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Via Federal Express and Email

Re: Petition for Reconsideration of Partial Approval of North Dakota's Regional Haze State Implementation Plan, 77 Fed. Reg. 20894 (Apr. 6, 2012), Docket ID No. EPA-R08-OAR-2010-0406

Dear Administrator Jackson:

Pursuant to Section 307(d)(7)(B) of the Clean Air Act (the "CAA" or the "Act"), 42 U.S.C. § 7607(d)(7)(B), the National Parks Conservation Association and the Sierra Club respectfully petition the Administrator of the Environmental Protection Agency ("EPA" or the "Agency") to reconsider certain aspects of the final rule partially approving North Dakota's Regional Haze State Implementation Plan, 77 Fed. Reg. 20894 (Apr. 6, 2012).

In the final rule, EPA arbitrarily and capriciously reversed its position regarding the technology that constitutes the Best Available Retrofit Technology (“BART”) necessary to control emissions of nitrogen oxides (“NOx”) at Milton R. Young Station Units 1 and 2 (“Milton R. Young”) and Leland Olds Station Unit 2 (“Leland Olds”). Initially, EPA proposed to reject North Dakota’s determination that selective non-catalytic reduction (“SNCR”) plus advanced separated overfire air (“ASOFA”) was BART for Milton R. Young Units 1 and 2 and Leland Olds Unit 2. EPA instead proposed to require a more effective control technology, selective catalytic reduction (“SCR”) plus ASOFA, as BART pursuant to a Federal Implementation Plan (“FIP”). In the final rule, however, EPA relied on a district court decision regarding the application of the Clean Air Act’s Prevention of Significant Deterioration (“PSD”) provisions to Milton R. Young to approve less effective SNCR technology as BART.

EPA based its decision to depart from its proposed BART determination solely on this district court PSD decision, which was not issued until after the November 21, 2011 comment deadline. Thus, Petitioners’ objections arose after the period for public comments, but within the time for judicial review. *See* CAA § 307(d)(7)(B); 42 U.S.C. § 7607(d)(7)(B).

Petitioners’ objection to EPA’s reliance on the district court decision is central to whether the final approval of North Dakota’s BART determinations for Milton R. Young and Leland Olds was unlawful. *Id.* In keeping with the governing requirements to petition for reconsideration, Petitioners request that EPA “convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed.” *Id.*

BACKGROUND

In approving North Dakota’s Regional Haze State Implementation Plan (“SIP”), EPA reversed its proposed conclusion that SCR is BART for Milton R. Young and Leland Olds. It justified this reversal on grounds that North Dakota recently prevailed in parallel litigation regarding its determination of Best Available Control Technology (“BACT”) under the Clean Air Act’s PSD provisions. In that case, the court was required to defer to the State, and it ultimately upheld the State’s conclusion that installation and operation of SCR at Milton R. Young was infeasible under the BACT (as opposed to BART) standard. As set forth in further detail below, EPA reasoned that it was constrained by the district court decision notwithstanding (1) the Agency’s own previous statements that the BACT determination should have no bearing on its BART determination and (2) the district court decision’s silence with respect to EPA’s key conclusions regarding the feasibility of SCR for BART purposes.

I. EPA’s Evaluation of North Dakota’s Regional Haze SIP

On March 3, 2010, North Dakota submitted a Regional Haze SIP revision for EPA’s approval.¹ In creating a SIP to comply with the Clean Air Act’s visibility program and

¹ Proposed Rule, 76 Fed. Reg. 58570, 58579 (Sept. 21, 2011).

implementing regulations, each state must evaluate the controls to be imposed on BART-eligible sources that are reasonably anticipated to cause or contribute to visibility impairment at certain national parks, wilderness areas, wildlife refuges and other “Class I areas” where air quality should be pristine.² For electricity generating units that are larger than 750 MW in size,³ the BART Guidelines set forth a five-step process for determining BART.⁴ Under Step 1, all available retrofit control technologies are identified.⁵ Under Step 2, technically infeasible options are eliminated.⁶ Under Step 3, the control effectiveness of the remaining control technologies is evaluated.⁷ Under Step 4, the cost, energy impacts, non-air quality environmental impacts, and remaining useful life of the source are evaluated.⁸ Finally, under Step 5, visibility impacts are evaluated.⁹

In its original Regional Haze SIP, North Dakota identified a number of potential control options as technically feasible for Milton R. Young Units 1 and 2 and Leland Olds Unit 2, including two forms of SCR: (1) low dust SCR (“LDSCR”), which is located after or “downstream” of pollution control technology designed to remove particulate matter, such as an electrostatic precipitator (“ESP”); and (2) tail-end SCR (“TESCR”), which is located downstream of both particulate control technology and scrubbers designed to remove sulfur dioxide (“SO₂”).¹⁰ Ultimately, however, the State rejected these forms of SCR as not-cost effective and determined that BART was SNCR plus ASOFA.¹¹ On July 28, 2011 with its SIP Amendment No. 1, North Dakota provided EPA with the entire administrative record for its BACT determination in the parallel PSD proceedings (discussed in further detail below) and supplemented its SIP appendix to identify documents that purportedly demonstrated the technical infeasibility of installing and operating LDSCR and TESCR at Milton R. Young.¹²

² A source is BART-eligible if: (1) it is a stationary source within one of 26 enumerated categories; (2) it was not in operation before August 7, 1962 but was in existence on August 7, 1977; and (3) it has the potential to emit 250 tons per year or more of any pollutant. CAA 169A(b)(2)(A), (g)(7); 42 U.S.C. § 7491(b)(2)(A), (g)(7).

³ EPA and North Dakota disagreed about whether Milton R. Young met this threshold. However, EPA proposed to find that Milton R. Young did in fact have a generating capacity greater than 750 MW. In so concluding, EPA relied on the actual operating levels of both units, which exceeded their nameplate capacities, and concluded that the total generating capacity of the two units is 794 MW. *See* 76 Fed. Reg. at 58,596. For Leland Olds, while EPA recognized that the BART Guidelines were not mandatory given its generating capacity, EPA chose to follow them “because they provide a reasonable and consistent approach for determining BART.” *Id.* at 58604.

⁴ 40 C.F.R. pt. 51, app. Y § IV.D.

⁵ *Id.*

⁶ *Id.*

⁷ *Id.*

⁸ *Id.*

⁹ *Id.*

¹⁰ 76 Fed. Reg. at 58596 (Milton R. Young Unit 1), 58597 (Milton R. Young Unit 2), 58597-98 (Leland Olds Unit 2).

¹¹ *Id.* at 58596-97 (Milton R. Young Units 1), 58597 (Milton R. Young Unit 2), 58598 (Leland Olds Unit 2).

¹² *See* SIP Amendment No. 1, Doc. No. EPA-R08-OAR-2010-0406-0026.

A. EPA's Proposed Action on the North Dakota Regional Haze SIP

Notwithstanding the information presented by the State regarding the alleged infeasibility of SCR, EPA, on September 21, 2011, proposed to disapprove North Dakota's SIP to the extent that it required SNCR plus ASOFA as BART to control NO_x emissions for Units 1 and 2 of Milton R. Young and Unit 2 of Leland Olds. EPA based its decision in large part on its technical conclusion that SCR was feasible. In addition, EPA found that North Dakota failed to properly evaluate the costs of compliance and to assess the visibility impacts of alternative BART controls as required under the Act.¹³ Given its proposed disapproval of the State's NO_x BART determinations, EPA proposed a FIP that required SCR plus ASOFA as NO_x BART for Milton R. Young and Leland Olds.¹⁴

Critical to EPA's conclusion that SCR was BART was EPA's determination that, contrary to the State's assertions, successful operation of SCR is feasible at these lignite boilers.¹⁵ Under the BART Guidelines, technical infeasibility must be established "based on physical, chemical, or engineering principles" that demonstrate "why technical difficulties would preclude the successful use of the control option on the emissions unit under review."¹⁶ A technology will be deemed feasible if it is available—in that it can be obtained through commercial channels—and applicable—meaning that it can reasonably be installed and operated on the source type under consideration, or has been used on the same or similar source type.¹⁷

EPA based its feasibility determination on a number of factors. First, EPA rejected the argument that the NO_x BART determination for Milton R. Young Units 1 and 2 and Leland Olds Unit 2 should be influenced by then-ongoing proceedings to determine the "Best Available Control Technology" to control NO_x emissions at Milton R. Young Units 1 and 2. At the time of the proposal, EPA was actively challenging North Dakota's BACT determination regarding the feasibility of SCR in court. However, EPA concluded that the BACT proceeding had no bearing on EPA's evaluation of North Dakota's SIP, including its NO_x BART determinations for Milton R. Young and Leland Olds. As EPA explained, "[o]ur proposed action here pertains to BART,

¹³ 76 Fed Reg. at 58599, 58602, 58604.

¹⁴ *Id.* at 58609-10 (Milton R. Young Unit 1), 58612-13 (Milton R. Young Unit 2), 58618-19 (Leland Olds Unit 2).

¹⁵ *Id.* at 58604-05 (finding that SCR is feasible at Milton R. Young Unit 1, and refusing to eliminate the technology under Step 2 of the BART analysis); *id.* at 58610 (refusing to eliminate SCR as technically infeasible under Step 2 of the BART analysis at Milton R. Young Unit 2 for the reasons described in the BART analysis and determination for Milton R. Young Unit 1); *id.* at 58613 (refusing to eliminate SCR as technically infeasible under Step 2 of the BART analysis at Leland Olds Unit 2 based both on North Dakota's initial determination that TESCR and LDSCR are technically feasible for use on North Dakota electricity generating units burning lignite coal and for the reasons described in the BART analysis and determination for Milton R. Young Unit 1).

¹⁶ *Id.* at 58604 (citing 40 C.F.R. pt. 51, app. Y § IV.D, Step 2).

¹⁷ *Id.*

not BACT, is governed by CAA provisions and regulations specific to regional haze and BART, and is not governed by [the] consent decree” in the BACT proceeding.¹⁸

Second, EPA rejected North Dakota’s view that SCR is not technically feasible for cyclone boilers firing North Dakota lignite. According to the State, the fuel used at Milton R. Young—North Dakota lignite—and the resultant flue gas stream contain high concentrations of sodium and potassium that will rapidly deactivate the SCR catalyst, requiring frequent replacement.¹⁹ EPA rejected this argument, explaining that the State’s expressed concerns about the length of the catalyst life at Milton R. Young were not related to the commercial availability of SCR or the ability of SCR to reduce NO_x emissions in the flue gas stream.²⁰ Rather, the concern that the sodium and potassium constituents in the flue gas would require frequent replacement of the catalyst related to cost of using SCR, not its technical feasibility.²¹ Under the BART Guidelines, if resolution of technical difficulties is a matter of increased cost, the technology will not be deemed infeasible.²²

Third, EPA rejected the State’s argument that two catalyst vendors’ unwillingness to provide typical catalyst life guarantees without first performing catalyst deactivation field testing demonstrated technical infeasibility.²³ As EPA explained, “the vendor guarantee for a specific catalyst life, or lack thereof, is not relevant to the availability of SCR, or its ability to remove NO_x from the gas stream at Milton R. Young Station, but only to the willingness of two catalyst companies to provide a specific catalyst life guarantee without more information.”²⁴ Moreover, EPA noted that neither vendor was unwilling to provide the catalyst absent field testing, just the guarantee.²⁵ In addition, one vendor indicated that it was willing to provide “full performance guarantees on critical operating parameters,” a factor indicating that the vendor believed NO_x could be successfully controlled at Milton R. Young with SCR.²⁶ EPA also pointed out that both catalyst vendors indicated that they believed that they would be able to offer a catalyst life guarantee after testing.²⁷ Thus, EPA rejected the argument that the lack of guarantee overcame the presumption that the technology, which is widely used at hundreds of units burning a variety of coals, is applicable to Milton R. Young.²⁸

¹⁸ *Id.* at 58604 n.41 (discussion regarding Milton R. Young Unit 1); *see also id.* at 58610, 58613 (applying the same reasoning to Milton R. Young Unit 2 and Leland Olds Unit 2).

¹⁹ *Id.* at 58604.

²⁰ *Id.*

²¹ *Id.*

²² *Id.* (citing 40 C.F.R. pt. 51, app. Y § IV.D, Step 2).

²³ *Id.* at 58604-05.

²⁴ *Id.* at 58605.

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.*

²⁸ *Id.* at 58604-05.

EPA further reasoned that North Dakota itself, per Appendix B.5 of its original SIP submission, had initially found that LDSCR and TESCO were technically feasible.²⁹ As North Dakota originally acknowledged, the placement of these technologies downstream from other controls that impact flue gas characteristics is critical. LDSCR is positioned after the ESP, which removes particulates, and TESCO is positioned after both the ESP and the SO₂ scrubber.³⁰ Because these technologies eliminate many of the catalyst poisons in North Dakota lignite, North Dakota had found, and EPA agreed, that the flue gas treated by LDSCR and TESCO would be comparable to flue gas that is successfully treated by SCR at other plants around the country. Moreover, as to Milton R. Young Unit 2, the State found that stack tests confirmed that the ESP and wet scrubber could remove the offending sodium and potassium, resulting in levels “significantly lower” than those present in gas streams of boilers burning peat and wood that were the subject of experimental and pilot scale testing of SCR catalyst life.³¹ Appendix B.5 also indicated that three vendors reported that SCR would be technically feasible for Milton R. Young.³² Lastly, North Dakota had found that existing biomass boilers with flue gas characteristics similar to North Dakota lignite have used TESCO successfully.³³

Finally, EPA’s feasibility determination relied on PM emission testing at Milton R. Young Unit 2 by Microbeam Technologies, Inc. This testing also demonstrated the high removal efficiency of PM and the sodium and potassium catalyst poisons by the ESP and scrubber. Before the ESP, the sodium oxide and potassium oxides were about 50 to 90 times greater than after the ESP, indicating that differences in fuel quality could be offset by locating the SCR after the ESP, as with both LDSCR and TESCO.³⁴

For all of these reasons, EPA concluded that SCR was feasible at both Milton R. Young Units 1 and 2 and Leland Olds Unit 2, and ultimately concluded that SCR was BART.³⁵

B. EPA’s Final Action on the North Dakota SIP and the Agency’s Response to the BACT Enforcement Action

Although EPA proposed to find that SCR was a feasible control to limit NO_x emissions at Milton R. Young Units 1 and 2 and Leland Olds Unit 2, EPA changed its position in the final rulemaking based solely on the outcome of the BACT proceedings. As EPA explained, “[a]fter considering a recent judicial decision, we have decided to approve North Dakota’s NO_x BART determinations for [Milton R. Young Station] 1 and 2 and [Leland Olds Station] 2 and to not promulgate a FIP for NO_x BART for these units.”³⁶ While Leland Olds Unit 2 was not subject to

²⁹ *Id.* at 58605 (citing Appendix B.5 to the State’s March 3, 2010 SIP submission, Doc. No. EPA-R08-OAR-2010-0406-0003).

³⁰ *Id.*

³¹ *Id.*

³² *Id.*

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.* (Milton R. Young Unit 1); *id.* at 58610 (Milton R. Young Unit 2); *id.* at 58613 (Leland Olds Unit 2).

³⁶ 77 Fed. Reg. 20894, 20897 (Apr. 6, 2012).

the BACT decision, EPA reasoned that the technical feasibility analysis applied equally to it because it was the same type of unit burning the same type of coal as Milton R. Young.³⁷ Based on this deference to the judicial decision in the BACT proceedings, EPA approved North Dakota's determination that SNCR plus ASOFA was BART for Milton R. Young Units 1 and 2 and Leland Olds Unit 2.³⁸

EPA did not provide any reasoned explanation for abandoning its view that SCR is BART and that the BACT proceedings in general, and these proceedings in particular, have no bearing on the BART determinations for Milton R. Young Units 1 and 2 and Leland Olds Unit 2. Nowhere in the final rule did EPA explain why, much less provide evidence why, its proposed conclusions regarding the feasibility of SCR were factually incorrect.

To justify its reversal, EPA asserted that under the BART Guidelines, states can rely on a BACT determination to determine BART for the same source "unless new technologies have become available or best control levels for recent retrofits have become more stringent."³⁹ Taking the position that North Dakota could rely on the BACT determination as the equivalent of BART, EPA summarily approved the State's proposal without any further consideration of the five BACT factors.⁴⁰

EPA further stated that finalizing its proposed BART limits would be "inappropriate" in light of the district court's decision on BACT, but EPA offered no explanation why its review was constrained by a decision that did not address BART and that, in any case, employed a standard of review that was expressly deferential to the State—a standard of review that would not apply to EPA's own BART determination.⁴¹

II. BACT Enforcement Action Concerning Milton R. Young Station

The district court decision that ostensibly persuaded EPA to reverse course on its BART proposal affirmed, under a very deferential standard of review, North Dakota's determination that SCR was technically infeasible.⁴²

³⁷ *Id.* at 20898 ("While Leland Olds 2 was not the subject of the BACT determination, the same reasoning that applies to Milton R. Young 1 and 2 also applies to Leland Olds 2. It is the same type of boiler burning North Dakota lignite coal, and North Dakota's views regarding technical infeasibility that the U.S. District Court upheld in the Milton R. Young BACT case apply to it as well.").

³⁸ *Id.*

³⁹ *Id.* (citing 70 Fed. Reg. 39104, 39164 (July 6, 2005)).

⁴⁰ *Id.* ("As a general rule, the selection of a recent BACT level as BART is the equivalent of selecting the most stringent level of control, and consideration of the five statutory BART factors becomes unnecessary.").

⁴¹ *Id.* at 20898.

⁴² See Order Denying Plaintiff's Motion to Stay and Motion for Dispute Resolution, *United States v. Minnkota Power Cooperative, Inc.*, 1:06-cv-00034-DHL-CSM (D.N.D. Dec. 21, 2011) [hereinafter Order].

Leading up to that decision, EPA and North Dakota had alleged that the owners of Milton R. Young, Minnkota Power Cooperative and Square Butte Electric Cooperative (collective referred to herein as “Minnkota”), illegally undertook “major modifications” at Milton R. Young’s two lignite-fired boilers without installing BACT.⁴³ The parties ultimately entered into a Consent Decree under which the State would determine BACT to control NOx emissions and EPA and Minnkota would retain the option to challenge the State’s decision in federal district court.⁴⁴ In such a challenge, the court would sustain North Dakota’s determination “unless the Party disputing the BACT determination demonstrates that it is not supported by the state administrative record and not reasonable in light of applicable statutory and regulatory provisions.”⁴⁵

In November 2010, North Dakota issued its final BACT determination.⁴⁶ It found that all forms of SCR, including LDSCR and TESCO, were technically infeasible and not BACT given, among other issues, the allegedly unique chemical and physical characteristics of a boiler combusting North Dakota lignite.⁴⁷ As a result, the State concluded that SNCR plus ASOFA was BACT.⁴⁸

EPA challenged North Dakota’s BACT determination in May 2011.⁴⁹ On December 21, 2011, the court issued a decision deferring to North Dakota’s conclusion that SCR technology was technically infeasible at Milton R. Young and affirming the corresponding determination that BACT was SNCR plus ASOFA.⁵⁰ The court was convinced that North Dakota could conclude that LDSCR and TESCO were not feasible given the different flue gas characteristics of North Dakota lignite and the absence of vendor performance guarantees.⁵¹ However, the court did not address the key reasons why EPA had concluded that SCR was feasible in its proposed BART determination for Milton R. Young and Leland Olds. Specifically, the court did not

⁴³ *Id.* at 2-4.

⁴⁴ *Id.* at 6; *see also* Consent Decree ¶¶ 65-66, 147, *United States v. Minnkota Power Cooperative, Inc.*, 1:06-cv-00034-DHL-CSM (D.N.D. July 27, 2006) [hereinafter Consent Decree].

⁴⁵ Consent Decree ¶ 147(c).

⁴⁶ *See* Order at 7-13; Admin. Rec. 240, Doc. No. EPA-R08-OAR-2010-0406-0069 (Findings of fact for BACT determination for control of NOx for Milton R. Young Units 1 and 2 from November 2010).

⁴⁷ Admin. Rec. 240 § III.A.23-24 (concluding that LDSCR and TESCO are neither available nor applicable to Milton R. Young).

⁴⁸ *Id.* § VI.

⁴⁹ *See* Memorandum in Support of United States’ Petition for Dispute Resolution Under the 2006 Consent Decree at 2, *United States v. Minnkota Power Cooperative, Inc.*, 1:06-cv-00034-DHL-CSM (D.N.D. May 12, 2011).

⁵⁰ Order at 33.

⁵¹ Order at 23-25 (discussing the lack of vendor guarantees and general evaluations of the flue gas characteristics when finding that North Dakota did not unreasonably conclude that SCR was not an available technology); *id.* at 26-27 (discussing the unique flue gas characteristics when finding that North Dakota did not unreasonably conclude that SCR was not an applicable technology); *see also id.* at 18-21 (discussing generalized flue gas characteristics when finding that North Dakota did not unreasonably conclude that SCR was not a demonstrated technology).

consider EPA's view, expressed in the proposal, that locating the SCR technology downstream of other pollution control devices could remove many offending catalyst poisons, making the flue gas characteristics similar to the characteristics where SCR is routinely installed.⁵² Nor did the court address EPA's view that vendor willingness or unwillingness to provide a catalyst life guarantee had no relation to whether SCR was commercially available or feasible but rather related to the cost of using SCR.⁵³

OBJECTIONS

EPA arbitrarily and capriciously reversed its position regarding BART for controlling NO_x emissions at Milton R. Young Units 1 and 2 and Leland Olds Unit 2, claiming that the district court's decision in the BACT proceeding forced its reversal. *See* 77 Fed. Reg. at 20898 ("In light of the court's decision and the views we have expressed in our BART guidelines on the relationship of BACT to BART, we have concluded that it would be inappropriate to proceed with our proposed disapproval of SNCR as BART and our proposed FIP to impose SCR at [Milton R. Young Units] 1 and 2 and [Leland Olds Unit] 2."). This conclusion is untenable for at least three reasons. First, EPA was not bound by the district court's decision to uphold North Dakota's feasibility analysis as that decision was not decided under the same standard of review that EPA must apply when reviewing a SIP and did not otherwise relieve EPA of its obligation to ensure that the State's Regional Haze SIP submission complies with the Act. Second, EPA wrongly concluded that the district court decision regarding BACT, which did not reject or rule on EPA's reasons for finding SCR feasible, limited EPA's own ability to conclude that SCR is feasible for BART purposes. Finally, EPA wrongly concluded that it could rely on the State's BACT determination in the face of the Agency's own conclusion that better controls are available. For all of these reasons, the district court's decision does not justify EPA's summary rejection of its proposed BART determinations. EPA must reconsider its reversal and, at a minimum, provide a reasoned explanation for why its proposed feasibility determination is no longer correct. Because no such reasoned explanation exists, EPA must reject the State's BART determinations as it did in its proposed rule.

I. EPA Improperly Concluded that the District Court's Decision Mandated EPA's Change of Position.

EPA improperly concluded that the district court decision mandated a decision to affirm North Dakota's NO_x BART determinations for Milton R. Young Units 1 and 2 and Leland Olds Unit 2, notwithstanding EPA's contrary conclusions in its proposal. *See* 77 Fed. Reg. at 20897-98. Because the district court did not stand in the same position in evaluating North Dakota's feasibility analysis as EPA does when reviewing North Dakota's SIP, EPA improperly based its decision to uphold North Dakota's BART determinations on that decision. Likewise, EPA was not required to defer to the district court's decision as it did not cast doubt on EPA's reasons for proposing to reject North Dakota's BART determinations. For all of these reasons, EPA

⁵² 76 Fed. Reg. at 58605.

⁵³ *Id.* at 58604-05.

improperly concluded that the district court's decision mandated its change of position. Without an adequate rationale for its reversal, EPA's BART determinations for Milton R. Young Units 1 and 2 and Leland Olds Unit 2 are arbitrary and capricious.

A. EPA Has An Affirmative Obligation to Review and Reject SIP Submissions That Do Not Comply with the Clean Air Act Irrespective of the District Court's Decision.

EPA improperly concluded that it was required, in light of the district court's opinion, to uphold North Dakota's BACT determinations for Milton R. Young Units 1 and 2 and Leland Olds Unit 2. EPA cannot abdicate its responsibility to evaluate North Dakota's SIP submission by relying on a district court decision that was decided under a different, and very deferential, standard of review. Instead, in evaluating a SIP submission, EPA has an affirmative obligation to determine whether the SIP complies with the Clean Air Act.

EPA must review a SIP submission to ensure that the SIP complies with "all applicable requirements" of the Clean Air Act. 42 U.S.C. § 7410(c)(3); *see also Kennecott Copper Corp. v. Costle*, 572 F.2d 1349 (9th Cir. 1978); *Dow Chem. Co. v. Costle*, F. Supp. 315 (D. Mich. 1978), *aff'd*, 659 F.2d 724 (6th Cir. 1981). In undertaking this review, EPA is not a rubber stamp, but rather must evaluate and assess the State's submission to ensure compliance with the Act. Indeed, as EPA itself has recognized, it cannot approve the State's BART determination simply because the State ostensibly considered the correct factors. 77 Fed. Reg. at 20902.

Instead, EPA has an obligation to evaluate whether the State's determinations are appropriate, *id.*, and it will not defer to the State's decision "under the mantle of state discretion." *Id.* at 20901. As courts have consistently explained, given this affirmative duty, EPA need not defer to a State's technical conclusions about whether a SIP complies with Clean Air Act requirements. For example, as the Ninth Circuit has explained,

The determination whether a particular form of emission control is feasible is obviously a matter requiring an exercise of the Administrator's discretion. This is true without regard to whether the alleged infeasibility rests on economic or technological grounds. This conclusion cannot be rendered immaterial by reliance on the finding by the State . . . that the EPA's constant emission control requirements were economically infeasible. *Such a finding is not binding on the Administrator.* . . . As we observed in Bunker Hill, there is no more reason to bind the Administrator to a state's finding of infeasibility than to a state's conclusion that its plan achieves in a timely fashion the ambient air quality standards.

Kennecott Copper Corp., 572 F.2d at 1354 (emphasis added); *see also Montana Sulphur & Chemical Co. v. EPA*, 666 F.3d 1174, 1189 (9th Cir. 2012); *Navistar Int'l Transp. Corp. v. EPA*, 941 F.2d 1339, 1347, 1350-51, 1357 (6th Cir. 1991).

The district court did not have the same authority to review North Dakota's BACT determination as EPA has to review North Dakota's SIP submission. The district court was limited by a consent decree that obligated North Dakota to issue a BACT determination and provided that a "Court shall sustain the decision by [the State] unless the Party disputing the BACT determination demonstrates that it is not supported by the state administrative record and not reasonable in light of applicable statutory and regulatory provisions." Consent Decree ¶ 147(c).⁵⁴

Given this limited authority, the district court deferred to the State, resolving any disagreement in favor of the State, and concluded that EPA had not proven that North Dakota's BACT determination was unreasonable. Order at 33. The court never reached the question of whether EPA's own BACT analysis, including EPA's conclusion that SCR is technically feasible, was itself reasonable, let alone more persuasive than North Dakota's conclusions regarding feasibility. Similarly, the court never ruled on whether EPA's legal and technical analyses were more consistent with the Clean Air Act. The court determined only that North Dakota's BACT determination, including its conclusion that SCR is not technically feasible, was "not unreasonable." *Id.*; see also Order at 28 (explaining the limited scope of the court's power as follows: "It is important to note that the standard of review is not what the EPA would have concluded even if a reviewing court may find EPA's view more persuasive. Instead, the standard of review is whether North Dakota's conclusion was unreasonable.").

Thus, notwithstanding the district court's opinion, EPA has the authority, and the duty, to disapprove a SIP submission if EPA rationally concludes that the submission does not meet all applicable Clean Air Act requirements.⁵⁵ The district court's decision did not require EPA to reverse position in disregard of the record the Agency itself had compiled. Thus, EPA's reliance on the district court decision in place of a reasoned basis for its reversal renders the final rule arbitrary and capricious.

Moreover, applying the proper legal standard for acting on a SIP submission, and the proper definition of BART, EPA should have reached the same conclusion in its final rule as it reached in the proposed rule: SCR plus ASOFA is BART for Milton R. Young, Units 1 and 2, and Leland Olds Unit 2. EPA found multiple legal and technical errors in North Dakota's BART determinations, 76 Fed. Reg. at 58596-58603, and found that the technical analyses conducted by EPA staff and outside contractors warranted the imposition of stronger BART limits in a FIP.

⁵⁴ This language in the consent decree comes from *Alaska Dep't of Envtl. Conservation v. EPA*, 540 U.S. 461, 495 (2004) (in an EPA civil challenge to a state issued BACT determination, or a challenge to an EPA stop-construction order, EPA bears the burden of showing that the state's BACT determination was not reasonable). EPA's role in reviewing a SIP revision differs significantly from EPA's role in reviewing a state-issued PSD permit. Since the Clean Air Act assigns different roles to EPA in reviewing BACT determinations as opposed to SIP submissions, courts have held EPA to different legal standards when EPA reviews state PSD determinations and SIP submissions.

⁵⁵ See, e.g., *Montana Sulphur*, 666 F.3d at 1189; *Virginia v. Browner*, 80 F.3d 869 (4th Cir. 1996); *Michigan v. Thomas*, 805 F.2d 176 (6th Cir. 1986); *Bethlehem Steel Corp. v. EPA*, 782 F.2d 645 (7th Cir. 1986).

Id. at 58604-19. In the face of the Agency's own conclusions that the State's BART determination was technically flawed and inconsistent with the requirements of the Clean Air Act, EPA could not permissibly defer to North Dakota's BART determination as the district court did.

B. The District Court Decision Left EPA Discretion to Disapprove North Dakota's BART Determinations.

EPA improperly concluded that the district court's opinion mandated EPA's change of position for the further reason that the district court's opinion does not address the key reasons why EPA originally concluded that SCR is feasible. If an agency changes position from proposal to final, the agency must provide a reasonable explanation lest the reversal be deemed arbitrary and capricious. *See, e.g., Trout Unlimited v. Lohn*, 645 F. Supp. 2d 929, 959-60, 965 (D. Or. 2007) (holding that that the National Marine Fisheries Service had not supported its decision to withdraw its proposal to list certain salmon species as threatened, rendering that decision arbitrary and capricious). Where, as here, an agency adopts a position that is inconsistent with its prior conclusions without disavowing those conclusions, and without adequate support for the change of position, courts have found the change of position arbitrary and capricious. *See id.*

Again, the district court's role in the BACT proceeding was simply to assess whether North Dakota's BACT determination was "reasonable in light of applicable statutory and regulatory provisions." *See Order* at 14-16. In undertaking its review, the court did not consider many of EPA's reasons for concluding that SCR is a feasible technology that should be designated as BART. Crucially, in the proposed rejection of North Dakota's BART determinations for Milton R. Young Units 1 and 2 and Leland Olds Unit 2, EPA asserted that the potential need for frequent catalyst replacement relates to whether using SCR is economical, not whether it is available or could operate on units combusting North Dakota lignite. *See 76 Fed. Reg.* at 58604 (explaining that the concern over catalyst deactivation and the need for frequent catalyst replacement relates to cost). Nowhere in its decision did the court reject or even mention this argument. Instead, the court focused on North Dakota's argument that the lack of vendor willingness to guarantee the catalyst life indicated that the technology was unavailable, and that the allegedly different flue gas characteristics of units rendered the technology inapplicable. *See Order* at 23-24, 25, 18-20, 27.

In addition, the court did not consider EPA's conclusion that the potential differences between the flue gas characteristics at units firing North Dakota lignite and units using other coals were irrelevant to the feasibility of LDSCR or TESCR. In proposing to reject North Dakota's BART determinations and find SCR feasible, EPA relied on North Dakota's reasoning in its initial SIP submission that LDSCR and TESCR were technically feasible because they are located downstream of controls that remove particulates and SO₂ as well as catalyst poisons that can arise when combusting North Dakota lignite. *76 Fed. Reg.* at 58605. EPA also relied on the Microbeam Testing that demonstrated the changed flue gas conditions downstream of pollution controls. *Id.* The court's opinion, however, does not mention that the flue gas stream varies depending whether one tests before or after pollutant removal by other controls. Instead, the

court simply deferred to North Dakota's determination in the BACT proceeding that the *general* flue gas characteristics of a plant firing North Dakota lignite rendered the technology infeasible. *See* Order at 18-19, 24.

Because the district court decision did not reject, dismiss, or denigrate EPA's view that SCR is feasible when placed downstream of other pollution control technologies, regardless of whether vendors are willing to guarantee the catalyst life, EPA was wrong to conclude that the decision limited EPA's ability to reject North Dakota's feasibility analysis and BART determinations.

Contrary to EPA's assertion in the final rule, it would not have been inappropriate for EPA to finalize its proposed finding that SCR is feasible given the available record evidence, even after the district court deferred to North Dakota's infeasibility determination in the BACT context. As discussed above, EPA must disapprove a SIP if EPA finds that the SIP submission will not meet the requirements of the Clean Air Act. Such decisions will be upheld where rational. *See, e.g., Montana Sulphur*, 666 F.3d at 1189; *Virginia v. Browner*, 80 F.3d 869 (4th Cir. 1996); *Michigan v. Thomas*, 805 F.2d 176 (6th Cir. 1986); *Bethlehem Steel Corp. v. EPA*, 782 F.2d 645 (7th Cir. 1986).

The record is replete with information that would, and in fact did, allow EPA in its proposed rule to rationally conclude that SCR, the most effective NO_x control currently available, is technical feasible on coal plants firing North Dakota lignite when the SCR is placed downstream of other pollution control devices.⁵⁶ For example, the record includes:

- The Microbeam Technologies Final Report, which assessed the particulate characteristics upstream and downstream of ESP and SO₂ scrubber (such gas a wet flue gas desulfurization) and demonstrates the high removal efficiency of these controls and their ability to eliminate many of the catalyst poisons of concern when firing North Dakota lignite (sodium and potassium) (Doc. No. EPA-R08-OAR-2010-0406-0003);
- Information from Argillon, now Johnson Matthey Catalysts ("JMC") that specifies the maximum amount of sodium and potassium that can be present in the flue gas to maintain a catalyst life guarantee, an amount that is less than the amounts that were present in the flue gas steam per the Microbeam testing (Doc. No. EPA-R08-OAR-2010-0406-0013);

⁵⁶ Although only Milton R. Young Unit 2 had a scrubber when the SIP was submitted, EPA both proposed to approve and finally approved the use of wet scrubbers as BART to control SO₂ emissions at Milton R. Young Unit 1 and Leland Olds Unit 2. *See* 76 Fed. Reg. at 58589-90 (proposing to approve North Dakota's SO₂ BART determination for Milton R. Young Unit 1—a wet scrubber); 77 Fed. Reg. at 20896-97 (finalizing the same); 76 Fed. Reg. at 58594 (proposing to approve North Dakota's SO₂ BART determination for Leland Olds Unit 2—a wet scrubber); 77 Fed. Reg. at 20896-97 (finalizing the same).

- JMC's recent reiteration, in a comment submitted on February 27, 2012, that it believes LDSCR and TESCO would be technically feasible on units firing North Dakota lignite (Doc. No. EPA-R08-OAR-2010-0406-0322);
- The expert report of Dr. Ranajit (Ron) Sahu, which points to technical evidence establishing that both LDSCR and TESCO are feasible on units firing North Dakota lignite (Doc. No. EPA-R08-OAR-2010-0406-0213);
- EPA's July 31, 2008 comments on North Dakota's Preliminary BACT Determination to control NOx emissions and Milton R. Young Units 1 and 2 and the Hartenstein July 2008 Expert Report supporting those comments. The Hartenstein report includes ample scientific explanations for when sodium and potassium act as catalyst poisons, and how an SCR system can be designed to avoid those issues. (Doc. No. EPA-R08-OAR-2010-0406-0046, Enclosures 1 and 2);
- An additional Hartenstein report from October 2008 that discusses the technical feasibility of SCR where the flue gas is rich in sodium and potassium (Doc. No. EPA-R08-OAR-2010-0406-0047); and
- Dr. Phyllis Fox's Revised Cost Effectiveness Analysis for TESCO at Leland Olds Unit 2. Dr. Fox explains that catalyst deactivation will not rapidly occur at a TESCO, which is located after control devices that have been proven to remove the majority of ash and catalyst poisons. Dr. Fox recommends keeping the catalyst above the water dew point to prevent deactivation. (Appendix C to the Technical Support Document supporting the proposal, Doc. No. EPA-R08-OAR-2010-0406-0076).

Given this record evidence, it was arbitrary and capricious for EPA to conclude it was constrained by the district court's decision in the BACT action.

II. EPA's Reliance on a BACT Determination to Substitute for BART Is Improper Since EPA Is Aware that Superior Controls Are Available.

EPA improperly relied on the BACT determination to substitute for BART where EPA was aware that BACT was not based on the most effective available controls. EPA's BART Guidelines prescribe a five-step process for determining BART. *See* 40 C.F.R. pt. 51, app. Y § IV.D. While normally an agency making a BART determination must follow all five steps of the process outlined in the Guidelines, EPA permits an abbreviated analysis in two circumstances.

First, an agency can rely on a MACT standard, or, in many cases, a NSR/PSD determination, so long as no new, superior technologies have become available subsequent to issuance of the MACT standard or NSR/PSD determination. *Id.* § IV.C. The BART Guidelines do not authorize either a state, or EPA when reviewing the state's proposal, to shortcut the BART analysis by relying on a BACT determination *per se*. Instead, the BART Guidelines

suggest that “for many NSR/PSD and NSR/PSD settlement agreements,” the resulting control can substitute for BART so long as there are no more cost-effective controls that would be considered the “best control.” *Id.* Another section of the BART Guidelines permits an agency to skip the BART analysis if either the “source has controls already in place which are the most stringent controls available” or “if a source commits to a BART determination that consists of the most stringent controls available.” *Id.* § IV.D (Step 1)(9). In short, under the Guidelines, BACT cannot substitute for BART if there is another technology available that is more effective than the technology selected as BACT.⁵⁷

By approving a BART determination after EPA had found that superior, cost-effective controls are available, EPA violated its own BART Guidelines. In reversing its position in the final approval of North Dakota’s SIP, EPA improperly relied on the State’s BACT determination, stating that:

... states generally may rely on a BACT determination for a source for purposes of determining BART for that source, unless new technologies have become available or best control levels for recent retrofits have become more stringent. 70 FR 39164. As a general rule, the selection of a recent BACT level as BART is the equivalent of selecting the most stringent level of control, and consideration of the five statutory BART factors becomes unnecessary.

77 Fed. Reg. at 20897. The BART Guidelines do *not* permit the substitution of BACT when BACT plainly does not represent the most stringent level of control available.

EPA has not disavowed its prior technical conclusion that SCR is a technically feasible control that is more stringent than BACT nor could it reasonably do so given the ample record evidence establishing that SCR is the most stringent control available. *See* 76 Fed. Reg. at 58610, 58613, 58619. Moreover, the district court decision did not disturb EPA’s finding that SCR is the most stringent control available. The court’s narrow holding was that North Dakota’s BACT determination “is not unreasonable.” Order at 33. Finally, since North Dakota issued its BACT determination in 2010, EPA has developed additional evidence that more stringent controls are available. *See, e.g.*, 76 Fed. Reg. 52388, 52390, 52393, 52439 (Aug. 22, 2011) (NO_x BART for the San Juan Generating Station, Units 1-4, is SCR with an emissions limit of 0.05 lbs/MMBtu, calculated on a 30-day “boiler operating day” average). This additional evidence makes it clear

⁵⁷ Additionally, when relying on a MACT standard or NSR/PSD determination in lieu of following the five-step BART process, the agency must “provide the public with a discussion of whether any new technologies have subsequently become available.” 40 C.F.R. pt. 51, app. Y, § IV.C. EPA’s final rule fails to discuss whether any new technologies have become available since North Dakota’s 2010 BACT determination. In particular, EPA’s final rule fails to mention the extensive evidence EPA presented in the proposed rule that SCR is available for the three units in question. As a result, EPA’s final rule violates the requirement to discuss new technologies that have become available since the BACT determination upon which EPA relies.

that “control levels for recent retrofits have become more stringent,” 77 Fed. Reg. at 20897, further indicating that EPA erred in relying on the BACT determination.

In short, EPA's final rule violates the provision in the BART Guidelines stating that BACT can substitute for BART only if more stringent, effective controls do not exist. 40 C.F.R. pt. 51, app. Y §§ IV.C, IV.D (Step 1)(9). As a result, EPA's final rule violates EPA's BART Guidelines and is arbitrary and capricious.

CONCLUSION

For all of the reasons set forth above, petitioners respectfully request that EPA reconsider its decision to approve North Dakota’s NOx BART determinations for Milton R. Young Units 1 and 2 and Leland Olds Unit 2. Thank you for considering this matter. Please do not hesitate to contact us with any questions.

Sincerely,



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