IN RE THREE MOUNTAIN POWER, LLC

PSD Appeal No. 01-05

ORDER DENYING REVIEW

Decided May 30, 2001

Syllabus

On February 20, 2001, the Shasta County Department of Resource Management Air Quality Management District (the "District"), pursuant to a delegation from U.S. Environmental Protection Agency Region IX ("Region IX"), issued a federal Clean Air Act prevention of significant deterioration ("PSD") permit to Three Mountain Power, LLC ("TMP"), authorizing the construction of a 500-megawatt nominally-rated natural gas-fired electrical generating power plant in Burney, Shasta County, California (the "Permit").

Burney Resources Group ("Petitioner") filed a Petition for Review seeking Board review on the following grounds: (1) the District deprived the public of the opportunity to review and comment on new information submitted by TMP after the close of the comment period in support of the District's best available control technology ("BACT") determination; (2) the District's selection of nitrogen oxide ("NO_x ") emission limits does not represent BACT; (3) the District's selection of carbon monoxide ("CO") emission limits does not represent BACT; (4) the District improperly eliminated from consideration in its BACT analysis catalytic absorption ("SCONOx") due it its alleged technical infeasibility; (5) the District failed to consider ammonia slip as a collateral impact of selective catalytic reduction ("SCR"), the technology chosen as the basis for the BACT emission limit; and (6) the District erroneously authorized TMP to offset PM_{10} and sulfur dioxide ("SO_2") emissions through road-paving and a voluntary wood-stove replacement program.

As a result of discussions wherein Petitioner, the District, TMP, the California Energy Commission, Region IX, and the Board explored whether the Board's consideration of the Petition for Review could be expedited, Petitioner agreed to waive its procedural claim in exchange for an opportunity to file a reply to the responses to its Petition and include new evidence with its reply. Petitioner subsequently withdrew the portion of the Petition for Review challenging the District's permit decision on procedural grounds.

Held: Review of the Petition for Review is denied for the following reasons:

(1) Petitioner has not shown that the District's selection of a NO_x emission limit of 2.5 parts per million ("ppm") measured at 15% oxygen averaged over one hour as BACT to be clearly erroneous or an exercise of discretion or an important policy consideration that the Board should, in its discretion, review. The data presented by Petitioner to support a more stringent emission limit are inadequate to do so, when appropriate deference is given to the permitting agency, and in light of the consistent treatment by Region IX of 2.5 ppm averaged over one hour as BACT for NO_x, and the fact that the vendor was only willing to

offer for TMP's facility a guaranty equivalent to 2.5 ppm averaged over one hour. Therefore, the Board denies review of this issue.

(2) The District's selection of a CO emission limit of 4 ppm averaged over three hours is consistent with the BACT limit for other sources in Region IX and includes a reasonable safety factor that would permit TMP to achieve compliance on a consistent basis.

(3) Since BACT means an emission limitation, rather than the particular pollution control technology by which BACT is to be achieved, and since the emission limitation constituting BACT would be the same with either SCONOx or SCR, the District's elimination of SCONOx during the BACT review did not materially affect the ultimate determination of the emission limit constituting BACT. Accordingly, the Board denies review of this issue.

(4) The District's selection of a 5 ppm ammonia slip limit is the most stringent limit for ammonia in any PSD permit issued in Region IX to date, and Petitioner's argument that emitted ammonia will form secondary PM_{10} is highly speculative in nature. Consequently, the Board denies review of this issue.

(5) Requirements in the Permit calling for PM_{10} and SO_2 offsets and mitigation measures are not requirements of the federal PSD program, and Petitioner has not shown that these issues otherwise come within the purview of the federal PSD program. Therefore, the Board denies review of this issue.

Before Environmental Appeals Judges Scott C. Fulton, Edward E. Reich, and Kathie A. Stein.

Opinion of the Board by Judge Reich:

I.. *INTRODUCTION*

Burney Resources Group ("Petitioner" or "BRG") has filed a Petition for Review seeking review of certain provisions of a final prevention of significant deterioration ("PSD") permit decision (the "Permit") issued to Three Mountain Power, LLC ("TMP") by the Shasta County Department of Resource Management Air Quality Management District (the "District"). The District is authorized to make PSD permit decisions for new and modified stationary sources of air pollution in Shasta County, California, pursuant to a 1985 delegation agreement with Region IX of the U.S. Environmental Protection Agency ("EPA" or "Agency"). *See* U.S. EPA-Shasta County APCD Agreement for Delegation of Authority of the Regulation for Prevention of Significant Deterioration of Air Quality (July 8, 1985) ("Delegation Agreement").[1] For the reasons stated below, we deny review.

---

[1] Because the District acts as EPA's delegate in implementing the federal PSD program, the permit is considered an EPA-issued permit for purposes of federal law, and is subject to review by
Continued

II. *BACKGROUND*

A. *Statutory and Regulatory Background*

The Clean Air Act ("CAA") established the PSD program to regulate air pollution in certain areas, known as "attainment" areas, where air quality meets or is cleaner than the national ambient air quality standards ("NAAQS"),[2] as well as in unclassifiable areas that are neither "attainment" nor "non-attainment." CAA §§ 160-169, 42 U.S.C. §§ 7470-7479. The statutory PSD provisions are carried out through a regulatory process that requires preconstruction permits for new major stationary sources, such as TMP's proposed facility. *See* 40 C.F.R. § 52.21.

The CAA and the PSD regulations require, among other things, that major new stationary sources employ the "best available control technology" ("BACT") to limit emissions of certain pollutants. CAA § 165(a)(4), 42 U.S.C. § 7475(a)(4); 40 C.F.R. § 52.21(j)(2). BACT is defined in the PSD regulations as follows:

> Best available control technology means an emission limitation * * * based on the maximum degree of reduction for each pollutant subject to regulation under [the] Act which would be emitted from any proposed major stationary source * * * which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source * * * through application of production processes or available methods, systems, and techniques * * * for control of such pollutant.

40 C.F.R. § 52.21(b)(12).

(continued)
EPA's Environmental Appeals Board (the "Board") pursuant to 40 C.F.R. § 124.19. *See In re Harquahala Generating Project*, PSD Appeal No. 01-04, slip op. at 1 n.1 (EAB, May 14, 2001); *In re Zion Energy, L.L.C.*, 9 E.A.D. 701 n.1 (EAB 2001); *In re Knauf Fiber Glass, GmbH*, 8 E.A.D. 121, 123 (EAB 1999) ("*Knauf I*"); *In re W. Suburban Recycling & Energy Ctr., L.P.*, 6 E.A.D. 692, 695 n.4 (EAB 1996) ("For purposes of part 124, a delegate State stands in the shoes of the Regional Administrator [and must] follow the procedural requirements of part 124. * * * A permit issued by a delegate is still an 'EPA-issued permit' * * *." (quoting 45 Fed. Reg. 33,413 (May 19, 1980)).

[2] The NAAQS are "maximum concentration 'ceilings'" for particular pollutants, "measured in terms of the total concentration of a pollutant in the atmosphere." U.S. EPA Office of Air Quality Planning & Standards, *New Source Review Workshop Manual* (draft Oct. 1990) at C.3. NAAQS have been set for six criteria pollutants: sulfur oxides, particulate matter, nitrogen dioxide ("NO_2"), carbon monoxide ("CO"), ozone, and lead. 40 C.F.R. §§ 50.4-.12.

EPA's Office of Air Quality Planning and Standards has issued a guidance document, the New Source Review Workshop Manual (draft Oct. 1990) ("Draft NSR Manual"), that is widely used in PSD reviews to lend some consistency and a framework to BACT determinations being made by permit-issuing authorities such as the District. The Draft NSR Manual is not, however, accorded the same weight as a binding Agency regulation; instead, it has been looked to by the Board as a statement of the Agency's thinking on certain PSD issues. *Knauf I*, 8 E.A.D. 121, 129 n.13 (EAB 1999); *In re RockGen Energy Ctr.*, 8 E.A.D. 536, 542 (EAB 1999); *In re Maui Elec. Co.*, 8 E.A.D. 1, 5 (EAB 1998); *In re Kawaihae Cogeneration Project*, 7 E.A.D. 107, 112 n.11 (EAB 1997).

Under the guidance of the Draft NSR Manual, permit issuers use a "top-down" method for determining BACT:

> The top-down process provides that all available control technologies be ranked in descending order of control effectiveness. The PSD applicant first examines the most stringent — or "top" — alternative. That alternative is established as BACT unless the applicant demonstrates, and the permitting authority in its informed judgment agrees, that technical considerations, or energy, environmental, or economic impacts justify a conclusion that the most stringent technology is not "achievable" in that case.

Draft NSR Manual at B.2. As the Board explained in *In re Maui Electric Co.*, 8 E.A.D. 1, 6, the Draft NSR Manual provides a five-step procedure for implementing the top-down analysis.[3]

---

[3] The first step in the BACT top-down analysis is to identify all "available" control options. Draft NSR Manual at B.5. Here the term "available" is defined to mean "those air pollution control technologies or techniques with a practical potential for application to the emissions unit and the regulated pollutant under evaluation." *Id.*

The second step is to eliminate "technically infeasible" options. *Id.* at B.7. This step involves firstdetermining for each technology whether it is "demonstrated," that is, installed and operated successfully elsewhere. *Id.* at B.17-.18. A control technology that is "demonstrated" for a given type or class of sources is assumed to be technically feasible unless source-specific factors exist and are documented to justify technical infeasibility. *Id.* at B.21. If a technology is not "demonstrated," then it will be deemed technically feasible only if it is "available" and "applicable" to the equipment under consideration. *Id.* Under the second step of the top-down analysis, the term "available" is used to refer to whether the technology is commercially available. *Id.* at B.17. An available technology is considered "applicable" if it can be installed and operated on the source type under consideration. *Id.* Applicability is generally assumed in cases where a commercially available control option has been or is soon to be deployed on the same or a similar source type. *Id.* at B.18. Technologies identified in step one that are not demonstrated and either not available or not applicable are eliminated under step two from further analysis. If a permit applicant asserts that a particular control option is technically infeasible, the

Continued

B. *Factual and Procedural Background*

On January 7, 1999, the District received an application from TMP for an Authority to Construct ("ATC") a 500-megawatt ("MW") natural gas-fired electrical generating power plant in Burney, Shasta County, California. *See* Preliminary Determination of Compliance 1 ("PDOC"). Between March 3 and May 13, 1999, TMP provided additional data as requested by the District to complete the ATC application. *Id*. The District notified TMP by letter dated May 13, 1999, that the ATC application was ready to be reviewed. *Id*. Accordingly, on January 5, 2000, the District gave public notice of a draft permit and issued a PDOC, notifying the public that written comments would be accepted from January 5, 2000, until February 4, 2000.

The District's BACT determination was premised in part on the use of selective catalytic reduction ("SCR") as the pollution control technology for the TMP facility. The District had eliminated from consideration catalytic absorption ("SCONOx") due it its alleged technical infeasibility. *See* PDOC at 8. Specifically, the District eliminated SCONOx based on the vendor's alleged refusal to guarantee nitrogen oxide ("NO_x") and CO emission rate performance for merchant mode power plants of the size of TMP. *Id*. at 8, 10.

During the public comment period, the District received written comments from Petitioner, California Unions for Reliable Energy ("CURE"), the California Energy Commission ("CEC"), Black Ranch, and the United States Environmental Protection Agency Region IX ("Region IX"). Petitioner, incorporating CURE's comments by reference, argued that the BACT analysis was not performed properly. *See* CURE's Comments at 3-11 (Feb. 3, 2000); BRG's Comments at 1 (Feb. 2, 2000). Similarly, Region IX argued that the District's analysis improperly rejected SCONOx as an available control technology. *See* Region IX's Comments at 1-2 (Feb. 4, 2000).

(continued)
applicant should provide factual support for that assertion. Such factual support may address commercial unavailability or difficulties associated with application of a particular control to the permit applicant's project. *Id*. at B.19. A control option is not considered infeasible simply based upon the cost of applying that option to the proposed project. Economic feasibility is evaluated in a subsequent step of the BACT process. *Id*. at B.20.

In step three of the top-down analysis, the remaining control technologies (not eliminated in step two) are ranked and then listed in order of control effectiveness for the pollutant under review, with the most effective alternative at the top. *Id*. at B.7.

In step four, the energy, environmental, and economic impacts are considered. The consideration of collateral impacts is used to either confirm the top BACT option as appropriate or to demonstrate that it is inappropriate. *Knauf I*, 8 E.A.D. 121, 131 (EAB 1999).

Finally, under step five of the analysis, the most effective control alternative not eliminated in step four is selected as BACT. Draft NSR Manual at B.53.

On February 10, 2000, the District wrote a letter to TMP, in which it requested a response to the issues raised during the public comment period. *See* Letter from Michael Kussow, Air Pollution Control Officer, Shasta County Air Quality Management District, to Martin McFadden, Vice President, Three Mountain Power (Feb. 10, 2000). By letter dated April 7, 2000, TMP provided that response, and notified the District that it was "preparing a supplemental BACT analysis to provide additional information regarding SCONOx and the scope and nature of the commercial 'guarantees' provided by its vendor, ABB Alstom Power." *See* Letter from Martin McFadden, Vice President, Three Mountain Power, to Michael Kussow, Air Pollution Control Officer, Shasta County Air Quality Management District 1 (Apr. 7, 2000). TMP's Supplemental BACT analysis was sent to the District attached to a letter dated April 18, 2000. *See* Letter from Martin McFadden, Vice President, Three Mountain Power, to Michael Kussow, Air Pollution Control Officer, Shasta County Air Quality Management District 1 (Apr. 18, 2000). On May 9, 2000, CURE submitted unsolicited comments on TMP's April 7, 2000 responses to comments on the PDOC, TMP's Supplemental BACT analysis, ABB Alstom Power's May 5, 2000 proposal for two SCONOx systems for the TMP project, and correspondence between TMP and ABB Alstom Power. *See* CURE's Comments (May 9, 2000).

The District subsequently revised the draft permit and issued the Permit on February 20, 2001,[4] authorizing the construction of the power plant. In addition, the District issued a Response to Comments document. This document addressed the comments received during the comment period but did not address the comments submitted by CURE after the close of the public comment period. *See* Response to Written Comments Submitted During Public Comment Period ("Response to Comments").

Petitioner filed its Petition for Review with the Board on March 22, 2001, seeking review of the provisions of the Permit. *See* Petition for Review (Mar. 22, 2001). In its Petition, Petitioner challenged the District's permit decision on the basis that the District failed to provide the public with an opportunity to comment on TMP's supplemental BACT analysis and failed to require TMP to employ BACT. *Id*. at 6, 18. Petitioner sought a remand of the Permit with instructions to the District to "thoroughly" investigate BACT for the gas turbines and to establish and include appropriate BACT limits. *Id*. at 45. On April 10, 2001, the Board issued an order directing Region IX to file a brief with the Board addressing the issues raised in the Petition. *See* Order Directing Briefing (Apr. 10, 2001).

---

[4] The District originally issued the Final Determination of Compliance ("FDOC") and Permit on June 9, 2000, but rescinded it on July 11, 2000, at the request of TMP to allow EPA to conclude a Section 7 consultation process with the U.S. Fish and Wildlife Service under the Endangered Species Act.

C. *Expedited Consideration of Petition for Review*

After two separate conference calls in which the Petitioner, the District, TMP, Region IX,[5] the CEC,[6] and the Board explored whether the Board's consideration of the Petition for Review could be expedited, Petitioner agreed in an April 19, 2001 telephone call to the Board, and in a follow-up letter dated April 23, 2001, to waive its procedural claim, effectively withdrawing the portion of the Petition for Review challenging the District's permit decision on procedural grounds and seeking a reopening of the public comment period. The withdrawal was premised on the Petitioner being given the opportunity to file a reply to the responses to its Petition and including new evidence with its reply. The Board subsequently issued an order setting the expedited briefing schedule to which the parties had orally agreed. *See* Order Setting Expedited Briefing Schedule (Apr. 23, 2001).

In addition, by order dated April 25, 2001, the Board dismissed the portion of the Petition for Review challenging the District's permit decision on procedural grounds and seeking a reopening of the public comment period. *See* Order Dismissing Portion of Petition for Review (Apr. 25, 2001). Later that day, however, Petitioner filed with the Board a motion to reinstate the portion of the Petition for Review that was dismissed by the Board "unless and until written notification by the other parties is received by the [Board] (with service on Petitioner) confirming that the other parties agree not to challenge, judicially or otherwise, the Board's acceptance of new evidence * * *." *See* Motion for Reinstatement of Portion of Petition for Review (Apr. 25, 2001).

By letters dated April 25, April 27, and April 30, 2001, the Permittee, the District, the CEC, and Region IX all confirmed that in exchange for Petitioner's waiver of its procedural challenge to the District's permit decision, they agreed not to raise a procedural objection, in this proceeding or any future judicial appeal of this proceeding, to the Petitioner's submission with its reply brief of any new evidence challenging the District's BACT analysis.[7] Accordingly, the Board issued an order denying Petitioner's motion for reinstatement on April 30, 2001.

---

[5] Region IX was represented on the first conference call held on April 11, 2001, but not on the second call that was held on April 18, 2001.

[6] The CEC was permitted to participate in the April 11, and April 18, 2001 conference calls as it had indicated that it intended to file a motion to participate as *amicus curiae* in the proceedings. The CEC subsequently filed that motion on April 24, 2001, *see* Motion for Leave to Participate as Amicus Curiae (Apr. 24, 2001), which was granted by the Board later that day. *See* Order Granting California Energy Commission's Motion to Participate as Amicus Curiae (Apr. 24, 2001).

[7] Consistent with the Board's Order Dismissing Portion of Petition for Review, the waivers expressly reserved the right to challenge the validity, relevance or interpretation of such evidence. *See* Order Dismissing Portion of Petition for Review (Apr. 25, 2001).

See Order Denying Motion for Reinstatement of Portion of Petition for Review (Apr. 30, 2001).

Pursuant to the Board's April 23, 2001 Order, *see* Order Setting Expedited Briefing Schedule (Apr. 23, 2001), the District filed its response to the Petition for Review on April 23, 2001, and the CEC filed its response on April 24, 2001. *See* Shasta County Department of Resource Management Air Quality Management District Response to Petitioner ("District's Response to Petition"); Response of the California Energy Commission in Opposition to Burney Resource[s] Group's Petition for Review ("CEC's Response to Petition"). TMP filed its response on April 25, 2001. *See* Response of Three Mountain Power, LLC In Opposition to Burney Resource[s] Group's Petition for Review ("TMP's Response to Petition"). Region IX filed its brief on May 1, 2001. *See* Memorandum Responding to Petition for Review by Burney Resources Group ("Region IX's Response to Petition").

Also consistent with the Board's April 23, 2001 Order, Petitioner filed its reply memorandum on May 14, 2001, *see* Petitioner's Reply Memorandum, and the District, TMP, and the CEC filed their Sur-Reply Briefs on May 18, 2000. *See* Sur-Reply Brief in Response to Petitioner ("District's Sur-Reply"); Sur-Reply of Three Mountain Power, LLC to Burney Resource[s] Group's Reply Brief ("TMP's Sur-Reply"); Reply of the California Energy Commission to Petitioner's Reply Memorandum ("CEC's Sur-Reply").[8] On May 25, 2001, Region IX filed a motion for leave to file a Sur-Reply to Petitioner's Reply Brief. *See* EPA's Motion For Leave to File a Sur-Reply to Petitioner Burney Resources Group's Reply Brief (May 25, 2001). Region IX's Motion for Leave to file a Sur-Reply Brief is granted and, as such, its May 25, 2001 response to Petitioner's Reply Brief is admitted to the administrative record before the Board.

II. *DISCUSSION*

A. *Standard of Review*

The Board's review of PSD permitting decisions is governed by 40 C.F.R. part 124, which "provides the yardstick against which the Board must measure" petitions for review of PSD and other permit decisions. *In re Maui Elec. Co.*, 8 E.A.D. 1, 7 (EAB 1998). Pursuant to those regulations, a decision to issue a

[8] On May 23, 2001, the Board received a motion from Petitioner to strike portions of the sur-reply briefs filed by TMP and CEC. *See* Petitioner's Motion to Strike Portions of Sur-Reply Briefs and Objection to Introduction of New Evidence with Sur-Reply Brief (May 23, 2001). Later that day, TMP filed a motion in opposition to Petitioner's motion to strike. *See* Three Mountain Power's Opposition to Petitioner's Motion to Strike and Objection (May 23, 2001). Since the evidence to which Petitioner objected did not form the basis for the Board's decision, Petitioner's Motion to Strike is denied as moot.

PSD permit will ordinarily not be reviewed unless the petitioner shows that the permit condition in question is based on: (1) a finding of fact or conclusion of law that is clearly erroneous; or (2) an exercise of discretion or an important policy consideration that the Board should, in its discretion, review. 40 C.F.R. § 124.19(a); *In re Steel Dynamics, Inc.*, 9 E.A.D. 740, 743 (EAB 2001) ("*Steel Dynamics II*"); *In re Sutter Power Plant*, 8 E.A.D. 680, 686 (EAB 1999).

B. *BACT Issues*

We now turn our attention to Petitioner's challenges to the District's BACT decisions, which are three-fold: (1) the NO_xemissions limitation for the Combustion Turbine Generators ("CTGs"); (2) the CO emissions limitation for the CTGs; and (3) the selection of SCR as the pollution control technology for the facility.

At the outset, we note that BACT is a site-specific determination and that the combined results of the considerations that form the BACT analysis are the selection of an emission limitation and a control technology that are specific to a particular facility. *Knauf I*, 8 E.A.D. 121, 128 (EAB 1999); *see also* 40 C.F.R. § 52.21(b)(12) ("best available control technology means an emission limitation * * * which the Administrator, on a case-by-case basis * * * determines is achievable for such source"); *In re CertainTeed Corp.*, 1 E.A.D. 743, 747 (Adm'r 1982) ("It is readily apparent * * * that * * * BACT determinations are tailor-made for each pollutant emitting facility.").

As we will discuss *infra*, we conclude that the Permit issued by the District to TMP contained the BACT limits for NO_x and CO and, as such, the District's decision to eliminate SCONOx did not materially affect the ultimate determination of the emission limit constituting BACT. Accordingly, we conclude that the District's rejection of SCONOx and selection of SCR was not clear error.

1. *BACT Limit for NO_x*

The District selected a NO_x emission limit of 2.5 parts per million ("ppm") measured at 15% oxygen averaged over one hour for the TMP facility. *See* Permit ¶ 35. According to Petitioner, however, the appropriate NO_x BACT for the CTGs is an emission limit of no more than 1.3 ppm measured at 15% oxygen averaged over one hour with no ammonia slip. *See* Petition for Review at 19, 31-32.

Petitioner, as a proponent of a permit condition that is different from that adopted by the permit issuer, has the burden of demonstrating that the contested permit condition is based on a finding of fact or conclusion of law that is clearly erroneous, or is based on an exercise of discretion or an important policy consideration that the Board should, in its discretion, review. *See* 40 C.F.R. §§ 124.13, .19(a); *Steel Dynamics II*, 9 E.A.D. 740, 743 (EAB 2001); *see also In re Haw.*

Elec. Light Co., 8 E.A.D. 66, 71 (EAB 1998) (burden of demonstrating review is warranted rests with petitioner). For the reasons detailed below, we find that Petitioner has not met its burden of demonstrating that a NO_xemission limit of 2.5 ppm measured at 15% oxygen averaged over one hour reflects clear error on the part of the District.

Petitioner's first argument in support of an emission limit of 1.3 ppm NO_x measured at 15% oxygen averaged over one hour is that Massachusetts and Connecticut have made BACT determinations and issued permits requiring that large gas turbines achieve a NO_x limit of 2 ppm at 15% oxygen averaged over one hour. *See* Petition for Review at 30 (citing CURE's Comments at 11-12 (Feb. 3, 2000)). However, the facilities referenced by Petitioner are located in nonattainment areas for ozone and, as such, NO_x emissions from these facilities are subject to nonattainment NSR requirements. *See* Region IX's Response to Petition at 7 n.6; TMP's Response to Petition at 33. Consequently, these facilities are required to meet the Lowest Achievable Emission Rate ("LAER") for NO_x, rather than BACT; and LAER can be more stringent than BACT.[9]

In addition, it is not clear that the 2 ppm NO_x limits in the Massachusetts and Connecticut permits are more stringent than the 2.5 ppm BACT limit in the TMP Permit. The Massachusetts and Connecticut permits use a one-hour block average, while the TMP Permit uses a 1-hour rolling average. According to Region IX,

> [w]hen comparing two limits that have the same limit (e.g., 2.0 ppm), and the same averaging time (e.g. 1 hour), a rolling average is considered more stringent because it will require compliance over more frequent, consecutive "rolling" time periods. It is more difficult, however, to compare the stringency of a block average with a rolling average when the corresponding limits vary, such as here, where the two northeast facilities have a 2.0 ppm limit based on a 1 hour block average and TMP has a 2.5 ppm limit based on a 1 hour rolling average.

[9] The LAER requirement provides that all affected sources must comply with either the most stringent limit contained in a state implementation plan or the most stringent emission limitation achieved in practice, whichever is more stringent. In contrast, under BACT, consideration of energy, environmental, or economic impacts may justify a lesser degree of control. *Compare* 40 C.F.R. § 52.21(b)(12), *with* 40 C.F.R. § 49.22; *see also* Draft NSR Manual at G.4 ("Unlike BACT, the LAER requirement does not consider economic, energy, or other environmental factors.").

Region IX's Response to Petition at 8 n.7; *see also* Response to Comments at 6; TMP's Response to Petition at 33-34.[10] Thus, we find that the Massachusetts and Connecticut emission limits provide insufficient support for Petitioner's contention that the 2.5 ppm emission limit constitutes clear error on the part of the District.

Petitioner's second argument in favor of a 1.3 ppm emission limit is that other facilities have received vendor guaranties for NO_x levels "down to 1.5 ppm." *See* Petition for Review at 30. Citing the Nueva Azalea project, Petitioner argues that the vendor "will offer the same guarantee [of a 1.3 ppm NO_x emission limit] to any other project." *See* Petition for Review at 32. Petitioner's reliance on the guaranty contained in the Nueva Azalea application is misplaced. That project is of no precedential value because it was suspended at the applicant's request on March 12, 2001, and the application has been withdrawn. *See* CEC's Response to Petition at 22-23; Region IX's Response to Petition at 13 n.11.

In any event, of particular import, the NO_x guaranty offered by the vendor for the TMP facility was 2 ppm averaged over three hours, which is equivalent in stringency to 2.5 ppm averaged over one hour. *See* District's Response to Petition at 4, 6. According to Region IX, it has "consistently stated that these two limits — 2.0 ppm at 15% oxygen averaged over 3 hours and 2.5 ppm at 15% averaged over 1 hour * * * — are equivalent and that they are considered BACT." Region IX's Response to Petition at 6. Petitioner does not dispute this.

Third, Petitioner cites the Otay Mesa project as an example of a facility that received a permit containing a NO_x emission limit of 2 ppm averaged over three hours with a goal of 1 ppm and 100 ton/yr of NO_x. *See* Petition for Review at 33. Unlike the TMP facility, however, the Otay Mesa facility is located in a nonattainment area for ozone as well as an attainment area for NO_x. As such,[11] the NO_x emissions from that facility are subject to both nonattainment NSR and PSD requirements. *See* Region IX's Response to Petition at 13 n.11; TMP's Response to Petition at 34. Consequently the Otay Mesa's NO_x emissions limit represents both a LAER and BACT limit. In any event, as previously noted, TMP's NO_x limit of 2.5 ppm averaged over one hour is equivalent to Otay Mesa's limit of 2 ppm averaged over three hours. *See* TMP's Response to Petition at 34; CEC's Response to Petition at 22.

---

[10] While Petitioner asserts that it is "harder to achieve the block average than the same limit based on a rolling average," Petition for Review at 31, thus apparently disagreeing with the District, TMP, and Region IX, we find its assertion unsupported and unpersuasive.

[11] NO_x emissions are precursors to ozone; thus, NO_x emissions at Otay Mesa are subject to NSR by virtue of ozone nonattainment.

Petitioner's last argument in favor of a 1.3 ppm emission limit is that monitoring data at the federal cogeneration facility in Vernon, California ("Federal Facility") demonstrate that particular facility's ability to achieve a NO_x limit of 1.3 ppm averaged over one hour with SCONOx. *See* Petition for Review at 32; CURE's Comments at 12-14 (Feb. 3, 2000). The District and TMP dispute Petitioner's contention that the SCONOx experience at the Federal Facility is transferable to the TMP facility, given, among other things, the structural differences between the two facilities. Specifically, the Federal Facility operates with a 32-MW gas-fired combustion turbine while the TMP facility will operate with two 170-MW gas-fired combustion turbines. *See* District's Response to Petition at 4, 6; TMP's Response to Petition at 34. As noted earlier, BACT determinations are facility-specific.

The issue of whether the Federal Facility data are relevant to TMP's facility is a technical one. We generally accord deference to permitting agencies when technical issues are in play. *In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 201 (EAB 2000) ("*Steel Dynamics I*"). As such, we assign a heavy burden to persons seeking review of issues that are quintessentially technical. *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 403 (EAB 1997). For example, we have stated that:

> [I]t is important to distinguish between BACT decisions where the permit issuer failed to consider an "available" control option in the first instance and decisions where the option was considered but rejected. Where a more stringent alternative is not evaluated because the permitting authority erred in not identifying it as an "available" option, a remand is usually appropriate, because proper BACT analysis requires consideration of all potentially "available" control technologies. However, where an alternative control option has been evaluated and rejected, those favoring the option must show that the evidence "for" the control option clearly outweighs the evidence "against" its application.

In re Masonite Corp., 5 E.A.D. 551, 569 n.26 (EAB 1994) (quoting *In re Inter-Power of N.Y., Inc.*, 5 E.A.D. 130, 144 (EAB 1994)). Accordingly, Petitioner cannot gain review of the Permit merely by pointing to data like the Federal Facility data. When the Board is presented with conflicting expert opinions or data, we look to see if the record demonstrates that the permitting agency duly considered the issues raised in the comments and if the approach ultimately selected is rational in light of all the information in the record, including the conflicting opinions and data. *Steel Dynamics I*, 9 E.A.D. at 180 n.16 (quoting *In re NE Hub Partners, L.P.*, 7 E.A.D. 561, 568 (EAB 1998), *review denied sub nom. Penn Fuel Gas, Inc. v. U.S. EPA*, 185 F.3d 862 (3d Cir. 1999)). Based on the evidence

in the record, we find that the District's selection of a NO_x limit of 2.5 ppm averaged over one hour was, in fact, rational.

The District's determination is further supported by Region IX, which makes a compelling argument:

> The appropriate BACT limit for NO_x with respect to gas-fired turbines such as those at TMP's facility is well-documented. As early as March 1998, in a letter to Goal Line, the developer of SCONOx, Region 9 recognized that, based on continuous six-month monitoring data submitted by Goal Line, SCONOx had been demonstrated in practice to achieve a NO_xemission rate of 2.0 ppm (averaged over 3-hours). * * * Subsequently, Region 9 stated in a letter to the South Coast Air Quality Management District ("SCAQMD") on June 10, 1998, that it fully supported the SCAQMD staff's recommendation to include a NO_x limit of 2.5 ppm (averaged over 1-hour), achievable through the application of SCONOx, in its BACT Guidelines. * * * Region 9 has consistently stated that those two limits — 2.0 ppm at 15% oxygen averaged over 3 hours and 2.5 ppm at 15% oxygen averaged over 1 hour * * * are equivalent and that they are considered BACT.

Region IX's Response to Petition at 6-7. Additionally, Region IX states that "both the local air districts with delegated PSD permitting authority and the Region, acting as permitting authority, have consistently determined [that] the 2.0/2.5 ppm limit is BACT for NO_x." *Id.* at 7. As previously noted, Petitioner does not dispute Region IX's contention that 2 ppm at 15% oxygen averaged over three hours and 2.5 ppm at 15% oxygen averaged over one hour are equivalent.

We do not find that the Federal Facility data have no relevance or merit. On balance, however, when arrayed against the technical deference given to a permitting agency, the consistent treatment of 2.0/2.5 ppm by Region IX as BACT for NO_x, and the fact that the vendor was only willing to offer for TMP's facility a guaranty equivalent to 2.5 ppm averaged over one hour,[12] we do not find

---

[12] It bears noting that even at the 2.5 ppm averaged over 1 hour configuration, the vendor hedged the guaranty to the point of rendering it insufficient in the District's view. According to the District, the vendor's proposal was insufficient due to "significant omissions [that included] a failure to offer a [Heat Recovery Steam Generator ("HRSG")] with integral SCONOx system, lack of performance data for duct-firing, and lack of performance data for partial load operations. Unacceptable qualifications include inadequate liquidated damages protection of only 15% of the contract cost, inade-

Continued

the District's choice of a 2.5 ppm limit at 15% oxygen averaged over one hour to be clear error.

2. *BACT Limit for CO*

The CO BACT limit in the TMP Permit is 4.0 ppm averaged over three hours. *See* Permit ¶ 35. This limit is consistent with the CO limit for other sources in Region IX,[13] which has been determined on a case-by-case basis to be in the range of 4.0 to 6.0 ppm with three hours being the most common averaging time. *See* Region IX's Response to Petition at 20. Initially, the District had selected a CO emission limit of 10 ppm but reduced that limit to 4.0 ppm based, in part, on comments received from Petitioner, Region IX, and CURE. *See* Response to Comments at 7, 11, 15, 21. Petitioner, however, argues that the appropriate CO emission limit for the TMP facility is one of no more than 0.5 ppm averaged over three hours. *See* Petition for Review at 43.

In support of its argument that the District erred in selecting a CO emission limit greater than 0.5 ppm, Petitioner references two Massachusetts permits, Island End and Mystic Station, which include CO limits of 2 ppm at 15% oxygen averaged over one hour, achieved using an oxidation catalyst. *See* Petition for Review at 42. However, as Petitioner acknowledges, the determinations for Island End and Mystic Station were LAER determinations rather than BACT determinations. *See id.*

Petitioner also argues that the Nueva Azalea project has obtained a vendor guaranty for 0.5 ppm CO averaged over one hour. *See* Petition for Review at 44. However, as we noted earlier, the Nueva Azalea project is of no precedential value because it was suspended at the applicant's request on March 12, 2001, and the application has been withdrawn. *See* CEC's Response to Petition at 22-23; Region IX's Response to Petition at 13 n.11.

In addition, Petitioner argues that monitoring data collected at the River Road Generating Project in Washington State ("River Road") support a CO emission limit of 0.5 ppm for the TMP Permit. The District disputes the applicability of the River Road data to the TMP facility. The District notes that although River Road was apparently able to achieve a 0.5 ppm CO emission limit, the permit for

---

(continued)
quate equipment warranty of only one year, limited catalyst life guarantee of only three years, and voiding of warranties if plant upsets occur." FDOC at 9 (referencing May 5, 2000 ABB Alstom Power proposal to TMP).

[13] States and territories in Region IX include Arizona, California, Hawaii, Nevada, American Samoa, Trust Territories of the Pacific Islands, Guam, Wake Islands, and the Northern Marianas. 40 C.F.R. § 1.7(b)(9).

that facility actually contains an emission limit of 6.0 ppm — a limit that is less stringent than the limit contained in TMP's Permit. *See* District's Response to Petition ¶ 4; *see also* TMP's Response to Petition at 37. More significantly, unlike the proposed TMP facility, River Road does not fire its heat recovery steam generator ("HRSG"); according to TMP the emission characteristics associated with an unfired HRSG are significantly different than those of a fired HRSG and, as such, the River Road data are not relevant to the District's CO BACT determination for the TMP project. *See* TMP's Response to CURE's Comments on the Draft PSD ATC/PDOC at 20; TMP's Response to Petition at 38.

Similarly, Petitioner argues that monitoring data at the Federal Facility support a CO emission limit of 0.7 ppm averaged over three hours. *See* Petition for Review at 43. The District disputes the relevance of the Federal Facility's monitoring data, arguing that SCONOx is not transferable to the TMP facility and that the Federal Facility operated only 37% of the time during the period the data were collected, and are from a small aeroderivative combustion turbine. *See* District's Response to Petition ¶¶ 4, 6; *see also* TMP's Response to Petition at 19, 34. Additionally, Region IX asserts that the Federal Facility data, while encouraging, do not account for all the factors that must be considered in establishing a BACT limit and are not sufficient to mandate a lower limit as BACT. *See* Region IX's Response to Petition at 21.

Moreover, the District argues that it is erroneous to suggest that:

> [T]he CO BACT should be determined strictly from operational data from a 32 MW gas turbine application without regard to specifying an emission limitation that the proposed facility can demonstrate compliance with under all operational circumstances and have sufficient margin over actual operational data to avoid continual compliance difficulties.

Final Determination of Compliance 7 ("FDOC").

The Board has recognized that permitting agencies have the discretion to set BACT limits at levels that do not necessarily reflect the highest possible control efficiencies but, rather, will allow permittees to achieve compliance on a consistent basis. *In re Masonite Corp.*, 5 E.A.D. 551, 560-61 (EAB 1994); *see also In re Knauf Fiber Glass, GmbH*, 9 E.A.D. 1,15 (EAB 2000) ("There is nothing inherently wrong with setting an emission limitation that takes into account a reasonable safety factor."); *Id.* ("The inclusion of a reasonable safety factor in the emission limitation calculation is a legitimate method of deriving a specific emission limitation that may not be exceeded."). Accordingly, we find no error in the District's decision to take into account a reasonable safety factor in setting the CO emission limitation.

As we explained previously, the Board accords deference to a permitting agency's determination regarding technical issues, and it is Petitioner's burden, as the proponent of a permit condition that is different from the one adopted by the District, to demonstrate that the permit condition is based on clear error or on an important policy consideration that the Board should, in its discretion, review. Consistent with the technical deference we accord to a permitting agency, and based on the current practice as articulated by Region IX, we find that the Petitioner has failed to meet its burden of demonstrating that the District's choice of a CO emission limit of 4 ppm averaged over three hours is clear error.

3. *The District's Selection of SCR*

Petitioner argues that the District improperly eliminated SCONOx under step 2 (technical feasibility) of the BACT top-down analysis. *See* Petition for Review at 21-31. Region IX also disagrees with the District's determination that SCONOx was not technically feasible for use at TMP. *See* Region IX's Memorandum Responding to Petition for Review by Burney Resources Group ("Region IX's Response to Petition") at 5-6. However, Region IX states that "while [it] does not agree with portions of the District's top-down BACT analysis, [it] believes that the record supports the District's selection of SCR technology." *See id.*

As noted previously, the top-down methodology is set forth in the Draft NSR Manual. The Draft NSR Manual is not accorded the same weight as a binding Agency regulation and, as such, a strict application of the methodology described in the NSR Manual is not mandatory. Nevertheless, the Board requires an analysis that reflects a level of detail in the BACT analysis comparable to the methodology in the NSR Manual. *See e.g. Knauf I*, 8 E.A.D. 121, 134 n.25 (EAB 1999) ("A strict application of the methodology described in the NSR Manual is not mandatory, but we expect an analysis that is as sufficiently detailed as the model in the NSR Manual."); *id.* at 129 n.14 ("We would not reject a BACT determination simply because the permitting authority deviated from the Draft NSR Manual, but we would scrutinize such a determination carefully to ensure that all regulatory criteria were considered and applied appropriately.").

As also noted previously, the Board generally accords deference to permitting agencies when technical issues are in play. *Steel Dynamics I*, 9 E.A.D. 165, 201 (EAB 2000). Consequently, persons seeking review of issues that are quintessentially technical are assigned a heavy burden. *See In re Ash Grove Cement Co.*, 7 E.A.D. 387, 403 (EAB 1997).

BACT "means an emission limitation," *see* 40 C.F.R. § 52.21(b)(12), rather than a particular pollution control technology. The control technology is the means by which the BACT is achieved. *See id.* ("[BACT] * * * is achievable * * * through application of production processes or available methods, systems, and techniques"). Petitioner has not shown that the appropriate BACT for NO_x

and CO is more stringent than the limits selected by the District, and TMP can achieve the appropriate BACT limits using either SCONOx or SCR.[14] Moreover, as we will discuss *infra* Part III.B.4, collateral impacts, such as ammonia slip, do not compel the rejection of SCR in this case. For this reason, we conclude that the District's selection of SCR was not erroneous.

Petitioner appears to argue that TMP's analysis was fatally flawed[15] because the allegedly improper elimination of SCONOx as technically infeasible tainted the District's BACT determination. *See* Petitioner's Reply Memorandum at 1, 14. Possibly for this reason, Petitioner contends that "[t]he dispute between the parties in this case is primarily legal and not technical." *Id.* at 2.

Petitioner's position does not accord with Board precedent. For a remand, there must be a compelling reason to believe that the District's elimination of SCONOx may have led to an erroneous permit determination. *See Steel Dynamics I*, 9 E.A.D. 165, 191 (EAB 2000); *In re Mecklenburg Cogeneration Ltd. P'ship*, 3 E.A.D. 492, 494 n.3 (Adm'r 1990). This is not, however, the case here.[16] Although the District eliminated SCONOx, the Permit contained the BACT limits for NO_x and CO. Thus, the District's elimination of SCONOx did not materially affect the ultimate determination of the emission limit constituting BACT. Accordingly, we deny review of the District's rejection of SCONOx and selection of SCR.[17]

---

[14] As discussed *supra*, Parts II.1 and II.2, the NO_x and CO emission limits in the TMP Permit represent BACT.

[15] According to Petitioner, "[p]ositions advanced *ex post facto* on these matters by the District or EPA cannot cure this fatal error by the District. It is well established that the *post hoc* rationalizations of an agency or other parties to a litigation cannot serve as a sufficient predicate for agency action." *See* Petitioner's Reply Memorandum at 14. We do not see this as a case involving *ex post facto* positions or *post hoc* rationalizations. The District, as the permitting agency, has always been clear and consistent as to its rationale for rejecting SCONOx. *See, e.g.*, PDOC at 8; FDOC at 8-11; Response to Comments at 1-6, 19-21; *see also* TMP's Sur-Reply Brief at 13. In any event, as discussed below, in this case the key question is whether the District derived the right limit.

[16] As noted previously, while the District did use a top-down framework for its decision making, it had no legal obligation to do so under the CAA and the PSD regulations. It is Petitioner's obligation to demonstrate that the permit conditions at issue are erroneous. Thus, an allegation that the District misapplied the top-down methodology, without a showing that the BACT limit may be clearly erroneous, does not justify a remand.

[17] Although we need not decide the issue, we also note it is not conclusive that the District erred in eliminating SCONOx as the control technology under step two of the BACT analysis. Both Petitioner and the District make arguments for and against the elimination of SCONOx. Specifically, the District analysis shows that, pursuant to the Draft NSR Manual, the District evaluated SCONOx as a potential control option and rejected it based on difficulties associated with application of SCONOx to TMP's project. *See* PDOC at 8; FDOC at 8-11. In rebuttal, Petitioner attempted to show that the difficulties cited by the District were illusory. *See* Petition for Review at 21-31. However, as discussed

Continued

4. *Ammonia Slip Limit*

We read Petitioner's arguments about ammonia slip[18] as two-fold. First, Petitioner asserts that the District failed to consider ammonia slip as a collateral impact of SCR as required under step four of the BACT top-down analysis.[19] That is, because SCR discharges ammonia and SCONOx does not, Petitioner argues that the District erroneously selected SCR.

Second, Petitioner disputes the emission limit for ammonia slip contained in the Permit. In Petitioner's comments on the draft permit (which contained an ammonia slip limit of 10 ppm), Petitioner argued for an ammonia slip limit of 5 ppm. *See* BRG's Comments at 1-2 (Feb. 2, 2000). When the District subsequently issued the Permit and Response to Comments document, it responded to Petitioner's comment by reducing the ammonia slip to 5 ppm. *See* Response to Comments at 27; Permit ¶ 35. Nevertheless, Petitioner now contends that an ammonia slip limit of 5 ppm would increase the annual average ambient concentration of secondary PM_{10}[20] because the ammonia emissions will convert to secondary particulate matter, thus causing a violation of California's annual PM_{10} standard. *See* Petition for Review at 33-40.[21]

At the outset, we find that Petitioner's argument that emitted ammonia will form PM_{10} is purely speculative in nature. Indeed, Petitioner concedes that its argument is based on various assumptions or theories, including that there is adequate ammonia and nitric acid (HNO_3) in the Burney area to convert ammonia to secondary PM_{10} and that the plant will operate 8,300 hours per year. *Id*. at 36. In addition, Petitioner concedes that:

(continued)
previously, it is Petitioner's burden to show that the evidence "for" SCONOx clearly outweighs the evidence "against" its application. *See In re Masonite* Corp., 5 E.A.D. 551, 569 n.26 (EAB 1994) (quoting *In re Inter-Power of N.Y., Inc.*, 5 E.A.D. 130, 144 (EAB 1994)) ("However, where an alternative control option has been evaluated and rejected, those favoring the option must show that the evidence "for" the control option clearly outweighs the evidence "against" its application.").

[18] SCR uses ammonia as a catalyst to reduce NO_x emissions, and some portion of unreacted ammonia escapes from the exhaust stack as "ammonia slip." *See, e.g. In re Sutter Power Plant*, 8 E.A.D. 680, 693 (EAB 1990).

[19] *See supra* note 3.

[20] Particulate matter, or "PM," is "the generic term for a broad class of chemically and physically diverse substances that exist as discrete particles (liquid droplets or solids) over a wide range of sizes." *Steel Dynamics I*, 9 E.A.D. 165, 181 (EAB 2000) (quoting 62 Fed. Reg. 38,652, 38,653 (July 18, 1997)). Particulate matter with an aerodynamic diameter of ten micrometers or less is referred to as "PM_{10}." *Id*. Secondary PM_{10} is formed when ammonia slip reacts with nitric acid in the ambient air to form ammonium nitrate, which can be measured as PM_{10}.

[21] Petitioner has not asserted that conversion to secondary particulate would cause or contribute to violation of the federal NAAQS.

> The exact amount of secondary PM_{10} that may form from ammonia slip is difficult to estimate with certainty because there is no current air quality data for the Burney Valley where the Project would be located and the reactions that form secondary PM_{10} are complex, poorly understood, and may occur hundreds of miles downwind from the plant.

Id. at 35-36. However, according to Region IX, many of Petitioner's assumptions are "contrary to the general characteristics of non-urban areas such as the Burney area." *See* Region IX's Response to Petition at 16. For example, Region IX argues that agricultural areas are usually "ammonia rich" such that the introduction of additional ammonia will not increase the formation of secondary PM_{10}. *Id*. at 17-19. Region IX also questions whether the San Joaquin Valley of California, which is located in the lower Central Valley and is primarily non-urban (and fairly similar to the Burney area, which is located in the upper Central Valley), has the HNO_3 necessary to form PM_{10}. *See id*. at 17; *see also* CEC's Response to Petition at 18 ("Specifically, CEC staff testified that the conversion rate would be 'not even close to 10 percent in the Burney area' because of lack of ozone and NH_3. * * * Testimony by the staff of [the District] verified that the ambient air in the vicinity is low in nitric acid.").

In its Reply Memorandum, Petitioner offered the declaration of Betty K. Pun, Ph.D., in which Dr. Pun averred that "EPA has cited a report[22] that I co-authored in support of its position [that secondary PM_{10} formation from TMP's ammonia emissions will be minimal or unlikely]. * * * The report * * * concludes that the formation of particulate nitrate is limited by availability of HNO_3 during winter in the San Joaquin Valley." *See* Declaration of Betty K. Pun, Ph.D. in Support of the Burney Resources Group (May 14, 2001) ¶ 7 ("Pun Declaration"). Region IX cited Dr. Pun's report for the proposition that adequate HNO_3 is generally unavailable in non-urban areas. *See* Region IX's Response to Petition at 17. Specifically, the Region stated:

> The assumption, however, that adequate HNO_3 is available is generally not the case in non-urban areas. Pun and Seigneur found that in the San Joaquin Valley of California the availability of HNO_3 was a limiting factor in PM_{10} formation.

Id. While Dr. Pun may raise a valid concern regarding the transferability of the findings of the report to the Burney Basin, she appears to confirm our conclusion

---

[22] Betty K. Pun & Christian Seigneur, *Sensitivity of PM Nitrate Formation to Precursor Emissions in the California San Joaquin Valley* 3-14 (Apr. 9, 1999).

that Petitioner's argument that emitted ammonia will form secondary PM_{10} is highly speculative in nature. She states that "we are not aware of any local NH_3 emission inventory in the Burney Basin, making it impossible to evaluate the effects of additional NH_3 emissions from the NH_3 slip on the formation of secondary NH_4NO_3." *See* Pun Declaration ¶ 7.

The Board will not overturn a permit provision based on speculative arguments. *See In re Hadson Power 14—Buena Vista*, 4 E.A.D. 258, 275 (EAB 1992) ("However, in the absence of a clear description of proposed construction emissions and how this provision might apply, we cannot sustain [the permitting agency's] action based on speculation as to the possible applicability of this provision."); *In re Colmac Energy, Inc.*, 2 E.A.D. 687, 689 (Adm'r 1988) ("Petitioners have not established that their concerns are anything other than speculative, which is not a sufficient basis to justify exercise of the review powers under the applicable regulations."); *In re Texas Indus., Inc.*, 2 E.A.D. 277, 279 (Adm'r 1986) ("Less speculation and more empirical evidence is needed by petitioner to justify review of the permit.").

On balance, we agree with Region IX that:

> The petitioner has not provided sufficient information to prove that its calculations are anything more than speculation concerning a complex process that is extremely difficult to quantify[,] nor has it provided any underlying factual information concerning the chemical composition of the ambient air in the Burney area. Thus, based upon the lack of any supportive information from petitioner and in light of the uncertainties concerning particulate formation discussed above, the petitioner has not met its burden in this instance. Petitioner has failed to prove that the ammonia emissions from the utilization of SCR will have an environmental impact that justifies rejection of SCR to control NO_x emissions at the TMP facility.

Region IX's Response to Petition at 19.

Furthermore, in challenging the ammonia slip limit of 5 ppm, Petitioner relies heavily on CURE's February 3, 2000 comments on the draft permit, in which CURE argued for an ammonia slip limit of 2 ppm or less. *Compare* CURE's Comments at 19-20 (Feb. 3, 2000), *with* Petition for Review at 34-38. The record contains evidence, however, that the District responded to CURE's February 3, 2000 comments by explaining that it had "revised the allowed ammonia slip concentration [from 10 ppm] to 5 ppm * * * to be consistent with the California Air Resources Board's ("CARB") Guidance for Power Plant Siting and Best Available Control Technology ([C]ARB, September 1999)." Response to Comments at 6.

Thus, Petitioner appears to simply repeat CURE's comments objecting to an ammonia slip greater than 2 ppm, without demonstrating why the District's response to the objections was inadequate.[23]

As the Board has previously explained, in order to establish that review of a permit is warranted, 40 C.F.R. § 124.19(a) requires a petitioner to both state the objections to the permit that are being raised for review, and to explain why the permit-issuer's previous response to those objections is clearly erroneous or otherwise warrants review. *In re P.R. Elec. Power Auth.*, 6 E.A.D. 253, 255 (EAB 1995); *In re Genesee Power Station, L.P.*, 4 E.A.D. 832, 866 (EAB 1993) (citing *In re LCP Chem. — N.Y.*, 4 E.A.D. 661, 664 (EAB 1993)); *In re SEI Birchwood, Inc.*, 5 E.A.D. 25, 27 (EAB 1994). Accordingly, with respect to the issue of the ammonia slip limit, Petitioner fails to meet the threshold requirement of specificity as required by 40 C.F.R. § 124.19.

Even if we were to consider the merits of Petitioner's argument, we would conclude that its argument must fail. The District's selection of the 5 ppm ammonia slip limit is the most stringent limit for ammonia in any PSD permit that has been issued in Region IX to date, *see* Region IX's Response to Petition at 19, and is within the bounds of CARB's Guidance, which suggests an ammonia slip limit of 5 ppm or less for facilities using SCR. *See* CARB, *Guidance for Power Plant Siting and Best Available Control Technology* (Sept. 1999). Petitioner has not met its burden of demonstrating that this limit constitutes clear error.

C. *PM_{10} and SO_2 Emission Offsets and Mitigation Measures*

Petitioner also seeks review of Permit condition 20 which authorizes TMP to offset PM_{10} and sulfur dioxide ("SO_2") emissions through road-paving and a voluntary wood-stove replacement program. *See* Petition for Review at 40-41. Specifically, Petitioner argues that such offsets are inconsistent with the Delegation Agreement and do not mitigate the impacts of secondary PM_{10}. *Id.*

Permit condition 20, however, is not a requirement of the federal PSD program. Rather, Permit condition 20 was included in the Permit to meet the require-

---

[23] CURE's argument for a lower ammonia slip limit was based on CARB's recommendation that "districts consider establishing ammonia slip levels below 5 [ppm] at 15 percent oxygen," low ammonia slip levels achieved in practice at a 1400 MW plant in Japan, and slip limits established for new power plants in Massachusetts and Rhode Island. *See* CURE's Comments at 19-20 (Feb. 14, 2000). Petitioner's argument that the District "has provided no justification for selecting a 5 ppm slip when the record indicates that even this slip would result in significant impacts and that lower slip limits are routinely permitted and technically feasible," *see* Petition for Review at 37, is not persuasive. Not only did the District offer a justification for the ammonia slip limit established in the Permit, but as discussed previously, Petitioner has not established that this slip would result in significant impacts.

ment of District Rule 2:2 and the Shasta County General Plan Air Quality Element Policy 2.e. *See* FDOC at 26. Emission offsets are not required in the PSD context. *Knauf I*, slip op. at 62, 8 E.A.D. at 168; *see also In re Multitrade Ltd. P'ship*, 4 E.A.D. 24, 27 (EAB 1992) (denying review of a petition objecting to a permit condition on offsets because the Clean Air Act and the PSD regulations do not require such a condition). Petitioner has not shown that this issue is within the purview of the federal PSD program. Accordingly, we deny review of the issue of PM_{10} and SO_2 emission offsets on the basis that we lack jurisdiction.

III. *CONCLUSION*

For the reasons set forth above, we deny Burney Resources Group's Petition for Review of the PSD permit issued by the District to TMP.

So ordered.