Team 37

No. 14–000123 and No. 14-000124

United States Court of Appeals for the Twelfth Circuit

SAVE OUR CLIMATE, INC.,

Petitioner

v.

SYLVANERGY, L.L.C.,

Petitioner

v.

SHANEY GRANGER, in her official capacity as the Regional Administrator for Region XII of the United States Environmental Protection Agency

Respondent

On Consolidated Petitions for Review of a Final Order of the Regional Administrator

PSD Appeal No. 15-0123

Brief of Petitioner

Save Our Climate, Inc.

Oral Argument Requested

Attorneys for Appellant

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JURISDICTIONAL STATEMENT

The United States Environmental Protection Agency ("EPA") has made a final decision to issue a Prevention of Significant Deterioration ("PSD") construction permit to Sylvanergy, L.L.C. ("Sylvanergy") under section 165 of the Clean Air Act ("CAA"). Save Our Climate, Inc. ("SOC") has filed a timely petition for review of this decision. This Court has exclusive jurisdiction to review final actions of EPA pursuant to 42 U.S.C. § 7607(b)(1) (2012), which provides that "a petition for review of action of the Administrator in . . . any other final action of the Administrator . . . which is locally or regionally applicable may be filed only in the United States Court of Appeals for the appropriate circuit."

STATEMENT OF THE ISSUES

1. Does this Court have jurisdiction to review the New Union Air Resources Board's ("NUARB") denial of Sylvanergy's request for a Non-Applicability Determination ("NAD"), even though the NAD is not made reviewable by statute and is not a "final" agency action?

2. Is the Forestdale Biomass Facility ("the facility") a "major emitting facility" subject to PSD review, considering that it is a "fossil-fuel fired" source subject to the 100 ton-per-year pollutant threshold under section 169(1) of the CAA, 42 U.S.C. § 7479(1) (2012), and has the "potential to emit" more than 250 tons per year of any air pollutant?

3. In light of *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427 (2014), and *Center for Biological Diversity v. EPA*, 722 F.3d 401 (2013), is the facility subject to PSD review as an emitter of greenhouse gases?

4. Did NUARB permissibly impose the Sustainable Forest Plan ("SFP") as its Best Available Control Technology ("BACT") for the facility, despite the fact that it did no searching review, did not properly consider all adverse environmental impacts, and did not ensure compliance with the CAA?

5. Did NUARB, in its BACT analysis, properly reject consideration of a wood gasification and partial carbon capture and storage ("CCS") plant as an impermissible "redefinition" of the project, contradicting accepted BACT review precedent and procedures?

STATEMENT OF THE CASE

Greenhouse gas ("GHG") emissions greatly endanger the public health and welfare of

both current and future generations. In recognition of this threat, EPA issued PSD permitting requirements for major stationary sources of GHGs. In this case, EPA issued a PSD permit to Sylvanergy to construct a biomass-fired electricity generation and wood-pellet production facility in Forestdale, New Union. R. at 1. The permit includes BACT limits for the facility's 350,000 tons per year (CO2 equivalents) of GHG emissions. R. at 5-6.

Sylvanergy seeks to overturn EPA's determination that its facility is a "major-emitting facility" subject to PSD review. It argues that, as a biomass facility, it should be exempted from PSD review and should not be required to install GHG BACT controls imposed by NUARB. However, Sylvanergy did not initially appeal NUARB's denial of its request for a NAD, which would have excused the facility from PSD review, and only does so now after the decisions in *Center for Biological Diversity v. EPA*, 722 F.3d 401 (2013), which vacated EPA's temporary PSD exemption for GHGs emitted from biomass facilities, and in *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427 (2014), which upheld EPA's finding that major emitting facilities are subject to BACT review for GHGs. Sylvanergy's strategy throughout the PSD permitting process reveals one motive: to exempt the facility from PSD review for GHGs, allowing it to cut costs at the expense of the public welfare.

SOC seeks to ensure that newly constructed facilities adhere to effective environmental regulations. Consequently, SOC agrees with NUARB's determination that the facility must yield to PSD regulations for GHGs but challenges the adequacy of NUARB's BACT review. Given the magnitude of global climate change, it is imperative that facilities like the Forestdale Biomass Facility comply with applicable regulatory standards and minimize the detrimental effects they may have on the environment.

STATEMENT OF THE FACTS

On June 12, 2014, under authorization by EPA delegation, NUARB issued a federal PSD permit to Sylvanergy under section 165 of the CAA, 42 U.S.C. § 7475 (2012). R. at 2, 4. The permit authorizes Sylvanergy to construct a biomass-fired electricity and wood pellet fuel production facility near Forestdale, New Union, a region in attainment of all National Ambient Air Quality Standards ("NAAQS"). R. at 4. The facility will contain a stoker design wood-fired boiler and two ultra-low sulfur diesel ("ULSD") start-up burners and will have an electrical generation capacity of 40 MW. R. at 5.

In its PSD review, NUARB utilized a 96-percent capacity factor to forecast potential emissions from the facility. *Id.* At this output, the facility would emit 255 tons of carbon monoxide and 110 tons of nitrous oxides per year. *Id.* Forestdale intends to limit the facility's activity to 6,500 hours per year at a 75-percent capacity factor, via an ordinance developed as part of the site plan approval process but enforceable only by Forestdale's building inspector. *Id.*

Sylvanergy requested a NAD based on projected emissions using this 75-percent capacity factor and argued that the facility is not a "fossil-fuel fired" source. R. at 5-6. NUARB rejected the proposal to use the 75-percent capacity factor because it is not "federally enforceable" within the meaning of 40 C.F.R. § 52.21(b)(4) (2015). R. at 6. NUARB also found that the proposed facility is a "fossil-fuel fired steam electric plant" capable of emitting more than 100 tons per year of any regulated air pollutant since it will employ ULSD start-up burners. R. at 6.

NUARB conducted a BACT review for GHG emissions, rejecting Sylvanergy's argument that the facility should be presumed to have zero net GHG emissions. R. at 2, 6. NUARB employed the top-down approach enumerated in EPA's New Source Review Workshop Manual ("NSR Manual") for its BACT analysis. It rejected carbon capture and storage ("CCS")

at step one of the analysis as "not potentially available. R. at 6, 10. It also rejected a wood gasification and partial CCS plant as BACT at step one of the review, reasoning that it constituted an impermissible redefinition of the facility. R. at 13.

SOC filed comprehensive comments expressing concerns about NUARB's BACT analysis. R. at 6. SOC cited a study confirming the economic and practical feasibility of wood gasification and partial CCS. R. at 12. SOC also noted that Forestdale's geology is ideal for a wood gasification and partial CCS facility and submitted testimony from renowned environmental economist, Costanza Outt, affirming the technology's economic feasibility. R. at 13. NUARB acknowledged these factual assertions but failed to respond to them. *Id*.

NUARB ultimately determined that the SFP constituted BACT for the facility's GHGs. R. at 2. The SFP will require Sylvanergy to purchase and manage a dedicated reforestation area, which will be managed based on short-rotation coppice ("SRC") planting techniques. R. at 7. SOC provided NUARB with extensive comments and ecological studies concerning the adverse environmental impacts of SRC planting. R. at 12. NUARB did not address these comments. *Id*.

On July 10, 2014, Sylvanergy and SOC filed petitions for review of the PSD permit. R. at 4. On appeal, the EAB ruled that it did not have the authority to rule on the NAD, and that Sylvanergy failed to state grounds for review based on its claimed exemption of biogenic GHG emissions from PSD review. *Id*. The EAB also found that there was no clear error in NUARB's rejection of SOC's arguments concerning the SFP's adverse environmental impacts, despite the fact that NUARB failed to sufficiently consider these arguments. R. at 12. EAB also found no clear error in NUARB's rejection of wood gasification and partial CCS, even though the control was rejected before its technical and economic feasibility were considered. R. at 13.

STANDARD OF REVIEW

Section 307(d)(9) of the CAA states that this Court may reverse EPA's final decision if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law" or "without observance of procedure required by law." 42 U.S.C. § 7607(d)(9)(A), (D) (2012).

SUMMARY OF THE ARGUMENT

This Court does not have jurisdiction to review NUARB's denial of the NAD because it is not made reviewable by statute and does not satisfy the three requirements establishing the reviewability of the action: the NAD denial is not final and not ripe for judicial review, and Sylvanergy did not exhaust all requisite administrative remedies after the denial. Therefore, Sylvanergy's appeal of the denial does not meet the threshold requirements laid out in *American Airlines, Inc. v. Herman*, 176 F.3d 283 (5th Cir. 1999).

NUARB properly determined that the Forestdale Biomass Facility is a "major emitting facility" subject to PSD review because it is a "fossil-fuel fired steam electric plant" that emits over 100 tons per year of any air pollutant. 42 U.S.C. § 7479(1) (2012). The Administrator's contrary interpretation of "fossil-fuel fired" was not reasonable under the standard of review provided in *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc*., 467 U.S. 837 (1984), because EPA failed to consider relevant issues, adequately explain its decision-making process, and provide a rational basis for rejecting NUARB's determination. The facility also has the potential to emit more than 250 tons per year of carbon monoxide because the limitations imposed by the Forestdale Site Plan are not federally, legally or practically enforceable.

NUARB properly determined that the facility is subject to PSD review as an emitter of GHG emissions since it is a major emitting facility in an attainment area for all NAAQS and the Supreme Court has upheld EPA's requirement that subjects major emitting facilities to PSD

review for GHGs. *Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427 (2014). Sylvanergy is not exempt from PSD review for GHGs and, thus, must conduct a BACT analysis for GHGs.

NUARB arbitrarily and capriciously imposed the SFP as BACT for the facility because it failed to take into account SOC's comments concerning BACT alternatives and environmental impacts. It also failed to ensure that the plan would allow consistent compliance with the CAA. NUARB arbitrarily and capriciously rejected wood gasification and partial CCS technology as BACT for the facility because its rationale for doing so has no basis in precedent or in procedure of law. NUARB is required by statute and EPA guidance to review alternative fuel combustion techniques, such as wood gasification, and add-on control technologies, like partial CCS in a proper BACT analysis for the facility. NUARB failed to meet this requirement. The premature rejection of this technology and implementation of the SFP as BACT should be reversed.

ARGUMENT

I. THIS COURT DOES NOT HAVE JURISDICTION TO REVIEW NUARB'S DENIAL OF SYLVANERGY'S REQUEST FOR A NON-APPLICABILITY DETERMINATION.

The Administrative Procedure Act permits judicial review of an agency action "made reviewable by statute and final agency action for which there is no other adequate remedy in a court." 5 U.S.C. § 704 (2012). Agency action is defined as "the whole or part of an agency rule, order, license, sanction, relief, or the equivalent or denial thereof, or failure to act." 5 U.S.C. § 551 (2012). In order for this Court to have jurisdiction to review the NAD denial, the denial must be established as an action reviewable by statute or as a final agency action.

However, the denial is not made reviewable by statute. The CAA provides a detailed appeals process for a number of agency actions but does not affirmatively grant an appeals process for a NAD. *See* 42 U.S.C. § 7607 (2012). Federal regulations also set forth appeals

processes for RCRA, UIC, NPDES, and PSD final permit decisions, but not for NAD denials. *See* 40 C.F.R. § 124.19 (2015). Under the canon of construction *expressio unius est exclusio alterius*, or "the express mention of one thing excludes all others," the exclusion of an appeals process of the NAD denial indicates implied preclusion of judicial review. Thus, Congress did not intend to permit judicial review of a NAD denial.

Furthermore, the denial is not a final agency action because Sylvanergy does not satisfy the three requirements establishing the timeliness, and thus reviewability, of the lawsuit. The three doctrines require that: (A) the action is final; (B) the action is ripe for judicial review; and (C) all available administrative remedies have been exhausted. *Am. Airlines, Inc. v. Herman*, 176 F.3d 283 (5th Cir. 1999). Because the NAD denial does not fulfill these three requirements and is accordingly not timely, the Court does not have jurisdiction to review this action.

A. NAD Denial Is Not a Final Agency Action Under the Supreme Court's Two-Part Definition of "Final."

The NAD denial is not a final agency action within the Supreme Court's definition of "final." To be final, the action must (1) serve as the consummation of the agency's decision-making process; and (2) determine rights or obligations or have some sort of legal consequences. *Bennett v. Spear*, 520 U.S. 154 (1997). Because the NAD denial is not the consummation of the agency's decision-making process and did not lead to any sort of legal consequences, the action is not considered "final" under the law.

1. The Denial Is Not a Consummation of EPA's Decision-Making Process Because It Is Only an Initial Determination of the Facility's Triggering of PSD Review.

The NAD denial is not a consummation of the agency's decision-making process because it is of a "merely tentative or interlocutory nature." *Id.* at 178. For example, an agency's decision to start a formal adjudicatory proceeding is not final when the decision only represents a

"threshold determination that further inquiry is warranted." *FTC v. Standard Oil Co. of Cal.*, 449 U.S. 232, 241 (1980). Similarly, NUARB merely made an initial determination that the facility fell under the definition of "major emitting facility." The denial only served as a tentative assessment of the facility and did not dispose of "all issues as to all parties." *Citizens for a Safe Env't v. Atomic Energy Com'n*, 489 F.2d 1018, 1021 (3d Cir. 1973). Since the denial only triggered additional PSD permit requirements, the denial is not a consummation of the agency's decision-making process and thus not a final agency action.

2. The Denial Did Not Affect Sylvanergy's Legal Rights or Obligations Because It Did Not Impede on Its Right To Build the Facility.

The denial is not reviewable because it fails to impose an obligation, deny a right, or fix some legal relationship. *Chi. & S. Air Lines, Inc. v. Waterman S.S. Corp*., 333 U.S. 103 (1948). Although an agency decision may "mature into a prejudicial result" if erroneous, it is not final if it does not impose any legal consequences. *Id*. at 112. The NAD denial did not affect the legal rights of Sylvanergy because it did not impede Sylvanergy's right to build the facility. It "gave nothing" and "took nothing away" from the applicant. *Id*. The denial only provided a preliminary determination as to which processes Sylvanergy would have to comply with in order to construct the facility. Although the denial prompted Sylvanergy to apply for a PSD permit, the action itself is not final and binding because it had no "direct consequences" on Sylvanergy's right to build a facility. *Dalton v. Specter*, 511 U.S. 462 (1994).

B. The Denial Is Not Ripe for Judicial Review Because It Does Not Fulfill the Supreme Court's Twofold Test That Determines the Ripeness of an Agency Action.

The NAD denial is not ripe for judicial review because it does not fulfill the Supreme Court's twofold test that assesses the ripeness of agency action, requiring (1) that the issues presented in the litigation are ready for judicial decision; and (2) that delaying would cause

hardship to the parties. *Abbott Labs.' v. Gardner*, 387 U.S. 136 (1967). Since the NAD denial does not satisfy these two requirements, it is not ripe for judicial review.

1. The Issue of the NAD Denial Is Not Ready for Judicial Decision Because Judicial Review Would Waste This Court's Time.

The denial is not ready for judicial decision because reviewing the issues presented in the denial would waste this Court's time. The ripeness doctrine prevents courts from "entangling themselves in abstract disagreements over administrative policies." *Id*. at 148. If the denial were to be reviewed, this Court would become embroiled in unnecessary disagreements over vague statutory terms such as "fossil-fuel fired" and "potential to emit." These were issues that Sylvanergy did not even bother to appeal for over a year. Review of the NAD denial would lead to judicial inefficiency—the exact problem that the *Abbott* Court sought to avoid.

2. Delaying the Review of the NAD Denial Would Not Cause Hardship to Sylvanergy Because the Company Already Underwent the PSD Permitting Process.

Delaying review of the NAD denial would neither cause any hardship nor have any effect on Sylvanergy whatsoever. The Supreme Court defines hardship as an impediment to parties conducting their day-to-day affairs, such as negotiating contracts and compiling records. *Toilet Goods Ass'n v. Gardner*, 387 U.S. 158, 164 (1967). Denying review would not cause any hardship to Sylvanergy—it has already prepared and submitted the PSD application and has even gone through the appeals process for the PSD final permit decision. Denying review would have no "direct effect on the day-to-day business" of the company. *Abbott*, 387 U.S. at 152. Sylvanergy would therefore suffer "no irremediable adverse consequences" if review were denied. *Toilet Goods*, 387 U.S. at 164.

C. Sylvanergy Did Not Exhaust All Administrative Remedies That Could Have Resolved the Matter in a Timely Manner.

Sylvanergy did not exhaust all administrative remedies that could have resolved the

NAD issue. The exhaustion doctrine promotes efficiency by giving agencies the "first chance" to exercise their discretion and apply their expertise in resolving administrative matters. *McKart v. United States*, 395 U.S. 185, 194 (1969). Judicial review should be precluded because: (1) Sylvanergy should have appealed the NAD denial immediately; and (2) there are no overriding policy considerations that would permit this Court to waive the exhaustion requirement.

1. Sylvanergy Should Have Appealed the NAD Denial Immediately to the EAB, But Instead Applied for a PSD Permit in Protest.

Sylvanergy should have appealed the denial immediately. Instead, it gambled with time and hastened its permit application to avoid BACT review for GHG emissions. It did not even bother to appeal the decision and instead directly filed for a PSD permit. If Sylvanergy had properly followed basic civil procedural rules, it would have immediately sought EAB review and then judicial review of the denial. In *Puerto Rico Cement Co. v. EPA*, 889 F.2d 292 (1st Cir. 1989), the Supreme Court reviewed an NAD denial because the cement company properly exhausted all administrative remedies by appealing to the EAB first. However, Sylvanergy failed to do so and should not be entitled to judicial review at this stage.

2. There Are No Overriding Policy Considerations That Would Permit the Court to Waive the Exhaustion Requirement, and Sylvanergy Should Not Be Rewarded for Wasting Everyone's Time.

The Court will find no overriding policy considerations that would permit judicial review of the NAD denial. To waive the exhaustion requirement, the interests of the plaintiff in obtaining "prompt access to a federal judicial forum" must exceed the "countervailing institutional interests favoring exhaustion." *McCarthy v. Madigan*, 503 U.S. 140, 146 (1992). Sylvanergy waived its interest in obtaining judicial review once it applied for the PSD permit. Any reasonable company seeking to build a large facility like Sylvanergy's could have simply contacted EPA to inquire about the appeals process were it to find the process in any way

ambiguous or unclear. However, Sylvanergy failed to do so within a reasonable amount of time,[1] so it forfeited its objection to the denial and cannot bring up the issue now. It failed to do its due diligence and exhaust all appropriate administrative remedies in a timely manner. *See Pozo v. McCaughtry*, 286 F.3d 1022, 1024 (7th Cir. 2002). The Court should not reward Sylvanergy for wasting judicial resources and the parties' time with its poor tactical gamesmanship.

The NAD denial is not a final agency action because it does not meet the Supreme Court's definition of "final" and is not ripe for judicial review, and Sylvanergy failed to exhaust all administrative remedies. The failure to satisfy these factors establishes the "untimeliness" of the review. Therefore, this Court does not have jurisdiction to review this action.

II. NUARB PROPERLY DETERMINED THAT THE FACILITY IS A "MAJOR EMITTING FACILITY" SUBJECT TO PSD REVIEW.

Even if it is assumed that the Court has jurisdiction to review the NAD denial, NUARB properly determined that the facility is a "major emitting facility" subject to PSD review. The facility falls under both categorical definitions of "major emitting facility" under section 169 of the CAA. First, the facility is one of the twenty-eight major sources specifically listed in the CAA—it is a "fossil-fuel fired steam electric plant" of more than 250 MMBtu/hour heat input capable of emitting over 100 tons of any air pollutant per year. 42 U.S.C. § 7479(1) (2012). Second, it has the potential to emit over 250 tons of any air pollutant per year. *Id*. Thus, NUARB properly determined that the facility is a "major emitting facility" subject to PSD review.

A. The Sylvanergy Facility Is a "Fossil-Fuel Fired" Source Subject to the 100-Ton-Per-Year Threshold Under the Clean Air Act.

The facility meets the statutory definition of "fossil-fuel fired steam electric plant," which

[1] We can assume a reasonable amount of time is sixty days. 42 U.S.C. § 7607 (2012) requires a petition for review of a PSD permit decision to be filed within sixty days of the decision's publication date in the Federal Register.

is in line with NUARB's determination but contrary to the Administrator's final decision. In order to determine whether the facility is a "fossil-fuel fired" source, the Court must first look to the Administrator's interpretation of the enabling statutory language. It must then follow three steps to determine how much deference should be given to EPA's decision. The first step ("Step Zero") asks whether the Administrator's interpretation[2] carries the "force of law." *United States v. Mead Corp*., 533 U.S. 218 (2001). If it does, then the Court must undergo a two-step analysis to determine if it deserves a deferential standard of review. *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc*., 467 U.S. 837 (1984).

The Court will find that (1) under Step Zero, the interpretation has the force of law; (2) under *Chevron* Step One, Congress has not directly spoken on the precise question at issue; and (3) under *Chevron* Step Two, EPA's interpretation is not reasonable, and its arbitrary and capricious application of the term does not warrant deference. As a result, the Administrator erred in not classifying the facility as a "fossil-fuel fired" source.

1. Under *Mead* Step Zero, the Agency's Interpretation of "Fossil-Fuel Fired" Carries the Force of Law.

EPA's interpretation of "fossil-fuel fired" carries the force of law and deserves the deferential *Chevron* standard of review. Agency interpretation of a statutory provision carries the force of law if Congress has delegated authority to the agency to make rules carrying the force of law, and if agency interpretation was promulgated in the exercise of that authority. *Mead*, 533 U.S. at 226-27. EPA's interpretation qualifies for *Chevron* deference because it fulfills these two requirements. First, Congress has delegated authority to EPA to make regulations and issue permits carrying the force of law. The CAA requires EPA to establish "the minimum elements of

[2] "Administrator's interpretation" is used interchangeably here with "EPA's interpretation" or "agency interpretation." NUARB's interpretation will be expressly noted otherwise.

a permit program to be administered by any air pollution control agency" and to issue and enforce permits. 42 U.S.C. § 7661a (2012). Second, EPA has exercised this delegation of authority by utilizing its interpretation of "fossil-fuel fired" when issuing the PSD permit to Sylvanergy. Thus, the agency's interpretation of "fossil-fuel fired" carries the force of law because it essentially determines which facilities must comply with the PSD program, obtain the permit, and adhere to BACT requirements.

2. Under *Chevron* Step One, Congress Has Not Directly Spoken on the Precise Definition of "Fossil-Fuel Fired" and Gave EPA the Authority to Delegate.

Congress has not directly spoken on the issue at hand because it has left power to EPA to interpret the definition of "fossil-fuel fired." If legislative intent is clear, then both the agency and courts must defer to the "unambiguously expressed intent of Congress." *Chevron*, 467 U.S. at 842-43. In the 1977 CAA Amendments, Congress created the PSD permit program authorizing EPA to regulate major sources of air pollutants. 1977 Amendments to the Clean Air Act, Pub. L. No. 95-95, 91 Stat. 685 (to be codified as amended in scattered sections of 42 U.S.C.). However, legislative history does not provide an in-depth discussion of the term "fossil-fuel fired electric utility steam generating unit." Thus, Congress has "explicitly left a gap for the agency to fill" on the definition of this statutory term. 467 U.S. at 843. Since the definition of "fossil-fuel fired" is ambiguous, the Court must move to *Chevron* Step Two to determine whether the agency's interpretation is based on a "permissible construction" of the statute. *Id*.

3. Under *Chevron* Step Two, the Agency's Interpretation of "Fossil-Fuel Fired" Is Not Reasonable and Thus Should Not Be Given Deference.

Although courts generally yield to an agency's interpretations of its enabling acts, EPA's interpretation of "fossil-fuel fired" is unreasonable and "arbitrary, capricious, or manifestly contrary to statute." *Chevron*, 467 U.S. at 843. The "unreasonable" standard essentially requires

the same analysis as the "arbitrary-or-capricious" standard. *Judulang v. Holder*, 132 S. Ct. 476, 483 n.7 (2011). EPA acted arbitrarily or capriciously because it did not (i) give adequate consideration to relevant issues; (ii) provide an explanation for its decision; and (iii) provide a rational basis for its decision. *Fed. Election Com'n v. Rose*, 806 F.2d 1081 (D.C. Cir. 1986).

i. EPA Failed to Give Adequate Consideration to Other Relevant Issues in Determining That Sylvanergy Is Not a "Fossil-Fuel Fired" Source.

EPA did not properly consider relevant factors in its decision to not classify the facility as "fossil-fuel fired." An agency commits this error when it does not consider "an important aspect of the problem" or it relies on factors that Congress did not intend it to consider. *Motor Vehicle Mfrs.' Ass'n v. State Farm Mut. Auto. Ins.*, 463 U.S. 29, 43 (1983). Because EPA did not adhere to the regulatory and statutory definitions of "electric utility steam generating unit" and "fossil-fuel fired," it failed to adequately consider relevant factors in making its decision.

First, EPA failed to abide by its own regulatory definition of "electric utility steam generating unit" ("EGU"). Under federal regulation, an EGU is capable of combusting more than "250 MMBtu/hr heat input of fossil fuel (either alone *or in combination* with any other fuel)." 40 C.F.R. § 60.40Da (2015) (emphasis added). The Forestdale Biomass facility will house a 500 MMBtu/hour biomass-fired electricity generation unit with two ULSD start-up burners, each with a maximum input rate of 60 MMBtu/hr. Therefore, the facility is an EGU because it can combust a total of 620 MMBtu/hr heat input of fossil fuel *in combination* with biomass fuel.

EPA also failed to consider the statutory definition of "electric utility steam generating unit." An EGU is "any fossil fuel fired combustion unit of more than 25 MW that serves a generator that produces electricity for sale." 42 U.S.C. § 7412(a)(8) (2012). The facility is an EGU because it will supply at least 30 MW based on a 75-percent capacity factor.

Furthermore, EPA failed to comply with its own regulatory definition of "fossil-fuel

fired." Under federal regulation, a "fossil-fuel fired" EGU is capable of combusting more than 25 MW of fossil fuels and fires fossil fuels for more than 15% of the annual heat input during one year after the applicable compliance date. 40 C.F.R. § 63.10042 (2015). The facility is capable of combusting more than 25 MW of fossil fuels (the ULSD burners have a combined heat input rate of 120 MMBtu/hr, which is about 35 MW).[3] It can also fire fossil fuels at approximately 20% of the annual heat input (*120 ÷ 620 MMBtu/hr = 19.35%*), which is greater than the 15% threshold. Thus, because EPA failed to consider its own enabling statutes and regulations in classifying the facility, its decision does not warrant deference.

ii. EPA Failed to Provide an Adequate Explanation of Its Decision-Making Process In Its Determination That the Facility Is Not a "Fossil-Fuel Fired" Source.

EPA did not adequately explain its decision to classify the facility as a non-fossil-fuel fired source. The Court may set aside this decision because the agency failed to "articulate a satisfactory explanation for its action." *Motor Vehicle*, 463 U.S. at 43. The EAB's Order Denying Review does not mention the issue at all, and the Administrator will be providing an explanation for its decision for the first time in its Respondent's Brief to this Court. In addition, with the dearth of legislative and regulatory history on defining biomass facilities as "fossil-fuel fired," the agency will be providing a new interpretation of the term for the first time in court. An agency's reasoning is not "entitled to deference when they are merely appellate counsel's 'post hoc rationalizations' for agency action, advanced for the first time in the reviewing court." *Martin v. Occupational Safety & Health Review Com'n*, 499 U.S. 144, 144 (1991). Since EPA's litigating position is "wholly unsupported by regulations, rulings, or administrative practice," this

[3] This calculation is based on the conversion factors provided by the Illinois EPA, which states that 1 MW equals 3,413,000 BTU/hr. *Conversion Factors*, ILL. EPA, http://www.epa.illinois.gov/topics/air-quality/planning-reporting/annual-emission-reports/tables/conversion-factors/index (last visited Nov. 16, 2015).

Court should not give deference but rather examine EPA's position as it would treat the other parties' arguments. *Bowen v. Georgetown Univ. Hosp.*, 488 U.S. 204, 212 (1988).

iii. EPA Provided No Rational Basis for Its Decision.

The Administrator's final decision is substantively irrational because it is "so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Motor Vehicle*, 463 U.S. at 29. EPA failed to take into account any of its own regulations and enabling statutory acts in calculating the facility's heat input and electrical generation capacity. It also provided no explanation in its decision-making and failed to articulate a "rational connection between the facts found and the choice made." *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168 (1962). Lastly, EPA failed to consider the regulatory and statutory intent of the PSD program, which is to protect the environment from hazardous air pollutants. By failing to define the facility as "fossil-fuel fired," EPA did not meet its own agency standards to oversee a major source of air pollution, rendering an outcome that "appears on its face to make no sense." *P.R. Sun Oil Co. v. EPA*, 8 F.3d 73, 77 (1st Cir. 1993). Therefore, EPA acted unreasonably, arbitrarily, and capriciously in its failure to classify the facility as a "fossil-fuel fired" source.

B. The Facility Has the Potential to Emit More Than 250 Tons of Carbon Monoxide Per Year Because the Limitations Imposed by the Forestdale Site Plan Are Not Federally Enforceable.

Even if the facility is not a "fossil-fuel fired" source subject to the 100 ton-per-year emissions threshold under section 169 of the CAA, it is still a "major emitting facility" because it has the "potential to emit" more than 250 tons of carbon monoxide per year. 42 U.S.C. § 7479(1) (2012). At its operational capacity of 96 percent, the facility has the potential to emit 255 tons of carbon monoxide per year. R. at 5. Sylvanergy contends that the operational capacity of its facility is 75 percent because the Forestdale Site Plan will limit its operation to no more than

6,500 hours per year. *Id.* This contention is unfounded. The Site Plan is not "federally enforceable" and thus may not be utilized in determining the facility's operational capacity and "potential to emit."

EPA defines "potential to emit" as "the maximum capacity of a stationary source to emit a pollutant under its physical and operational design." It specifies that "any physical or operational limitation on the capacity of the source to emit . . . shall be treated as part of its design if the limitation of the effect it would have on emissions is federally enforceable." 40 C.F.R. § 52.21(b)(4) (2015). EPA defines "federally enforceable" as "all limitations and conditions which are enforceable by the Administrator." 40 C.F.R. § 52.21(b)(17) (2015). Thus, operational limitations are considered within the facility's "potential to emit" only if they are federally enforceable.

To qualify as "federally enforceable," local limitations must be "effective as a practical matter … approved by EPA and integrated into the State implementation plan … and submitted to the Administrator for approval." *Nat'l Mining Ass'n v. EPA*, 59 F.3d 1351, 1363 (D.C. Cir. 1995). *Nat'l Mining* further requires EPA to consider legally and practically enforceable state and local controls. *Id.* at 1365. The Forestdale Site Plan is neither a part of any SIP, nor is it legally and practicably enforceable by any state or local air pollution agency. Therefore, the plan may not be considered in determining the facility's operational capacity and its "potential to emit." The facility's operational capacity is thus 96 percent and it has the potential to emit more than 250 tons of carbon monoxide per year.

1. The Forestdale Site Plan Is Not Federally Enforceable Because It Is Not a Part of any State Implementation Plan, Nor Has it Been Screened by EPA.

The Forestdale Site Plan is not federally enforceable because it is not a part of any SIP. A SIP is an "implementation plan submitted by a state" that is screened by EPA and "include[s]

enforceable emission limitations and other control measures" to promote air quality within attainment regions. 42 U.S.C. § 7410 (2012). EPA screens SIP controls to ensure that they effectively limit emissions, making them "federally enforceable." *Nat'l Mining*, 59 F.3d at 1363.

The Forestdale Site Plan is not part of any SIP and has not been screened by EPA. Because the Site Plan has not been screened, its controls should not be considered "federally enforceable." Unscreened controls are at a greater risk of being ineffective than those that are screened. Giving unscreened controls federally enforceability status would curb EPA's ability to effectively limit emissions. In this case, if the Site Plan were considered "federally enforceable," Sylvanergy's facility would have an operational capacity of 75 percent and would therefore not be subjected to PSD review. Forestdale created the controls for the sole purpose of mitigating the impact of log trucks bringing raw logs to the facility. These controls are completely unrelated to air pollution regulation and have not been found to be effective in that regard. Because the Site Plan is not a part of an SIP and has not been screened by EPA, it is not "federally enforceable."

2. The Forestdale Site Plan Is Not Federally Enforceable Because It Is Not Legally and Practically Enforceable.

The facility has the potential to emit more than 250 tons of carbon monoxide per year because the Site Plan's limitations are not legally and practicably enforceable within the scope of *Nat'l Mining* and subsequent EPA determinations. Following the *Nat'l Mining* ruling, a number of cases concerning the term "potential to emit" were remanded for reconsideration. On remand, several local and state limitations were found to be legally and practically enforceable and therefore federally enforceable. *See Chem. Mfrs. Ass'n v. EPA*, 70 F.3d 637, 1995 WL 650098 (D.C. Cir. 1995) (unpublished table decision) (vacated "federal enforceability" requirement for potential to emit limits); *see also Ogden Projects, Inc. v. New Morgan Landfill Co.*, 911 F.Supp. 863 (E.D. Pa 1996) (where a state environmental agency required a landfill operator to install a

control mechanism that effectively reduced the landfill's volatile organic compound emissions below the PSD threshold, which the court found to be legally and practicably enforceable).

In light of *Nat'l Mining* and associated rulings, EPA released an Interim Policy, stating that, "'[f]ederally enforceable' should now be read to mean federally enforceable or legally and practically enforceable *by a state or local air pollution agency*." U.S. EPA, OFFICE OF AIR QUALITY PLANNING AND STANDARDS, RELEASE OF INTERIM POLICY AN [SIC] FEDERAL ENFORCEABILITY OF LIMITATIONS ON POTENTIAL TO EMIT 3 (1996) (emphasis added). *Nat'l Mining, Chem. Mfrs*., and *Ogden Projects* all involved limitations made by local or state environmental agencies that had the authority to regulate air pollution levels. In the present case, though, the Site Plan was imposed by the Village of Forestdale—not a local air pollution agency—and is enforceable only by Forestdale's building inspector. R. at 5. This enforceability framework is inconsistent with both the text of the EPA Interim Policy and the case law. While EPA granted local and state air pollution agencies the authority to regulate air pollution, it did not give individuals like the city building inspector the authority to do the same.

There is no guarantee that the Site Plan controls will be effective. A guarantee could only be made by EPA or other air pollution control agencies that specialize in regulating air pollution levels. In addition, there is no guarantee that the building inspector will rigorously enforce the limitations or that he will not adjust them in the future.

Sylvanergy had no qualms with these controls being federally enforceable until it realized that the facility would be subject to BACT review for GHGs. Sylvanergy has thus essentially conceded that the Site Plan is neither legally nor practically enforceable. It only wishes to obtain federal enforceability status now because it wishes to evade PSD regulation to cut costs at the expense of the public welfare.

The Forestdale Site Plan is therefore neither federally nor legally and practicably enforceable. The facility, therefore, must be subjected to an emission limit based on a 96-percent capacity factor and should be considered a major emitting facility—within the meaning of the CAA—that has the potential to emit more than 250 tons of any hazardous pollutant.

III. NUARB PROPERLY DETERMINED THAT THE FACILITY IS SUBJECT TO PSD REVIEW AS A "MAJOR EMITTING FACILITY" AND AN EMITTER OF GREENHOUSE GAS EMISSIONS BECAUSE THE CLEAN AIR ACT REQUIRES PSD REVIEW FOR "MAJOR EMITTING FACILITIES" AND BIOMASS FACILITIES ARE NOT EXEMPT FROM PSD REVIEW.

The PSD program protects the public from air pollution and ensures that new major emitting facilities do not degrade air quality in areas currently in attainment of the NAAQS. 42 U.S.C. § 7470 (2012). New major emitting facilities in attainment areas are subject to PSD review. 42 U.S.C. § 7475(a) (2012). Prior to constructing a facility, would-be polluters must obtain a PSD permit containing emissions limits that reflect the "best available control technology for each regulated pollutant subject to regulation under this chapter." *Id*.

Following *Massachusetts v. EPA*, 549 U.S. 497 (2007), where the Supreme Court found that EPA had the authority to regulate GHGs, EPA issued PSD requirements for major stationary sources of GHGs. Reconsideration of Interpretation of Regulations that Determine Pollutants Covered by Clean Air Act Permitting Programs, 75 Fed. Reg. 17004 (Apr. 2, 2010) (to be codified at 40 C.F.R. pt. 50-51, 70-71). In *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427 (2014), industry groups and a number of states challenged this rulemaking. While the Supreme Court found that the CAA "does not compel or permit EPA to adopt an interpretation of the Act requiring a source to obtain a PSD or Title V permit on the sole basis of its potential greenhouse-gas emissions," it held that "EPA reasonably interpreted the Act to require sources that would need permits based on their emission of conventional pollutants to comply with BACT for

GHGs." *Id*. at 2431-32. From this holding, a rule emerged: stationary sources are not subject to PSD review based solely on GHG emissions; however, sources that are subject to PSD review based on conventional pollutants—"anyway sources"—are required to conduct a BACT analysis for GHGs pursuant to 42 U.S.C. § 7475(a)(4) (2012). *Id.* The Forestdale Biomass facility is subject to PSD review for GHGs because it is an "anyway source" with the potential to emit conventional pollutants, triggering BACT review for all regulated pollutants at the facility. Furthermore, biomass facilities are not exempt from BACT review for GHGs.

A. The Facility Is A Major Emitting Facility in an Attainment Area for All NAAQs and Is Therefore Subject to PSD Review for Greenhouse Gases.

As has already been established, the Forestdale Biomass Facility is a "major emitting facility" within the meaning of 42 U.S.C. § 7479 (2012). The State of New Union is in attainment for all NAAQS. R. at 5. As a new major emitting facility operating in an attainment area for all NAAQS, Sylvanergy is required to obtain a PSD permit before construction commences at the facility. 42 U.S.C. § 7475(a)(4) (2012). Under the PSD program, facilities that are subject to PSD review for conventional pollutants are required to conduct a BACT analysis for GHG emissions. *Util. Air*, 134 S. Ct. at 2449.

Agency discretion in statutory interpretation is subject to the two-step *Chevron* test. Under this test, "[if] the intent of Congress is clear, that is the end of the matter; for the Court, as well as the agency, must give effect to the unambiguously expressed intent of Congress." *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc*., 467 U.S. 837, 842-43 (1984). The statutory requirement here is clear. The facility is subject to PSD review because it is a new major emitting facility operating in an attainment area.

The Supreme Court in *Utility Air* upheld EPA's interpretation of 42 U.S.C. § 7475(a)(4) (2012), and required BACT review for GHG emissions under such circumstances. Thus, though

the Sylvanergy facility does not trigger PSD review based solely on its potential to emit GHG emissions, it is still, nonetheless, subject to BACT review for GHGs under the PSD program.

B. Sylvanergy Is Not Exempt from PSD Review for Greenhouse Gases Because Conventional Pollutants, Not Greenhouse Gases, Trigger PSD Review, and Carbon Neutrality Cannot Be Assumed at Biomass Facilities.

Sylvanergy argues that, as a biomass plant, the facility should be assumed to be a carbon neutral source of energy, and thus, should not be subject to PSD review as an emitter of GHGs. R. at 8. This argument fails because (i) the potential to emit GHGs cannot trigger PSD review for a major emitting facility; and (ii).it cannot be assumed that a biomass facility is carbon neutral based solely on the fact that it burns biomass.

First, as discussed previously, the potential to emit GHGs cannot trigger PSD review for a major emitting facility. *Util. Air,* 134 S. Ct. at 2445. The applicability of PSD review is determined by: 1) whether the proposed facility will be constructed in an attainment area for the NAAQS; and 2) whether the proposed facility falls within the statutory definition of "major emitting facility." If a facility meets these criteria, then it is subject to BACT review for *all* regulated air pollutants under the CAA, including GHGs. *Id.* at 2448. Thus, Sylvanergy's argument here is moot – it is statutorily required to perform a PSD review to determine BACT for GHGs regardless of its purported carbon neutrality.

Furthermore, it cannot be assumed that a biomass facility is carbon neutral based solely on the fact that it burns biomass. In November 2014, EPA found that the net climate effects of a biomass facility are not obvious and should not be assumed:

> There are circumstances in which biomass is grown, harvested and combusted in a carbon neutral fashion but carbon neutrality is not an appropriate a priori assumption; it is a conclusion that should be reached only after considering a particular feedstock's production and consumption cycle. There is considerable heterogeneity in feedstock types, sources and production methods and thus net biogenic carbon emissions will vary considerably.

U.S. EPA, OFFICE OF AIR AND RADIATION, FRAMEWORK FOR ASSESSING BIOGENIC CO_2 EMISSIONS FROM STATIONARY SOURCES 3 (2014). The net impact that the facility will have on the climate will depend on the feedstock used, how it is harvested, and the combustion techniques utilized at the facility. Sylvanergy has provided no evidence to suggest that the feedstock, harvest methods, and combustion techniques that it will employ will produce a net carbon neutral facility. Instead, it has simply assumed carbon neutrality on its face. NUARB therefore correctly determined that Forestdale is subject to BACT review for GHGs.

C. Sylvanergy Is Not Exempt from PSD Review for Greenhouse Gases Because There Is No Exemption for Biofuels Under the PSD Program.

Sylvanergy also argues that it is exempt from PSD review because EPA granted a temporary exemption to biofuels when it promulgated PSD permitting rules for major stationary sources of GHGs. In deferring the regulation of carbon dioxide from biogenic sources, EPA argued that it needed more time to assess the net climate effects of biogenic carbon. Deferral for CO_2 Emissions from Bioenergy and Other Biogenic Sources Under the PSD and Title V Programs, 76 Fed. Reg. 43,490 (July 20, 2011) (to be codified at 40 C.F.R. pt. 51-52, 70-71).

EPA also set an expiration date for this exemption: "[t]he deferral is limited to three years, and EPA may, before the expiration of the deferral, undertake additional rulemaking to clarify the applicability of PSD and Title V permitting requirements for specific categories of biogenic emissions." *Id.* The three-year exemption expired in July 2014. EPA has not promulgated rules extending this exemption and it is, thus, no longer applicable.

More significantly, EPA's exemption for biofuels was struck down by the United States Court of Appeals for the District of Columbia in *Center for Biological Diversity v. EPA*, 722 F.3d 401, 404 (2013). In *Center for Biological Diversity*, several environmental groups

challenged EPA's exemption for biofuel sources, arguing that the deferral for biogenic sources of carbon dioxide was arbitrary and capricious. *Id*. Writing for the majority, Judge Tatel concluded that, "the Deferral Rule cannot be justified under any of the administrative law doctrines relied on by EPA." *Id.* at 412. Thus, Sylvanergy has no basis for claiming that the facility should be excused from PSD review as a biomass plant. Sylvanergy's contention that the facility is exempt from PSD review as a biofuel facility cannot be maintained and, therefore, NUARB did not act arbitrarily or capriciously in determining that the facility was subject to BACT review for GHGs.

IV. NUARB IMPERMISSIBLY IMPOSED THE SUSTAINABLE FOREST PLAN AS THE BEST AVAILABLE CONTROL TECHNOLOGY FOR THE FACILITY TO MITIGATE CARBON EMISSIONS.

EPA and state agencies acting on EPA's behalf require major emitters to install BACT to mitigate GHG emissions pursuant to section 169 of the CAA, 42 U.S.C. § 7479(3) (2012), where such emitters are otherwise subject to PSD review. *Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427, 2449 (2014). Because the facility is a "major emitting facility" subject to PSD review, regulatory agencies must require Sylvanergy to apply BACT for GHGs emitted by its facility.

The CAA defines BACT as "an emissions limitation based on the maximum degree of reduction of each pollutant subject to regulation, which the permitting authority . . . determines is achievable for such facility." 42 U.S.C. § 7479(3) (2012). EPA summarizes its top-down, five-step BACT review approach in the NSR Manual, which the record describes in detail. R. at 10. Step one of the BACT review process requires that an agency determine all potentially available technologies. U.S. EPA, OFFICE OF AIR QUALITY PLANNING AND STANDARDS, NEW SOURCE REVIEW WORKSHOP MANUAL B.5-.9 (1990). The process outlined in the NSR Manual has become the standard by which state agency BACT determinations are judged for compliance with 42 U.S.C. § 7475(a). *See Sur Contra La Contaminacion v. EPA*, 202 F.3d 443, 446 (2000)

("[t]he Manual, while not binding on the agency, represents the EPA's views on technical issues; accordingly, the Regions give it weight in their decisions."). As this is the accepted standard utilized by state agencies, EPA, and federal courts in reviewing agency BACT determinations, this is the process against which we assess NUARB's BACT determination analysis.

NUARB acted arbitrarily and capriciously in imposing the SFP as BACT because it failed to consider SOC's comments regarding alternatives, and thereby failed to conduct a proper searching review of BACT considerations. NUARB also acted arbitrarily and capriciously by dismissing SOC's comments concerning the SFP's unacceptable adverse environmental impacts and by failing to note that the SFP, by design, will interfere with Sylvanergy's ability to comply with the CAA.

A. NUARB Arbitrarily and Capriciously Imposed the Sustainable Forest Plan as BACT Because It Failed To Conduct a Proper Searching Review of BACT Considerations.

The agency acted arbitrarily and capriciously by imposing the SFP as BACT in light of alternatives that were rejected as "not potentially available" at BACT step one. "BACT analysis calls for a searching review of industry practices and control options, a careful ranking of alternatives, and a final choice able to stand as first and best." *N. Mich. Univ. Ripley Heating Plant*, 14 E.A.D. 283, 294 (EAB 2009).

Knauf Fiber Glass, 8 E.A.D. 121 (EAB 1999), affirmed the importance of public participation and holistic review during the BACT process. In *Knauf*, a county agency issued a PSD permit for the construction of a manufacturing plant. *Id.* at 122. Citizens filed comments criticizing the agency's BACT configuration because more stringent measures could have been employed. *Id.* at 137. The agency's response did not directly address the feasibility of the alternatives proposed by the comments. *Id.* at 139. The EAB found that the agency insufficiently

responded to comments and thereby failed to conduct a properly searching review of the options. *Id.* at 141. It then remanded the BACT determination for further analysis. *Id.* Thus, the EAB found that where an agency fails to properly respond to comments, there is a sufficient basis to remand a BACT determination for review.

Similarly, NUARB received extensive critical comments regarding its BACT determination but chose to disregard them completely. NUARB received comments from organizations such as SOC expressing disdain for NUARB's choice of BACT and imploring it to consider options such as wood gasification and partial CCS. R. at 6.

The record demonstrates that NUARB improperly evaluated these control technologies. NUARB rejected the implementation of wood gasification and partial CCS despite numerous comments made by SOC affirming the technologies' economic and practical feasibility R. at 7, 12-13. NUARB acknowledged the verity of the comments but did not consider them in their rejection of the technology at step one. R. at 13. A BACT determination cannot stand as "first and best," nor can BACT review constitute a "searching review of industry practices," when unconsidered alternatives are both feasible and more stringent. *N. Mich. Univ. Ripley Heating Plant*, 14 E.A.D. 283, 294 (EAB 2009). By failing to consider such alternatives, NUARB failed to appropriately respond to comments made during the comment period and left open a number of questions that needed to be addressed.

The assertion that SOC's technologies were unproven or unfit for the facility is unreasonable in light of the fact that implementation of the SFP is unprecedented and therefore inconsistent with "industry practices and control options." *Id.* Never before has such a control system been put in place as a means to counteract GHG emissions from a fossil-fuel fired source.

Under the heightened "clearly erroneous" standard of review, the EAB remanded BACT

determination in the *Knauf* case for the county agency's failure to address public comments. Under the less stringent arbitrary and capricious standard, therefore, NUARB's BACT determination should be remanded for further analysis.

B. NUARB Arbitrarily and Capriciously Imposed the Sustainable Forest Plan as BACT Because It Will Have Unacceptable Adverse Environmental Impacts.

NUARB acted arbitrarily and capriciously in imposing the SFP as BACT because it failed to address SOC's comments concerning the SFP's adverse environmental impacts and to consider more feasible and stringent alternatives.

The CAA provides that regulatory agencies take "into account energy, *environmental*, and economic impacts and other costs" in its BACT analysis. 42 U.S.C. § 7479(3) (2012) (emphasis added). EPA's BACT guidance protocol provides that permitting authorities should consider direct and indirect impacts of control strategies when making BACT determinations. U.S. EPA, OFFICE OF AIR AND RADIATION, GUIDANCE FOR DETERMINING BEST AVAILABLE CONTROL TECHNOLOGY FOR REDUCING CARBON DIOXIDE FROM BIOENERGY PRODUCTION 18 (2011). Where the application of a control results in the release of unregulated pollutants, the environmental impact of such emissions is eligible for consideration in assessing BACT. *See Genesee Power Station Ltd. P'ship*, 4 E.A.D. 832, 848 (EAB 1993) (if a technology has "an incidental effect of increasing or decreasing emissions of unregulated pollutants," consideration of that effect may be taken into account in selecting BACT); *see also N. Cty. Res. Recovery Assocs.'*, 2 E.A.D. 229, 230 (EAB 1986).

The rule expressed in *Genesee Power* and *North County* should not be constricted to emissions. Rather, it should encompass deleterious environmental effects as a whole. Limiting BACT environmental impacts assessment to emissions would be inconsistent with the CAA's primary purpose—to improve and maintain environmental welfare within the several States.

BACT environmental impact assessment *has* included factors beyond emissions before. *See Indeck-Elwood LLC*, 13 E.A.D. 126, 195, 205 (EAB 2006) (where the EAB found that environmental impacts are "most naturally read to include [Endangered Species Act]-identified impacts to endangered or threatened species."). EPA therefore should have considered the SFP's adverse environmental effects.

A pollutant is a substance introduced into the environment that has undesirable environmental effects or adversely affects a natural resource's usefulness. The SFP *will* introduce unregulated pollutants into the environment: monocropped trees in a short-rotation coppice ("SRC") planting system. SRC planting operations centered on monocropping tree species such as poplar implicate a number of water quality/quantity, soil quality, and biodiversity concerns that would adversely affect the usefulness of the land that will be used for the SFP.

SRC invokes three threats to water quality: sediment pollution, nitrogen pollution, and pesticide contamination. Ian Tubby & Alan Armstrong, *Establishment and Management of Short Rotation Coppice*, FORESTRY COMM'N (2002), http://www.forestry.gov.uk/pdf/fcpn7.pdf/$ FILE/fcpn7.pdf. SRC also adversely reduces groundwater recharge volumes. R.L. Hall et al., *Hydrological Effects of Short Rotation Coppice* (1996), http://core.ac.uk/download/pdf/63213.pd f. It also depreciates soil viability, causing nutrient depletion and acidification. A. Jug et al., *Short-rotation Plantations of Balsam Poplars, Aspen and Willows on Former Arable Land in the Federal Republic of Germany*, 121 FOREST ECOLOGY AND MGMT. 85 (1999).

Forest monocultures may experience pathogen epidemics and pest invasions. I.A.S. Ibson & T.M. Jones, *Monoculture as the Origin of Major Pests and Diseases, in Origins of Pest, Parasite, Disease, and Weed Problems, 18th Symposium of the British Ecological Society, Bangor* 139-161 (J.M. Cherrett & G.R. Sagar eds., 1977). The culmination of pest invasions,

disease outbreaks, and other impacts will negatively affect the SFP region's biodiversity, thereby implicating the Endangered Species Act ("ESA") as in *Indeck-Elwood*. Agencies are obligated to ensure that their actions—which include the granting of PSD permits—will not jeopardize the existence of endangered and threatened species or their habitats. *See* 50 C.F.R. § 402.02(c) (2015). In granting the PSD and accepting the SFP as BACT, NUARB will jeopardize species and their habitats, which is repugnant to the purposes of both the CAA and the ESA.

The environmental impacts implicated by the SFP are unacceptable. Given Sylvanergy's resistance to PSD review, it cannot be trusted to responsibly mitigate environmental concerns triggered by the SFP. By neglecting to consider these impacts in light of other available control technologies and by neglecting to consider comments regarding the environmental impacts discussed above, NUARB acted arbitrarily and capriciously in imposing the SFP as BACT.

C. NUARB Arbitrarily and Capriciously Imposed the Sustainable Forest Plan as BACT Because, by Design, the Plan Will Prohibit Sylvanergy's Compliance with the Clean Air Act.

By its design, the SFP will prohibit Sylvanergy from complying with BACT requirements. Courts have long held that permit providers have the discretion to implement controls as BACT that "do not necessarily reflect the highest possible control efficiencies but, rather, will allow permittees to achieve compliance on a consistent basis." *Steel Dynamics, Inc.*, 9 E.A.D. 165, 188 (EAB 2000). By implementing the SFP, NUARB has restricted Sylvanergy's ability to achieve compliance on a consistent basis. By failing to recognize this fact, NUARB acted arbitrarily and capriciously in imposing the SFP as BACT.

As discussed above, the land subject to the SFP will be particularly susceptible to pest and disease outbreaks. Outbreaks may not wipe out the entire tree population, but they *will* inhibit Sylvanergy's ability to comply with the plan on a consistent basis. Because outbreaks will

inevitably limit tree populations, fewer trees will remain than the plan requires. Sylvanergy will therefore be unable to fully offset its GHG emissions as required by the plan.

NUARB should have considered alternatives that would not have had this undesirable effect. By ignoring compliance issues with respect to the availability of suitable alternatives, the agency acted arbitrarily and capriciously by imposing the SFP as BACT.

V. NUARB IMPROPERLY REJECTED CONSIDERATION OF A WOOD GASIFICATION AND PARTIAL CCS PLANT AS BACT FOR THE FACILITY AND ITS REJECTION SHOULD THEREFORE BE REVERSED.

NUARB improperly rejected wood gasification and partial CCS as an impermissible redefinition of the facility under step one of its BACT analysis because this determination has no basis in precedent or in procedure of law. Furthermore, NUARB is required to conduct a complete review of alternative combustion techniques and add-on control technologies, like wood gasification and partial CCS, in a proper BACT analysis. NUARB's rejection of wood gasification and partial CCS was, therefore, arbitrary and capricious and should be reversed.

A. NUARB's Rejection of Wood Gasification and Partial Carbon Capture and Storage as an Impermissible Redefinition of the Facility Has No Basis in Precedent or in Procedure of Law and Was Therefore Arbitrary and Capricious.

NUARB rejected wood gasification at the facility as an impermissible redefinition of the proposed source in step one of its BACT analysis. The EAB accepts this finding, noting, "[t]he NSR Manual states that '[h]istorically, EPA has not considered the BACT requirement as a means to redefine the design of the source when considering available control alternatives.' NSR Manual at B.13. The Board has repeatedly applied EPA policy against considering facility alterations that change the fundamental nature of the proposed source.'" *Desert Rock Energy Co.*, PSD Appeal Nos. 08-03, 08-04, 08-05, 08-06, 2009 WL 3126170 (EAB 2009).

While it is true that the EAB has rejected BACT requirements that constitute a

fundamental redefinition of a facility, it has historically only done so when a BACT requirement alters the *fuel source* to be utilized at a facility. The full NSR Manual excerpt reads: "[h]istorically, EPA has not considered the BACT requirement as a means to redefine the design of the source . . . *For example, applications proposing to construct a coal-fired electric generator, have not been required by EPA as part of a BACT analysis to consider building a natural gas-fired electric turbine* . . . " U.S. EPA, OFFICE OF AIR QUALITY PLANNING AND STANDARDS, NEW SOURCE REVIEW WORKSHOP MANUAL B.13 (1990) (emphasis added). This full excerpt reveals the kind of BACT requirement that EPA thought would constitute a fundamental "redefinition" of a proposed source when issuing its guidance on the matter—namely BACT requirements that alter the fuel source at a facility.

This historical emphasis on fuel source as the crucial factor in determining whether a BACT challenge constitutes a fundamental redefinition of a facility is further highlighted when examining the cases that the EAB relies upon in approving NUARB's dismissal of wood gasification and partial CCS. All of these cases involve a BACT requirement that would have altered the fuel source utilized at the facility: *Prairie State* involved a rejection of a PSD challenge that would have required a proposed coal-fired power plant to utilize low-sulfur coal rather than locally sourced high-sulfur coal, *Prairie State*, 13 E.A.D. 1 (EAB 2006); *Hillman* concerned the rejection of a PSD permit appeal that would have required the facility to alter the tire-derived fuel/wood waste ratio proposed for the electric power facility, *Hillman Power Co.*, 10 E.A.D. 673 (EAB 2002); in *Hawaiian Commercial & Sugar Co.*, the EAB rejected a challenge to a PSD permit that would have required the facility to install low sulfur distillate or residual oil burners rather than a coal fired boiler, *Haw. Commer. & Sugar Co.*, 4 E.A.D. 95 (EAB 1992); in *Old Dominion*, the EAB rejected a challenge to a PSD permit that would have

required a new electric generating station to use natural gas rather than coal at the facility, *Old Dominion Elec. Coop.*, 3 E.A.D. 779 (Adm'r 1992); and finally, in *Pennsauken County*, the EAB rejected the requirement that a new waste combustor burn 20% refuse-derived fuel and 80% coal rather than 100% municipal waste, *Pennsauken Cty.*, 2 E.A.D. 667 (Adm'r 1988).

This review reveals that the EAB has actively rejected BACT challenges that would require a facility to utilize an entirely new fuel source. In contrast to these cases, wood gasification and partial carbon capture would allow Sylvanergy to utilize the same fuel source that it proposed to use in its PSD permit application—it would merely require a modification of the combustion technique utilized to burn the wood at the facility. Wood gasification does not involve any change to the fuel source used at the facility and, thus, the cases relied upon by the EAB in making this determination provide no basis for rejecting wood gasification at the proposed facility. Because NUARB and the EAB provide no relevant precedent for the rejection of wood gasification and partial CCS, the determination that this technology would impermissibly redefine the project was arbitrary and capricious should be reversed.

B. NUARB Is Required To Conduct a Complete Review of Alternative Fuel Combustion Techniques such as Wood Gasification, and Add-On Control Technologies like Partial CCS, in a Proper BACT Analysis for GHG Emissions.

In contrast to the fuel source used at a facility, it is well established that the combustion technique to be utilized at a proposed facility is appropriate for review under a proper BACT analysis. The NSR Manual states:

> The first step in a "top-down" analysis is to identify . . . all "available" control options . . . Air pollution control technologies and techniques include the application of production process or available methods, systems, and techniques, *including fuel cleaning or treatment or innovative fuel combustion techniques for control of the affected pollutant*.

U.S. EPA, OFFICE OF AIR QUALITY PLANNING AND STANDARDS, NEW SOURCE REVIEW

WORKSHOP MANUAL B.5 (1990) (emphasis added). In addition, EPA has stated that fuel gasification techniques should be included in a BACT review for GHGs: "EPA believes that integrated gasification combined cycle ("IGCC") should also be listed for consideration when it is more efficient than the proposed technology." U.S. EPA, OFFICE OF AIR QUALITY PLANNING AND STANDARDS, PSD AND TITLE V PERMITTING GUIDANCE FOR GREENHOUSE GASES 30 (2011). The requirement that top-down BACT analysis include alternative fuel cleaning or fuel combustion techniques, including those that are *innovative*, is clear and unambiguous. Thus, NUARB did not fulfill its statutory duty in rejecting wood gasification as an available control option under step one of its BACT review.

Courts and environmental agencies often require review of alternative combustion techniques as part of a proper BACT analysis. In *Prairie State*, the case that the EAB relies most heavily upon in rejecting wood gasification and partial CCS, Illinois EPA required a detailed analysis of the feasibility of IGCC—a technology analogous to wood gasification when combusting coal—as part of its BACT review for the Prairie State facility. Neither the EAB nor Illinois EPA argued that this technology would constitute a fundamental redefinition of the potential source. *Prairie State*, 13 E.A.D. 1, 6 (EAB 2006).

In another instance, the Utah Supreme Court reviewed a PSD permit issued to a power company for the construction of a coal-fired power plant. Environmental groups challenged the permit on the basis that the Utah Division of Air Quality should have included IGCC technology in its BACT analysis. The Court concluded: "[it] is evident that the Power Company was not required to consider wind generation for electric power as an alternative process. However, as in the *Prairie State* BACT analysis, the Power Company should have included IGCC in its BACT review. IGCC is a control technology that can reduce the emissions of several criteria pollutants.

The adoption of this standard would not require the Power Company to redefine the design of its proposed facility." *Utah Chapter of Sierra Club v. Air Quality Bd*., 226 P.3d 719, 733 (2009). In this instance, as in *Prairie State*, it was concluded that the combustion technique utilized was a proper subject matter for BACT review and that alternative combustion processes—specifically gasification—should have been included in a proper BACT analysis.

Similarly, add-on control technologies, such as partial CCS, are well within the realm of a proper BACT review for GHGs and do not impermissibly redefine the scope of a project. EPA practice and guidance states that a reviewing agency *must* consider available add-on control technologies, like partial CCS, for BACT review. As the NSR Manual reads: "The top-down BACT analysis should consider potentially applicable control techniques . . . Add-on controls . . . should be considered based on the physical and chemical characteristics of the pollutant-bearing emission stream." U.S. EPA, OFFICE OF AIR QUALITY PLANNING AND STANDARDS, NEW SOURCE REVIEW WORKSHOP MANUAL B.10 (1990).

Recent EPA guidance explicitly states that CCS is an add-on control technology that should be included in a BACT review for GHG emissions: "For the purposes of a BACT analysis for GHGs, EPA classifies CCS as an add-on pollution control technology that is 'available' for facilities emitting CO2 in large amounts, including fossil-fuel fired power plants, and for industrial facilities with high-purity CO2 streams." U.S. EPA, OFFICE OF AIR QUALITY PLANNING AND STANDARDS, PSD AND TITLE V PERMITTING GUIDANCE FOR GREENHOUSE GASES 32 (2011). As this guidance suggests, partial CCS should be treated similarly to traditional add-on technologies like scrubbers and electrostatic precipitators that reduce the post-combustion emission of pollutants. Such add-on control technologies do not impermissibly redefine a source. To the contrary, they are explicitly required in a proper BACT review.

EPA often requires add-on control technologies, like partial CCS, as BACT. In *Alaska Department of Environmental Conservation v. EPA*, 540 U.S. 461, 496 (2004), for instance, EPA rejected the state agency's determination that low NO_x burners were BACT for a diesel electric generator and required the agency to re-examine selective catalytic reduction ("SCR") as an add-on control technology for NO_x. The Supreme Court upheld EPA's determination that the state agency's rejection of SCR was arbitrary and capricious. *Id.*

In sum, NUARB's rejection of wood gasification and partial CCS as an impermissible redefinition of the Forestdale Biomass Facility has no basis in precedent and directly contradicts EPA guidance. Thus, NUARB's rejection is arbitrary and capricious and was made without observance of procedure required by law. For these reasons, NUARB's determination that wood gasification and partial CCS would impermissibly redefine the source should be reversed.

CONCLUSION

For the aforementioned reasons, Save Our Climate respectfully asks the Court to reverse: 1) NUARB's implementation of the Sustainable Forest Plan as BACT for the Forestdale Biomass Facility; and 2) NUARB's rejection of wood gasification and partial CCS as an impermissible redefinition of the proposed source. Save Our Climate further petitions the Court to reject review of NUARB's denial of Sylvanergy's request for a NAD due to lack of jurisdiction. If the Court finds that it has jurisdiction to review the denial, Save Our Climate asks that the Court uphold NUARB's finding that the Forestdale Biomass Facility is a "major emitting facility" subject to PSD review. Finally, SOC petitions the Court to uphold NUARB's determination that the Forestdale Biomass Facility is subject to PSD review for GHGs.

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Respectfully submitted,

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