Team Number: 48
Arguing for Respondent Granger

UNITED STATES COURT OF APPEALS
FOR THE TWELFTH CIRCUIT

September Term, 2015

Docket Nos. 14-000123 and 14-000124

SYLVANERGY, L.L.C.,

Petitioner

-V. –

SAVE OUR CLIMATE, INC,

Petitioner

-V. –

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

Respondent

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

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ORDER

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JURISDICTIONAL STATEMENT

Sylvanergy, L.L.C., and Save Our Climate, Inc. (SOC), have filed timely petitions pursuant to section 307(b) of the Clean Air Act, 42 U.S.C. § 7607(b)(1) (2012), seeking judicial review of the final decision of Shaney Granger, Regional Administrator of the United States Environmental Protection Agency (EPA), granting a Prevention of Significant Deterioration (PSD) preconstruction permit to Sylvanergy for the construction of a biomass-fired electricity generation and wood pellet production facility in Forestdale, New Union (the Forestdale Biomass Facility). The petitions are preceded by an order of the Environmental Appeals Board denying petitions for review filed by Sylvanergy and SOC pursuant to 40 C.F.R. pt. 124 (2015). This Court has jurisdiction to review the EAB's decision under the same provision of the Clean Air Act. See 42 U.S.C. §7607(b)(1) (2012).

STATEMENT OF ISSUES

1. Whether the United States Court of Appeals for the Twelfth Circuit has jurisdiction to review NUARB's denial of Sylvanergy's request for a non-applicability determine (NAD).
2. If this Court has jurisdiction to review the denial of the NAD, whether NUARB properly determined that the Sylvanergy facility is a "major emitting facility" subject to PSD review.
    a. Whether the Sylvanergy facility is a "fossil-fuel fired" source subject to the 100 ton-per-year threshold under section 169(1) of the Clean Air Act, 42 U.S.C. § 7479(1) (2012).

b. Whether the Sylvanergy facility otherwise has the "potential to emit" more than 250 tons per year of carbon monoxide despite the limitations imposed by the Village of Forestdale site plan approval.

3. Whether a biomass-fueled facility is subject to PSD review as an emitter of greenhouse gases.
4. Whether NUARB properly rejected consideration of a wood gasification and partial carbon capture and storage plant as BACT for the Sylvanergy facility.
5. Whether NUARB permissibly imposed the Sustainable Forest Plan as BACT for the Sylvanergy facility.

STATEMENT OF THE FACTS

On January 15, 2013, Sylvanergy petitioned the State of New Union Air Resources Board (NUARB) for a Non-Applicability Determination (NAD). Sylvanergy asked NUARB to determine that Sylvanergy was not required to obtain a PSD preconstruction permit under section 165 of the Clean Air Act. Sylvanergy argued the potential to emit pollutants did not exceed the threshold under section 169(1) of the Clean Air Act. 42 U.S.C. §74791. Sylvanergy argued that it should not be required to obtain a PSD permit stemmed from its argument that it did not qualify as a "fossil-fuel fired steam electric plant" subject to the 100-ton-per-year, "major emitting facility" threshold and because it did not have the potential to emit more than the otherwise applicable threshold of 250 tons per year of regulated pollutants. NUARB rejected these arguments and denied the NAD. Sylvanergy challenged NUARB's denial of its request for a NAD before the Environmental Appeals Board. The board determined that it did not have authority to consider Sylvanergy's challenge to the denial of the NAD and that Sylvanergy had the option to seek judicial review of the denial of the NAD.

Sylvanergy's proposed facility will operate with wood fired boilers for steam generation. The facility is a biomass facility with two attendant fossil-fueled start-up burners, each with only a maximum heat input rate of 60 MMBtu/hr. The facility will be located within the limits of the Village of Forestdale. As part of the Village's site plan approval it limited the operation of the facility to no more than 6,500 hours per year, a 75 percent capacity factor. At a 96 percent capacity factor the facility will emit 255 tons per year of carbon monoxide (CO) and other pollutants. The EPA looked at the 96 percent capacity factor when determining the facility's potential to emit because the site plan approval has no recordkeeping requirement and is not federally enforceable.

During its BACT analysis, NUARB considered PSD limits for the potential greenhouse gas (GHG) emissions from Sylvanergy's facility. Sylvanergy argued that since biomass fuels such as wood are renewable source, carbon dioxide emissions associated with their combustion are fully offset by the carbon sequestration afforded by the regrowth of the trees through the Sustainable Forest Plan. Thus, Sylvanergy argued that it should be considered to have zero GHG emissions; therefore, PSD limits for potential GHG emissions should not apply. However, in its appeal to the Environmental Appeals Board, Sylvanergy relied on the "Deferral Rule," which has been overruled by the District of Colombia Circuit, in order to further its argue that it should be exempted from PSD review.

There are many factors that impact a biogenic facility's net atmospheric contribution of CO2 emissions, including the type of feedstock used and the manner of its production, processing, and consumption. Because Sylvanergy's facility would emit 350,000 tons per year of CO_2e and Sylvanergy is considered an "anyways" source as an emitter of CO above the Act's threshold, NUARB reasoned that the plant would in fact emit greenhouse gases, and that controls on those

emissions were possible. Therefore, NUARB conducted a BACT review for greenhouse gas (GHG) emissions from the proposed facility.

SOC filed detailed comments on the proposed arguing that BACT for GHGs from the facility was partial carbon capture and storage using a system of wood fuel gasification and combined cycle combustion. NUARB rejected the implementation of wood gasification and partial carbon capture and storage as an impermissible redefinition of the proposed source.

NUARB chose a Sustainable Forest Plan as BACT, which required acquisition of 25,000 hectares of dedicated forest. This would offset approximately 70 percent of the GHG emissions of the plant and assure sustainable biomass feedstock production based on short-rotation coppice plantings such as poplar. SOC asserts that the Sustainable Forest Plan should have been rejected under BACT step 4 as having unacceptable adverse environmental impacts. SOC submitted extensive comments and ecological studies asserting that monoculture forestry practices as contemplated by the Sustainable Forest Plan destroy biodiversity and promote tree diseases and pest invasions. NUARB did not address these comments. Upon review, the EAB considered SOC's arguments against the Sustainable Forest Plan, and found no clear error in NUARB's rejection of them.

SUMMARY OF ARGUMENT

This Court does not have jurisdiction to review NUARB's denial of Sylvanergy's request for a Non-Applicability Determination (NAD). This Court does not have jurisdiction because there is both a problem of ripeness and exhaustion of administrative remedies. Puerto Rican Cement Co., Inc. v. U.S.E.P.A., 889 F.2d 292, 294 (1st Cir. 1989). After denying the NAD, NUARB had to take further action to obtain an enforceable order; thus, NUARB's decision to deny the NAD is not ripe for review by this Court. Furthermore, Sylvanergy's request that this Court review

NUARB's denial of the NAD does not fall under any of the narrow exceptions to the exhaustion of administrative remedies requirement.

The Sylvanergy facility is a "major emitting facility" because it has the potential to emit 255 tons per year of CO. The EPA correctly calculated the facility's "potential to emit" using the operations at a 96 percent capacity factor. The proposed facility's "potential to emit" means "the maximum capacity of a stationary source to emit a pollutant under its physical and operational design." Louisiana-Pacific Corp., 682 F. Supp. at 1141. The Village of Forestdale's site plan approval limiting the facilities operations to a 75 percent capacity factor is not part of the facility's operational design because there is no monitoring requirement and it is not federally enforceable, thus the EPA was correct in not using it.

Furthermore, NUARB's determination that Sylvanergy's Forestdale Biomass Facility was subject to PSD review for GHG was correct. Sylvanergy, as an emitter of GHG, cannot be exempt from PSD review under the "Deferral rule" because the District of Columbia Circuit has overturned that rule. Additional, Sylvanergy is considered an "anyway" source because its facility will potentially emit 250 tons per year of CO and will be considered a "major emitting facility" subject to PSD review regardless of its potential GHG emissions. Lastly, PSD review for GHG was appropriate because Sylvanergy's facility would emit 350,000 tons per year of CO_2e, which is well above the EPA's currently proposed limit of 75,000 tons per year of CO_2e. Therefore Sylvanergy's GHG emissions are subject to PSD review. Utility Air Regulatory Group v. E.P.A., 134 U.S. 2427 (2014).

NUARB acted within its discretion to reject consideration of a wood gasification and partial carbon capture and storage as an impermissible redefinition of the proposed source. To require that the applicant's proposed process for electricity generation (wood combustion) to be replaced

by an entirely different process (wood gasification and stream reformation technology) would fundamentally change the scope of the proposed facility. Old Dominion Elec. Coop., 3 E.A.D. 779, 793 (Adm'r 1992).

NUARB properly determined the Sustainable Forest Plan to be the best available control technology for the proposed facility. BACT requires the maximum feasible degree of regulated pollutant emissions reductions. CAA § 169(3), 42 U.S.C. § 7479(3) (2012). A biomass facility is not BACT per se, because multiple variables impact a biomass facility's net atmospheric CO2 emission impact. U.S. Env't Prot. Agency, Revised Framework for Assessing Biogenic Carbon Dioxide (CO2) Emissions from Stationary Sources, ii (2014).

Biological re-sequestration can be ensured through the use of sustainable feedstock (which is equivalent to "clean fuel" because it counteracts its own emissions during regrowth), or it can be ensured through dedicated reforestation (an "add-on" pollution control which serves as the biological equivalent of carbon capture and sequestration). The Sustainable Forest Plan provides both of these functions; therefore, it is an acceptable pollution control for Sylvanergy's facility.

The permitting authority has considerable discretion when weighing whether environmental factors should disqualify an option from BACT analysis. U.S. Env't Prot. Agency, New Source Review Workshop Manual: Prevention of Significant Deterioration and Nonattainment Permitting B.50-.51 (draft, 1990). Because there is insufficient information in the record for the court to analyze the rationale for NUARB's decision, the court should require affidavits or testimony from NUARB explaining its reasoning.

STANDARD OF REVIEW

This Court reviews the EAB's decision under the "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law" standard of the Administrative Procedure

Act, 5 U.S.C. § 706(2)(A); Mueller v. United States Envtl. Prot. Agency, 993 F.2d 1354, 1356 (8th Cir. 1993). "This standard of review gives agency decisions a 'high degree of judicial deference.'" Missouri Limestone Producers Ass'n, Inc. v. Browner, 165 F.3d 619, 621 (8th Cir. 1999).

Here, the EAB's decision warrants exceptional deference because it involves the interpretation and application of the EPA's own regulations in a complicated and technical field of environmental law. See Thomas Jefferson Univ. v. Shalala, 512 U.S. 504, 512 (1994). The Supreme Court has stated: "the agency's interpretation must be given 'controlling weight unless it is plainly erroneous or inconsistent with the regulation.' ... [B]road deference is all the more warranted when, as here, the regulation concerns 'a complex and highly technical regulatory program,' in which the identification and classification of relevant 'criteria necessarily require significant expertise and entail the exercise of judgment grounded in policy concerns.'" Id. (citations omitted) (quotations omitted).

ARGUMENT

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

A petition to the Environmental Appeals Board under paragraph (a) of 40 C.F.R. § 124.19 is a prerequisite to seeking judicial review of final agency action. 40 C.F.R. § 124.19(l)(1). "Final agency action on a…PSD permit occurs when agency review procedures under [40 C.F.R. §124.19] are exhausted and the Regional Administrator subsequently issues a final permit decision…" 40 C.F.R. § 124.19(l)(2). Sylvanergy can appeal NUARB's decision denying a NAD before this Court only if that decision is a "final action of the administrator." Puerto Rican Cement Co., Inc., 889 F.2d at 294 *citing* 42 U.S.C. § 7607(b)(1). Furthermore, agency action is

considered final when "it represents the culmination of the agency's decision-making process and conclusively determines the rights and obligations of the parties with respect to the matters at issue." Rhode Island v. U.S.E.P.A., 378 F.3d 19, 23 (1st Cir. 2004). NUARB's denial is not reviewable by this Court because 1) NUARB must take further action to obtain an enforceable order (a problem of "ripeness"), and 2) because Sylvanergy can take further administrative steps (*i.e.,* it can invoke the PSD review process) and thereby perhaps obtain the permission to build its facility (a problem of "exhaustion of administrative remedies"). Puerto Rican Cement Co., Inc. v. U.S.E.P.A., 889 F.2d at 294.

A. Sylvanergy's Challenge to NUARB's Denial of its Request for a NAD is not yet "Ripe" for Judicial Review.

NUARB's denial of Sylvanergy's request for a NAD is not ripe for review before this court because the denial simply requires "further administrative action other than the possible imposition of sanctions, before rights, obligations or duties arise." Roosevelt Campobello Intern. Park Com'n, Campobello Island, New Brunswick, Canada v. U.S. E.P.A., 684 F.2d 1034, 1040 (1st Cir. 1982). Agency actions at issue here, NUARB's denial of the NAD, did not confer any "clean air" rights to Sylvanergy yet. Id. The NAD denial made by NUARB was "interlocutory" in the sense that another important, directly related agency action, namely PSD review and BACT analysis, must take place before they will do so. Id. The 1st Circuit has determined that "premature review…can deprive the agency of the opportunity to refine, revise or clarify the particular rule or other matter at issue." Id. The Court also determined that premature review can also "deprive [agency] of the opportunity to resolve the underlying controversy on other grounds, thus creating a consensus among the parties or avoiding the need for court proceedings." Id. Furthermore, to withhold judicial review at this time does not work exceptional hardship on Sylvanergy. This is not a case in which withholding review may force

Sylvanergy to comply with an agency ruling that it believes unlawful or even a case in which denial of review subjects Sylvanergy to harmful uncertainty. Id. Therefore, because after denying a NAD, NUARB had to take further action to obtain an enforceable order, NUARB's decision to deny the NAD was not a final action of the administrator and thus not ripe for review by this court.

B. Sylvanergy Failed to Exhaust its Administrative Remedies before Seeking Judicial Review of the Denial of the NAD.

Sylvanergy has not yet exhausted its administrative remedies before seeking judicial review by this court. Following the PSD review procedures, Sylvanergy could have tried to obtain from NUARB permission to build the new facility. With further evidence on appeal, NUARB may have reversed its determination that PSD review applies to Sylvanergy's facility. Thus, this court can and should refuse to consider claims that were not fairly exhausted. While courts have approved judicial waiver where "exhaustion would be futile, or where the harm suffered pending exhaustion would be irreparable," that is not the case here. City of New York v. Heckler, 742 F.2d 729, 736 (2d Cir. 1984). Sylvanergy's request that this Court review NUARB's denial of the NAD does not fall under any of these narrow exceptions.

1. Sylvanergy will not face "irreparable harm" if this Court does not have jurisdiction to review NUARB's denial of Sylvanergy's request for a NAD.

Sylvanergy will not experience "irreparable harm" if this court does not review NUARB's denial of the NAD request made by Sylvanergy. For instance, "the expense and annoyance of litigation is 'part of the social burden of living under government.'" Puerto Rican Cement Co., Inc., 889 F.2d at 295 *citing* FTC v. Standard Oil Co., 449 U.S. 232, 244 (1980). In Standard Oil Co., the Supreme Court held that "a roughly analogous type of agency decision—a Federal Trade Commission decision to initiate an expensive, time consuming agency proceeding against a

company—was 'interlocutory' and not 'final' for review purposes despite the 'substantial burden' that forced participation in the administrative proceeding would impose upon the company." Puerto Rican Cement Co., Inc., 889 F.2d at 295 *citing* Standard Oil Co., 449 U.S. at 244. Therefore, the harm pending agency exhaustion would not be irreparable and thus Sylvanergy has failed to exhaust all administrative remedies before petitioning this court for review of NUARB's denial of the NAD.

2. Sylvanergy's exhaustion of administrative remedies would not be futile.

While an agency can waive "exhaustion requirements," NUARB did not do so here. Mathews v. Diaz, 426 U.S. 67, 76 (1976). The EPA here has created an administratively separate agency decision-making process for appealing the granting or denying of NADs, the Environmental Appeal Board. The Environmental Appeals Board is the correct forum for which Sylvanergy can challenge the denial of the NAD. Furthermore, the EPA has raised objections to this Court reviewing the case. Unlike the case of Puerto Rican Cement Co., Inc. where the Court interpreted the EPA's failure as a determination by the Secretary that exhaustion would have been futile, Granger and the EPA are now challenging and arguing that this Court does not have jurisdiction to review NUARB's denial of Sylvanergy's request for a NAD. Therefore, there has been no waiver and exhaustion of administrative remedies before requesting review by this court; therefore, Sylvanergy's attempt to exhaust administrative remedies before request review by this court would not be futile.

II. NUARB PROPERLY DETERMINED THAT THE SYLVANERGY FACILITY IS A "MAJOR EMITTING FACILITY" SUBJECT TO PSD REVIEW BECAUSE SYLVANERGY HAS THE POTENTIAL TO EMIT MORE THAN 250 TONS PER YEAR OF CARBON MONOXIDE.

The term "major emitting facility" covers two categories of stationary sources: (1) any listed source type – including fossil-fuel fired steam electric plants of more than two hundred and fifty

million British thermal units per hour heat input – with the potential to emit 100 tons per year or more of air pollutants, and (2) any other source with the potential to emit 250 tons per year or more of any air pollutant. 42 U.S.C. §7479(1) (2013). The proposed facility's "potential to emit" means "the maximum capacity of a stationary source to emit a pollutant under its physical and operational design." Louisiana-Pacific Corp., 682 F. Supp. at 1141. A technological or operational capacity limitation may be considered part of the design capacity if it is enforced by a permit that requires appropriate monitoring and record keeping to determine compliance. EPA Final rule67 Fed. Reg. 80186-01 (Dec. 31, 2002). A major emitting facility may not be constructed unless a permit prescribing emission limitations has been issued for the facility. §7475 (a)(1).

A. The Sylvanergy Facility is not a "Fossil-Fuel Fired" Source

The Sylvanergy facility is not a "fossil-fuel fired," source because wood, not fossil fuel, fires the boiler for steam generation. The primary process in a steam electric plant – steam production for electricity generation – is achieved by boilers. Slyvanergy's facility is considered a biomass facility because their boiler is wood burning. Alabama Power Co. v. Costle, 636 F.2d 323, 397 (D.C. Cir. 1979) (holding that the term "source" means any structure, building, facility equipment, installation or operations (or combination thereof).). The plant does not become a fossil-fuel fired steam electric plant merely because of the use of two attendant fossil-fueled start-up burners. The term source "need not be interpreted so narrowly as to comprehend only those sources that emit pollutants through industrial "point" sources (such as smokestacks and chimneys)". Id. at 396.

B. The Sylvanergy Facility is a Major Emitting Facility because it has the "Potential to Emit" more than 250 tons-per-year of CO2, and the Village of Forestdale's Site Plan Approval Limitation is not enforced by a Permit that requires Appropriate Monitoring and Record Keeping to Determine Compliance, nor is it Federally Enforceable.

When calculating whether a source emits, or has the potential to emit, more than 250 tons/year of any pollutant, "Congress clearly envisioned that entire plants could be considered to be single 'sources.'" Alabama Power Co. v. Costle, 636 F.2d 323, 397 (D.C. Cir. 1979), see also Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc., 467 U.S. 837, 104 S. Ct. 2778, 81 L. Ed. 2d 694 (1984) (holding that treatment of all pollution-emitting devices within same industrial grouping as though they were encased within single "bubble" is permissible construction of term "stationary source).

Where a source has not yet been built, EPA may rely on the proposed facility's "potential to emit," which means "the maximum capacity of a stationary source to emit a pollutant under its physical and operational design." Louisiana-Pacific Corp., 682 F. Supp. at 1141. The EPA may calculate maximum design capacity based on an assumption of round-the-clock operations. U.S. v. Ohio Edison Co., 267 F.Supp.2d 829, 917 (Dist. Ct., S.D. Ohio 2003). The EPA Final rule, Dec. 31, 2002, 11-12, 67 FR 80186-01, states:

> "Practical enforceability for a source-specific permit will be achieved if the permit's provisions specify: (1) [a] technically-accurate limitation and the portions of the source subject to the limitation; (2) the time period for the limitation (hourly, daily, monthly, and annual limits such as rolling annual limits); and (3) the method to determine compliance, including appropriate monitoring, recordkeeping, and reporting."

Furthermore, some jurisdictions have held that any physical or operational limitation on the source's emission capacity – either technological or operational – will only be treated as a design

limitation if it is *federally enforceable*. Louisiana-Pacific Corp., 682 F. Supp. at 1141, Nat'l Min. Ass'n, 59 F.3d at 1362.

The Sylvanergy facility is a "major emitting facility" because it has the potential to emit more than 250 tons-per-year of CO. The EPA properly looked at the facility running at 96 percent capacity, which produced 255 tons-per-year of CO, in determining the facilities "potential to emit" once it begins operations. The Village of Forestdale's site plan approval, which would limit the facility to a capacity of 75 percent, is not federally enforceable. It also does not meet the regulatory requirement for monitoring, recordkeeping, and reporting. Thus, the EPA properly did not include the site plan limitations when calculating Sylvanergy's potential to emit.

III. SYLVANERGY, AS A BIOMASS-FUELED FACILITY, IS SUBJECT TO PSD REVIEW AS AN EMITTER OF GREENHOUSE GASES BECAUSE OF ITS POTENTIAL TO EMIT 350,000 TON-PER YEAR OF CO_2E AND BECAUSE IT IS CONSIDERED AN "ANYWAY" SOURCE.

The Environmental Appeals Board's decision to uphold NUARB's determination that the proposed Forestdale Biomass Facility was subject to PSD review for greenhouse gases should be affirmed by this Court. Under the Clean Air Act, it is unlawful to construct or modify a "major emitting facility" in "any area to which [the PSD program] applies" without first obtaining a permit. 42 U.S.C. §§ 7475(a)(1), 7479(2)(C). The Clean Air Act defines a "major emitting facility" as any stationary source with the potential to emit 250 tons per year of "any air pollutant" (or 100 tons per year for certain types of sources). Utility Air Regulatory Group v. E.P.A., 134 U.S. 2427, 2435 (2014); § 7479(1). Due to the following reasons, Sylvanergy's biogenic greenhouse gas emissions cannot be exempt from PSD review.

A. Sylvanergy's Biogenic Greenhouse Gas Emissions are not exempt from PSD Review because the D.C. Circuit has rejected the "Deferral Rule."

The Environmental Appeals Board was correct in determining that Sylvanergy, as an emitter of greenhouse gases, failed to state grounds for review based on its claimed exemption of biogenic greenhouse gas emissions from PSD review. Sylvanergy's reliance on the "Deferral Rule" as the basis for its exemption from PSD review is unsupported by law because the District of Columbia Circuit Court rejected the EPA's "Deferral Rule" in Center for Biological Diversity v. E.P.A., 722 F.3d 401, 405 (D.C. Cir. 2013). Center for Biological Diversity involved the question of whether biogenic carbon dioxide emissions were exempt from PSD review. The EPA defines biogenic carbon dioxide "as carbon dioxide emissions directly resulting from the combustion or decomposition of biologically-based materials other than fossil fuels and mineral sources of carbon." Center for Biological Diversity, 722 F.3d at 405 *citing* "Deferral for CO2 Emissions From Bioenergy and Other Biogenic Sources Under the Prevention of Significant Deterioration (PSD) and Title V Programs," 76 Fed. Reg. 43490-01. EPA adopted a "Deferral Rule" in order to temporarily exempt biogenic carbon dioxide from the PSD permitting program. Id. However, the D.C. Circuit Court held that the EPA could not justify the Deferral Rule under any administrative law. Center for Biological Diversity, 722 F.3d at 412. While the Court's opinion left open the question of whether the EPA has authority under the Clean Air Act to permanently exempt biogenic carbon dioxide sources from the PSD permitting program, it did reject the "Deferral Rule" Sylvanergy has attempted to rely on as the basis for its PSD review exemption. Id. Therefore, Sylvanergy cannot rely on the EPA's court-rejected "Deferral Rule" as the basis for an exemption from PSD review.

B. Sylvanergy's Biogenic Greenhouse Gas Emissions are not exempt from PSD Review because Sylvanergy is considered an "Anyway Source."

In 2009, the EPA found that greenhouse-gas emissions from new motor vehicles contribute to elevated atmospheric concentrations of greenhouse gases, which endanger public health and welfare by fostering global "climate change." Utility Air Regulatory Group, 134 U.S. at 2437 *citing* 74 Fed.Reg. 66523, 66537. EPA then announced steps it was taking to "tailor" the PSD program to greenhouse gases. Utility Air Regulatory Group, 134 U.S. at 2437 *citing* 75 Fed.Reg. 31514. However, the Supreme Court in Utility Air Regulatory Group held that "the EPA may not treat greenhouse gases as a pollutant for purposes of defining a "major emitting facility" (or a "modification" thereof) in the PSD context." Utility Air Regulatory Group, 134 U.S. at 2449. This effectively overruled the EPA's "tailoring" of the PSD program to major emitting facilities based solely on greenhouse gases. 75 Fed.Reg. 31514 (i.e. Tailoring Rule). In its reasoning the Court determined that "EPA lacked authority to "tailor" the [Clean Air] Act's unambiguous numerical thresholds to accommodate its greenhouse-gas-inclusive interpretation of the permitting triggers." Utility Air Regulatory Group, 134 U.S. at 2446. However, the current situation is clearly distinguishable from the EPA treating greenhouse gases as a pollutant for purposes of defining a "major emitting facility." NUARB did not solely rely on Sylvanergy's potential to emit greenhouse gases to designate Sylvanergy as a "major emitting facility." As discussed above, NUARB's determination that Sylvanergy is subject to PSD review as a "major emitting facility" is based Sylvanergy's potential to emit more than 250 tons per year of carbon monoxide. Therefore, NUARB is not treating only Sylvanergy's potential greenhouse gas emissions as a pollutant for purposes of defining Sylvanergy a "major emitting facility." Utility Air Regulatory Group, 134 U.S. at 2437.

However, the Supreme Court did determine that the "EPA may…continue to treat greenhouse gases as a pollutant subject to regulation…for purposes of requiring BACT for 'anyway' sources." Id. at 2449. An "anyway" source refers to those facilities required to obtain permits anyway because of their emission of conventional pollutants. Sylvanergy is an "anyway" source because the facility will potentially emit 250 tons per year of carbon monoxide (CO) and will be considered a "major emitting facility" subject to PSD review regardless of its potential greenhouse gas emissions. The Supreme Court further held that the "EPA may require an "anyway" source to comply with greenhouse-gas BACT only if the source emits more than a *de minimis* amount of greenhouse gases." Utility Air Regulatory Group, 134 U.S. at 2437 *citing* 75 Fed.Reg. 31523. However, the Court went on to find that because the EPA did not arrive at 75,000 tons per year CO_2e by identifying the *de minimis* level, that portion of the EPA rule was rejected. Id. at 2449. Therefore, while the Court did not hold that 75,000 tons per year CO_2e necessarily exceeds a true *de minimis* level, only that EPA must justify its selection on proper grounds, the Court did hold that EPA may continue to treat greenhouse gases as a "pollutant subject to regulation…" for purposes of requiring BACT for "anyway" sources." Id. at 2449. While the Supreme Court pointed out that the EPA *might* establish an appropriate *de minimis* threshold below which BACT is not required for a source's greenhouse-gas emissions; as of September 1, 2015, the EPA has not done so.

Therefore, even if the EPA does justify its selection of 75,000 tons per year CO_2e, it was proper for NUARB to consider PSD limits for greenhouse gases. As discussed above, at the 96-percent capacity factor, Sylvanergy has the potential to emit 255 tons per year of CO, thus making Sylvanergy a "major emitting facility" and subject to PSD review anyway for its CO emissions. Furthermore, Sylvanergy's facility would emit 350,000 tons per year of CO_2e.

Moreover, the District of Columbia Circuit Court noted that "the atmosphere makes no distinction between carbon dioxide emitted by biogenic and fossil-fuel sources," making Sylvanergy's argument that because biomass fuels such as wood are a renewable resource, carbon dioxide emissions associated with their combustion are fully offset by the carbon sequestration afforded by the regrowth of the biofuels superfluous. Center for Biological Diversity, 722 F.3d at 405-06. Therefore, as a biomass-fueled facility, Sylvanergy is subject to PSD review as an emitter of greenhouse gases, because it is both an "anyway" source *and* it has the potential to emit 350,000 tons per year of CO_2e.

IV. NUARB PROPERLY REJECTED CONSIDERATION OF A WOOD GASIFICATION AND PARTIAL CARBON CAPTURE AND STORAGE AS AN IMPERMISSIBLE REDEFINITION OF THE PROPOSED SOURCE.

It is well established that the permitting authority may reject an option from BACT analysis that requires a fundamental redesign of the proposed facility. Old Dominion Elec. Coop., 3 E.A.D. 779, 793 n. 38 (Adm'r 1992); U.S. Env't Prot. Agency, New Source Review Workshop Manual: Prevention of Significant Deterioration and Nonattainment Permitting B.13 (draft, 1990) [hereinafter NSR Workshop Manual].

The PSD preconstruction permit applicant defines "the proposed facility's end, object, aim, or purpose." Prairie State Generating Co., 13 E.A.D. 1, 18 (EAB 2006).

To determine whether a control technology redefines the source, the permitting authority should look at the proposed design to determine which elements are inherent for the applicant's basic purpose. E.g. Desert Rock Energy Co., 14 E.A.D. 484, 530 (EAB 2009); Northern Michigan Univ., 14 E.A.D. 283, 302 (EAB 2009); Prairie State Generating Co., 13 E.A.D. 1 at 23. "Redefinition" of the source is ultimately a question of degree that is within the broad discretion of the permitting authority. Desert Rock Energy Co., 14 E.A.D. 484 at 485.

"Redefinition" includes changing the primary process that will take place at the facility. For example, in Old Dominion Elec. Coop., 3 E.A.D. 779 at 793, the Administrator found no clear error in the State's rejection of a challenger's proposal to substitute one type of electric generating facility (fired by natural gas) for another (coal-fired) on the grounds that such an alternative would redefine the source. See also NSR Manual, supra, at B.13 ("applicants 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 although the turbine may be inherently less polluting per unit product"); SEI Birchwood, Inc., 5 E.A.D. 25, 29-30 n.8 (EAB 1994) (switch to natural gas would redefine coal-fired electric generating plant); Haw. Commercial & Sugar Co., 4 E.A.D. 95, 99-100 (EAB 1992) (dictating which boiler type the applicant must use constituted redefinition of the proposed source).

NUARB acted well within its discretion to reject wood gasification and steam reformation. Sylvanergy's proposed biomass facility consists of a wood-fired boiler together with two diesel start-up burners. To require that the applicant's proposed process for electricity generation be replaced by wood gasification and stream reformation technology would fundamentally change the scope of the proposed facility. NUARB has the authority to reject this option from BACT analysis.

V. NUARB PERMISSIBLY IMPOSED THE SUSTAINABLE FOREST PLAN AS BACT FOR THE SYLVANERGY FACILITY.

NUARB properly determined the Sustainable Forest Plan to be the best available control technology for the proposed facility. BACT requires the maximum feasible degree of regulated pollutant emissions reductions. CAA § 169(3), 42 U.S.C. § 7479(3) (2012). A biomass facility is not BACT per se, because multiple variables impact a biomass facility's net atmospheric CO2 emission impact. U.S. Env't Prot. Agency, Revised Framework for Assessing Biogenic Carbon

Dioxide (CO2) Emissions from Stationary Sources, ii (2014). Biomass is only beneficial as a "renewable" fuel if it is in fact "renewed" in order to offset the facility's emissions. Biological re-sequestration can be ensured through the use of sustainable feedstock (which is equivalent to "clean fuel" because it counteracts its own emissions during regrowth), or it can be ensured through dedicated reforestation (an "add-on" pollution control which serves as the biological equivalent of carbon capture and sequestration). The Sustainable Forest Plan provides both of these functions. Therefore, the Sustainable Forest Plan is an acceptable pollution control for Sylvanergy's facility.

The permitting authority has considerable discretion when weighing whether environmental factors should disqualify an option from BACT analysis. U.S. Env't Prot. Agency, New Source Review Workshop Manual: Prevention of Significant Deterioration and Nonattainment Permitting B.50-.51 (draft, 1990). Because there is insufficient information in the record for the court to analyze the rationale for NUARB's decision, the court should require affidavits or testimony from NUARB explaining its reasoning.

A. Sylvanergy's Proposed Facility was not BACT Per Se.

BACT requires that regulated pollutant emissions be reduced by the "maximum degree" feasible. CAA § 169(3), 42 U.S.C. § 7479(3) (2012). The standard is applied on a case-by-case basis to determine what is feasible for each facility. The standard is not dependent on the use of any one technology, nor is it relational to other facilities.

Biogenic feedstock is an environmentally preferable fuel because it is a renewable resource. The carbon emitted by biomass consumption can be re-captured by biomass production. The EPA agrees with Sylvanergy that this unique dynamic merits consideration in the BACT analysis. U.S. Env't Prot. Agency, Guidance for determining Best Available Control

Technology for Reducing Carbon Dioxide Emissions from Bioenergy Production 8 (2011). However, "carbon neutrality cannot be assumed for all biomass energy a priori." U.S. Env't Prot. Agency, Revised Framework for Assessing Biogenic Carbon Dioxide (CO2) Emissions from Stationary Sources ii (2014). There are many factors that impact a biogenic facility's net atmospheric contribution of CO2 emissions, including the type of feedstock used and the manner of its production, processing, and consumption. Id. at 48.

The EPA plans to propose a revision to the PSD rules to recognize biogenic feedstock whose emissions are likely to have minimal or zero net atmospheric contributions of biogenic CO2 emissions as BACT per se. Janet G. McCabe, U.S. Env't Prot. Agency, Memorandum Addressing Biogenic Carbon Dioxide Emissions from Stationary Sources 3 (November 19, 2014). This exemption would include feedstock that is sustainably produced. Sustainable feedstocks are equivalent to "clean fuels" because emissions from their consumption are proportionally counteracted by their regrowth.

However, biogenic feedstocks that do not guarantee minimal atmospheric CO2 contribution should remain subject to the BACT requirement. McCabe, supra, at 3. In Center for Biological Diversity, the court remanded EPA's administrative action deferring regulation of all biogenic CO2 sources for three years. Ctr. for Biological Diversity v. E.P.A., 722 F.3d 401, 411 (D.C. Cir. 2013). The EPA had rejected a "middle-ground option" that would require biogenic CO2 sources to install BACT if they failed to make any effort to take into account net carbon cycle impacts. Because the EPA failed to explain why it rejected an option that "would have had the practical effect of reducing [biogenic sources'] emissions," the court remanded its decisions as arbitrary and capricious. Id.

Sylvanergy's proposed facility is a "major emitting" facility that emits GHGs, a regulated pollutant. Under the plain meaning of the statute, it is therefore subject to the BACT standard. Sylvanergy's proposal does not provide for sustainable feedstock, nor other methods that demonstrate maximum feasible CO2 reductions for the facility. Therefore, NUARB properly undertook BACT analysis.

B. Dedicated Reforestation is an Acceptable Control Technology for a Wood-Burning Facility.

1. BACT should consider net atmospheric impact of CO2 emissions

The BACT standard targets pollution either "emitted from *or* which results from" any major emitting facility. CAA § 169(3), 42 U.S.C. § 7479(3) (2012) (emphasis added). This dichotomy indicates that BACT can reduce the pollution attributable to the facility either by controlling the facility's direct emissions or by controlling the facility's net pollution impact.

The EPA and the judiciary have long recognized circumstances in which the statute can be applied to a facility's net pollution impact rather than its direct emissions. For example, in Chevron, the Court upheld the EPA's decision "to treat all of the pollution-emitting devices as though they were encased within a single 'bubble'." Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc., 467 U.S. 837, 859 (1984). Other concepts applied under the Clean Air Act include "netting," in which a facility credits current emissions reductions towards future emissions requirements, and "offsetting," by which the air quality impact of a new facility's emissions is offset by reductions in emissions elsewhere. 40 C.F.R. § 52.21(b)(3); 40 C.F.R. § Pt. 51, App. S.

GHG emissions are distinct because they are well-mixed in the atmosphere at large spatial scales, and their adverse impacts are globalized. Therefore, it is unnecessary to reduce CO2 emissions directly at the source. Instead, BACT should consider a facility's net atmospheric impact for CO2 emissions. U.S. Env't Prot. Agency, Guidance for determining Best Available

Control Technology for Reducing Carbon Dioxide Emissions from Bioenergy Production 8 (2011).

Accounting for biological sequestration is the only way to take into account the benefit of biomass in BACT analysis. Biological sequestration has the potential to render a facility's carbon impact net-neutral or even net-negative. Furthermore, there are no available technologies that *directly* capture CO2 emissions from biomass combustion. Technological carbon capture and sequestration is not feasible, because there is no proven technology for removing CO2 from the dilute flue gas streams that result from biomass combustion. Therefore, the purpose of BACT and the goals of the Clean Air Act are best achieved by determining BACT on the basis of a biomass facility's net atmospheric impact, rather than direct emissions. Dedicated reforestation is an acceptable control technology because it significantly reduces Sylvanergy's net carbon impact on the atmosphere.

2. The Sustainable Forest Plan is an "add on" pollution control, and provides "clean fuel."

BACT can involve a range of technologies and practices, including "production process and available methods, systems, and techniques, including … clean fuel." CAA § 169(3), 42 U.S.C. § 7479(3) (2012).

The EPA classifies carbon capture and sequestration ("CCS") as an "add-on" pollution control available for consideration in Step-1 of BACT analysis. U.S. Env't Prot. Agency, Guidance for determining Best Available Control Technology for Reducing Carbon Dioxide Emissions from Bioenergy Production 13-14 (2011). CCS is a three-step process: (1) capture of CO2 emissions from power plants or industrial processes, (2) transport of the captured and compressed CO2 (usually in pipelines) to on- or off-site injection wells, and (3) underground injection and geologic sequestration of the CO2 into deep underground rock formations. U.S.

Env't Prot. Agency, Carbon Dioxide Capture and Sequestration ¶ 1, http://www3.epa.gov/climatechange/ccs/ (last visited Nov. 21, 2015). While there is no proven technology to capture CO2 from biomass combustion, biological sequestration performs the same function as CCS by capturing CO2 and storing it in plant cells rather than underground. Just as CCS sequesters CO2 in off-site injection wells, the Sustainable Forest Plan sequesters CO2 in off-site biomass. By purchasing and managing land for reforestation under the Sustainable Forest Plan, Sylvanergy is "adding on" a *biological* CCS system to its facility's operations.

Furthermore, the Sustainable Forest Plan assures sustainable biomass feedstock production based on short-rotation coppice plantings such as poplar. As discussed above, sustainable feedstocks are equivalent to "clean fuels" because they counteract emissions from their consumption as they are regrown. The EPA therefore plans to revise PSD regulations to exempt feedstock that is sustainably produced from the BACT requirement. Janet G. McCabe, U.S. Env't Prot. Agency, Memorandum Addressing Biogenic Carbon Dioxide Emissions from Stationary Sources 3 (November 19, 2014). Because the Sustainable Forest Plan both provides clean fuel and serves as natural CCS, it is a permissible BACT option.

3. NUARB was within its discretion to not reject the Sustainable Forest Plan as BACT on environmental impact grounds.

When performing BACT analysis, the permitting authority must take into account "energy, environmental, and economic impacts and other costs." CAA § 169(3), 42 U.S.C. § 7479(3) (2012). The permitting authority has considerable discretion in determining what weight to give environmental concerns. Hillman Power Co., L.L.C., 10 E.A.D. 673, 684 (EAB 2002). However, the permitting authority must fully consider the important aspects of the problem and "articulate a satisfactory explanation for its action including a 'rational connection between the

facts found and the choice made.'" Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 31 (1983); see also 2 Am. Jur. 2d Administrative Law § 477 (2015); U.S. Env't Prot. Agency, PSD and Title V Permitting Guidance for Greenhouse Gases 44 (2010).

A court may review an agency's decision under the arbitrary and capricious standard. An agency's decision is arbitrary and capricious if the agency has (1) relied on factors that legislature did not intended it to consider, (2) entirely failed to consider an important factor, (3) offered an explanation for its decision that contravenes the evidence before it, or (4) issued a decision that is entirely implausible. 2 Am. Jur. 2d Administrative Law § 477 (2015).

The scope of review under the "arbitrary and capricious" standard is narrow, and a court must not substitute its judgment for that of the agency. Motor Vehicle Mfrs. Ass'n of U.S., Inc., 463 U.S. 29 at 43. Where the Court has no administrative record from which to evaluate the agency's decision, the court may require affidavits or testimony from the agency explaining its action. See Camp v. Pitts, 411 U.S. 138, 142-43 (1973) (where administrator's failure to explain administrative action frustrated judicial review, the remedy was to obtain explanation of reasons for the agency decision either through affidavits or testimony); Citizens to Pres. Overton Park, Inc. v. Volpe, 401 U.S. 402, 420 (1971).

Here, the Court has insufficient explanations for NUARB's decision on record to determine whether the decision was arbitrary and capricious. SOC submitted comments opposing the Sustainable Forest Plan on the grounds that it would have unacceptable adverse environmental impacts. While environmental impacts are one of the factors that the statute requires consideration of, NUARB did not address SOC's comments. The EAB examined the record found that, even in light of SOC's environmental concerns, the decision to apply the Sustainable Forest Plan as BACT was reasonable. Therefore, the decision was not so "implausible" as to be

arbitrary and capricious. However, there is no explanation for NUARB's decision in the record; therefore, the court is unable to assess whether the decision was reached on appropriate grounds. Thus, the proper remedy is to require testimony from the administrators who participated in the decision to explain their action, such that proper assessment of the agency's decision can take place.

CONCLUSION

For the foregoing reasons, this Court should deny Sylvanergy, L.L.C.'s and Save Our Climate, Inc.'s consolidated petition.