UNITED STATES COURT OF APPEALS
FOR THE TENTH CIRCUIT

STATE OF WYOMING,

Petitioner,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

POWDER RIVER BASIN RESOURCE COUNCIL, et al.,

Intervenors.

No. 14-9529

POWDER RIVER BASIN RESOURCE COUNCIL, et al.,

Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents.

STATE OF WYOMING, et al.,

Intervenors.

No. 14-9530

PACIFICORP, Petitioner, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al., Respondents. ---------- POWDER RIVER BASIN RESOURCE COUNCIL, et al., Intervenors.	No. 14-9534

Petition for Review from the U.S. Environmental Protection Agency

PETITIONERS' OPENING BRIEF

ORAL ARGUMENT REQUESTED

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CORPORATE DISCLOSURE STATEMENT

Petitioners Powder River Basin Resource Council, National Parks Conservation Association, and Sierra Club are non-profit conservation organizations. None of the petitioner organizations has a parent corporation and no publicly held corporation owns a ten percent or greater ownership interest in any of the petitioner organizations.

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STATEMENT OF RELATED CASES

Pursuant to Tenth Circuit Rule 28.2(C), Petitioners notify the Court that this Petition for Review is related to the following cases, which are procedurally consolidated with this Petition:

- State of Wyoming, et al. v. U.S. Environmental Protection Agency, et al., No. 14-9529;
- PacifiCorp, et al. v. U.S. Environmental Protection Agency, et al., No. 14-9534.

These two cases challenge elements of the U.S. Environmental Protection Agency's action in Final Rule, Approval, Disapproval and Promulgation of Implementation Plans; State of Wyoming; Regional Haze State Implementation Plan; Federal Implementation Plan for Regional Haze, 79 Fed. Reg. 5,032 (Jan. 30, 2014), that are distinct from the elements challenged in this petition for review. The Petitioners here have intervened as respondents in the related cases listed above.

GLOSSARY

BACT:	Best available control technology
BART:	Best available retrofit technology
BLM:	United States Bureau of Land Management
EPA:	United States Environmental Protection Agency
FIP:	Federal implementation plan
LNB/OFA:	Low nitrogen oxide burners with overfire air
NO_x:	Nitrogen oxide
PM:	Particulate matter
SIP:	State implementation plan
SCR:	Selective catalytic reduction
SNCR:	Selective non-catalytic reduction

STATEMENT OF JURISDICTION

This Court has jurisdiction pursuant to 42 U.S.C. § 7607(b)(1), which authorizes judicial review of EPA's final decisions on Clean Air Act state implementation plans in the circuit court for the circuit in which the affected state is located. This case concerns EPA's final rule partially approving and partially disapproving Wyoming's state implementation plan for regional haze and promulgating a federal implementation plan.[1]

STATEMENT OF ISSUES

Whether EPA's determinations in the final rule of the "best available retrofit technology" for controlling nitrogen oxide emissions from units 1 and 2 of the Naughton coal-fired power plant are arbitrary and contrary to the requirements of the Clean Air Act and Regional Haze Rule.

STATEMENT OF THE CASE

This case concerns air pollution that damages visibility in some of our nation's most treasured public lands—including national parks such as Yellowstone and Grand Teton, and federal wilderness areas. To restore air quality in these iconic landscapes—called "Class I areas"—the Clean Air Act requires

[1] Petitioners' standing to sue is documented in the attached amended declarations of Shannon Anderson and Andrew H. Salter and the declarations in support of the Unopposed Motion to Intervene filed by Powder River Basin Resource Council, et al., in related case no. 14-9529, Doc. 01019239219 (filed April 24, 2014).

states to adopt implementation plans to eliminate visibility-impairing "haze pollution" from human-caused sources such as coal-fired power plants. 42 U.S.C. §§ 7491(a)(1), (b)(2). These state implementation plans, or "SIPs," must include incremental visibility-improvement goals to ensure that the state will eliminate human-caused haze pollution in Class I areas at a reasonable rate of progress, 40 C.F.R. § 51.308(d)(1),[2] and must prescribe the emission limits and other air pollution control strategies necessary to achieve those goals, 42 U.S.C. § 7491(b)(2). For some of the oldest, dirtiest stationary sources of haze-causing pollution—such as minimally controlled coal-fired power plants—SIPs must also require installation of the "best available retrofit technology," or "BART," for reducing emissions of haze-forming pollutants. Id. § 7491(b)(2)(A).

Wyoming's SIP allowed the weakest available BART air pollution controls for haze-forming nitrogen oxide ("NO_x") emissions from most of the State's coal-fired power plants and would leave visibility impaired in affected Class I areas for over a century. Yet on January 30, 2014, EPA approved most of Wyoming's SIP. Final Rule, Approval, Disapproval and Promulgation of Implementation Plans; State of Wyoming; Regional Haze State Implementation Plan; Federal

[2] All citations to the Regional Haze Rule, 40 C.F.R. § 51.308, reference the rule as it existed in 2014, at the time of the challenged final rule. EPA revised portions of the rule in 2017, 82 Fed. Reg. 3,078 (Jan. 10, 2017), in a manner that does not impact this case.

Implementation Plan for Regional Haze, 79 Fed. Reg. 5,032 (Jan. 30, 2014) ("Final Rule") (JA000100).[3] Of central relevance to this petition for review, EPA approved Wyoming's determination to allow the weakest available NO_x BART air pollution controls for units 1 and 2 of the Naughton coal-fired power plant, which together perceptibly degrade visibility in all seven of Wyoming's Class I areas—including Yellowstone and Grand Teton National Parks and the Bridger and Fitzpatrick wilderness areas in Wyoming's scenically iconic Wind River Range. See JA002264-2269 (EPA revised haze computer modeling results for "baseline" scenario).

Pursuant to 42 U.S.C. § 7607(b)(1), Petitioners Powder River Basin Resource Council, National Parks Conservation Association, and Sierra Club (collectively, the "Conservation Organizations") petitioned for judicial review of the Final Rule on March 28, 2014. On May 15, 2014, this Court ordered the Conservation Organizations' petition for review procedurally consolidated, for purposes of submission and oral argument, with challenges to the Final Rule filed by the State of Wyoming, PacifiCorp, and Basin Electric Power Cooperative. On September 9, 2014, the Court granted motions by Basin Electric, PacifiCorp, and

[3] The parties' Joint Appendix is cited as "JA," followed by the bates-stamped page number.

Wyoming to stay the effectiveness of EPA's BART determinations for Laramie River 1-3, Wyodak 1, and Dave Johnston 3. Ord. on Mots. to Stay, Doc. 01019307361 (Sept. 9, 2014). All other aspects of the Wyoming Haze Rule remain in effect.

Beginning May 17, 2017, the Court abated these consolidated appeals, which were fully briefed as of March 16, 2015, to accommodate settlement negotiations between EPA and Basin Electric. Ord. on Mots. to Abate, Doc. 01019811474 (May 17, 2017). The Court denied the Conservation Organizations' requests to allow them to proceed separately with this Petition. Id.; Ord. on Mot. to Proceed Separately, Doc. 01019826971 (June 19, 2017).

On July 22, 2019, EPA and Basin Electric notified the Court that they reached a settlement of Basin Electric's claims related to the Laramie River Station. They jointly moved the Court to lift the abeyance order for the limited purposes of dismissing Basin Electric's petition, Case No. 14-9533, and dismissing Basin Electric as an intervenor in the remaining Consolidated Cases, which this Court granted. Unopposed Mot. to Lift Abatement, Doc. 010110201000 (July 22, 2019).

Subsequently, EPA, Wyoming, and PacifiCorp notified the Court that they had commenced settlement negotiations related to the Wyodak Unit 1 facility, and

requested the Court extend the abatement of the consolidated petitions. Joint Mot. to Extend Time, Doc. 010110255037 (Nov. 4, 2019).

The abatement remained in place until, after settlement negotiations failed to resolve any of the claims in the remaining petitions, this Court ordered the parties to re-brief the petitions. Order, Doc. 010110744060 (Sept. 23, 2022).

STATEMENT OF FACTS

I. THE REGIONAL HAZE PROGRAM

Congress enacted the Clean Air Act's regional haze provisions to protect the "intrinsic beauty and historical and archaeological treasures" of our national parks and wildernesses by eliminating human-caused haze pollution that mars vistas in these "Class I areas." H.R. Rep. No. 95-294, 95th Cong., 1st Sess. at 203-04 (1977), reprinted in 1977 U.S.C.C.A.N. 1077, 1282; see also 42 U.S.C. § 7472(a) (defining Class I areas to encompass most national parks and wilderness areas); id. § 7491(a)(1) (establishing national visibility goal). Haze pollution "reduces the clarity, color, and visible distance that one can see." JA000103. In the western United States, human-caused haze has reduced the visual range in many Class I areas to only 100-150 kilometers—about one-half to two-thirds the range that otherwise would exist. Id. Haze pollution results from a multitude of sources that emit fine particulate matter ("PM") and its precursors, which include sulfur dioxide and nitrogen oxides ("NO_x"). JA000102-03. This same pollution causes "serious

health effects and mortality in humans and contributes to environmental effects such as acid deposition and eutrophication." JA000103.[4]

Sources of air pollution in Wyoming impair visibility in Class I areas both inside and outside the state's borders, including Badlands and Wind Cave National Parks in South Dakota and the Bridger and Fitzpatrick wilderness areas that occupy the western and eastern slopes, respectively, of Wyoming's magnificent Wind River Range. JA000435 (SIP showing Wyoming sources' contribution to visibility impairment in Class I areas in other states), JA000437-438 (describing Wyoming sources' contribution to haze in Bridger and Fitzpatrick wilderness areas); see also JA000322-324 (describing Bridger and Fitzpatrick wilderness areas).

To achieve Congress's national goal of "the prevention of any future, and the remedying of any existing" human-caused haze in Class I areas, 42 U.S.C. § 7491(a)(1), the Clean Air Act requires each state to develop an implementation plan to reduce, and ultimately eliminate, air pollution from sources within its borders that causes or contributes to visibility impairment in any Class I area. Id.

[4] Eutrophication occurs when a body of water acquires a high concentration of nutrients such as nitrates—a form of NO_x—which promote excessive algae growth. As the algae die and decompose, the water is depleted of available oxygen, which kills other resident organisms such as fish. U.S. Geological Survey, Eutrophication, https://www.usgs.gov/centers/wetland-and-aquatic-research-center/science/science-topics/eutrophication (last visited October 12, 2022).

§ 7491(b). These state implementation plans, or "SIPs," must prescribe "emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress toward meeting the national goal." Id. § 7491(b)(2). "EPA reviews all SIPs to ensure that the plans comply with the statute," and it "may not approve any plan that 'would interfere with any applicable requirement.'" Oklahoma v. EPA, 723 F.3d 1201, 1204 (10th Cir. 2013) (quoting 42 U.S.C. § 7410(*l*)). If a SIP does not satisfy statutory and regulatory requirements, EPA must disapprove it and prepare a federal implementation plan, or "FIP." 42 U.S.C. § 7410(c)(1)(B). "[W]hen promulgating a FIP, EPA stands in the shoes of the state" and must satisfy the same statutory and regulatory requirements. JA000189 (Final Rule).

Central to achieving the visibility improvement goal, the Clean Air Act and EPA's Regional Haze Rule, 40 C.F.R. § 51.308, provide that SIPs must require installation of the "best available retrofit technology," or "BART," for controlling haze-forming pollution from certain major stationary sources that began operating between 1962 and 1977 and cause or contribute to visibility impairment in Class I areas.[5] 42 U.S.C. § 7491(b)(2)(A). To determine what technology constitutes

[5] A "major stationary source" falls within one of twenty-six enumerated industrial categories and has the potential to emit at least 250 tons of air pollution annually. 42 U.S.C. § 7491(g)(7).

BART for a particular source, the state (or EPA in promulgating a FIP) must assess:

> the costs of compliance, the energy and nonair quality environmental impacts of compliance, any existing pollution control technology in use at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.

Id. § 7491(g)(2); accord 40 C.F.R. § 51.308(e)(1)(ii)(A). For power plants with a total generating capacity exceeding 750 megawatts, the state's BART analysis must follow EPA's BART Guidelines, codified at 40 C.F.R. Part 51, Appendix Y. 42 U.S.C. § 7491(b)(2); 40 C.F.R. § 51.308(e)(1)(ii)(B). In all cases, the BART-based emission limits adopted by the State must be sufficiently stringent to, in combination with other control measures in the SIP, and provide for the elimination of human-caused haze in affected Class I areas at a reasonable rate of progress. 42 U.S.C. §§ 7491(b)(2), (b)(2)(A).

Because of their age and scale, BART sources make an outsized contribution to the regional haze problem; the need to remedy haze-forming pollution from these sources was "a major concern motivating the adoption of the [Clean Air Act's] visibility provisions." 1999 Regional Haze Rule, 64 Fed. Reg. at 35,737 (quoting H.R. Rep. No. 564, 95th Cong., 1st Sess. at 155 (1977)). Thus, adequate emission controls on sources subject to BART are a necessary first step toward meeting the Clean Air Act's visibility mandate. Additionally, for each Class I area

within a state, the state (or EPA in promulgating a FIP) must establish visibility-improvement goals "that provide for reasonable progress towards achieving natural visibility conditions." 40 C.F.R. § 51.308(d)(1). These "reasonable progress goals" must "provide for an improvement in visibility for the most impaired days over the period of the implementation plan and ensure no degradation in visibility for the least impaired days over the same period." Id. Further, states setting reasonable progress goals must account for EPA's benchmark of restoring natural visibility conditions by 2064. Id. § 51.308(d)(1)(i)(B). To that end, the state must determine the rate of progress necessary to restore natural visibility by 2064—called the "uniform rate of progress" or "glide path," id.—and evaluate all emissions-reduction measures necessary to make such progress, id. § 51.308(d)(1)(i); 1999 Regional Haze Rule, 64 Fed. Reg. at 35,732.[6]

The Conservation Organizations' petition for review challenges EPA's failure to require adequate emission controls in the Final Rule for the Naughton coal-fired power plant. Coal-fired power plants emit more haze-forming NO_x

[6] The requirements of 40 C.F.R. § 51.308(d)(1) were unchanged by EPA's 2017 rule revisions; however, EPA in August 2019 issued guidance, https://www.epa.gov/sites/default/files/2019-08/documents/8-20-2019_-_regional_haze_guidance_final_guidance.pdf, and in July 2021 issued a clarification memorandum, https://www.epa.gov/system/files/documents/2021-07/clarifications-regarding-regional-haze-state-implementation-plans-for-the-second-implementation-period.pdf, providing additional direction to states implementing these requirements.

pollution than any other stationary-source category in the West. JA000430; see also JA001317 ("Electric utilities are perhaps the single largest contributor to poor visibility … Coal-powered electric utilities dominate these emissions …."). Wyoming hosts a large fleet of coal-fired power plants—15 individual units, 13 of which are subject to BART requirements. JA000107; JA000009. The Naughton coal-fired power plant is located near Kemmerer in southwest Wyoming. JA000931. EPA determined that Naughton 1 and 2 reduce visibility by more than one deciview[7] in all seven Class I areas in Wyoming, including Yellowstone and Grand Teton National Parks. See JA002264-2269 (EPA revised modeling results showing maximum visibility impairment under two scenarios).[8] The units collectively reduce visibility by 5 to 5.6 deciviews in the Bridger Wilderness—the Class I area most affected by Naughton. Id. In real terms, these data mean that

[7] Visibility changes of one deciview or more are perceptible across the range of typical meteorological conditions; indeed, "EPA believes that visibility changes of less than one deciview are likely to be perceptible in some cases." Final Rule, Regional Haze Regulations, 64 Fed. Reg. 35,714, 35,726 (July 1, 1999) ("1999 Regional Haze Rule"). Further, even imperceptible changes in visibility attributable to a particular source are significant under the regional haze program because visibility impairment in a Class I area typically results from the cumulative impact of numerous disparate sources, each of which may make a relatively minor contribution to the visibility problem, e.g., JA000236 (Final Rule); it is only by eliminating each of these individual contributions that the Clean Air Act's visibility-improvement mandate can be achieved.

[8] Total visibility impairment is calculated by adding the 98th percentile impairment in the "baseline" scenario for both units.

avoidable pollution from the Naughton plant significantly impairs visibility and dirties the air over some of the West's most treasured landscapes.

II. THE WYOMING REGIONAL HAZE PLAN

A. Wyoming's SIP

Wyoming submitted its SIP to EPA on January 7, 2011. Wyoming's SIP contains BART determinations for NO_x and PM controls at thirteen coal-fired power-plant units and four coal-fired industrial boilers. JA000009. Of central relevance to this petition for review, the SIP proposed BART determinations for Naughton 1 and 2 reflected irrationally weak controls for NO_x emissions.

For Naughton 1 and 2, the State determined that the least effective NO_x controls—low-NO_x burners and overfire air, or "LNB/OFA,"—constitute BART. JA000016. The State rejected higher-performing control options—namely, the addition of selective catalytic reduction ("SCR") or selective non-catalytic reduction ("SNCR") technology to LNB/OFA—based on its judgment that the visibility improvement achievable with those technologies is not worth the cost. See id.

B. EPA's 2012 Proposed Rule

In June 2012, EPA issued a proposed rule partially approving and partially disapproving Wyoming's SIP and promulgating a FIP to replace those components EPA proposed to disapprove. Proposed Rule, State of Wyoming; Regional Haze

State Implementation Plan; Federal Implementation Plan for Regional Haze, 77 Fed. Reg. 33,022 (June 4, 2012) ("2012 Proposed Rule"). Though EPA proposed to disapprove as insufficiently stringent Wyoming's NO_x BART determinations for seven coal-fired power plant units, JA000003, it proposed to approve Wyoming's selection of LNB/OFA as NO_x BART controls for Naughton 1 and 2, accepting Wyoming's determination that higher-performing controls "were not reasonable based on the high cost effectiveness and associated visibility improvement." JA000016.[9]

C. EPA's 2013 Proposed Rule

EPA issued a second proposed rule in June 2013, in which it corrected certain errors the Conservation Organizations, National Park Service, and others had identified in Wyoming's control-cost and visibility-improvement analyses. Proposed Rule, State of Wyoming; Regional Haze State Implementation Plan; Federal Implementation Plan for Regional Haze, 78 Fed. Reg. 34,738 (June 10, 2013) ("2013 Proposed Rule"). Based on its revised analyses, in the 2013 Proposed Rule EPA concluded that Wyoming's NO_x BART determinations for eight coal-fired power-plant units—including Naughton 1 and 2—"could not be

[9] The higher-performing options were (1) LNB/OFA plus SCR—the most effective control option—or (2) LNB/OFA plus SNCR, which is the next-most effective option. JA000015-16.

supported, warranting a FIP." JA000055. For Naughton 1 and 2, EPA conducted its own BART analysis based on the five statutory factors, 42 U.S.C. § 7491(g)(2), and EPA's BART Guidelines, 40 C.F.R. Pt. 51 App. Y, and concluded that LNB/OFA plus SCR is "the best system of continuous emission control technology available," id. § 51.308(e)(1)(ii)(A), to address these units' substantial visibility impact, JA000088. EPA stressed that SCR's cost-effectiveness value is within the range that Wyoming in its SIP and EPA in other actions have considered reasonable and that installing SCR would result in "significant" cumulative visibility improvement at affected Class I areas—3.54 deciviews from installing the controls at Naughton 1 and 4.18 deciviews from installing the controls at Naughton 2. Id.

D. EPA's Final Rule

On January 30, 2014, EPA promulgated the Final Rule challenged in this petition for review, which, when implemented, would achieve significantly less visibility improvement than the rule EPA proposed in 2013. EPA's Final Rule approved Wyoming's NO_x BART control determinations for 10 of the 15 coal-fired power plant units in the state. JA000107. EPA accepted Wyoming's

selection of the least effective control option—LNB/OFA—as BART for nine of those ten units, id., including Naughton 1 and 2. JA000119.[10]

EPA reversed its earlier preliminary determination that LNB/OFA plus SCR constitutes BART for controlling NO_x emissions from Naughton 1 and 2, accepting Wyoming's selection of LNB/OFA only, which is projected to result in NO_x emission levels four times higher than the level achievable with SCR. JA000118-119. However, most of EPA's conclusions regarding the superior benefits of SCR were unchanged from the 2013 Proposed Rule: In the Final Rule, EPA stated that the visibility improvement at the most-impacted Class I area achievable with SCR "remains significant on a source-wide basis (1.24-1.45 deciviews)," though it appeared "more modest on a unit-specific basis (0.33-0.46 deciviews). The visibility improvement at six other impacted Class I areas continues to support the selection of this option [i.e., SCR] as well." JA000119. EPA also concluded that "the revised average cost-effectiveness values for LNB/OFA + SCR were acceptable." Id. As the sole justification for EPA's reversal of its 2013 BART proposal notwithstanding these findings, EPA stated that SCR's incremental cost-effectiveness value—a cost metric that measures a control technology's cost-effectiveness compared to the next-most stringent option—was higher than values

[10] Wyoming and EPA agreed that LNB/OFA plus SCR is BART for controlling NO_x emissions from Naughton Unit 3. JA000118-119 (Final Rule).

EPA had found acceptable in other FIPs. Id. On that singular basis, EPA concluded "that it was not unreasonable for the State to reject LNB/OFA + SCR as BART." Id.[11]

The Final Rule will unnecessarily leave the skies over affected national parks and wilderness areas shrouded in haze due to EPA's failure to require an adequate level of NOx control at Naughton.

SUMMARY OF ARGUMENT

EPA's Final Rule violates core requirements of the Clean Air Act and Regional Haze Rule. And—though EPA failed to support its decision with required analyses and substantial evidence—the record demonstrates that, under the Final Rule, Wyoming will not satisfy requirements to make reasonable progress toward eliminating its contribution to human-caused haze pollution in

[11] "The incremental cost effectiveness calculation compares the costs and performance level of a control option to those of the next most stringent option …." 40 C.F.R. Pt. 51, App. Y, § IV.D.e. It is calculated as "the difference in total annual costs between [a] control option and the next most stringent option, divided by the difference in emissions, after controls have been applied, between those two control options." JA000011 n.17 (2012 Proposed Rule). Average cost-effectiveness, in contrast, measures "the total annualized costs of control divided by annual emissions reductions" for a single control technology. 40 C.F.R. Pt. 51, App. Y, § IV.D.4.c. Both incremental and average cost-effectiveness measure control performance by emissions reductions at the source, not visibility improvement in a particular Class I area; thus, neither cost value captures directly the visibility benefits of specific control options.

Class I areas. Accordingly, the challenged portions of the Final Rule should be vacated and remanded to EPA.

Specifically, the Final Rule violates the statutory mandate to require the "best available retrofit technology," or "BART," for controlling emissions of haze-forming pollution from major stationary sources such as Wyoming's Naughton coal-fired power plant. 42 U.S.C. § 7491(b)(2)(A). In the Final Rule, EPA arbitrarily approved Wyoming's determination that the weakest available NO_x controls constitute BART for Naughton 1 and 2, in contravention of the statutory mandate to select BART controls constituting the best technology available and which are stringent enough to assure reasonable progress toward eliminating human-caused haze. Id. §§ 7491(b)(2), (b)(2)(A). EPA's NO_x BART determination for Naughton 1 and 2 also violates statutory and regulatory requirements because it was not based on a reasoned analysis of the five statutory BART factors, see id. § 7491(g)(2) (establishing factors for determining BART), and it rests on an unsupported and inaccurate estimate of the costs of more effective controls.

ARGUMENT

This Court should set aside the challenged components of the Final Rule to vindicate Congress's mandate to restore natural visibility conditions over some of our nation's most iconic landscapes. In the Final Rule, EPA's determination that

the weakest available NO_x controls constitute BART for Naughton 1 and 2 runs counter to the record evidence and violates the statutory and regulatory mandates to install the best available emission controls on BART sources and adopt an implementation plan that provides for reasonable progress toward eliminating human-caused haze pollution. Accordingly, these components of the Final Rule are unlawful and should be set aside.

I. STANDARD OF REVIEW

This petition for review is governed by 42 U.S.C. § 7607(d)(9), which authorizes the Court to set aside portions of EPA's Final Rule that are "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." "'Agency action is arbitrary or capricious if 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 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.'" Oklahoma, 723 F.3d at 1211 (quoting Ariz. Pub. Serv. Co. v. EPA, 562 F.3d 1116, 1123 (10th Cir. 2009)). The reviewing court must ensure that "the agency examined the relevant data and articulated a rational connection between the facts found and the decision made." Cliffs Synfuel Corp. v. Norton, 291 F.3d 1250, 1257 (10th Cir. 2002) (quotation omitted). "[J]udicial review can occur only when agencies explain their decisions

with precision, for '[i]t will not do for a court to be compelled to guess at the theory underlying the agency's action ….'" Am. Lung Ass'n v. EPA, 134 F.3d 388, 392 (D.C. Cir. 1998) (quoting SEC v. Chenery Corp., 332 U.S. 194, 196-97 (1947)). And "[t]his requirement means, among other things, that an agency 'must cogently explain why it has exercised its discretion in a given manner.'" United States v. Magnesium Corp. of Am., 616 F.3d 1129, 1144 (10th Cir. 2010) (quoting Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29 (1983)).

In reviewing SIPs under the regional haze program, "EPA has substantive authority to assure that a state's proposals comply with the [Clean Air] Act, not simply the ministerial authority to assure that the state has made some determination of BART." Arizona ex rel. Darwin v. EPA, 815 F.3d 519, 531 (9th Cir. 2016) (emphasis in original); see also Nebraska v. EPA, 812 F.3d 662, 667 (8th Cir. 2016) (stating EPA's role is to determine whether SIP "is reasonably moored to the [Act's] provisions") (quotation and citation omitted; alteration in original)). Further, EPA must cogently explain why the costs and benefits of specific emissions controls warrant or preclude their selection as BART. Nat'l Parks Conservation Ass'n v. EPA, 788 F.3d 1134, 1145 (9th Cir. 2015). As will be shown below, EPA failed to rationally exercise its substantive authority to ensure compliance with the Act.

II. EPA ARBITRARILY REJECTED THE MOST EFFECTIVE NO_X CONTROLS AS BART FOR NAUGHTON UNITS 1 AND 2

EPA's application of the Clean Air Act's "best available retrofit technology," or "BART" requirements to NO_x emissions from units 1 and 2 of the Naughton coal-fired power plant violates the Clean Air Act and Regional Haze Rule. Together, Naughton 1 and 2 perceptibly degrade visibility in all seven Class I areas in Wyoming—including Yellowstone and Grand Teton National Parks and the Bridger and Fitzpatrick wilderness areas in the Wind River Range, JA002264-2269—and Wyoming projected that visibility in the Class I area most impacted by Naughton—the Bridger Wilderness—will remain impaired for over one hundred years beyond EPA's 2064 benchmark for eliminating human-caused haze, JA000416. Yet in the Final Rule, EPA rejected the most effective NO_x control option—LNB/OFA plus SCR—as BART for Naughton 1 and 2, approving Wyoming's selection of the weakest option—LNB/OFA only. JA000119. This determination—which allows Naughton 1 and 2 to emit four times the haze-forming NO_x pollution they would with SCR, see JA000118-119 (stating emission rates achievable with and without SCR)—was arbitrary and unlawful.

In the Clean Air Act's regional haze provisions, Congress focused first and foremost on controlling emissions from the oldest and dirtiest sources of haze pollution, mandating installation of "the best available retrofit technology" at these sources through each state's first regional haze SIP. See 42 U.S.C.

§ 7491(b)(2)(A) (requiring BART at major stationary sources of haze pollution that began operating between 1962 and 1977 and cause or contribute to visibility impairment in a Class I area); see also, e.g., Proposed Rule, Regional Haze Regulations, 62 Fed. Reg. 41,138, 41,149 (July 31, 1997) ("The provisions in the Act requiring BART appear to demonstrate Congress'[s] intention to focus attention on this specific set of large existing sources, which are minimally controlling emissions, as possible candidates for emissions reductions needed to make reasonable progress toward the national visibility goal."). The BART requirement is designed to achieve major pollution reductions within the first five years of a haze plan's implementation. 42 U.S.C. §§ 7491(b)(2)(A), (g)(4). Accordingly, BART implementation offers a critical opportunity for EPA to ensure significant gains toward achieving the Clean Air Act's national visibility goal. Without adequate pollution controls on these large sources, natural visibility conditions may never be restored.

The pollution controls selected as BART must constitute "the best system of continuous emission control technology available and associated emission reductions achievable," 40 C.F.R. § 51.308(e)(1)(ii)(A) (emphasis added), and, in combination with the SIP's reasonable progress controls, must provide for the elimination of human-caused haze pollution in affected Class I areas at a reasonable rate of progress, 42 U.S.C. §§ 7491(b)(2), (b)(2)(A). Subject to these

overarching mandates, the BART determination must rest on a reasoned evaluation of five factors: (1) the costs of available controls, (2) the energy and non-air quality environmental impacts of available controls, (3) any existing controls in use at the source, (4) the source's remaining useful life, and (5) the degree of visibility improvement achievable with available controls. Id. § 7491(g)(2); 40 C.F.R. § 51.308(e)(1)(ii)(A). "The factors [a]re meant to be considered together," and the agency may not treat a single factor significantly differently from the others. Am. Corn Growers Ass'n v. EPA, 291 F.3d 1, 6 (D.C. Cir. 2002).

Contrary to these authorities, EPA approved Wyoming's selection of LNB/OFA—the least effective NO_x control option—as BART for Naughton 1 and 2. This decision violated the Clean Air Act and Regional Haze Rule because (1) EPA arbitrarily rejected the most effective control option—LNB/OFA plus SCR—solely because its incremental cost-effectiveness exceeds that of controls EPA has approved in other, unspecified haze rules; and, (2) EPA overestimated the costs of retrofitting Naughton 1 and 2 with SCR, which, if corrected, would show that SCR is even more cost-effective than EPA found. See Nat'l Parks Conservation Ass'n v. EPA, 803 F.3d 151 (3d Cir. 2015) ("NPCA") ("EPA's conclusory assertions on the issue of control costs and its invocation of its own experience addressing cost estimates do not suffice" to support selection of weak controls as BART.).

A. EPA Violated the Clean Air Act and Regional Haze Rule by Rejecting SCR Based Solely on Incremental Costs

In the Final Rule, EPA abandoned its proposal to require SCR, in addition to LNB/OFA, as NO_x BART controls for Naughton units 1 and 2 because the incremental cost-effectiveness value for the SCR control option was "beyond the upper end of the range … of what [EPA has] found to be acceptable in … other FIPs." JA000119. This determination was unlawful because EPA gave controlling weight to "incremental" costs, even though EPA determined that average cost-effectiveness, visibility improvement, and the other BART factors uniformly supported SCR. Further, EPA's own analysis demonstrates that the controls EPA selected—LNB/OFA—are not "the best" emission-reduction technology available, 40 C.F.R. § 51.308(e)(1)(ii)(A), and are not sufficiently stringent to assure reasonable progress toward the national visibility goal at affected Class I areas, 42 U.S.C. § 7491(b)(2). Accordingly, EPA's NO_x BART determination for Naughton 1 and 2 should be set aside.

EPA's BART analysis in the Final Rule demonstrates that the agency gave a single cost metric—incremental cost-effectiveness—controlling weight in rejecting SCR for Naughton 1 and 2, in violation of statutory and regulatory mandates to determine BART from a reasoned analysis of five specified factors. Id. § 7491(g)(2); 40 C.F.R. § 51.308(e)(1)(ii)(A); see also Am. Corn Growers, 291 F.3d at 6 (holding that EPA may not "extract[] one of the five statutory factors" for

determining BART and "treat[] it differently than the other four"). As in the 2013 Proposed Rule, which concluded that LNB/OFA plus SCR is BART for these units, EPA found the SCR control option reasonably cost-effective in the Final Rule. JA000118 (Final Rule) (finding average cost-effectiveness of LNB/OFA plus SCR "acceptable"); JA000088 (2013 Proposed Rule) (finding cost-effectiveness values for LNB/OFA plus SCR "are reasonable"). Further, in both instances EPA identified no environmental impacts, remaining-useful-life issues, or existing controls that undermined SCR's reasonableness. JA000119 (Final Rule); JA000088 (2013 Proposed Rule). Finally, in both the 2013 proposal and the Final Rule, EPA determined that installing SCR on the three Naughton units would achieve significant visibility improvement at affected Class I areas. JA000119 (Final Rule); JA000088 (2013 Proposed Rule).[12] Specifically, in the Final Rule EPA estimated that installing LNB/OFA plus SCR on all three Naughton units alone would improve visibility in the Bridger Wilderness by 1.24-1.45 deciviews—a perceptible change—and yield significant improvement at additional Class I areas. JA000118-119. In short, EPA's analysis of average cost-

[12] EPA considered the visibility benefits of installing SCR at all three Naughton units, consistent with the requirement in EPA's BART Guidelines to "'conduct a visibility improvement determination for the source(s) as part of the BART determination,'" which "requires consideration of the visibility improvement from BART applied to the BART-eligible source as a whole." JA000116 (Final Rule) (quoting 40 C.F.R. Pt. 51, App. Y) (emphasis added).

effectiveness, non-air quality environmental impacts, remaining useful life of the source, existing controls, and visibility benefits—i.e., all five BART factors—supported the selection of SCR.

But after presenting this favorable analysis of SCR in the Final Rule, EPA stated:

> [H]owever, we found that while the revised average cost-effectiveness values for LNB/OFA + SCR were acceptable, the revised incremental cost-effectiveness values were beyond the upper end of the range … of what we have found to be acceptable in our other FIPs. For Units 1 and 2, respectively, the average cost-effectiveness per unit is $3,109 and $2,566/ton, while the incremental cost-effectiveness is $10,384 and $8,440/ton. Consequently, we believe that it was not unreasonable for the State to reject LNB/OFA + SCR as BART.

JA000119. This explanation belies EPA's claim that it "based its decisions on the BART determinations … on a careful weighing of the five factors." JA000238; see also JA000116 (asserting that "[t]he interplay among the five factors, and in particular the cost and visibility factors, is highly significant and determinative of the outcome"). Instead, EPA placed controlling weight on only one aspect of the costs of compliance—incremental cost—without "weighing" incremental cost against other cost metrics and the remaining BART factors or otherwise accounting for its analysis of the remaining factors.

EPA's approach contradicts the agency's own interpretation of the function of incremental costs in a BART analysis. As EPA asserted in the Final Rule,

"incremental costs are to be considered within the context of the five [BART] factors, including average cost effectiveness and visibility improvement," and high incremental costs may render more stringent controls unreasonable "when considered with visibility improvement." JA000238 (emphasis added). In other words, subject to the overriding statutory requirement to select as BART "the best" technology available and assure reasonable progress toward eliminating human-caused haze, a state or EPA might reasonably reject the most stringent controls if they are significantly more expensive than the next-most stringent option and offer insignificant visibility benefits. If supported by the record, such an analysis could constitute a permissible cost-benefit judgment—provided that the suite of BART controls and other strategies required by the SIP satisfy the overriding reasonable progress mandate. But here, EPA did not make a reasoned cost-benefit judgment that SCR is "not worth it"; instead, it treated incremental costs in a vacuum, and its own explanation demonstrates that this single factor was dispositive of the BART determination. See JA000119 (articulating grounds for rejecting SCR). This

approach violated EPA's duty to make BART determinations based on a rational balancing of the five statutory factors.[13]

More fundamentally, EPA's approach of vetoing the most effective controls based solely on incremental cost cannot be reconciled with the Clean Air Act's mandate to determine BART in light of the visibility improvement necessary to make reasonable progress toward the national visibility goal. See 42 U.S.C. § 7491(b)(2)(A) (requiring SIPs to contain "such emission limits … as may be necessary to make reasonable progress toward meeting the national goal … including" BART-based emission limits for certain stationary sources). The record in this case demonstrates that installing SCR on Naughton 1 and 2 is necessary to make the requisite progress toward restoring natural visibility in affected Class I areas. As described above, Naughton 1 and 2 perceptibly degrade visibility in all seven of Wyoming's Class I areas and degrade visibility in the Bridger Wilderness by 5 to 5.6 deciviews. JA002264-2269 (EPA revised modeling results showing

[13] EPA further misused the incremental cost-effectiveness factor by relying on it to reject the most stringent control option—SCR—while also rejecting the next-most stringent control option—SNCR. JA000119 (Final Rule). Incremental cost-effectiveness is inherently comparative; in analyzing the incremental cost of SCR, EPA asked whether the additional visibility benefits of SCR compared to SNCR are worth the additional cost over and above SNCR. Thus, SCR's incremental cost-effectiveness value has meaning only insofar as the agency is choosing between SCR and SNCR. It cannot supply a rational basis for rejecting SCR where the next-most stringent control also is rejected.

maximum visibility impairment under the baseline scenario for each unit, which add up to a 5 to 5.6 deciviews impairment). And Wyoming estimated that, with LNB/OFA only on Naughton 1 and 2, visibility in the Bridger Wilderness will remain impaired until 2165—more than a century beyond EPA's 2064 benchmark. JA000414-16. Given this record—and EPA's conclusions that the average cost-effectiveness, visibility improvement, non-air quality environmental impacts, remaining useful life of the source, and existing controls factors support SCR—EPA's rejection of SCR in favor of the weakest available NO_x controls flouts the statutory mandate to "take into consideration" the five BART factors, 42 U.S.C. § 7491(g)(2), and establish BART-based emission limits "as may be necessary to make reasonable progress toward meeting the national [visibility] goal," id. § 7491(b)(2). See North Dakota v. EPA, 730 F.3d 750, 761 (8th Cir. 2013) (holding that "flaw[s] in the analysis prevented the state from conducting a meaningful consideration of [one of the required BART] factor[s], as required by the BART guidelines"). EPA's abstract judgment that the incremental cost of the most effective control option is too high cannot supersede this fundamental mandate.

Finally, EPA's justification for rejecting SCR for Naughton 1 and 2 effectively establishes a ceiling for incremental costs, which is untethered from statutory or regulatory standards and rests exclusively on EPA's past practice. See

JA000119 (Final Rule) (rejecting SCR because its incremental cost-effectiveness values "were beyond the upper end of the range … of what we have found to be acceptable in our other FIPs") (emphasis added). "EPA's conclusory assertions on the issue of control costs and its invocation of its own experience addressing cost estimates do not suffice" to support its rejection of SCR for Naughton 1 and 2 and "a reviewing court, need[s] an agency to show its work before [it] can accept its conclusions[.]" Nat'l Parks Conservation Ass'n, 803 F.3d at 166-67. Further, EPA cannot simply rely on its incremental cost effectiveness judgments in other FIPs, which were based on distinct factual records concerning the five BART factors, without justifying its determination regarding the Naughton BART determinations based on the evidence before EPA on those actions. Moreover, the Clean Air Act does not authorize EPA to establish a ceiling for acceptable incremental costs of BART controls, above which controls will be rejected regardless of their visibility benefits. Instead, the Act mandates that EPA "shall take into consideration" the five BART factors, 42 U.S.C. § 7491(g)(2), and establish BART-based emission limits "as may be necessary to make reasonable progress toward meeting the national [visibility] goal," id. § 7491(b)(2). EPA failed to do so in the Final Rule.

Ultimately, to fulfill Congress's intent in the Clean Air Act, EPA's role is to "assure that a state's proposals [under the regional haze program] comply with the

Act, not simply … to assure that the state has made some determination of BART." Arizona ex rel. Darwin, 815 F.3d at 531; Nebraska, 812 F.3d at 667 (same); see also North Dakota, 730 F.3d at 760-61 ("Although the [Clean Air Act] grants states the primary role of determining the appropriate pollution controls within their borders, EPA is left with more than the ministerial task of routinely approving SIP submissions."). In sum, EPA's rejection of SCR as BART for Naughton 1 and 2 contradicts the agency's own BART analysis and violates the statutory mandate to require as BART those controls that are necessary—in conjunction with the other requirements of the SIP—to assure reasonable progress toward eliminating human-caused haze pollution in Class I areas. EPA must consider full control costs in tandem with the other four BART factors to select appropriate controls from among the universe of technologies that will assure reasonable progress. But it cannot reject necessary and cost-effective controls simply because a single cost metric—incremental costs–are higher than those of controls EPA has approved in other rules. EPA's own five-factor BART analysis demonstrates that LNB/OFA plus SCR is reasonable for Naughton 1 and 2 and that inferior NO_x controls will not provide for reasonable progress. EPA's decision to reject SCR based on incremental cost was arbitrary and should be set aside.

B. EPA Applied an Arbitrary Retrofit Factor to its SCR Cost Estimates, Which Skewed its BART Analysis

In addition to impermissible reliance on incremental cost-effectiveness, EPA's NO_x BART determination for Naughton 1 and 2 is unlawful because EPA applied an arbitrary "retrofit factor" to its SCR cost calculations, which inflated the estimated cost of SCR by thirty percent and skewed EPA's BART determination. EPA's use of an unjustified retrofit factor provides additional and independent grounds for setting aside its NO_x BART determination for these units.

Because of flaws in Wyoming's cost analyses, EPA developed its own cost estimates for potential BART controls. JA000053-54. But EPA's analyses were also flawed. To calculate the costs of retrofitting specific coal-plant units with SCR, EPA relied on the Integrated Planning Model or "IPM," JA000054, which provides cost algorithms "based upon actual retrofits and incorporates all of the costs normally associated with retrofit of an SCR," JA000222 (Final Rule). In estimating control costs for Naughton, EPA also considered estimates provided by PacifiCorp, the plant's operator. See JA000223 (Final Rule) (discussing report prepared by PacifiCorp consultant Babcock & Wilcox). EPA's consultant noted that PacifiCorp did not "report[] the kind of issues that tend to dramatically increase retrofit costs, such as the need for relocation of major pieces of equipment," JA002119, and specifically rejected certain grounds on which PacifiCorp estimated higher-than-normal SCR installation costs, JA002157. A

"typical SCR retrofit," which would include normal space constraints and other site-specific challenges, would have a retrofit factor of 1.0. JA001935. Nevertheless, EPA applied a "retrofit difficulty factor of 1.3" to its SCR cost estimates for all three Naughton units, increasing the IPM-generated cost estimates by thirty percent. JA000223 (Final Rule).[14] EPA explained that, for Naughton 1 and 2, this retrofit factor "was based upon the fact that [Naughton] appeared to be a less congested site than Dave Johnston, but there were potential challenges"—such as abandoned chimneys creating obstructions on the site—"that could result in longer duct runs or additional demolition." Id.

EPA's application of a retrofit factor to increase by thirty percent its SCR cost estimates for Naughton 1 and 2 was unsupported by the record and arbitrary. First, by applying a retrofit factor to the IPM-generated cost estimates, EPA impermissibly double-counted costs associated with the challenges of installing SCR on existing coal-plant units. As explained in EPA's Control Cost Manual, installing pollution controls on existing facilities can increase capital costs compared to installation at newly constructed facilities because of the need "to

[14] EPA applied retrofit factors to inflate the IPM-generated control-cost estimates for 13 of the 15 coal-plant units it evaluated, thereby assuming that all but two of Wyoming's coal-plant units present exceptionally difficult retrofit conditions. JA000221. As the Conservation Organizations explained in comments on the 2013 Proposed Rule, in no case did EPA justify application of a retrofit factor to its SCR cost estimates. JA001935-1938.

'shoe-horn' the equipment into the right locations." U.S. Env't Prot. Agency, EPA Air Pollution Control Cost Manual § 2.5.4.2 (6th ed. 2002), available at https://www3.epa.gov/ttncatc1/dir1/c_allchs.pdf (last visited Oct. 12, 2022). "To quantify the unanticipated additional costs of installation not directly related to the capital cost of the controls themselves, engineers and cost analysts typically multiply the cost of the system by a retrofit factor." Id. In other words, a retrofit factor may be necessary to account for the increased cost of installing controls at an existing facility relative to the cost of installing the same controls at a new facility. But as described above, the IPM algorithms EPA used to estimate control costs for Naughton are derived from a database of actual SCR retrofits completed across the country; thus, in EPA's words, the IPM already "incorporates all of the costs normally associated with retrofit of an SCR," JA000222 (Final Rule), and there is no need to adjust the IPM-generated estimate upward absent evidence that a particular retrofit project will be uniquely difficult.[15] Here, as EPA's consultant observed, PacifiCorp did not "report[] the kind of issues that tend to dramatically increase retrofit costs …." JA002119. Thus, EPA had no basis to assume that the costs of installing SCR on Naughton 1 and 2 would exceed those of typical SCR

[15] Though EPA relied extensively on the Control Cost Manual to justify its selected retrofit factors, see JA000222 (EPA responses to comments), the Control Cost Manual does not reference the IPM or explain how a retrofit factor reasonably applies to IPM-generated cost estimates.

retrofits, and its application of a retrofit factor to the IPM-generated cost estimates double-counted the costs inherent in SCR retrofits.

Second, even assuming an upward adjustment of the IPM-generated cost estimate was warranted, EPA failed to justify the retrofit factor of 1.3 it selected. EPA identified two attributes of the Naughton site that could increase SCR retrofit costs: (1) site congestion, which can impede access for the crane needed to complete the installation, make it more difficult to transport and organize construction materials, and potentially require demolition of existing equipment to make room for the SCR; and (2) the location of abandoned chimneys on the site, which could necessitate demolition of the chimneys or additional duct work if the chimneys remain in place. See JA000223 (Final Rule) (explaining basis for retrofit factor of 1.3 for Naughton 1 and 2); JA000222 (describing site characteristics that can increase retrofit costs generally). However, EPA never quantified or otherwise explained the magnitude of costs associated with the site-specific challenges on which its retrofit factor ostensibly rested, except to assert that Naughton "appear[s] to be a less congested site than Dave Johnston," JA000223, which EPA elsewhere

described as "one of the more congested sites in Wyoming," JA000222.[16] Neither EPA's consultant nor PacifiCorp's consultant provided a breakdown of SCR retrofit costs, which might indicate why the site-specific challenges they identified translated to a thirty percent cost increase specifically. See generally JA002110-2166 (EPA consultant's report); JA001998-2014 (PacifiCorp consultant's report). Instead, in the Final Rule EPA asserted only that "[t]here are no strict guidelines used for determining the actual value of retrofit factors"—they "are a matter of judgment"—and insisted that the cursory explanation for its chosen retrofit factor cited above shows that its determination was "the result of a thoughtful process, and w[as] not arbitrary." JA000222. But EPA must "articulate[] a rational connection between the facts found and the decision made," Cliffs Synfuel Corp., 291 F.3d at 1257 (quotation omitted); the agency's bare assertion that it thoughtfully exercised its judgment is insufficient to justify its determination that a factor of 1.3—as opposed to any other number—was warranted. See Ass'n of Private Colleges & Univs. v. Duncan, 870 F. Supp. 2d 133, 154 (D.D.C. 2012)

[16] EPA applied a retrofit factor of 1.5 to its SCR cost estimates for Dave Johnston 1-4. JA000222. As noted supra, note 15, EPA likewise failed to justify its application of a retrofit factor of 1.5 to the Dave Johnston units; accordingly, the 1.5 figure does not provide a reasonable point of comparison for quantifying the retrofit difficulty of Naughton 1 and 2.

("That this explanation could be used to justify any [determination] at all demonstrates its arbitrariness").

EPA's arbitrary decision to apply a retrofit factor of 1.3 to its SCR cost estimates rendered its BART determination for Naughton 1 and 2 unlawful. As EPA explained in rejecting Wyoming's analyses, accurate cost estimates are an essential component of a defensible BART determination. See, e.g., JA000122 (Final Rule) ("To the extent a cost analysis relies on values that are inaccurate, a state has not considered cost in a reasoned or reasonable fashion."); JA000147 (Final Rule) (affirming that "appropriate technical analyses are fundamental to a reasoned BART determination"); see also 42 U.S.C. § 7491(g)(2) (establishing BART factors). For example, this Court previously held that methodological flaws in a state's cost of compliance estimate—which "greatly overestimated" the cost of controls—are a basis for rejecting a state's BART determination for failure to comply with BART guidelines. Oklahoma, 723 F.3d at 1211; see also North Dakota, 730 F.3d at 761. Further, EPA's unsupported retrofit factor had an outsized impact on its BART determination for Naughton 1 and 2 because, as explained above, EPA relied conclusively on incremental costs as the basis for rejecting SCR. See supra, Point II.A. Accordingly, EPA's arbitrary application of a retrofit factor to its SCR cost estimates provides additional and independent grounds for setting aside its NO_x BART determination for Naughton 1 and 2.

CONCLUSION

For the foregoing reasons, the Conservation Organizations respectfully request that the Court vacate and remand the Final Rule's NO_x BART determination for Naughton 1 and 2.

STATEMENT REGARDING ORAL ARGUMENT

This case raises novel issues regarding implementation of the Clean Air Act's regional haze program and concerns air quality over some of our nation's most treasured public lands. Given the complexity and consequence of the issues raised, the Conservation Organizations respectfully request oral argument.

Respectfully submitted this 28th day of October, 2022.

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CERTIFICATION FOR ECF PLEADING

I hereby certify with respect to the foregoing that all required privacy redactions have been made; that if required to file hard copies with the clerk's office, the ECF submission is an exact copy of those documents; and that the ECF submission was scanned for viruses with Microsoft Defender Version 1.377.940.0 (last updated October 28, 2022), and according to the program is free of viruses.

Respectfully submitted October 28, 2022.

s/ Jenny K. Harbine

CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITATION

As required by Fed. R. App. P. 32(a)(7)(C), I certify that this brief is proportionally spaced and contains 7,995 words. I relied on my Microsoft Word word processing tool to obtain the count.

I certify that the information in this certificate is true and correct to the best of my knowledge and belief formed after a reasonable inquiry.

Respectfully submitted October 28, 2022.

s/ Jenny K. Harbine

CERTIFICATE OF SERVICE

I certify that on this 28th day of October, 2022, I electronically filed the foregoing Petitioners' Opening Brief with the Clerk of the Court for the United States Court of Appeals for the Tenth Circuit by using the appellate CM/ECF system, which will send notification of this filing to all attorneys of record.

s/ Jenny K. Harbine