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Measuring Brief (Sylvanergy)

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TWENTY-EIGHTH ANNUAL JEFFREY G. MILLER PACE NATIONAL ENVIRONMENTAL LAW MOOT COURT COMPETITION

Measuring Brief*

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Docket Nos. 14-000123 and 14-000124
UNITED STATES COURT OF APPEALS
FOR THE TWELFTH CIRCUIT

SYLVANERGY, L.L.C.,
Petitioner,
v.
SHANEY GRANGER, in her official capacity as Regional Administrator for Region XIII of the United States Environmental Protection Agency,
Respondent,
and
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

Brief of SYLVANERGY, L.L.C., Petitioner

* This brief has been reprinted in its original format. Please note that the Table of Authorities and Table of Contents for this brief have been omitted.

STATEMENT OF JURISDICTION

This Court has jurisdiction under section 307(b) of the Clean Air Act, 42 U.S.C. § 7607(b)(1) (2012), to review the final Environmental Protection Agency (EPA) action issuing a Prevention of Significant Deterioration permit to Sylvanergy, L.L.C. This Court also has jurisdiction to review all intermediate and interlocutory decisions relevant to EPA's final action. 5 U.S.C. § 704 (2012) (providing that an "intermediate agency action or ruling not directly reviewable is subject to review on the review of the final agency action").

STATEMENT OF THE ISSUES

This Court has jurisdiction to review final Prevention of Significant Deterioration (PSD) permits, as well as intermediate decisions made during the PSD permitting process. Sylvanergy, L.L.C. (Sylvanergy) timely petitioned this court for review of the PSD permit issued by New Union Air Resources Board (NUARB). Does this Court have jurisdiction to review NUARB's interlocutory decision to deny Sylvanergy's request for a Non-Applicability Determination?

Sylvanergy proposed a biomass-fired electricity generation facility that contains only two 60 MMBtu/hour fossil fuel start-up burners. Under the Clean Air Act (CAA), a fossil fuel-fired steam electric plant is regulated under the PSD program if it has a heat input of more than 250 MMBtu/hour. Did NUARB err in classifying the Sylvanergy facility as a fossil fuel-fired plant?

Because Sylvanergy's proposed facility is not one of the 28 specified sources under CAA section 165, it is only subject to PSD review if it emits more than 250 tons per year(tpy) of carbon monoxide (CO). Locally imposed, binding output restrictions

prevent the proposed facility from emitting any more than 190 tpy of CO. Did NUARB err in determining that the proposed facility's CO emissions triggered PSD review?

An EPA rule deferring regulation of biogenic carbon dioxide emissions was in effect at the time NUARB issued Sylvanergy's PSD permit. EPA has consistently recognized that biomass-fired electricity generation can be carbon neutral. Did NUARB err in subjecting Sylvanergy's proposed facility to PSD review for greenhouse gas emissions?

In step one of a best available control technology (BACT) determination, the permit issuer does not consider those control technologies that would impermissibly redefine the permit applicant's proposed source. NUARB determined that requiring Sylvanergy to gasify wood and burn gas, rather than burn wood, would redefine the proposed facility. Was NUARB's determination reasonable?

Although BACT traditionally involves onsite control technologies, NUARB ultimately determined that BACT for Sylvanergy's proposed facility involvespurchasing and managing 25,000 hectares of forested land on a separate piece of property. Did NUARB err by considering "beyond-the-fence" measures in its BACT determination?

STATEMENT OF THE CASE

This is a petition to review the grant of a Prevention of Significant Deterioration (PSD) permit to Sylvanergy, L.L.C. (Sylvanergy). R. 4. Sylvanergy seeks to construct a new biomass-fired electricity generation and wood pellet production facility in Forestdale, New Union. R. 5. New Union Air Resources Board (NUARB) found that two start-up burners using fossil fuels rendered Sylvanergy's proposed biomass-fired facility a "fossil-fuel facility" subject to a lower threshold for emissions. R. 6.

Further, NUARBdetermined it would be impermissible to consider local operational controls in assessing the facility's potential to emit pollutants. *Id.* Therefore, NUARB denied Sylvanergy's request for a Non-Applicability Determination (NAD) and found that Sylvanergy's facility is a "major emitting facility" subject to PSD review. *Id.*During its PSD review, NUARB adopted a Sustainable Forest Plan as BACT for greenhouse gas (GHG) emissions from Sylvanergy's proposed facility. *Id.*

Petitions for review of the NUARB decisions were timely filed with the Environmental Appeals Board (EAB) by both Sylvanergy and Save Our Climate, Inc. (SOC), an environmental non-profit corporation. R. 4. Sylvanergy sought review of the NAD denial, the applicability of PSD review for biomass facilities, and the imposition of the Sustainable Forest Plan as BACT for GHG emissions. R. 7. SOC challenged the denial of a wood gasification and partial carbon capture and storage as BACT. *Id.* The EAB concluded it lacked jurisdiction to review the NAD denial, as it held that action did not constitute a "PSD final permit decision." R. 8. The EAB further determined that use of biofuels alone does not constitute BACT, R. 11; that NUARB properly excluded wood gasification and partial carbon capture and storage from its BACT analysis, R. 13; and that NUARB reasonably imposed the Sustainable Forest Plan as BACT. R. 12.Sylvanergy timely filed this petition for review of the EAB decision. R. 1.

STATEMENT OF FACTS

Sylvanergy, L.L.C. (Sylvanergy) proposed to build the Forestdale Biomass Facility—a biomass-fired electricity generation facility—approximately 2 km from the center of Forestdale, New Union. R. 5. Sylvanergy designed the Forestdale Biomass Facility to include a biomass-fired electricity generation unit with a capacity of 40 megawatts, as well as a wood pellet fuel production plant. *Id.* The planned 500 million British thermal units per hour (MMBtu/hour) electricity generation unit would

primarily use a wood-fired boiler, and two ultra-low sulfur diesel start-up burners would be used to start the boiler. *Id.*

The designed facility initially had a potential to emit 350,000 tons per year (tpy) of greenhouse gases (GHGs) at full capacity, and 255 tpy of carbon monoxide (CO) at 96% operational capacity. *Id.* However, when Village of Forestdale granted site approval for the proposed facility, it conditioned its approval upon the facility operating at 75% capacity, or 6,500 hours annually. *Id.* This operational restriction mitigates the impact of log trucks transporting lumber through Forestdale for processing at Sylvanergy's proposed facility. *Id.* The Village of Forestdale incorporated the operational restriction into the site plan, and it is enforceable by the Forestdale Building Inspector. *Id.* Based on these restricted operating conditions, the facility has the potential to emit no more than 190 tpy of CO, as well as lesser amounts of other criteria pollutants. *Id.*Despite the enforceable emissions limitation, New Union Air Resources Board (NUARB) determined that Sylvanergy requires a Prevention of Significant Deterioration (PSD) permit in order to operate the Forestdale Biomass Facility. R. 6. Further, NUARB decided to conduct PSD review for GHG emissions over Sylvanergy's objection. *Id.*

After determining that PSD review applied to GHG emissions, NUARB conducted a top-down approach to determine what should be implemented as Best Available Control Technology (BACT) for GHG emissions. *Id.* NUARB considered carbon capture and storage, but determined that this technology is not currently available for biomass combustion. *Id.* NUARB next considered alternative fuels like natural gas, as well as wood gasification and partial carbon capture and storage. R. 7. Both options were rejected as impermissible redefinitions of the source. *Id.* Finally, NUARB considered a Sustainable Forest Plan that involves management of a separate 25,000 hectare reforestation area. *Id.* NUARB ultimately adopted the Sustainable Forest Plan as BACT, requiring Sylvanergy to purchase 25,000 hectares of land outside of the Forestdale Biomass Facility property, at an estimated cost of $10 million. R. 7.

STANDARD OF REVIEW

The Administrator's decision must be vacated if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." Administrative Procedure Act (APA), 5 U.S.C. § 706(2)(A)(2012); *see alsoAlaska Dept. of Envtl. Conservation v. U.S. Envtl. Prot. Agency*, 540 U.S. 461, 497 (2004) (indicating APA standard of review applies to review of Prevention of Significant Deterioration permit where Clean Air Act sections do not specify the review standard).

SUMMARY OF ARGUMENT

Sylvanergy, L.L.C. (Sylvanergy) timely petitioned this Court to review a final Prevention of Significant Deterioration (PSD) permit issued by New Union Air Resources Board (NUARB). Upon review of that final agency action, this Court has jurisdiction to review all intermediate decisions leading to the PSD permit, including NUARB's threshold decision that PSD review applies to the Forestdale Biomass Facility. Therefore, this Court should grant review of NUARB's Non-Applicability Determination (NAD) and find that NUARB impermissibly subjected Sylvanergy's proposed facility to PSD review.

NUARB erred by concluding thatthe Forestdale Biomass Facility is a "major emitting facility" subject to PSD regulation. Sylvanergy's proposed facility is not a listed source subject to the 100 ton per year (tpy) emissions threshold because it is not fossil fuel-fired. Further, the facility does not have the potential to emit more than 250 tpy of any relevant pollutant because the Village of Forestdale imposed practical and enforceable operational controls that lower the facility's emissions potential below the statutory threshold. Thus, this Court should remand to NUARB to reconsider Sylvanergy's NAD request in light of the locally imposed operational restrictions.

NUARB also erroneously subjected the Forestdale Biomass Facility to PSD review for greenhouse gases (GHGs). At the time NUARB issued Sylvanergy's PSD permit, it arbitrarily failed to consider an EPA regulation deferring PSD review of biogenic carbon dioxide (CO_2) emissions until a later date. In addition, EPA has consistently acknowledged the potential of biomass-fired electricity generation to provide carbon-neutral renewable energy. As such, EPA has continuously asserted that it would like to defer regulation of biogenic CO_2 emissions until it can be certain that there is a regulatory benefit. Subjecting Sylvanergy's proposed facility to PSD review for GHGs represented an irrational departure from EPA's consistent policy position. Therefore, this Court should vacate NUARB's decision to subject Sylvanergy's proposed facility to PSD review as arbitrary and capricious.

Finally, NUARB erred in determining the best available control technology (BACT) for the Forestdale Biomass Facility. As a threshold matter, the agency reasonably found that wood gasification and partial carbon capture and storage redefined the source, as it would substantially change the design of Sylvanergy's proposed facility. However, NUARB impermissibly considered "beyond-the-fence" measures in identifying the Sustainable Forest Plan as BACT, as BACT traditionally involves onsite control technologies more readily understood as technological.Therefore, if this Court finds that the Forestdale Biomass Facility is subject to PSD review, it should nevertheless remand the PSD permit to NUARB for a proper BACT determination.

ARGUMENT

I. THIS COURT HAS JURISDICTION TO REVIEW THE NON-APPLICABILITY DETERMINATION BECAUSE THAT INTERLOCUTORY DECISION ONLY BECAME REVIEWABLE AFTER SYLVANERGY EXHAUSTED ALL ADMINISTRATIVE REMEDIES.

New Union Air Resources Board (NUARB) denied Sylvanergy's request for a Non-Applicability Determination (NAD) as an intermediate step in the Prevention of Significant Deterioration (PSD) permitting process. This Court has jurisdiction to review all subsidiary decisions related to issuance of the PSD permit now that Sylvanergy has exhausted its administrative remedies. Section 307(b) of the Clean Air Act (CAA) confers jurisdiction on the circuit courts of appeals to review several specific actions of the U.S. Environmental Protection Agency (EPA) Administrator, in addition to "any other final action of the Administrator under this chapter . . . which is locally or regionally applicable." 42 U.S.C. § 7607(b)(1) (2012). Under section 307(b), parties must file petitions for review "within sixty days from the date notice of such promulgation, approval, or action appears in the Federal Register." *Id.*

Here, the denial of Sylvanergy's NAD request—thereby subjecting the Forestdale Biomass Facility to PSD review—did not constitute a final agency action for which Sylvanergy had to seek judicial review within sixty days.[1] Instead, the sixty day limitation period began after the Environmental Appeals Board (EAB) reached its final decision and the Regional Administrator published the PSD permit in the Federal Register, rendering the agency action "final" pursuant to EPA regulations. *See* 40 C.F.R. § 124.19(l)(2) (2014) (providing that a final action on a PSD permit does not occur until all administrative remedies are

[1] A section 165 imposes best available control technology requirements on facilities subject to PSD review. 42 U.S.C. § 7475 (2012).

exhausted); *W. Union Tel. Co. v. Fed. Commc'n Comm'n*, 773 F.2d 375, 377 (D.C. Cir. 1985) (holding that a sixty day limitations period did not begin to run until after an order was published in the Federal Register, rendering that order effective). Sylvanergy timely petitioned this Court for review of the EAB decision. R. 1. While reviewing that final agency action, this Court has jurisdiction to review all intermediate decisions reached before EPA published the final PSD permit. *See* 5 U.S.C. § 704 (providing that courts have jurisdiction to review interlocutory decisions upon review of a final agency action).

A. The denial of the NAD request was an intermediate step in the PSD permitting process, not a final agency action, and provided an insufficient basis for judicial review until an adequate factual record was developed during PSD permitting.

The term "final action . . . bears the same meaning in § 307(b)(1) that it does under the Administrative Procedure Act (APA), 5 U.S.C. § 704." *Whitman v. American Trucking Ass'ns*, 531 U.S. 457, 478 (2001). Thus, for an action to be reviewable under section 307(b) it must at least satisfy the following APA criteria for finality: "First, the action must mark the 'consummation' of the agency's decisionmaking process—it must not be of a merely tentative or interlocutory nature. And second, the action must be one by which 'rights or obligations have been determined,' or from which 'legal consequences will flow.'" *Bennett v. Spear*, 520 U.S. 154, 177–78 (1997) (internal citations omitted). This does not mean that interlocutory actions such as NUARB's NAD decision are unreviewable; instead, "[a] preliminary, procedural, or intermediate agency action or ruling not directly reviewable is subject to review on the review of the final agency action." 5 U.S.C. § 704 (2012). Because the NAD decision was an aspect of the PSD permitting process, it became reviewable as part of that final agency action when the Regional Administrator published the final PSD permit in the Federal Register.

Multiple circuits have recognized that agency deliberations are ongoing until the agency takes action on a permit application,

thus providing its final position as to what standards and controls should apply to a proposed facility. *See Ocean Cty. Landfill Corp. v. U.S. Envtl. Prot. Agency*, 631 F.3d 652, 656 (3d Cir. 2011) (holding that "a new permit, not intermediate decisions, will mark the 'consummation' of the agency's decisionmaking process"); *Pub. Serv. Co. of Colorado v. U.S. Envtl. Prot. Agency*, 225 F.3d 1144, 1147 (10th Cir. 2000) (holding that the consummation of agency decision making "cannot occur before the [state agency] has acted on the permit application). Threshold determinations merely indicating that further agency action is required—like deciding that PSD review should apply to a proposed facility—cannot be reviewed immediately. *See Fed. Trade Comm'n v. Standard Oil Co. of California*, 449 U.S. 232, 241 (1980) (finding an agency determination that adjudicatory proceedings were merited did not represent a final agency decision, only a threshold opinion).

In *Ocean County Landfill*, the Third Circuit considered a challenge to an EPA determination that two facilities were under "common control," which required reopening and reissuing the operating permits of each facility to reflect their status as a single source. 631 F.3d at 654. Although EPA characterized its decision as "final," the Third Circuit did not have jurisdiction to review the common control determination because it "was only one, intermediate, step in the permitting process." *Id.* at 655. The court also found it significant that EPA's decision did not require immediate compliance, but merely instructed a facility to begin the permitting process. *Id.*at 656. Thus, in *Ocean County Landfill*, determining that a certain permit was required did not represent the culmination of the agency's decision-making process, because drafting and commenting on a permit can expose new facts and allow the agency to change position. *Id.* at 655.

Similarly, NUARB's rejection of Sylvanergy's NAD request was an interlocutory decision that only informed Sylvanergy of the agency's opinion that a particular permit would be required for a proposed facility. As the court made clear in *Ocean County Landfill*, requiring a party to begin permitting procedures does not represent a reviewable final agency action because the fact-finding involved in drafting a permit and soliciting comments will provide a court with the information necessary to resolve all

disputes related to a facility in a single proceeding. *Id.* at 656 (explaining that the court's "ability to decide the issue would benefit greatly from additional facts, most importantly the terms of a new permit and whether and/or how it will harm [the permitee]"). In addition, the denial of the NAD request merely alerted Sylvanergy of its preexisting obligations under the CAA, and did not impose any new legal obligations or penalties. As the Seventh Circuit has recognized, a decision is not reviewable as a final agency action when it "has no legal force except to impose upon [a party] the already-existing burden of complying with the CAA and its implementing regulations." *Acker v. U.S. Envtl. Prot. Agency*, 290 F.3d 892, 894 (7th Cir. 2002). Therefore, because the NAD decision did not represent the consummation of the agency's permitting process and did not impose any new penalties, this Court now has jurisdiction to review that decision as an intermediate part of the PSD permitting process.

Although the EAB decision cites *Puerto Rican Cement Co. v. U.S. Envtl. Prot. Agency*, 889 F.2d 292 (1st Cir. 1989),for the proposition that the denial of an NAD request is subject to immediate review in the courts of appeals, R. 8, that case is inapposite. In *Puerto Rican Cement*, the First Circuit recognized that the denial of an NAD was analogous to a decision of the Federal Trade Commission to initiate costly proceedings against a company, which the Supreme Court held not to be a final agency action. 889 F.2d at 295 (citing *Fed. Trade Comm'n v. Standard Oil Co.*, 449 U.S. 232, 244 (1980)). However, in finding that it had jurisdiction, the First Circuit decided to "apply the exception and not the rule," in light of the fact that EPA did not contest jurisdiction, and thus waived all exhaustion requirements. *Id.* at 295–96. Here, unlike in *Puerto Rican Cement*, EPA did not consent to interlocutory judicial review after the NAD decision. Therefore this Court should apply the rule and not the exception by reviewing NUARB's NAD denial as a component of the final PSD permit.

B. No PSD decisions are reviewable under section 307(b) until all administrative remedies are exhausted, and thus even if the NAD decision otherwise satisfies the test for a "final agency

action," it is only now reviewable after the EAB issued its decision.

In addition to satisfying the Supreme Court's test for finality, a party seeking judicial review of an agency action must meet the separate but related requirement of exhausting all administrative remedies. *Myers v. Bethlehem Shipbuilding Corp.*, 303 U.S. 41, 50–51 (1938) (explaining that "no one is entitled to judicial relief for a supposed or threatened injury until the prescribed administrative remedy has been exhausted"). Although finality and exhaustion are similar jurisdictional prerequisites, the two concepts "are not identical . . . no matter how often they converge." *Bethlehem Steel Corp. v. U.S. Envtl. Prot. Agency*, 669 F.2d 903, 908 (3d Cir. 1982). Finality generally refers to the conclusion of the agency's decision-making process, while exhaustion concerns the steps a litigant must take before seeking judicial review of an agency action. *Id.*

EPA regulations provide that PSD permit decisions only become final actions once a permit applicant has exhausted all administrative remedies. 40 C.F.R.§ 124.19(l)(2) (2014) ("For purposes of judicial review under the appropriate Act, final agency action on a . . . PSD permit occurs when agency review procedures under this section are exhausted and the Regional Administrator subsequently issues a final permit decision under this paragraph."). Further, the CAA regulations indicate that reviewable PSD permit decisions include both specific permit conditions, as well as the threshold decision to issue a permit. *See id.* § 124.13 (describing the issues petitioners must raise during commenting in order to later seek EAB review, including challenges to "any condition of a draft permit" and the decision to "prepare a draft permit"). Therefore, so long as a permittee expresses disagreement with the denial of an NAD during public commenting, that issue can later be raised on appeal to the EAB. *See id.* § 124.19(a)(4)(ii) (providing that the EAB has jurisdiction to review issues raised by petitioners during a public comment period to the extent required by 40 C.F.R § 124.13, which contemplates review of the decision that a facility needs a PSD permit). Here, NUARB's denial of Sylvanergy's NAD request was reviewable on appeal to the EAB as part of the PSD permitting process, and only became a final agency action for the purposes of

section 307(b) review once the EAB issued its decision and the Regional Administrator published the final PSD permit. *Id.* § 124.19(l)(2) (providing that agency actions are not final until a party exhausts administrative remedies by seeking EAB review). Now that the agency action is final under the terms of the CAA and all administrative remedies have been exhausted, this Court has jurisdiction to review all intermediate and subsidiary decisions involved in issuing the PSD permit, including the threshold decision that a PSD permit is necessary for the Forestdale Biomass Facility.

II. THE FORESTDALE BIOMASS FACILITY IS NOT SUBJECT TO THE 100 TPY THRESHOLD BECAUSE IT DOES NOT MEET EPA'S DEFINITION OF A FOSSIL FUEL-FIRED FACILITY.

Sylvanergy's proposed facility is subject to the 100 tpy threshold for PSD review only if it qualifies as one of 28 enumerated sources, including either a "fossil-fuel fired steam electric plant" or a "fossil-fuel boiler." *See* 42 U.S.C. § 7479(1) (2012) (defining 'major emitting facility' for PSD regulation). The CAA imposes PSD requirements on fossil fuel facilities that have a heat input of greater than 250 million British thermal units per hour (MMBtu/hour). *Id.*NUARB erred in characterizing the Forestdale Biomass Facility as a fossil fuel source subject to the 100 tpy threshold for two reasons. First, Sylvanergy's plant design involves a biomass-fired electricity generation unit, not a fossil fuel-fired source. R. 5. Second, even if classified as a fossil-fuel source, the Forestdale Biomass Facility nonetheless fails to meet the heat input criteria of the CAA because its two ultra-low sulfur diesel (ULSD) start-up burners do not have the capacity to generate more than 120 MMBtu/hour.[2]*Id.*; *see* 42 U.S.C. § 7479(1) (listing heat input criteria for fossil fuel sources). Thereforethis Court should reverse NUARB's findingthat the Forestdale Biomass Facility is fossil-fuel source.

2. The Forestdale Biomass Facility uses two 60 MMBtu/hour ULSD start-up burners. R. 5. The two burners function as part of the same electricity generation unit, and are counted together for purposes of determining heat input.

A. The Forestdale Biomass Facility is a biomass source, not a fossil fuel source.

Biomass is not considered a fossil fuel for PSD purposes. *See* U.S. ENVTL. PROT. AGENCY, NEW SOURCE REVIEW WORKSHOP MANUAL: PREVENTION OF SIGNIFICANT DETERIORATION AND NONATTAINMENT AREA PERMITTING A-22 to A-23 (Draft, 1990) [hereinafter "NSR MANUAL"]. EPA distinguishes between fossil fuel fired steam electric plants and biomass facilities, finding that if a "boiler were designed and permitted to burn wood only, it would not be classified as one of the 28 PSD sources and would instead be subject to the 250 tpy threshold." *Id.*

Here, the Forestdale Biomass Facility combines a wood pellet production plant with a wood-fired boiler capable of generating steam-based electricity by combusting biomass. R. 5. NUARB considered the plant "fossil-fuel fired" because the design utilizes ULSD ignition sources to start the biomass boiler. *Id.;* R. 6. However, the use of some fossil fuels does not render the facility a fossil fuel plant. The purpose of Sylvanergy's proposed facility is electricity generation, which is done by processing wood into pellets, combusting the wood pellets into steam and using steam to power a generator. R. 5. Fossil fuels comprise a single function in the chain, starting the boiler used for biomass combustion.

This single function is not sufficient to classify the entire plant as a fossil fuel source because courts look to a facility's primary activity to discern the source designation. *LaFleur v. Whitman,* 300 F.3d 256, 275 (2d Cir. 2002); *see also* NSR MANUAL at A-2 (describing the 'primary activity' test). In *LaFleur*, the court upheld a determination that a new source designed to both produce chemicals and process municipal waste was not subject to the 100 tpy threshold as a "chemical processing plant." *LaFleur,* 300 F.3d at 256. Although chemical production was a part of the process, the Second Circuit upheld EPA's determination that the plant was primarily a municipal waste facility because that part of the facility's operations generated the majority of its revenue and influenced the design and location of the plant. *Id.* at 276.

A similar analysis applies to the Forestdale Biomass Facility. The facility's business model and design is centered around biomass, as evidenced by its wood pellet production plant, as well

as its location in the aptly-named Forestdale, a well-forested region. R.7, 11. Analogous to the *LaFleur* court's comparison of revenue, here the Court can look at the input levels for each type of fuel to determine the nature of Sylvanergy's proposed facility. The biomass combustion has a heat input of 380 MMBtu/hour while the ULSD start-up burners comprise only 120 MMBtu/hour, less than one quarter of the facility's total input. R. 5. Such a small component part falls well short of constituting the primary activity of the proposed facility. Indeed, NUARB found that Sylvanergy's "primary reliance" would be on wood biomass and not fossil fuels. R. 6.Therefore, the NUARB erred in concluding that the Forestdale Biomass Facility is a fossil fuel-fired source.

B. The Forestdale Biomass Facility's fossil fuel heat input is not sufficient to qualify as one of the listed sources subject to the 100 tpy threshold.

Under the CAA, a fossil fuel source is only subject to the PSD program if it has a heat input of more than 250 MMBtu/hour. 42 U.S.C. § 7479(a)(1). The Forestdale Biomass Facility's two ULSD start-up burners do not have the capacity to generate more than 120 MMBtu/hour. R. 5. Thus, NUARB erred in determining that the proposed facility is subject to the PSD program as a fossil fuel source.

Save Our Climate, Inc. (SOC) contends that the 76% of heat generated by biomass should be considered in determining if the facility is an eligible fossil fuel source. Even EPA acknowledges that this represents an improper reading of the statute, as evidenced by EPA's litigation position in this action. *See* R. 2. In prior instances, EPA has noted that where a facility produces electricity through both biomass and fossil fuels, only the heat input of the fossil fuels is used to determine if the source meets the statutory threshold. *See In re Air Quality Permit No. 3434*, N.M. Envtl. Improvement Bd., No. 07-04(A), 5 (2007).[3] Further, of

3. Available at https://www.env.nm.gov/aqb/permit/documents/NSR_3434_Order_and_Statement_of_Reasons_for_Granting_Permit.pdf (overturning a permit denial for biomass plant with fossil-fuel start-up burners in part on EPA's interpretation that source would not be subject to 100 tpy threshold).

all the enumerated PSD sources, only fossil fuel sources have a heat input specification. 42 U.S.C. § 7479(1). This suggests that Congress was not concerned with heat input generally, but with fossil fuel-derived heat input specifically. Therefore, it would make sense to calculate the fossil-fuel heat input specifically rather than the facility-wide heat input in defining the source. Because Congress only specified a heat input threshold for fossil fuels, it is untenable to interpret the statute as requiring measurement of facility-wide heat input. Accordingly, this Court should reverse the finding of NUARB that the Forestdale Biomass Facility is a fossil fuel source subject to the 100 tpy threshold.

III. THE FORESTDALE BIOMASS FACILITY DOES NOT HAVE THE POTENTIAL TO EMIT MORE THAN 250 TPY OF ANY RELEVANT POLLUTANT BECAUSE LOCALLY IMPOSED AND ENFORCEABLE RESTRICTIONS LOWER THE FACILITY'S EMISSIONS BELOW THE THRESHOLD.

Sources that are not specifically listed under section 169(1) are only subject to PSD review if the source has the potential to emit greater than 250 tpy of a relevant pollutant. 42 U.S.C. § 7479(1). "Potential to emit" is not defined by statute. *Id.* Courts have stated that EPA must take emission controls into account when calculating potential to emit. *Alabama Power Co. v. Costle*, 636 F.2d 323, 353 (D.C. Cir. 1979). The Forestdale Biomass Facility's potential to emit does not exceed the 250 tpy threshold because it is subject to locally imposed emission controls. R. 5. NUARB erred in applying vacated regulations and an inapplicable Interim Policy to reject the properly calculated potential to emit, which includes the locally enforced operating conditions. This Court should reverse NUARB's decision finding that the Forestdale Biomass Facility is a "major emitting facility."

A. NUARB erred in applying EPA's "federally enforceable" regulatory requirement, which is no longer good law.

In refusing to consider locally-enforced controls that restrict the operational capacity of the Forestdale Biomass Facility, NUARB relied on an EPA regulation that requires controls to be "federally enforceable." R. 6; 40 C.F.R. § 52.21(b)(4) (2014). However, this regulation is no longer valid in the wake of two D.C. Circuit decisions invalidating the regulations.[4]*See Nat'l Mining Ass'n v. U.S. Envtl. Prot. Agency.*, 59 F.3d 1351, 1364 (D.C. Cir. 1995); *Chem. Mfrs. Ass'n v. U.S. Envtl. Prot. Agency*, 70 F.3d 637 (D.C. Cir. 1995). In *National Mining*, the court clarified that potential to emit, in the section 112 program regulations, cannot be reasonably read to include only federally enforced controls.59 F.3d at 1364. The court noted that potential to emit plainly refers to non-voluntary, effective, and practical controls, but rejected EPA's "rather strained interpretation of the statute." *Id.* In *Chemical Manufacturer's*, the court addressed the same "federally enforceable" language, this time under the New Source Review regulations. 70 F.3d at 637. The court vacated the rule in light of the "similar challenge" that was addressed in *National Mining*.[5]*Id.* EPA did not appeal the rulings. NUARB impermissibly relied on these regulations in refusing to count the Forestdale Biomass Facility's locally enforceable controls when calculating its potential to emit.

B. EPA's Interim Policy is not applicable to Sylvanergy or entitled to deference.

In light of these decisions, EPA issued an Interim Policy memo in January 1996 to address federal enforceability requirements. Memorandum from John S. Sietz, Director, Office

4. As nationally applicable, these regulations may only be challenged in the Court of Appeals for the D.C. Circuit. 42 U.S.C. § 7607(b)(1). Decisions are given nation-wide effect. See, e.g. U.S. v. Marine Shale Processors, 81 F.3d 1329, 1357 (5th Cir. 1996) (recognizing holding of National Mining).

5. Although EPA has declined to remove the vacated regulations from the CFR, they have no legal effect. Chem. Mfrs. Ass'n, 70 F.3d at 637; Action on Smoking and Health v. Civil Aeronautics Bd.,713 F.2d 795, 797 (D.C. Cir. 1983) (defining "vacate").

of Air Quality Planning and Standards, and Robert I Van Heuvelen, Director, Office of Regulatory Enforcement to Regional Offices, 5 (Jan. 22, 1996) [hereinafter "Interim Policy"]. The Interim Policy stated that in the PSD context "the term 'federally enforceable' should now be read to mean 'federally enforceable or legally and practicably enforceable by a state or local air pollution control agency.'" *Id.* However, this position is inconsistent with the ruling in *Chemical Manufacturer's* and the Interim Policy has no legal application to Sylvanergy's NAD.

Although EPA interprets the D.C. Circuit's decision as vacating "the PSD/NSR federal enforceability requirement," this misstates the court's holding. Interim Policy at 4. The petitioners challenged "*regulations* of the Environmental Protection Agency that define the term'potential to emit'" and the Court held that "the *regulations* are vacated." *Chem. Mfrs.*, 70 F.3d at 637 (emphasis added).Thus, the regulatory definition of "potential to emit," and not merely the "federally enforceable" requirement was vacated. EPA has declined to promulgate a new definition of "potential to emit" for the past nineteen years. As such, only the statutory text is binding for PSD determinations. The term "federally enforceable" does not appear in the statute, it appears only in the now-vacated regulations. *Chem. Mfrs.*, 70 F.3d at 637*;* 42 U.S.C. § 7479 (defining 'major source'). The Interim Policy does not purport to interpret "potential to emit," which is the governing term for review of Sylvanergy's NAD request.

Because EPA is interpreting neither the statute nor a valid regulation, and the Interim Policy was not promulgated under notice-and-comment rulemaking, it is entitled to *Skidmore* deference at best. *Skidmore v. Swift & Co.*, 323 U.S. 134, 140 (1944). Non-legislative agency pronouncements are "entitled to respect" under *Skidmore* to the extent they have the "power to persuade." *Gonzales v. Oregon*, 546 U.S. 243, 256 (2006), *quoting Skidmore*, 323 U.S. at 140. Factors indicating the weight given to such interpretations include the "thoroughness evident in its consideration, the validity of its reasoning, [and] its consistency with earlier and later pronouncements." *Skidmore*, 323 U.S. at 140. The Interim Policy was intended to be a temporary policy, until supplanted by regulations that would give full consideration to the appropriate statutory requirements. Interim Policy at 2–3.

The agency gave no explanation for the requirement that a state or local air pollution control agency enforce any emissions limitations. *Id.* at 3. Further, requiring enforcement by an air pollution control agency has no basis in either the statutory language or the D.C. Circuit opinion rejecting the regulation. *See Nat'l Mining,* 59 F.3d at 1362. Finally, as the D.C. Circuit noted, the agency's position on requiring federally enforceable controls has varied widely. *Id.* EPA's Interim Policy is therefore unpersuasive and should be rejected under *Skidmore.*

C. NUARB's assessmentof the Forestdale Biomass Facility'spotential to emit was arbitrary and capricious because it failed to consider locally-imposed operational restrictions.

NUARB erred in failing to consider the Village of Forestdale's operational restrictions in assessing the Forestdale Biomass Facility'spotential to emit criteria pollutants. *National Mining*—cited as the rationale for vacatur of the "potential to emit" regulations in the PSD context—provides guidance for assessing the adequacy of controls limiting a source's potential to emit. 59 F.3d at 1362. There, the D.C. Circuit established that under the plain meaning of "potential to emit," emissions controls must only be effective and non-voluntary. *Id.* According to this reasoning, the Forestdale Biomass Facility'scalculated potential to emit must include the operational limits that are documented in the site approval plan and enforceable by regulatory personnel. R. 5. Operational limits are a well-established means of controlling emissions, which EPA has often cited as exemplary means to limit emissions. *See, e.g.*, *Requirements for Preparation, Adoption, and Submittal of Implementation Plans; Approval and Promulgation of Implementation Plans* 48 Fed. Reg. 38,742, 38,747 (proposed Aug. 25, 1983) (citing limit on hours as example of emission limit); NSR MANUAL at A-1 (listing restrictions on hours of operations as condition which limits potential to emit). Because the Village of Forestdale's operational restrictions satisfy the D.C. Circuit's criteria for an effective emissions limitation, NUARB erroneously concluded that the Forestdale Biomass Facilityhas the potential to emit more than 250 tpy of CO.

Accordingly, this Court should reverse the denial of Sylvanergy's NAD request.

IV. BIOMASS-FUELED FACILITIES ARE NOT SUBJECT TO PSD REVIEW FOR GHG EMISSIONS, BECAUSE SUCH FACILITIES ARE CARBON NEUTRAL AND EPA HAS CONSISTENTLY RECOGNIZED A PSD EXEMPTION FOR BIOGENIC CARBON DIOXIDE EMISSIONS.

EPA has consistently recognized that biogenic carbon dioxide (CO_2) emissions do not pose the same risks to the planet as emissions from fossil fuel-fired facilities, and the agency should continue its practice of exempting biomass facilities from PSD review for CO_2 because such facilities are carbon neutral. *See, e.g.*, *Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units*, 79 Fed. Reg. 34,830, 34,843–44 n.30 (proposed June 18, 2014) (to be codified at 40 C.F.R. pt. 60) (describing biomass as a form of "renewable energy" akin to wind or solar energy).After the Supreme Court determined that greenhouse gases (GHGs) qualify as a "pollutant" under the CAA, *Massachusetts v. U.S. Envtl. Prot. Agency*, 549 U.S. 497, 529 (2007), EPA made a finding that GHGs in the atmosphere endanger public health and welfare, leading to regulation of GHG emissions from motor vehicles. *Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act*, 74 Fed. Reg. 66,496, 66,497 (December 15, 2009). Shortly after the endangerment finding, EPA promulgated a "Tailoring Rule" that specified the thresholds at which new facilities would be subject to PSD review for GHGs, indicating that PSD regulation of GHGs would begin in January, 2011. *See Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule*, 75 Fed. Reg. 31,514, 31,523 (June 3, 2010).

However, EPA immediately recognized that GHG emissions from biomass facilities cannot be treated in the same manner as GHG emissions from fossil fuel-fired plants, and one month after promulgating the Tailoring Rule, EPA issued a Call for

Information regarding the best means of accounting for biogenic GHG emissions. *See* 75 Fed. Reg. 41,173 (July 15, 2010). In response to comments received during the Call for Information and a separate petition stressing that the combustion of biomass does not raise net atmospheric levels of GHGs, EPA decided to defer regulation of GHGs under the PSD program until July 20, 2014, so it could take more time to study the issue. *Deferral for CO2 Emissions from Bioenergy and Other Biogenic Sources Under the Prevention of Significant Deterioration (PSD) and Title V Programs* (*Deferral Rule*), 76 Fed. Reg. 43,490 (July 20, 2011). The Deferral Rule recognizes the marginal benefit of regulating biogenic GHG emissions and acknowledges that biomass facilities are potentially carbon neutral. *Id.* at 43,492.

During the deferral period, EPA developed a framework for analyzing biogenic GHG emissions. U.S. ENVTL. PROT. AGENCY, FRAMEWORK FOR ASSESSING BIOGENIC CO_2 EMISSIONS FROM STATIONARY SOURCES (2011). Although this framework indicates that carbon neutrality cannot be assumed in all cases, it also states that "biogenic CO_2 emissions from stationary sources will not inevitably result in an increased net flux of biogenic CO_2 to the atmosphere within a policy-relevant time scale- unlike CO_2 emissions from combustion of fossil fuels." *Id.* at 3, 6. This is because biomass fuels are able to sequester carbon from the Earth's atmosphere over a short period of time, and the biogenic CO_2 emissions resulting from combustion are a part of the natural carbon cycle. *Id.* at 1. The logic of EPA's framework—which explains how regulators can determine whether a biomass facility might have a net impact on atmospheric CO_2 levels—indicates that a facility should not automatically be subject to PSD review for biogenic CO_2 emissions. *Id.* Instead, a biomass facility should only be subject to technology-based requirements if EPA determines that it will increase net atmospheric levels of GHGs. *Id.* In addition, EPA recognizes that the use of biomass is a potential means of reducing net GHG emissions. *See* 79 Fed. Reg. at 34,923 (listing the use of biomass fuel as a "potential emission reduction measure").

Even if EPA eventually determines that biogenic GHG emissions are not categorically exempt from PSD review, NUARB impermissibly subjected the Forestdale Biomass Facility to PSD

review for GHGs. At the time the permit was issued the Deferral Rule was still legally in effect and imposing PSD requirements on the GHG emissions at a biomass facility represented an irrational departure from past agency practice. Therefore, NUARB's decision to subject the Forestdale Biomass Facilityto PSD review for CO_2 should be set aside as arbitrary and capricious.

A. The Deferral Rule was legally in effect when NUARB issued the permit, and agencies are required to apply whatever law is controlling at the time a permit is issued.

The EAB cites *Center for Biological Diversity*(*CBD*) *v. EPA*,722 F.3d 401 (D.C. Cir. 2013), for the proposition that the D.C. Circuit invalidated the Deferral Rule before Sylvanergy's PSD permit was issued. R. 8. However, though the D.C. Circuit asserted that EPA has a nondiscretionary duty to regulate all emissions of GHGs under the PSD program and determined that the Deferral Rule should be invalidated, 722 F.3d at 412, the court never issued a mandate officially vacating the rule. *See In re Sierra Pac. Indus. (Anderson Processing Facility)*, PSD Appeal Nos. 13-01 to 13-04, 2013 WL 3791510, at *42 (EAB 2013) (indicating that "[t]he Court's judgment [vacating the Deferral Rule] will not become final and effective until such time as it issues a 'mandate'"). Because the Deferral Rule was never officially vacated and did not expire on its own terms until July 20, 2014, that rule was still legally in effect when Sylvanergy's PSD permit was issued on June 12, 2014. R. 4. Further, EPA itself acknowledged that the Deferral Rule remained valid for the entire three year deferral period, indicating that the agency considered the rule to be in effect at the time Sylvanergy's permit was issued. Memorandum from Janet McCabe, EPA Office of Air and Radiation, to Regional Administrators, Next Steps and Preliminary Views on the Application of Clean Air Act Permitting Programs to Greenhouse Gases, at 6 (July 24, 2014). EPA must apply whatever law is controlling at the time a permit is issued, and it was therefore required to give effect to the Deferral Rule and exempt the Forestdale Biomass Facility from PSD review for GHGs. *See Sierra Club v. U.S. Envtl. Prot. Agency*, 762 F.3d 971,

980 (9th Cir. 2014) (explaining that "EPA is bound to enforce administrative guidelines in effect when it takes final action").

In addition, the subsequent decision of the Supreme Court in *Utility Air Regulatory Group v. U.S. Envtl. Prot. Agency*(*UARG*), 134 S. Ct. 2427 (2014), undermines the reasoning of the *CBD* opinion. The *CBD* court did not address "whether the agency has authority under the Clean Air Act to permanently exempt biogenic carbon dioxide sources from the PSD permitting program." 722 F.3d at 412. Rather, the court assumed that EPA had a nondiscretionary duty to regulate biogenic GHG emissions under the CAA, and held that the Deferral Rule did not articulate a reasonable basis for avoiding a statutory mandate. *Id.* at 408–09, 412. In *UARG*,the Supreme Court rejected the notion that EPA was compelled to regulate GHGs under the PSD program, and indicated that the agency could plausibly interpret the phrase "any air pollutant" in the PSD context to "exclude those atypical pollutants that, like greenhouse gases, are emitted in such vast quantities that their inclusion would radically transform those programs and render them unworkable as written." 134 S.Ct. at 2442. Thus, the Supreme Court found the CAA ambiguous with regard to PSD review of GHG emissions, a conclusion that permits EPA to permanently exempt biogenic GHG emissions from PSD review if it so chooses, and certainly allows the agency to defer regulation in light of scientific uncertainty as to whether biomass facilities have any net effect on atmospheric levels of GHGs. Because the agency chose to defer regulation of biogenic CO_2 emissions until after July 20, 2014, it acted arbitrarily and capriciously in subjecting the Forestdale Biomass Facilityto PSD review for CO_2 emissions in the permit issued on June 12, 2014.

B. Even if the D.C. Circuit had invalidated the Deferral Rule, subjecting Sylvanergy to PSD review for biogenic GHG emissions was arbitrary and capricious because such action represented an irrational departure from EPA's stated policy position.

Even if the D.C. Circuit had issued a mandate vacating the deferral rule, EPA's decision to require PSD review of GHGs at the Forestdale Biomass Facilityrepresented an irrational departure from the agency's stated policy position and must be set aside as arbitrary and capricious. The Supreme Court has stated:

> Though the agency's discretion is unfettered at the outset, if it announces and follows—by rule or by settled course of adjudication—a general policy by which its exercise of discretion will be governed, an irrational departure from that policy (as opposed to an avowed alteration of it) could constitute action that must be overturned as "arbitrary, capricious, [or] an abuse of discretion."

Immigration &Naturalization Serv. v. Yueh-Shaio Yang, 519 U.S. 26, 32 (1996). Thus, if an agency announces and follows a certain discretionary practice, it must act in accordance with that stated practice unless it provides a reasoned explanation for changing course. *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 57 (1983).

In *State Farm*, the National Highway Traffic Safety Administration rescinded a regulation requiring manufacturers to construct new cars with either passive seatbelts or airbags. *Id.* at 35–37. The agency stated that it no longer thought the regulation would provide significant safety benefits, though nearly all of the agency's reasoning was based on the inefficacy of the passive belts. *Id.* at 38–39. The Court held that the agency is permitted change position as to what actions are in the public interest, but that it acted arbitrarily in rescinding a rule purported to address important safety issues without a reasoned explanation as to why it no longer thought the rule would accomplish statutory objectives. *Id.* at 42–43.

Similarly, here EPA has failed to provide any explanation for its decision to apply PSD review to the GHG emissions at the Sylvanergy biomass facility, which conflicts with numerous agency statements indicating an intention to exempt biogenic GHG emissions from the PSD program until EPA can be certain that there would be a regulatory benefit to controlling such emissions. Apart from deferring PSD regulation of biogenic GHGs, EPA also released a guidance document to provide "a basis for concluding that under the PSD Program the combustion of biomass fuels can be considered BACT for biogenic CO_2 emissions at stationary sources." *Deferral Rule*, 76 Fed. Reg. at 43,492. EPA has repeatedly acknowledged the scientific uncertainty regarding the effect of biogenic CO_2 emissions. *See CBD*, 722 F.3d at 407. In light of that uncertainty, EPA reasonably decided to conduct more research before subjecting biomass facilities to PSD review for GHG emissions, and acknowledges that there may be no benefit to regulation of certain biogenic GHGs. *See, e.g.*, *Deferral Rule*, 76 Fed. Reg. at 43,492 ("EPA concluded that the issue of accounting for the net atmospheric impact of biogenic CO_2 emissions is complex enough that further consideration of this important issue is warranted"); *Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units*, 79 Fed. Reg. 34,830, 34,924–25 (proposed June 18, 2014) (to be codified at 40 C.F.R. pt. 60) (explaining that "burning biomass-derived fuels for energy recovery can yield climate benefits as compared to burning conventional fossil fuels," and announcing that EPA needed to continue studying the impact of biogenic CO_2 emissions in achieving emission reduction targets). Despite these clear statements of EPA policy, NUARB impermissibly imposed PSD requirements on the Forestdale Biomass Facility. Because that decision represents an unexplained departure from announced policy, it must be set aside as arbitrary and capricious.

V. NUARB REASONABLY DETERMINED THAT WOOD GASIFICATION AND PARTIAL CARBON CAPTURE AND STORAGE WOULD IMPERMISSIBLY REDEFINE THE FORESTDALE BIOMASS FACILITY.

Step one of the "top-down" method[6]for determining BACT requires identification of "all 'available' control options. Available control options are those air pollution control technologies or techniques . . . that have potential for practical application to the emissions unit and the regulated pollutant under evaluation." U.S. ENVTL. PROT. AGENCY OFFICE OF AIR AND RADIATION, GUIDANCE FOR DETERMINING BEST AVAILABLE CONTROL TECHNOLOGY FOR REDUCING CARBON DIOXIDE EMISSIONS FROM BIOENERGY PRODUCTION 6, 24 (2011) [hereinafter "BACT GUIDANCE"].In step one of its BACT review, NUARB properly "rejected the implementation of wood gasification and partial carbon capture and storage as an impermissible redefinition of the proposed source." R. 7. The agency's determination reflects an "important limitation on BACT"—it "cannot be used to order a fundamental redesign of [a] facility." *UARG*, 134 S.Ct. 2427, 2448 (2014); *see also Sierra Club v. U.S. Envtl. Prot. Agency*, 499 F.3d 653, 654-655 (7th Cir. 2007). The CAA requires "the *proposed facility* [be] subject to the best available control technology." 42 U.S.C. §7475(a)(4) (2012) (emphasis added). That is, BACT only applies only to the facility Sylvanergy intends to build. If redesigns were considered control technologies, it "would stretch the term 'control technology' beyond the breaking point." *Sierra Club*, 499 F.3d at 655.

The EAB has articulated how to determine what changes to a facility's design would constitute a redefinition of the proposed source. *See, e.g.*,*In re Desert Rock Energy Company, LLC*, 14 E.A.D. 484, 530 (EAB 2009).First, the permit issuer evaluates how an applicant defines the facility's "end, object, aim or purpose . . . the facility's basic design." *Id*. Second, the permit issuer takes

6. The top-down framework is the recommended and "predominant method for determining BACT."Clean Air Act Advisory Committee, Interim Phase I Report of the Climate Change Work Group of the Permits, New Source Review and Toxics Subcommittee16 (2010), available at http://www.epa.gov/oar/caaac/climate/2010_02_InterimPhaseIReport.pdf.

a "hard look" at which design components are integral to the facility's purpose and which can be changed to reduce emissions "without disrupting the applicant's basic business purpose for the proposed facility." *Id.*[7] In those instances when it is not readily apparent "where control technology ends and a redesign of the 'proposed facility' begins," it is proper to defer to a reasonable agency decision. *See Sierra Club*, 499 F.3d at 656 (If the distinction "is one of degree . . . the treatment of differences of degree . . . is entrusted to the judgment of the agency that administers the regulatory scheme rather than to courts of generalist judges."). Here, NUARB reasonably determined that requiring Sylvanergy to gasify wood and burn gas, rather than burn wood, would fundamentally redefine the Forestdale Biomass Facility.

Substantial change to a proposed design is a valid reason to find a control technology impermissibly redefines the proposed source. *See Powder River Basin Res. Council v. Wyoming Dep't of Envtl. Quality*, 226 P.3d 809, 823 (Wyo. 2010). In *Powder River Basin Resource Council*, the applicant's proposed facility would include a "'subcritical' boiler," while petitioners argued for a "'supercritical' boiler," the difference being a matter of operating temperatures and pressures. *Id.* at 821. However, this distinction still required "a different boiler" with changes in its structure and components, and therefore would redefine the proposed source. *Id.* at 822.

Here, the difference between control technologies is substantial, and NUARB reasonably found SOC's proposed option would redefine the design of the Forestdale Biomass Facility. Sylvanergy proposed to construct a wood pellet fuel production plant in conjunction with a biomass-fired electricity generation unit. R. 5. Within biomass-fired units, biomass such as wood pellets are solid fuel and "[are] burned in a boiler to produce high-pressure steam that is used to power a steam turbine-driven power generator." U.S. ENVTL. PROT. AGENCY COMBINED HEAT

7. A permit issuer also evaluates whether the applicant has "intentionally design[ed] the plant in a way calculated to make measures for limiting the emission of pollutants ineffectual." Sierra Club, 499 F.3d at 654. However, no party argues that Sylvanergy proposed a design making potential emissions limitations ineffectual, and this factor will not be discussed.

AND POWER P'SHIP, BIOMASS COMBINED HEAT AND POWER CATALOG OF TECHNOLOGIES30 (2007) [hereinafter "CHP CATALOG"]. The Forestdale Biomass Facilityis designed to "consist of an advanced stoker design wood-fired boiler together with two ULSD start-up burners." R. 5. A stoker boiler "employ[s] direct fire combustion of solid fuels with excess air, producing hot flue gases, which then produce[s] steam." CHP CATALOGat 30.

Sylvanergy's proposed design is far removed from the technology and processes involved in wood gasification. "Biomass gasification systems operate by heating biomass in an environment where the solid breaks down to form a flammable gas. The gas produced—synthetic gas, or syngas—can be cleaned, filtered, and then burned in a gas turbine." *Id*. at 26. Rather than the wood pellets acting as a solid fuel source in direct combustion, the wood pellets would undergo "several steps" in order for the actual fuel source, the syngas, to be obtained. *See Id.*at 45. This requires technologies such as "fixed bed gasifiers and fluidized bed gasifiers," specific to the gasification process and beyond those proposed by Sylvanergy in the record. *Id*. at 30; *see* R. 5. The integrated gasification combined cycle (IGCC) "is not simply an add-on emissions control technology, but instead requires a differently designed power block." *Desert Rock*, 14 E.A.D. at 530.[8]

Further, the fact that both control technologies use the same materials to generate the same product does not undermine the validity of NUARB's decision. SOC relies on *Utah Chapter of Sierra Club v. Air Quality Board* in arguing wood gasification and partial carbon capture and storage must be considered, as the "basic design" of the Forestdale Biomass Facility—an electric power generating plant fueled by wood—would remain unchanged. *See* 226 P.3d 719, 733 (Utah 2009) (agency erred in finding control technology redefined the source because it would not change the basic design of a proposed facility, an electric power generating plant fueled by coal). However, the *Utah*

8. SOC relies on Desert Rock in arguing NUARB improperly rejected wood gasification and partial carbon capture and storage as BACT. See 14 E.A.D. at 484 (finding agency inappropriately rejected consideration of IGCC as BACT). However, Desert Rock is distinguishable. The permit applicant in that case had included IGCC in its definition of the proposed facility; therefore, the agency had not taken the requisite "hard look"by ignoring this proposal and erred in its analysis. Id. at 547.

*Chapter of Sierra Club*decision should not be given significant weight here, as it is "too simplistic to say that a proposed source is defined solely by the raw materials it uses and the product it makes." *Powder River Basin*, 226 P.3d at 823. A control technology can redefine a source, even where the raw materials and end product are unchanged. *See id.* at 824; *Sierra Club*, 499 at 654 (transport and changes in facility design led to rejection of control technology option, despite it using same raw materials to make same product). Similar to both *Powder River Basin* and *Sierra Club*, the control technology proposed by SOC would require substantial changes in design to the Forestdale Biomass Facility by requiring different equipment and more extensive processes. Therefore, at this stage in the BACT determination, it was reasonable for NUARB to conclude that wood gasification and partial carbon capture and storage would redefine the Forestdale Biomass Facility.

VI. NUARB ERRED IN IMPOSING THE SUSTAINABLE FOREST PLAN AS BACT BECAUSE IT IMPERMISSIBLY CONSIDERED "BEYOND-THE-FENCE" MEASURES CONTRARY TO CAA SECTION169(3).

While NUARB reasonably found that wood gasification and partial carbon capture and storage redefined the source, it ultimately erred at step one of the BACT determination. The agency impermissibly considered "beyond-the-fence" measures in identifying the Sustainable Forest Plan as an available control option. Congress intended for BACT to be applied onsite, and the Supreme Court has cautioned against an unheralded expansion of the requirement in the GHG context.

BACT is defined as:

> [A]n emissions limitation . . .which the permitting authority, on a case-by-case basis . . . determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant.

42 U.S.C. §7479(3) (2012). This definition does not indicate that a permit-issuing agency is allowed to consider offsite mitigation measures or offsets in its BACT determination. Even if this Court finds section 169(3) ambiguous on its face, an analysis of corresponding regulations, case law, and other CAA requirements show that considering "beyond-the-fence" measures is an impermissible construction of the statute. Because the Supreme Court has counseled against an expansive BACT requirement, this Court should find that NUARB operated outside the scope of the CAA section169(3) when it imposed the Sustainable Forest Plan. *See UARG*, 134 S.Ct. at 2447–49.

A. A permit-issuing agency is required to consider onsite, traditional control technology in its BACT determination.

Fundamentally, the CAA instructs EPA to apply "best available *controltechnology*," 42 U.S.C. § 7475(a)(4) (emphasis added), which suggests machinery, equipment, or some other sort of tangible object or process that physically limits emissions. *See Control Technology*, BOUVIER LAW DICTIONARY QUICK REFERENCE (Wolters Kluwer 2012) ("Devices, substances, and processes to control any activity."). An examination of BACT's definition supports this scope. Although "production processes and available methods, systems, and techniques" are undefined, Congress included a subsequent list of examples to illustrate what control technologies it considered permissible as BACT. *See id.*§ 7479(3)."We rely on the principle of noscitur a sociis—a word is known by the company it keeps—to 'avoid ascribing to [words] a meaning so broad that [they are] inconsistent with [their] accompanying words, thus giving unintended breadth to the Acts of Congress.'" *Yates v. U.S.*, 135 S.Ct. 1074, 1085 (2015) (internal citation omitted). Here, section 169(3) uses "fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques." 42 U.S.C. §7479(3). These all refer to traditional technological processes that, logically and practically speaking, would occur onsite. While this list is not exclusive, it remains that NUARB's inclusion of offsite reforestation area management in the BACT

determination is an attempt to fit a square peg in a round hole. Indeed, in the preceding petition for review, the EAB acknowledges an absence of instances where offsite measures have been required as BACT. R. 11. Instead, cases apply the traditional, onsite BACT requirement. *See, e.g.*, *Alaska Dept. of Envtl. Conservation v. U.S. Envtl. Prot. Agency*, 540 U.S. 461 (2004) (determining whether selective catalytic reduction or low-NO_xwould establish BACT standard for NO_x from diesel electric generator); *Sierra Club v. Wisconsin Dept. of Natural Res.*, 787 N.W.2d 855 (Wis. App. 2010) (disputing whether BACT for SO_2 should be based on wet or dry flue gas desulfurization). This application of BACT is further supported by EPA guidance, which "interprets the language of the BACT definition . . . to include control methods that can be used *facility-wide*." BACT GUIDANCE at 23 (emphasis added).

EPA's regulatory definition of BACT also indicates section 169(3)'s scope. Beyond mirroring the statutory definition, the regulatory definition also provides:

> If the reviewing authority determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology.

40 C.F.R. §51.166(b)(12) (2014). These prescriptions have been referred to as "non-numeric limitations" and are similar to the management plan NUARB determined as BACT.*See, e.g.*, *In re Indeck-Elwood*, 13 E.A.D. 126, 176 (EAB 2006). As indicated by the regulations, however, non-numeric limitations are only available if EPA has considered and rejected technological limitations. *See* 40 C.F.R. 51.166(b)(12) (prescribing limitations only when traditional methods are "infeasible"). While these regulations do not go as far as suggesting offsite measures can be considered, they do indicate *non-traditional* measures should only be considered as a matter of last resort. Clearly, EPA's regulations supplement a narrow statutory scope, and the Sustainable Forest Plan falls outside what the CAA requires for BACT determinations.

Finally, any comparison to CAA section111(a)(1) in support of "beyond-the-fence" measures is misguided, as the corresponding "best system for emission reduction" (BSER) requirement is distinguishable from BACT. 42 U.S.C. §7411(a)(1). First, unlike BACT, which is limited in definition by references to traditional technological controls, BSER is undefined in the CAA and is open to broader, albeit reasonable agency interpretation.Second, legislative history also indicates broader considerations are permissible for BSER. Similar to BACT, section 111(a)(1) once referred to the "best *technological* system;" however, Congress removed this language in 1990. *See* Clean Air Act Amendments of 1990, Pub. L. No. 101-549, 104. Stat. 2399 (codified at 42 U.S.C. §§ 7401-7671q (2012)); H.R. 3316, 101st Cong., at 12-13 (1989) (proposing that emissions reductions be achieved through the use of not only technological systems but also emissions trading and other methods). More accurately, BSER and BACT are complementary, yet separate standards between New Source Performance Standards and PSD review—a relationship that Congress acknowledged during the 1977 Clean Air Act Amendments. *See* H.R. REP. 95-294, at 166 (1977), *reprinted in* 1977 U.S.C.C.A.N. 1077, 1245 (indicating that PSD policy, alongside BSER requirements under section 111, "will help strengthen incentives for new plants to use locally available coal *plus* best available control technology") (emphasis added).

B. The Supreme Court has cautioned against a regulatory expansion of BACT analysis.

Even if this Court finds the CAA is ambiguous as to whether offsite measures can be considered in a BACT determination, recent concerns raised by the Supreme Court in *UARG* suggest this Court should refrain from allowing such novel and expansive regulatory authority. 134 S.Ct. 2427. Among the issues presented in *UARG*, the Supreme Court addressed whether EPA reasonably interpreted the CAA to require "anyway" sources to comply with BACT for GHGs. 134 S.Ct. at 2447. Petitioners argued that BACT fundamentally did not apply, as it "has traditionally been about end-of-stack controls 'such as catalytic converters or particle collectors'; but applying it to greenhouse gases will make it more

about regulating energy use . . . enabl[ing] regulators to control 'every aspect of a facility's operation and design.'" *Id.* (citation omitted). While the Court concluded, in that context, there were proper regulatory restraints that mitigated concerns of "'unbounded' regulatory authority," it acknowledged

> the potential for greenhouse-gas BACT to lead to an unreasonable and unanticipated degree of regulation, and our decision should not be taken as an endorsement of all aspects of EPA's current approach, nor as a free rein for any future regulatory application of BACT in this distinct context.

Id. at 2448–49. The same concerns for "unbounded regulatory authority" apply here. By considering offsite mitigation measures or offsets in determining BACT, NUARB acted arbitrarily and capriciously. Therefore, this Court must remand the PSD permit so NUARB can reevaluate its BACT determination.

CONCLUSION

For the reasons stated above, Sylvanergy respectfully requests that this Court reverse New Union Air Resources Board's (NUARB's) denial of Sylvanergy's Non-Applicability Determination request. In the alternative, this Court should remand Sylvanergy's Prevention of Significant Deterioration (PSD) permit to NUARB in recognition of the fact thatthe Forestdale Biomass Facilityshould not have been subjected to PSD review for biogenic carbon dioxide (CO_2) emissions. Finally, if this Court determines that NUARB can regulate biogenic CO_2 emissions under the PSD program, this Court should still remand the PSD permit and instruct NUARB to only consider onsite control technologies in its determination of best available control technology.