BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In re:	)	
Metcalf Energy Center	)	PSD Appeal Nos. 01-07 and 01-08
PSD Permit No. 99-AFC-3	)	

ORDER DENYING REVIEW

On May 4, 2001, the Bay Area Air Quality Management District ("Bay Area District" or "District") issued a federal prevention of significant deterioration ("PSD") permit, pursuant to Clean Air Act § 165, 42 U.S.C. § 7475, to Calpine Corporation and Bechtel Enterprises, Inc. ("Calpine/Bechtel") for the construction of a new electrical power plant in San Jose, California. The Bay Area District is authorized to make PSD permitting decisions for new and modified stationary sources of air pollution in the San Francisco Bay area of California pursuant to a delegation agreement with Region IX of the U.S. Environmental Protection Agency ("EPA" or "Agency"). *See* 40 C.F.R. § 52.21(u); 56 Fed. Reg. 4944 (Feb. 7, 1991). Because the Bay Area District acts as EPA's delegate under the PSD program, the District's PSD permits are considered EPA-issued permits, and appeals of the permit decisions are heard by the Environmental Appeals Board ("Board") pursuant to 40 C.F.R. § 124.19. *See In re Maui Elec. Co.*, PSD Appeal No. 98-2, slip op. at 2 n.1 (EAB Sept. 10, 1998), 8 E.A.D. ___.

In this case, two sets of petitioners -- (1) the City of Morgan Hill, the Santa Teresa Citizen Action Group, and DemandCleanAir (collectively "Morgan Hill Petitioners"); and

(2) Californians for Renewable Energy, Inc. ("CARE") -- filed appeals of the District's permit decision for Calpine/Bechtel, requesting on numerous grounds that the permit be remanded to the District for further consideration. For the reasons set forth below, the petitions for review are denied.

I. *BACKGROUND*

A. *Statutory and Regulatory Background*

Congress enacted the PSD provisions of the Clean Air Act ("CAA" or "Act") in 1977 for the purpose of, among other things, "insur[ing] that economic growth will occur in a manner consistent with the preservation of existing clean air resources." CAA § 160(3), 42 U.S.C. § 7470(3). To that end, parties must obtain preconstruction approval (i.e., PSD permits) to build new major stationary sources, or to make major modifications to existing sources, in areas of the country deemed to be in "attainment" or "unclassifiable" with respect to federal air quality standards called "national ambient air quality standards" ("NAAQS"). *See* CAA §§ 107, 160-169B, 42 U.S.C. §§ 7407, 7470-7492.

NAAQS are established on a pollutant-by-pollutant basis and are currently in effect for six air contaminants: sulfur oxides (measured as sulfur dioxide ("SO_2")), particulate matter ("PM"), carbon monoxide ("CO"), ozone (measured as volatile organic compounds ("VOCs")), nitrogen dioxide ("NO_2"), and lead. 40 C.F.R. § 50.4-.12. In areas deemed to be in "attainment"

for any of these pollutants, air quality meets or is cleaner than the NAAQS for that pollutant. CAA § 107(d)(1)(A)(i), 42 U.S.C. § 7407(d)(1)(A)(i); *In re Maui Elec. Co.*, PSD Appeal No. 98-2, slip op. at 5 (EAB Sept. 10, 1998), 8 E.A.D. ___. In "unclassifiable" areas, air quality cannot be classified on the basis of available information as meeting or not meeting the NAAQS.[1] CAA § 107(d)(1)(A)(iii), 42 U.S.C. § 7407(d)(1)(A)(iii).

Applicants for PSD permits must demonstrate, through analyses of the anticipated air quality impacts associated with their proposed facilities, that their facilities' emissions will not cause or contribute to an exceedence of any applicable NAAQS or air quality "increment."[2] CAA § 165(a)(3), 42 U.S.C. § 7475(a)(3); 40 C.F.R. § 52.21(k)-(m). In addition, applicants for PSD permits must employ the "best available control technology," or "BACT," to minimize emissions of pollutants that may be produced by the new source in amounts greater than

[1]Areas may also be designated as "nonattainment," meaning that the concentration of a pollutant in the ambient air exceeds the NAAQS for that pollutant. CAA § 107(d)(1)(A)(ii), 42 U.S.C. § 7407(d)(1)(A)(ii). The PSD program is not applicable, however, in nonattainment areas. *See* CAA § 161, 42 U.S.C. § 7471.

[2]Air quality increments represent the maximum allowable increase in concentration that may occur above a baseline ambient air concentration for a pollutant. *See* 40 C.F.R. § 52.21(c) (increments for six regulated air pollutants).

applicable levels of significance established by the PSD regulations.[3] CAA § 165(a)(4), 42 U.S.C. § 7475(a)(4); 40 C.F.R. § 52.21(j)(2).

The BACT requirement, which is of substantial importance to this appeal, is defined in the regulations as follows:

> [BACT] means an emissions limitation (including a visible emission standard) 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 or major modification 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 or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

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[3]The levels of significance are as follows:

POLLUTANT	LEVEL OF SIGNIFICANCE
CO	100 tons per year ("tpy")
NO_2	40 tpy
SO_2	40 tpy
PM	15 tpy
ozone(as VOCs)	40 tpy
lead	0.6 tpy

40 C.F.R. § 52.21(b)(23).

40 C.F.R. § 52.21(b)(12); *accord* CAA § 169(3), 42 U.S.C. § 7479(3). As the Board has noted on prior occasions, "[t]he requirements of preventing violations of the NAAQS and the applicable PSD increments, and the required use of BACT to minimize emissions of air pollutants, are the core of the PSD regulations." *In re Encogen Cogeneration Facility*, PSD Appeal Nos. 98-22 to -24, slip op. at 5 (EAB Mar. 26, 1999), 8 E.A.D. ___; *accord In re Haw. Elec. Light Co.*, PSD Appeal Nos. 97-15 to -23, slip op. at 11 (EAB Nov. 25, 1998), 8 E.A.D. ___.

B. *Factual and Procedural Background*

On May 5, 1999, Calpine/Bechtel submitted to the Bay Area District a permit application for permission to construct a 600-megawatt ("MW") combined-cycle electrical power plant, to be known as the "Metcalf Energy Center." The facility will consist of two nominal 200-MW "F-class" natural-gas-fired combustion gas turbines, two heat recovery steam generators ("HRSGs") equipped with 200 MMBtu/hour duct burners, and a 235-MW steam turbine generator. *See* Bay Area District, PSD Permit for Metcalf Energy Center 1 (May 4, 2001) ("Permit") (9 Administrative Record ("AR") 6213). Calpine/Bechtel proposes to site the new plant in San Jose, California, in an area designated as attainment or unclassified for NO_2, CO, SO_2, and PM. *See* 40 C.F.R. § 81.305. As currently configured, the proposed facility has the potential to emit all of these pollutants in quantities sufficient to trigger the protections of the PSD program, *see*

Permit at 4 (9 AR 6216), and thus the facility is subject to BACT for each of these pollutants.[4] *See* 40 C.F.R. § 52.21(j)(2).

On April 20, 2000, the District issued a Preliminary Determination of Compliance ("PDOC") for the Metcalf project. 4 AR 2359-2436. The PDOC, which is analogous to a draft PSD permit, incorporated certain proposed terms and conditions for the construction and operation of the Metcalf plant. On April 26, 2000, the District published a notice inviting public comment on the PDOC and establishing a comment deadline of May 31, 2000. 5 AR 2437-39. In response to its notice, the District received a number of comments from interested individuals and organizations, as well as from affected governmental agencies. *See* 6 AR 3138-3302 (comment letters). In particular, the District received comments from the City of Morgan Hill, Santa Teresa Citizens Group, DemandCleanAir, and CARE, as well as very technically detailed comments from the Coyote Valley Research Park ("CVRP"). *See* 6 AR 3138-3223, 3233-40, 3257-59, 3261-71.

After reviewing the public comments, the District prepared individual response letters for each of the commenters. *See* 7 AR 4034-75 (response-to-comments letters). At the same time

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[4]In addition, the San Jose area is also classified as nonattainment for ozone. *See* 40 C.F.R. § 81.305. Therefore, Metcalf is also subject to emissions limits consistent with the Lowest Achievable Emission Rate, or "LAER," for nitrogen oxides ("NO_x") and VOCs, which are ozone precursors. LAER is the rate of emissions that reflects either the most stringent limit contained in a state implementation plan or the most stringent limit achieved in practice, whichever is more stringent. *See* CAA §§ 171(3), 173(a)(2), 42 U.S.C. §§ 7501(3), 7503(a)(2); 40 C.F.R. § 51.165(a)(1)(xiii) & app. S at II.A.18 (definitions of LAER).

(late August 2000), the District issued its Final Determination of Compliance ("FDOC").[5] In issuing the FDOC, the District noted that the document did not at that time constitute the final PSD permit for the proposed Metcalf project. 9 AR 6213. Instead, the District indicated that because EPA Region IX and the U.S. Fish and Wildlife Service ("FWS") had not completed all necessary consultation concerning the project pursuant to section 7 of the Endangered Species Act, "the PSD permit conditions contained in [the FDOC] may be revised to reflect the outcome of the consultation." *Id*.

Upon completion of the EPA/FWS section 7 consultation process in March 2001, the District proceeded to issue the final PSD permit and FDOC for the Metcalf project on May 4, 2001. 9 AR 6206-99. The District subsequently notified the public that it had issued the Metcalf permit and that any party wishing to contest the terms and conditions of said permit could file a petition for review with the Board by June 16, 2001. 9 AR 6189-90.

On June 18, 2001, the Morgan Hill Petitioners filed PSD Appeal No. 01-07 and CARE filed PSD Appeal No. 01-08 with this Board.[6] *See* Petition of the City of Morgan Hill, Santa Teresa Citizen Action Group & DemandCleanAir ("MHP Pet'n"); Petition of Californians for Renewable Energy, Inc. ("CARE Pet'n"). The Morgan Hill Petitioners also filed a supplement to

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[5]Notably, PDOCs and FDOCs typically contain both PSD and non-PSD requirements, such as requirements imposed under state or local law or federal nonattainment new source review provisions.

[6]The petitions were timely filed: June 16, 2001, fell on a Saturday, so the filing deadline was automatically extended to the next working day, which was Monday, June 18, 2001. *See* 40 C.F.R. § 124.20(c).

their petition on June 19, 2001.[7] *See* Supplement to MHP Petition for Review ("MHP Pet'n Supp."). At the request of the Board, the Bay Area District provided a response, in conjunction with the California Energy Commission ("CEC"), to the petitions for review, and the Board granted Calpine/Bechtel leave to file its own responses to the petitions. *See* Joint Response Brief of the Bay Area District & CEC in Opposition to Petitions for Review ("BAAQMD/CEC Resp."); Response of Calpine/Bechtel in Opposition to MHP Petition for Review ("C/B MHP Resp."); Response of Calpine/Bechtel in Opposition to CARE Petition for Review ("C/B CARE Resp."). The Board received the District/CEC and Calpine/Bechtel responses on July 18, 2001. The Board also had directed EPA Region IX to file an *amicus curiae* brief responding to the petitions, which the Region filed on August 1, 2001. *See* EPA Region IX Memorandum Responding to Petitions for Review ("R9 Resp."). Briefing was completed on August 1, 2001.[8]

II. *DISCUSSION*

Under the rules governing this proceeding, a PSD permit ordinarily will not be reviewed unless it is based on a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. *See* 40 C.F.R.

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[7]This supplement was also timely filed. Under the permitting regulations, three days are added to a filing deadline in cases where, as here, service of notice occurred by mail. *See* 40 C.F.R. § 124.20(d); 9 AR 6189-90 (Notice of Determination of Compliance with PSD Requirements).

[8]All pending motions in this case requesting approval to submit further briefing, to stay the proceeding, or, as asserted, to complete/supplement the administrative record are hereby denied.

§ 124.19(a); 45 Fed. Reg. 33,290, 33,412 (May 19, 1980). The Board's analysis of PSD permits is guided by the preamble to section 124.19, which states that the Board's power of review "should be only sparingly exercised" and that "most permit conditions should be finally determined at the [r]egional [or state] level." 45 Fed. Reg. at 33,412; *accord In re Kawaihae Cogeneration Project*, 7 E.A.D. 107, 114 (EAB 1997). The burden of demonstrating that review is warranted rests with the petitioner, who must state his/her objections to the permit and explain why the permit issuer's previous response to those objections is clearly erroneous, an abuse of discretion, or otherwise warrants review. *In re Haw. Elec. Light Co.*, PSD Appeal Nos. 97-15 to -23, slip op. at 8 (EAB Nov. 25, 1998), 8 E.A.D. ___; *Kawaihae*, 7 E.A.D. at 114; *In re EcoEléctrica, L.P.*, 7 E.A.D. 56, 60-61 (EAB 1997).

The decision presently before the Board is whether the Petitioners have made a sufficient showing that any condition or conditions of the PSD permit are clearly erroneous or involve an important matter of policy or exercise of discretion warranting review. In the pages below, we begin by examining the Bay Area District's BACT analysis for NO_x and CO emissions from the proposed facility. Next, we address the Bay Area District's analysis of the collateral environmental impacts of various pollution control technologies. We then turn our attention to a variety of procedural deficiencies alleged by Petitioners to have existed in the permitting process. Finally, we conclude by addressing a number of miscellaneous issues.

A. *BACT Analysis for NO_x and CO*

In its preliminary analysis of BACT requirements for the proposed facility, the Bay Area District determined that an emissions limit of 2.5 parts per million, dry volume ("ppmvd") at 15% oxygen ("O_2") averaged over one hour would constitute BACT for NO_x emissions from the combustion gas turbines and HRSGs. PDOC at 9 (4 AR 2372). The District also determined that a limit of 10 ppmvd at 15% O_2 averaged over three hours would constitute BACT for CO emissions from these units. PDOC at 9-11 (4 AR 2372-74). The District specified that these BACT limits would be achieved through the use of dry low-NO_x combustors on the gas turbines, low-NO_x duct burners on the HRSGs, and a Selective Catalytic Reduction ("SCR") system, with ammonia injection, on the combined NO_x emissions stream from these units. PDOC at 3 (4 AR 2366).

During the comment period on the PDOC, a number of parties criticized the BACT analysis prepared by the District. EPA Region IX and others argued, among other things, that the analysis was deficient because it failed to include an evaluation of SCONOx™ technology, which the Region has determined is technically feasible for use on large combustion turbines of the type to be employed at Metcalf. 6 AR 3147-89 (CVRP), 3233-35 (CARE), 3242 (CEC), 3243-45, 3293-96 (EPA Region IX), 3259, 3269-71 (Santa Teresa Citizens/DemandCleanAir), 3277 (R.F. Williams), 3279 (Kyaw Tha Paw U). The commenters also argued that the District's analysis was inconsistent with the top-down BACT method recommended in the *New Source*

Review Manual, long-standing EPA guidance on this subject.[9] 6 AR 3149-51 (CVRP), 3233-35 (CARE), 3242 (CEC), 3269 (Santa Teresa Citizens/DemandCleanAir), 3294 (EPA Region IX).

In response to these criticisms of its BACT analysis, the District prepared a supplemental BACT analysis and issued it as part of the FDOC in late August 2000. 9 AR 6221-26. Calpine/Bechtel had also submitted a supplemental BACT analysis on August 3, 2000. 7 AR 3771-3831. Both supplemental analyses followed the top-down approach recommended in EPA's *NSR Manual*, and both evaluated SCONOx™ as well as SCR and other NO_x and CO control technologies. *See* 9 AR 6221-26; 7 AR 3773-3805. In addition, both analyses included a comparison of the collateral environmental, economic, and energy-related impacts of SCR and SCONOx™. *See* 9 AR 6222-24; 7 AR 3800-03. The final PSD permit issued by the Bay Area District retains the emissions limit of 2.5 ppmvd at 15% O_2 averaged over one hour as BACT for NO_x but reduces the CO BACT limit to 6 ppmvd at 15% O_2 averaged over three hours, subject to

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[9]In 1990, EPA issued draft guidance for permitting authorities to use in, among other things, analyzing PSD requirements. *See* U.S. EPA, Office of Air Quality Planning & Standards, *New Source Review Workshop Manual* (draft Oct. 1990) ("*NSR Manual*"). Although it is not accorded the same weight as a binding Agency regulation, the NSR Manual has been considered by this Board to be a statement of the Agency's thinking on certain PSD issues. *See*, *e.g.*, *In re Tondu Energy Co.*, PSD Appeal Nos. 00-05 & 00-07, slip op. at 13 n.13 (EAB Mar. 28, 2001), 10 E.A.D. ___.

The *NSR Manual* sets forth a "top-down" process for determining BACT. The process includes five steps: (1) identifying all available control options for a targeted pollutant; (2) analyzing the options' technical feasibility; (3) ranking feasible options in order of effectiveness; (4) evaluating their energy, environmental, and economic impacts; and (5) selecting BACT as the most effective option not eliminated in a preceding step. *Id*. at B.5-.9; *see In re Knauf Fiber Glass, GmbH*, PSD Appeal Nos. 98-3 to -20, slip op. at 11-14 (EAB Feb. 4, 1999), 8 E.A.D. ___ (expounding on steps in top-down analysis); *In re Haw. Elec. Light Co.*, PSD Appeal Nos. 97-15 to -23, slip op. at 24-34 (EAB Nov. 25, 1998), 8 E.A.D. ___ (same).

a further reduction to no less than 4 ppmvd if actual performance results over a range of operating conditions indicate that a lower limit could be consistently achieved. Permit conds. 20(b), (d) (9 AR 6243-44); *see infra* note 11. The selected pollution control technology, i.e., dry low-NO_x burners and SCR, remains the same technology recommended in the PDOC. Permit at 2-5, 9, 12-14 (9 AR 6214-17, 6221, 6224-26).

As mentioned above, review of the conditions of a PSD permit should be sparingly granted, and most permit conditions should be finally determined at the permit issuer level. *See*, *e.g.*, *In re Kawaihae Cogeneration Project*, 7 E.A.D. 107, 114 (EAB 1997); 45 Fed. Reg. 33,290, 33,412 (May 19, 1980). The Board generally defers to the permit issuer's judgment absent evidence of clear error of fact or law, or some other compelling reason warranting review. *In re Inter-Power of N.Y., Inc.*, 5 E.A.D. 130, 144 (EAB 1994). This is particularly true in cases where highly technical issues are in dispute. *In re Steel Dynamics, Inc.*, PSD Appeal Nos. 99-4 & 99-5, slip op. at 53 (EAB June 22, 2000), 9 E.A.D. ___; *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 403 (EAB 1997).

In the following pages, we address Petitioners' arguments about the numeric emissions limits the District selected as BACT and then turn to their arguments pertaining to collateral impacts. In each instance, we find that Petitioners failed to demonstrate clear error or other reason for us to grant review of the Bay Area District's permit decisions for Metcalf.

1. *Numeric Emissions Limits*

Morgan Hill Petitioners and CARE each argue that in selecting BACT limitations for the proposed facility's emissions of NO_x and CO,[10] the Bay Area District failed to comply with the requirements of the PSD program. MHP Pet'n at 33; CARE Pet'n at 20-23. Those requirements, they claim, include a mandatory evaluation by the permit issuer of the most recent regulatory decisions made for, and actual performance data collected from, similar facilities. MHP Pet'n at 33. Such an evaluation is necessary, Petitioners contend, in cases where, as here, applicable pollution control equipment such as SCR and SCONOx™ can operate over a wide range of emission performance levels, and the permit issuer therefore must determine which performance level among the many represents BACT for the facility in question. *Id*. (citing *NSR Manual* at B.23). Petitioners contend that had recent regulatory decisions and performance data from across the nation been considered, the Bay Area District would have selected lower emissions limits as BACT. Specifically, Petitioners argue that on the basis of that information, NO_x BACT should be established as 1.3 ppmvd at 15% O_2 averaged over one hour and CO BACT as 1.0 ppmvd at 15% O_2 averaged over three hours. MHP Pet'n at 30, 36; CARE Pet'n at 21.

As the Clean Air Act makes clear, BACT is an emission limitation, which, we have noted, is most often expressed in numerical form. *See In re Knauf Fiber Glass, GmbH*, PSD Appeal Nos. 98-3 to -20, slip op. at 11 n.12 (EAB Feb. 4, 1999), 8 E.A.D. ___ ("*Knauf I*") ("[a]n

[10]Petitioners do not contest the BACT limits the Bay Area District established for the other affected pollutants (SO_2 and PM).

emission limitation is ordinarily expressed as a numerical limit on the rate of emissions"); *see also* CAA § 169(3), 42 U.S.C. § 7479(3) ("[BACT] means an emission limitation"); *In re Three Mountain Power, L.L.C.*, PSD Appeal No. 01-05, slip op. at 23 (EAB May 30, 2001), 10 E.A.D. ___ (BACT means an emission limitation rather than a particular pollution control technology). The Act calls for BACT determinations to be made on a "case-by-case" basis. CAA § 169(3), 42 U.S.C. § 7479(3); *accord* 40 C.F.R. § 52.21(b)(12). This statutory directive does not mean, however, that the numerical BACT limitation for a particular facility must be determined in a vacuum. On the contrary, the hallmark of any BACT analysis is the process of comparing one facility with another, in terms of pollution control technologies employed, costs of compliance, collateral environmental, energy, and economic impacts, and so on. *See*, *e.g.*, *Knauf I*, slip op. at 11, 8 E.A.D. ___ ("[i]n reaching [a] facility-specific result, the emission limitations achieved by other facilities and corresponding control technologies used at other facilities are an important source of information in determining what constitutes [BACT]"); *NSR Manual* at B.11, .22-.53. The comparisons focus primarily on the emission levels achievable by a proposed facility vis-a-vis the levels achieved by comparable facilities. *See Knauf I*, slip op. at 12, 8 E.A.D. ___ ("[t]he essence of the BACT determination process * * * is to look for the most stringent emissions limits achieved in practice at similar facilities and to evaluate the technical feasibility of implementing such limits and/or control technologies for the project under consideration"); *NSR Manual* at B.22-.26 (control technology option achieving lowest emission level is ranked as "top" control option). The closer the similarities between two facilities, the more likely their BACT limitations will be similar.

Important in this equation is the temporal aspect of BACT determinations. Specifically, BACT determinations, by definition, are made with regard to currently available technologies. *See* CAA § 169(3), 42 U.S.C. § 7479(3); 40 C.F.R. § 52.21(b)(12). Because improvements in the pollution reduction capabilities of technologies frequently occur with the passage of time, emission limitations set for older facilities may be less stringent than emission limitations achievable using more modern technologies. Thus, when there is a significant disparity in the ages of the facilities being compared, the differences must be closely scrutinized to ensure that an emission limitation for a new facility is not set at a level that fails to take into account technological advances. As a corollary to this observation, the closer the facilities are to each other in time, the less likely it is that their emission limitations will differ, all other considerations being equal. In such instances, the need to scrutinize small differences between the two facilities is correspondingly diminished.

This is the situation we are confronted with today, for the proposed Metcalf facility is closely allied, in technology and in time, with the facility we considered very recently in *In re Three Mountain Power, L.L.C.*, PSD Appeal No. 01-05 (EAB May 30, 2001), 10 E.A.D. ___ ("*TMP*") (Order Denying Review). In *TMP*, the permit applicant proposed to construct a 500-MW natural-gas-fired, combined-cycle electrical power plant using F-class combustion turbines and HRSGs. Calpine/Bechtel propose a very similar 600-MW plant, also using F-class combustion turbines and HRSGs in combined-cycle formation. Both power plants have NO_x and CO BACT limits set by the local air quality management district as an average emissions level over one- or three-hour increments; NO_x BACT for both facilities is set at 2.5 ppmvd at 15% O_2

averaged over one hour, while CO BACT for TMP is 4.0 ppmvd and for Metcalf is 6.0 ppmvd, both at 15% O_2 averaged over three hours.[11] Permit conds. 20(b), (d) (9 AR 6243-44); *see TMP*, slip op. at 14-15, 10 E.A.D. ___. As we noted in *TMP*, these limits (2.5 ppm for NO_x and 4-6 ppm for CO) have been determined on a case-by-case basis to be BACT for large gas-fired turbines and are generally accepted as such by Region IX and other air quality districts within California. *See TMP*, slip op. at 18-19, 10 E.A.D. ___. In light of the similarities between these two facilities, and the fact that much of the same, or very similar, evidence was previously considered by the Board in *TMP*, we are disinclined to grant review of the BACT decisions made

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[11]The Metcalf permit also contains an optimization clause, which calls for the reduction of the CO limit to as low as 4 ppmvd in certain circumstances:

> If compliance source test results and continuous emission monitoring data indicate that a lower CO emission concentration level can be achieved on a consistent basis (with a suitable compl[ia]nce margin) over the entire range of turbine operating conditions, including duct firing and power steam augmentation operations, and over the entire range of ambient conditions, the District will reduce this limit to a level not lower than 4.0 ppmv, on a dry basis, corrected to 15% O_2.

Permit cond. 20(d) (9 AR 6243); *see In re Pennsauken County Resource Recovery Facility*, 2 E.A.D. 768, 771 (Adm'r 1989) (noting addition of optimization clause in permit requiring minimization of pollutant emissions based on tests conducted after permit issuance); *In re RockGen Energy Ctr.*, PSD Appeal No. 99-1, slip op. at 26 (EAB Aug. 25, 1999), 9 E.A.D. ___ (citing *Pennsauken* with approval); *In re Spokane Reg'l Waste-to-Energy*, 2 E.A.D. 809, 815 n.15 (Adm'r 1989) (recommending consideration on remand of optimization provision).

With respect to the difference between TMP's permitted CO BACT limit (4 ppm) and Metcalf's (6 ppm), it is important to understand that our decision in *TMP* made no judgment as to whether 6 ppm could constitute BACT for CO emissions. The only CO-related issue before us in that case was whether a limit *lower than* 4 ppm should have been selected as CO BACT. We answered that question in the negative. *See TMP*, slip op. at 19, 10 E.A.D. ___ (finding that 4.0 ppm CO limit is "consistent with the CO limit for other sources in Region IX, 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"); *id*. at 19-22, 10 E.A.D. ___ (analyzing petitioner's arguments and finding no showing of clear error or other grounds for review of permit condition).

for the Metcalf facility. For us to grant review under these circumstances, the petitioners would need to point to substantial new evidence not in the *TMP* record, or substantial evidence in the *TMP* record that was not adequately brought to our attention in *TMP*, that would show compelling new circumstances regarding the Metcalf facility versus the TMP facility.

In the petitions before us, the petitioning parties reference a variety of regulatory decisions and performance data that they claim establish, as BACT, emissions limits lower than those chosen by the Bay Area District. For NO_x, this information includes: (1) nine months of performance data from the 32-MW Federal Cogeneration Facility in Vernon, California, showing maximum NO_x emissions of 1.275 ppm averaged over one hour and 1.254 ppm averaged over three hours; (2) a report that the 5-MW Genetics Institute of Andover, Massachusetts meets a NO_x emissions limit of 1.0 ppm "when the turbine is functioning properly"; (3) permit decisions from Massachusetts and Connecticut requiring large gas turbines to achieve a NO_x limit of 2.0 ppmvd at 15% O_2 averaged over one hour; and (4) a proposed Massachusetts-issued permit for a 525-MW plant establishing a NO_x emissions limit of 1.5 ppm at 15% O_2. MHP Pet'n at 33 (citing CVRP Comments at 6-10); MHP Pet'n Supp. at 1; CARE Pet'n at 20-21. For CO, the information includes: (1) nine months of performance data from the 32-MW Federal Facility in Vernon showing CO emissions routinely at or below 1 ppm averaged over one hour and 0.7 ppm averaged over three hours; (2) similar performance at the 5-MW Genetics Institute in Andover; (3) source tests from nine combined-cycle plants reported in a California EPA, Air Resources Board ("CARB") guidance document, showing actual CO emissions at or below 2 ppmvd at 15% O_2 averaged over one hour; (4) four source tests from facilities using combined-cycle gas

turbines (River Road Generating Project; Procter & Gamble Cogen; Harbor Cogen; Watson Cogen) showing actual CO emissions less than 1 or 2 ppm at 15% O_2; (5) performance data from the River Road Generating Project in Washington State showing routine achievement of 1.2 ppm CO averaged over one hour and 0.5 ppm averaged over three hours; (6) recent permits issued by other states limiting CO emissions to 2 ppmv averaged over one hour (e.g., Island End and Mystic Station, Massachusetts); (7) a New Jersey permit limiting CO emissions from Newark Bay Cogeneration Facility to 1.8 ppmvd at 15% O_2 averaged over one hour, and a source test showing achievement of that limit; and (8) a proposed Massachusetts-issued permit for a 525-MW plant establishing a CO emissions limit of 2.0 ppmvd at 15% O_2. MHP Pet'n at 35-36 (citing CVRP Comments at 32-36); MHP Pet'n Supp. at 1; CARE Pet'n at 21.

We previously examined a number of these same regulatory decisions and performance data sets when considering the BACT determinations made by the Shasta County Air Quality Management District in our May 30, 2001 ruling in *TMP*. *See TMP*, slip op. at 13-22, 10 E.A.D. ___ (addressing items (1) and (3) above for NO_x and (1), (5) (and part of (4)), and (6) for CO). We decline to revisit these examples in the context of this case. Moreover, the remaining items referenced by Petitioners and not addressed in *TMP* are similar in kind to these other cases (in terms of numeric BACT limits or emissions levels achieved) and are neither unique nor compelling enough to persuade us that a detailed look at these examples would likely lead to a finding of clear error or other reason to grant review of the Bay Area District's NO_x and CO BACT determinations for Metcalf Energy Center.

For instance, the nine CO source tests highlighted by Petitioners as achieving CO emissions of 2 ppm or less (CO items (3) and (7) above) were taken from a CARB guidance document. 6 AR 3174, 3179 (CVRP Comments at 29 n.52, 34) (citing CARB, *Guidance for Power Plant Siting and Best Available Control Technology* app. C, at 23-26, tbls. C-6, C-8 (Sept. 1999) ("CARB Guidance")); MHP Pet'n at 36.[12] That same guidance document, however, nonetheless recommends a CO BACT limit of 6.0 ppm at 15% O_2 averaged over three hours. CARB Guidance at 29 & app. C at 30. As another example, Region IX convincingly argues that, in pointing out a proposed (not final) Massachusetts permit that sets NO_x BACT at 1.5 ppm and CO BACT at 2 ppm for a 525-MW plant (NO_x item (4) and CO item (8) above), the Petitioners failed to specify the averaging times, additional costs associated with control technology needed to achieve these limits, or any associated environmental impacts, and thus failed to meet their burden of showing that the data, by itself, warrants applying much lower BACT limits. R9 Resp. at 19, 26.

We find that the emissions limits for NO_x and CO selected by the Bay Area District are, at this moment in time, generally accepted as BACT by federal and state regulators for facilities such as Metcalf. *See* 6 AR 3243-45, 3293-96 (EPA Region IX); Permit at 9 (9 AR 6221) (EPA Region IX and South Coast AQMD); *TMP*, slip op. at 16, 19, 10 E.A.D. ___ (Shasta County AQMD); CARB Guidance at 29 & app. C at 30 (CARB). Moreover, we have not been presented

[12]We note that our own examination of the CARB guidance document reveals five sources, not nine, as reporting test results of 2.02 ppm or less: (1) Brooklyn Navy Yard Cogeneration; (2) Crockett Cogeneration; (3) Modesto Irrigation District; (4) Newark Bay Cogeneration Partnership; and (5) Sacramento Power Authority. *See* CARB Guidance app. C, at 25-26, tbl. C-8.

with a compelling reason to withhold our traditional deference to the permitting authorities in technical areas such as BACT. Accordingly, we find that Petitioners have not carried their burden of persuading us that the District's actions in processing this permit were clearly erroneous or otherwise warrant a grant of review. *See* 40 C.F.R. § 124.19(a). Therefore, review of the Bay Area District's NO_x and CO BACT decisions is denied.

2. *Collateral Impacts*

In the course of conducting a BACT analysis, a permit issuer may determine that two or more technologies are capable of achieving the same levels of emissions reductions for regulated pollutants emitted by the source in question. In such cases, the permit issuer will typically conduct a "collateral impacts analysis," which consists of an examination of the beneficial and adverse environmental, energy-related, and economic impacts of the competing control technologies. *See NSR Manual* at B.26-.53. A collateral impacts analysis may provide a rationale for selecting, as more advantageous overall, one of the technologies as the pollution control option of choice for the particular source or even, in some circumstances, selecting an option that is not the most effective technology in terms of pollutant removal. *See In re Kawaihae Cogeneration Project*, 7 E.A.D. 107, 117 (EAB 1997) ("'[T]he collateral impacts clause operates primarily as a safety valve whenever unusual circumstances specific to the facility make it appropriate to use less than the most effective technology.") (quoting *In re Columbia Gulf Transmission Co.*, 2 E.A.D. 824, 827 (Adm'r 1989)); *NSR Manual* at B.26-.29.

In this case, the Bay Area District included in the final PSD permit a collateral impacts analysis of SCR and SCONOx™ technologies, which are both capable of achieving the chosen NO_x BACT limit. The District identified three ammonia-related environmental impacts as potentially deriving from SCR but not SCONOx™ use. First, small quantities of ammonia are emitted during SCR operation as "ammonia slip" and therefore may lead to human respiration of this compound. Second, ammonia emissions can potentially lead to the formation of secondary particulate matter (e.g., ammonium nitrate), which may adversely affect human health and also impair visibility. Third, the storage and transport of ammonia can result in accidental releases of the chemical, with consequent adverse impacts to human and environmental health. The District analyzed each of these potential impacts and concluded that they would not be significant; therefore, they were not deemed to be reasons for eliminating SCR as a control alternative. *See* Permit at 11-12 (9 AR 6223-24).

On appeal, Petitioners contend that the Bay Area District did not adequately evaluate the collateral impacts of these competing technologies. The Morgan Hill Petitioners express concern about the ammonia slip and secondary particulate formation issues connected to SCR use and argue that the Bay Area District's decision to place a 5 ppm limit on ammonia slip "is not adequate to mitigate the significant impacts of SCR." MHP Pet'n at 34. Petitioners also contend that SCONOx™ has the collateral benefits of controlling emissions of CO, VOCs, and, in conjunction with an oxidation catalyst, toxics, even during turbine start-up and shut-down periods when toxic emissions may be particularly high. *Id*. at 34-35; CARE Pet'n at 20-25. Also, on appeal, the Morgan Hill Petitioners proffer new evidence in an effort to demonstrate that

toxic emissions during turbine start-up have been underestimated and thus, presumably, that SCONOx™ should be used at Metcalf because it has fewer environmental impacts than SCR. *See* MHP Pet'n at 34-35 & ex. M (CVRP, Testimony before the CEC on Air Quality and Public Health (Feb. 2001) (recommending that oxidation catalyst be required or in the alternative that the number of turbine start-ups be limited)).[13]

The Bay Area District addressed these arguments (excepting the new CVRP start-up testimony) in its responses to comments and in the final PSD permit. *See*, *e.g.*, 7 AR 4035-36 (response to comment regarding toxics), 4040-41 (response regarding ammonia and precursor organic compounds), 4046 (ammonia), 4050 (toxics), 4055-56 (start-up/shut-down, ammonia), 4063 (ammonia), 4065 (ammonia), 4068-69 (start-up/shut-down, precursor organic compounds), 4071 (start-up, ammonia), 4073 (start-up/shut-down, precursor organic compounds); Permit at 10-12 & conds. 11-12, 20(e)-(f), 21, 24-33 (9 AR 6222-24, 6242, 6244-48). For example, with respect to ammonia slip, the District explained:

> A health risk assessment [of the allowable ammonia slip, i.e., 5 ppmvd at 15% O_2] using air dispersion modeling showed an acute hazard index of 0.018 and a

[13]Calpine/Bechtel argue that this CVRP testimony before the CEC is "extra-record" evidence that should not be considered by the Board because it was not available to the Bay Area District "when it initially issued the FDOC in August 2000" and has not been included by the District in the administrative record for this case. C/B MHP Resp. at 10-11 n.8. We note, however, that the proposed PSD permit did not include a top-down BACT analysis or a discussion of SCONOx™'s potential application to this facility, *see infra* Part II.B.1, so these appeals have provided the first opportunity for parties to submit their views on the Bay Area District's SCONOx™ analysis. As such, we will treat this evidence, which in any event is relatively minor in scope and probative value, as part of the administrative record for this case.

chronic hazard index of 0.0131 resulting from the ammonia slip emissions. In accordance with the District Toxic Risk Management Policy and currently accepted practice, a hazard index of 1.0 or above is considered significant. Therefore, the toxic impact of the ammonia slip resulting from the use of SCR is deemed to be not significant and is not a sufficient reason to eliminate SCR as a control alternative.

* * * Because of the complex nature of the chemical reactions and dynamics involved in the formation of secondary particulates, it is difficult to estimate the amount of secondary particulate matter that will be formed from the emission of a given amount of ammonia. However, [the District has concluded that] the formation of ammonium nitrate in the Bay Area air basin is limited by the formation of nitric acid and not driven by the amount of ammonia in the atmosphere. Therefore, ammonia emissions from the proposed SCR system are not expected to contribute significantly to the formation of secondary particulate matter. This potential environmental impact is not considered adverse enough to justify the elimination of SCR as a control alternative.

* * * Although ammonia is toxic if swallowed or inhaled * * *, it is a commonly used material that is typically handled safely and without incident. [Metcalf] will be required to maintain a Risk Management Plan (RMP) and implement a Risk Management Program to prevent accidental releases. * * * In

> addition, the CEC has modeled the health impacts arising from a catastrophic release of aqueous ammonia due to spontaneous storage tank failure at the proposed [Metcalf] facility and found that the impact would not be significant. Therefore, the potential en[vi]ronmental impact due to aqueous ammonia storage at [Metcalf] does not justify the elimination of SCR as a control alternative.

Permit at 11-12 (9 AR 6223-24). With respect to emissions during start-up and shut-down of the turbines, the District explained:

> During a gas turbine start-up, the steam turbine must be brought up to full operating temperature in precise stages. During this period, the combustors operate outside of their efficient range (leading to elevated CO and NO_x emission rates) and the SCR catalyst heats up to its ideal operating temperature. Consequently, it is not possible for the turbines to comply with their BACT emission limitations during start-up. During a turbine shutdown, the combustors may once again operate at low firing rates outside of their efficient range while the steam turbine is cooled down. To insure that start-up and shutdown emissions are accurately accounted for, permit conditions require that the [continuous emission monitors] for NO_x and CO to be in operation during turbine start-ups and that they have sufficient range to accurately measure elevated emission concentrations during a start-up or shutdown.

7 AR 4068.

Petitioners have failed to identify any clear error or other reason for us to grant review of the Bay Area District's treatment of these issues.[14] *See In re Sutter Power Plant*, PSD Appeal Nos. 99-6 & 99-73, slip op. at 10-11 (EAB Dec. 2, 1999), 8 E.A.D. ___ (to obtain review, petitioner has burden of presenting specific information supporting its allegations); *Kawaihae*, 7 E.A.D. at 114-19, 131-32 (finding no showing of clear error in permit issuer's treatment of ammonia-related issues). The high standard for obtaining review set forth in 40 C.F.R. § 124.19(a) is not easily overcome, *see* 45 Fed. Reg. 33,290, 33,412 (May 19, 1980), and here, the Petitioners fall short of its demanding requirements. For the most part, Petitioners merely repeat comments made on the draft PSD permit, *compare* MHP Pet'n at 34 *with* 6 AR 3259, 3261, 3269-70 (Morgan Hill Petitioners' Comments) *and* CARE Pet'n at 23 *with* 6 AR 3233-35 (CARE Comments), which the District addressed in its responses thereto. *See*, *e.g.*, 7 AR 4034-75 (response-to-comments letters); *see also In re NE Hub Partners, L.P.*, 7 E.A.D. 561, 582-84 (EAB 1998) (permit issuer must briefly describe and respond to all significant comments), *review denied sub nom. Penn Fuel Gas, Inc. v. U.S. EPA*, 185 F.3d 862 (3d Cir. 1999); 40 C.F.R. § 124.17(a)(2) (same). In other cases, Petitioners make blanket assertions without any justifying support that might give us reason to look closer at the District's analysis. *See*, *e.g.*, MHP Pet'n at 34 (stating, without more, that the District's lowering of the ammonia slip limit to 5 ppm is a "step in the right direction" but "not adequate to mitigate the significant impacts of SCR"). As

[14]Region IX also contends that Petitioners have not provided sufficient evidence to substantiate their ammonia emissions claims. *See* R9 Resp. at 22-24.

for the new evidence the Morgan Hill Petitioners proffer regarding allegedly underestimated levels of toxics that are emitted during turbine start-up, Petitioners do not explain how CVRP testimony before the CEC reveals deficiencies in the Bay Area District's analysis of toxic emissions from SCR and SCONOx™, and we are not obliged to speculate as to what those connections might be. *See In re Rogers Corp.*, TSCA Appeal No. 98-1, slip op. at 55-56 (EAB Nov. 28, 2000), 9 E.A.D. ___ (Board does not have duty to "comb the record" and make party's arguments for it), *appeal docketed*, No. 00-1542 (D.C. Cir. Dec. 22, 2000). Accordingly, review of Petitioners' arguments about collateral impacts is denied.[15]

B. *Procedural Issues*

Petitioners also raise various claims with respect to the Bay Area District's procedures in issuing the PSD permit. The Morgan Hill Petitioners claim that an adequate opportunity for public comment was precluded by the District's failure to conduct a top-down BACT analysis in the PDOC and by its acceptance of significant submissions (i.e., a supplemental BACT analysis) from Calpine/Bechtel after the closure of the public comment period. The Morgan Hill

[15]In entertaining the foregoing collateral impacts arguments, we assumed, without deciding, that SCONOx™ is a technically feasible control option for the Metcalf facility. In its BACT analysis, the Bay Area District concluded that SCONOx™ is not technically feasible here because of various alleged scale-up problems with larger gas turbines; that conclusion is hotly contested in these appeals. *See*, *e.g.*, MHP Pet'n at 30-33 & ex. L (Alstom Power response to Stone & Webster report); CARE Pet'n at 18-23; BAAQMD/CEC Resp. at 21-24; C/B MHP Resp. at 43-49; C/B CARE Resp. at 39-43; R9 Resp. at 18-24. However, in light of our conclusion that Petitioners failed to show clear error or other reason to grant review of the Bay Area District's collateral impacts analysis, we need not reach the question whether SCONOx™ is technically feasible.

Petitioners also specify several instances in which, they claim, the District failed to respond to significant public comments. CARE, for its part, claims that the District's decision to issue the FDOC prior to the fulfillment of EPA responsibilities under the Endangered Species Act impermissibly interfered with the public's ability to provide meaningful comments on the PSD permit. These arguments are addressed in turn below.

1. *Public Participation*

Petitioners charge that the Bay Area District failed to allow for "meaningful" or "informed" public participation pursuant to the Clean Air Act and its implementing regulations. MHP Pet'n at 9-10 & n.10 (citing CAA § 160(5), 42 U.S.C. § 7470(5); 40 C.F.R. § 52.21(q), (u) & pt. 124); CARE Pet'n at 37-40. Specifically, the Morgan Hill Petitioners claim the District, prior to issuing the final PSD permit determination, clearly erred by: (1) performing the top-down BACT analysis after the close of the public comment period; (2) accepting a post-comment-period supplemental BACT analysis from the permit applicant; and (3) failing to reopen the public comment period to allow comments on these new BACT materials. MHP Pet'n at 9-10.

We find no clear error here. A permitting agency is expressly authorized to compile new materials in an effort to respond to comments submitted on a draft permit. 40 C.F.R. § 124.17(b) (to respond to comments, permit issuer may add new materials to administrative record); *In re Caribe Gen. Elec. Prods., Inc.*, RCRA Appeal No. 98-3, slip op. at 13-14 n.19 (EAB Feb. 4,

2000), 9 E.A.D. ___ (same), *appeal docketed*, No. 00-1580 (1st Cir. May 4, 2000). Such new materials may include, as here, information from the permit applicant. *See*, *e.g.*, *In re Am. Soda*, UIC Appeal Nos. 00-1 & 00-2, slip op. at 28 (EAB June 30, 2000), 9 E.A.D. ___ (groundwater quality report); *In re NE Hub Partners, L.P.*, 7 E.A.D. 561, 586-88 (EAB 1998) (technical materials regarding underground well imaging device), *review denied sub nom. Penn Fuel Gas, Inc. v. U.S. EPA*, 185 F.3d 862 (3d Cir. 1999). Moreover, we have explained on a number of occasions that while a strict application of the top-down analytical method set forth in the *NSR Manual* is not mandatory, what is required is a BACT analysis that "reflects a level of detail * * * comparable" to that set forth in the *NSR Manual*. *See TMP*, slip op. at 22, 10 E.A.D. ___; *see also In re Steel Dynamics, Inc.*, PSD Appeal Nos. 99-4 & 99-5, slip op. at 26 & n.22 (EAB June 22, 2000), 9 E.A.D. ___; *In re Knauf Fiber Glass, GmbH*, PSD Appeal Nos. 98-3 to -20, slip op. at 12, 19 nn.14, .25 (EAB Feb. 4, 1999), 8 E.A.D. ___. Under the circumstances presented here, there is no clear error in the District's decision to respond to comments by incorporating the supplemental top-down information into its BACT analysis.

As for the District's decision to issue a final PSD permit without first reopening the public comment period to accept input on the new BACT materials, we again find no clear error or other reason to grant review. Under EPA's permitting regulations, a permit issuer has discretion to, among other things, reopen a comment period "[i]f any data[,] information[,] or arguments submitted during the public comment period * * * appear to raise substantial new questions concerning a permit." 40 C.F.R. § 124.14(b). "The Board has long acknowledged the deferential nature of this standard." *NE Hub*, 7 E.A.D. at 585 (citing *In re Amoco Oil Co.*, 4

E.A.D. 954, 980 (EAB 1993) (determination of whether to reopen public comment period "is generally left to the sound discretion of the [permit issuer]"); *In re Old Dominion Elec. Coop.*, 3 E.A.D. 779, 797 (Adm'r 1992) ("[t]he decision by the permit issuer to reopen the public comment period is discretionary")).

Here, of course, we have new information (i.e., the District's top-down BACT analysis and the permit applicants' supplemental BACT analysis) submitted *after*, not *during*, the public comment period, as specified by the above-quoted regulation. In many such cases, the Board has held that the appropriate avenue for raising questions about post-comment-period information is via the permit appeals process. *See*, *e.g.*, *Am. Soda*, slip op. at 28, 9 E.A.D. ___ (appeals process provides petitioners with opportunity to question validity of information introduced after close of public comment period); *accord Caribe*, slip op. at 13-14 n.19, 9 E.A.D. ___; *NE Hub*, 7 E.A.D. at 587 n.14; *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 431 (EAB 1997). Moreover, the Board has noted in another case involving post-comment-period submittals that the standard for reopening the public comment period still turns on whether a substantial new question has arisen. *NE Hub*, 7 E.A.D. at 586-87; *see also Ash Grove*, 7 E.A.D. at 431.

The new information in this case concerns the portion of the BACT analysis relating to the performance and collateral impacts of SCONOx™, as well as the collateral impacts of SCR. *See* Permit at 9-12 (9 AR 6221-24) (top-down NO_x BACT analysis), 14 (9 AR 6226) (top-down CO BACT analysis). Despite the absence of this information from the Bay Area District's initial NO_x and CO BACT analysis, *see* PDOC at 9-11, a number of commenters nonetheless submitted

comments addressing these very issues during the public comment period on the draft PSD permit. *See*, *e.g.*, 6 AR 3149-89 (CVRP Comments), 3233 (CARE Comments), 3243-45, 3292-96 (EPA Region IX Comments), 3259, 3269-71 (Santa Teresa Citizen Action Group Comments) 3273-74 (Robert F. Williams Comments), 3279 (Kyaw Tha Paw U Comments). In light of these comments, which discuss in detail the technical capabilities and environmental and economic impacts of the SCONOx™ and SCR technologies, we cannot find that the public has not had any opportunity to address the relative merits of these two technologies. We also are not persuaded that anything the Bay Area District incorporated into the administrative record after the close of the public comment period "raise[d] substantial new questions" about the permit, pursuant to 40 C.F.R. § 124.14(b), that the commenters had not already addressed in some fashion. The Petitioners' recourse in this situation is an appeal to the Board, not a reopening of the public comment period, as they have requested. We find no clear error or other reason to grant review of the District's decision not to reopen the public comment period to allow further public input on these BACT issues and, as a result, review is denied. *See* 45 Fed. Reg. 33,290, 33,412 ((May 19, 1980) ("if all new material in a response to comments required reproposal, the agency would be put to the unacceptable choice of either providing an unacceptable response or embarking on the same kind of endless cycle of reproposals [that] the courts have already rejected").

2. *Failure to Respond to Significant Comments*

The Morgan Hill Petitioners also argue that the Bay Area District failed to respond to a number of significant public comments submitted on the draft PSD permit. They categorize the

comments at issue as being related to: (1) NO_x BACT (eight comments); (2) SCR/SCONOx™ collateral impacts (four comments); (3) CO BACT (four comments); (4) toxic emissions (one comment); and (5) BACT for gas turbine start-up and shut-down (two comments). *See* MHP Pet'n at 14-29. According to the Petitioners, the District failed particularly to respond to "the detailed technical comments submitted by CVRP."[16] *Id*. at 15; *see* 6 AR 3149-89 (CVRP Comments).

Under the permitting regulations, permit issuers are obligated to "[b]riefly describe and respond to all significant comments on the draft permit * * * raised during the public comment period, or during any hearing." 40 C.F.R. § 124.17(a)(2). As we have previously explained, "[t]his regulation does not require a [permit issuer] to respond to each comment in an individualized manner," nor does it require the permit issuer's response "to be of the same length or level of detail as the comment." *NE Hub*, 7 E.A.D. at 583. Instead, "[t]he response to comments document must demonstrate that all significant comments were considered, even if the [permit issuer] ultimately disagrees with the substance of the comments." *Id*.

In this case, we find that the Bay Area District did in fact consider and respond to the majority of the comments identified by the Morgan Hill Petitioners. *See* 7 AR 4034-75 (response-to-comments letters); Permit at 8-16 (9 AR 6220-28) (BACT/collateral impacts analysis); *see also* C/B MHP Resp. ex. B (table comparing targeted comments and responses to

[16]Region IX agrees that the Bay Area District's written responses, particularly with respect to the CVRP's very detailed technical comments, "could have exhibited a more careful consideration of [commenters'] concerns." R9 Resp. at 10; *see id*. at 10 n.4.

comments). The District's responses may not have been acceptable to Petitioners, but, as mentioned above, there is no requirement that a permit issuer adopt a commenter's positions as its own. *See NE Hub*, 7 E.A.D. at 583 ("the regulation does not require the [permit issuer] to make a permit change corresponding to any particular comment").

In three instances, however, the District did not respond to comments identified by Petitioners.[17] First, CVRP raised a number of challenges to the technical conclusions of the Stone & Webster report, upon which the Bay Area District primarily relied in finding SCONOx™ to be technically infeasible. *See* 6 AR 3162-64 (CVRP Comments). Second, CVRP commented that both Massachusetts and Connecticut had issued permits establishing NO_x BACT for large gas turbines as 2 ppmv at 15% O_2 averaged over one hour, which, it claimed, is a lower emission limit than the one the District selected for Metcalf. 6 AR 3154. Third, CVRP identified thirteen source tests for combined-cycle plants showing, it claimed, that "BACT for CO for large combined cycle gas turbines in merchant operation is no more than 2.0 ppmvd @ 15% O_2 averaged over 1 hour." 6 AR 3179.

While these three comments among the ones identified here by Petitioners may well have been significant enough to warrant at least some response from the Bay Area District, we nonetheless do not in these circumstances find clear error or other reason to grant review of the

[17]The three comments identified by Petitioners were actually made by CVRP, not Petitioners, but that fact does not preclude their being raised by Petitioners in this appeal. *See In re Beckman Prod. Servs.*, 5 E.A.D. 10, 19 n.13 (EAB 1994) (to be preserved for review, an issue that is reasonably ascertainable must be raised during the public comment period, but the person filing the petition for review does not necessarily have to be the one who raised the issue).

permit on their basis. In making its BACT determinations for NO_x and CO emissions from the proposed facility, the District selected limits for these pollutants that are -- at this moment in time -- generally accepted as BACT by federal and state regulators. *See* 6 AR 3243-45, 3293-96 (EPA Region IX); Permit at 9 (9 AR 6221) (EPA Region IX and South Coast AQMD); *TMP*, slip op. at 16, 19, 10 E.A.D. ___ (Shasta County AQMD); CARB Guidance at 29 & app. C at 30 (CARB). Thus, even if the District had explicitly responded to the comments regarding the NO_x permit data from Massachusetts and Connecticut and the comments regarding the thirteen CO source tests, it is highly unlikely that the District would have altered its BACT determinations. *See supra* Part II.A.1 (rejecting NO_x examples raised here because we examined them in *TMP*, a very similar case, and rejecting CO examples raised here because CARB discounted them and recommended a higher limit). It is equally unlikely that it would do so on remand, and thus review is denied. *See TMP*, slip op. at 24, 10 E.A.D. ___ ("For a remand, there must be a compelling reason to believe that the [permit issuer's omissions] may have led to an erroneous permit determination."); *see also In re Steel Dynamics, Inc.*, PSD Appeal Nos. 99-4 & 99-5, slip op. at 39 (EAB June 22, 2000), 9 E.A.D. ___; *In re Mecklenburg Cogeneration Ltd. P'ship*, 3 E.A.D. 492, 494 n.3 (Adm'r 1990).

As for the third set of comments -- relating to the Stone & Webster/SCONOx™ technical feasibility issue -- we note that in Parts II.A.1-.2 above, we found no clear error or other reason to grant review of the District's selection of BACT limits or its SCR/SCONOx™ collateral impacts analysis. Given these findings, it is plain that Petitioners' desired determination that SCONOx™ is technically feasible would have no ultimate effect on the permit. (Indeed, our analysis above,

as well as a portion of the District's analysis, assumed such technical feasibility, with no change in outcome in terms of permit conditions or selected technology. *See supra* Part II.A.2; Permit at 10 (9 AR 6222).) Thus, a remand ordering the District to consider and respond to CVRP's comments criticizing the Stone & Webster report would not ultimately lead to any changes in the Metcalf PSD permit, and therefore review is denied. *See TMP*, slip op. at 24, 10 E.A.D. ___.

In sum, while we believe that the Bay Area District may have committed procedural errors by failing to respond to certain comments, as required by 40 C.F.R. § 124.17(a)(2), we find that any such errors do not in this instance rise to the level necessary to justify a remand. *See* 40 C.F.R. § 124.19(a). Review is denied.

3. *Bifurcation of FDOC and PSD Permit*

CARE argues that the Bay Area District's decision to issue the FDOC in August 2000, while also holding finalization of the PSD permit in abeyance (for completion of Endangered Species Act ("ESA") consultation activities), "precluded informed public participation" as required under the Clean Air Act. CARE Pet'n at 40. According to CARE, the District's "premature" disclosure of its approval of an air emissions permit for the proposed facility discouraged public participation in the permit review process. Petitioner asserts:

> "CARE is a non-profit corporation dependent on public contributions to fund experts who participate in the public's behalf in this project. CARE has expended

> several thousand dollars of these funds to retain two consultants who are preparing written comments and questions as part of the public's review of this permit. CARE has been contacted by contributors who are concerned that their contributions towards expert consultants is for a fruitless endeavor as the issuance of the project's air permit is a 'done deal.'"

Id. at 37 (quoting CARE letter to Bay Area District).

CARE notes, as does Region IX, that in a letter to the Bay Area District dated July 28, 2000, the Region expressed concern about the District's bifurcated approach to the Metcalf permit. *Id*. at 38-39; R9 Resp. at 16. The Region stated:

> [W]e would like to note that bifurcating the FDOC may not be the best means for addressing EPA's ESA requirements. The bifurcation process is a strained procedure, particularly where permit terms and conditions for nonattainment [New Source Review] overlap with PSD conditions in one document that is labeled the "FDOC." In addition, in some instances, EPA may determine that revisions to the PSD conditions are required as a result of ESA consultation, and the PSD revisions may necessitate changes to the non-PSD portions of the FDOC. For these reasons, we would prefer that the FDOC not issue until the ESA process is concluded and EPA has determined that it has satisfied its ESA obligations.

9 AR 6321 (*quoted in* CARE Pet'n at 39). The Region then advised the District that if it proceeded with the bifurcated approach, it should clarify the status of the PSD permit in its communications with the public and the permit applicants. 9 AR 6321-22.

The District apparently took the Region's latter words to heart. As evidenced by its responses to public comments, the District clearly informed commenters that although the FDOC was final, the PSD portion of the permit would not be finalized until the completion of the ESA process. *See generally* 7 AR 4034-75 (response-to-comment letters). The District's responses also informed the commenters that ESA requirements might necessitate revisions to the PSD permit. *See id*. In our view, these precautions adequately informed the public of the status of the PSD permit. We find no clear error or other reason to grant review of the permit on this ground.

Finally, the fact that Petitioner perceives itself as having lost the opportunity to raise more funds to mount a campaign in opposition to the proposed facility cannot serve as a foundation for granting review of the permit determination. *See*, *e.g.*, *TMP*, slip op. at 28, 10 E.A.D. ___ ("Board will not overturn a permit provision based on speculative arguments"); *In re Colmac Energy, Inc.*, 2 E.A.D. 687, 689 (Adm'r 1988) (same). The alleged prejudice is nothing more than a purported loss of tactical advantage and in no way foreclosed Petitioner from exercising any rights conferred by law to participate in the proceeding. Accordingly, review of the permit on these grounds is denied.

C. *Miscellaneous Issues*

CARE raises a number of miscellaneous arguments, which pertain to: (1) the Bay Area District's ozone attainment plan; (2) meteorological data used to perform ambient air quality modeling; (3) endangered species; (4) a variety of state/local and air toxics issues; and (5) environmental justice. These arguments are addressed below.

1. *Ozone Attainment Plan*

CARE observes that in March 2001, EPA issued a rule proposing to disapprove in part the Bay Area District's ozone attainment plan (which was submitted in 1999 as a state implementation plan revision). CARE Pet'n at 16-18; *see* 66 Fed. Reg. 17,379 (Mar. 30, 2001) (proposed rule). According to CARE, this rule constitutes an EPA determination that the District is not adequately implementing its ozone attainment plan, and thus, under section 173(a)(4) of the Clean Air Act, the District may not issue a PSD permit to Calpine/Bechtel for the Metcalf facility. CARE Pet'n at 16. CARE does not cite a specific page or pages of the proposed rule in making this argument but, instead, simply claims that "EPA's disapproval of parts of [the District's] Ozone Attainment Plan is a determination by EPA that [that plan] is not being adequately implemented." *Id*. at 17. We do not agree.

Section 173(a)(4) of the CAA specifies:

> The permit program required by section 7502(b)(6) of this title shall provide that permits to construct and operate may be issued if --
>
> * * * *
>
> the Administrator has not determined that the applicable implementation plan is not being adequately implemented for the nonattainment area in which the proposed source is to be constructed or modified in accordance with the requirements of this part.

CAA § 173(a)(4), 42 U.S.C. § 7503(a)(4). Importantly, this provision deals with construction and operation permits for new or modified sources in nonattainment areas, not attainment areas. Thus, it is not applicable to PSD permits, which are issued to sources in attainment or unclassifiable areas and do not fall within the "permit program required by section 7502(b)(6) of this title." *See id*.

We also note that EPA Region IX, the entity that issued the proposed rule, explains the situation as follows: "[T]he basis for EPA's proposed rulemaking was the Agency's determination that an ozone attainment plan submitted by [the District] did not achieve adequate reductions to show attainment by the relevant statutory deadline. EPA's action did not concern a finding of non-implementation of the existing applicable attainment plan." R9 Resp. at 27. This statement is borne out by our own review of the proposed regulation, which significantly does

not mention section 173(a)(4) in the sections addressing the consequences of EPA's disapproval or of its findings of failure to attain national air quality standards. *See* 66 Fed. Reg. at 17,384-85 (Parts III.C-.D, IV). Instead, EPA lists several other provisions of the CAA (e.g., section 179(a)-(d)) as the appropriate means by which to address the matters to which it is objecting. *See id*. In light of these facts, it is plain that CARE's argument is without merit. Therefore, review is denied.

2. *Meteorological Data*

In conducting ambient air quality modeling for the proposed project, the Bay Area District based its calculations on one year (1993) of meteorological data collected at an IBM site located three miles from the proposed project site. 9 AR 6232, 6281-87 (air quality impact analysis); 7 AR 4074. CARE contends that the District's decision to use these data is clearly erroneous because the data are not sufficiently representative of the proposed Metcalf site to accurately reflect the ambient air conditions there. *See* CARE Pet'n at 25-29. CARE also argues that the District failed to consider the complex terrain near the project site, which CARE believes will cause "rotor-flow fumigation" and "terrain-induced downwash" impacts -- i.e., excess levels of air pollutants at ground level, where the pollutants will adversely affect human health. *Id*. at 27-29.

CARE repeats in its petition the meteorological data-related comments it submitted on the draft permit. *Compare* 6 AR 3237-40 (CARE Comments) *with* CARE Pet'n at 25-29. The

Bay Area District responded to these comments, explaining that it had compared the IBM data to data taken at a closer location (the Pacific Gas & Electric Metcalf Station) and found "very good agreement," which indicated the IBM data were sufficiently representative of the area to be used to calculate air quality impacts.[18] 7 AR 4074 (District response to CARE comments). The District also considered complex terrain impacts in its analysis, *see* 9 AR 6282-83, and, in response to CARE's concerns in this regard, explained that it did not expect the "gentle, sloping hills" in the area to cause the downwash problems that "steep ridges" generally would. 7 AR 4075.

In its petition for review, CARE does not make an argument that addresses the adequacy of the District's responses to CARE's meteorological comments on the draft permit. Instead, CARE merely repeats its prior comments. We decline to grant review in such a case. *See*, *e.g.*, *In re Steel Dynamics, Inc.*, PSD Appeal Nos. 99-4 & 99-5, slip op. at 89-90 (EAB June 22, 2000), 9 E.A.D. ___ (denying review of permit where petitioner failed to show how permit issuer's response to comments was clearly erroneous or otherwise warranted review); *In re Encogen Cogeneration Facility*, PSD Appeal Nos. 98-22 to -24, slip op. at 10-21 (EAB Mar. 26, 1999), 8 E.A.D. ___; *In re SEI Birchwood, Inc.*, 5 E.A.D. 25, 27 (EAB 1994).

[18]The District explained that it could not use the PG&E data itself for modeling "because of quality control problems with the recorded stability classifications." 7 AR 4074.

3. *Endangered Species Act*

CARE includes in its petition a lengthy discussion of issues related to the ESA, 16 U.S.C. §§ 1531-1544. Most of the discussion consists of substantive quotations taken from comments submitted to the CEC in June and October 2000 by Dr. Shawn Smallwood. *See* CARE Pet'n at 29-35 & nn.20-21 (quoting Smallwood comments on CEC's preliminary and final staff assessments of the proposed project). These comments raise questions about, among other things, the mitigation of impacts on listed species in the project area.[19] *Id*. at 34-35.

At the outset, we note that EPA may not delegate its responsibility to ensure that the Bay Area District's PSD permitting actions comply with the ESA. *See* 56 Fed. Reg. 4944, 4945 (Feb. 7, 1991) (Region IX/Bay Area District PSD delegation agreement) ("EPA may not delegate and hereby retains its responsibilities to ensure that PSD permitting actions by the [Bay Area] District are not likely to jeopardize the continued existence of endangered or threatened species, or adversely modify their critical habitats"); 6 AR 3298-99 (EPA letter to U.S. Fish and Wildlife Service requesting initiation of formal consultation under ESA § 7). Thus, Petitioners must allege clear error or other reason for us to grant review, in this instance, of Region IX's handling

[19]The "reasonable and prudent measures" ("RPMs") required to mitigate the Metcalf project's "incidental take" of listed species are included in the Biological Opinion issued on March 7, 2001. *See* 9 AR 6118-69 (Final Biological Opinion). To assure that the RPMs and other ESA conditions were imposed on Metcalf, EPA advised the Bay Area District to request that Calpine/Bechtel amend its PSD permit application to state that they would implement all RPMs, terms and conditions, and reporting requirements identified in the Biological Opinion. 9 AR 6109-12. By letter dated March 19, 2001, Calpine/Bechtel agreed to implement all such measures. 9 AR 6296.

of ESA issues related to the Metcalf facility. CARE's petition, however, is devoid of any such allegation. *See* CARE Pet'n at 29-35. While the Board broadly construes petitions filed by persons unrepresented by legal counsel, as is the case here with CARE's petition, we nonetheless expect such petitions to provide sufficient specificity to apprise the Board of the issues being raised. *See*, *e.g.*, *In re Sutter Power Plant*, PSD Appeal No. 99-6 & 99-73, slip op. at 10-11 (EAB Dec. 2, 1999), 9 E.A.D. ___. We also expect the petitions to articulate some supportable reason or reasons as to why the permitting authority erred or why review is otherwise warranted. *See*, *e.g.*, *In re Beckman Prod. Servs.*, 5 E.A.D. 10, 19 (EAB 1994). Because the petition fails to meet these threshold procedural requirements, we deny review of CARE's ESA arguments.[20]

4. *Non-PSD Issues*

CARE also raises a large number of issues that are outside the scope of the federal PSD program. These issues include claims pertaining to: (1) the California Environmental Quality Act ("CEQA"); (2) unspecified "LORS," or laws, ordinances, regulations, and standards; (3) the California Unfair Competition Act; (4) CEC proceedings and treatment of staff analysts; and (5) the Bay Area District's and CEC's purported legal duties to protect public health, safety, and

[20]We note but need not decide here the question of the Board's jurisdiction to review ESA-related issues in the context of this proceeding. Unlike the regulations governing the issuance of certain Clean Water Act permits, for example, which expressly refer to ESA procedures in issuing permits under that statute, including the potential "adoption of particular [ESA-related] permit conditions," *see* 40 C.F.R. § 122.49, there are no comparable regulations governing issuance of PSD permits. *Cf. In re Dos Republicas Resources Co.*, 6 E.A.D. 643, 649 & n.27 (EAB 1996) (citing 40 C.F.R. § 122.49 and noting existence of parallel authorizing regulation under Safe Drinking Water Act, 40 C.F.R. § 144.44).

welfare. All of these issues involve questions of state and/or local law and therefore may not be adjudicated by the Board. *See*, *e.g.*, *In re Sutter Power Plant*, PSD Appeal Nos. 99-6 & 99-73, slip op. at 14 (EAB Dec. 2, 1999), 9 E.A.D. ___ ("[t]he Board may not review, in a PSD appeal, the decisions of a state agency made pursuant to non-PSD portions of the CAA or to state or local initiatives and not otherwise relating to permit conditions implementing the PSD program"); *In re Knauf Fiber Glass, GmbH*, PSD Appeal Nos. 98-3 to -20, slip op. at 53-68 (EAB Feb. 4, 1999), 8 E.A.D. ___ (declining to review CEQA and other non-PSD claims on these grounds).

In addition, CARE makes an argument regarding partial load emissions of formaldehyde and acrolein, which are toxic air contaminants subject to regulation under section 112(b) of the CAA. *See* CARE Pet'n at 24-25; *see also* CAA § 112(b), 42 U.S.C. § 7412(b). These pollutants are not subject to review under the PSD regulations, except to the extent that their emissions may be considered a collateral environmental impact in the context of the BACT determination. *Knauf I*, slip op. at 55-57 & n.56, 8 E.A.D. ___. CARE's focus here, however, is on the treatment of formaldehyde and acrolein in Calpine/Bechtel's risk assessment, not on collateral impacts. Such issues, as with the state/local law issues above, are outside our jurisdiction to review and therefore Petitioner's redress is in another forum.

5. *Environmental Justice*

CARE states in several instances that the proposed facility is proposed to be located "within a scant five miles" of "residential enclaves inhabited mainly by low-income families, and peoples of color." CARE Pet'n at 13; *see id*. at 6. To the extent that these statements may be construed as raising environmental justice concerns, review is denied. Neither CARE nor any other commenter raised environmental justice questions during the public comment period, even though the issue was reasonably ascertainable at that time. *See* 6 AR 3138-3302 (comment letters). Thus, the issue has not been preserved for review by the Board. *See* 40 C.F.R. §§ 124.13,.19(a) (petition may raise issues that were introduced during public comment period or were not reasonably ascertainable at that time).

6. *Lack of Specificity*

Finally, review of any other arguments raised in the petitions but not addressed above is hereby denied on the ground that the arguments are not specific enough to warrant our attention. *See*, *e.g.*, *In re Envotech, L.P.*, 6 E.A.D. 260, 267-69 (EAB 1996) (under 40 C.F.R. § 124.19(a), petition for review must contain clear identification of the permit conditions at issue and argument that the conditions warrant review); *In re Beckman Prod. Servs.*, 5 E.A.D. 10, 18-19 (EAB 1994) (same).

III. *CONCLUSION*

For the foregoing reasons, we deny review of all the elements of Morgan Hill's and CARE's petitions.

So ordered.

ENVIRONMENTAL APPEALS BOARD[21]

Dated: 08/10/01

By: /s/
Ronald L. McCallum
Environmental Appeals Judge

[21]The three-member panel deciding this matter is comprised of Environmental Appeals Judges Ronald L. McCallum, Edward E. Reich, and Kathie A. Stein. *See* 40 C.F.R. § 1.25(e)(1).

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Order Denying Review in the matter of Metcalf Energy Center, PSD Appeal Nos. 01-07 and 01-08, were sent to the following persons in the manner indicated:

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