 2026) (attached as Ex. 5).
[43] Oklahoma 2022 SIP at 45–46.
[44] Oklahoma 2022 SIP, tbl. 6-1.
[45] Bureau of Econ. Analysis, Outdoor Recreation Satellite Account, U.S. and States, 2024 (March 2026), https://www.bea.gov/data/special-topics/outdoor-recreation (attached as Ex. 6).
[46] *See* David Keiser et al., Air Pollution and Visitation at U.S. National Parks, 4 Sci. Advances 3-6 (July 18, 2018), https://www.science.org/doi/10.1126/sciadv.aat1613 (attached as Ex. 7).

which is associated with respiratory diseases, asthma attacks, and decreased lung function.[47] NOx also reacts with ammonia, moisture, and other compounds to form fine particulates that can cause and worsen respiratory diseases, aggravate heart disease, and lead to premature death.[48] Similarly, SO_2 worsens asthma symptoms, leads to increased hospital visits, and can form particulates that aggravate respiratory and heart diseases and cause premature death.[49] Particulate matter (PM) can penetrate deep into the lungs and cause a host of health problems, such as aggravated asthma, decreased lung function, and heart attacks.[50] NOx and SO_2 emissions also harm terrestrial and aquatic plants and animals through acid rain and nitrogen deposition, which in turn causes ecosystem changes such as eutrophication of lakes and streams in and around the Wichita Mountains and other Class I areas.

For all of these reasons, EPA must ensure that Oklahoma's 2022 SIP includes all emission reduction measures that are necessary to make reasonable progress toward restoring natural visibility conditions at the Wichita Mountains and other Class I areas affected by Oklahoma's pollution. As explained in detail in the sections below, Oklahoma's 2022 SIP fails to do so, and EPA's proposed approval of that SIP is contrary to the requirements of the Clean Air Act and the RHR.

III. EPA Uses Its New URP Policy to Avoid Properly Reviewing the Oklahoma SIP.

EPA's proposed approval of Oklahoma's 2022 SIP is arbitrary, capricious, and contrary to law for two independent reasons. First, EPA grounds its proposed approval on a newly announced policy under which a state has "presumptively demonstrated" reasonable progress whenever projected visibility conditions at all affected Class I areas are below the Uniform Rate of Progress and the state has "evaluated potential control measures by considering the four statutory factors."[51] As discussed below, this New URP Policy is inadequately explained, internally inconsistent, contrary to the plain text of the Clean Air Act and the RHR, and procedurally defective under the Administrative Procedure Act. Second, if EPA's New URP Policy were lawful, EPA's proposed approval of Oklahoma's SIP still fails that policy's own requirements. Oklahoma's Four-Factor Analyses were built on unreliable inputs, and EPA proposes to rubber-stamp them without independent review of the record evidence in its own docket.

Relying on its New URP Policy, EPA appears to abandon, without any explanation, its earlier technical review of Oklahoma's SIP. As discussed further below, EPA previously identified significant deficiencies in Oklahoma's source-selection methodology, emissions data,

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[47] U.S. Envtl. Prot. Agency, Integrated Science Assessment for Oxides of Nitrogen — Health Criteria (Jan. 2016), https://www.epa.gov/naaqs/nitrogen-dioxide-no2-primary-standards-integrated-science-assessments-current-review (attached as Ex. 8).
[48] *Id.*
[49] U.S. Envtl. Prot. Agency, Integrated Science Assessment for Sulfur Oxides — Health Criteria (Apr. 2017), https://www.epa.gov/isa/integrated-science-assessment-isa-sulfur-oxides-health-criteria (attached as Ex. 9).
[50] U.S. Envtl. Prot. Agency, Integrated Science Assessment for Particulate Matter (Dec. 2019), https://ordspub.epa.gov/ords/eims/eimscomm.getfile?p_download_id=539935 (attached as Ex. 10).
[51] 91 Fed. Reg. at 6590.

and Four-Factor Analyses. Yet, the Agency now proposes to approve the same SIP without addressing those earlier findings—apparently because the SIP satisfies EPA's New URP Policy.

IV. EPA's New URP Policy is Inadequately Explained and Internally Inconsistent.

As noted above, EPA recently announced a new policy whereby if "visibility conditions for a Class I area impacted by a State are below the URP and the State has evaluated potential control measures and considered the four statutory factors, the State will have presumptively demonstrated reasonable progress for the second planning period."[52] EPA's description of the New URP Policy in its proposal to approve Oklahoma's 2022 SIP differs from that as originally announced in the Agency's proposal to approve West Virginia's SIP. In the West Virginia proposal, EPA explained that, if visibility conditions at affected Class I areas are projected to be below the URP and the state considered the four factors, the state presumptively demonstrates reasonable progress.[53] Absent from EPA's description of the New URP Policy in the West Virginia proposal is a need for states to have "evaluate[d] potential control measures."[54] In its proposal here, the Agency does not explain the change in its description of the New URP Policy nor explain the significance of that change. EPA does state that the new policy reflects "a change in policy as to how the URP should be used in the evaluation of regional haze second planning period SIPs."[55]

EPA further relies on *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009), and *Perez v. Mortgage Bankers Ass'n*, 575 U.S. 92 (2015), for the proposition that an agency may change policy so long as the New URP Policy is "permissible under the statute" and there are "good reasons for it."[56] These authorities are misapplied. *Fox Television* and *Perez* address what procedural standards govern an agency's departure from prior policy—they have nothing to say about whether a New URP Policy is substantively lawful in the first place. EPA's invocation of *Fox Television* does not answer, and indeed presupposes, the dispositive question: whether the New URP Policy is "permissible under the statute." As detailed in these comments, it is not. Citing *Fox Television* to justify a policy that violates the plain text of the Clean Air Act and the RHR is circular—*Fox Television* authorizes changes to lawful policies; it does not authorize unlawful ones.

EPA's explanation of the New URP Policy, and application of that Policy in the proposal here, is both inadequate and internally inconsistent. As a result, EPA fails to provide a "satisfactory explanation" for its proposal to approve the 2022 SIP, making the proposal arbitrary and capricious in violation of both the Clean Air Act and the APA.[57]

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[52] 90 Fed. Reg. 16478, 16483 (proposed Apr. 18, 2025) (announcing the new URP policy for the first time).
[53] 90 Fed. Reg. at 16483.
[54] 91 Fed. Reg. at 6590.
[55] 91 Fed. Reg. at 6590.
[56] 91 Fed. Reg. at 6590.
[57] 42 U.S.C. § 7607(d)(9); 5 U.S.C. § 706(2); *State Farm*, 463 U.S. at 43 ("[T]he agency must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made." (internal quotation and citation omitted)); *Sierra Club v. EPA*, 719 F.2d 436, 459 (D.C. Cir. 1983) (explaining that "inconsistency is the hallmark of arbitrary action").

A. EPA Fails to Adequately Explain Its New URP Policy.

EPA does not explain anywhere in its proposal how the New URP Policy is a change from prior guidance on how states and the Agency can consider the URP in second planning period SIPs. Indeed, EPA does not identify any specific prior guidance from which the New Policy reflects a change in position. Rather, EPA asserts that the New Policy does not allow it or states to treat the URP as a safe harbor because the New Policy still requires states to conduct Four-Factor Analyses.[58]

As shown below, EPA's longstanding guidance—embodied by the 1999 RHR, 2017 RHR revision, and guidance and memoranda documents for the second planning period—is that the URP is not a safe harbor.[59] EPA's admission that its New URP Policy is a change from this prior guidance necessarily means that the agency is now treating the URP as a safe harbor. If EPA's New URP Policy does not treat the URP as a safe harbor, as the Agency claims, then the Agency's explanation and application of its New URP Policy in the proposal here is both internally inconsistent and not adequately explained, both of which also violate the Clean Air Act and fundamental principles of reasoned agency decisionmaking.[60] Indeed, EPA's application of its New URP Policy here to approve Oklahoma's 2022 SIP underscores that the New URP Policy does allow both states and EPA to treat the URP as a safe harbor. EPA has explicitly noted that, even where a state "considered" the four factors but rejects otherwise reasonable controls based on claims that affected Class I areas are projected to be below their glidepaths at the end of the planning period, the state *is* treating the URP as a safe harbor.[61]

To the extent EPA claims that the New URP Policy does not treat the URP as a safe harbor because it creates only a presumption that a SIP is approvable, EPA similarly fails to provide any explanation, let alone an adequate one, of how that presumption operates. In general, a presumption establishes a "legal inference or assumption that a fact exists," "unless the adversely affected party overcomes" the presumption with other evidence.[62] However, EPA does not explain how the presumption created by the New URP Policy operates or affects the Agency's review of SIPs when the presumption is triggered. As noted above and below, the presumption appears to relieve EPA of its duty to substantively review a state's control

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[58] 91 Fed. Reg. at 6591.

[59] *See infra* Sections V-VI.

[60] *State Farm*, 463 U.S. at 43; *Cboe Futures Exch., LLC v. SEC*, 77 F.4th 971, 977 (D.C. Cir. 2023) (holding that agency "failed adequately to explain its rationale and failed to consider an important aspect of the problem" and that "those deficiencies require vacatur"); *MCI Telecommunications Corp. v. F.C.C.*, 57 F.3d 1136, 1140 (D.C. Cir. 1995) ("The APA requires the Commission to provide notice of a proposed rulemaking adequate to afford interested parties a reasonable opportunity to participate in the rulemaking process." (internal quotation and citation omitted)).

[61] *See, e.g.*, Memorandum from Peter Tsirigotis, Dir., Envtl. Prot. Agency, to Reg'l Air Dirs., Regions 1-10 at 15 (July 8, 2021) [hereinafter "2021 Clarification Memo"], https://www.epa.gov/system/files/documents/2021-07/clarifications-regardingregional-haze-state-implementation-plans-for-the-second-implementation-period.pdf (explaining in the section of the Memo dedicated to discussing reliance on the URP as a safe harbor that "EPA has reviewed several draft second planning period regional haze SIPs that conclude that additional controls, including potentially cost-effective and otherwise reasonable controls, are not needed because all of the Class I areas in the state (and those out-of-state areas affected by emissions from the state) are below their [URPs]. The 2017 RHR preamble and the August 2019 Guidance clearly state that it is not appropriate to use the URP in this way, *i.e.,* as a 'safe harbor'") (attached as Ex. 11); 82 Fed. Reg. at 3093 ("The URP is not a safe harbor, however, and states may not subsequently reject control measures that they have already determined are reasonable.").

[62] Black's Law Dictionary at 1223 (8th ed. 1999).

determinations and Four-Factor Analyses where the Agency concludes that the State has triggered that presumption.[63] Otherwise, it is entirely unclear what role the "presumption" serves in EPA's review of SIPs. As a result, the presumption created by the New URP Policy also relieves states of the obligation to demonstrate reasonable progress in a manner that is reasonable and adequately documented. Yet, treating the New URP Policy as a presumption is contrary to the burdens set forth in the Clean Air Act and the RHR. Both the CAA and RHR make clear that it is the state's burden (or EPA's burden where the state fails to act) to ensure that the Regional Haze SIP contains sufficient and necessary measures to make reasonable progress based on the four factors.[64] Nothing in the statute or the RHR allows EPA to shift that burden off the states or the Agency.

Additionally, EPA fails to explain what, if any, circumstances could overcome the presumption that a SIP is approvable under the New URP Policy. Nor does the Agency explain whether or not any such circumstances are present for Oklahoma's 2022 SIP. Thus, EPA's proposal here fails to provide adequate notice of the Agency's rationales in support of its proposed action.[65] Based only on EPA's limited description of the New URP Policy in the proposal here, there appear to be three circumstances that potentially could overcome the New URP Policy's presumption that a SIP is approvable.

The first circumstance is that all Class I areas affected by pollution from the state—here, Oklahoma—are *not* projected to be below the URP glidepath at the end of the planning period.[66] As discussed in detail below, however, that circumstance *is* present here.[67] Both EPA and Oklahoma failed to properly identify all out-of-state Class I areas that are affected by Oklahoma pollution in accordance with the requirements of the Clean Air Act.[68] And some of the Class I areas that EPA and Oklahoma failed to identify are projected to be above,[69] not below, their unadjusted or adjusted URP glidepaths in 2028.[70] Thus, the presence of affected Class I areas that are projected to be above the glidepath either does not overcome the presumption that a SIP is approvable under the New URP Policy, or EPA has improperly applied the New URP Policy to approve Oklahoma's 2022 SIP.

The second circumstance that could potentially overcome the presumption is that a state entirely fails to evaluate potential control measures or consider the four statutory factors for any

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[63] *See infra* Section V.A.1.
[64] The State is the entity tasked with complying with the requirements of the Regional Haze Program. *See* 40 C.F.R. § 51.308(f)(2)(i) ("The State must evaluate and determine the emission reduction measures that are necessary to make reasonable progress…The State must include in its implementation plan a description of the criteria it used to determine which sources or groups of sources it evaluated and how the four factors were taken into consideration").
[65] *State Farm*, 463 U.S. at 43; *Cboe Futures Exch., LLC*, 77 F.4th at 977; *MCI Telecommunications Corp.*, 57 F.3d at 1140.
[66] 91 Fed. Reg. at 6590 (stating that "*where visibility conditions for a Class I area impacted by a State are below the 2028 URP* and the State has also evaluated potential control measures by considering the four statutory factors, the State will have presumptively demonstrated reasonable progress for the second planning period for that area" (emphasis added)).
[67] *See infra* Section VIII.C.
[68] *Id.*
[69] *Id.*
[70] *Id.*

sources or group of sources.[71] Even if such circumstances could overcome the presumption of approvability under the New URP Policy, the New URP Policy would be nothing more than a distinction without a difference from treating the URP as a safe harbor. As noted below, the New URP Policy allows EPA to evade its mandatory duty to substantively review SIPs to ensure that states' Four-Factor Analyses and control determinations are reasonable and well-supported as required by the Act and RHR.[72] There is no meaningful difference between allowing states to entirely forgo conducting Four-Factor Analyses and requiring them to "consider" the four factors but then failing to require or ensure that they do so reasonably and in compliance with the requirements of the Act and RHR. To the extent EPA asserts that the addition of the new language in its description of the New URP Policy here—requiring states to "evaluate[] potential control measures" and consider the four factors[73]—corrects any deficiency in the New URP Policy, that claim is misplaced. Just as with the consideration of the four factors, there is no meaningful difference between EPA allowing states to entirely forgo evaluating potential control measures based on the four factors and failing to require or ensure that states do so reasonably and in compliance with the Act and RHR. In any event, Oklahoma did select sources and conduct Four-Factor Analyses for those sources, so this circumstance is not present here.[74]

The third circumstance that could potentially overcome the presumption is that, although states evaluated potential control measures and considered the four statutory factors, they failed to do so reasonably or in compliance with the requirements of the Clean Air Act and the RHR. Once again, as explained below, EPA failed to substantively review Oklahoma's 2022 SIP to ensure that the State's Four-Factor Analyses and control determinations were reliable, reasonable, and adequately documented as required by the Act and RHR.[75] And readily available record evidence demonstrates that Oklahoma did, in fact, fail to conduct its analyses reasonably or provide adequate documentation for its analyses.[76] As a result, the failure of a state to reasonably evaluate potential control measures or consider the four factors either does not overcome the presumption that a SIP is approvable under the New URP Policy or EPA has improperly applied that Policy to approve Oklahoma's 2022 SIP.

Finally, even if the New URP Policy does create a presumption that a SIP is approvable, that fact cannot save the New URP Policy from the legal deficiencies discussed in these comments. The New URP Policy still violates the plain text of the Clean Air Act and the RHR, as well as EPA's interpretations of the Act and Rule, as discussed below.[77] Moreover, as

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[71] 91 Fed. Reg. at 6590 (stating that "where visibility conditions for a Class I area impacted by a State are below the 2028 URP and *the State has also evaluated potential control measures by considering the four statutory factors*, the State will have presumptively demonstrated reasonable progress for the second planning period for that area" (emphasis added)).

[72] *See infra* Sections V.A.1 and VI.

[73] 91 Fed. Reg. at 6590.

[74] However, as discussed in more detail below, Oklahoma's Four-Factor Analyses were highly flawed and were not adequately documented, and so, violated the requirements of the Clean Air Act and the RHR. *See infra* Sections IX.D-I.

[75] *See infra* Sections V.A, VI, IX.D-I; 40 C.F.R. § 51.308(f)(2)(iii) (requiring that states to "document the technical basis, including modeling, monitoring, cost, engineering, and emissions information, on which the State is relying to determine the emission reduction measures that are necessary to make reasonable progress").

[76] *See infra* Sections V.A.1, IX.D-I;

[77] *See infra* Sections V-VI.

discussed below, EPA also cannot point to any "clear congressional authorization"[78] for the authority to create a presumption that, where a Class I area is on or below the URP, states need not implement further emission reduction measures based on consideration of the four statutory factors.[79]

B. EPA's Reliance on the New URP Policy to Approve Oklahoma's 2022 SIP Is Internally Inconsistent.

EPA's reliance on the new URP policy in the proposal here is internally inconsistent with the Agency's own explanations of what states must do to comply with the Clean Air Act and the RHR. EPA notes in the proposal that states' source selection methods must be "reasonable" and "reasonably explained"[80] but fails to explain or address anywhere in the proposal whether the New URP Policy requires that states' Four-Factor Analyses be based on reliable, reasonable, and well-documented information. EPA has explained that the Clean Air Act and RHR require that states must reasonably analyze the four statutory factors and make reasonable control determinations.[81] Yet, as noted below, EPA shirks its duty to engage in substantive and rigorous review of Oklahoma's 2022 SIP here, ignoring readily available record evidence showing that Oklahoma's Four-Factor Analyses and control determinations were neither reasonable nor adequately supported.[82] Thus, EPA's New URP Policy allows the Agency and states to treat the Four-Factor Analyses as an ungraded box-checking exercise, in violation of the Clean Air Act and RHR. This further makes EPA's proposal internally inconsistent, and so, arbitrary and capricious, because states are required to conduct reasonable source selection processes but then permitted to conduct unreasonable and unsupported Four-Factor Analyses.[83] This also makes EPA's New Policy irrational,[84] as states are still required to select sources for further analysis, consider a "meaningful set" of control measures,[85] and then go through the exercise of conducting Four-Factor Analyses without any requirement that this process affect the ultimate outcome of the SIP—i.e., whether the SIP includes new or additional emission reduction measures necessary to make reasonable progress.

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[78] *West Virginia v. EPA*, 597 U.S. 697, 723 (2022) (quoting *Utility Air Regulatory Group v. EPA*, 573 U. S. 302, 324 (2014)).
[79] *See infra* Section V.A.1.
[80] 91 Fed. Reg. at 6584.
[81] *See, e.g.*, EPA, Response to Comments for the Federal Register Notice for the Texas and Oklahoma Regional Haze State Implementation Plans; Interstate Visibility Transport State Implementation Plan to Address Pollution Affecting Visibility and Regional Haze; and Federal Implementation Plan for Regional Haze, Docket No. EPA-R06-OAR-2014-0754, at 848-89 (Dec. 9, 2015) [hereinafter "2016 FIP RTC"] ("[T]he state was not free to make [reasonable progress] determinations that were inconsistent with the CAA. Thus, while states have discretion in establishing reasonable progress goals it must be reasonably exercised. Texas' approach to reasonable progress was flawed and we properly rejected it.").
[82] *See supra* Section IV.A; *see infra* Sections V.A.1, IX.D-I.
[83] *Sierra Club*, 719 F.2d at 459.
[84] *See INS v. Yang*, 519 U.S. 26, 32 (1996) ("[A]n irrational departure from [a governing] policy . . . constitute[s] action that must be overturned as 'arbitrary, capricious, or an abuse of discretion' within the meaning of the Administrative Procedure Act" (alteration omitted)).
[85] 91 Fed. Reg. at 6584 (citation omitted).

V. EPA's New URP Policy Violates the Clean Air Act.

As shown above, EPA's New URP Policy must allow the Agency and States to treat the URP as a safe harbor from complying with the Clean Air Act's and RHR's requirements to identify emission reduction measures that are necessary to make reasonable progress based on the four statutory factors. The New URP Policy, thus, allows states to conduct unreasonable and unsupported analyses and reject otherwise reasonable and cost-effective emission reduction measures by claiming all affected Class I areas are projected to be below the URP glidepath at the end of the planning period. The New URP Policy also allows EPA to evade its duty under the Clean Air Act and RHR to engage in rigorous and substantive review of state Four-Factor Analyses and control determinations to ensure that they comply with the Act and Rule.

EPA explicitly states that the New URP Policy reflects only "a change in policy as to how the URP should be used in the evaluation of regional haze second planning period SIPs."[86] Thus, EPA has not proposed to change any of its prior interpretations regarding the requirements of the Clean Air Act or RHR.[87] As summarized below, EPA's own interpretations of the Act's visibility requirements, which the Agency has not proposed to change, belie its claim that the New URP Policy can be squared with the statute's text, context, or intent.

A. The New URP Policy Violates the Plain Language of the Clean Air Act.

Under the U.S. Supreme Court's decision in *Loper-Bright Enterprises v. Raimondo*, a statutory provision is interpreted "using the traditional tools of statutory construction" to arrive at the provision's "best reading."[88] The starting point for that inquiry is the text of the statute—here, the Clean Air Act.[89] The plain language of 42 U.S.C. § 7491 bars EPA's New URP Policy.

1. Congress Defined Reasonable Progress to be Based on the Four Statutory Factors.

Section 7491(b)(2) requires states to develop SIPs that "make reasonable progress toward meeting the national goal" of eliminating human-caused visibility impairment in Class I areas. Section 7491(g)(1), in turn, defines "reasonable progress," providing that, "in determining reasonable progress there shall be taken into consideration the costs of compliance, the time necessary for compliance, and the energy and nonair quality environmental impacts of compliance, and the remaining useful life of any existing source subject to such requirements."

Section 7491(g)(1) begins with the dependent clause "in determining reasonable progress" that must be joined with the independent clause of that section—*i.e.*, the four reasonable progress factors—to make sense. Thus, accurately reading those clauses together, the Act requires that states and EPA must determine what constitutes "reasonable progress" based on

[86] 91 Fed. Reg. at 6590; 90 Fed. Reg. at 16483 (same).
[87] To the extent EPA views any of the arguments or statements made in its proposal to approve to the Oklahoma 2022 SIP, or its other proposals in which the Agency relies on its new URP policy, as changing any of its prior interpretations of the Clean Air Act and the RHR, such changes would constitute unacknowledged and unreasoned changes in position. *Fox Television Stations, Inc.*, 556 U.S. at 515.
[88] 603 U.S. 369, 400, 403 (2024).
[89] *EDF v. EPA*, 124 F.4th 1, 11 (D.C. Cir. 2024).

the four statutory factors listed in Section 7491(g)(1). Notably absent from the statutory text is any reference to the URP.[90]

EPA misreads this provision when, in its New URP Policy, it changes the phrase "taken into consideration" into "considers." The word "consideration" means "something that is considered as a ground of opinion or action" or "the act of regarding or weighing carefully."[91] Here, the things that states and EPA must "take into consideration" are the four statutory factors listed in (g)(1). States and EPA must not merely "consider" the four statutory factors, but must use them "in determining reasonable progress," confirming that the best reading of this statutory provision requires states to determine reasonable progress based on the four statutory factors, and not other unlisted factors. Had Congress intended states to consider other factors, such as the URP, in determining what constitutes reasonable progress, it would have listed those factors in the statutory definition for "reasonable progress."[92]

The New URP Policy also would only require states and EPA to apply the CAA's text in certain scenarios. Under the New URP Policy, even if control analyses show that new or existing controls are reasonable based on the four statutory factors, states and EPA can ignore the results of those analyses and not require any emission reduction measures to make reasonable progress if they show all affected Class I areas are projected to be below the URP glidepath at the end of the planning period. EPA's proposal for Oklahoma is a prime example. In its SIP, Oklahoma rejected dry sorbent injection (DSI) for the Hugo Electric Generating Plant, asserting, based on a facility-submitted Four-Factor Analysis, that DSI was not cost-effective at $41,003/ton of SO_2 reduced.[93] However, readily available record evidence, including the Conservation Groups' 2022 Comments and EPA's own 2022 Comments to the State, show that Oklahoma dramatically inflated the cost of DSI for Hugo.[94] As discussed in more detail below, the Conservation Groups corrected errors in the DSI cost analysis for Hugo and demonstrated that DSI would be cost-effective for the facility at $4,039/ton assuming 80% control and $4,466/ton at 40% control.[95] Both of these revised cost figures are below Oklahoma's chosen cost-effectiveness threshold for SO_2 of $5,000/ton.[96] Still, EPA proposes to approve Oklahoma's 2022 SIP, including the State's determination that DSI is not cost-effective for Hugo, and fails to address the issues it identified in its comments to the State. Instead, EPA repeats Oklahoma's summary and blindly proposes to approve the State's unreasonable

[90] The URP is an administrative construct that the Agency, not Congress, created to serve as a visibility tracking metric. 91 Fed. Reg. at 6591 ("In developing the regulations required by CAA section 169A(b), EPA established the concept of the uniform rate of progress (URP) for each Class I area."); 2021 Clarification Memo at 15 (explaining that EPA established the URP as a tracking metric).

[91] WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY OF THE ENGLISH LANGUAGE 484 (Merriam-Webster 1961); *see also* THE COMPACT EDITION OF THE OXFORD ENGLISH DICTIONARY 859 (Oxford at the Clarendon Press, 1971) (providing that "consideration" is "[t]he taking into account of anything as a motive or reason; a fact or circumstance taken, or to be taken into account; a reason considered").

[92] *State Farm*, 463 U.S. at 43 (holding that it is arbitrary and capricious for agencies to "rel[y] on factors which Congress has not intended").

[93] Oklahoma 2022 SIP at 38-39.

[94] Conservation Organizations' 2022 Comments at 33-39; Oklahoma 2022 SIP, App. M, EPA, Comments on Oklahoma RH SIP Public Comment Draft at 10 (PDF p. 13) (July 1, 2022) [hereinafter "EPA 2022 Comments"], Docket No. EPA-R06-OAR-2022-0736-0002_attachment_15, https://www.regulations.gov/document/EPA-R06-OAR-2022-0736-0002.

[95] Conservation Organizations' 2022 Comments at 36-39.

[96] Oklahoma 2022 SIP at 47-49.

analysis.[97] As a result, the New URP Policy allows EPA and states to disregard the text that Congress set forth in Section 7491(g)(1) requiring states to determine reasonable progress based on the four statutory factors when EPA asserts that affected Class I areas are below the URP.[98]

EPA similarly relies on the New URP Policy to shun its duties under the Clean Air Act to engage in rigorous and substantive review of state SIPs. Multiple courts, including the Supreme Court, have held that the Clean Air Act's plain text requires that EPA engage in rigorous and substantive review of SIPs.[99] Section 7491(b)(2)(B)'s requirement that states develop SIPs "that mak[e] reasonable progress toward meeting the national goal" inherently requires EPA to assess whether SIP submissions provide adequate measures to achieve that goal. Section 7410(k)(3), which requires EPA to determine if SIPs "meet[] all of the applicable requirements of this chapter," further necessitates that EPA will assess the adequacy, effectiveness, and reasonableness of SIPs to ensure they comply with the Act and its implementing regulations.

EPA's New URP Policy would render these Clean Air Act requirements superfluous.[100] In pointing to the New URP Policy, EPA tries to evade its duty to review Four-Factor Analyses or control determinations to ensure that the technical bases for those analyses are adequately documented and the determinations are based on reasoned decisionmaking. EPA's proposal here, again, is an apt example. EPA's conclusory review of Oklahoma's Four-Factor Analysis and control determination for the Hugo Plant clearly underscores how the Agency relies on the New URP Policy to evade its review duties.[101] As noted above, readily available record evidence, including EPA's own 2022 Comments to the State and the Conservation Groups' 2022 Comments, show that Oklahoma's Four-Factor Analysis dramatically inflated the cost of DSI for Hugo and that, correcting these errors, DSI would be cost-effective. Yet, EPA proposes to approve Oklahoma's analysis for Hugo, asserting, without any explanation or analysis, that the State's determination that there were no cost-effective controls for the facility was "reasonable."[102] EPA merely summarizes Oklahoma's Four-Factor Analysis for Hugo and then asserts that "Oklahoma adequately considered the four statutory factors on the selected control technologies . . . and concluded that no measures are necessary to make reasonable progress."[103] EPA does not engage in any independent analysis or review of the State's control determination for Hugo. In fact, the only "justification" EPA provides for approving Oklahoma's Four-Factor Analysis and control determination for Hugo is its New URP Policy, noting that "Oklahoma

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[97] 91 Fed. Reg. at 6592.

[98] *TRW Inc. v. Andrews*, 534 U.S. 19, 31 (2001) ("It is a cardinal principle of statutory construction that a statute ought, upon the whole, to be so construed that, if it can be prevented, no clause, sentence, or word shall be superfluous, void, or insignificant." (internal quotation marks omitted)); *Griffin v. Oceanic Contractors, Inc.*, 458 U.S. 564, 575 (1982) ("[I]nterpretations of a statute which would produce absurd results are to be avoided if alternative interpretations consistent with the legislative purpose are available."); *Armstrong Paint & Varnish Works v. Nu-Emanual Corp.*, 305 U.S. 315, 333 (1938) (explaining that "to construe statutes so as to avoid results glaringly absurd, has long been a judicial function").

[99] *Alaska Dep't of Envtl. Conservation*, 540 U.S. at 485-86; *Arizona ex rel. Darwin*, 815 F.3d at 525, 531-32; *North Dakota*, 730 F.3d at 760-62; *Oklahoma*, 723 F.3d at 1207-10; 2016 FIP RTC at 847; *id.* at 849 ("[T]he state was not free to make [reasonable progress] determinations that were inconsistent with the CAA. Thus, while states have discretion in establishing reasonable progress goals, it must be reasonably exercised. Texas' approach to reasonable progress was flawed and we properly rejected it.").

[100] *TRW Inc.*, 534 U.S. at 31; *Griffin*, 458 U.S. at 575; *Armstrong Paint & Varnish Works*, 305 U.S. at 333.

[101] 91 Fed. Reg. at 6592; *see supra* Section IV.A; *see infra* Section IX.F.2.

[102] 91 Fed. Reg. at 6592.

[103] *Id.*

demonstrated that it is making reasonable progress for the second planning period without requiring any control measures for [Hugo]."[104]

Moreover, EPA's claim that the Act requires only reasonable progress and not maximal progress is a red herring.[105] The plain text of the Clean Air Act embodies Congress's determination that the rate of progress achieved by the emission reduction measures found to be reasonable based on the four statutory factors "is, by definition, a reasonable rate of progress."[106] EPA tries to sever the word "reasonable" from "progress" in justifying its New URP Policy to make a free-floating determination, unmoored from the four statutory factors, as to what is "reasonable." Yet, in severing "reasonable" from "progress" here, EPA must also recognize the ordinary meaning of the word "progress," which is defined as "the action or process of advancing or improving by marked stages or degrees" or "gradual betterment."[107] Thus, the Agency cannot use its attempt to break this term apart to justify approving SIPs that fail to require facilities to adopt emission reduction measures that are reasonable based on a review of the four factors, and therefore, necessary to make reasonable progress toward the goal of remedying existing and preventing future impairment. In any event, the Agency cannot change the fact that Congress deliberately placed "reasonable progress" under Section 7491(g)'s heading of "Definitions," making it a statutorily defined term.

EPA's own interpretation of the Act's text in its 2017 RHR revision preamble demonstrates that the New URP Policy violates the statute. In that preamble, EPA explained that the terms "compliance" and "subject to such requirements" in Section 7491(g)(1) showed that "Congress intended the relevant determination to be the requirements with which sources would have to comply in order to satisfy the [Clean Air Act's] reasonable progress mandate."[108] In other words, the Four-Factor Analyses must be the basis on which states determine the requirements that represent reasonable progress.

Accordingly, EPA cannot point to any asserted ambiguity or lack of explicit direction in 7491(g)(1) to claim it can interpret the statutory text to allow consideration of visibility conditions or the URP in determining what constitutes reasonable progress. EPA cannot "presum[e] that statutory ambiguities are implicit delegations to agencies."[109] Indeed, a lack of detail does not "necessarily reflect a congressional intent that an agency, as opposed to a court, resolve the resulting interpretive question," and instead, "every tool" available must be used "to determine the best reading of the statute and resolve the ambiguity."[110]

EPA also cannot escape *Loper-Bright*'s mandate to find the "best reading" of the provision by citing Congress' instruction for EPA in Section 7491(a)(4) to issue regulations as some indication of intent to delegate authority to EPA to undercut the Regional Haze Program.

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[104] *Id.* (explaining that projected 2028 visibility conditions at the Class I areas to which Hugo contributes to impairment are projected to be below their respective URPs in 2028).
[105] 91 Fed. Reg. at 6590.
[106] 82 Fed. Reg. 3078, 3093 (Jan. 10, 2017).
[107] WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY OF THE ENGLISH LANGUAGE 1813 (Merriam-Webster 1961).
[108] 82 Fed. Reg. at 3091.
[109] *Loper-Bright*, 603 U.S. at 399.
[110] *Id*. at 399-400.

Nothing in Section 7491(a)(4) authorizes EPA to create a "presumption" that a haze plan demonstrates reasonable progress, thereby excusing the state from implementing reasonable emission reductions based on a consideration of the statutory factors for a source where affected Class I areas are on or below the URP. As an initial matter, Section 7491(a)(4) authorizes EPA only to "promulgate regulations" "after notice and public hearing."[111] Here, in a transparent attempt to avoid actually issuing any uniform, national "regulation" under Sections 7491(a)(4) and 7607(d)(1)(J), EPA is instead attempting to amend the RHR on a piecemeal, state-by-state basis. Moreover, EPA has failed to comply with Section 7491(a)(4)'s mandate to issue any such *regulation* "after notice and public hearing."[112]

In any event, EPA does not, and cannot, point to any "'clear congressional authorization' for the authority it claims."[113] Indeed, nothing in Section 7491 suggests, let alone clearly states, that EPA has authority to create a presumption that, where a Class I area is on or below the URP, states need not implement further emission reductions based on a consideration of the four statutory reasonable factors. As noted, the URP appears nowhere in the statute. Moreover, courts have recognized that other provisions of the Clean Air Act clearly establish presumptions applicable to the regulation of pollution,[114] yet "not a peep was heard from Congress about the possibility"[115] that EPA would have authority to create out of whole cloth a presumption that, if Class I areas affected by a state are on or below the URP towards natural visibility, the Agency could override the four carefully defined reasonable progress factors that Congress *did* explicitly enumerate. It is generally presumed that Congress acts intentionally and purposely when it includes specific authority in one section, but excludes such authority from another provision of the same statute.[116] Here, nothing in the Clean Air Act clearly provides EPA with the roving authority to create a presumption that effectively obviates the need to consider "the costs of compliance, the time necessary for compliance, and the energy and nonair quality environmental impacts of compliance, and the remaining useful life of any existing source" when evaluating the pollution reduction measures necessary to ensure reasonable progress.[117]

Additionally, under Section 7491(a)(4), EPA must "promulgate regulations to *assure* [] reasonable progress toward meeting *the national goal*."[118] The national goal is "the prevention of *any* future, and the remedying of *any* existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution."[119] "The word 'any' has an

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[111] 42 U.S.C. § 7491(a)(4).
[112] *Id*.
[113] *West Virginia*, 597 U.S. at 723 (quoting *Utility Air Regulatory Group*, 573 U.S. at 324).
[114] *See, e.g.*, *Catawba Cty. v. EPA*, 571 F.3d 20, 36 (2009) (observing that the Clean Air Act's nonattainment provisions, 42 U.S.C. § 7407(d)(4), created a "presumption" that the "boundaries of certain urban ozone or carbon monoxide nonattainment areas [should] 'include the entire metropolitan statistical or consolidated metropolitan statistical area,' unless EPA determined that some portions 'do not contribute significantly to the violation of the national ambient air quality standard'. . . In contrast, section 107(d)(6) says nothing about [that] presumption. Instead it provides that the PM[2.5] area designations must be 'based on air quality monitoring data' and promulgated in accordance with section 107(d)(1)'s general provisions for area designations. § 7407(d)(6)(A).").
[115] *West Virginia*, 597 U.S. at 734.
[116] *Russello v. United States*, 464 U.S. 16, 23 (1983).
[117] 42 U.S.C. § 7491(g)(1).
[118] *Id.* § 7491(a)(4) (emphasis added).
[119] *Id.* § 7491(a)(1) (emphasis added).

expansive meaning,"[120] and its use here requires that EPA's haze regulations provide for the elimination of all manmade visibility pollution. Thus, EPA's mandate to issue regulations only extends to regulations that *assure* reasonable progress, not ones that impede it. Yet, that is exactly the effect of allowing states to rely on a non-statutory factor—the URP—to adopt SIPs that fail to adopt measures necessary for reasonable progress based on consideration of the four factors, as EPA allows here.[121]

Thus, EPA's New URP Policy cannot be the "best reading" of the Clean Air Act's regional haze provisions. Rather, EPA's own (still standing) interpretation of the Act discussed below—that the URP is not a safe harbor and states and EPA cannot reject controls that are found to be reasonable based on an analysis of the four statutory factors by claiming Class I areas are below their respective URPs—constitutes the best reading of the statute.

2. Congress Directed States to Make Reasonable Progress in Each Successive Planning Period.

The Clean Air Act does not contemplate prolonging progress toward attaining natural visibility conditions—the Act sets a goal of clearing the air of human-caused visibility impairment by reducing emissions from a source when it is reasonable to do so based on the four statutory reasonable progress factors. To that end, Section 7491(b)(2)(B) provides that states must develop regional haze SIPs that set forth a long-term strategy "for making reasonable progress toward meeting the national goal" covering "ten to fifteen years" at a time. Congress set a framework for EPA to establish iterative planning periods during which states must build on emission reductions achieved in each successive planning period.

EPA claims in the proposal that it "believe[s] this [new URP] policy also recognizes the considerable improvements in visibility impairment that have been made by a wide variety of State and Federal programs in recent decades."[122] Merely relying on past reductions, or expected ongoing reductions from the implementation of already existing air quality programs, again makes the text of Section 7491(b)(2)(B) superfluous by allowing states and EPA to evade the directive to continue making progress toward the natural visibility goal in each planning period if the states show that all affected Class I areas are projected to be below the URP at the end of the planning period.[123] EPA relies on a factor that Congress could not have intended that it or states consider.[124]

Continued delay in achieving the natural visibility goal is something Congress explicitly addressed in the 1990 Clean Air Act amendments. Although the reasonable progress provisions

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[120] *Babb v. Wilkie*, 589 U.S. 399, 405 n.2 (2020).
[121] Furthermore, EPA can hardly claim that Congress' mandate to issue regulations extends to EPA's interpretation, as the Agency declined to incorporate visibility conditions or the URP as additional reasonable progress factors when it promulgated the regulations Congress authorized under 42 U.S.C. § 7491(a)(4). *See* 40 C.F.R. § 51.308(f)(2)(i).
[122] 91 Fed. Reg. at 6591.
[123] *TRW Inc.*, 534 U.S. at 31; *Griffin*, 458 U.S. at 575; *Armstrong Paint & Varnish Works*, 305 U.S. at 333.
[124] *State Farm*, 463 U.S. at 43 ("[A]n agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider.").

were enacted in the 1977 Amendments, EPA ignored them. In response, Congress forced EPA to act with its 1990 Amendments to the Act. As explained by Senator Tim Wirth of Colorado:

> Despite [findings that visibility was deteriorating], EPA has refused to move forward with the adoption of regional haze regulations under the 1977 visibility protection amendments. EPA has succeeded in defeating a citizen suit brought to require the adoption of these requirements, and as a result has effectively repealed the law. It is necessary that Congress intervene once again to require EPA to do what we thought we had required them to do in 1977.
>
> This amendment is designed to ensure that Agency inaction and delay does not again frustrate implementation of effective protection for our national parks and wilderness.[125]

This legislative history shows that Congress meant what it said in the statute—states and EPA must make reasonable progress toward the natural visibility goal in each successive planning period.

B. EPA's Contemporaneous Understanding of the Act Reflects the Best Reading of the Statute.

Under *Loper-Bright*, an agency's contemporaneous understanding of a statutory provision may warrant respect in interpreting that provision.[126] EPA's contemporaneous understanding of the Clean Air Act's haze requirements is the best reading of those requirements and confirms that the statute's text prohibits the Agency's New URP Policy.

EPA's 1999 RHR, which was EPA's first significant attempt at implementing the Clean Air Act's 1990 visibility amendments, is the best evidence of EPA's "contemporaneous" understanding of the Clean Air Act's requirements. That Rule tracks the statutory text and provides that:

> In establishing a reasonable progress goal for any mandatory Class I Federal area within the State, the State must [c]onsider the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any potentially affected sources, and include a demonstration showing how these factors were *taken into consideration* in selecting the goal.[127]

Thus, the 1999 RHR also did not permit states or EPA to treat the URP as a safe harbor and did not permit states to reject controls found to be reasonable based on an analysis of the four statutory factors by claiming affected Class I areas will be below the URP glidepath. Rather, the 1999 RHR required states and EPA to establish reasonable progress goals (RPGs) based on the four statutory factors. Again, as noted above, the concept of the URP does not

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[125] A LEGISLATIVE HISTORY OF THE CLEAN AIR ACT AMENDMENTS OF 1990, 5796 (Envt'l Policy Div., C.R.S., Nov. 1993).
[126] *Loper-Bright*, 603 U.S. at 430.
[127] 64 Fed. Reg. 35714, 35766 (July 1, 1999) (emphasis added).

appear anywhere in the statute. EPA introduced the concept of the URP with the 1999 RHR to serve as an "analytical requirement."[128] The 1999 RHR references the "uniform rate of improvement," providing that "[i]n establishing the reasonable progress goal, the State must consider the uniform rate of improvement in visibility and the emission reduction measures needed to achieve it for the period covered by the implementation plan."[129] Although the terminology used in the 1999 Rule is slightly different, the "uniform rate of improvement" referenced there is understood to be the same as the "uniform rate of progress" referenced in section 51.308(f). Still, nothing in the 1999 RHR regulatory text allows states or EPA to ignore the requirement to determine the emission reduction measures necessary to make reasonable progress based on the four statutory factors.

As with the Act's plain language, the 1999 RHR's text requires that EPA engage in rigorous and substantive review of state SIPs and reasonable progress determinations. The 1999 RHR required that, "[i]n determining whether the State's goal for visibility improvement provides for reasonable progress towards natural visibility conditions, the Administrator *will evaluate* the demonstrations developed by the State pursuant to paragraphs (d)(1)(i) and (d)(1)(ii) of this section."[130] The cross-referenced paragraphs pertain to the state's demonstration of how the four factors were taken into consideration in establishing the RPGs. Thus, neither EPA nor states could treat the Four-Factor Analysis required by the Act and the RHR as an ungraded, make-work exercise.

Moreover, the 1999 RHR preamble made clear that states and EPA could not use the URP to avoid complying with the statutory and regulatory requirements of the haze program. EPA explained that the 1999 Rule set out a four-step process that states had to go through to determine the measures necessary to make reasonable progress.[131] Step 2 required states to calculate the URP for a given Class I area.[132] Step 3 required states to identify the amount of progress that would result if they achieved the URP by the end of the first planning period.[133] Step 4 then required states to "identify and analyze emissions measures" needed to achieve that amount of progress during the first planning period "based on the statutory factors."[134] Following the recitation of this four-step process, EPA stated that:

> If the State determines that the amount of progress identified through the analysis is reasonable based upon the statutory factors, the State should identify this amount of progress as its reasonable progress goal for the first long-term strategy, unless it determines that additional progress beyond this amount is also reasonable. If the State determines that additional progress is reasonable based on the statutory factors, the State should adopt that amount of progress as its goal for the first long-term strategy.[135]

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[128] *Id.* at 35732.
[129] *Id.* at 35766.
[130] *Id.* (emphasis added).
[131] *Id.* at 35732.
[132] *Id.*
[133] *Id.*
[134] *Id.*
[135] *Id.*

The "analysis" EPA discussed here references the analysis in Step 4 of the process—i.e., the statutory Four-Factor Analysis. Thus, EPA clearly explained that, even if the measures found to be reasonable based on a Four-Factor Analysis would result in a rate of progress that is below the URP for a given Class I area, the RHR still required states to include those measures in the long-term strategy as necessary to make reasonable progress. In fact, in the 1999 RHR, EPA had originally proposed "presumptive 'reasonable progress targets,'"[136] similar to its New URP Policy, which treats the URP as the target states should aim for but not exceed in their SIPs. But EPA ultimately rejected that approach in the final Rule.[137] Thus, EPA rejected the notion that the URP itself necessarily represented reasonable progress.

In the 27 years since EPA adopted the 1999 RHR, the Agency has time and again reaffirmed its contemporaneous understanding of the Clean Air Act's haze provisions. In its response to comments on the 2017 RHR revision (2017 RHR RTC), EPA devoted an entire section to explaining that the URP is not a safe harbor.[138] EPA pointed out that if the 1999 RHR preamble were to be read to support the notion of the URP as a "safe harbor" that:

> would lead to a nonsensical result. If a state had to identify, analyze, and adopt only those measures that would be needed to achieve the URP, there would never be a circumstance in which it would determine that the amount of progress identified was not reasonable or in which it determined that additional progress is reasonable. This would . . . *read the statutory four-factor analysis out of the regional haze rule*. If consideration of whether additional measures were also reasonable were merely an option for the state, an explanation of the implication of a state determination that there are such additional measures would be irrelevant to the central question of what a state must do to prepare an approvable SIP revision.[139]

EPA further explained in the 2017 RHR revision preamble that:

> Treating the URP as a safe harbor would be inconsistent with the statutory requirement that states assess the potential to make further reasonable progress towards the natural visibility goal in every implementation period. Even if a state is currently on or below the URP, there may be sources contributing to visibility impairment for which it would be reasonable to apply additional control measures in light of the four factors. Although it may conversely be the case that no such sources or control measures exist in a particular state with respect to a particular Class I area and implementation period, this should be determined based on a four-factor analysis for a reasonable set of in-state sources that are contributing the most to the visibility impairment that is still occurring at the Class I area. It would bypass the four statutory factors and undermine the fundamental structure and purpose of

[136] *Id.* at 35730.
[137] *Id.* at 35731.
[138] EPA, Responses to Comments on Protection of Visibility: Amendments to Requirements for State Plans; Proposed Rule, 81 Fed. Reg. 26942 (May 4, 2016) at 161-70 (Dec. 2016), https://www.regulations.gov/document/EPA-HQ-OAR-2015-0531-0635 [hereinafter "2016 RHR RTC"] (attached as Ex. 12).
[139] *Id.* at 169.

> the reasonable progress analysis to treat the URP as a safe harbor, or as a rigid requirement.[140]

EPA repeated its interpretation that the Act's requirements prohibit using the URP as a safe harbor in its guidance and memoranda for this second planning period. In its 2019 Guidance, EPA states that the RHR does not "establish[] the URP glidepath as the amount of visibility improvement that constitutes 'reasonable progress.'"[141] Similarly, in its 2021 Clarification Memo, EPA devotes an entire section to explaining that the "Uniform Rate of Progress is Not a 'Safe Harbor'" and explains that:

> EPA has reviewed several draft second planning period regional haze SIPs that conclude that additional controls, including potentially cost-effective and otherwise reasonable controls, are not needed because all of the Class I areas in the state (and those out-of-state areas affected by emissions from the state) are below their [URPs]. The 2017 RHR preamble and the August 2019 Guidance clearly state that it is not appropriate to use the URP in this way, i.e., as a "safe harbor." The URP is a planning metric used to gauge the amount of progress made thus far and the amount left to make. *It is not based on consideration of the four statutory factors and, therefore, cannot answer the question of whether the amount of progress made in any particular implementation period is "reasonable progress."*[142]

At every opportunity since promulgating the original 1999 RHR, EPA has reaffirmed, reiterated, and repeated that relying on the URP to avoid adopting otherwise reasonable controls based on an analysis of the four statutory factors violates the Clean Air Act. EPA's New URP Policy allows states and EPA to do exactly that, and so, cannot be the best reading of the statute. Rather, EPA's contemporaneous interpretation of the Act embodied by the 1999 RHR constitutes the best reading of the Act's haze requirements.

C. The Context of the Act's Visibility Provisions Confirms the Best Reading of the Statute.

The context[143] of Section 7491(g)(1) supports that EPA's contemporaneous interpretation of the Act is the best reading of the statute for two reasons.

First, Section 7491(g)(1) does not list visibility conditions or the URP as factors that can be considered in determining what constitutes reasonable progress. Section 7491(g)(2) defining

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[140] 82 Fed. Reg. at 3099-100; *see also* 2017 RHR RTC at 165-66 (stating that "the glidepath was not established by Congress and the EPA never intended it as the goal of the regional haze program" and, while some commenters claimed that treating the URP as a safe harbor would provide regulatory certainty, EPA "[did] not believe it should be achieved by bypassing the statutory analysis and relieving states of the requirement to consider the four factors for a reasonably chosen set of sources even when the RPGs without additional controls would be on or below the glidepath").

[141] Memorandum from Peter Tsirigotis, Dir., Envtl. Prot. Agency, to Reg'l Air Dirs., Regions 1-10 at 49 (Aug. 20, 2019), EPA Docket ID No. EPA-R06-OAR-2022-0736-0004 [hereinafter "2019 Guidance"], https://www.regulations.gov/document/EPA-R06-OAR-2022-0736-0004.

[142] 2021 Clarification Memo at 15.

[143] *U.S. Sugar Corp. v. EPA*, 113 F.4th 984, 993 (D.C. Cir. 2024) (providing that the context of a statutory provision is another tool of statutory construction).

Best Available Retrofit Technology (BART), on the other hand, explicitly includes visibility as one of the five statutory factors states must consider in their BART analyses. "Congress acts intentionally and purposely when it includes particular language in one section of a statute but omits it in another."[144] Because Congress intentionally omitted any reference to visibility in the definition of reasonable progress, it is clear that states may not reject controls based on assertions about visibility conditions at Class I areas. Rather, the Act and RHR provide that states and EPA consider visibility in the development of SIPs through the identification of affected Class I areas and selection of sources for which they will conduct Four-Factor Analyses. Under the Act, a state must develop a long-term strategy to "make reasonable progress towards meeting the national goal" of preventing and remedying anthropogenic visibility impairment for any in-state Class I areas and any out-of-state Class I areas for which in-state pollution sources "may reasonably be anticipated to cause or contribute to any impairment of visibility."[145] In other words, states and EPA account for visibility impacts in determining which Class I areas are affected by in-state pollution sources and in selecting the sources that contribute to impairment at those Class I areas to be addressed in the long-term strategy, but not in determining what emission reduction measures are necessary to make reasonable progress for those selected sources. To insert visibility conditions or the URP as an unnamed fifth factor is contrary to the plain language of the Act.

Second, Section 7491 does not contain any exemptions from the Act's reasonable progress requirements, including in cases where affected Class I areas are projected to be below the glidepath. This is again in stark contrast to Section 7491(c), which contains explicit exemptions from BART that are based on visibility conditions. That Congress did not provide for similar, or any, exemptions from reasonable progress shows that Congress did not intend any exemptions such as EPA proposes here.[146] EPA cannot create the exemption it proposes by invoking the de minimis principle, as courts have explained that "an agency can't use [that principle] to create an exception where application of the literal terms would provide benefits, in the sense of furthering the regulatory objectives."[147] For selected sources, emission reduction measures would further the objective of reducing visibility impairment at affected Class I areas. As EPA explained in the 2017 RHR revision preamble, "the pollutants that lead to regional haze can originate from sources located across broad geographic areas" and "these sources may be numerous and emit amounts of pollutants that, even though small, contribute to the collective whole."[148] And, in any event, under EPA's New URP Policy, states could evade the Act's

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[144] *Intel Corp. Inv. Pol'y Comm. v. Sulyma*, 589 U.S. 178, 186 (2020) (internal citation omitted); *see also Russello*, 464 U.S. at 23 ("[When] Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion."); *EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489, 509 (2014) (explaining that practical difficulties in implementation or administrative efficiency do not justify departure from the Act's plain text; courts "must presume that a legislature says in a statute what it means and means in a statute what it says there."); *State Farm*, 463 U.S. at 43 (explaining that it is arbitrary and capricious for agencies to "rel[y] on factors which Congress has not intended").

[145] 42 U.S.C. § 7491(b)(2).

[146] *Intel Corp. Inv. Pol'y Comm.*, 589 U.S. at 186; *Russello*, 464 U.S. at 21; *EME Homer City Generation, L.P.*, 572 U.S. at 509; *State Farm*, 463 U.S. at 43.

[147] *Waterkeeper Alliance v. EPA*, 853 F.3d 527, 535 (D.C. Cir. 2017).

[148] 82 Fed. Reg. at 3082.

reasonable progress requirements even for large sources of visibility impairing pollution, for which controls would likely result in benefits.[149]

D. The Purpose of the Act's Visibility Provisions Further Confirms the Best Reading of the Statute.

The purpose[150] of the Act's regional haze provisions is "the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution."[151]

In its 2017 RHR revision preamble, EPA rejected the idea that states could use the URP as a safe harbor, pointing to the Act's natural visibility goal:

> This approach is consistent with and advances the ultimate goal of section [7491]: Remedying existing and preventing future visibility impairment. Congress required the EPA to promulgate regulations requiring reasonable progress toward that goal, and it would be antithetical to allow states to avoid implementing reasonable measures until and unless that goal is achieved.[152]

Contrary to Congress's stated goal in establishing the Regional Haze Program, the New URP Policy would allow states to adopt SIPs that do not include the measures that are necessary, based on consideration of the four statutory factors, to remediate anthropogenic visibility impairment during a given planning period.

VI. The New URP Policy is Inconsistent with the RHR.

Using the "'traditional tools' of construction,"[153] EPA cannot square its New URP Policy with the RHR, just as it cannot square that policy with the Clean Air Act.

The RHR's long-term strategy requirements track those of the Clean Air Act, requiring that such strategies "must include the enforceable emissions limitations, compliance schedules, and other measures that are necessary to make reasonable progress pursuant to [40 C.F.R. § 51.308(f)(2)(i) through (iv)]."[154] Section 51.308(f)(2)(i), in turn, provides that:

> The State *must* evaluate and determine the emission reduction measures that are necessary to make reasonable progress by considering the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any potentially affected

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[149] *See, e.g., infra* Section IX.F.2 (discussing Oklahoma's unreasonable Four-Factor Analyses and control determinations for Hugo and EPA's conclusory proposal to approve those analysis and determinations without any substantive review).
[150] *See, e.g.*, *Lissack v. Comm'r of Internal Rev.*, 125 F.4th 245, 258 (D.C. Cir. 2025) (considering, among other things, Congress' purpose in amending tax whistleblower provisions).
[151] 42 U.S.C. § 7491(a).
[152] 82 Fed. Reg. at 3094.
[153] *Kisor v. Willkie*, 588 U.S. 558, 575 (2019) (stating that the traditional tools of construction include "the text, structure, history, and purpose of a regulation").
[154] 40 C.F.R. § 51.308(f)(2).

> anthropogenic source of visibility impairment. The State should consider evaluating major and minor stationary sources or groups of sources, mobile sources, and area sources. The State must include in its implementation plan a description of the criteria it used to determine which sources or groups of sources it evaluated and *how the four factors were taken into consideration in selecting the measures for inclusion in its long-term strategy.*[155]

Once again, section 51.308(f)(2)(i) contains a dependent clause ("by considering" the four factors) that must be joined with its independent clause ("the State must evaluate and determine . . . the measures that are necessary to make reasonable progress) to make sense. As with the Clean Air Act and 1999 RHR, accurately reading these clauses together requires that states and EPA determine the measures that must be included in a state's long-term strategy *based on* the four statutory factors. Nothing in sections 51.308(f)(2)(ii)-(iv) changes this requirement or allows states to reject otherwise reasonable measures that satisfy the four factors by pointing to the URP.

The RHR's RPG provisions further make clear that the URP cannot supplant the requirement to conduct thorough and reasonable Four-Factor Analyses to identify necessary measures in the long-term strategy. Section 51.308(f)(3)'s requirement that states establish RPGs for their in-state Class I areas refers back to (f)(2)'s requirement to establish emission limits and other measures necessary to make reasonable progress.[156] As explained above, section 51.308(f)(2) is directly linked to the four factors, as the emission limits and measures necessary to make reasonable progress must be based on the four factors.

The purpose and history of the 2017 RHR revision confirm these requirements. As EPA explained in the 2017 RHR revision preamble, one purpose of the revised Rule was to clarify misunderstandings in the interpretation and application of the 1999 RHR. EPA clarified the proper consideration of the URP with regard to Four-Factor Analyses:

> [I]f a state has reasonably selected a set of sources for analysis and has reasonably considered the four factors in determining what additional control measures are necessary to make reasonable progress, then the state's analytical obligations are complete if the resulting RPG for the most impaired days is below the URP line. The URP is not a safe harbor, however, and states may not subsequently reject control measures that they have already determined are reasonable. If a state's RPG for the most impaired days is above the URP line, then the state has an additional analytical obligation to ensure that no reasonable controls were left off the table.[157]

EPA explained that the Four-Factor Analysis is not a box checking exercise; rather, states must engage in thorough and reasoned analyses to satisfy the requirements of the RHR. Contrary to

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[155] *Id.* § 51.308(f)(2)(i) (emphasis added). This provision was added in the 2017 RHR revision, further emphasizing that EPA's new URP policy is inconsistent with the RHR.
[156] *Id.* § 51.308(f)(3) (requiring states to set RPGs for their in-state Class I areas that "reflect the visibility conditions that are projected to be achieved at the end of the applicable implementation period as a result of those enforceable emissions limitations, compliance schedules, and other measures required under paragraph (f)(2)").
[157] 82 Fed. Reg. at 3093.

EPA's New URP Policy, a state's mere mention or reference to the four statutory factors is not sufficient to demonstrate that the state conducted those analyses in compliance with the RHR.

EPA further clarified that even the 1999 RHR prohibited reliance on the URP to evade the Four-Factor Analysis requirements of the Act and the Rule:

> [T]he URP was never intended to be a safe harbor. In the 1999 RHR, we explained that "[states should identify the amount of progress that is reasonable based upon the statutory factors and adopt that amount of progress in their long-term strategies]"[158] This approach is consistent with and advances the ultimate goal of section [7491]: Remedying existing and preventing future visibility impairment. Congress required the EPA to promulgate regulations requiring reasonable progress toward that goal, and it would be antithetical to allow states to avoid implementing reasonable measures until and unless that goal is achieved.[159]

Thus, in response to a comment that EPA should explicitly state in the RHR itself that the URP is not a safe harbor, EPA declined to do so because it believed that point was already patently clear:

> EPA agrees . . . that the requirement of 40 CFR 51.308(f)(2) applies regardless of whether the affected Class I area is currently attaining, or is projected to attain, the uniform rate of progress. We are not adding the suggested language in the final version of this section because we believe that the text being finalized, supplemented with the statements in the preamble and this document about the safe harbor concept are sufficient clarification of this point.[160]

Just as with the text and requirements of the Clean Air Act discussed above, EPA has time and time again explained that treating the URP as a safe harbor, as the Agency proposes to do with its New URP Policy, violates the RHR.

Finally, just as with the plain language of the Clean Air Act, the text of the RHR specifically requires EPA to engage in rigorous and substantive reviews of state SIP submissions. The Rule requires that "[i]n determining whether the State's goal for visibility improvement provides for reasonable progress towards natural visibility conditions, [EPA] will also evaluate the demonstrations developed by the State pursuant to [section 51.308(f)(2)],"[161] including "how the four factors were taken into consideration in selecting the measures for inclusion in [the] long-term strategy"[162] and whether "the State . . . document[ed] the technical basis, including modeling, monitoring, cost, engineering, and emissions information, on which the State is relying to determine [those measures]."[163] This text requires EPA to not only determine whether states conducted Four-Factor Analyses, but whether those analyses were reasonably conducted

[158] The full text of the quoted language from the 1999 RHR can be found above. To avoid duplication, that text is paraphrased here.
[159] 82 Fed. Reg. at 3093-94.
[160] 2017 RHR RTC at 170; *see also* 2021 Clarification Memo at 13 (stating that EPA has "consistently stated" that "relying on the URP as a safe harbor . . . does not comport with the RHR").
[161] 40 C.F.R. § 51.308(f)(3)(iv).
[162] *Id.* § 51.308(f)(2)(i).
[163] *Id.* § 51.308(f)(2)(iii).

and adequately justified. Yet, as explained above, EPA relies on the New URP Policy to evade its substantive review duties.[164]

VII. Announcing and Applying the New URP Policy in State-Specific Regional Actions Violates the Procedural Requirements of the Clean Air Act.

The New URP Policy violates the Clean Air Act's procedural requirements, as it is inconsistent with both national policy and actions taken on second planning period SIPs by nearly every EPA region. The New URP Policy also effectively revises the RHR without complying with the Act's rulemaking requirements and is intended to have national scope and effect.

A. The New URP Policy Unlawfully Departs from National Policy.

EPA acknowledges that its New URP Policy reflects "a change in policy" regarding the URP. However, the Agency ignores that its announcement of this change in a regional SIP action, and continued application of that policy in other regional SIP actions, including this one, violates the Clean Air Act's requirements that SIP actions be consistent with national policy.

EPA's New URP Policy is incompatible with its own longstanding policy that the URP is not a safe harbor, and the mere fact that a Class I area is projected to be on or below the URP glidepath does not allow states to conduct unreasonable Four-Factor Analyses or ignore reasonable emission reduction measures. Not only is this EPA's longstanding policy, it is also the Agency's national policy. As explained in detail above, EPA codified the prohibition on using the URP to evade the Four-Factor Analysis requirement as national policy in the 1999 RHR and 2017 RHR revision, as well as its 2019 Guidance and 2021 Clarification Memo.[165]

The Clean Air Act requires EPA to "assure fairness and uniformity in the criteria, procedures, and policies applied" in its SIP actions.[166] In accordance with this directive, EPA adopted consistency regulations[167] that explicitly require that the regional offices carry out SIP actions "fairly and in a manner that is consistent with the Act and Agency policy"[168] and to have "mechanisms for identifying and correcting inconsistencies by standardizing . . . policies being employed by Regional Office employees in implementing and enforcing the act."[169] Regional offices also "shall seek concurrence from the appropriate EPA Headquarters office on any interpretation of the Act, . . . when such interpretation may result in application of the [A]ct or

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[164] *See supra* Section IV.A and V.A.1.
[165] *See supra* Sections V-VI.
[166] 42 U.S.C. § 7601(a)(2)(A); *see Nat'l Env't. Dev. Ass'ns Clean Air Project v. EPA*, 752 F.3d 999, 1009 (D.C. Cir. 2014) (explaining that EPA must, "without limitation," "assure that actions taken under the act . . . [are] carried out fairly and in a manner that is consistent with the Act" and its regulations (alteration in original) (quoting 40 C.F.R. § 56.5(a)(1), (2))).
[167] 40 C.F.R. Part 56.
[168] 40 C.F.R. § 56.5(a)(1).
[169] *Id.* § 56.3(a)-(b); *see* 44 Fed. Reg. at 13045 (stating that EPA "interprets § 301(a)(2) of the Act as a mandate to assure greater consistency among the Regional Offices in implementing the Act, certainly *not* as a license to institutionalize the kind of inconsistencies that prompted Congress to enact this provision" (emphasis added)).

rule, regulation, or program directive that is inconsistent with Agency policy."[170] Because EPA's proposed approval of the Oklahoma 2022 SIP is based on an interpretation of the Clean Air Act that "varies from national policy," the Agency is required under 40 C.F.R. § 56.5(b) to obtain the concurrence of the relevant EPA Headquarters Office before finalizing the proposed approval. Yet, nothing in the record indicates that the regional office obtained that concurrence.

> Furthermore, with respect to interagency review, Executive Order 12,866 requires review by the Office of Management and Budget of any "significant regulatory actions," which includes actions that "[r]aise novel legal or policy issues arising out of legal mandates."[171] EPA's New URP Policy, contradicting over twenty years of prior EPA practice, raises novel legal and policy issues. However, the record shows no attempt at compliance; indeed, EPA's proposal incorrectly states that compliance is not required.[172]

EPA cannot take action or approve a SIP that violates applicable Clean Air Act requirements.[173] Yet, by applying the New URP Policy that sharply departs from national policy, EPA proposes to do just that. EPA's proposed piecemeal approach to rewriting its national URP policy arbitrarily and impermissibly "institutionalize[s] the kind of inconsistencies that prompted Congress to enact" § 7601(a)(2) in the first place.[174] Because EPA has failed to demonstrate that it complied with the Agency's own consistency regulations, as required by 40 C.F.R. § 56.5, the Agency's proposed action is contrary to law.

B. The New URP Policy Is Inconsistent with Actions Across EPA Regions.

In addition to requiring consistency with national policy, EPA's regulations further require that EPA regional office SIP actions "[a]re as consistent as reasonably possible with the activities of" other EPA regions.[175] This requirement is also meant to implement the Congress's directive that EPA "assure fairness and uniformity in the criteria, procedures, and policies applied by the various [EPA] regions in implementing and enforcing" the Clean Air Act.[176]

EPA's current proposal to approve Oklahoma's 2022 SIP based on its New URP Policy is inconsistent with SIP actions taken by nearly every other EPA region stating that "the URP . . . is not a 'safe harbor.'"[177] As EPA has repeatedly explained—in both revising the RHR itself and

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[170] 40 C.F.R. § 56.5(b).
[171] Exec. Order No. 12,866 Regulatory Planning and Review, 58 Fed. Reg. 51735 at § 6(a)(3)(A) (Sept. 30, 1993) (agency responsibility); *id.* at 3(f)(4) (definition of significant regulatory action).
[172] 91 Fed. Reg. at 6603.
[173] 42 U.S.C. §§ 7410(k)(3), (1); *see also Panhandle E. Pipe Line Co. v. FERC*, 613 F.2d 1120, 1135 (D.C. Cir. 1979) ("It has become axiomatic that an agency is bound by its own regulations."); *U.S. Lines, Inc. v. Fed. Mar. Comm'n*, 584 F.2d 519, 526 n.20 (D.C. Cir. 1978) ("Although it is within the power of [an] agency to amend or repeal its own regulations, [an] agency is not free to ignore or violate its regulations while they remain in effect.").
[174] 44 Fed. Reg. 13043, 13045 (Mar. 9, 1979).
[175] 40 C.F.R. § 56.5(a); *see also* 2011 McCabe Consistency Memo; 2007 Wehrum Consistency Memo.
[176] 42 U.S.C. § 7601(a)(2)(A).
[177] 88 Fed. Reg. 80655, 80633 (Nov. 20, 2023) (EPA Region 1 stating in its proposal on New Hampshire's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 89 Fed. Reg. 58663, 58670 (July 19, 2024) (EPA Region 1 stating in its proposal on Connecticut's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 87 Fed. Reg. 51016, 51024 (Aug. 19, 2022) (EPA Region 2 stating in its proposal on New Jersey's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 89 Fed. Reg. 20384, 20392 (Mar. 22, 2024) (EPA Region 2 stating in its proposal on New York's Round 2 SIP that the URP "is not a safe harbor" (quotations

in partially disapproving second planning period SIPs—"the URP is not a safe harbor and an area's position with respect to the URP should not be a factor in determining whether a control measure is reasonable."[178] EPA's proposal here is also inconsistent with SIP actions during the first planning period, during which EPA regions disapproved multiple SIPs where states improperly relied on the URP as a safe harbor.[179]

Thus, EPA's proposed approval violates the Clean Air Act's and its implementing regulations' requirements that actions taken under the Act "[a]re carried out fairly and in a manner that is consistent" with other EPA regional actions.[180]

C. EPA's New URP Policy Effectively Revises the RHR.

As a core part of the 2017 RHR revision, EPA explicitly recognized that the mere fact that a Class I area is at or below the URP necessary to achieve natural visibility by 2064 is "not a safe harbor" from having to implement cost-effective or reasonable control measures necessary to make reasonable progress based on the four statutory factors.[181] Such an approach would be "antithetical" to the Clean Air Act's goal of remedying and preventing all visibility

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omitted)); 86 Fed. Reg. 19793, 19800 (Apr. 15, 2021) (EPA Region 3 stating in its proposal on Washington, D.C.'s Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 88 Fed. Reg. 58178, 58186 (Aug. 25, 2023) (EPA Region 3 stating in its proposal on Maryland's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 89 Fed. Reg. 67018, 67026 (Aug. 19, 2024) (EPA Region 3 stating in its proposal on Delaware's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 89 Fed. Reg. 47481, 47489 (June 3, 2024) (EPA Region 4 stating in its proposal on Georgia's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 89 Fed. Reg. 67341, 67349 (Aug. 20, 2024) (EPA Region 4 stating in its proposal on North Carolina's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 89 Fed. Reg. 105506, 105514 (Dec. 27, 2024) (EPA Region 4 stating in its proposal on Florida's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 89 Fed. Reg. 56827, 56834 (July 11, 2024) (EPA Region 5 stating in its proposal on Minnesota's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 89 Fed. Reg. 65492, 65500 (Aug. 9, 2024) (EPA Region 5 stating in its proposal on Wisconsin's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 89 Fed. Reg. 71124, 71131 (Aug. 30, 2024) (EPA Region 5 stating in its proposal on Ohio's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 89 Fed. Reg. 178, 185 (Jan. 2, 2024) (EPA Region 7 stating in its proposal on Kansas's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 89 Fed. Reg. 63258, 63266 (Aug. 2, 2024) (EPA Region 7 stating in its proposal on Iowa's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 89 Fed. Reg. 56693, 56702 (July 10, 2024) (EPA Region 8 stating in its proposal on North Dakota's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 89 Fed. Reg. 63030, 63039 (Aug. 1, 2024) (EPA Region 8 stating in its proposal on Wyoming's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 89 Fed. Reg. 67208, 67217 (Aug. 19, 2024) (EPA Region 8 stating in its proposal on Utah's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 89 Fed. Reg. 47398, 47406 (EPA Region 9 stating in its proposal on Arizona's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)); 89 Fed. Reg. 13622, 13631 (EPA Region 10 stating in its proposal on Oregon's Round 2 SIP that the URP "is not a safe harbor" (quotations omitted)).

[178] *See* 82 Fed. Reg. at 3078; 89 Fed. Reg. 55140, 55156 (July 3, 2024); 81 Fed. Reg. 296, 326 (Jan. 5, 2016) (disapproving Texas's first planning period SIP and finding "the uniform rate of progress is not a 'safe harbor' under the Regional Haze Rule.").

[179] 82 Fed. Reg. at 3084 & n.30 (providing an example of a SIP rejection); 76 Fed. Reg. 64186, 64195 (proposed Oct. 17, 2011) (EPA Region 6 proposing to partially disapprove Arkansas's Round 1 reasonable progress goals); 77 Fed. Reg. 14604, 14612 (Mar. 12, 2012) (EPA Region 6 taking final action to partially disapprove Arkansas's Reasonable Progress Goals).

[180] 40 C.F.R. § 56.5(a).

[181] 82 Fed. Reg. at 3093 ("[T]he rate of progress that will be achieved by the emission reductions resulting from all reasonable control measures is, by definition, a reasonable rate of progress.").

impairment.[182] Indeed, "until and unless" that natural visibility goal is achieved, states cannot reject control measures that are reasonable based on the four statutory reasonable progress factors.[183]

EPA's New URP Policy effectively revises the national RHR in two ways. First, it creates an exception to the national RHR's categorical prohibition against relying on the URP as a safe harbor from reasonable control measures.[184] Now, EPA claims that the Clean Air Act and the RHR allow states to avoid control measures that are reasonable under the four statutory factors, and so, necessary to make reasonable progress where the state demonstrates that affected Class I areas are meeting the URP. In effect, EPA has revised a rule that, as a matter of law, allows no exceptions, into a rule that allows exceptions when (or where) EPA decides that all affected Class I areas are meeting the URP. Second, the proposed action changes the applicability of the RHR's URP policy, making that national policy inapplicable to Oklahoma. The proposed action thus amends the national, categorical URP policy to no longer be national or categorical.

EPA cannot point to Section 7491(a)(4) to support its attempt to effectively amend the RHR through regional SIP actions. That provision provides "after notice and public hearing, the Administrator shall promulgate regulations to assure (A) reasonable progress toward meeting the national goal [and] compliance with the requirements of this section."[185] Thus, this section requires EPA to undergo a rulemaking process to promulgate regulations. EPA cannot rationally read a statutory directive that it conduct a rulemaking process to give the Agency authority to *not* conduct a rulemaking process when it seeks to amend an existing regulation. On the other hand, section 7607(d)(1) of the Act requires the "promulgation or *revision* of regulations under part C of subchapter I of [the Act] (relating to prevention of significant deterioration of air quality and protection of visibility)" to be carried out using the procedures in Section 7607(d).[186] These procedures include providing the opportunity for a public hearing,[187] which EPA has not done, and keeping the proposed rule open for public comment for 30 days after the hearing,[188] which EPA has not done. Moreover, the Act's rulemaking procedures require that EPA include in the docket all data, information, and documents related to the methodology for the proposed revision, as well as an explanation of the major legal interpretations underlying the rule.[189] In addition, as noted above, this action is subject to the requirement in Executive Order 12,866 for interagency review by the Office of Management and Budget; and in turn, the procedures in Section 7607(d) require EPA to provide the results of such review in the docket prior to the date of proposal and finalization.[190] There is no indication EPA has followed these requirements. EPA is therefore improperly attempting to revise the RHR without following the statutorily required procedures.

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[182] *Id.* at 3094.
[183] *Id.*
[184] *Id.* at 3093.
[185] 42 U.S.C. § 7491(a)(4).
[186] *Id.* § 7607(d)(1)(J) (emphasis added).
[187] *Id.* § 7607(d)(5)(B)(ii). The Federal Register Act requires 15 days of notice in the Federal Register prior to such a hearing. 44 U.S.C. § 1508(2).
[188] 42 U.S.C. § 7607(d)(5)(iv).
[189] *Id.* § 7607(d)(3).
[190] *Id.* § 7607(d)(4)(B)(ii).

D. EPA Must Determine Its New URP Policy Has Nationwide Scope and Effect.

In its 2017 RHR revision, EPA concluded that judicial review of the Rule—including EPA's national policy position that the URP is not a safe harbor against implementing reasonable control measures (national URP Policy)—should be centralized in the D.C. Circuit.[191] Even if the proposed action does not amend the nationally applicable RHR (it does), EPA must publish a finding that the revisions to the Agency's national Rule, which embodies its national URP policy, are "based on a determination of nationwide scope [and] effect."[192]

The U.S. Supreme Court recently issued two decisions that touch on Section 7607(b)'s language regarding the effect of a "determination of nationwide scope or effect" on venue.[193] In *Calumet*, the lead opinion regarding this provision, the Court held:

> [A]n EPA action is "based on" a particular determination only if that determination "lie[s] at the core of the agency action," so as to form the most important part of the agency's reasoning . . . . Put more concretely, an EPA action is based on a determination of nationwide scope or effect only if a justification of nation-wide breadth is the primary explanation for and driver of EPA's action. A determination of nationwide scope or effect does not rise to this level if EPA also relied in significant part on other, "intensely factual" considerations, or if the key driver of EPA's action is otherwise debatable.[194]

Here, the key driver of EPA's action is its New URP Policy. EPA gives no other "intensely factual" consideration for proposing to approve Oklahoma's 2022 SIP despite ample evidence that additional emission reduction measures are necessary to make reasonable progress.[195] Where EPA does purport to draw a conclusion regarding the State's Four-Factor Analyses, EPA does so without meaningful review.[196] Indeed, EPA's New URP Policy allows EPA to evade fact-intensive review of a state's Four-Factor Analyses, instead substituting a purely ministerial determination as to whether the SIP submittal contains Four-Factor Analyses, regardless of whether they are rational or supported by the record.

Where, as here, "EPA relies on determinations of nationwide scope or effect to reach *a presumptive resolution*, those determinations qualify as the primary driver of its decision," and EPA's action is therefore based on a determination of nationwide scope or effect.[197] That is precisely what has happened here: EPA has made a presumptive resolution of the issue of whether Oklahoma's 2022 SIP makes reasonable progress. And the Agency's resolution of that central issue is indisputably based on the Agency's New URP Policy that purportedly allows EPA to determine that the 2022 SIP presumptively demonstrates reasonable progress.[198] That there are particular facts that might cause EPA to depart from this presumption (and which facts

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[191] 82 Fed. Reg. at 3079.
[192] 42 U.S.C. § 7607(b)(1).
[193] *EPA v. Calumet Shreveport Refining, LLC et al.*, 145 S. Ct. 1735 (2025) [hereinafter "*Calumet*"]; *Oklahoma et al. v. EPA et al.*, 605 U.S. 609 (2025).
[194] *Calumet*, 145 S. Ct. at 1751.
[195] *See* 91 Fed. Reg. at 6591-97; *see supra* Sections II.A and V.A.1; *see infra* Sections IX.D-I.
[196] *See supra* Sections IV.A and V.A.1; *see infra* Sections IX.F.
[197] *Calumet*, 145 S. Ct. at 1752.
[198] 91 Fed. Reg. at 6591-97.

EPA does not even specify) would be merely "peripheral."[199] Indeed, EPA has now proposed to apply its New URP Policy to approve multiple SIPs across EPA Regions without any hint that any of those SIPs might fail the "presumption."[200]

Furthermore, as explained above, the 2017 RHR revision, which embodies EPA's national URP policy, was based on determinations of nationwide scope and effect. EPA's New URP Policy, thus, is necessarily based on those same determinations of nationwide scope and effect. Indeed, EPA explicitly recognizes that the proposed rule adopts a "new" policy that departs from its existing national policy.[201] As such, the New URP Policy is necessarily based on the same determinations of nationwide scope and effect as the original policy—i.e., the nationwide RHR.

As recognized by the U.S. Supreme Court, EPA still has a role in deciding whether a regional action is based on a determination of nationwide scope or effect.[202] While in dicta the Supreme Court theorized that it would be rare for EPA to fail to make the determination of nationwide scope and effect despite it being appropriate to do so, the Court only mentioned issue preservation as a potential obstacle to reviewability of such a failure.[203] The Act gives EPA discretion to make the determination of nationwide scope and effect; in such a circumstance, it is arbitrary and capricious for EPA to fail to explain why it is or is not exercising that discretion.[204]

VIII. The Oklahoma 2022 SIP Does Not Meet EPA's New URP Policy for Presumptive Approval.

Even if EPA's New URP Policy does not violate the Clean Air Act and RHR (it does), EPA cannot approve Oklahoma's 2022 SIP based on that policy. As EPA explains in its proposal here, to qualify for presumptive approval under the new policy, all Class I areas, both in-state and out-of-state, that may be affected by pollution from the state must be projected to be below their respective URP glidepaths at the end of the planning period.[205] First, all states rely on the Interagency Monitoring of Protected Visual Environments (IMPROVE) monitoring network to develop their URP glidepaths, but recent funding threats raise significant concerns about the continued operation of the network. Second, Oklahoma's adjustment to the URP for the Wichita Mountains Wilderness Area does not comply with the RHR. Third, both EPA and Oklahoma ignore that Oklahoma pollution contributes to impairment at additional out-of-state

[199] *Calumet*, 145 S. Ct. at 1752.
[200] *E.g.*, 90 Fed. Reg. 16478 (West Virginia); 90 Fed. Reg. 20425 (May 14, 2025) (South Dakota); 90 Fed. Reg. 25929 (June 18, 2025) (California); 90 Fed. Reg. 25975 (June 18, 2025) (Michigan); 90 Fed. Reg. 25944 (June 18, 2025) (Indiana); 90 Fed. Reg. 26362 (June 20, 2025) (Texas); 90 Fed. Reg. 40272 (Aug. 19, 2025) (Oklahoma); 90 Fed. Reg. 34792 (Washington); 90 Fed. Reg. 43958 (Sept. 11, 2025) (Montana); 90 Fed. Reg. 43030 (Sept. 5, 2025) (Arkansas); 90 Fed. Reg. 36005 (July 31, 2025) (South Carolina); 90 Fed. Reg. 40272 (Aug. 19, 2025) (Tennessee); 90 Fed. Reg. at 43030 (Sept. 5, 2025) (Arkansas); 91 Fed. Reg. 5321 (Feb. 6, 2026) (Nevada).
[201] 91 Fed. Reg. at 6590-91.
[202] *Calumet*, 145 S. Ct. at 1752-53.
[203] *Id.* at 1752, n.4.
[204] *E.g.*, *Owner-Operator Indep. Drivers Ass'n v. Fed. Motor Carrier Safety Admin.*, 494 F.3d 188, 203 (D.C. Cir. 2007) (explaining that an "agency must cogently explain why it has exercised its discretion in a given manner").
[205] 91 Fed. Reg. at 6586.

Class I areas that Oklahoma did not identify and that some of those Class I areas are projected to be above the URP in 2028.

A. States, Including Oklahoma, Rely on the IMPROVE Network to Satisfy the RHR's Monitoring Requirements.

The RHR requires states to submit a SIP that provides (1) "a monitoring strategy for measuring, characterizing, and reporting of regional haze visibility impairment that is representative of all mandatory Class I Federal areas within the State," and (2) "for the reporting of all visibility monitoring data to the Administrator at least annually for each mandatory Class I Federal area in the State."[206] The RHR also provides that states may satisfy these requirements through their participation in the IMPROVE network.[207] As EPA explains in its proposal, the IMPROVE monitoring network "is used to measure visibility impairment caused by air pollution at the 156 Class I areas covered by the visibility program."[208]

Despite the importance of the IMPROVE network to the Regional Haze Program (and other Clean Air Act programs),[209] there have been recent threats to the network's continued operation. For instance, the Trump Administration issued a stop-work order on multiple contracts to maintain the IMPROVE network earlier in the Administration.[210] Although those contracts appear to have been reinstated, funding cuts for air quality monitoring remains an issue, threatening the continued operation of the IMPROVE network.

Yet, EPA could not determine whether any SIP qualifies for approval under its New URP Policy without necessary monitoring data from the IMPROVE network. All states, including Oklahoma, rely on IMPROVE monitoring data to develop the URP glidepaths for their in-state Class I areas and to determine whether Class I areas are above or below their glidepaths.[211] All states, including Oklahoma, also rely on their participation in the IMPROVE network to satisfy the RHR's requirements that states have monitoring networks to measure visibility at Class I areas and report that data to EPA on an annual basis.[212] Without the IMPROVE network, not only would states be unable to meet the RHR's monitoring requirements, but they also could not show that their SIPs qualify for approval under EPA's New URP Policy.

B. EPA Fails to Account for Oklahoma's Reliance on URP Glidepath Adjustments.

The RHR requires states to calculate the URP for each Class I area within their borders, which is the amount of progress that would ensure that natural visibility conditions are achieved if kept constant each year.[213] This calculation shows a straight-line "glidepath" between baseline

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[206] 40 C.F.R. § 51.308(f)(6), (f)(6)(iv).
[207] *Id.* § 51.308(f)(6).
[208] 91 Fed. Reg. at 6585 (citations omitted).
[209] *See generally* Decl. of Bruce Polkowsky (May 16, 2025) (attached as Ex. 13).
[210] Maxine Joselow, *Park Service Suspends Air-Quality Monitoring at All National Parks*, WASHPOST (May 5, 2025 7:19 PM), https://www.washingtonpost.com/climate-environment/2025/05/05/national-parks-air-quality-monitoring/ (attached as Ex. 14).
[211] *See, e.g.*, Oklahoma 2022 SIP at 7-17; *id.* App. B.
[212] *See, e.g.*, 91 Fed. Reg. at 6600-01.
[213] 40 C.F.R. § 51.308(f)(1).

visibility conditions and natural visibility conditions. States must also develop RPGs, expressed in deciviews, for all in-state Class I areas reflecting the visibility conditions that will be achieved at the end of the implementation period as a result of the measures included in a state's long-term strategy.[214] States must then compare those RPGs to the URP to track the amount of progress that will be made at each Class I area.[215] The RHR allows states to adjust the URP glidepaths to account for international and prescribed wildland fire emissions.[216] However, these adjustments must be made "using scientifically valid data and methods" and must be approved by the EPA Administrator.[217]

In the 2022 SIP, Oklahoma relied on EPA's September 2019 Modeling Technical Support Document (2019 Modeling TSD)[218] both to adjust the URP for Wichita Mountains Wilderness Area and to establish the RPG for that Class I area.[219] However, EPA's 2019 Modeling TSD does not provide scientifically sound data or methods for making the glidepath adjustments—a point EPA itself has acknowledged.

In its 2019 Modeling TSD, EPA highlighted substantial problems with available data and methods for adjusting Class I area glidepaths based on both international and prescribed wildland fire emissions. For example, EPA's 2028 projections for international emissions were based on just one year of data from 2016 and were held constant through 2028 because "[EPA does] not have specific information on expected emissions changes between now and 2028."[220] EPA also noted that the science on which modeling contributions from international emissions rests is questionable, stating that "[d]ue to the uncertainty in many of the calculations and modeling and ambient data, additional scrutiny of the initial glidepath adjustments are warranted."[221]

EPA also noted serious concerns with adjusting glidepaths based on prescribed wildland fires in its 2019 Modeling TSD. According to EPA, there are significant data and modeling limitations for prescribed fires, including that: (1) there is limited existing emissions data for prescribed fires, and that data does not accurately capture the significant variability in these emissions from year-to-year; (2) the categorization of fires between wildfires (which are considered natural emissions) and prescribed fires (which are considered anthropogenic emissions) is uncertain; and (3) prescribed fire impacts are likely already reflected in natural wildfire impacts when estimating ambient natural conditions on the 20% most impaired days, likely resulting in double-counting of these emissions.[222] Consequently, EPA did not include

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[214] *Id.* § 51.308(f)(3)(i).
[215] *Id.* § 51.308(f)(3).
[216] *Id.* § 51.308(f)(1)(vi)(B).
[217] *Id.*; 82 Fed. Reg. at 3104 (explaining that adjustment for international emissions "would be available only when and if these impacts can be estimated with sufficient accuracy").
[218] U.S. Envtl. Prot. Agency, *Technical Support Document for EPA's Updated 2028 Regional Haze Modeling* (2019) [hereinafter "EPA 2019 Modeling TSD"], https://www.epa.gov/sites/default/files/2019-10/documents/updated_2028_regional_haze_modeling-tsd-2019_0.pdf (attached as Ex. 15).
[219] Oklahoma 2022 SIP at 52 & fig.6-4; 91 Fed. Reg. at 6587, 6599.
[220] EPA 2019 Modeling TSD at 37.
[221] *Id.* at 67.
[222] *Id.* at 35, 54-55, 67.

prescribed fire contributions in its proposed adjustments to the glidepaths in the 2019 Modeling TSD.[223]

Moreover, these adjustments allow EPA and states to "flatten out" the glidepaths for the relevant Class I areas to make it *appear* that these Class I areas are on track to meet the Clean Air Act's goal of achieving natural visibility conditions when that is not the case. As a result, the adjusted URPs do not reflect "the rate of progress that would reach true natural visibility conditions" at Class I areas.[224]

As noted above, Oklahoma relied on EPA's invalid URP adjustments to claim that Wichita Mountains is projected to be below the URP in 2028. EPA's 2019 Modeling TSD shows that Wichita Mountains is projected to be above its unadjusted URP,[225] and neither EPA nor Oklahoma can rely on EPA's invalid URP adjustments to assert that Wichita Mountains will be below the URP in 2028. Thus, even for Oklahoma's own in-state Class I area, both EPA and Oklahoma fail to show that Oklahoma's 2022 SIP meets EPA's New URP Policy. Additionally, and as discussed in more detail below, EPA also cannot show that the Oklahoma 2022 SIP satisfies the New URP Policy for presumptive approval based on Oklahoma's contribution to out-of-state Class I areas.

C. EPA Ignores Pollutants that Are Affected by Oklahoma Pollution.

The Act requires states in which a Class I area is located or "the emissions from which may reasonably be anticipated to cause or contribute to any impairment of visibility in any such area" to develop a SIP that makes reasonable progress toward the natural visibility goal.[226] The RHR contains similar language, providing that states must address regional haze at all in-state Class I areas "and in each mandatory Class I Federal area located outside the State that may be affected by emissions from within the State."[227] As EPA explained in its 2019 Guidance, identification of affected Class I areas in other states is a "key process step[]" in the development of regional haze SIPs.[228]

Oklahoma was required to identify affected Class I areas in the 2022 SIP in accordance with the requirements of the Act. Referencing the statutory and regulatory provisions requiring states to identify affected Class I areas, EPA explained in its proposal to approve the West Virginia SIP, in which EPA first announced its New URP Policy, that "[c]ritically, the statute and regulation both require that the cause-or-contribute assessment consider all emissions of visibility impairing pollutants from a state, as opposed to emissions of a particular pollutant or emissions from a certain set of sources."[229] EPA explains in its proposal here that "[v]isibility impairing pollutants include fine and coarse particulate matter (PM) (*e.g.*, sulfates, nitrates, organic carbon, elemental carbon, and soil dust) and their precursors (*e.g.*, [SO_2], [NOx], and, in

[223] *Id.* at 54-55, 67.
[224] *See* 82 Fed. Reg. at 3105.
[225] Oklahoma 2022 SIP at 52 & fig.6-4; 91 Fed. Reg. at 6587.
[226] 42 U.S.C. § 7491(b)(2).
[227] 40 C.F.R. § 51.308(f).
[228] 2019 Guidance at 4-5, 8.
[229] 90 Fed. Reg. at 16484.

some cases, volatile organic compounds (VOC) and ammonia (NH_3)).”[230] The text of the Act and RHR noted above also does not limit the cause-or-contribute analysis to a certain set of days, like the most impaired days, and instead broadly requires states to look at *any* visibility impairment at *any* affected Class I area on all days of the year.

As EPA notes in its proposal, Oklahoma identified the Class I areas based on its statewide emissions of only SO_2 and NOx, and did not consider direct emissions of PM.[231] Oklahoma did not consider other haze-forming pollutants, like NH_3 and VOCs. As a result, Oklahoma failed to consider all emissions of visibility impairing pollutants in identifying affected Class I areas. Thus, EPA’s own summary of Oklahoma’s identification of affected Class I areas shows that the State’s process did not meet the requirements of the Clean Air Act, as it did not include all haze-forming pollutants.

The State also failed to identify all out-of-state Class I areas affected by Oklahoma pollution. Oklahoma relied on CenSARA’s modeling and AOIs to identify affected out-of-state Class I areas.[232] Based on this modeling, Oklahoma initially identified five out-of-state Class I areas but eliminated two areas in Texas following its state-to-state consultation.[233] Oklahoma, thus, only identified Caney Creek Wilderness Area and Upper Buffalo Wilderness Area in Arkansas, and Hercules-Glades Wilderness Area in Missouri as being affected by Oklahoma pollution sources.[234]

However, the very CenSARA modeling on which Oklahoma relied shows that the State contributes to impairment at numerous additional out-of-state Class I areas,[235] including: (1) Badlands and Wind Cave National Parks in South Dakota;[236] (2) Big Bend and Guadalupe National Parks in Texas;[237] (3) Voyageurs National Park and Boundary Waters Canoe Area Wilderness Area in Minnesota;[238] (4) Breton Wilderness Area in Louisiana;[239] (5) Great Sand Dunes and Rocky Mountain National Parks in Colorado;[240] (6) Isle Royale National Park and Seney Wilderness Area in Michigan;[241] (7) Theodore Roosevelt National Park and Lostwood

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[230] 91 Fed. Reg. at 6582.
[231] 91 Fed. Reg. at 6588.
[232] Oklahoma 2022 SIP at 30, 45; 91 Fed. Reg. at 6586.
[233] Oklahoma 2022 SIP at 6 & tbl.2-1, 45-46; 91 Fed. Reg. at 6586.
[234] Oklahoma 2022 SIP at 45-46 & tbl.6.6.; 91 Fed. Reg. at 6586.
[235] Cent. States Air Res. Agencies, *CenSARA AOI Analysis*, https://censara.org/ftpfiles/Ramboll/ (click on the link titled “facilityemis.ewrt.qd2028.alltraj.xlsx” to download the file) (attached as Ex.16).
[236] *Id.* In the “Summary” tab, set the EWRT and EWRT*Q/d thresholds to 0% in columns R through W, select the Class I area from the dropdown menu in column C, and select only Oklahoma in the dropdown menu in column D to filter the results to show only Oklahoma facilities. With those settings, the CenSARA modeling shows that 162 individual Oklahoma point sources that emit at least 100 tpy of NOx and SO_2 contribute to impairment at Badlands and Wind Cave National Parks. *Id.*
[237] *Id.* (showing that 147 and 139 individual Oklahoma point sources that emit at least 100 tpy of NOx and SO_2 contribute to impairment at Big Bend National Park and Guadalupe Mountains National Park, respectively).
[238] *Id.* (showing that 162 individual Oklahoma point sources that emit at least 100 tpy of NOx and SO_2 contribute to impairment at both Voyageurs National Park and Boundary Waters Canoe Area Wilderness Area).
[239] *Id.* (showing that 148 individual Oklahoma point sources that emit at least 100 tpy of NOx and SO_2 contribute to impairment at Breton Wilderness Area).
[240] *Id.* (showing that 75 and 126 individual Oklahoma point sources that emit at least 100 tpy of NOx and SO_2 contribute to impairment at Great Sand Dunes National Park and Rocky Mountain National Park, respectively).
[241] *Id.* (showing that 162 and 161 individual Oklahoma point sources that emit at least 100 tpy of NOx and SO_2 contribute to impairment at Isle Royale National Park and Seney Wilderness Area, respectively).

Wilderness Area in North Dakota;[242] (8) Mammoth Cave National Park in Kentucky;[243] (9) Mingo Wilderness Area in Missouri;[244] (9) Salt Creek, White Mountain, and Wheeler Peak Wilderness Areas in New Mexico;[245] and (10) Sipsey Wilderness Area in Alabama.[246]

Neither Oklahoma nor EPA demonstrate that all of these additional affected Class I areas are projected to be below their respective URP glidepaths at the end of the planning period. Nor can they. EPA's 2019 Modeling TSD[247] shows that many of these areas are projected to be above their respective unadjusted glidepaths at the end of this planning period, including Great Sand Dunes National Park, Big Bend National Park, Guadalupe Mountains National Park, Lostwood Wilderness Area, Theodore Roosevelt National Park, Badlands National Park, White Mountains Wilderness Area, and Salt Creek Wilderness Area.[248]

As noted above, Oklahoma and EPA cannot rely on EPA's glidepath adjustments for these Class I areas to claim that they will be below their glidepaths in 2028, as EPA's methods for adjusting the glidepath did not meet the requirements of the RHR. In any event, the EPA 2019 Modeling TSD shows that at least one of these Class I areas—Salt Creek Wilderness Area—is projected to be above both the unadjusted *and* adjusted glidepaths in 2028.[249]

Because Oklahoma and EPA do not and cannot show that all Class I areas affected by Oklahoma pollution will be below their respective URP glidepaths at the end of the planning

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[242] *Id.* (showing that 144 and 186 individual Oklahoma point sources that emit at least 100 tpy of NOx and SO_2 contribute to impairment at Theodore Roosevelt National Park and Lostwood Wilderness Area, respectively).
[243] *Id.* (showing that 162 individual Oklahoma point sources that emit at least 100 tpy of NOx and SO_2 contribute to impairment at Mammoth Cave National Park).
[244] *Id.* (showing that 162 individual Oklahoma point sources that emit at least 100 tpy of NOx and SO_2 contribute to impairment at Mingo Wilderness Area).
[245] *Id.* (showing that 157, 151, and 75 individual Oklahoma point sources that emit at least 100 tpy of NOx and SO_2 contribute to impairment at Salt Creek Wilderness Area, White Mountains Wilderness Area, and Wheeler Peak Wilderness Area, respectively).
[246] *Id.* (showing that 162 individual Oklahoma point sources that emit at least 100 tpy of NOx and SO_2 contribute to impairment at Sipsey Wilderness Area).
[247] Note, CenSARA's second planning period modeling materials do not include comparisons of projected RPGs for Class I areas against their URPs.
[248] EPA 2019 Modeling TSD at 56-64. Note that EPA's 2019 Modeling TSD does not provide RPG projections or URP calculations for Wheeler Peak Wilderness Area. *See generally id.*
[249] *Id.* at 62. To the extent that EPA may rely on its past analyses purporting to show that Salt Creek Wilderness Area will be below the URP in 2028, EPA has not acknowledged that Oklahoma contributes to this Class I area, let alone explained how its prior analyses would apply here. In any event, EPA's prior analyses for Salt Creek are not sufficient to demonstrate that this Class I area would be below URP, as explained in prior comments. *See* Nat'l Parks Conservation Ass'n, et al., Comments on Proposed Air Plan Approval; Texas and Oklahoma; Texas Regional Haze Plans for the First and Second Implementation Periods and Five-Year Progress Report; Oklahoma Regional Haze Plan for the First Implementation Period, Docket No. EPA–R06–OAR–2025–0197 at 63-66 (July 23, 2025) (attached as Ex. 17); Nat'l Parks Conservation Ass'n, et al., Petition for Reconsideration of Air Plan Approval; Texas and Oklahoma; Texas Regional Haze Plans for the First and Second Implementation Periods and Five-Year Progress Report; Oklahoma Regional Haze Plan for the First Implementation Period, 90 Fed. Reg. 56001 (Dec. 5, 2025), EPA Docket No. EPA-R06-OAR-2025-0197 at 60-62 (Feb. 3, 2026) (attached as Ex. 18); Nat'l Parks Conservation Ass'n, et al., Petition for Reconsideration of Approval of Air Quality Implementation Plans; California; Regional Haze State Implementation Plan for the Second Implementation Period, Docket No. EPA-R09-OAR-2025-0203 at 28-31 (Nov. 4, 2025) (attached as Ex. 19).

period, EPA's proposal to approve the State's SIP based on its New URP Policy is arbitrary, capricious, and contrary to the law.[250]

IX. EPA's Proposal to Approve Oklahoma's 2022 SIP Violates the Clean Air Act and RHR.

This section demonstrates that EPA's proposal to approve Oklahoma's 2022 SIP violates the Clean Air Act and RHR for several reasons. First, Oklahoma failed to rationally explain its source selection methodology. Second, the Oklahoma 2022 SIP contains documentation flaws. Third, the State failed to document its cost-effectiveness thresholds. Fourth, Oklahoma excluded BART sources from Four-Factor Analyses. Fifth, the State failed to evaluate area sources. Sixth, EPA failed to meaningfully evaluate Oklahoma's Four-Factor Analyses. Finally, Oklahoma failed to document its Cross-State Air Pollution Rule (CSAPR) claims.

A. Oklahoma Failed to Rationally Explain its Source Selection Methodology.

Oklahoma's source selection methodology is highly flawed. These flaws were identified by the Conservation Organizations' 2022 Comments and EPA's comments in 2022. None of these flaws were addressed.

1. Oklahoma's Single Pollutant Source Selection Reasoning Is Unsound.

As indicated in Section 6.5.1 of the Conservation Organizations' 2022 Comments, Oklahoma's poor documentation extends to its source selection methodology as well.[251] Oklahoma did not adopt the usual procedure of selecting sources based on their combined NOx and SO_2 impacts. Rather, Oklahoma evaluated impacts by calculating Q/d separately for NOx and SO_2. This decision was not based on sound judgement supported by any technical or legal analysis. Oklahoma's explanation that controlling aggregated emissions would not reasonably correspond with the Most Impaired Days (MIDs) identified through monitoring is irrational and disconnected from real pertinent considerations, and thus has no relationship to the source selection process or in fact cost-effectiveness analysis.

Furthermore, Oklahoma's contention "[t]he visibility improvement from controlling one pollutant at a source identified through aggregate contribution would be far less than would be considered cost effective," indicates a consideration that is also out of order and thus biases the source selection process. Oklahoma could not know at this stage of the process what controls would be cost-effective and what visibility improvement would result from those controls. In fact, Oklahoma did not even quantify the visibility improvement resulting from any of the controls it considered in any of its Four-Factor Analyses, and thus had no basis on which to make this statement.[252]

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[250] *State Farm*, 463 U.S. at 43.

[251] Additional objections concerning technical aspects of Oklahoma's source selection methodology are covered in other sections.

[252] Additional information is provided in Section 6.5.1 of the Conservation Organizations' 2022 Comments. *See* Conservation Organizations' 2022 Comments at 15-17.

In Oklahoma's response to comments, the State provides the following explanation:

> [T]he important criterion involving extinction-weighted residence time makes intuitive sense only when considering the two components separately, given their different source regions. Northerly winds occur commonly during periods of freezing weather in the winter months, but southerly winds dominate the rest of the year. In this situation, the pollutants correspond with different origin regions, different seasons, and different chemical pathways and environments. Consequently, DEQ, in separating the pollutants, made a special effort to capture those sources that contribute most within its territorial jurisdiction to visibility impairment at the WMWA. The above comment appears to imply that a combination of NOx and SO_2 might ensnare a considerable number of facilities. Realistically, however, few sources emit moderate quantities of both SO_2 and NOx in the inventories, such that the total quantity of both pollutants together but neither pollutant independently gives Q/d > 5 tons year^{1} km^{1} in the inventories for 2016. A cursory analysis reveals only one such source: the Wynnewood petroleum refinery in Garvin County.[253]

Here, it appears that Oklahoma is making an argument that NOx and SO_2 impacts are more significant during different times of the year and (based on the HYSPLIT modeling used in the AOI calculations) originate from different areas. However, as explained in the Conservation Organizations' original comments, this is the usual situation for many Class I areas and does not provide any unique basis for separately assessing NOx and SO_2. This and Oklahoma's other arguments that are addressed in Section 6.5.1 of the Conservation Organizations' 2022 Comments do not relate to any logical basis to justify Oklahoma to conduct its source selection by separately considering NOx and SO_2, in lieu of considering these pollutants together.

Oklahoma further claims that if the State had performed its source selection by considering NOx and SO_2 together, only one additional source, the Wynnewood petroleum refinery, would have been selected.[254] Simply stating that its decision only excluded one additional source from receiving a Four-Factor Analysis is not a valid excuse for failing to assess that additional facility. In fact, here, Oklahoma is admitting that had it performed a combined NOx and SO_2 impact analysis, it would have had to subject this additional source, which contains many individual units, to Four-Factor Analyses.

It is evident that a primary motivating factor for Oklahoma calculating Q/d separately for NOx and SO_2, instead of considering the combined NOx + SO_2 Q/d impacts, is that doing so resulted in fewer sources being selected. EPA has confirmed this conclusion by stating in Comment No. 4 of its 2022 comments that "[t]he SIP narrative should explain why twelve sources is a reasonable number of sources beyond merely noting that the State has limited

[253] Oklahoma 2022 SIP, App. K, Summary of Public Comments and Staff Responses at 50 [hereinafter "Oklahoma RTC"], Docket No. EPA-R06-OAR-2022-0736-0002_attachment_13, https://www.regulations.gov/document/EPA-R06-OAR-2022-0736-0002.
[254] *Id.*

available resources."[255] Oklahoma has indicated in a number of places in its 2022 SIP that resource considerations caused it to compromise the scrutiny it paid to various aspects of its SIP.

Thus, Oklahoma has failed to properly document its decision to assess Q/d separately for NOx and SO_2 and has therefore not satisfied the documentation requirements of 40 C.F.R. § 51.308(f)(2)(iii). Consequently, EPA must (1) make this finding in its final determination, (2) find that the Wynnewood refinery should have been subjected to a proper Four-Factor Analysis, and (3) disapprove Oklahoma's long-term strategy.

2. Oklahoma's Q/d and Contribution Thresholds Are Arbitrary.

Oklahoma's Q/d and contribution thresholds were not properly justified and are thus arbitrary.[256] Oklahoma does not present any discussion or justification for selecting a Q/d threshold of 5 or a contribution threshold of 0.5%.

Oklahoma merely explained that "Commenters describe the threshold as 'arbitrary,' but neighboring states applied a similar threshold, and DEQ knows of no non-arbitrary threshold that it could declare."[257] This statement represents the sum total of Oklahoma's response to these comments for its Q/d threshold—that it does not have one. Establishing the thresholds that are used in the selection of sources for Four-Factor Analyses are some of the most important decisions a state makes in constructing its SIP. The effectiveness of the entire long-term strategy pivots on this decision. Therefore, Oklahoma's Q/d threshold must be documented as required by section 51.308(f)(2)(iii) of the RHR.

Regarding its 0.5% contribution threshold, Conservation Organizations' 2022 Comments objected[258] to Oklahoma's statement that "[g]iven the successful reduction in visibility impairment over the last decade, 0.5% is an appropriate threshold for identifying sources of the greatest importance for further analysis."[259] In other words, Oklahoma was saying that because it has already made enough progress in the first round of the Regional Haze Program, it found this contribution threshold acceptable, in lieu of a stricter value. Oklahoma's justification is effectively a claim that the URP is a safe harbor prohibition, which violates the RHR.

Oklahoma replies to the Conservation Organizations' 2022 Comments:

> DEQ notes its previously unanticipated success in improving visibility at the WMWA to instill confidence in this implementation plan revision, not to use the uniform rate of progress as a safe harbor for not requiring the further controls that the commenter prefers. DEQ applied the 0.5% contribution threshold principally to ensure selection of the most polluting subset of sources for further analysis. Any cost-effective emission controls required under this plan therefore most likely

[255] EPA 2022 Comments at 2.
[256] Conservation Organizations' 2022 Comments at 17-18.
[257] Oklahoma RTC at 50.
[258] Conservation Organizations' 2022 Comments at 17-18.
[259] Oklahoma 2022 SIP at 32.

> contribute to diminution of visibility impairment at the Wichita Mountains Wilderness Area or at another mandatory Class I federal area in a different state.[260]

Here, Oklahoma's response to comments suggests that because it made progress in the first round of the program (such progress largely due to EPA's Federal Implementation Plan (FIP)), the public should have confidence that it will do so in its second round SIP. Again, as with its failure to justify its Q/d threshold, Oklahoma failed to provide any data, calculations, or reasoning, and besides its invocation that the public trust its judgement implies that such a justification is impossible. While it is not the public's responsibility to provide such a justification to Oklahoma, it is worthwhile to point out that other states do justify their thresholds. At the very least, Oklahoma should have assessed the effect of other Q/d and contribution threshold values, assessed which sources would have been affected had those thresholds been selected, and what impacts on Class I Areas could potentially be mitigated through the use of those thresholds. That information should have been discussed and weighed using a reasonable decision-making process.

In its proposal, EPA ignores its previous 2022 objections and merely notes Oklahoma's Q/d and contribution thresholds without providing any judgement.[261]

Thus, Oklahoma failed to properly document its Q/d and contribution thresholds and therefore did not satisfy the documentation requirements of 40 C.F.R. § 51.308(f)(2)(iii). Consequently, EPA must (1) make this finding in its final determination, and (2) also disapprove Oklahoma's long-term strategy.

B. EPA Must Acknowledge Oklahoma's Considerable Documentation Flaws.

1. Oklahoma Failed to Include Unit-Level Emission Data in its 2022 SIP.

The 2022 SIP did not include unit-level emissions for non-Electricity Generating Units (EGUs).[262] Although unit-level emissions are readily available for EGUs via EPA's Clean Air Markets Program,[263] unit-level emissions from non-EGUs are not readily available from either EPA or Oklahoma. Facility-level data is not adequate for conducting a Four-Factor Analysis, which is performed on individual emission units. A facility, such as a cement plant, paper mill, chemical plant, etc., may have dozens of individual units. Therefore, only knowing the emissions for the plant as a whole does not provide the necessary information for assessing the cost-effectiveness of controls for individual units. This means that this critical unit-level

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[260] Oklahoma RTC at 50-51.
[261] 91 Fed. Reg. at 6588-89.
[262] Conservation Organizations' 2022 Comments at 9. EPA also only includes in its docket facility-level, rather than unit-level, emissions for 2023 and 2020, although it is unclear if this information is referenced or used in its proposal. *See* EPA, ODEQ 2023 Oklahoma Annual Point Source Emission Summary, Docket No. EPA-R06-OAR-2022-0736-0013, EPA Docket ID No. EPA-R06-OAR-2022-0736-0013, https://www.regulations.gov/document/EPA-R06-OAR-2022-0736-0013; EPA, 2020 National Emissions Inventory (NEI) Data for Oklahoma Facilities, Docket No. EPA-R06-OAR-2022-0736-0011, https://www.regulations.gov/document/EPA-R06-OAR-2022-0736-0011.
[263] EPA, Clean Air Markets Program Data (CAMPD): Custom Data Download (Apr. 11, 2025), https://campd.epa.gov/data/custom-data-download.

emission data must be included by Oklahoma in its SIP in order to enable a proper review in accordance with the documentation requirements of 40 C.F.R. § 51.308(f)(2)(iii).

Non-EGU unit-level emissions data for the last five years of available data was requested during the 2022 review of the Oklahoma SIP and was promptly provided, along with a number of Title V permits that were requested.[264] As can be seen from an examination of the Conservation Organizations' 2022 Comments, this unit-specific emission data was used in the critique of the Four-Factor Analyses and independent cost-effectiveness analyses performed for many non-EGU sources. However, that information *was not* incorporated into the Oklahoma 2022 SIP, and it is not evident that Oklahoma or EPA even considered it. Thus, the public did not have an opportunity to consider this vital information, and EPA should have identified this serious flaw in Oklahoma's source selection and Four-Factor Analyses.

In contrast to its obligation to ensure that emissions data are available to ensure sources are properly selected and assessed, EPA uses emission data in its proposal to justify Oklahoma's decision to eliminate sources from Four-Factor consideration.[265] Therefore, it is clear EPA understands that access to emissions data is necessary to assess the State's decision.

Knowing and verifying the emissions from each unit and the existing controls installed on the individual units at facilities emitting hundreds to thousands of tons of air pollution annually is a critical function of an air agency that must control the emissions from these sources under a variety of state and federal programs.[266] Therefore, this information is available to state agencies. With respect to the regional haze program, this information is necessary to (1) verify that the right units/processes at facilities have been identified to receive Four-Factor Analyses and (2) verify that the emissions from these units used in cost-effective calculations are actually representative of expected future operations. This is critical information, as it is common for the emissions from individual units to significantly change from year to year, as is evident from an examination of the unit-specific emissions data Oklahoma provided when requested. In fact, the lack of this information prevented a complete review of non-EGU Four-Factor Analyses, including, as noted later in these comments, the Oxbow Kremlin Calcined Coke Plant and the DCP Chitwood Gas plant.

In response to this concern, Oklahoma states:

> Neither the regional haze rule nor federal law requires the Oklahoma SIP or the state's website to include every permit and all emissions data that it collects. EPA already regularly receives the necessary data from Oklahoma and every other state to develop the national emissions inventory, which it makes publicly available on its website.[267]

Oklahoma adds that it has complied with Section 51.308(f)(2)(iv) concerning the five additional long-term strategy factors and has therefore satisfied its obligation. Oklahoma's

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[264] *See* file "InfoRequest_2022-06-07.xls" (attached as Ex. 1.g). Various permits were also requested but are not separately listed.
[265] *See, e.g.*, 91 Fed. Reg. at 6593 n.54; *id.* at 6594 nn.56, 60; *id.* at 6595 n.65.
[266] Conservation Organizations' 2022 Comments at 9.
[267] Oklahoma RTC at 40.

response is off-subject and, at a minimum, misleading. First, the five additional long-term factors it cites are not used in the analysis of a source's Four-Factor Analysis. Rather, these five factors are assessed in addition to a Four-Factor Analysis. Second, while the National Emission Inventory (NEI) does contain unit-level emission data for many source types, that data is only generated every three years, and is published with a significant lag time. At the time Oklahoma was developing its SIP, the 2020 NEI had not even been released.[268] Thus, only the 2017 data was available. Consequently, when the Oklahoma SIP was out for public comment in 2022, the only non-EGU unit-level emissions data available to the public would have been from 2017, 2014, and every three years previous. Five year and older emission data is inadequate to determine whether the emission baseline selected for a Four-Factor Analysis is representative of the unit's typical operations. In addition, as indicated above, Oklahoma promptly provided annual emissions data for all non-EGUs in the state for the last five years when that data was requested through the State's open records procedure. Therefore, Oklahoma could have easily included that data in its SIP. Instead, Oklahoma chose not to do so.

As discussed above, the State's approach is contrary to 40 C.F.R. §51.308(f)(2)(iii), which requires that Oklahoma "document the technical basis, including modeling, monitoring, cost, engineering, and emissions information, on which the State is relying to determine the emission reduction measures that are necessary to make reasonable progress in each mandatory Class I Federal area it affects."

EPA has nothing to say in its proposal about this significant flaw in Oklahoma's Four-Factor Analyses, and must correct this oversight in its final determination and reject Oklahoma's Four-Factor Analyses for its non-EGUs.

2. Oklahoma Failed to Provide Cost-Effectiveness Documentation.

Although in a few cases Oklahoma questioned facility-submitted data and assumptions relating to source cost-effectiveness calculations, in most cases Oklahoma accepted this data and information without question, even though it has been demonstrated that doing so was incorrect.[269]

Oklahoma responded to concerns by stating "[s]pecific to cost documentation, DEQ believes that the responses contained in Appendix E, in concert with the information included in Section 6 of the SIP, meets the requirements of 40 C.F.R. § 51.308(f)(2)(ii)."[270] Clearly, that is not the case, as is detailed in the many comments provided in 2022 by Conservation Organizations and EPA.

EPA also noted many deficiencies in Oklahoma's Four-Factor documentation. Specifically, in the 2022 EPA Comments, EPA made the following statement in Comment 7:

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[268] *See* EPA, 2020 National Emissions Inventory (NEI) Technical Support Document: Introduction at 1-1 (March 2023) (stating that the 2020 NEI was released in January 2023), https://www.epa.gov/air-emissions-inventories/2020-national-emissions-inventory-nei-technical-support-document-tsd (attached as Ex. 20).
[269] Conservation Organizations' 2022 Comments at 9-10.
[270] Oklahoma RTC at 40.

> For each of the selected sources, and for each emission unit evaluated, the four-factor analysis should clearly identify the baseline control scenario, and associated emissions and emissions limits (lb/MMBtu, tons/year, lb/ton, etc., depending on unit type) used in the analysis. Further guidance regarding these issues can be found on pages 29 and 30 of our August 2019 Guidance, respectively. See also 40 C.F.R. 51.308(f)(2)(iii). The State should provide appropriate documentation of all this information, including with citations to regulatory and technical documents. We specifically recommend that the SIP narrative identify existing emission limits and where those limits are located (e.g., in the SIP, in a federal and/or state permit, in a consent decree). In addition, we recommend that the SIP narrative discuss how these limits compare to the baseline emissions used in the four-factor analyses. *Oklahoma has not provided analysis consistent with these recommendations, but rather agrees with all aspects of the submitted four-factor analyses and the conclusions made by the facilities without providing an independent assessment and discussion of the State's review of these analyses.* The State should document their review and decision-making process when determining reasonable control measures. Such documentation should include the State's assessment of the analysis performed under each factor and how it weighed the four statutory factors to allow for stakeholder review and comment.[271]

More specifically, EPA requested that Oklahoma provide the following:

> Please include line-item cost breakdowns, cost calculations (preferably in Excel spreadsheet format), and all vendor quotes obtained for all the control options evaluated in the four-factor analyses. This is consistent with the Regional Haze Rule, which requires that in establishing its long-term strategy for regional haze, a state must document the technical basis, including modeling, monitoring, cost, engineering, and emissions information, on which the state is relying to determine the emission reduction measures that are necessary to make reasonable progress in each mandatory Class I Federal area it affects. 40 C.F.R. § 51.308(f)(2)(iii).

Clearly, in its 2022 comments, EPA found significant problems with Oklahoma's lack of not only documentation, but also its failure to provide an independent analysis of the Four-Factor Analyses submitted to it by source contractors.

Oklahoma responded to EPA's criticism by stating that the information, data, and documentation that EPA referred to was already in the individual Four-Factor Analyses in Appendix E, and in the SIP document itself. Oklahoma further stated:

> As time allows, DEQ will supplement the SIP document by repeating additional details in the body and/or additional documents in the appendices, as requested. Such details/documents may include copies of existing permits, lists/descriptions of existing permit limits and requirements, and baseline emissions if significantly different. There are perhaps portions where more explicit discussions could be added of DEQ's review and assessment of each four-factor analysis. Some of these

[271] EPA 2022 Comments at 4 (emphasis added).

> additions could only be added in a supplement to the current SIP revision, given EPA's implication that the added details must allow for stakeholder review and comment, i.e., a full additional round of FLM and State/Tribal consultation, followed by EPA and public review.[272]

An examination of Oklahoma's SIP indicates that Oklahoma apparently was not able to find the time to provide any additional documentation. This is made evident through an examination of Appendix E of Oklahoma's August 2022 SIP (which contains Oklahoma's Four-Factor Analyses), issued following its June 1, 2022 to July 1, 2022 public hearing. This comparison indicates that Appendix E remained essentially unchanged from the version issued prior to its public hearing. Thus, it appears that little, if any, of EPA's requested documentation was provided. Even if Oklahoma had provided additional documentation, it should have repeated its public hearing process so that the public would have been able to consider any additional documentation.

In contrast to its 2022 comments and the Conservation Organizations' comments, EPA's proposal has nothing to say about this obvious flaw in Oklahoma's SIP in its proposal. It is therefore clear that Oklahoma has not satisfied the documentation requirements of 40 C.F.R. § 51.308(f)(2)(iii). Consequently, EPA must make this finding in its final determination.

C. EPA Must Reject Oklahoma's Cost-Effectiveness Thresholds.

Both EPA and the Conservation Organizations were highly critical of Oklahoma's cost-effectiveness thresholds. In Comment No. 24 of its 2022 Comments, EPA notes that Oklahoma appears to have avoided selecting an actual SO_2 threshold, but "points to $5,000/ton as being 'widely used as a reasonable threshold in evaluating SO_2 compliance costs for Regional Haze.'"[273] Furthermore, EPA criticized Oklahoma's decision to selectively survey other state choices for cost-effectiveness thresholds, and its failure to acknowledge the reality of the progression of the Regional Haze Program, stating:

> EPA is also currently aware of other states considering up to $10,000/ton as reasonable. We note that the first planning period involved the evaluation of BART controls at sources that were older and mostly uncontrolled. Considering the iterative nature of the regional haze program, it is reasonable to expect that following the installation of controls at the largest sources during the first planning period, sources with lower emissions and thus potentially less cost-effective controls (i.e., higher $/ton figures) will likely be pulled in for evaluation in the second and subsequent planning periods. It may be a more appropriate approach to select cost thresholds for the second planning that are higher than those from the first planning period. Ultimately, if a state applies a threshold for cost/ton to evaluate control measures, the selected cost threshold should be justified based on a review of the sources selected for evaluation and the available controls for this planning period.[274]

[272] Oklahoma RTC at 14.
[273] EPA 2022 Comments at 10.
[274] *Id.* at 10-11.

EPA was also highly critical of Oklahoma's decision to base its $1,400/ton to $2,000/ton NOx threshold on EPA's previously estimated marginal cost of complying with CSAPR Update ozone season NOx emissions budgets, stating:

> [W]e note that the transport program under CAA section 110(a)(2)(D)(i)(I) is an entirely separate program from regional haze, serving a different statutory purpose and involving the consideration of factors that may have no relationship to the regional haze program. There were numerous source-specific NOx controls estimated to cost over $2,000/ton that were found to be cost-effective in the first planning period by states and/or EPA. We recommend Oklahoma look to examples and precedent within the regional haze program as a starting point for evaluating what may be cost-effective in making reasonable progress on visibility in the second planning period. We further note that the CSAPR Update was, by its own terms, only a partial remedy to the problem of interstate ozone transport for the 2008 ozone NAAQS, intended to obtain near-term emissions reductions by the 2017 ozone season. EPA has never made any finding that the control strategy in the CSAPR Update constituted the only emissions controls for NOx at EGUs that could be found to be cost-effective. Thus, we see no basis for the CSAPR Update to serve as a cost-effectiveness benchmark for Oklahoma's second planning period Regional Haze SIP. Oklahoma's selection of a cost threshold of $1,400 to $2,000/ton for NOx controls in the second planning period does not seem appropriate or sufficiently justified. EPA suggests Oklahoma consider applying a more robust cost threshold based on the full range of first planning period costs found to be reasonable, in addition to more recent control cost assumptions, including those found in other state plans for the second planning period.[275]

Thus, EPA was very clear that it considered Oklahoma's SO_2 and NOx cost-effective thresholds to be based on selectively sourced, incomplete, and misapplied data.

In its Response to Comments, Oklahoma basically replied to EPA that it is free to set whatever cost-effective thresholds it chose, and rejected EPA's admonition that it should assume that these thresholds should increase from those used in the first planning period.[276] Oklahoma also argued that it relied on CSAPR because it places a greater emphasis on health-based programs, rather than the aesthetic goals of the Regional Haze Program.[277]

The Conservation Organizations made similar comments concerning Oklahoma's complete lack of support for its SO_2 and NOx cost-effectiveness thresholds.[278] In addition, the Conservation Organizations noted throughout their comments that Oklahoma did not present any rational basis for rejecting controls. Not until it was through rejecting all controls, and near the end of its SIP, did Oklahoma even discuss the highly flawed cost-effectiveness thresholds discussed above.[279]

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[275] *Id.* at 11.
[276] Oklahoma RTC at 25-26.
[277] *Id.* at 26.
[278] Conservation Organizations' 2022 Comments at 18-19.
[279] Oklahoma 2022 SIP at 47-49.

Oklahoma devoted the most space to drawing a distinction between rejecting controls versus declining to require them, and reiterated its position that because "neither statute nor regulation mandates a certain threshold for determination of cost-effectiveness, DEQ may determine what is a reasonable and appropriate."[280] Again, no rational explanation was provided by Oklahoma for its cost-effectiveness thresholds. Oklahoma violated the documentation requirements of section 51.308(f)(2)(iii) of the RHR.

In its proposal, EPA ignored all of the criticisms it made in 2022 of Oklahoma's failure to document its cost-effectiveness thresholds, and merely summarized Oklahoma's explanation:

> Oklahoma determined the cost-of-control thresholds in dollars per ton of emissions saved to be $1,400 to $2,000 per ton and $5,000 per ton for NO and SO_2 respectively. Oklahoma looked to the Cross-State Air Pollution Rule (CSAPR) to inform the selection of an appropriate cost threshold for NOx controls. For SO_2 controls, Oklahoma also notes that during discussions with CenSARA, other RPOs, and states, $5,000 per ton has been widely used as a reasonable cost threshold. Control options were determined by Oklahoma to be cost prohibitive in most instances.[281]

Thus, by EPA's own 2022 criticism (as well as those by the Conservation Organizations), Oklahoma failed to properly document its NOx and SO_2 cost-effectiveness thresholds and has therefore not satisfied the documentation requirements of 40 C.F.R. § 51.308(f)(2)(iii) and the long-term requirements of 51.308(f)(2)(i). Consequently, EPA must make these findings in its final determination.

D. Oklahoma Improperly Excluded BART Sources from the Requirement to Reassess All Sources Each Planning Period.

Oklahoma's 2022 SIP excluded all sources that had undergone BART analysis during the first planning period from its Four-Factor Analysis for the second planning period.[282] Oklahoma's 2022 SIP identified thirteen emission units at six facilities that had been required to implement BART controls during the first planning period. These six facilities — OG&E Sooner Station, OG&E Muskogee Generating Station, PSO Northeastern Station, OG&E Seminole Power Plant, PSO Comanche Station, and PSO Southwestern Station — were excluded from any Four-Factor Analysis on the sole ground that they had already been subject to BART.[283] Oklahoma explained that "eliminating sources identified in the AOI study that underwent BART reduced the potential for expending valuable resources on analyzing sources with little opportunity for further reductions."[284] Despite record evidence on this issue,[285] EPA's proposal fails to address Oklahoma's elimination of the BART emission units in its SIP.

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[280] Oklahoma RTC at 52.
[281] 91 Fed. Reg. at 6589.
[282] Oklahoma 2022 SIP at 36-37.
[283] *Id.* at 36-37.
[284] *Id.* at 36.
[285] *See* Conservation Organizations' 2022 Comments at 12-18.

The Clean Air Act requires states to identify sources that contribute to visibility impairment and evaluate potential emission reduction measures using the statutory reasonable progress factors. Section 7491directs states to determine the emission limitations, compliance schedules, and other measures necessary to make reasonable progress toward the national visibility goal, taking into account the statutory factors of cost, time for compliance, energy and non-air quality environmental impacts, and remaining useful life of the source.[286] That obligation requires states to evaluate potentially contributing sources and determine whether additional controls are warranted in light of the four statutory factors.

There is nothing in the statutory text that authorizes a state to omit entire categories of sources from that analysis. Congress knew how to create categorical exemptions from visibility planning requirements and did so expressly in several provisions governing BART.[287] Notably, Congress did not provide any comparable exemption from the reasonable progress requirements in Section 7491(g)(1). Nor does the statute suggest that sources subject to BART—or eligible for BART—are categorically excluded from consideration when states evaluate additional measures needed to achieve reasonable progress.

Allowing states to categorically exclude BART-eligible sources from the reasonable progress analysis would therefore contradict the statute's design. The reasonable progress framework is intended to ensure that states evaluate whether further emission reductions from contributing sources are necessary to continue making progress toward the national visibility goal. A categorical exclusion of BART sources short-circuits the reasonable progress analysis by barring consideration of potentially significant contributors before the four statutory factors are applied.

These statutory requirements were codified directly into the RHR at 40 C.F.R. § 51.308(e)(5), which states, "[a]fter a State has met the requirements for BART or implemented an emissions trading program or other alternative measure that achieves more reasonable progress than the installation and operation of BART, BART-eligible sources will be subject to the requirements of paragraphs (d) and (f) of this section, as applicable, in the same manner as other sources." The RHR has required evaluation of BART sources for purposes of reasonable progress at least since the 2005 BART rule revision.

EPA has reinforced this position consistently throughout the life of the Regional Haze Program. For instance, in its 2017 RHR revision, EPA emphasized, "we anticipate that a number of BART-eligible sources that installed only moderately effective controls (or no controls at all) will need to be reassessed. Under the 1999 RHR's 40 C.F.R. § 51.308(e)(5), BART-eligible sources are subject to the requirements of 40 C.F.R. § 51.308(d), which addresses regional haze SIP requirements for the first implementation period, in the same manner as other sources going forward."[288]

EPA has explained that "States should treat BART-eligible sources the same as other reasonable progress sources going forward."[289] In its 2023 proposed Texas FIP, EPA stated,

[286] 42 U.S.C. §§ 7491(b)(2), (g)(1).
[287] *See id.* § 7491(c).
[288] 82 Fed. Reg. at 3083.
[289] 81 Fed. Reg. 26942, 26947 (May 4, 2016).

"BART-eligible sources, including sources found subject to BART and for which a BART emission limit was established, may need to be re-assessed for additional controls in future implementation periods under the CAA's reasonable progress provisions. Thus, the EPA has stated that States should treat BART-eligible sources the same as other reasonable progress sources going forward."[290]

Moreover, Oklahoma's BART exclusion was unreasonable because the six excluded facilities are significant sources of NOx emissions. Oklahoma's 2022 SIP relied on combustion controls—low-NOx burners or low-NOx burners with overfire air—at the NOx BART sources.[291] This means that none of these sources have any post-combustion NOx controls such as selective catalytic reduction (SCR) or selective non-catalytic reduction (SNCR).[292]

By proposing to approve Oklahoma's approach, EPA effectively reads into the Act an exemption that Congress did not provide, allowing the State to bypass the required reasonable progress Four-Factor Analysis for an entire class of sources that may contribute to visibility impairment.

E. Oklahoma Failed to Properly Consider Area Sources.

Nonpoint (area) sources are the top NOx emitters of any sector for Oklahoma's 2017 emission inventory and NOx emissions from the oil and gas sector are responsible for a significant amount of this NOx.[293] Despite this, there does not appear to be any real consideration of how area sources could be analyzed and potentially controlled. Therefore, Oklahoma has not satisfied section 51.308(f)(2)(i), which requires that states include area sources when evaluating source contributions.

EPA expressed a similar concern that Oklahoma was not properly evaluating area sources when it stated, "[s]ection 4 also notes that [] the proportion of NOx emissions attributable to nonpoint sources increased slightly from 2014 to 2017. Given the large proportion of Oklahoma's NOx emissions attributable to oil and gas nonpoint sources, we encourage Oklahoma to reconsider whether it would be appropriate and reasonable to evaluate potential NOx control strategies for nonpoint sources in a four-factor analysis."[294]

Oklahoma responds to EPA's concern by claiming that Section 51.308(f)(2)(i), which refers to the four-factor analysis, "does not exclude the consideration of unquantifiable or noneconomic costs, or economic costs that persons or entities other than owners or operators of facilities may bear."[295] Oklahoma further states that "[i]n the case of petroleum and natural gas sources, DEQ also must consider very carefully the energy effects of any regulation, especially

[290] 88 Fed. Reg. 28918, at 28921 (May 4, 2023) (citing 81 Fed. Reg. at 26947); *see also* 2019 Guidance at 25 ("[S]tates may not categorically exclude all BART-eligible sources, or all sources that installed BART controls, as candidates for selection for analysis of control measures.").
[291] Oklahoma 2022 SIP at 23-25; *id.* at 36 (noting all thirteen BART units "reduced NOx emissions by installation of (or in some cases utilizing existing) low-NOx burners").
[292] Conservation Organizations' 2022 Comments at 14 (explaining that "none [of the BART sources] have any post-combustion NOx controls and remain large sources of NOx").
[293] *Id.* at 12.
[294] EPA 2022 Comments at 1.
[295] Oklahoma RTC at 1.

considering the scale of the contribution of the industry in the state to the North American and global fuel supply."[296] In fact, there is no provision in the RHR or in the CAA that provides for the insertion of these types of considerations into the Four-Factor Analysis.

As is indicated above, regarding EPA's New URP Policy, EPA explained to Oklahoma that:

> "[R]easonable progress" for a given implementation period is determined through the four statutory factors. 40 C.F.R. § 51.308(f)(2)(i). EPA has explained that reasonable progress cannot be determined prior to or independently from the analysis of control measures for sources. See 82 FR 3078, 3091/3 (Jan. 10, 2017); Clarifications Memo at 6. ODEQ must therefore determine what is necessary to make reasonable progress in the second implementation period by using the four factors to analyze control measures for sources.[297]

Again, EPA is clear that reasonable progress considerations ancillary to the four-factors are not allowed under the RHR. Oklahoma does not offer any insight into what "unquantifiable or noneconomic costs" may involve, but this seemingly catch-all category is clearly not one of the four-factors.

Consideration of the energy and non-air quality environmental impacts of compliance is indeed one of these factors. However, Oklahoma's apparent interpretation of this factor is vastly different from how EPA has historically interpreted this factor in both the BART Rule and in its guidance. EPA's historical interpretation of "the energy and non-air quality environmental impacts of compliance" in section 51.308(f)(2)(i) does not include any consideration of the potential impacts on fuel supply. For example, the BART five factors in section 51.308(e)(1)(ii)(a) contains this same factor. In its BART Rule, EPA provided extensive direction on how states were required to interpret this factor.[298] In short, rather than considering potential fuel supply impacts, EPA's direction was completely focused on *the comparison of the energy requirements between potential control choices*. The BART Guidance contained in EPA's final rule was, in fact, mandatory for BART determinations. Thus, how EPA interpreted the BART factor concerning "the energy and non-air quality environmental impacts of compliance" became a part of the RHR.

EPA reinforced how it interpreted this factor for reasonable progress in its 2007 Reasonable Progress Guidance:

> The third factor is "energy and non-air environmental impacts." In assessing energy impacts, you may want to consider whether the energy requirements associated with a control technology result in energy penalties. For example, controls on diesel engines may decrease the engine's fuel efficiency, leading to an increase in diesel fuel consumption. Or, a particular control may require a fuel unavailable in the area. To the extent that these considerations are quantifiable,

[296] *Id.*
[297] EPA 2022 Comments at 13.
[298] 70 Fed. Reg. 39104, 39168-69 (July 6, 2005).

> they should be included in the engineering analyses supporting compliance cost estimates.
>
> Some examples of non-air environmental impacts that you may wish to consider, are 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 waste water disposal. To the extent that these considerations are quantifiable, they should also be included in the analyses supporting compliance cost estimates.
>
> For additional guidance on applying this factor to stationary sources, you may wish to consult the BART Guidelines, referenced above.[299]

This methodology was further reinforced in EPA's 2019 Guidance:

> Characterizing information about the third statutory factor – the energy and non-air environmental impacts – generally involves assessing the impacts of a control measure on the energy consumed by a source. Non-air environmental impacts can include the generation of wastes for disposal and impacts on other environmental media, such as nearby water bodies.
>
> Energy impacts
>
> The Control Cost Manual provides advice on estimating energy requirements or savings for some situations. States may consider energy impacts in terms of kilowatt-hours or mass of fuels used. We recommend that states focus their analysis on direct energy consumption at the source rather than indirect energy inputs needed to produce raw materials for the construction of control equipment. Prior experience with energy impacts of the same or similar emission control measure at similar sources can also be informative.
>
> Non-air environmental impacts
>
> When there are significant potential non-air environmental impacts, characterizing those impacts will usually be very source- and place-specific. Other EPA guidance intended for use in environmental impact assessments under the National Environmental Policy Act may be informative, but not obligatory to follow, in this task.[300]

Furthermore, in its extensive Response to Comments Document for its 2017 RHR Revision, there are no comments suggesting that this factor be interpreted as considering potential impacts on fuel supply considerations or discussed by EPA.[301] Thus, EPA has consistently and exclusively interpreted this factor as being a comparison of the energy

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[299] EPA, Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program at 5-2 to 5-3 (June 1, 2007), https://www.regulations.gov/document/EPA-HQ-OAR-2016-0289-0011 (attached as Ex. 21).
[300] 2019 Guidance at 33. Note that an examination of the documents referenced in footnote 65 of the 2019 Guidance does not indicate any consideration of grid reliability. *Id.* at 33 n.65
[301] *See generally* 2017 RHR RTC.

requirements between potential controls, and not involving any consideration of potential impacts on fuel supply.

Even all of the above extensive rule language and guidance aside, Oklahoma's national production of oil and gas is a small share of the total U.S. production. For example, the U.S. Energy Information Agency indicates that in 2024, Oklahoma's natural gas production amounted to only 7% of the U.S. total, and its crude oil production amounted to only 3% of the U.S. total.[302] Therefore, it is difficult to envision how the mere consideration of controls on the area sources in Oklahoma's oil and gas sector could possibly result in significant impacts on U.S. fuel supplies.

EPA has issued a tool on the identification and estimation of emissions for nonpoint oil and gas emissions.[303] Because the concern in Oklahoma's 2022 SIP involves NOx and SO_2, the oil and gas area source review would mainly involve engines of various types (*e.g.*, artificial lifts, compressors, pumps, drilling rigs, fracking equipment, etc.), heaters, and flares. All of these sources have proven cost-effective controls.[304] Some of these controls are reviewed as part of the Chitwood Gas plant analysis covered later in these comments.

In summary, Oklahoma did not satisfy section 51.308(f)(2)(i), which requires that states include area sources when evaluating source contributions and EPA must make this finding in its final determination.

F. EPA Shirks Its Duty to Review Oklahoma's Source-Specific Four-Factor Analyses.

EPA's proposed approval of Oklahoma's 2022 SIP is unreasonable because the Agency does not meaningfully review the Four-Factor Analyses for the six sources discussed below.

1. EPA Must Reject the Kremlin Calcined Coke Plant Four-Factor Analysis.

Section 9 of the Conservation Organizations' 2022 Comments provided a critique of the Kremlin Calcined Coke Plant Four-Factor Analysis:

- Oklahoma failed to require documentation of many unjustified claims that served to limit the controls considered and wrongly inflated the cost-effectiveness (higher $/ton).

- The Kremlin plant failed to consider NOx, despite emitting significant quantities of NOx, and the availability of proven NOx control technologies for these specific source types.

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[302] *See* U.S. Energy Info. Admin., Oklahoma State Energy Profile: Analysis at 1-2 (Aug. 21, 2025), https://www.eia.gov/states/OK/analysis (attached as Ex. 22).
[303] *See* EPA, 2020 Nonpoint Oil and Gas Emission Estimation Tool Version 1.3 (Aug. 2, 2022), https://www.epa.gov/system/files/documents/2024-02/2020-nonpoint-oil-and-gas-emission-estimation-tool-v1_3.pdf (attached as Ex. 23).
[304] Vicki Stamper & Megan Williams, Oil and Gas Sector Reasonable Progress Four-Factor Analysis of Controls for Five Source Categories: Natural Gas-Fired Engines, Natural Gas-Fired Turbines, Diesel-Fired Engines, Natural Gas-Fired Heaters and Boilers, and Flaring and Incineration (Mar. 6, 2020) (prepared for NPCA) (attached as Ex. 24).

- Kremlin's contractor, S&L, overdesigned the SO_2 controls it considered to address more SO_2 emissions than the plant is actually permitted to emit. This wrongly inflated the cost-effectiveness.

- S&L used SO_2 scrubber efficiencies that are demonstrably too low, which wrongly inflated the cost-effectiveness.

- S&L failed to consider proven, more cost-effective cooling options.

- S&L failed to consider one scrubber system and cooling system that could service all the kilns, which wrongly inflated the cost-effectiveness.

- Incredibly, S&L not only wrongly claimed that a separate electrical power generation plant is a necessary part of the scrubber system for Kremlin, but it also refused to offset the cost of this power generation through the sale of electricity. This wrongly inflated the cost-effectiveness.

- S&L wrongly assumed a 20-year equipment life, without any documentation, when the same control technologies fitted to EGUs (which operate in very harsh environments) are required by EPA's Control Cost Manual to be assessed based on a 30-year equipment life. This wrongly inflated the cost-effectiveness.

- S&L included cost items prohibited by EPA's Control Cost Manual, which wrongly inflated the cost-effectiveness.

- S&L wrongly used an undocumented 20% contingency when, according to the Control Cost Manual, a lower value would have been more appropriate. This wrongly inflated the cost-effectiveness.[305]

The Conservation Organizations demonstrated that by correcting the many errors S&L made in its analyses, and conforming the analysis to EPA's Control Cost Manual, S&L's estimate of a wet scrubber for the Kremlin plant Kiln 1 dropped from S&L's inflated figure of $6,574/ton, to between $3,525/ton and $3,011/ton.[306] Furthermore, even these figures are likely high because S&L failed to consider a single wet scrubber and cooling system that would service all three kilns. This is well within Oklahoma's undocumented $5,000/ton cost-effectiveness threshold, discussed earlier.

Oklahoma dismissed almost all of these detailed and documented flaws, and stated it was unaware of a sales tax exemption.[307] Oklahoma refers the reader to its response to Comment No. 19, concerning a justification for a 20-year equipment life.[308] Although there is nothing pertinent in this response, EPA's 2022 comments to the State do concern Oklahoma's wrongly assumed 20-year equipment life for the Kremlin assessment about which EPA states, "[b]ased on what we

[305] Conservation Organizations' 2022 Comments at 20-28.
[306] *Id.* at 28-31. Note that Conservation Organizations' revised cost figures may increase slightly if the sales tax for pollution control equipment that was assumed to be invalid is sustained.
[307] Oklahoma RTC at 67.
[308] *Id.* Note that Oklahoma's response to comment 20 does not address remaining useful, and it appears Oklahoma meant to refer to its response to comment 19 on that issue. *Id.* at 21-22.

have historically observed and available literature, an assumption of 30 years for the equipment life of scrubbers and DSI is reasonable and consistent with EPA's Control Cost Manual."[309] This is definitive guidance from EPA in 2022. In response, Oklahoma states the following:

> EPA's Cost Control Manual is guidance and not mandated. DEQ concurs that the remaining useful life for Oxbow's facility is based on the remaining useful life of the control equipment versus the life of the source. However, as addressed in Oxbow's second response, EPA's Cost Control Manual states '…we expect an equipment life of 20 to 30 years for wet FGD systems.' Although EPA uses 30 years in its example calculations, the Cost Control Manual does not state that 30 years is the only acceptable remaining useful life timeframe.[310]

In its Control Cost Manual, EPA defines the meaning of the equipment life of a control as follows: "[t]he life of the control is defined in this Manual as the equipment life. This is the expected design or operational life of the control equipment."[311] EPA has consistently assumed a 30-year equipment life for EGU scrubber retrofits, scrubber upgrades, SCR, and SNCR installations. Oklahoma must know this, as EPA summarized and cited to the Control Cost Manual in the Agency's response to comments document for its Texas and Oklahoma Regional Haze SIP final disapproval and FIP for the first planning period.[312]

Although there is no data readily available to establish the equipment life for a wet scrubber fitted to a coke kiln, there are, in fact, many examples of wet scrubber systems fitted to EGUs in operation that have far exceeded a 30-year operating life, as the following table documents.[313]

Table 1. Examples of Wet Scrubber Lives of 30 Years or More

Plant Name	Equipment Type	SO_2 Control ID	Status	Inservice Year	Retirement Year	Life of wet FGD
Longview Fibre	SP		RE	1949	2016	67
Bryant Sugar House	SP		RE	1962		63
Bryant Sugar House	SP		RE	1962		63
Bryant Sugar House	SP		RE	1962		63

[309] EPA 2022 Comments at 9.
[310] Oklahoma RTC at 22.
[311] EPA, Control Cost Manual, Section 1, Chapter 2, Cost Estimation: Concepts and Methodology at 22 (Nov. 2017) [hereinafter "CCM: Concepts and Methodology"], https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/cost-reports-and-guidance-air-pollution (attached as Ex. 25).
[312] 2016 FIP RTC at 268, 274; *see also* 82 Fed. Reg. at 930-34, 938 (providing extensive cost determinations for scrubber upgrades).
[313] *See* workbook "30-year plus EGU scrubber" (attached as Ex. 26).

Plant Name	Equipment Type	SO_2 Control ID	Status	Inservice Year	Retirement Year	Life of wet FGD
Milton R Young	SP	FGD2	OP	1978	2037	59
Cholla	TR	1	OP	1973		52
International Paper Vicksburg Mill	SP		OP	1973		52
Transalta Centralia Generation	SP	2	OP	1974	2025	51
Sherburne County	SP	1	OP	1976		49
Sherburne County	SP	2	OP	1976		49
Interstate Paper LLC Riceboro	TR	CS01	OP	1976		49
AES Petersburg	TR	3	OP	1977		48
Martin Lake	SP	1	OP	1977		48
Plant 31 Paper Mill	SP	SCRUB 1	OP	1977		48
Widows Creek	TR	8	RE	1978		47
Martin Lake	SP	2	OP	1978		47
Hunter	SP	1	OP	1978		47
Huntington	SP	1	OP	1978		47
Argus Cogen Plant	TR	25SCR B	OP	1978		47
Argus Cogen Plant	SP	25SCR B	OP	1978		47
Argus Cogen Plant	SP	26SCR B	OP	1978		47
Argus Cogen Plant	TR	26SCR B	OP	1978		47

Plant Name	Equipment Type	SO_2 Control ID	Status	Inservice Year	Retirement Year	Life of wet FGD
Clewiston Sugar House	SP		RE	1972	2019	47
Clewiston Sugar House	SP		RE	1972	2019	47
Apache Station	TR	2	OP	1979		46
Apache Station	TR	3	OP	1979		46
Transalta Centralia Generation	SP	1	RE	1974	2020	46
Pleasants Power Station	TR	1	OP	1979		46
Craig (CO)	SP	C2	OP	1979		46
Coal Creek	SP	1	OP	1979		46
Martin Lake	SP	3	OP	1979		46
Jim Bridger	TR	SC74	OP	1979		46
Dallman	TR	33	OP	1980		45
Pleasants Power Station	TR	2	OP	1980		45
Craig (CO)	SP	C1	OP	1980		45
Hunter	SP	2	OP	1980		45
Laramie River Station	SP	1	OP	1980		45
Winyah	SP	3	OP	1980		45
Flint River Operations	SP	PB	OP	1980		45
Bryant Sugar House	SP		RE	1980		45
Widows Creek	SP	7	RE	1981		44
Syl Laskin	SP	SCR1	RE	1971	2015	44
Syl Laskin	SP	SCR2	RE	1971	2015	44
East Bend	SP	2	OP	1981		44

Plant Name	Equipment Type	SO_2 Control ID	Status	Inservice Year	Retirement Year	Life of wet FGD
Coal Creek	SP	2	OP	1981		44
A B Brown	SP	1	RE	1979	2023	44
Laramie River Station	SP	2	OP	1981		44
Winyah	SP	4	OP	1981		44
Sikeston Power Station	TR	1	OS	1981		44
Finch Paper	SP		OP	1981		44
W A Parish	SP	FGD8	OP	1982		43
Gibson	SP	5	OP	1982		43
San Miguel	SP	SM-1	OP	1982		43
San Miguel	TR	SM-1	OP	1982		43
Merom	SP	2FGD	OP	1982		43
R D Green	SP	G1	RE	1979	2022	43
Escanaba Mill	SP		OP	1982		43
Cross	SP	2	OP	1983		42
Muscatine Plant #1	SP	9	OP	1983		42
R M Schahfer	SP	17	OP	1983		42
Hunter	SP	3	OP	1983		42
Merom	SP	1FGD	OP	1983		42
Kaukauna Paper Mill	SP		RE	1975	2017	42
Seminole (FL)	SP	1	OP	1984		41
Seminole (FL)	SP	2	OP	1984		41
R D Green	SP	G2	RE	1981	2022	41

Plant Name	Equipment Type	SO_2 Control ID	Status	Inservice Year	Retirement Year	Life of wet FGD
Dillard Complex	SP		RE	1974	2015	41
Lowman Energy Center	SP	3	RE	1980	2020	40
Limestone	SP	FGD1	OP	1985		40
Big Bend	TR	FGD4	OP	1985		40
Reid Gardner	SP	1	RE	1974	2014	40
Reid Gardner	SP	2	RE	1974	2014	40
Four Corners	TR	4	OP	1985		40
Four Corners	TR	5	OP	1985		40
Monticello	SP	3	RE	1978	2018	40
Fernandina Plant	SP		RE	1976	2016	40
Dinuba Energy	SP		OP	1985		40
Limestone	SP	FGD2	OP	1986		39
C D McIntosh Jr	TR	3	RE	1982	2021	39
AES Petersburg	SP	4	OP	1986		39
Cane Run	SP	4	RE	1976	2015	39
R M Schahfer	SP	18	OP	1986		39
Intermountain Power Project	SP	1CCC	OP	1986		39
Bonanza	SP	1-1	OP	1986		39
Cholla	SP	2	RE	1978	2016	38
Stanton Energy Center	SP	1	OP	1987		38
Mill Creek (KY)	SP	3	RE	1978	2016	38
Reid Gardner	SP	3	RE	1976	2014	38

Plant Name	Equipment Type	SO_2 Control ID	Status	Inservice Year	Retirement Year	Life of wet FGD
Naughton	TR	3	RE	1981	2019	38
Intermountain Power Project	SP	2CCC	OP	1987		38
D B Wilson	SP	W1	RE	1984	2022	38
Pirkey	SP	1	RE	1985	2023	38
Dillard Complex	SP		RE	1977	2015	38
Cane Run	SP	5	RE	1978	2015	37
A B Brown	SP	2	RE	1986	2023	37
Fayette Power Project	TR	3	OP	1988		37
Sandow No 4	SP	4	RE	1981	2018	37
Jim Bridger	TR	SC72	RE	1986	2023	37
Jim Bridger	TR	SC73	OP	1988		37
Southeast Resource Recovery	SP	FGD1	OP	1988		37
Southeast Resource Recovery	SP	FGD2	OP	1988		37
Southeast Resource Recovery	SP	FGD3	OP	1988		37
Escalante	SP	1	RE	1984	2020	36
Cane Run	TR	6	RE	1979	2015	36
J K Spruce	SP	FGD1	OP	1992	2028	36
Covington Facility	SP	DS69	OP	1989		36
Dolet Hills	SP	1	RE	1986	2021	35
Mill Creek (KY)	SP	2	RE	1980	2015	35

Plant Name	Equipment Type	SO_2 Control ID	Status	Inservice Year	Retirement Year	Life of wet FGD
Clay Boswell	SP	AQCS2	RE	1980	2015	35
Trimble County	SP	1	OP	1990		35
Somerset Plant	SP	2HFB	OP	1990		35
	SP	1	RE	1986	2020	34
Mill Creek (KY)	SP	1	RE	1981	2015	34
Wilmarth	SP	1	OP	1991		34
Wilmarth	SP	2	OP	1991		34
Reid Gardner	SP	4	RE	1983	2017	34
Martin Lake	TR	1	RE	1977	2011	34
Clewiston Sugar House	SP		RE	1972	2006	34
Clewiston Sugar House	SP		RE	1985	2019	34
Martin Lake	TR	2	RE	1978	2011	33
Coronado	SP	FGD1	RE	1979	2012	33
Jim Bridger	TR	SC71	RE	1990	2023	33
Dillard Complex	SP		RE	1982	2015	33
Mill Creek (KY)	SP	4	RE	1982	2014	32
Martin Lake	TR	3	RE	1979	2011	32
St Johns River Power Park	TR	1	RE	1987	2018	31
Conemaugh	SP	1	OP	1994		31
FirstEnergy Harrison Power Station	SP	1	OP	1994		31

Plant Name	Equipment Type	SO_2 Control ID	Status	Inservice Year	Retirement Year	Life of wet FGD
FirstEnergy Harrison Power Station	SP	2	OP	1994		31
FirstEnergy Harrison Power Station	SP	3	OP	1994		31
Mt Storm	SP	3	OP	1994		31
Coronado	SP	FGD2	RE	1980	2011	31
Gavin Power, LLC	SP	1	OP	1994		31
Gavin Power, LLC	TR	1	OP	1994		31
Gavin Power, LLC	SP	2	OP	1994		31
Gavin Power, LLC	TR	2	OP	1994		31

The above information was obtained from EIA Form 860 from 2024.[314] The equipment types "SP" and "TR" correspond to "Spray Type" and "Tray Type" wet scrubbers, respectively.[315] From the above table, it can be seen that there are examples of wet scrubber systems with lives of 40, 50, and over 60 years. Thus, in many cases, EPA's use of a 30-year equipment life in EGU wet scrubber retrofit and upgrade cost-effectiveness calculations is actually a very conservative assumption. Again, Oklahoma has not presented any information that would serve to distinguish the life of a wet scrubber fitted to an EGU from that fitted to a coke kiln.

Thus, Oklahoma's Four-Factor Analysis for the Kremlin coke kiln is flawed and inflated, and EPA itself informed Oklahoma that its undocumented 20-year equipment life was invalid. Therefore, in its final determination, EPA must find that Oklahoma has not satisfied the documentation requirements of 40 C.F.R. § 51.308(f)(2)(iii), and for the reasons described above, it must reject the Kremlin Coke Four-Factor Analysis.

2. EPA Must Reject the Hugo Four-Factor Analysis.

The Conservation Organizations' 2022 Comments provided a critique of the Western Farmers Hugo Four-Factor Analysis:

- Hugo's contractor, Trinity, wrongly used 2009 $/kW cost figures picked from other scrubber and DSI cost analyses, which Oklahoma acknowledged are invalid, due to the

[314] U.S. Energy Info. Admin., EIA Form 860 (2024), https://www.eia.gov/electricity/data/eia860/ (see workbook "6_1_EnviroAssoc_Y2024.xlsx," worksheet "Emissions Control Equipment").
[315] *Id.* (see workbook "LayoutY2024.xlsx," worksheet "Reference Tables 7-9").

length of escalation time that would have to be applied to them. Instead of using readily available cost models from EPA's Control Cost Manual, Oklahoma wrongly accepted the escalated and outdated 2009 $/kW cost figures anyway.

- Oklahoma wrongly accepted Trinity's miscalculated SO_2 inlet, which was too low and wrongly inflated Hugo's scrubber and DSI cost-effectiveness (higher $/ton) figures.

- Oklahoma wrongly accepted Trinity's miscalculated capacity factor, which was too low and wrongly inflated Hugo's scrubber and DSI cost-effectiveness values.

- Oklahoma wrongly accepted Trinity's undocumented DSI efficiency of 40%, which is too low and wrongly inflated Hugo's DSI cost-effectiveness values.[316]

As detailed in Conservation Organizations' 2022 Comments, revising Trinity's cost calculations using EPA's Control Cost Manual dry and wet scrubber cost models and correcting for the problems noted above resulted in cost-effectiveness figures of $6,579/ton and $6,939/ton, respectively.[317] These results are much lower than Trinity's inflated dry and wet scrubber cost-effectiveness figures of $8,203/ton and $8,462/ton, respectively.

Similarly, using EPA's Control Cost Manual DSI cost model, and a reasonable 80% efficiency, a cost-effectiveness figure of $4,039/ton for DSI at Hugo results.[318] Even using Trinity's unreasonably low 40% DSI efficiency assumption in EPA's Control Cost Manual DSI cost model, a cost-effectiveness figure of $4,466/ton results.[319] These figures contrast with Trinity's absurd figure of $41,003/ton.

Oklahoma ignored its previous acknowledgement that 2009 cost data is too old to escalate, and dismissed the use of EPA's Control Cost Manual by stating, "use of EPA's Cost Control Manual is not mandated by regulation."[320] EPA's regulations require that cost information, along with all aspects of a state's demonstration, be properly documented via section 51.308(f)(2)(iii). Also, Oklahoma ignores the fact that throughout EPA's 2019 Guidance, EPA repeatedly recommends that states prepare their cost estimates according to the Control Cost Manual. Some of these instances are reproduced below:

> For purposes of the second implementation period, EPA recommends that states follow the source type-relevant recommendations in the EPA Air Pollution Control Cost Manual that are stated in the manual as applying to cost estimates in a permitting context. Cost calculation spreadsheets consistent with the Control Cost Manual recommendations are available for several types of emission control systems. . . .

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[316] Conservation Organizations' 2022 Comments at 33-37.
[317] *Id.* at 34-35; *see also* workbook "Hugo wetanddryscrubbers_controlcostmanualspreadsheet_may_2021" (attached as Ex. 1.f).
[318] Conservation Organizations' 2022 Comments at 37-39; *see also* workbook "Hugo DSI Cost Estimate" (attached as Ex. 1.d).
[319] Conservation Organizations' 2022 Comments at 39; *see also* workbook "Hugo DSI Cost Estimate."
[320] Oklahoma RTC at 75.

> [W]hen site-specific cost estimates are not available, states may quantify control costs for particular types of control equipment by using generic cost estimates or estimation algorithms. The Control Cost Manual is EPA's recommended source of generic cost estimates and algorithms. . . .
>
> We recommend that a state that intends to be following the Control Cost Manual recommendations assess whether the vendor or expert's treatment of costs is consistent with the principles in the Control Cost Manual (e.g., contingency adjustments, *cost escalation*, etc.). Adjustments or exclusions may achieve this consistency if it is not already present. *If a cost quote or opinion prepared for one source is adopted or adapted to another source, EPA recommends the state explain in its SIP submittal how the source for which the original cost estimate was made is relevant to estimating the cost of compliance for the source in question*.[321]

In addition, in its 2019 Guidance, EPA reinforces the RHR's documentation requirement by stating, "[a]s part of meeting the requirement of the Regional Haze Rule for the state to document the cost and engineering information on which the State is relying to determine the emission reduction measures that are necessary to make reasonable progress (40 C.F.R. § 51.308(f)(2)(iii)), every source-specific cost estimate used to support an analysis of control measures must be documented in the SIP."[322]

Thus, EPA is clear that states should follow the Control Cost Manual (including in the use of cost escalation) when preparing cost estimates. Despite this direction, Oklahoma wrongly accepted Trinity's outdated 2009 cost information without ensuring that the "vendor or expert's treatment of costs [was] consistent with the principles in the Control Cost Manual (e.g., contingency adjustments, cost escalation, etc.)."[323] Furthermore, Oklahoma accepted this data without an adequate explanation of "how the source for which the original cost estimate was made is relevant to estimating the cost of compliance for the source in question."[324]

Oklahoma stated that the Conservation Organizations erred when assigning an 80% DSI efficiency to Hugo, claiming that in the "Sargent & Lundy Dry Sorbent Injection for SO_2/HCl Control Cost Development Methodology (April 2017) created for EPA's IPM model, it states that 'SO_2 removal should be set at 50% with an ESP and 70% with a baghouse.'"[325] This is in fact an erroneous interpretation of the S&L cost model documentation. The full quote is actually: "[t]o simplify the correlation between efficiency and technology, SO_2 removal should be set at 50% with an ESP and 70% with a baghouse."[326] Following this quote, the IPM model provides an example of how using a 50% efficiency simplifies the calculation of the Normalized Stoichiometric Ratio (NSR) for various sorbents (e.g., milled trona, unmilled trona, etc.) in the

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[321] 2019 Guidance at 31-32 (emphasis added).
[322] *Id.* at 32.
[323] *Id.*
[324] *Id.*
[325] Oklahoma RTC at 75.
[326] EPA, IPM Model—Updates to Cost and Performance for APC Technologies: Dry Sorbent Injection for SO_2/HCl Control Cost Development Methodology at 4 (Apr. 2017), https://www.epa.gov/system/files/documents/2023-12/attachment-5-7-dsi-cost-development-methodology-1.pdf (attached as Ex. 27).

examples that S&L uses.[327] A few pages later, however, S&L presents the actual algorithms that are used in its cost model. Here S&L provides the following maximum removal targets:

> Unmilled Trona with an ESP = 65%
>
> Milled Trona with an ESP = 80%
>
> Unmilled Trona with a BGH = 80%
>
> Milled Trona with a BGH = 90%
>
> Hydrated Lime with an ESP = 30%
>
> Hydrated Lime with a BGH = 50%[328]

Thus, a DSI system that uses milled trona and an ESP is capable of 80% efficiency. Furthermore, this DSI control efficiency has also been assumed by EPA in evaluating SIPs.[329] In fact, the March 2024 version of the IPM cost model increased these efficiencies for some combinations of sorbent and particulate control devices, including increasing the maximum efficiency for milled trona with an ESP to 85%.[330]

In the Conservation Organizations' 2022 Comments for the Hugo DSI Four-Factor Analysis, an 80% removal target was used because Hugo is fitted with an ESP, and was certainly capable (as is any U.S. based EGU) of procuring trona and milling it onsite.[331] In summary, an 80% DSI efficiency is documented as being reasonable and Oklahoma should have assumed it in its Four-Factor Analysis of Hugo.

Oklahoma acknowledged that even when the Conservation Organizations also assumed a 40% DSI efficiency, the resulting cost-effectiveness was still under Oklahoma's $5,000/ton threshold, but dismissed this by stating, "[t]his very simple example demonstrates the complexity of cost calculations and the variation that can occur with differing assumptions. DEQ restates its belief that there are currently no cost-effective controls necessary at the Hugo Generating Station."[332] This is akin to concluding that when a task is complex, any solution is equally viable. As a result, it is apparent that Oklahoma's Four-Factor Analysis of the Hugo EGU is arbitrary.

In its 2022 comments, EPA correctly admonished Oklahoma for accepting the use of an undocumented 7% interest rate and wrongly accepting the escalation of 2009 cost data.[333]

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[327] *Id.*
[328] *Id.* at 8, tbl.1 (see the NSR row calculation notes).
[329] 82 Fed. Reg. at 925 ("We will evaluate each unit at its maximum recommended DSI performance level, according to the IPM DSI documentation, assuming milled trona: 80% SO_2 removal for an ESP installation and 90% SO_2 removal for a baghouse installation.").
[330] EPA, IPM Model—Updates to Cost and Performance for APC Technologies: Dry Sorbent Injection for SO_2/HCl Control Cost Development Methodology at 8 (Mar. 2024), https://www.epa.gov/system/files/documents/2023-04/13527-002%20DSI%20Cost%20Methodology_Final_2023.pdf (attached as Ex. 28).
[331] Conservation Organizations' 2022 Comments at 39.
[332] Oklahoma RTC at 75.
[333] EPA 2022 Comments at 10.

However, although Oklahoma revised these calculations using a 3.25% interest rate, Oklahoma refused to correct its improper escalation of 2009 cost data.[334] In its proposal, EPA ignored this issue, along with the other flaws identified above, and accepted Oklahoma's inflated cost-effectiveness figures for the Hugo scrubbers and DSI.[335]

In its final determination, EPA must correct its proposed position on Hugo and find that Oklahoma has not satisfied the documentation requirements of 40 C.F.R. § 51.308(f)(2)(iii), and for the reasons described above, it must reject the Hugo Four-Factor Analysis.

3. EPA Must Reject the Grand River Energy Center Four-Factor Analysis.

The Conservation Organizations' 2022 Comments provided a critique of the Grand River Energy Center (GREC) Four-Factor Analysis:

- GREC's Four-Factor Analysis of Unit 2 is fundamentally incomplete and inadequate, as it lacks any details or documentation for its bottom-line cost-effectiveness figures for Unit 2.

- Oklahoma has wrongly allowed GREC to redact fundamental information necessary in order to conduct any control cost analysis concerning the SO_2 cost-effectiveness of Unit 2, to the point where no details are provided to support the bottom-line figures. GREC has not provided any information that would justify these redactions and many of these parameters are publicly available anyway.

- GREC has redacted the unit's historical capacity factor, which can be calculated from data from EPA's CAMPD site.

- GREC has redacted the unit's forecasted capacity factor, preventing any critique of this important component of a control cost analysis.

- GREC has redacted the unit's coal sulfur content, which is available from EIA's Form 923 data and is necessary to conduct any SO_2 control cost analysis.

- GREC has even redacted the unit's assumed equipment life, which is necessary in order to calculate the annualized cost. As a consequence, it is likely that GREC used a very short equipment life that was not secured by a federally enforceable commitment.[336]

- Because Unit 2 already has a dry scrubber, which GREC claims, without any documentation, was designed for an 85% removal efficiency, it is underperforming, as EPA has long recognized that dry scrubbers are capable of 95% removal efficiency. Oklahoma must know this, as it is summarized and cited to in EPA's response to

[334] Oklahoma RTC at 23-24.
[335] 91 Fed. Reg. at 6592.
[336] Notably, the facility is planning to continue firing coal and operating an additional five to seven years than recently planned. *See Fitch Upgrades Grand River Dam Authority, OK's Revs to "AA-"; Outlook Stable*, Fitch Ratings (Feb. 25, 2026), https://www.fitchratings.com/research/us-public-finance/fitch-upgrades-grand-river-dam-authority-ok-revs-to-aa-outlook-stable-25-02-2026 (attached as Ex. 29).

comments document for its Texas and Oklahoma Regional Haze SIP final disapproval and FIP.[337]

- GREC has not adequately assessed the cost-effectiveness of a scrubber upgrade for Unit 2. EPA has consistently required that scrubber upgrades be assessed and again, this was a key aspect of EPA's Texas and Oklahoma Regional Haze SIP final disapproval and FIP.[338]

Consequently, GREC's "cost-effectiveness" analysis was no analysis at all and merely consisted of the presentation of a few bottom-line figures, without any documentation.

As discussed above, in its 2022 Comments, EPA informed Oklahoma that it must provide appropriate documentation and that "ODEQ has not provided analysis consistent with these recommendations, but rather agrees with all aspects of the submitted four-factor analyses and the conclusions made by the facilities without providing an independent assessment and discussion of the State's review of these analyses."[339]

Oklahoma apparently conceded the complete lack of any documentation in the GREC analysis. In fact, in its January 31, 2022 letter to the facility, Oklahoma requested documentation of many of these redactions and assumptions.[340] GREC refused to provide them,[341] but as discussed Oklahoma subsequently accepted the cost-effectiveness figures anyway.

Oklahoma states, "DEQ and EPA have both reviewed the confidential portions of GRDA's original four-factor response. As stated elsewhere, EPA's Control Cost Manual is guidance. That being said, even with making some adjustments to the remaining useful life, the lowest cost control (DSI) would still be well above what DEQ considers to be cost effective at approximately $12,000/ton SO_2 removed."[342] Again, it seems that there is likely no justification for most, if not all, of GREC's redactions, especially in comparison to the many unredacted cost analyses reviewed for other EGUs. However, no details of the revised $12,000/ton figure are available, so the public has no ability to critique any aspect of the Four-Factor Analysis for Unit 2.

In its proposed approval, EPA did not acknowledge any of these issues, including its previous 2022 objections to Oklahoma's lack of documentation. EPA merely repeats Oklahoma's summary and proposes approval of Oklahoma's acceptance of GREC's undocumented figures.

In summary, there is nothing in GREC's analysis that would distinguish it from the hundreds of other EGUs and industrial sources that have performed Four-Factor Analyses required by the RHR, and have documented their assumptions and cost information. Oklahoma and EPA wrongly accepted bottom line cost-effectiveness figures from GREC without any

[337] *See* 2016 FIP RTC at 202, 233, 259, 289.
[338] Conservation Organizations' 2022 Comments at 39-43.
[339] EPA 2022 Comments at 4.
[340] Oklahoma 2022 SIP, App. E, Four-Factor Analyses at PDF pp. 76-77, Docket No. EPA-R06-OAR-2022-0732-0002_attachment_7, https://www.regulations.gov/document/EPA-R06-OAR-2022-0736-0002.
[341] *Id.* at PDF pp. 78-81.
[342] Oklahoma RTC at 79.

details or documentation whatsoever. Oklahoma and EPA have wrongly accepted GREC's explanation that it cannot supply any details due to unreasonable confidentiality claims. Thus, GREC's analysis is effectively a black box that cannot be adequately critiqued by the public. If EPA were to finalize its proposed approval of GREC's analysis, then virtually any EGU or industrial source could similarly provide only bottom-line cost-effectiveness figures without any documentation. This is an obvious violation of the documentation requirements of section 51.308(f)(2)(iii) and EPA must therefore reject GREC's analysis in its final determination.

4. EPA Must Reject the Horseshoe Four-Factor Analysis.

The Conservation Organizations' 2022 Comments provided a critique of the OG&E Horseshoe Four-Factor Analysis:

- Horseshoe's contractor, S&L failed to provide any documentation for its SNCR capital costs for Units 6, 7, and 8.
- S&L assumed several undocumented and/or improper parameters, which inflated the cost-effectiveness, including a contingency of 20%, a 20-year operating life assumption, and a 7% interest rate assumption. This wrongly inflated the cost-effectiveness of SNCR for Units 6, 7, and 8.
- Urea was assumed as the SNCR reagent, instead of ammonia, which is more cost-effective.
- The SNCR efficiencies were not provided. Instead, only very high NOx outlets were provided, resulting in low, unjustified SNCR efficiencies.[343]

In its Control Cost Manual, EPA defines the meaning of the equipment life of a control as follows: "[t]he life of the control is defined in this Manual as the equipment life. This is the expected design or operational life of the control equipment."[344] Therefore, the life of an SNCR system, like all controls, must be evaluated on this basis. In order to assess the expected life of an SNCR system, it is instructive to first discuss the expected life of related but more complex NOx control technology, an SCR system.

An SCR system is a simple and robust piece of equipment, consisting of a large box that houses the catalyst with no moving parts that would impact its service life. The catalyst is replaced or regenerated regularly as a maintenance item and this cost is amortized in the control cost analysis. SCR systems are thus much less complicated and require much less maintenance than the EGUs or other sources they serve. Therefore, an SCR system can be expected to have a life that is at least as long as the equipment it serves. EPA recognizes this by stating in the

[343] Conservation Organizations' 2022 Comments at 43-46.
[344] CCM: Concepts and Methodology at 22.

Control Cost Manual, "[t]hus, broadly speaking, a representative value of the equipment life for SCR at power plants can be considered as 30 years."[345]

In comparison, an SNCR system is even much less complicated than an SCR system. In an SNCR system, there is a box that houses a catalyst. The only parts exposed to the exhaust stream are lances with replaceable nozzles. The injection lances must be regularly checked and serviced, but this can be done relatively quickly if necessary, is relatively inexpensive, and should be considered a maintenance item. In this regard, the lances are analogous to SCR catalyst, which is not considered when estimating the equipment life of an SCR system. All other items, which comprise the vast majority of the SNCR system capital costs, are outside the exhaust stream, are similar to those used in SCR systems, and should be considered to last as long as they would with an SCR system.

This has been demonstrated in detail in a recent report, and accompanying file concerning EPA's BART Proposal for Coal Creek.[346] The Coal Creek report documented that a number of coal-fired EGUs have SNCR installations older than 30 years. There is nothing in the record for this action that would distinguish an SNCR installation at Units 6, 7, and 8 from Coal Creek. Indeed, that would not be expected, considering the simple and robust nature of SNCR systems.

Indeed, EPA actually has acknowledged that SNCR systems should have an equipment life of 30 years in its 2016 BART FIP regarding the BART determination for Flint Creek:

> We note that we provided comments to ADEQ, which included a recommendation that 30 years should be used as an equipment life for SNCR. AEP did not adopt this recommendation in its September 2013 BART analysis for the Flint Creek facility. We agree with the Sierra Club's consultant that AEP overestimated the cost of SNCR because its calculation based it on a reduction of from 0.31 lbs/MMBtu to 0.2 lbs/MMBtu. We have corrected this error, and the error in AEP SWEPCO's assumed 20 year equipment life, and recalculated the SNCR cost effectiveness for Flint Creek.[347]

EPA reinforced this position by stating that "[t]he assumption of a shortened remaining useful life (20 years) in the cost analysis for NOx controls evaluated for Units 6, 7, and 8 is not appropriate without an enforceable shutdown date for these units."[348] In the same comment, EPA went on to note that in a follow-up response to Oklahoma, the company stated that it is willing to consider enforceable air permit conditions that require retirements for these units no later than 20 years from the effective date of the SIP, but Oklahoma did not take this into account

[345] EPA, Control Cost Manual, Section 4, Chapter 2, Selective Catalytic Reduction at PDF p. 80 (June 2019), https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/cost-reports-and-guidance-air-pollution (attached as Ex. 30).
[346] Joe Kordzi, A Review of EPA's BART Proposal for Coal Creek (Aug. 2024) (attached as Ex. 31); *see also* workbook "Coal Creek.xlsx" (attached as Ex. 31.a); workbook "eu_icr_parti_partii-short version.xlsx." (attached as Ex. 31.b).
[347] 81 Fed. Reg. 66332, 66387 (Sept. 27, 2016).
[348] EPA 2022 Comments at 8.

in its review and decision-making process. In its reply, Oklahoma focuses on the cost-ineffectiveness of SCR and ignores the other NOx control – SNCR.[349]

Thus, there is ample documentation that SNCR systems have lasted for 30 years or more, and as discussed above, EPA has acknowledged that SNCR systems must be evaluated on the basis of 30 years, including those for Horseshoe. Therefore, SNCR installations on Units 6, 7, and 8 must be considered to have a 30-year equipment life.

Due to the undocumented and flawed S&L SNCR cost-effectiveness calculations, Conservation Organizations employed EPA's SNCR cost models in their 2022 Comments. Using a documented reasonable range of 40% to 60% SNCR efficiencies, the following cost-effectiveness values were calculated:[350]

Table 2. Horseshoe SNCR Cost-Effectiveness

Unit	40%	50%	60%
6	$4,209/ton	$3,538/ton	$3,083/ton
7	$5,409/ton	$4,545/ton	$3,960/ton
8	$11,056/ton	$9,172/ton	$7,898/ton

As noted in section IX.C. of these comments above, Oklahoma's $1,400/ton to $2,000/ton NOx threshold is unreasonable. From the above, it can be seen that if Oklahoma had selected a more reasonable NOx cost-effectiveness threshold, SNCR would be cost-effective for the Horseshoe Units 6 and 7. In its final determination, EPA must reject Oklahoma's unreasonable NOx threshold, and reject the Horseshoe Four-Factor Analysis.

5. EPA Must Reject the Chitwood Gas Plant Four-Factor Analysis.

The Conservation Organizations' 2022 Comments provided a critique of the Chitwood Gas Plant Four-Factor Analysis of NOx controls for nine compressor engines:

- None of the 13 items in the quote, below Item 1, have any documentation.
- Many individual cost items in Trinity's cost-effectiveness calculations are either demonstrably unneeded or insufficiently documented and are highly questionable. This wrongly inflated the cost-effectiveness (higher $/ton).
- Chitwood included undocumented costs in its cost-effectiveness calculation. A number of the items listed in Chitwood's contractor, Trinity's cost-effectiveness calculation are

[349] Oklahoma RTC at 20.
[350] Conservation Organizations' 2022 Comments at 43-46; *see also* workbook "Horseshoe SNCR CCM cost-effectiveness.xlsm" (attached as Exhibit 1.c).

not present in the quote it presents from the equipment vendor, Siemens. This includes Items 2, 3, 4, and 5.

- The programmable logic controllers of Item 6 have been in wide use in industrial environments for decades and are therefore likely already present. Therefore, Oklahoma must require that Chitwood justify the need for this $250,000 item for each engine, which, considering the information in the record, seems unlikely.

- Item 9, "Safety/inspector/fire watch for each engine build" is undocumented. A charge of $100,000 for each engine appears to be excessive to have a worker standby with a fire extinguisher. It is difficult to understand how this cost could be higher than $56,250 cost for the project/site managers and engineer.

- There is no mention of the need for an oxidation catalyst for Item 12 in the Siemens' quote. Furthermore, Chitwood's permit indicates these engines were constructed prior to December 12, 2002 and are thus grandfathered and thus have no applicable requirements to reduce CO.

- Permit specific condition No. 6 further states, "Engine C-10 shall be operated with exhaust gases passing through a functioning catalytic converter." Thus, it appears that engines C-1 through C8 do not have any requirement "to stay under current permit values" as Trinity claims in its analysis. Oklahoma must therefore clarify the need to install oxidation catalysts, which Trinity lists for all the engines.

- Chitwood's calculated emission reductions are demonstrably too low, which wrongly inflated the cost-effectiveness.

- Trinity used an undocumented 7% interest rate in lieu of the Bank Prime Rate.

- Correcting the issues described above approximately halved the cost-effectiveness of NOx controls for nine compressor engines for the Chitwood Gas Plant Four-Factor Analysis.[351]

Oklahoma states that "these engines are grandfathered, which effectively means they are very old. As included in DCP's response and clarified above, the age of the engines means that their current condition would have to be individually evaluated by taking each one offline to get a true cost estimate and technical evaluation of what controls could actually be installed. These evaluations would likely find that some of the engines are not amenable to controls, and some could be controlled but likely at higher cost estimates."[352] In other words, Oklahoma concluded that in order to properly evaluate the Chitwood Gas plant engines, additional work would have to be performed. The fact that additional work would have to be performed is not a valid excuse from not properly performing a Four-Factor Analysis.

[351] Conservation Organizations' 2022 Comments at 46-52.
[352] Oklahoma RTC at 90.

EPA had several issues with the Chitwood analyses in its 2022 Comments. First, EPA informed Oklahoma that it did not justify the 7% interest rate used in the Chitwood analysis.[353] In its reply, Oklahoma states that it reran the analysis using an interest rate of 3.25, which was the Bank Prime Rate at the time and it did not change its conclusion.[354] However, Oklahoma did not provide that analysis. And, in any event, Oklahoma's response does not address the other flaws in the analysis noted in the bullet points above.

Second, EPA referred to Chitwood's concerns about uncertainty due to a lack of an engineering study, health analysis, and more detailed analysis of whether each engine could accommodate the contemplated retrofits. In that comment, EPA stated that, if Oklahoma's "determination that controls are not necessary is based on consideration of the uncertainty associated with the Four-Factor Analysis provided by the company, [Oklahoma] should provide a site-specific analysis and engineering study (or request the company to do so) to more accurately determine the feasibility and cost of retrofit controls at these units and reconsider whether the determination that no controls are necessary is reasonable based on the updated analysis."[355] In other words, as above, the fact that additional work would have to be performed is not a valid excuse for not properly performing a Four-Factor Analysis. In its reply, Oklahoma stated, "[t]his more thorough analysis may show that the control is technically infeasible in its entirety or may show higher costs that would still make the control not feasible."[356] Of course, a more thorough analysis could also indicate that many individual cost items in Trinity's cost-effectiveness are demonstrably unneeded, or lack documentation and are highly questionable, which wrongly inflated the cost-effectiveness.

In its proposal, EPA overlooked all of its previous 2022 objections to the Chitwood Four-Factor Analysis and proposed approval. In its final determination, EPA must reject Oklahoma's unreasonable NOx threshold, and reject the Chitwood Gas Plant Four-Factor Analysis.

6. Oklahoma Failed to Evaluate Muskogee 6 for Cost-Effective Controls.

Oklahoma provided Muskogee Station with a blanket exemption from four-factor reviews because Units 3 and 4 had undergone BART analyses in the first round SIP review. The illegality of this BART exemption is discussed above. However, that aside, this exemption certainly does not extend to Unit 6.

Unit 6, which burns coal, was constructed in 1978 and runs on its as-built condition from nearly 50 years ago.[357] It did not undergo a BART analysis in the first planning period, as its construction date fell just outside of the BART time window. Nevertheless, Oklahoma proclaims the following:

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[353] EPA 2022 Comments at 11.
[354] Oklahoma RTC at 17.
[355] EPA 2022 Comments at 7.
[356] Oklahoma RTC at 18.
[357] According to EPA CAMPD data, Muskogee Unit 6 has no SO_2 controls and only rudimentary overfire air NOx controls, and with the exception of activated carbon injection to control mercury, operates in its as-built state. EPA, Clean Air Markets Program Data (CAMPD) (Apr. 11, 2025), https://campd.epa.gov/.

> While Units 3 and 4 at OG&E's Muskogee Generating Station were required to implement BART controls in conjunction with Planning Period 1, coal-fired Unit 6 was not BART-eligible. However, the Muskogee Generating Facility, including Unit 6, is subject to CSAPR requirements. It is unlikely that a new four-factor analysis for individual emission units at a facility that is subject to CSAPR requirements would result in a finding that additional cost-effective controls are available and appropriate.[358]

There is no basis for Oklahoma to conclude that it is unlikely that cost-effective controls would not be available for a large, essentially uncontrolled EGU. This is an obvious failure of Oklahoma to satisfy the documentation requirements of 40 C.F.R. § 51.308(f)(2)(iii). First, Oklahoma's participation in the CSAPR NOx Group 2 programs does not provide any regulatory pressure to reduce NOx on any of its affected EGUs. This is further reinforced by the observation that Unit 6 is only fitted with overfire air to control NOx. This is the rudimentary technology that was installed on the units when it was built in 1978. It is the least effective and least expensive NOx control technology installed on coal-fired EGUs. Therefore, if there had been any regulatory pressure on Unit 6 to reduce NOx, Muskogee would have at least installed upgraded closed-coupled/separated overfire air, and Low NOx Burners (LNB) as Units 4 and 5 did while they still burned coal, in 2013. Second, because Muskogee Unit 6 is coal-fired, Oklahoma's participation in the CSAPR NOx Group 2 program is incapable of providing any incentive to reduce SO_2 emissions. In fact, Unit 6 has no SO_2 control of any kind.

EPA emphasized the need for Oklahoma to subject Muskogee Unit 6 to a Four-Factor Analysis, as part of its larger comment that rejected OKLAHOMA's blanket BART exemption:

> Arkansas and Missouri specifically identified the Muskogee Generating Station as reasonably anticipated to impair visibility at one or more of their Class I areas. We also note that OG&E Muskogee Generating Station is located closer to Arkansas' Class I areas and Missouri's Class I area than to Oklahoma's own Class I area. OG&E Muskogee is located 178.11 km from Caney Creek; 187.37 km Upper Buffalo; 231.48 km from Hercules Glades; and 330.27 km from Wichita Mountains. Therefore, the Q/d values of this source with respect to Caney Creek, Upper Buffalo, and Hercules Glades are greater than the Q/d value with respect to Wichita Mountains. (See Appendix C of the proposed SIP).[359]

Unit 6 must be subjected to a proper Four-Factor Analysis and be evaluated for NOx and SO_2 in this planning period. Furthermore, there is no reason to conclude that the same SO_2 controls that were found to be cost-effective for Units 4 and 5 in the first planning period would not be cost-effective for Unit 6 in this planning period.

Beyond mentioning that Muskogee Units 4 and 5 were subject to BART in the first planning period, EPA has nothing to say in its proposal about this obvious fundamental flaw in Oklahoma's long-term strategy. Consequently, in its final determination, EPA must find that

[358] Oklahoma 2022 SIP at 37.
[359] EPA 2022 Comments at 3.

Muskogee Unit 6 should have been subjected to a proper Four-Factor Analysis for both SO_2 and NOx controls, and disapprove Oklahoma's long-term strategy.

For all of the above six sources, EPA's proposed approval is also arbitrary and capricious because the Agency fails to explain its departure from its prior statements regarding significant deficiencies in Oklahoma's SIP. As discussed above, EPA provided detailed pre-proposal comments to Oklahoma identifying numerous substantive deficiencies in the State's draft SIP. Although those comments were sent to the State during its SIP development process, they are nevertheless part of the administrative record and reflected EPA's assessment of the State's draft SIP. EPA's proposal here neither acknowledges any of the concerns nor explains why the deficiencies EPA previously identified are no longer issues. Because EPA has not reconciled its current approval with the Agency's earlier statements regarding significant flaws in Oklahoma's SIP, the proposed approval lacks the reasoned explanation of the Agency's reversal.

G. Oklahoma Failed to Document CSAPR Claims.

In various places in its 2022 SIP, Oklahoma claims that CSAPR participation would likely result in equal or better progress than would result from source-specific Four-Factor Analyses. Oklahoma did not provide any demonstration or documentation for this claim, other than its discussion in its response to comments[360] where the State responds to EPA's Comment No. 5, which was critical of Oklahoma's blanket BART exemption. The State's response largely consisted of a description of the workings of the CSAPR NOx Ozone Season Group 2 program (the only part of CSAPR that Oklahoma participates in) and references to EPA's "better than BART" Rule. Oklahoma follows this discussion by asserting, "[f]or those EGU sources that were selected for a Four-Factor Analysis in this second planning period per DEQ's source selection criteria, the responses confirm that there are no additional cost-effective controls that should be implemented."[361] No data or other documentation was provided to substantiate this claim. However, the conflict with Oklahoma's approach with the RHR aside, an examination of the efficacy of EPA's CSAPR program demonstrates that this claim is incorrect, particularly with the NOx Group 2 program.

According to EPA, a fundamental tenet of any cap and trade program is that, "the cap and associated allowance market creates a monetary value for allowances, providing sources with a tangible incentive to decrease emissions."[362] This is actually the single most important aspect of a successful emissions trading program, because if market forces do not adequately value allowances, there is little to no incentive for sources to install pollution controls or take other measures to reduce emissions.

EPA had historically published an annual Power Sector Progress Report that contained the average allowance prices for the SO_2 and NOx CSAPR programs. These prices offered a snapshot of the amount of regulatory pressure to install controls resulted from the program. However, those reports have stopped and EPA's webpage for the latest report, which covered

[360] Oklahoma RTC at 5-8.
[361] *Id.* at 8.
[362] EPA, Tools of the Trade: A Guide to Designing and Operating a Cap and Trade Program for Pollution Control at 1-3 (June 2003), https://www.epa.gov/sites/production/files/2016-03/documents/tools.pdf (attached as Ex. 32).

2023, appears to be broken.[363] However, some data on the average NOx and SO_2 allowance pricing for CSAPR is occasionally made available through third party brokers. This information demonstrates that presently, there is very little economic or regulatory incentive to install NOx controls as a result of participation in the NOx Group 2 CSAPR program. For example, Argus reported the following on December 22, 2025:

> The seasonal NOx markets have been more active this year compared to 2024, when prices essentially flatlined due to regulatory and legal uncertainty brought about by a barrage of lawsuits filed against the US Environmental Protection Agency (EPA) for its "good neighbor" plan.
>
> But the plan is now essentially defunct after the US Supreme Court halted its implementation in June 2024. This led the EPA to return to less-rigorous NOx emissions limits tied to older ozone standards and reshuffle the participating states into the Group 2 and "expanded" Group 2 markets. Argus launched its assessment of the latter in February 2025.
>
> EPA said in March it intends to reconsider the good neighbor plan in order to give states more freedom in developing their own ozone reduction plans. The announcement led to the US District of Columbia Circuit Court of Appeals pausing a lawsuit challenging the legality of the good neighbor plan until the agency completes its reconsideration, and which could culminate in new regulations by fall 2026.
>
> But those developments did little to move the seasonal NOx markets, which have already been sluggish due to oversupply and weak compliance demand, leading to more dramatic price fluctuations when trades do occur. Argus has assessed Group 2 allowances at $875/short ton (st) since 1 December and expanded Group 2 allowances at $850/st since 24 October.[364]

Thus, the CSAPR NOx Group 2 allowance price was approximately $875/ton going into 2026. This appears to be the result of regulatory uncertainty over EPA's Good Neighbor Rule. Additionally, the CSAPR Group 1 and 2 SO_2 allowances have been at near zero value since at least 2023.[365] This sensitivity of EPA's emission trading programs to externalities (and fixed caps) has been a common flaw going back to the Acid Rain Program (ARP).

The ARP's SO_2 allowance market collapsed, and has remained so for years. This was primarily due to external market forces that were unanticipated by the program's designers. As the figure below indicates, much of the collapse of the ARP SO_2 allowance market was in fact

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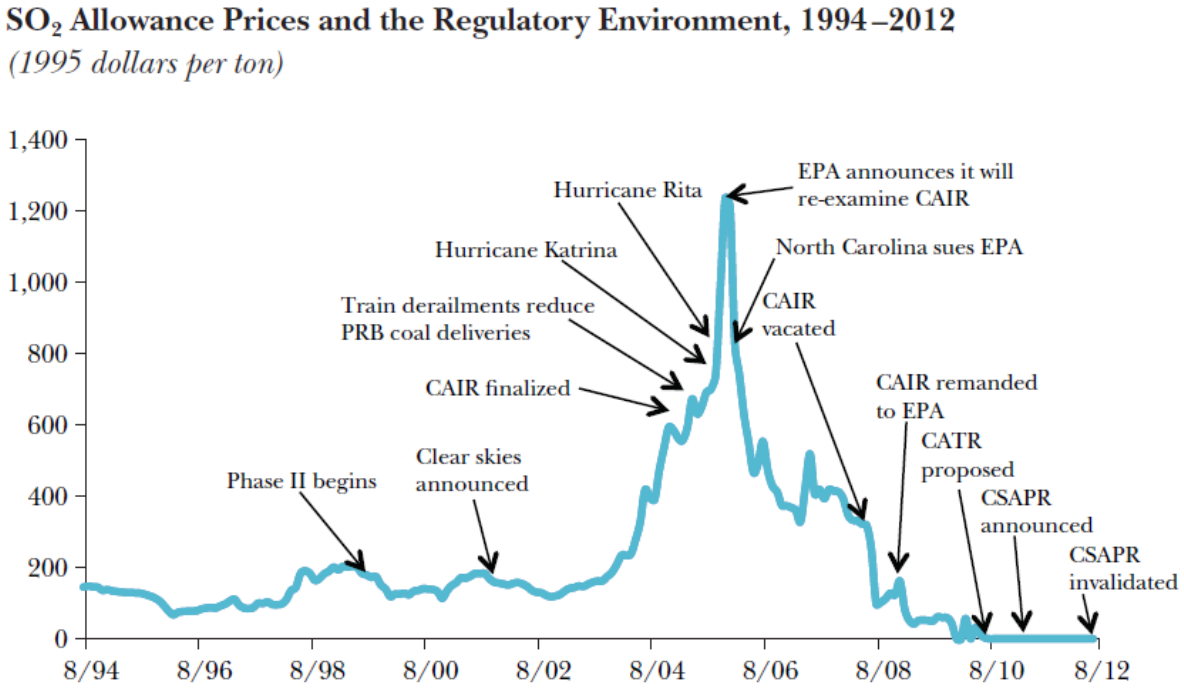
[363] *See* EPA, Power Sector Programs Progress Report (last updated Feb. 26, 2026), https://www.epa.gov/power-sector/progress-report. Note that clicking on the "Market Activity" link under the "Program Compliance & Market Activity" section leads to a page in which the market activity data is stuck with a "Data is loading…" indicator.
[364] Argus Media, Viewpoint: CSAPR Sentiment Bearish Despite Coal Use (Dec. 22, 2025), https://www.argusmedia.com/en/news-and-insights/latest-market-news/2768787-viewpoint-csapr-sentiment-bearish-despite-coal-use (attached as Ex. 33).
[365] *See* EPA, Power Sector Programs Progress Report: Program Compliance and Market Activity (last updated Feb. 10, 2026), https://www.epa.gov/power-sector/progress-report-program-compliance-and-market-activity (see the 2022 Program Compliance and Market Activity Data (xlsx) link).

due to the effect of CAIR, CSAPR, litigation of these programs, and although not shown on the graph, the National Ambient Air Quality Standards ("NAAQS) and Mercury and Air Toxics Standards (MATS) programs, which regulated the same sources via other means. In other words, trading programs do not operate in a vacuum. There are a number of externalities that can serve as drivers to EGU owners for making economic decisions, including other regulatory programs. Trading programs can, however, remain pertinent if they contain minimum allowance prices—a feature that the ARP and CSAPR lack.[366]

Figure 1. The Collapse of the SO_2 Allowances Market in the Acid Rain Program[367]



Source: Data on spot prices compiled by Power & Energy Analytic Resources (PEAR) Inc. from Cantor Fitzgerald until September 11, 2001, and from ICAP United thereafter.
Notes: CAIR is "Clean Air Interstate Rule." CATR is "Clean Air Transport Rule." CSAPR is "Cross-State Air Pollution Rule."

There is no evidence that Oklahoma provided—or indeed likely can provide—that would indicate that post-combustion NOx controls, such as SNCR or SCR can be installed on any of the EGUs flagged for Four-Factor Analyses for less than $875/ton. For example, in its 2023 EGU NOx Mitigation Strategies Final Rule TSD, EPA calculated that to install SNCR at only an efficiency of 25% on a generic coal-fired boiler (500 MW, tangential boiler, 10,000 Btu/kWh

[366] In addition, units have reduced operation of existing NOx controls after the price of NOx allowances dropped under the several different trading programs. *See* Thomas F. McNevin, Recent Increases in Nitrogen Oxide (NOx) Emissions from Coal-Fired Electric Generating Units Equipped with Selective Catalytic Reduction, 66 J. Air & Waste Mgmt. Ass'n 134–142 (2016), https://www.tandfonline.com/doi/full/10.1080/10962247.2015.1112317 (attached as Ex. 34).
[367] Richard Schmalensee & Robert N. Stavins, The SO_2 Allowance Trading System: The Ironic History of a Grand Policy Experiment, 27 J. Econ. Persp. 103, 114 (2013), https://www.aeaweb.org/articles?id=10.1257/jep.27.1.103 (attached as Ex. 35).

heat rate, bituminous fuel) with an input emission rate of 0.2 lb NOx/MMBtu, and a capacity factor of 56%, the cost was estimated to be $6,200/ton.[368] For the same unit burning oil or gas, the cost-effectiveness was estimated to be $5,600/ton.[369] These figures may well be significantly different for Oklahoma's EGUs, but it is extremely unlikely these figures will even approach $875/ton. Regardless, the burden of proof is on Oklahoma to make that assessment, rather than merely asserting it without any documentation as Oklahoma has done and EPA now proposes to accept.

Moreover, CSAPR allowance pricing is effectively a regulatory black box. As discussed above, EPA ceased the publication of its annual Power Sector Progress Report, which was the only source of publicly available CSAPR allowance pricing, outside of occasional reports from third-party brokers, such as the Argus article cited above. This means that even if the allowance pricing of the CSAPR Group 2 NOx and Group 1 and 2 SO_2 programs had not collapsed, and could somehow be held up as a regulatory incentive to control NOx and SO_2, it would be difficult to impossible to verify such an assertion with publicly available information. Therefore, a state that claims that CSAPR somehow provides any regulatory pressure to install controls must provide the applicable allowance pricing for a reasonable time period in order to satisfy the documentation requirements of 40 C.F.R. § 51.308(f)(2)(iii). EPA must acknowledge this in its final determination.

In summary, Oklahoma's assertion that the CSAPR Group 2 NOx program provides any economic or regulatory incentive to reduce NOx on any of its EGUs subject to Four-Factor Analyses is unreasonable and not supported. Oklahoma's participation in the CSAPR Group 2 NOx program has no impact on EGU SO_2 controls, such as those that would be assessed under a proper Four-Factor Analysis for Muskogee Unit 6. Therefore, in its final determination, EPA must reject Oklahoma's CSAPR argument and require that Oklahoma's affected EGUs be subjected to proper Four-Factor Analyses.

H. Oklahoma Failed to Address Issues Regarding Existing Measures.

EPA informed Oklahoma that it must determine on a source-by-source basis whether the existing measures of a source that has undergone a Four-Factor Analysis are needed for reasonable progress.[370] If so, that source's emissions limits must be made a part of the SIP.[371] EPA later emphasized this specifically in its Comment 10 in relation to Continental Carbon.[372] However, Oklahoma side-stepped this issue, stating, "[s]ources for which no additional measures were found to be cost-effective in their four-factor analyses still remain subject to the same program requirements, as applicable, that require consideration of Class I Area visibility impacts of any significant emissions increases (i.e., prevention of significant deterioration (PSD))."[373] In

[368] EPA, Technical Support Document (TSD) for the Final Federal Good Neighbor Plan for the 2015 Ozone National Ambient Air Quality Standards: EGU NOx Mitigation Strategies, Docket No. EPA-HQ-OAR-2021-0668 at 26 (Mar. 2023), https://www.epa.gov/system/files/documents/2023-03/EGU%20NOx%20Mitigation%20Strategies%20Final%20Rule%20TSD.pdf (attached as Ex. 36).
[369] *Id.* at 27.
[370] EPA 2022 Comments at 4.
[371] *Id.*
[372] *Id.* at 5.
[373] Oklahoma RTC at 14.

other words, Oklahoma refused to make the required determination and, instead, cited other programs like the PSD program. EPA does not address this issue at all in its proposal, and must do so in its final determination.

I. Oklahoma Failed to Investigate Whether Sources Can Achieve Lower Emission Rates.

EPA informed Oklahoma that "[i]f a source is capable of operating or is already operating at a lower emission rate than assumed either (1) as the basis for not conducting a full four-factor analysis or (2) as the baseline for four-factor analysis, that lower rate should be analyzed as a potential control measure."[374] In its reply, Oklahoma cited to the Maysville Gas plant as the only example it is aware of that fits that case. Oklahoma then claimed that it "knows of no legal authority it possesses to unilaterally impose such limits or requirements."[375] Oklahoma misunderstands the RHR. When a state evaluates a source under the four-factor requirements of Section 51.308(f)(2)(i), it must make a determination of whether that source is capable of emitting lesser amounts of the visibility impairing pollutant at issue. If that can be done without imposing additional controls, such as a scrubber or SCR system adding more reagent in order to achieve a lower emission rate, then a state must assess that option as part of its Four-Factor Analysis. EPA does not address Oklahoma's failure to assess this issue at all in its proposal, and must do so in its final determination.

X. Conclusion

The Conservation Groups strongly oppose EPA's proposal to approve Oklahoma's 2022 SIP, which is fundamentally flawed in multiple ways that make it ineffective at achieving reasonable progress in the second regional haze planning period. Oklahoma failed to satisfy the requirements of the Clean Air Act and RHR by ignoring its obligations to properly select, analyze, and propose controls for haze-polluting sources in the state. EPA must withdraw its proposal to approve and disapprove the 2022 SIP for the reasons set forth above.

We look forward to further action from EPA to gain needed emission reductions to benefit our treasured national parks and wilderness areas during the second planning period.

Sincerely,

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[374] EPA 2022 Comments at 4-5.
[375] Oklahoma RTC at 15.

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Enclosures

XI. Exhibit Index

Exhibit Number	Title
1.a	Chitwood cost-effectiveness.xlsx
1.b	El_Oklahoma_2016-2020 Annual Point Source Emissions.xlsx
1.c	Horseshoe SNCR CCM cost-effectiveness.xlsx
1.d	Hugo DSI Cost Estimate.xlsx
1.e	Hugo wetanddryscrubbers_controlcostmanualspreadsheet_may_2021-yearly.xlsx
1.f	Hugo wetanddryscrubbers_controlcostmanualspreadsheet_may_2021.xlsm
1.g	InfoRequest_2022-06-07-formatted.xlsx
1.h	Kremlin.xlsx
1.i	OK EGU emissions.xlsx
2	Memorandum from Janet McCabe, Deputy Assistant Adm'r, Off. Air & Radiation, Env't Prot. Agency, to Reg'l Adm'rs, Regions I–X (Apr. 6, 2011)
3	Memorandum from William L. Wehrum, Acting Assistant Adm'r, Off. of Air & Radiation, Env't Prot. Agency, to Air Div. Dirs., Regions I–X (Sept. 7, 2007)
4	U.S. Fish & Wildlife Serv., *Wichita Mountains Wildlife Refuge: About Us*
5	U.S. Fish & Wildlife Serv., *Wichita Mountains Wildlife Refuge*
6	Bureau of Econ. Analysis, *Outdoor Recreation Satellite Account, U.S. and States, 2024*
7	David Keiser et al., *Air Pollution and Visitation at U.S. National Parks*, 4 Sci. Advances 3–6 (July 18, 2018).
8	U.S. Env't Prot. Agency, *Integrated Science Assessment for Oxides of Nitrogen—Health Criteria* (Jan. 2016)
9	U.S. Env't Prot. Agency, *Integrated Science Assessment for Sulfur Oxides—Health Criteria* (Apr. 2017)
10	U.S. Env't Prot. Agency, *Integrated Science Assessment for Particulate Matter* (Dec. 2019)
11	U.S. Env't Prot. Agency, *Clarifications Regarding Regional Haze State Implementation Plans for the Second Implementation Period* (memorandum) (July 8, 2021)

Exhibit Number	Title
12	U.S. Env't Prot. Agency, *Response to Comments for the Federal Register Notice for the Texas and Oklahoma Regional Haze State Implementation Plans; Interstate Visibility Transport State Implementation Plan to Address Pollution Affecting Visibility and Regional Haze; and Federal Implementation Plan for Regional Haze*, Docket No. EPA-R06-OAR-2014-0754 (Dec. 9, 2015)
13	Decl. of Bruce Polkowsky (May 16, 2025)
14	Maxine Joselow, *Park Service Suspends Air-Quality Monitoring at All National Parks*, Wash. Post (May 5, 2025)
15	U.S. Envtl. Prot. Agency, *Technical Support Document for EPA's Updated 2028 Regional Haze Modeling* (2019)
16	Cent. States Air Res. Agencies, CenSARA AOI Analysis, https://censara.org/ftpfiles/Ramboll/
17	Nat'l Parks Conservation Ass'n, et al., Comments on Proposed Air Plan Approval; Texas and Oklahoma; Texas Regional Haze Plans for the First and Second Implementation Periods and Five-Year Progress Report; Oklahoma Regional Haze Plan for the First Implementation Period, Docket No. EPA–R06–OAR–2025–0197 (July 23, 2025)
18	Nat'l Parks Conservation Ass'n, et al., Petition for Reconsideration of Air Plan Approval; Texas and Oklahoma; Texas Regional Haze Plans for the First and Second Implementation Periods and Five-Year Progress Report; Oklahoma Regional Haze Plan for the First Implementation Period, 90 Fed. Reg. 56001 (Dec. 5, 2025), EPA Docket No. EPA-R06-OAR-2025-0197 (Feb. 3, 2026)
19	Nat'l Parks Conservation Ass'n, et al., Petition for Reconsideration of Approval of Air Quality Implementation Plans; California; Regional Haze State Implementation Plan for the Second Implementation Period, Docket No. EPA-R09-OAR-2025-0203 (Nov. 4, 2025)
20	U.S. Envtl. Prot. Agency, *2020 National Emissions Inventory (NEI) Technical Support Document (TSD): Introduction*
21	U.S. Envtl. Prot. Agency, *Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program* (June 1, 2007)
22	U.S. Energy Info. Admin., *Oklahoma State Energy Profile: Analysis*
23	EPA, 2022 Nonpoint Oil and Gas Emission Estimation Tool Version 1.3 (Aug. 2, 2022)

Exhibit Number	Title
24	V. Stamper & Megan Williams, *Oil and Gas Sector Reasonable Progress Four-Factor Analysis of Controls for Five Source Categories* (Mar. 6, 2020) (prepared for NPCA)
25	U.S. Envtl. Prot. Agency, *Control Cost Manual*: Section 1—Introduction, Chapter 2—Cost Estimation: Concepts and Methodology (Nov. 2017)
26	Workbook, "30-year plus EGU scrubber"
27	U.S. Envtl. Prot. Agency, *IPM Model—Updates to Cost and Performance for APC Technologies: Dry Sorbent Injection for SO_2/HCl Control Cost Development Methodology* (Final, Apr. 2017)
28	U.S. Envtl. Prot. Agency, *IPM Model—Updates to Cost and Performance for APC Technologies: Dry Sorbent Injection for SO_2/HCl Control Cost Development Methodology* (Final, Mar. 2024)
29	Fitch Ratings, Fitch Upgrades Grand River Dam Authority, OK's Revs to "AA-"; Outlook Stable (Feb. 25, 2026)
30	U.S. Envtl. Prot. Agency, *EPA Air Pollution Control Cost Manual*, Section 4—NO_x Controls, Chapter 2—Selective Catalytic Reduction (June 2019)
31	Joe Kordzi, *A Review of EPA's BART Proposal for Coal Creek* (prepared for Sierra Club & Nat'l Parks Conservation Ass'n) (Aug. 2024)
31.a	"Coal Creek.xlsx"
31.b	"eu_icr_parti_partii-short version.xlsx"
32	U.S. Envtl. Prot. Agency, *Tools of the Trade: A Guide to Designing and Operating a Cap and Trade Program for Pollution Control* (June 2003)
33	Argus Media, Viewpoint: CSAPR Sentiment Bearish Despite Coal Use (Dec. 22, 2025)
34	Thomas F. McNevin, Recent Increases in Nitrogen Oxide (NOx) Emissions from Coal-Fired Electric Generating Units Equipped with Selective Catalytic Reduction, 66 J. Air & Waste Mgmt. Ass'n 134–142 (2016)
35	Richard Schmalensee & Robert N. Stavins, The SO_2 Allowance Trading System: The Ironic History of a Grand Policy Experiment, 27 J. Econ. Persp. 103 (2013)
36	U.S. Envtl. Prot. Agency, *Technical Support Document (TSD) for the Final Federal Good Neighbor Plan for the 2015 Ozone National Ambient Air Quality Standards: EGU NOx Mitigation Strategies*, Docket No. EPA-HQ-OAR-2021-0668 (Mar. 2023)