IN RE RUSSELL CITY ENERGY CENTER, LLC

PSD Appeal Nos. 10-01, 10-02, 10-03, 10-04 & 10-05

ORDER DENYING REVIEW

Decided November 18, 2010

Syllabus

This decision addresses five petitions for review challenging the prevention of significant deterioration ("PSD") permit ("Final Permit") the Bay Area Air Quality Management District ("BAAQMD") issued to Russell City Energy Company, LLC ("RCEC") pursuant to Clean Air Act § 165, 42 U.S.C. § 7475. The Final Permit authorizes RCEC to construct a new, 600-megawatt natural gas-fired combined-cycle power plant in Hayward, California. BAAQMD issued the Final Permit pursuant to a delegation agreement between it and the United States Environmental Protection Agency Region 9.

This is the second time the Board has reviewed a challenge to the PSD permit for this proposed facility. The initial appeal resulted in a remand to BAAQMD. *See In re Russell City Energy Ctr.*, 14 E.A.D. 159 (EAB 2008). On February 3, 2010, following post-remand proceedings, BAAQMD issued the Final Permit.

The Board received twelve petitions for review of the Final Permit and previously dismissed seven on timeliness grounds. The remaining petitioners are: the California Pilots Association ("CalPilots"), the Chabot-Las Positas Community College District ("College District"), Citizens Against Pollution ("CAP"), Mr. Robert Sarvey, and CAlifornians for Renewable Energy, Inc./Mr. Rob Simpson ("CARE").

Petitioners assert that BAAQMD made a number of errors in issuing the Final Permit. Several petitioners challenge BAAQMD's best available control technology ("BACT") analysis for startup and shutdown emissions. As part of the challenge to the startup and shutdown limits, certain petitioners claim that BAAQMD erred in rejecting an auxiliary boiler as BACT, in failing to set the Final Permit's startup emission limits at more stringent levels, and in including an overly generous compliance margin (also referred to as a safety factor). Among the other determinations one or more petitioners challenge are BAAQMD's BACT analysis for NO_2 (nitrogen dioxide), BAAQMD's BACT analysis for cooling tower particulate matter ("PM") emissions, BAAQMD's air quality analysis for 24-hour $PM_{2.5}$ (particulate matter with a diameter of 2.5 micrometers or less), and BAAQMD's consideration of aviation-related health and safety risks. Mr. Sarvey additionally requests the Board consider whether the new federal NO_2 standard should be applied to the permit, and whether meaningful penalties for violations of the permit should be specified. Finally, CARE claims that BAAQMD made a number of procedural errors in the underlying proceedings and erred by failing to consider greenhouse gas emissions as regulated pollutants.

Held: The Board denies review of the permit. Petitioners have not met their burden of demonstrating that review is warranted on any of the grounds presented.

(1) BACT Analysis for Startup and Shutdown Emissions. The Board concludes that the College District, CAP, and Mr. Sarvey have failed to demonstrate that BAAQMD clearly erred in its BACT analysis for startup and shutdown emissions.

> (a) BAAQMD's consideration of cost-effectiveness in its BACT analysis of an auxiliary boiler was permissible and not precluded by the delegation agreement. On related issues, the Board concludes that BAAQMD responded to comments it received seeking information regarding the operating scenario and associated startup/shutdown events for the proposed facility, and its approach for selecting the operating scenario was rational. The Board rejects CAP's challenge to BAAQMD's emissions reductions numbers because it was not preserved for review. The Board also concludes that BAAQMD did duly consider the issues the College District raised concerning the data BAAQMD relied upon in its cost-effectiveness analysis, and the approach BAAQMD ultimately adopted is rational in light of all the information in the record.
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> (b) With respect to the Final Permit's startup and shutdown emission limits, CAP and Mr. Sarvey have not shown that BAAQMD failed to comply with BACT requirements in its selection of those limits. In particular, they have failed to demonstrate that BAAQMD clearly erred in its selection of 480 and 95 pounds for the NO_2 permit limits for cold and hot startup emissions. BAAQMD's rationale for selecting an emissions limit less stringent than an emissions limit based on either the highest emissions measured in a performance test at a similar facility or the average emissions performance that a similar facility achieved appears rational in light of the evidence in the record.
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> (c) The Board also concludes that BAAQMD's use of a safety factor is rational. Certainly selection of a reasonable safety factor is not an opportunity for the permittee to argue for, or for the permit issuer to set, a safety factor that is not fully supported by the record, or that does not reflect the exercise of the permit issuer's considered judgment in determining that the emissions limit, including the safety factor, constitutes BACT. While there no doubt can be cases where the compliance margin crosses the line from permissible to impermissible, for example, because it is excessively large or is not sufficiently documented and supported, that is not the case here. Although it could be argued that the compliance margins selected here tend towards the more generous side, when viewed in the context of the entirety and thoroughness of the explanation supporting the limits set and the reasons supporting the margins, the Board cannot conclude that they constitute clear error.
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> (d) CAP has also not shown that BAAQMD erred by limiting its review to a consideration of upgrades. CAP fails to address or even acknowledge any of BAAQMD's responses to comments

> on the issue of upgrading the equipment and the connected issue of outdated technologies. Moreover, CAP's conclusory assertions appear to be contradicted by the administrative record. Finally, the Board concludes that BAAQMD did not clearly err in failing to consider, in its final permit decision, the Gateway facility's anticipated use of Op-Flex as a Supplemental Environmental Mitigation Project, nor is it appropriate to remand the Final Permit so that BAAQMD can consider this new information.

(2) BACT for PM Emissions from the Cooling Tower. The Board concludes that Mr. Sarvey has failed to demonstrate that BAAQMD clearly erred or abused its discretion in setting BACT for the PM emissions from the cooling tower. The only issue Mr. Sarvey raises in connection with BAAQMD's BACT analysis for PM emissions from the cooling tower that was properly preserved for review is his disagreement with BAAQMD's determination that dry cooling would "redefine the source." Mr. Sarvey, however, has failed to demonstrate BAAQMD abused its discretion on this point.

(3) BACT Analysis for NO_2 /Ammonia Slip. The Board concludes that Mr. Sarvey has failed to demonstrate that BAAQMD clearly erred in its BACT analysis for NO_2 by failing to properly consider the collateral impacts of ammonia slip. Not only did Mr. Sarvey fail to address the major point BAAQMD made in its responses to comments – namely, that EPA has established the presumption that ammonia is not a secondary PM precursor and should not be included as part of the PSD BACT analysis – but EPA's recent rule itself suggests that BAAQMD did not clearly err in its treatment of ammonia slip in its PM analysis.

(4) Recently Issued NO_2 Standard. The Board declines to review, as an important policy consideration, whether the recently issued NO_2 standard should be applied to the Final Permit as requested by Mr. Sarvey. The Board concludes, for several reasons, that it is inappropriate to remand this permit to BAAQMD for it to reconsider in light of EPA's new NO_2 rule.

(5) Enforcement Provisions. The Board rejects Mr. Sarvey's request that it remand the Final Permit to require inclusion of penalties for permit violations. Petitioner's fear of lax enforcement by the permit issuer is not grounds for review.

(6) Aviation-Related Risks. The Board rejects CalPilots' challenge to BAAQMD's consideration of aviation-related risks. Not only did CalPilots fail to address or even acknowledge BAAQMD's responses to comments on these same issues, but CalPilots also failed to demonstrate that the aviation-related issues it raises fall within the Board's PSD jurisdiction.

(7) 24-Hour $PM_{2.5}$ Claims. The Board concludes that the College District failed to demonstrate that BAAQMD clearly erred in concluding that it need not address the 24-hour $PM_{2.5}$ standard in the Final Permit. BAAQMD concluded that EPA's recent designation of the San Francisco Bay Area as nonattainment for the 24-hour $PM_{2.5}$ NAAQS, which occurred prior to BAAQMD's issuance of the Final Permit, rendered moot all of the College District challenges to the BAAQMD's analysis of 24-hour $PM_{2.5}$ because the Final Permit no longer addressed the 24-hour $PM_{2.5}$ NAAQS.

(8) Alleged Violations of Permitting Provisions and Other Miscellaneous Challenges. CARE has failed to demonstrate that BAAQMD violated the procedural permitting regulations or clearly erred in any other way. CARE alleges numerous procedural violations but

fails to demonstrate that BAAQMD has violated any of the part 124 or section 52.21 procedural regulations. CARE's claim that BAAQMD violated California's Public Records Act raises solely a state law issue and, thus, is not within the Board's PSD review authority. Similarly, the Board lacks jurisdiction to review CARE's claim that BAAQMD should have "renoticed" the preliminary determination of compliance ("PDOC") because the PDOC was issued pursuant to state statutory and regulatory authority and not under federal PSD-related authority. Petitioner also fails to demonstrate that BAAQMD's responses to comments are clearly erroneous or otherwise warrant review. Finally, CARE does not address BAAQMD's responses to CARE's comments concerning greenhouse gases in any real way or explain why BAAQMD's responses are clearly erroneous. Thus, CARE has failed to demonstrate why BAAQMD's responses on this issue are clearly erroneous or otherwise warrant review.

Before Environmental Appeals Judges Edward E. Reich, Charles J. Sheehan, and Kathie A. Stein.

Opinion of the Board by Judge Reich:

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I. *STATEMENT OF THE CASE*

The California Pilots Association ("CalPilots"), the Chabot-Las Positas Community College District ("College District"), Citizens Against Pollution ("CAP"), Mr. Robert Sarvey, and CAlifornians for Renewable Energy, Inc. ("CARE")/Mr. Rob Simpson each petitioned[1] the Environmental Appeals Board ("Board") to review a Clean Air Act ("CAA" or "Act") prevention of significant deterioration ("PSD") permit, PSD Permit No. 15487 (the "Final Permit"), the Bay Area Air Quality Management District ("BAAQMD") issued to Russell City En-

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[1] CalPilots filed PSD Appeal No. 10-01, the College District filed PSD Appeal No. 10-02, CAP filed PSD Appeal No. 10-03, Mr. Sarvey filed PSD Appeal No. 10-04, and CARE/Mr. Rob Simpson filed PSD Appeal No. 10-05. For the remainder of the decision, the Board refers to joint Petitioners CARE/Mr. Rob Simpson as "CARE" and to their joint petition as the "CARE Petition" unless specifically referring to just one of the joint petitioners.

ergy Company, LLC ("RCEC"), on February 3, 2010. BAAQMD issued the Final Permit pursuant to a delegation agreement between it and the United States Environmental Protection Agency ("EPA" or "Agency") Region 9.

The Final Permit authorizes RCEC to construct a new, 600-megawatt natural gas-fired combined-cycle power plant in Hayward, California ("Facility"). *See* Final Permit at 1. RCEC is also participating in this matter and has filed responses to each of the petitions. On July 22, 2010, the Board held oral argument, in which all five petitioners, BAAQMD, and RCEC participated. For the reasons discussed below, the Board denies review of the Final Permit.

II. *ISSUES ON APPEAL*

A. *Participants' Assertions*

Petitioners assert that BAAQMD made a number of errors in issuing the Final Permit. CalPilots raises several aviation-related health and safety concerns. Among other things, CalPilots asserts that the power plant exhaust fumes may have adverse health effects on pilots and passengers as well as on the aircraft. CalPilots Pet. at 2. CalPilots also argues that the Facility will have a deleterious effect on the San Francisco Bay Area air traffic management as well as on aircraft operations in general. *Id.* at 4-5, 7.

The College District, CAP, and Mr. Sarvey all challenge BAAQMD's best available control technology ("BACT") analysis for startup and shutdown emissions. CAP asserts that BAAQMD failed to respond to significant comments seeking accurate and consistent information on the proposed facility's operating scenario. CAP Pet. at 9-18. Both CAP and the College District claim that BAAQMD erred in several respects in rejecting an auxiliary boiler as BACT. CAP Pet. at 18-22; College Dist. Pet. at 35-36. In addition, Mr. Sarvey and CAP both argue that BAAQMD erred in failing to set the Final Permit's startup emission limits at the most stringent limits and in including an overly generous compliance margin (also referred to as a safety factor). Sarvey Pet. at 6-13; CAP Pet. at 23-28.

The College District also challenges the Final Permit on other grounds. It asserts that BAAQMD's air quality analysis for 24-hour $PM_{2.5}$ (particulate matter with a diameter of 2.5 micrometers or less), which concluded that there would be no violation of the national ambient air quality standards ("NAAQS"), is clearly erroneous for several reasons. College Dist. Pet. at 26-35. The College District further claims that BAAQMD's environmental justice analysis, which is based on BAAQMD's air quality analysis for 24-hour $PM_{2.5}$, is consequently erroneous as well. *Id.* at 36-37.

Mr. Sarvey raises several additional concerns. He asserts that BAAQMD's BACT analysis for NO_2 (nitrogen dioxide) erroneously fails to account for the collateral impacts of ammonia slip from the use of Selective Catalytic Conversion ("SCR"). Sarvey Pet. at 4. He also claims that BAAQMD's BACT analysis for the cooling tower particulate matter emissions fails to consider alternative technologies, work practices, and alternative sources of water to limit the allegedly significant impacts from particulate matter emissions from the cooling tower. *Id.* Finally, he requests the Board review, as an important policy consideration, whether the new federal NO_2 standard should be applied to the permit and whether meaningful penalties for violations of the permit should be specified because of BAAQMD's alleged lax CAA enforcement. *Id.*

CARE claims that BAAQMD made a number of procedural errors in the underlying proceedings, including circumventing public participation, failing to "renotice" the preliminary determination of compliance, failing to respond to public records requests, and failing to adequately respond to comments. CARE Pet. at 2. CARE also asserts that BAAQMD improperly failed to consider greenhouse gas emissions as regulated pollutants. *Id.* at 9-12.

In general, in responding to Petitioners' assertions, both BAAQMD and RCEC claim that BAAQMD properly and adequately considered these same issues below, except in the case of several newly raised – and allegedly untimely – issues. *E.g.*, RCEC Resp. to Sarvey at 1-2; BAAQMD Resp. to CAP at 4-5. With respect to some of Petitioners' assertions, such as CalPilots' aviation-related claims and Mr. Sarvey's ammonia slip issue, BAAQMD and RCEC also allege that petitioners fail to explain why BAAQMD's response to the same or very similar comments in its response to comments document was clearly erroneous. *E.g.*, BAAQMD Resp. to CalPilots at 9; BAAQMD Resp. to Sarvey at 25-26; RCEC Resp. to Sarvey at 36-37. They assert that claims falling into this category should be procedurally barred on this basis alone. *E.g.*, BAAQMD Resp. to Sarvey at 26; RCEC Resp. to Sarvey at 37. With respect to the College District's substantive arguments challenging BAAQMD's 24-hour $PM_{2.5}$ PSD analysis, BAAQMD and RCEC argue that it should fail because EPA designated the Bay Area nonattainment for the 24-hour $PM_{2.5}$ NAAQS and thus the nonattainment permitting regulations should apply instead of the PSD regulations. BAAQMD Resp. to College Dist. at 3; RCEC Resp. to College Dist. at 2. Finally, in response to CARE's allegations, BAAQMD and RCEC claim that CARE's contentions generally lack merit and that, for some of these issues, CARE also failed to address BAAQMD's responses to comments on the same issues. BAAQMD Resp. to CARE at 4; RCEC Resp. to CARE at 2-3.

B. *Issues Raised*

Based on the participants' assertions and responses, the Board has determined that it must resolve the following issues:

1. Has the College District, CAP, or Mr. Sarvey demonstrated that BAAQMD clearly erred in its BACT analysis for startup and shutdown emissions?

2. Has Mr. Sarvey demonstrated that BAAQMD clearly erred or abused its discretion in setting BACT for particulate matter emissions from the cooling tower?

3. Has Mr. Sarvey demonstrated that BAAQMD clearly erred in its BACT analysis for NO_2 by failing to properly consider the collateral impacts of ammonia slip?

4. Should the Board review, as an important policy consideration, whether the recently issued NO_2 standard should be applied to the Final Permit as Mr. Sarvey argues?

5. May the Board, as an important policy consideration, review the Final Permit and require inclusion of penalties for violations because of BAAQMD's alleged lax CAA enforcement as Mr. Sarvey argues?

6. Has CalPilots demonstrated why BAAQMD's responses to comments concerning aviation-related risks are clearly erroneous or otherwise warrant review?

7. Have the College District's 24-hour $PM_{2.5}$ claims been essentially rendered moot in thePSD context because the Bay Area was designated as nonattainment for the 24-hour $PM_{2.5}$ NAAQS at the time of Final Permit issuance?

8. Has CARE demonstrated that BAAQMD violated the procedural permitting regulations or clearly erred in any other way?

III. *STANDARD OF REVIEW*

When a state or local authority issues a PSD permit pursuant to EPA's delegation of the federal PSD program, as is the case here, the Board considers such permits EPA-issued permits subject to administrative appeal in accordance with 40 C.F.R. § 124.19.[2] *See In re Christian Cnty. Generation, LLC*, 13 E.A.D. 449,

[2] EPA administers the federal PSD program. *See* 40 C.F.R. § 52.21(a)(1). When appropriate, EPA delegates federal PSD program authority to states and local agencies. *See id.* § 52.21(a)(1), (u). California is divided into Air Pollution Control Districts and Air Quality Management Districts; BAAQMD is one. These agencies are county or regional governing authorities that have primary re-
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450 n.1 (EAB 2008); *In re Hillman Power Co.*, 10 E.A.D. 673, 675 (EAB 2002). In determining whether to grant review of a petition filed under 40 C.F.R. § 124.19, the Board first considers whether the petitioner has met threshold pleading requirements such as timeliness, standing, and issue preservation. *See* 40 C.F.R. § 124.19(a); *In re Indeck-Elwood, LLC*, 13 E.A.D. 126, 143 (EAB 2006); *In re BP Cherry Point*, 12 E.A.D. 209, 216 (EAB 2005); *In re Knauf Fiber Glass, GmbH ("Knauf II")*, 9 E.A.D. 1, 5 (EAB 2000). For example, a petitioner seeking Board review must file its appeal within thirty days of permit issuance and ordinarily must have filed comments on the draft permit or participated in the public hearing. 40 C.F.R. § 124.19(a).

In addition, the regulations require any person who believes that a permit condition is inappropriate to raise "all reasonably ascertainable issues and * * * all reasonably available arguments supporting [petitioner's] position" during the comment period on the draft permit. 40 C.F.R. § 124.13. That requirement is made a prerequisite to appeal by 40 C.F.R. § 124.19(a), which requires any petitioner to "demonstrat[e] that any issue[] being raised [was] raised during the public comment period * * * to the extent required[.]"). *In re ConocoPhillips Co.*, 13 E.A.D. 768, 800-01 (EAB 2008); *see also, e.g., Christian County*, 13 E.A.D. at 457; *In re Shell Offshore, Inc.,* 13 E.A.D. 357, 394 n.55 (EAB 2007). As the Board has stated, "[t]he regulatory requirement that a petitioner must raise issues during the public comment period 'is not an arbitrary hurdle, placed in the path of potential petitioners simply to make the process of review more difficult; rather it serves an important function related to the efficiency and integrity of the overall administrative scheme.'" *Christian County*, 13 E.A.D. at 459 (quoting *BP Cherry Point,* 12 E.A.D. at 219). "The purpose of such a provision is to 'ensure that the Region has an opportunity to address potential problems with the draft permit before the permit becomes final, thereby promoting the longstanding policy that most permit decisions should be decided at the regional level, and to provide predictability and finality to the permitting process.'" *Shell Offshore*, 13 E.A.D. at 394 n.55 (quoting *In re New Eng. Plating Co*., 9 E.A.D. 726, 732 (EAB 2001)); *accord ConocoPhillips*, 13 E.A.D. at 800. The Board has frequently rejected appeals where issues that were reasonably ascertainable during the comment period were not raised at that time but instead were presented for the first time on appeal.

(continued)
sponsibility for controlling air pollution from stationary sources. *See* Cal. Health & Safety Code §§ 40000, 40200; *see also* Cal. Air District Map, Cal. EPA Air Res. Bd., http://www.arb.ca.gov/drdb/dismap.htm (last updated Apr. 11, 2008). The EPA has delegated authority to the BAAQMD to administer the federal PSD program. *See* U.S. EPA – BAAQMD Agreement for Delegation of Authority to Issue and Modify Prevention of Significant Deterioration Permits Subject to 40 C.F.R. § 52.21 (dated Feb. 4, 2008). PSD permits issued by BAAQMD under that delegation are therefore governed by federal regulations, including 40 C.F.R. part 124. *In re Seminole Elec. Coop., Inc.*, 14 E.A.D. 468, 475 (EAB 2009); *In re Russell City Energy Ctr.* 14 E.A.D. 159, 161 n.1 (EAB 2008); *In re Gateway Generating Station*, PSD Appeal No. 09-02, at 1 n.1 (EAB Sept. 15, 2009) (Order Dismissing Petition for Review).

E.g., Indeck, 13 E.A.D. at 165-69; *BP Cherry Point*, 12 E.A.D. at 218-20; *In re Kendall New Century Dev.*, 11 E.A.D. 40, 54-55 (EAB 2003). Moreover, issues must be raised with a reasonable degree of specificity and clarity during the comment period in order for the issue to be preserved for review. *ConocoPhillips*, 13 E.A.D. at 801; *Shell Offshore,* 13 E.A.D. at 394 n.55; *In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 230-31 (EAB 2000).

Assuming that a petitioner satisfies its threshold pleading obligations, the Board then evaluates the petition on its merits to determine if review is warranted. *Indeck*, 13 E.A.D. at 143; *see also In re Beeland Group, LLC*, 14 E.A.D. 189, 195 (EAB 2008). Ordinarily, the Board will not grant review of a PSD permit unless the petitioner demonstrates that the permitting authority based the permit condition in question on a clearly erroneous finding of fact or conclusion of law or involves an important matter of policy or an exercise of discretion that warrants review. *See* 40 C.F.R. § 124.19(a); Consolidated Permit Regulations, 45 Fed. Reg. 33,290, 33,412 (May 19, 1980). 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 [permit issuer's] level," guides the Board's analysis of PSD and other permits. 45 Fed. Reg. at 33,412; *accord In re N. Mich. Univ.*, 14 E.A.D. 283, 290 (EAB 2009) ("*NMU*"); *In re Cardinal FG Co.*, 12 E.A.D. 153, 160 (EAB 2005).

For each issue raised in a petition, therefore, the burden of demonstrating that review is warranted rests with the petitioner, who must raise objections to the permit and *explain why* the permit issuer's previous response to those objections is clearly erroneous or otherwise warrants review. *NMU*, 14 E.A.D. at 290; *BP Cherry Point*, 12 E.A.D. at 217; *Steel Dynamics,* 9 E.A.D. at 744. Consequently, the Board has consistently denied review of petitions which merely cite, attach, incorporate, or reiterate comments previously submitted on the draft permit.[3] *E.g., In re Peabody W. Coal Co.*, 12 E.A.D. 22, 33 (EAB 2005) ("[P]etitioner may not simply reiterate comments made during the public comment period, but must substantively confront the permit issuer's subsequent explanations."); *In re City of Irving*, 10 E.A.D. 111, 129-30 (EAB 2001) (same), *review denied sub nom. City*

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[3] Federal circuit courts of appeal that have reviewed this Board requirement have upheld it. *City of Pittsfield v. U.S. EPA*, 614 F.3d 7, 11-13 (1st Cir. 2010), *aff'g In re City of Pittsfield*, NPDES Appeal No. 08-19 (EAB Mar. 4, 2009) (Order Denying Review); *Mich. Dep't Envtl. Quality v. U.S. EPA*, 318 F.3d 705, 708 (6th Cir. 2003) ("[Petitioner] simply repackag[ing] its comments and the EPA's response as unmediated appendices to its Petition to the Board * * * does not satisfy the burden of showing entitlement to review."), *aff'g In re Wastewater Treatment Facility of Union Township*, NPDES Appeal Nos. 00-26 & 00-28 (EAB Jan. 23, 2001) (Order Denying Petitions for Review); *LeBlanc v. EPA*, No. 08-3049, at 9 (6th Cir. Feb. 12, 2009) (concluding that Board correctly found petitioners to have procedurally defaulted where petitioners merely restated "grievances" without offering reasons why Region's responses were clearly erroneous or otherwise warranted review), *aff'g In re Core Energy, LLC*, UIC Appeal No. 07-02 (EAB Dec. 19, 2007) (Order Denying Review).

of Abilene v. EPA, 325 F.3d 657 (5th Cir. 2003); *In re Hadson Power 14*, 4 E.A.D. 258, 294-95 (EAB 1992) (denying review where petitioners merely reiterated comments on draft permit and attached a copy of its comments without addressing permit issuer's responses to comments).

This burden, moreover, rests particularly heavily on a petitioner seeking review of issues fundamentally technical or scientific in nature. *In re Dominion Energy Brayton Point, LLC* ("*Dominion I*"), 12 E.A.D. 490, 510 (EAB 2006); *Peabody,* 12 E.A.D. at 33; *In re City of Moscow*, 10 E.A.D. 135, 142 (EAB 2001). Consequently, "when issues raised on appeal challenge a [permit issuer]'s technical judgments, clear error or a reviewable exercise of discretion is not established simply because petitioner[] document[s] a difference of opinion or an alternative theory regarding a technical matter. In cases where the views of the [permit issuer] and the petitioner indicate bonafide differences of expert opinion or judgment on a technical issue, the Board typically will defer to the [permit issuer]." *In re NE Hub Partners, L.P.*, 7 E.A.D. 561, 567 (EAB 1998), *review denied sub nom. Penn Fuel Gas Inc. v. U.S. EPA*, 185 F.3d 862 (3rd Cir. 1999); *accord Dominion I*, 12 E.A.D. at 510; *Peabody*, 12 E.A.D. at 33-34. Accordingly, when the Board is presented with conflicting expert opinions over technical issues, "we look to determine whether the record demonstrates that the Region duly considered the issues raised in the comments and whether the approach ultimately adopted by the Region is rational in light of all the information in the record." *In re Gov't of D.C. Mun. Separate Sewer Sys.*, 10 E.A.D. 323, 348 (EAB 2002); *accord Moscow*, 10 E.A.D. at 142; *NE Hub*, 7 E.A.D. at 568. The Region's rationale for its conclusions, however, must be adequately explained and supported in the record. *Moscow*, 10 E.A.D. at 142; *NE Hub*, 7 E.A.D. at 568.

Finally, when pro se litigants, like three of the petitioners here,[4] file petitions, the Board endeavors to liberally construe their petitions so as to fairly identify the substance of the arguments being raised. *In re Sutter Power Plant*, 8 E.A.D. 680, 687 (EAB 1999); *see also In re Chukchansi Gold Resort*, 14 E.A.D. 260, 264 (EAB 2009); *In re Envotech, LP*, 6 E.A.D. 260, 268 (EAB 1996). Nevertheless, the petitioner challenging the permit decision still bears the burden of demonstrating that its petition warrants review. *New Eng. Plating*, 9 E.A.D. at 730; *In re Encogen Cogeneration Facility*, 8 E.A.D. 244, 249-50 (EAB 1999); *see also Sutter*, 8 E.A.D. at 687; *In re Beckman Prod. Servs., Inc.*, 5 E.A.D. 10, 19 (EAB 1994).

[4] CAP and the College District are represented by counsel; the other three petitioners are not.

IV. *SUMMARY OF DECISION*

The Board concludes that petitioners have not demonstrated that their petitions warrant review on any of the grounds presented. The Board therefore denies review for the reasons explained in detail below.

V. *PROCEDURAL AND FACTUAL HISTORY*

This is the second time the Board has reviewed a challenge to the PSD permit for this proposed facility. BAAQMD previously issued a final permit decision in November of 2007, which would have authorized the construction of the Russell City Energy Center in Hayward, California. *See In re Russell City Energy Ctr.*, 14 E.A.D. 159, 161 (EAB 2008) ("*Russell City I*"). Shortly thereafter, Mr. Simpson filed a petition for review challenging that final permit decision as well as the procedures used in considering the underlying draft permit. *Id.* In his 2008 petition, Mr. Simpson argued, among other things, that BAAQMD had failed to ensure compliance with the notice and outreach requirements of the PSD regulations in issuing the draft permit. *See id.* at 17-19, 21-22. The Board ultimately concluded that BAAQMD's outreach and notice efforts "fell significantly short of" the part 124 procedural requirements and remanded the permit to BAAQMD. *Id.* at 186. The Board directed BAAQMD to reopen the public comment period on the draft permit to provide public notice fully consistent with the part 124 regulations, in particular 40 C.F.R. § 124.10. *Id.* at 188.

On remand, in December of 2008, BAAQMD issued a draft permit and a Statement of Basis, and provided an opportunity for public comment and review on the proposal. *See* Crockett Decl. Ex. 5 (BAAQMD, Statement of Basis, Federal "Prevention of Significant Deterioration" Permit, Russell City Energy Center 3 (Dec. 8, 2008) ("SOB")). BAAQMD later issued a revised draft permit, issued a supplement to its Statement of Basis, and reopened the comment period. *See* Crockett Decl. Ex. 4 (BAAQMD, Additional Statement of Basis, Federal "Prevention of Significant Deterioration" Permit, Russell City Energy Center (Aug. 3, 2009) ("ASOB")).

On February 3, 2010, following these post-remand proceedings, BAAQMD issued the Final Permit. At the same time, BAAQMD also issued a 235-page response to the public comments it had received. *See* Crockett Decl. Ex. 3 (BAAQMD, Responses to Public Comments, Federal "Prevention of Significant Deterioration" Permit, Russell City Energy Center (Feb. 2010) ("RTC")).

Twelve individuals or groups filed petitions for review of this Final Permit with the Board, alleging that BAAQMD made various errors in issuing the Final Permit. The Board has previously dismissed seven of those petitions on timeliness

grounds.[5] Accordingly, five petitions for review of this Final Permit – those from CalPilots, CAP, the College District, Mr. Sarvey, and CARE – are currently pending before the Board. BAAQMD and RCEC each filed separate responses to each petition. Four of the petitioners filed reply briefs (CAP, the College District, Mr. Sarvey, and CARE), and BAAQMD and RCEC each filed one sur-reply brief.

Also pending are several motions requesting that the Board take administrative notice of and/or supplement the administrative record with certain documents. CARE, in connection with one of its motions requesting leave to file a reply, asks the Board to take official notice of petitions Mr. Simpson and/or Mr. Boyd, the president of CARE, have filed in other two cases. *See* Second Motion Requesting Leave to File a Reply Brief at 1 (May 14, 2010). On July 16, 2010, following briefing by all participants in this matter, Mr. Sarvey filed a motion requesting the Board take official notice of two memoranda EPA issued after BAAQMD had issued the Final Permit. *See* Motion for Official Notice of Relevant EPA Documents. Shortly thereafter, the College District filed a motion requesting the Board take official notice of two "non-record government documents cited in its Petition" and supplement the administrative record with them. *See* College Dist. Request to Take Official Notice of Facts and to Supplement the Administrative Record at 2 (July 19, 2010). On July 21, 2010, CalPilots submitted a document entitled "Administrative Notice," in which it "gives notice" that the Federal Aviation Agency ("FAA") has recently issued revisions to its "Airmen's Information Manual (AIM)"[6] that address thermal plumes.[7] *See* CalPilots Administrative Notice at 1. CalPilots requests that this new provision "be made part of the Administrative Record." *Id.* The Board will address each of these motions below in connection with the Board's consideration of the relevant substantive argument.

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[5] *See* Order Dismissing Two Petitions for Review as Untimely (June 9, 2010) (dismissing PSD Appeal Nos. 10-12 & 10-13); Order Dismissing Petition for Review as Untimely (May 17, 2010) (dismissing PSD Appeal No. 10-06); Order Dismissing Four Petitions for Review as Untimely (May 3, 2010) (dismissing PSD Appeal Nos. 10-07 through 10-10).

[6] This FAA document is officially entitled "Aeronautical Information Manual," and its original effective date was February 11, 2010. The effective date of "Change 1" was August 26, 2010. *See* http://www.faa.gov/air_traffic/publications/atpubs/aim/ (last viewed on Nov. 9, 2010).

[7] CalPilots also submitted a copy of the relevant change FAA made to the AIM. *See* CalPilots Admin. Notice App. B (copy of section 7-5-5). This particular revision, a new section CalPilots indicates is numbered 7-5-5, is entitled "Avoid Flight in the Vicinity of Thermal Plumes (Smoke Stacks and Cooling Towers)." The current version of the AIM, with Change 1 incorporated, contains the same statements CalPilots submitted, but the revision in question is now located in section 7-5-15. The Board will therefore refer to section 7-5-15 hereinafter when discussing this exhibit.

VI. *ANALYSIS*

A. *Relevant Statutory and Regulatory Provisions*

The CAA requires EPA to create a list of pollutants that, among other things, pose a danger to public health and welfare and result from numerous or diverse mobile or stationary sources. CAA § 108(a)(1), 42 U.S.C. § 7408(a)(1). The Act also requires EPA to issue air quality criteria and promulgate regulations establishing NAAQS for those listed pollutants. CAA §§ 108(a)(2), 109(a)(2), 42 U.S.C. §§ 7408(a)(2), 7409(a)(2). EPA has established NAAQS for six listed or "criteria" pollutants: sulfur dioxide, particulate matter, carbon monoxide ("CO"), ozone, nitrogen dioxide, and lead. *See* 40 C.F.R. §§ 50.4-.13.

The Act further directs EPA to designate geographic areas within states, on a pollutant by pollutant basis, as being in either "attainment" or "nonattainment" with the NAAQS, or as being "unclassifiable." CAA § 107(d), 42 U.S.C. § 7407(d). For those areas designated as attainment or as unclassifiable, the CAA's prevention of significant deterioration or "PSD" requirements apply.[8] CAA § 165, 42 U.S.C. § 7475. Thus, persons in attainment or unclassifiable areas who wish to construct "major emitting facilities" must obtain preconstruction approval in the form of PSD permits to build such facilities. *Id.*

As part of this permit issuance process, the PSD regulations at 40 C.F.R. § 52.21 require, among other things,[9] that new major stationary sources and major modifications of such sources employ the "best available control technology," or BACT, to minimize emissions of regulated pollutants. CAA § 165(a)(4), 42 U.S.C. § 7475(a)(4); 40 C.F.R. § 52.21(j)(2). The statute defines BACT as follows:

> The term "best available control technology" means an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under this chapter emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and

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[8] For a further discussion of CAA requirements in attainment versus nonattainment areas, see Part VI.B.7.a below.

[9] Permit issuers also review permit applications prior to construction to ensure that emissions from the proposed facility will not cause an exceedance of the NAAQS or applicable PSD ambient air quality "increments." CAA § 165(a)(3), 42 U.S.C. § 7475(a)(3).

> techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant.

CAA § 169(3), 42 U.S.C. § 7479(3); *accord* 40 C.F.R. § 52.21(b)(12) (similar regulatory definition). As the Board has explained many times, BACT is a "site-specific determination resulting in the selection of an emission limitation that represents application of control technology or methods appropriate for the particular facility." *Christian County,* 13 E.A.D. at 454 (quoting *Cardinal,* 12 E.A.D. at 161); *accord In re Prairie State Generating Co.*, 13 E.A.D. 1, 12 (EAB 2006), *aff'd sub. nom Sierra Club v. U.S. EPA,* 499 F.3d 653 (7th Cir. 2007); *In re Knauf Fiber Glass, GmbH ("Knauf I"),* 8 E.A.D. 121, 128-29 (EAB 1999).

BAAQMD, in determining BACT emission limits for the Final Permit, utilized the "top-down method," *see* SOB at 38-48; RTC at 92-125, which is described in an EPA manual that provides guidance to permit issuers reviewing new sources under the CAA.[10] *See* Office of Air Quality Planning & Standards, U.S. EPA, *New Source Review Workshop Manual* 1 (draft Oct. 1990) ("*NSR Manual*"). The NSR Manual summarizes the top-down method for determining BACT as follows:

> [T]he 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.

NSR Manual at B.2; *accord Prairie State,* 13 E.A.D. at 13.

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[10] Permit issuers often use the NSR Manual's "top-down" method to perform their BACT analyses, as BAAQMD did here. The NSR Manual is not a binding Agency regulation and, consequently, strict application of the methodology described in it is not mandatory, nor is it the required vehicle for making BACT determinations. *E.g., NMU*, 14 E.A.D. at 291; *Prairie State*, 13 E.A.D. at 6 n.2; *Knauf I*, 8 E.A.D. at 129 n.13; *see also Steel Dynamics,* 9 E.A.D. at 183 ("This top-down analysis is not a mandatory methodology, but it is frequently used by permitting authorities to ensure that a defensible BACT determination, involving consideration of all requisite statutory and regulatory criteria, is reached."). In this case, however, as discussed in detail below, *see infra* Part VI.B.1.a.i, the Delegation Agreement between EPA Region 9 and BAAQMD requires BAAQMD to use this method in determining BACT for PSD permits it has been delegated to issue.

The NSR Manual's recommended top-down analysis employs five steps. *NSR Manual* at B.5-.9; *see also In re Desert Rock Energy Co.*, 14 E.A.D. 484, 522-24 (EAB 2009) (summarizing steps); *Prairie State*, 13 E.A.D. at 13-14 (same). The first step requires the permitting authority to identify all potentially "available" control options. *NSR Manual* at B.5. Available control options are those technologies, including the application of production processes or innovative technologies, that have "a practical potential for application to the emissions unit and the regulated pollutant under evaluation." *Id.*

Once all possible control options are identified, step 2 allows the elimination of "technically infeasible" options. *Id.* at B.7. This step involves first determining for each technology whether it is "demonstrated," in other words, whether it has been installed and operated successfully elsewhere on a similar facility. *Id.* at B.17. If it has not been demonstrated, the permit issuer then performs a somewhat more difficult analysis: determining whether the technology is both "available" and "applicable." *Id.* at B.17-.22. Technologies identified in step 1 as "potentially" available, but that are neither demonstrated nor found after careful review to be both available and applicable, are eliminated under step 2 from further analysis. *Id.*; *see e.g., Prairie State*, 13 E.A.D. at 34-38 (reviewing step 2 analysis); *Cardinal*, 12 E.A.D. at 163-68 (same); *Steel Dynamics*, 9 E.A.D. at 199-202 (same).

In step 3, the permit issuer ranks the remaining control options by control effectiveness, with the most effective alternative at the top. *NSR Manual* at B.7, .22; *see also In re Newmont Nev. Energy Inv., LLC*, 12 E.A.D. at 459-64 (EAB 2005) (evaluating challenge to step 3 analysis). In step 4, the permitting authority considers energy, environmental, and economic impacts and either confirms the top alternative as appropriate or determines it to be inappropriate. *NSR Manual* at B.8-.9, .26-.53. It is in this step that the permit issuer considers issues surrounding the relative cost effectiveness of the alternative technologies. *Id.* at B.31-.46. The purpose of step 4 is to either validate the suitability of the top control option identified or provide a clear justification as to why that option should not be selected as BACT. *Id.* at B.26; *see also Prairie State*, 13 E.A.D. at 38-51 (considering the application of step 4); *In re Three Mountain Power, LLC*, 10 E.A.D. 39, 42 n.3 (EAB 2001) (evaluating environmental impacts); *Steel Dynamics*, 9 E.A.D. at 202-07, 212-13 (remanding permit because cost-effectiveness analysis under step 4 was incomplete).

Ultimately, in step 5, for the pollutant and emission unit under review, the permit issuer selects as BACT the most effective control option that was not eliminated in step 4. *NSR Manual* at B.9,.53. The reviewing authority should then specify an emission limit for the source that reflects the imposition of the control option selected. *Id.* at B.2, B.54; CAA § 169(3), 42 U.S.C. § 7479(3); *see also Prairie State*, 13 E.A.D. at 14, 51.

In light of these statutory and regulatory requirements, the Board next turns to the eight issues petitioners have raised in this matter.

B. *Issues Analyzed*

1. *Has the College District, CAP, or Mr. Sarvey Demonstrated That BAAQMD Clearly Erred in Its BACT Analysis for Startup and Shutdown Emissions?*

Several petitioners – CAP, the College District, and Mr. Sarvey – challenge BAAQMD's permit limits for startup and shutdown emissions, claiming they are not BACT for several reasons. Both CAP and the College District claim that BAAQMD clearly erred by rejecting an auxiliary boiler. CAP Pet. at 18-22; College Dist. Pet. at 35-36. In connection with this challenge, they question aspects of BAAQMD's cost-effectiveness analysis, including the underlying data BAAQMD used in performing the analysis. CAP also asserts that BAAQMD failed to respond to significant comments seeking accurate and consistent information on the startup and shutdown operating scenarios that were used to calculate the cost-effectiveness of the boiler. CAP Pet. at 9-18. In addition, Mr. Sarvey and CAP both argue that the Final Permit's startup emission limits were not the most stringent because BAAQMD allegedly relied on maximum achieved limits rather than demonstrated-in-practice limits, improperly added a compliance margin, failed to require Op-Flex, and improperly limited its consideration to upgrades of already-purchased equipment. Sarvey Pet. at 6-13; CAP Pet. at 23-28.

In order to address Petitioners' arguments concerning the permit limits for startup and shutdown emissions, the Board must resolve the following issues: (1) Has CAP or the College District shown that BAAQMD clearly erred in rejecting an auxiliary boiler as BACT? (2) Has CAP or Mr. Sarvey shown that BAAQMD's selection of the Final Permit's startup emission limits failed to comply with BACT requirements? The Board addresses each issue in turn.

a. *Has CAP or the College District Shown That BAAQMD Clearly Erred in Rejecting an Auxiliary Boiler as BACT?*

As noted above, both the College District and CAP claim that BAAQMD clearly erred in failing to consider an auxiliary boiler as BACT for startup and shutdown emissions. College Dist. Pet. at 35-36; CAP Pet. at 18-22. While their overarching claim is the same, the two participants challenge BAAQMD's rejection of an auxiliary boiler for different reasons. CAP first contends that BAAQMD improperly considered cost-effectiveness as a basis for rejecting an auxiliary boiler. CAP Pet. at 18. CAP additionally argues that, even if cost-effectiveness were relevant, BAAQMD improperly calculated the startup and shutdown emissions because it did not use a credible startup and shutdown operating scenario. In connection with this claim, CAP also asserts that BAAQMD

failed to respond to significant comments seeking accurate and consistent information on the operating scenario that it used to calculate the cost-effectiveness of the boiler. CAP Pet. at 9-18. The College District, on the other hand, claims that BAAQMD clearly erred by relying on documents that are inapplicable to the Facility. College Dist. Pet. at 35. Before considering arguments about BAAQMD's cost-effectiveness analysis, the Board considers whether BAAQMD clearly erred in considering costs in the first place as CAP alleges.

i. *Did BAAQMD Impermissibly Consider Cost-Effectiveness in Rejecting the Auxiliary Boiler as BACT?*

In arguing that BAAQMD impermissibly considered cost-effectiveness in rejecting the use of an auxiliary boiler as BACT for startup and shutdown emissions, CAP asserts that the Delegation Agreement between Region 9 and BAAQMD authorizing BAAQMD to issue PSD permits in the Bay Area requires BAAQMD to apply District Regulation 2-2-206[11] to PSD permits. CAP Pet. at 19 (referring to U.S. EPA – BAAQMD Agreement for Delegation of Authority to

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[11] District Regulation 2-2-206 states the following:

> **Best Available Control Technology (BACT)**: For any new or modified source, except cargo carriers, the more stringent of:
>
> > 206.1 The most effective emission control device or technique which has been successfully utilized for the type of equipment comprising such a source; or
> >
> > 206.2 The most stringent emission limitation achieved by an emission control device or technique for the type of equipment comprising such a source; or
> >
> > 206.3 Any emission control device or technique determined to be technologically feasible and cost-effective by the APCO; or
> >
> > 206.4 The most effective emission control limitation for the type of equipment comprising such a source which the EPA states, prior to or during the public comment period, is contained in an approved implementation plan of any state, unless the applicant demonstrates to the satisfaction of the APCO that such limitations are not achievable. Under no circumstances shall the emission control required be less stringent than the emission control required by any applicable provision of federal, state or District laws, rules or regulations.
>
> The APCO shall publish and periodically update a BACT/TBACT Workbook specifying the requirements for commonly permitted sources. BACT will be determined for a source by using the workbook as a gui-

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Issue and Modify Prevention of Significant Deterioration Permits Subject to 40 C.F.R. § 52.21 at 3 (dated Feb. 4, 2008) [hereinafter Delegation Agreement]). According to CAP, District Regulation 2-2-206 defines BACT to be equivalent to the lowest achievable emissions rate, otherwise known as "LAER,"[12] which does not consider cost-effectiveness. *Id.* at 20. CAP asserts that if BAAQMD had properly used its BACT definition in District Regulation 2-2-206, an auxiliary boiler would have been required as BACT.[13] *Id.*

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> dance document or, on a case-by-case basis, using the most stringent definition of 2-2-206.

District Regulation § 2-2-206. Significantly, the regulation's title does not explicitly state that it applies to "PSD" permits, unlike numerous other provisions of the District Regulations. *See*, *e.g.*, *id.* §§ 2-2-203 to -205, -209, -232 to -233.

[12] LAER is a term of art commonly used in establishing emissions control limits in new source permits for facilities to be located in nonattainment areas. *See NSR Manual* at G.1-.4. EPA defines LAER as "the most stringent emission limitation derived from either of the following: the most stringent emission limitation contained in the implementation plan of any State for such class or category of source; or the most stringent emission limitation achieved in practice by such class or category of source." *Id.* at G.2.

[13] The parties dispute whether CAP sufficiently raised this issue below. BAAQMD Resp. to CAP at 44 (claiming that CAP did not raise this issue during the public comment period); RCEC Resp. to CAP at 17-19 (same); CAP Reply at 7-9. Upon consideration, the Board concludes that CAP sufficiently put BAAQMD on notice that CAP was questioning the cost-effectiveness portion of BAAQMD's BACT analyses. In its initial comments, CAP discussed why it believed, as a matter of legal interpretation, "achieved in practice" (or LAER) technology should be considered BACT and explicitly referenced the Delegation Agreement. *See* CAP Pet. Ex. 7 at 5-8 (Letter from Helen Kang et al., CAP, to Weyman Lee, P.E., BAAQMD (Feb. 5, 2009)) ("CAP's Feb. 5, 2009 Comments"). As CAP notes, although this comment was submitted in reference to another portion of BAAQMD's BACT analysis, at the time CAP submitted the comment, BAAQMD had not yet considered an auxiliary boiler. CAP Reply at 8. CAP admits that, when it submitted a second set of comments following BAAQMD's issuance of another draft permit and the ASOB, it "did not make the same comment that 'achieved in practice' technology need not undergo a cost-effectiveness analysis as to the auxiliary boiler" but did question BAAQMD's rejection of auxiliary boilers "even though they are demonstrated as feasible since they are used at" two other plants, thereby impliedly referring to its earlier "achievable in practice" argument. *Id.* In fact, in its second set of comments, the majority of CAP's argument concerning the use of an auxiliary boiler questioned the assumptions BAAQMD relied upon to calculate cost-effectiveness, which could be read, as BAAQMD did, to imply that CAP was only concerned with the way the cost-effectiveness analysis was conducted, and not the fact that one was performed at all. CAP Pet. Ex. 3 at 6 (Letter from Helen Kang et al., CAP, to Weyman Lee, P.E., BAAQMD (Sept. 16, 2009)) ("CAP's Sept. 16, 2009 Comments"). CAP, however, points out that BAAQMD, in its Additional Statement of Basis, specifically told members of the public who had previously commented that they need not resubmit their comments on the draft permit issued with the Additional Statement of Basis. *Id.* (referring to ASOB at 3). The Board concludes that, particularly in light of BAAQMD's statement in the Additional Statement of Basis that commenters need not repeat their concerns, CAP's initial comment raising its overarching concern about BAAQMD's BACT analysis was sufficient to raise the general issue. The Board is also persuaded by CAP's contention that "it would be unfair to bar CAP's argument [concerning cost-effectiveness] when reiterating the same ar-

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In response, BAAQMD asserts that CAP's claim is contradicted by the CAA's definition of BACT, which "clearly and unambiguously" requires BAAQMD to "take into account 'economic impacts and other costs.'" BAAQMD Resp. to CAP at 45 (quoting CAA § 169(3), 42 U.S.C. § 7479(3)); *see also* RCEC Resp. to CAP at 20. BAAQMD also argues that "[t]he Delegation Agreement is based on the fact that the District's Regulation 2, Rule 2 contains certain provisions to help guide District staff in conducting PSD analyses, which track the requirements of the federal PSD program." BAAQMD Resp. to CAP at 46 (citing several provisions of BAAQMD's regulations). BAAQMD further argues that the Delegation Agreement requires BAAQMD "to issue[] PSD permits in accordance with the PSD requirements of Regulation 2, Rule 2, but only to the extent that they are actually consistent with the federal PSD requirements in 40 C.F.R. § 52.21." *Id.* BAAQMD also acknowledges that "the Delegation Agreement could be more clearly written and has caused some confusion in the past." *Id.* at 46 n.13.

The Board generally agrees with BAAQMD's characterization of the Delegation Agreement. The Delegation Agreement contains several general statements concerning the PSD analyses BAAQMD is required to perform under it, which, when read in conjunction with BAAQMD's regulations, are confusing, if not somewhat ambiguous.[14] The Board, however, has identified one provision of the

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gument as to the auxiliary boiler would have elicited the same response" BAAQMD gave in response to CAP's cost-effectiveness claim regarding another portion of the same BACT analysis: "that Regulation 2-2 does not apply." *Id.* at 9.

[14] For example, in the section entitled "Scope of Partial Delegation," the Delegation Agreement states that "[BAAQMD's] regulations continue to *generally* meet the requirements of 40 C.F.R. § 52.21 for issuing PSD permits; therefore [BAAQMD] permits issued in accordance with the provisions of Regulation 2 – Rule 2 shall be deemed to meet federal PSD permit requirements pursuant to the provisions of this delegation agreement." Delegation Agreement at 2 (pt. II, ¶ 2) (emphasis added). This provision could be read to suggest that Regulation 2 – Rule 2 contains BAAQMD's PSD requirements. A subsequent section containing the "General Delegation Conditions," however, provides that "[BAAQMD] shall issue PSD permits under this partial [D]elegation Agreement in accordance *with the PSD requirements of* the District's Regulation 2 – Rule 2 and 40 C.F.R. § 52.21 * * * ." *Id.* at 3 (pt. IV, ¶ 1) (emphasis added). This statement may imply that only some of the Regulation 2 – Rule 2 provisions apply to PSD permits. Notably, Regulation 2 – Rule 2 has numerous provisions, of which only some are specifically labeled as "PSD" provisions. *See, e.g.*, District Regulation §§ 2-2-205, -209. Others appear to be intended to govern nonattainment permits. *See id.* §§ 2-2-302 to -303 (emission offset requirements, labeled "NSR"). The Regulation 2 – Rule 2 provision in question is entitled "Best Available Control Technology" and appears to be a definition of BACT. *See supra* note 11. Strangely, however, this provision, unlike many others, is not labeled as a "PSD provision" as would be expected. Furthermore, this "BACT" definition appears to more closely resemble a definition of LAER than of BACT. *Compare* District Regulation § 2-2-206 (requiring the more stringent of, among other things, "the most stringent emission limitation achieved by an emission control device or technique for the type of equipment comprising such a source") *with* 40 C.F.R. § 51.165(a)(1)(xiii) (EPA's definition of LAER); *see also supra* notes 11 and 12. This, too, is odd because, as EPA has explained, "the emissions control requirement for nonattainment areas, lowest achievable emission rate (LAER), is defined
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Delegation Agreement that specifically instructs BAAQMD on how to perform its PSD determinations. It states that "[a]ll PSD BACT determinations are required to perform 'top-down' BACT analyses." Delegation Agreement at 5 (pt. VI, ¶ 2). As explained above, *see supra* Part VI.A, the top-down BACT analysis specifically includes consideration of costs at step 4. *See NSR Manual* at B.31-.46. Based on the Delegation Agreement's specific requirement that BAAQMD perform a top-down BACT analysis and the fact that such analysis necessarily includes consideration of costs, the Board is unpersuaded by CAP's argument that BAAQMD clearly erred in considering costs in its BACT analysis for the auxiliary boiler. This interpretation comports with the statutory provision that requires consideration of costs as part of the BACT analysis. *See* CAA § 169(3), 42 U.S.C. § 7479(3).

ii. *Challenges to the Basis of the Cost-Effectiveness Analysis for the Auxiliary Boiler*

As mentioned above, CAP and the College District both challenge BAAQMD's cost-effectiveness analysis for an auxiliary boiler, but for different reasons. CAP asserts that BAAQMD could not have demonstrated the cost-ineffectiveness of an auxiliary boiler because the startup and shutdown emissions it relied upon in its calculations were not based on a credible operating scenario and thus had no basis. CAP Pet. at 21-22. In a related challenge, CAP also claims that BAAQMD failed to respond to commenters asking for a credible operating scenario of startups and shutdowns. *Id.* at 14-18. CAP further argues that BAAQMD had no ascertainable basis for the emission reductions numbers it used. *Id.* at 22. The College District claims that BAAQMD clearly erred by relying on documents that are inapplicable to the Facility rather than the documents the College District submitted. College Dist. Pet. at 35-36. BAAQMD disagrees with these assertions, claiming that its startup profile had a well-reasoned and well-documented evidentiary basis. BAAQMD Resp. to CAP at 49; *accord* RCEC Resp. to CAP at 5. BAAQMD further claims that it reasonably based its emissions reduction estimates on data from a similar facility. BAAQMD Resp. to CAP at 51; BAAQMD Resp. to College Dist. at 33-43; *accord* RCEC Resp. to CAP at 27; RCEC Resp. to College Dist. at 39-43.

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differently than the best available control technology (BACT) emissions control requirement." *NSR Manual* at G.1. The Board need not resolve the ambiguities in these more general provisions of the Delegation Agreement because, as explained in the text, the Board relies on the provision in the Delegation Agreement that contains the most specific direction regarding how BAAQMD is to perform PSD BACT analyses it has been delegated, and this provision is dispositive of the issue. The Board also need not address the substantial question of whether a Delegation Agreement can, whatever its wording, effectively change the statutory definition of "BACT."

The parties' dispute over BAAQMD's cost-effectiveness analysis involves technical issues.[15] As noted earlier, *see supra* Part III, when a petitioner seeks review of a permit based on issues that are fundamentally technical in nature, the Board assigns a particularly heavy burden to the petitioner. With this standard in mind, the Board turns to each petitioner's argument.

(a) *CAP's Procedural and Substantive Challenges to BAAQMD's Operating Scenario*

In its petition, CAP claims that BAAQMD failed to respond to comments seeking accurate and consistent information about the number and kind of startup and shutdown events that would occur at the proposed Facility, thereby violating 40 C.F.R. § 124.17. CAP Pet. at 9; *see also id.* at 14 (asserting that BAAQMD "failed to respond to comments asking for a determination of the number and kind of startup and shutdown events"). According to CAP, without a credible operating scenario, BAAQMD could not properly determine BACT for the startup/shutdown emissions. *Id.* Later in its petition, CAP directly challenges BAAQMD's cost-effectiveness calculations for the auxiliary boiler, as opposed to the alleged failure to respond to comments, asserting that the startup and shutdown emissions values BAAQMD relied upon had no basis because BAAQMD did not use a credible operating scenario. *Id.* at 21-22. Because these two issues are interconnected, the Board considers them together here.

In responding to these assertions, BAAQMD claims that it "clearly explained and documented" the Facility's operating scenario in response to comments and that "there is no confusion in the record how [it] evaluated the issue." BAAQMD Resp. to CAP Pet. at 10. BAAQMD also states that its "analysis of this issue developed and became more specific over the course of the proceeding, as is to be expected in a public process where the permitting agency solicits public comments and then refines its analysis as comments [are] received and additional information is developed in response." *Id.* at 11. BAAQMD further contends that the operating scenario and startup profile it used had a well-reasoned and

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[15] The "average cost effectiveness" of a control option is calculated using the following formula:

$$\text{average cost effectiveness (dollars per ton removed)} = \frac{\text{control option annualized cost}}{\text{baseline emissions rate (tons/yr)} - \text{control option emissions rate (tons/yr)}}$$

NSR Manual at B.36-.37. Thus, one needs to calculate a baseline emissions rate and a control option emissions rate as well as an annualized cost for the control option. CAP and the College District are essentially challenging the values BAAQMD used for both emissions rates, a calculation that involves technical judgments. The College District also appears to be challenging BAAQMD's calculation for the annualized cost of the control option ($1,029,521). *See* College Dist. Pet. at 35.

well-documented evidentiary basis. BAAQMD Resp. to CAP at 9-42, 49-51; *accord* RCEC Resp. to CAP at 5-16.

(i) *Did BAAQMD Respond to Comments on the Operating Scenario?*

Upon consideration of the administrative record in this case, the Board concludes that BAAQMD did respond to the comments it received seeking information regarding the operating scenario and associated startup/shutdown events. Although BAAQMD clarified and refined its analysis over time, as BAAQMD itself admits, the Board does not find this to be error as this is a normal part of the dynamic of the notice and comment process associated with permitting proceedings.

Section 124.17 requires permit issuers 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). The Board has explained that this regulation requires that the response to comments document demonstrate that all significant comments were considered but does "not require a [permit issuer] to respond to each comment in an individualized manner" or 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.

In its original Statement of Basis, BAAQMD did not clearly explain the anticipated operating scenario for the proposed Facility. In the introductory section, BAAQMD summarized four operational modes of the proposed Facility – base load, load following, partial shutdown, and full shutdown – without any explanation of how frequently these modes would be operating. *See* SOB at 11; *see also id.* at 12 (referring to emissions during "normal (baseload) operations"). Later in the document, BAAQMD indicated that the proposed Facility would be a "combined-cycle, baseload plant" and not a peaking plant.[16] *Id.* at 40; *see also id.* at 62, 103, 142 (comparing the proposed Facility, in a several of its analyses, with baseload plants).

In response to comments requesting a more detailed explanation of the operating scenario and suggesting that the Facility "may not operate on a full-time, base-loaded basis," BAAQMD, in its Additional Statement of Basis, clarified that the Facility would be a type of baseload plant, an "intermediate-to-baseload" capacity power plant. ASOB at 12-13. BAAQMD explained that it would not, as

[16] Plants operating in "peaking mode" remain idle most of the time but can be started up and shut down, potentially frequently, when power demand increases, i.e., at "peak" demand times. *See* RTC at 121; *see also In re Kendall New Century*, 11 E.A.D. 40, 50-52 (EAB 2003) (describing the differences between peak and baseload generating plants).

some commenters suggested, require the plant to be designed as a peaking facility because that type of plant would be less efficient and inappropriate to provide the electricity service needed. *See id.* at 13. Later in the document, in examining the potential applicability of an auxiliary boiler as BACT – an analysis which requires that a precise number of startups be specified – BAAQMD stated that it had conservatively estimated "an annual operating profile containing 6 cold startups and 100 warm startups."[17] *Id.* at 69. BAAQMD's calculation was based on a 6-day, 16-hour ("6 x 16") operating profile for the Facility. *See id.* at 69-70 & nn.127, 129. Although BAAQMD did not clearly explain that it was relying on a 6 x 16 operating profile to mathematically derive the number of startups, the details were contained in an e-mail and associated spreadsheets, a couple of which BAAQMD cited in its Additional Statement of Basis.[18] *See id.*; *see also* Crockett Decl. Ex. 11 (April 2, 2009 e-mail and attached spreadsheets with calculations relying on this scenario).

During the second public comment period, several commenters again questioned whether the proposed Facility would truly be an intermediate-to-baseload facility instead of a peaker plant. RTC at 121. Commenters, such as CAP, also requested more information on the number of startup and shutdown events. *Id.*; *see, e.g.,* CAP's Sept. 16, 2009 Comments at 6 (stating that it was unclear how BAAQMD arrived at its annual startup numbers of 6 cold startups and 100 warm startups, and arguing that 700 warm startups would be a conservative estimate); *see also* CAP's Feb. 5, 2009 Comments at 3 (requesting "more information on the number of maximum predicted startup and shutdown events per day and per year").

Because the operating profile is determinative of the number of startup and shutdown events, BAAQMD provided, in responding to these comments, a lengthy explanation for its conclusion that the Facility would be used for intermediate-to-baseload operation with a 6 x 16 operating profile. RTC at 122-23. BAAQMD's explanation included the following:

> [BAAQMD] has reviewed the facility as proposed and has not found any indication that it is not in fact being

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[17] "Warm startups" are those that occur between eight and forty-eight hours after a gas turbine shutdown, and "cold startups" are those that occur more than forty-eight hours after shutdown. Final Permit at 5; *accord* RTC at 95 n.193. "Hot startups" are startups that occur within eight hours of a gas turbine shutdown. Final Permit at 5; *accord* RTC at 95 n.193.

[18] In its petition, CAP appears to dispute whether one of the spreadsheets RCEC submitted to BAAQMD and BAAQMD relied upon in developing its analysis in the Additional Statement of Basis, *see* ASOB at 69-70 & nn.127, 129, and its Responses to Public Comments, *see* RTC at 114-16 & nn.235, 237, should be considered part of the administrative record. *See* CAP Pet. at 14 n.10 (claiming that the document is not contained in BAAQMD's record). In its reply brief, CAP states that it does not dispute that the spreadsheet is part of the record. CAP Reply at 11.

built for intermediate-to-baseload operation. To the contrary, all available information suggests that it will be used for intermediate-to-baseload operation.

One clear indication is that the facility has been designed and proposed to maximize energy efficiency, which is being prioritized over fast start times. This tradeoff between a low heat rate (an indication of energy efficiency) and quicker startups times is what determines how power plants are dispatched – that is, whether they are kept on-line or whether they are turned off when demand is not at its peak. Whether and when plants are turned on to provide power to the grid is determined by the California Independent System Operator ("ISO"), which ensures that the state's electricity grid operates reliably at all times. * * * [BAAQMD] therefore disagrees based on the design of the facility that this facility will be used as a peaker plant, as the comments suggested.

[BAAQMD] also disagrees that this facility will be used as a peaker plant based on its review of available information from the record of proceedings before other California regulatory agencies. The information the [BAAQMD] discovered strongly supports the conclusion that this facility will be an intermediate-to-baseload facility. For example, the California Public Utilities Commission ("CPUC") has expressly made a finding that the facility is subject to California's CO_2 Emissions Performance Standard ("EPS"), which applies only to baseload generation facilities designed and intended to provide electricity at an annualized plant capacity factor of at least 60 percent. Similarly, in related regulatory proceedings concerning the approval of a natural gas pipeline project, PG&E described the Russell City facility and two other highly efficient facilities as having "the lowest heat rates of all the units in PG&E's portfolio" and therefore requiring "the most steady demand" for natural gas supply to meet the needs of PG&E's customers, further suggesting that these facilities – including Russell City – will be dispatched in an intermediate-to-baseload capacity. * * *

Finally, the [BAAQMD] also reviewed the Power Purchase Agreement for this facility for indications of how the facility will be dispatched, as some of the comments suggested. The Power Purchase Agreement re-

> quires that the facility be available for dispatch on a "6 x 16" basis, meaning that it has to be available to operate at least 16 hours a day, 6 days a week. This dispatch requirement is typical for an intermediate-to-baseload facility, and is not the type of dispatch requirement that would be seen in a Power Purchase Agreement for a peaker plant. This is also the operating scenario on which Calpine has agreed to provide NOx offsets for the facility. It is unlikely that Calpine would provide NOx offsets to accommodate this level of operation if the facility were actually intended to be operated as a peaker with far fewer total hours of operation per year.

RTC at 122-23 (internal footnotes omitted) (referencing Second Amended and Restated Power Purchase and Sale Agreement between Pacific Gas & Electric Co. ("PG&E") and RCEC ("Power Purchase Agreement")). Significantly, the Power Purchase Agreement upon which BAAQMD relied referred to "fifty weeks of operation" during which the units would be "started and operated for up to sixteen hours," six days a week. *See* Crockett Decl. Ex. 13 (page A-97 of Power Purchase Agreement).

Based on an operating profile of 16 hours a day, 6 days a week, and 50 weeks of the year, BAAQMD again explained that it had calculated "an annual operating profile containing 6 cold startups and 100 warm startups" for the two turbines and relied upon these values in its cost-effectiveness analysis.[19] *See* RTC at 114-16; ASOB at 69-70. BAAQMD also calculated that there would be 500 hot startups.[20]

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[19] In its response brief, BAAQMD detailed its math: a plant running on a 6 x 16 operating profile over the course of a year would have a startup profile for each turbine of 250 hot startups per year (5 per week multiplied by 50 weeks); 50 warm startups per year (1 per week multiplied by 50 weeks) and 3 cold startups per year (for occasional extended downtime). BAAQMD Resp. to CAP at 10; Oral Arg. Tr. at 76 (clarifying that the number of hot starts would be 5 per week, not 6, as previously and incorrectly stated). Thus, multiplying all of these values by two, the total number of startups for the two turbines at the facility "would be 500 hot startups, 100 warm startups, and 6 cold startups per year." BAAQMD Resp. to CAP at 10. As BAAQMD further explains, logically, "16 hours per day of operation with an overnight shutdown would result in a 'hot startup' the next morning, as hot startups are defined as startups that occur within 8 hours of a shutdown." *Id.* to CAP at 10. Similarly, "6 days per week of operation would mean that the facility is not operated one day per week, which would result in a 'warm startup' when the facility starts up again after the idle day, as warm startups are defined as startups that occur between 8 hours and 48 hours of a shutdown." *Id.*

[20] The estimate of hot starts does not appear to have been explicitly mentioned by BAAQMD in its Responses to Public Comments, most likely because the number of hot starts is not relevant to the cost-effectiveness analysis BAAQMD performed. *See* RTC at 114 & n.235. It was, however, specified in the underlying documents BAAQMD relied upon in performing its calculations. *See*, *e.g.*, CAP Pet. Ex. 6; Crockett Decl. Ex. 11; *see also* ASOB at 69-70 nn.127, 129 (citing supporting documents).

As the above excerpts demonstrate, BAAQMD's response provided a lengthy explanation for its rationale in relying on a 6 x 16 operating scenario, the scenario which dictates the number of startup events. BAAQMD also clearly stated the number of warm and cold startups upon which it was relying. Contrary to CAP's assertions, these numbers were identical to those BAAQMD had already provided in its Additional Statement of Basis.[21] The Board concludes that the response to comments document demonstrates that BAAQMD adequately responded to all significant comments it received in connection with the operating scenario and associated number of startups/shutdowns.

While it may be true that BAAQMD's earliest explanations of the Facility's operating scenario were not a model of clarity, and while it might have been more helpful had BAAQMD explained the simple mathematical calculations behind its startup numbers, BAAQMD did, upon receiving comments noting problems with its earlier explanations, clarify and provide a more detailed description of the intended operating scenario upon which it based its startup and shutdown numbers.[22] This is fully consistent with one purpose of the part 124 public comment procedures: to allow commenters to point out problems with a permit issuer's initial evaluation so that it may clarify and better explain its analyses. The mere fact that a permit issuer clarified and refined its explanations and analyses in response to a comment does not, without more, provide a valid basis on which that commenter can later challenge the permit decision as being based on "inconsistent" statements.[23] The Board thus concludes that BAAQMD did not clearly err by failing to respond to comments on the anticipated operating scenario as CAP alleged.

[21] In its petition, CAP repeatedly argues that BAAQMD made "no effort at clarity, certainty, or consistency as to the number and kind of SU/SD events." CAP Pet. at 15; *see also id.* at 9 (BAAQMD failed to provide "accurate and consistent information"); *id.* at 13 ("no consistent information * * * whether there will be few or frequent SU/SDs"). BAAQMD however clearly stated in both the Additional Statement of Basis and the Responses to Public Comments that there would be "six cold starts and 100 warm starts" per year per turbine. RTC at 114; ASOB at 69. The Board does not see how there is *any* lack of clarity or inconsistency in these identical statements. It appears, in reality, that BAAQMD did clearly state how many startups there would be, but that CAP disagrees with BAAQMD's determination.

[22] BAAQMD's more detailed analysis in its later documents was also the result of BAAQMD's determination that a cost-effectiveness analysis was required in its consideration of an auxiliary boiler. In order to perform that analysis, BAAQMD realized that more precision was necessary in defining the expected operating scenario. *See* RTC at 114-16 (auxiliary boiler analysis, relying on operating scenario); *see also* Oral Arg. Tr. at 75 (explaining that the "startup scenario underpins the amount of emission reductions that you will achieve from putting in the auxiliary boiler").

[23] CAP's argument about "consistency" in BAAQMD's discussion of the operating scenario seems to be based, at least in part, on the fact that BAAQMD's statements in its responses to comments document and Additional Statement of Basis were not completely consistent with the statements it made in its original Statement of Basis. *See, e.g.,* CAP Pet. at 15-16 (comparing statements BAAQMD made in its SOB to those in its RTC).

The Board next turns to the question of whether the approach BAAQMD ultimately selected is rational in light of all the information in the record. Because CAP's argument challenging the operating scenario BAAQMD relied upon in its BACT analysis clearly involves technical questions, the Board accords substantial deference to BAAQMD on this issue. *See* discussion *supra* Part III.

(ii) *Was BAAQMD's Approach in Selecting an Operating Scenario for the Facility Rational?*

As summarized above, BAAQMD considered several sources of information in determining that the Facility would be used for intermediate-to-baseload operation with a 6 x 16 operating profile. BAAQMD first considered the proposed Facility's design and, based on its expert knowledge about how power plants are dispatched, concluded that the Facility was designed to maximize energy efficiency rather than quick start times, a design similar to other baseload and intermediate service plants, and not peaker plants. RTC at 122. BAAQMD then considered information and findings from other California regulatory agencies in connection with the proposed plant. *Id.* According to BAAQMD, the California Public Utilities Commission ("CPUC") had "expressly made a finding" that the Facility would be subject to performance standards that apply only to baseload generation facilities, evidence that again indicated a baseload plant, rather than a peaker plant, as commenters such as CAP had suggested. *Id.* BAAQMD, following the suggestion of commenters, then looked at the Power Purchase Agreement between PG&E and RCEC, which BAAQMD concluded required the plant to be available for dispatch on a 6 x 16 basis.[24] *Id.* at 123. Finally, BAAQMD noted that

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[24] In its reply brief, CAP makes an argument that the Power Purchase Agreement does not support the operating scenario BAAQMD used. CAP Reply at 1-6. CAP argues that BAAQMD misinterpreted the statement in the agreement that provides: "'[The Authority to Construct] shall allow for *up to* 50 weeks of operation on [PG&E's] behalf in '6 x 16' mode per year, where the Units are started and operated for *up to* 16 hours, and subsequently shut down each day for 6 days per week.'" *Id.* at 3 (citing Power Purchase Agreement at A-97) (emphasis added). CAP contends the "up to" language should be read to mean that "the facility could operate between 0 and 16 hours a day," but not more, and up to but less than 50 weeks rather than as a minimum limit, as it alleges BAAQMD to have read it. *Id.* RCEC disagrees with CAP's interpretation, arguing that the agreement "means that RCEC must have *at least* this capacity and must obtain air permits that allow for operation no less frequently. It does not mean that the Project cannot be dispatched for more than 16 hours per day or less than 16 hours per day." RCEC Sur-Reply at 17. Because CAP did not challenge BAAQMD's interpretation of the Power Purchase Agreement in its petition, the Board rejects CAP's argument as untimely for the reasons discussed below in Part VI.B.1.b.ii. Moreover, while this agreement could be read to set a maximum limit, it would make no logical sense for a buyer's contract to so specify. The buyer's interest clearly would be in guaranteeing a minimum availability; there would be no reason for it wanting to specify a maximum in lieu of a minimum. The Board made this point at oral argument. Oral Arg. Tr. at 32-33. CAP acknowledged that it was indeed a buyer's agreement, and that it could be setting the availability limit. *Id.* at 33. Although the wording in this agreement is somewhat confusing, the

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the applicant had agreed to provide NO_x offsets for the facility consistent with a 6 x 16 operating profile, a commitment it was unlikely to make if the plant were intended to operate with far fewer hours annually. *Id*. Based on its expert opinion, BAAQMD concluded that all of this information supported the operating scenario it used. *Id*. at 124.

In light of the evidence in the administrative record, the Board concludes that BAAQMD's approach appears rational, and none of petitioner's arguments demonstrate otherwise. One of CAP's primary contentions appears to be that there could be other potential operating scenarios, and it provides several possible alternative scenarios.[25] *See* CAP Pet. at 15-17; *see also id.* (arguing that the exhibit containing the operating scenario calculations "does not lead to the conclusion that 6 x 16 means *only that combination of startups*") (emphasis added). While it is true that there may be other possible operating scenarios, the issue here is not whether there could be other credible scenarios, but whether the scenario BAAQMD selected was rational in light of the record.[26]

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sensible reading of the contract is to establish a minimum rather than a maximum availability of power that the buyer could buy from RCEC, as BAAQMD interpreted it.

[25] For instance, CAP argues that, based on BAAQMD's statement that the facility might shut down during a "'period of low overall demand such as late evening and early morning hours,'" this "could mean two shutdowns and startups per turbine per day." CAP Pet. at 15. As BAAQMD points out, however, its statement is not sensibly read to mean the facility would shut down twice overnight but rather that sometime during the decreased demand in the late evening and the period of increased demand in the morning, the Facility would shut down. BAAQMD Resp. to CAP at 31. CAP also argues that "if the [] facility operated for 16 hours per day, 6 days a week, that could mean six warm startups per week, which would be 300 warm starts for one turbine for 50 weeks." CAP Pet. at 17. CAP appears to be suggesting that because 8 hours is the cutoff between hot and warm startup time frames, if the facility is operating at or just under sixteen hours, then the startup the following day would constitute a warm, and not a hot, startup, contrary to BAAQMD's calculations. *Id.* at 17. As BAAQMD points out, however, "[i]f the facility is operating to sell power to the grid 16 hours per day, with additional time needed for startup and shutdown[,] the available downtime in the balance of a 24-hour day is less than 8 hours." BAAQMD Resp. to CAP at 31. In this same vein, CAP also argues that, "depending on whether the 6 x 16 represents an average," there could be "as many as 300 warm startups per year per turbine." CAP Pet. at 16. While the basis of CAP's claim of "as many as 300" is not altogether clear, it appears that CAP is suggesting that, if 16 hours a day is an average, then on some days, the Facility could run for less than 16 hours and thus, the following day's startup would be a warm, not a hot startup, thereby increasing the number of warm starts BAAQMD estimated to something above 100. Again, while this calculation is another possible one, although one that may not take into account the time it takes to actually implement the startup and shutdown of the facility, it does not necessarily mean that BAAQMD's assumptions are not rational.

[26] In its reply brief, CAP argues that BAAQMD "should have justified why it did not use the worst case scenario" in establishing an operating scenario. CAP Reply at 1. This argument is significantly different than the one it raised in its petition; in fact, the two are inconsistent. CAP's reframing of its argument is essentially an attempt to raise a new issue in its reply brief. As noted below in Part VI.B.1.b.ii, new issues raised at the reply stage are equivalent to late-filed appeals and must be
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Along similar lines, CAP asserts that the Final Permit's daily and annual CO limits theoretically allow up to 2 startups and shutdowns per day and implies that this somehow demonstrates a problem with the operating scenario BAAQMD relied upon. CAP Pet. at 13, 21. However, as BAAQMD points out, "simply because it is possible for a turbine to have multiple startups on a single day does not mean that such a situation is likely to occur." BAAQMD Resp. to CAP at 32.

CAP's reliance on alleged inconsistencies in the permitting record is even more unconvincing. As the Board pointed out above, *see supra* note 23 and accompanying text, many of the "inconsistent" statements CAP attributes to BAAQMD are actually elaborations and clarifications BAAQMD made during the permitting process in response to comments. Similarly unpersuasive is CAP's suggestion that statements in the administrative record – made by BAAQMD, the applicant, and/or others[27] – that the Facility will be a "baseload" facility are inconsistent with BAAQMD's statement that the Facility will be an "intermediate-to-baseload facility." CAP Pet. at 13-14. As noted above, BAAQMD's use of the descriptor "intermediate-to-baseload" was intended to clarify that the Facility would be a type of baseload facility, as opposed to a peaking facility.[28]

CAP also asserts that the California Energy Commission ("CEC") staff assessments in the state power plant certification process "point to multiple [startup/shutdown] events,"[29] which CAP also believes is evidence of inconsistency. *Id.* at 17. Although not altogether clear to which CEC staff assessments CAP is referring in its assertion, the Board reviewed the CEC documents CAP cites in this section of its brief and did not find any that support CAP's assertion.[30]

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denied on the basis of timeliness. Thus, the Board does not consider this newly raised issue, nor does it consider any arguments related to this new issue, such as CAP's new arguments concerning interpretations of the NSR Manual.

[27] CAP refers to a CPUC decision that refers to the proposed Facility as a baseload facility. CAP Pet. at 9 & n.14; *see also* BAAQMD Resp. Ex. 14 at 24-25 (copy of the CPUC decision).

[28] Another alleged inconsistency is a statement RCEC made in an amendment to its application in which it stated that the Facility would be a "load following unit." CAP Pet. at 16. This argument is unpersuasive as well. Notably, in the Statement of Basis, BAAQMD explained that "load following" was "a total output of less than the base load scenario." SOB at 11. Thus, the descriptor "load following" does not appear inconsistent with the descriptor "intermediate-to-baseload facility."

[29] Presumably CAP means multiple events per day.

[30] In its petition, CAP mentions a CEC staff analysis which "assum[ed] 52 cold startups and 260 hot startups per each turbine." CAP Pet. at 12 (citing CEC, Final Staff Assessment, Russell City Energy Project at 4.1-12 (June 10, 2002)). As BAAQMD points out, however, the CEC staff noted that this was a "conservative estimation" and went on to further state that the "[s]taff believes that the more likely scenario is that, barring major mechanical malfunction of the equipment itself, cold startups may occur once or twice a year, most likely during the annual maintenance and inspection. Staff expects
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For the foregoing reasons, the Board concludes that BAAQMD's approach appears rational in light of the evidence in the record. The Board already concluded that BAAQMD responded to the comments raising this issue. Accordingly, the Board denies review on these grounds.

(b) *Was CAP's Challenge to BAAQMD's Emissions Reduction Numbers Preserved for Review?*

CAP also asserts that BAAQMD's cost-effectiveness analysis is flawed because BAAQMD had no ascertainable basis for the startup/shutdown emissions reduction numbers it used, 0.9 tons of NO_x and 12.4 tons of CO. *Id.* at 22. CAP claims that these numbers are values RCEC supplied BAAQMD from the Mankato Energy Center in Minnesota, another of RCEC's facilities, and that BAAQMD failed to perform an independent analysis of these data. *Id.* (referring to RTC at 114 & n.235 and CAP Pet. Ex. 8).[31] CAP further argues that there is "no apparent explanation of how the numbers from this facility can reasonably be used for setting BACT for RCEC, how reliable the numbers are, and what the numbers represent." *Id.* CAP also claims that BAAQMD failed to provide an explanation for "mysterious notes" contained in the spreadsheet. *Id.* (referring to CAP Pet. Ex. 8 at 1-3).

Both BAAQMD and RCEC contend that the Board should deny review of this issue because CAP did not raise this objection during the public comment period. BAAQMD Resp. at 52; RCEC Resp. to CAP at 25-26. BAAQMD further argues that, while one commenter had stated it would be more appropriate to use the Siemens data sheets rather than the Mankato facility data, no commenter "questioned whether the Mankato data were not reliable, accurate, or representative." BAAQMD Resp. at 52; *see also* RCEC Resp. to CAP at 25 ("[N]o one ever called into question the representativeness or reliability of the startup data from

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that the vast majority of startups would be hot or warm starts, thus minimizing startup periods of time and emissions." BAAQMD Resp. to CAP at 34 (citing CEC, Final Staff Assessment, Russell City Energy Project at 4.1-12 (June 10, 2002)). This latter statement seems to be consistent with the operating scenario BAAQMD assumed. CAP also mentions another letter in which a CEC staff member states that "the planned operating profile of the project [is] frequent startup and shutdown cycles." CAP Pet. at 16 (citing a May 29, 2007 letter). From the calculations mentioned in the letter, it appears that the letter was based on maximum daily emissions limits, which the Board has already concluded is not relevant to BAAQMD's determination of a likely operating scenario. Finally, CAP cites another CEC staff member that stated that "'the project owner has asserted that the more typical, normal operating day of the facility could include a hot startup, about 16 hours of normal operation followed by a shutdown.'" CAP Pet. at 12 (citing a June 2007 letter). This last statement is entirely consistent with the operating scenario BAAQMD used.

[31] Exhibit 8 is a copy of the document BAAQMD cited in footnote 235 of its response-to-comments document.

Calpine's Mankato Energy Center."). BAAQMD also argues that no commenter ever requested that it provide further explanation or justification for the data in the spreadsheet.[32] BAAQMD Resp. at 52.

In its reply brief, CAP concedes that it did not question the Mankato data in its public comments. CAP Reply at 11. CAP argues, however, that it still may raise this issue in its petition because another commenter, the College District, "questioned the emissions assumptions that [BAAQMD] used." *Id.* (referring to Letter from Jewell Hargleroad, on behalf of the College District, to Weyman Lee, P.E., BAAQMD, at 3-4 (Sept. 16, 2009) ("College Dist. Sept. 16, 2009 Comments")).

Before reaching the merits of this issue, the Board must first consider whether this issue was properly preserved. As noted earlier, *see* Part III *supra*, to be preserved for review, "all reasonably ascertainable issues" must be raised during the comment period. They also must be raised with a reasonable degree of specificity and clarity. It is CAP who bears the burden of demonstrating that this issue was raised, and with sufficient specificity, during the public comment period. 40 C.F.R. § 124.19(a); *In re ConocoPhillips Co.*, 13 E.A.D. 768, 801 (EAB 2008); *In re Shell Offshore, Inc.,* 13 E.A.D. 357, 394 n.55 (EAB 2007).

In attempting to demonstrate that this issue was raised during the comment period, CAP relies on the College District September 2009 comments. While it is true that the College District's comment *generally* challenged BAAQMD's emissions calculations, the College District questioned BAAQMD's calculations based on Siemens vendor data from the Caithness facility application. Crockett Decl. Ex. 9 (College Dist. Sept. 16, 2009 Comments at 3-4). The College District did not challenge, question, or even mention, the Mankato data.[33] *See id.* CAP has therefore failed to demonstrate that the issue it is currently raising, a challenge to the basis of the Mankato data, was raised with a reasonable degree of specificity and clarity during the comment period. *See*, *e.g.*, *Concophillips*, 13 E.A.D. at 801-02 (concluding that expressing concerns about greenhouse gas emissions did not reflect "the requisite level of specificity required" to preserve the issue of whether BACT was required for CO_2 and methane); *Shell Offshore,* 13 E.A.D. at 394-96 (concluding that issue of whether a specific condition was enforceable

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[32] BAAQMD also contends that the substance of CAP's argument is false. BAAQMD Resp. to CAP at 53. Because the Board concludes that this issue is procedurally barred due to CAP's failure to raise this issue in its comments on the draft permit, the Board need not address the parties' arguments concerning the substantive issue.

[33] In fact, the College District comment states that, relying on BAAQMD's assumptions, it "agree[s] that the reduction for NO_x for cold startups results in a difference of .9 tons." College District Sept. 16, 2009 Comments at 4. Thus, this portion of the College District's comments, instead of supporting CAP's present contentions, actually contradicts CAP's claim questioning the legitimacy of the 0.9 ton figure.

was not preserved where only generalized concerns regarding appropriate monitoring were raised in comments); *see also* cases cited *supra* Part III. The Board consequently concludes that this issue was not preserved for review and denies review of this issue.

(c) *College District's Challenge to the Data BAAQMD Relied on in Its Cost-Effectiveness Analysis*

The College District also challenges BAAQMD's cost-effectiveness calculations for the auxiliary boiler. College Dist. Pet. at 23-26, 35-36. The College District asserts that BAAQMD relied on records from another source that utilizes fuel oil rather than natural gas and ignored records applicable to natural gas that the College District had submitted. *Id.* at 35. The College District also contends that BAAQMD's error was "magnified" by relying on cost estimates from the Mankato facility, which has a much larger boiler than the one that would be necessary at the Facility, rather than properly considering information the College District submitted on Lake Side,[34] a facility which allegedly has a similarly sized boiler.[35] *Id.* at 35-36; *see also* College Dist. Suppl. Errata to Its Pet. at 2-3.

In response, BAAQMD contends that it carefully considered the costs and benefits of utilizing an auxiliary boiler and documented its cost-effectiveness analysis on the record. BAAQMD Resp. to College Dist. at 33-37. BAAQMD further asserts that it did not err either in its calculations of emissions reductions an auxiliary boiler would achieve or by its calculations of costs. *Id.* at 37-43; *see*

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[34] In its original petition, the College District cited the Caithness facility information for this proposition. College Pet. at 35. In its errata, however, the College District revised its statement to cite the information from Lake Side. College Dist. Suppl. Errata to Its Pet. at 2-3. According to the College District's supplemental errata, Lake Side operates the same turbines and has the same operating scenario as contemplated for the Facility. *Id.*

[35] In its reply brief, the College District asserts that, under BAAQMD's "achieved in practice guidelines, [] cost effectiveness does not trump what has been achieved in practice at other facilities." College Dist. Reply at 20 & n.7 (referring to BAAQMD's BACT Workbook). In connection with its assertion, the College District cites CAP's arguments concerning the Delegation Agreement and BAAQMD's regulations. *Id.* at 20. To the extent the College District is reiterating CAP's argument on that point, the Board has already addressed that issue. *See supra* Part VI.B.1.a.i. If the College District is intending to raise an issue concerning the applicability of BAAQMD's BACT Workbook to its cost-effectiveness analysis, this issue is procedurally barred for a number of reasons. First, the College District has not demonstrated that it raised this issue in its comments on the draft permit, and it is clearly an issue that was "reasonably ascertainable" and thus must have been raised below to have been preserved for review. *E.g.*, *ConocoPhillips*, 13 E.A.D. at 801; *Shell Offshore*, 13 E.A.D. at 394 n.55. Additionally, because this issue was not mentioned in the College District's petition, it may not be raised for the first time in the reply brief. *See* discussion *infra* Part VI.B.1.b.ii; *see also Dominion I*, 12 E.A.D. at 595; *Knauf I*, 8 E.A.D. at 126 n.9; Order of May 19, 2010 at 7 (explicitly instructing parties that new issues raised in their reply briefs would not be considered); Order of May 6, 2010 at 1 (same); Oral Arg. Tr. at 9 (same).

also RCEC Resp. to College Dist. at 36 (contending that BAAQMD conducted an appropriate cost-effectiveness analysis). BAAQMD also avers that the College District submitted two data sheets with its comment on the draft permit, not four. BAAQMD Resp. to College Dist. at 35; Crockett Decl. ¶ 10; *see also* Crockett Decl. Ex. 9 (copy of College District comments, containing only 2 pages of Siemens Westinghouse proprietary data). Notably, one of these two data sheets showed emissions estimates based on the use of an auxiliary boiler firing fuel oil, not natural gas.[36] BAAQMD Resp. to College Dist. at 35 n.20; Crockett Decl. Ex. 9, attach. at 2.

Before considering the substantive issues the College District raises, the Board first considers the College District's motion requesting the Board take official notice and supplement the administrative record with two documents that are related to its auxiliary boiler arguments.

(i) *College District's Motion Requesting Official Notice and Supplementation of the Record*

In its motion, the College District requests the Board take "official notice" of two documents: (1) an October 6, 2009 e-mail from BAAQMD Engineer Weyman Lee to the College District inquiring about the College District's comments on the draft permit; and (2) two pages of another PSD permit application, that of the Caithness Long Island Project, which had been submitted to EPA Region 2 in 2006. *See* College Dist. Request to Take Official Notice of Facts and to Supplement the Administrative Record at 2, 4-7 (July 19, 2010) [hereinafter College Dist. Mot.]. The College District also states that it "seeks to supplement the administrative record before the Board" with these documents.[37] *Id.* at 2.

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[36] One of the two pages in dispute had emissions data based on use of an auxiliary boiler firing natural gas. *See* College Dist. Pet. Ex. 4.

[37] The College District also notes that it had requested the Board "take official notice of the non-record government documents cited in its Petition." College Dist. Mot. at 2 (citing two Board cases); *accord* College Dist. Pet. at 4. The College District presumably intended this broad, open-ended request to include every document it mentioned in its petition or attached as an exhibit. The College District, however, did not point to any specific documents it wished the Board to "officially notice" nor did it note which, if any, of the documents it cited in its petition were already included in the administrative record below and thus would not constitute "*non-record* government documents." Finally, the College District did not explain the relevance of any such non-record government documents to the current matter, which the Board has noted is an important consideration in deciding whether to take official notice of a document. *See* Order of May 19, 2010 at 5-6. The two Board cases to which the College District cites do not stand for the proposition that *any and all* "non-record government documents" may be "officially noticed" in such a wholesale manner. Both of those cases involved specific documents. *See In re Arecibo & Aguadilla Reg'l Wastewater Treatment Plants*, 12 E.A.D. 97, 145 n.86 (EAB 2005) (taking official notice of "relevant non-record information con-

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The College District's motion contains at least two discrete requests for Board action. Significantly, taking official notice and supplementing the record are two different actions, which are not typically concurrent or equivalent, because they involve different considerations. The Board therefore considers each request separately.

(a) Official Notice

As has been explained in previous cases, the Board may take "official notice" of certain relevant non-record information, generally public documents such as statutes, regulations, judicial proceedings, public records, and Agency documents. *See, e.g., In re Desert Rock Energy Co.*, 14 E.A.D. 484, 487 n.3 (EAB 2009) (taking notice of relevant state court cases); *Arecibo*, 12 E.A.D. at 145 n.86 (taking official notice of a consent decree between the permittee and the permit issuer in another judicial proceeding); *In re Indianapolis Power & Light Co.*, 6 E.A.D. 23, 29 n.12 (EAB 1995) (taking official notice of a response to public comments document the Agency issued in connection with a rulemaking); *City of Denison*, 4 E.A.D. at 419 n.8 (taking official notice of a regional order regarding the "line of succession" in a region); *In re Hawaiian Commercial & Sugar Co.*, 4 E.A.D. 95, 102 n.13 (EAB 1992) (taking official notice of a basic Agency reference document); *In re Rubicon, Inc.*, 2 E.A.D. 551, 556 n.11 (CJO 1988) (taking notice of an Agency memorandum). Here, only one of the two documents appears to fall within the general category of public documents of which the Board will take official notice: the Caithness permit application, which had already been submitted to EPA and was publically available. *See Dominion I*, 12 E.A.D. at 548 (briefly discussing an NPDES application pending in another, unrelated case, which was "extra-record * * * but in the public domain"). The other document, an e-mail between BAAQMD and the College District, does not fall within this general category of documents. Accordingly, the Board takes official notice of the Caithness permit application but denies the College District's request that official notice be taken of the 2009 Lee e-mail.

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tained in the judicial proceedings relating to [the permittee's] compliance with the Clean Water Act," including a consent decree between the permittee and the permit issuer and a related court order); *In re City of Denison*, 4 E.A.D. 414, 419 n.8 (EAB 1992) (taking official notice of a relevant EPA regional order). Nor does the Board think it appropriate that the burden should be shifted to the *Board* to search a party's filings to determine which of the party's documents might fall within the category of "non-record government documents" so that the Board may then take official notice of them. That responsibility is petitioner's. *See*, *e.g.*, *In re City of Pittsfield*, NPDES Appeal No. 08-19, at 11 (EAB Mar. 4, 2009) (Order Denying Review) (noting that burden of supporting claim is petitioner's, not Board's), *aff'd*, 614 F.3d 7 (1st Cir. 2010). Accordingly, the Board denies the College District's non-specific, open-ended request for the Board to take official notice of any non-record government document the College District may have cited.

(b) Supplementation of the Administrative Record

As indicated above, the question of whether it is appropriate to add a document to the administrative record involves consideration of different factors than the decision to take official notice of a document. Thus, the fact that the Board has taken official notice of the Caithness permit does not mean the two pages automatically become part of the administrative record for the final permit decision nor does the Board's denial of official notice status for the 2009 Lee e-mail necessarily mean the e-mail cannot be added to the administrative record.

General principles of administrative law dictate that the complete or official administrative record for an agency decision include all documents, materials, and information that the agency relied on directly or indirectly in making its decision. *Dominion I*, 12 E.A.D. at 519 (citing *BAR MK Ranches v. Yuetter*, 994 F.2d 735, 739 (10th Cir. 1993); *Thompson v. U.S. Dep't of Labor*, 885 F.2d 551, 555 (9th Cir. 1989)); *accord In re Dominion Energy Brayton Point, LLC ("Dominion II")*, 13 E.A.D. 407, 417 (EAB 2007). Consistent with this principle, EPA's part 124 regulations provide that the final permitting decision be based on the administrative record. 40 C.F.R. § 124.18(a). Part 124 contains several provisions specifying what should be in the administrative record for EPA-issued PSD permits. *E.g.*, 40 C.F.R. §§ 124.9, .17(b), .18(b). The administrative record for the final permit must include the administrative record for the draft permit and: (1) all comments received during the public comment period; (2) the tape or transcript of any "public hearings" held under section 124.12; (3) any written materials submitted at such public hearing; (4) the response to comments document required to be prepared pursuant to section 124.17 and any documents cited in the response to comments; (5) other documents contained in the supporting file for the permit; and (6) the final permit. *Id.* § 124.18(b); *see also id.* § 124.17(b). The regulations also provide a timeline for the closing of the administrative record, stating that "[t]he record shall be complete on the date the final permit is issued." 40 C.F.R. § 124.18(c); *accord Dominion I*, 12 E.A.D. at 516.

The 2009 Lee e-mail is BAAQMD engineer Mr. Lee's request to the College District's counsel seeking additional followup information concerning comments the College District had submitted to BAAQMD on the Additional Statement of Basis during the comment period. *See* College Dist. Mot. Ex. 1. The content of the e-mail does not appear to clearly fall into any of the categories of materials that *must* be included in the administrative record,[38] *see* 40 C.F.R. § 124.18(b)(1)-(7), nor does it appear, on its face, to contain information that BAAQMD would have "relied on" in its final permitting decision. BAAQMD,

[38] The only category the 2009 Lee e-mail could arguably fall within is the one that includes "other documents contained in the supporting file for the permit." 40 C.F.R. § 124.18(b)(6).

therefore, would not necessarily have included it in the administrative record. As the College District argues, however, BAAQMD does refer, albeit obliquely, to the 2009 Lee e-mail in responding to the College District's petition for review and reply brief. *See, e.g.,* BAAQMD Resp. to College Dist. Pet. at 34 (referring to a BAAQMD inquiry to the College District); BAAQMD Sur-Reply at 7 n.3 (noting that BAAQMD explicitly asked the College District for a further explanation). Moreover, as the College District suggests, the e-mail provides context for the College District's followup comments, which go to the heart of some of the arguments the parties raise on appeal. Finally, the Certified Index for the Final Permit, in a section entitled "Miscellaneous Communications," does list a few e-mails between BAAQMD and other groups or individuals, which sound similar in character to the e-mail in question here. *See* Certified Index at 71-72 (items 13.1, 13.6, and 13.12). Based on these last few factors, the Board concludes that, in this case, the e-mail should be part of the administrative record.[39] *Cf. In re Pollution Control Indus. of Ind., Inc.*, 4 E.A.D. 162, 165-66 (EAB 1992) (allowing permit issuer to file supplemental response on appeal to clarify underlying administrative record). Accordingly, the Board directs BAAQMD to add the 2009 Lee e-mail to the administrative record.[40]

The two pages from the Caithness permit application, however, merit a different result. The two pages with which the College District seeks to supplement the record are the very pages that BAAQMD avers the College District did *not* initially submit during the comment period.[41] Because BAAQMD did not receive these two pages during the comment period (and, in fact, did not receive them until the College District filed its petition), BAAQMD did not consider them in its final permit decision; thus, these two pages cannot constitute part of the administrative record for that decision. *See, e.g.*, *Dominion II*, 13 E.A.D. at 417; *Dominion I*, 12 E.A.D. at 518 (declining to supplement the record with documents submitted post-permit issuance); *In re Peabody W. Coal Co.*, 12 E.A.D. 22, 40 n.42 (EAB 2005) (explaining that documents received by the permit issuer after permit

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[39] The Lee e-mail was also in existence and, in fact, in BAAQMD's possession prior to the issuance of the permit. Thus, there is no question that the document predates the decision and that the permit issuer was aware of the document.

[40] The Board has spent significant effort analyzing this procedural issue in order to ensure that the administrative record is complete. The Board notes, however, that the presence or absence of this e-mail in the record does not impact the disposition of the College District's claim.

[41] According to BAAQMD's affidavits, the College District's original submission only included two single-page data sheets from the Caithness permit application, not the four pages the College District intended to submit. Crockett Decl. ¶ 10; BAAQMD Sur-Reply, Weyman Decl. ¶ 3. It appears that the College District may have inadvertently submitted one side of a two-sided document or the first and last pages of a four-page document. The College District disputes this. *See* College Dist. Reply at 18. In the end, as discussed below, as a substantive matter, it does not matter whether the pages were submitted as they, and the calculations upon which they are based, are considered on appeal.

issuance, even if they were listed in the certified index, could not be considered part of the administrative record); *In re Gen. Motors Corp.*, 5 E.A.D. 400, 405 (EAB 1994) (declining to consider data provided by the permittee after issuance of the final permit). To allow supplementation of the administrative record with documents that were inadvertently not included in comment submissions – and that the permit issuer did not actually considered – would circumvent the administrative record process. *See Gen. Motors*, 5 E.A.D. at 405 (allowing consideration of post-permit issuance data would "invite unlimited attempts by permittees to reopen and supplement the administrative record after the period for submission of comments has expired"); *see also Pollution Control Indus.*, 4 E.A.D. at 166 (noting that, in a contested case concerning what issues were properly raised and preserved, Board looks only to written comments petitioner actually filed on draft permit). The important consideration is what the commenter actually submitted, not what the commenter intended to submit. Accordingly, to the extent the College District seeks to supplement the administrative record for the Final Permit that had been before BAAQMD at the time the Final Permit was issued with the two pages from the Caithness application, the Board denies that request.

The Board presumes, however, that what the College District may actually intend is to have these two pages considered in support of the arguments in its petition. As discussed below, the Board may consider these two pages in support of the petition and will do so even though the documents were not part of the administrative record below.

As the Board has explained in previous cases, "[p]art 124 does not specify if and when the Board, in the course of its review of final permit decision, may consider materials not included in the administrative record at the time of permit issuance." *Dominion II*, 13 E.A.D. at 418. Nevertheless, on occasion, the Board has "considered * * * newly submitted materials in the course of evaluating the merits of a petition," typically in the situation where a petitioner submits documents in response to new materials the permit issuer added to the record in response to comments. *Id.* Here, the College District desires, at least in part, that the Board consider the evidence to counter and clarify the information BAAQMD used in its response to comments. While the situation here is not identical to that described in *Dominion II*, the Board believes, under the facts and circumstances of this case, that it is appropriate to consider these two pages as the College District's proffer of evidence in support of its assertions that BAAQMD's analysis was erroneous as well as to explain the significance of the two pages of data BAAQMD did consider.

(ii) *College District's Substantive Claim*

Turning back to the College District's substantive challenge to BAAQMD's cost-effectiveness analysis, it is important to note that the College District's claim that BAAQMD used incorrect data for the cost-effectiveness calculations involves

technical matters. Thus, as already explained, *see supra* Part III, the Board accords substantial deference to BAAQMD on issues of this nature. The questions the Board therefore must consider here are: does the record demonstrate that BAAQMD duly considered the issues raised in the comments on this point, and is the approach BAAQMD ultimately adopted rational in light of all the information in the record?

In its comments on the draft permit, the College District questioned the cost-effectiveness analysis for the auxiliary boiler that BAAQMD had included in the Additional Statement of Basis. *See* College Dist. Sept. 16, 2009 Comments at 3. The College District submitted its own calculations, based on Siemen Westinghouse vendor data that had been submitted as part of the Caithness Energy Center application. *Id.* Using BAAQMD's assumptions for startups, the College District calculated that the auxiliary boiler would reduce CO emissions by 89.9 tons, which the College District claimed was eight times the value BAAQMD used in its analysis. *Id.* at 4. The College District also calculated that the cost-effectiveness of the boiler would similarly drop eight-fold to $11,515 per ton. *Id.* The College District claimed that at this lower cost level, an auxiliary boiler should be required as BACT. *Id.* Importantly, the College District did *not* question the annualized cost calculation BAAQMD had used, and any attempt to do so now is untimely.[42] *See id.* at 3-4. In fact, the College District used BAAQMD's $1,029,521 annualized cost figure in its own calculations. *See id.* at 4.

BAAQMD specifically responded to the College District's comments in its Responses to Public Comments. *See* RTC at 114-15. BAAQMD indicated that it had reviewed the submitted vendor data, but that it disagreed with the commenters' figures. *Id.* at 115. According to BAAQMD, using the estimates commenters had submitted, "the annual emissions reductions come to 48.7 tons of CO, not the 89.9 tons calculated by the commenters."[43] *Id.* Thus, according to

[42] The Board discusses this issue in the text further below.

[43] This discrepancy was most likely due to two factors. First, BAAQMD was relying on the two pages of vendor data that it had received, which contained emissions data based on an auxiliary boiler using fuel oil, whereas the College District had used data from a third page, which contained emissions based on an auxiliary boiler using natural gas. In addition, it appears that, for its baseline emissions values, the College District used the Caithness permit limit numbers from table 5 of BAAQMD's Additional Statement of Basis rather than the Siemen's emissions data. *Compare* College Dist. Sept. 16, 2009 Comments at 3 *with* ASOB at 65. These differences led to BAAQMD's confusion over the College District's calculations. *See* RTC at 115; BAAQMD Resp. to College Dist. at 35-36. Although BAAQMD, in the 2009 Lee e-mail, requested additional information on the College District's cost-effectiveness calculation, *see* College Dist. Mot., Ex. 1, BAAQMD did not explicitly explain that the College District's calculations were inconsistent with the data sheets it submitted. Thus, in response to this e-mail, the College District reiterated its calculations, and it was not until the parties briefed these issues before the Board that it became clear that the difference in calculations was due to

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BAAQMD, the "amount of emission reductions would lead to a cost-effectiveness calculation of $21,140 per ton of CO reduced, not the $11,515 figure cited in the comments." *Id.*

Most significant, particularly in light of the disagreement as to which figure to use, is BAAQMD's determination that "*[b]ut even taking the numbers presented in these comments at face value*, an auxiliary boiler would not be considered sufficiently cost-effective to require as BACT. Even [the College District's estimate of] $11,515 is well above the costs of achieving a ton of CO reductions that [BAAQMD] found to be justified in its cost-effectiveness analysis." *Id.* (emphasis added).

The record clearly supports BAAQMD's conclusion in this regard. In its response to comments document in its BACT analysis for CO, BAAQMD had considered whether a control option that cost $4,500 per ton was cost-effective. RTC at 70. BAAQMD had explained that "a review of other districts in California found none that consider additional CO controls appropriate as BACT where the total (average) cost-effectiveness will be greater than $400 per ton, or where the incremental cost-effectiveness will be over $1,150 per ton." *Id.* BAAQMD also noted that it had reviewed other permitting agency's approaches as reported in EPA's RACT/BACT/LAER Clearinghouse and had not found "any permits that had imposed CO controls at a cost-per-ton in the range that would be required here." *Id.* (citing limits that had been imposed at various facilities based on average cost-effectiveness calculations of $1,161, $1,750, and $2,736 per ton). The College District did not challenge BAAQMD's conclusions on this point in its petition.

Thus, according to BAAQMD's response to comments, an auxiliary boiler would not be cost-effective using *either* the College District's cost estimate of $11,515 per ton, which was based on the Caithness data, or its own recalculation of the Caithness data at $21,140 per ton. This conclusion essentially renders the debate over which Caithness data BAAQMD should have used in its cost-effectiveness analysis – the data the College District intended to submit and that BAAQMD avers was not submitted (i.e., the natural gas data) or the data that BAAQMD avers was actually submitted (i.e., the fuel oil data) – irrelevant be-

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the missing vendor data page. However, as explained in note 44 below, had BAAQMD received the page of data earlier, it would not have changed BAAQMD's conclusion.

The Board notes that it is unclear from the record when BAAQMD realized that one of the submitted data sheets referred to a fuel oil turbine with an auxiliary boiler, unlike the other sheet for the same facility which referred to a natural gas turbine. The Board would generally expect a permit issuer, on its own initiative, to obtain an entire data set for a facility that appears to have applicable data once it becomes aware of such facility.

cause BAAQMD ultimately addressed both.[44] Notably, in its petition, the College District does not challenge BAAQMD's conclusion that the College District's $11,515 value is not cost-effective; it only challenges BAAQMD's alleged failure to consider the applicable Caithness data, an argument that has been demonstrated to be factually incorrect.

With respect to the College District's challenge to BAAQMD's annualized cost estimate of $1,029,521, the Board finds that petitioner did not preserve this issue for review. As already noted, the College District failed to raise this issue in its comments on the draft permit. As explained above in Part III, a petitioner must raise all reasonably ascertainable arguments during the comment period to preserve such arguments for review.[45]

In sum, based on the administrative record, the Board concludes that BAAQMD did duly consider the issues the College District raised, despite the College District's suggestions to the contrary. Upon review of BAAQMD's analysis, the Board also concludes that the cost-effectiveness approach BAAQMD ultimately adopted is rational in light of all the information in the record. The Board therefore denies review based on this ground.

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[44] In its response to the petition, BAAQMD again recalculated the cost-effectiveness of an auxiliary boiler, this time using the data the College District had intended to submit (i.e., the emissions data based on a natural gas turbine with an auxiliary boiler). BAAQMD Resp. to College Dist. at 38-39. Based on its latest calculations, which appear correct, the total number of emissions reduced would be 70.54 tons per year, resulting in a cost-effectiveness of the boiler of $14,594 per ton of CO reduced. *Id.* at 38-39 & n.24. Because this value is higher than the $11,515 value BAAQMD already determined in its responses to comments to be cost-ineffective, this higher cost would necessarily also be considered cost-ineffective.

[45] The College District argues in its reply brief that it was not until BAAQMD issued its Responses to Public Comments that it became aware of the basis for cost information. College Dist. Reply at 21-22. BAAQMD explained in its Additional Statement of Basis as well as its Responses to Public Comments that it was relying on data from the applicant's Mankato, Minnesota, facility for its auxiliary boiler calculations. ASOB at 69. BAAQMD also provided the cost information in its Additional Statement of Basis, stating that the "cost estimate showed that the annualized cost of $1,029,521 for the installation and operation of the auxiliary boiler." *Id.* at 70. In connection with this statement, BAAQMD dropped a footnote which cited a spreadsheet entitled "Aux Boiler-NOx-2.xls." *Id.* at 70 n.129. Even if the discussion in the text had been unclear, the College District could have asked to review the underlying data which BAAQMD had used and referenced in the Additional Statement of Basis. Furthermore, the portion of the discussion at issue in the Additional Statement of Basis is nearly identical to that same discussion in the Responses to Public Comments. *Compare id.* at 69-70 & n.129 *with* RTC at 114 & n.237. The Board is therefore unpersuaded by the College District's rationale for failing to raise the issue in a timely manner in its petition.

b. *Has CAP or Mr. Sarvey Shown That BAAQMD's Selection of the Final Permit's Startup/Shutdown Emission Limits Failed to Comply with BACT Requirements?*

Both CAP and Mr. Sarvey assert that BAAQMD erred in establishing the Final Permit's startup and shutdown emission limits. *See* CAP Pet. at 23-28; Sarvey Pet. at 6-13. Both petitioners challenge BAAQMD's BACT approach generally, stating that BAAQMD's analysis was performed in a "backward fashion" and is "backward looking." Sarvey Pet. at 8 ("backward fashion"); CAP Pet. at 23 ("backward looking"). Both petitioners also claim that BAAQMD failed to show why "already achieved" NO_x limits for cold and hot starts are not BACT for the Facility. CAP Pet. at 24-25; *accord* Sarvey Pet. at 12 (contending that BAAQMD erred in failing to adopt permit limits "that have been demonstrated in practice"). They also both contend that BAAQMD compounded this error by then adding on a large and inappropriate "compliance margin." CAP Pet. at 23; Sarvey Pet. at 8. Both petitioners additionally raise specific concerns about BAAQMD's rejection of Op-Flex as a control option.[46] CAP Pet. at 11; *see also* Sarvey Pet. at 13. Finally, CAP also claims that BAAQMD erroneously limited itself to considering "upgrades to already-purchased turbines" and improperly considered cost in rejecting newer technologies. CAP Pet. at 11, 23-24.

BAAQMD asserts that its BACT analysis for startups at the Facility was "clear, well-reasoned, and well-documented." BAAQMD Resp. to CAP at 9. BAAQMD further argues that it did not abuse its discretion by basing the startup emissions limits on data from similar facilities and incorporating a reasonable safety margin to ensure that the limits will be achievable. *Id.* at 54-74; BAAQMD

[46] Mr. Sarvey also observes that the Flex-Plant 30 technology, which BAAQMD had considered but had determined to be "unavailable" and therefore did not consider further in its BACT analysis, *see* RTC at 106-07, was, in fact, recently purchased in 2009. Sarvey Pet. at 8 (citing an August 10, 2009 press release, which mentions the recent sale by Siemens of a Flex-PlantTM 30 power island). While it is unclear whether Mr. Sarvey is, in fact, challenging BAAQMD's unavailability determination, because he is proceeding *pro se*, and because BAAQMD assumes that he is challenging BAAQMD's determination on this point, BAAQMD Resp. to Sarvey 21 n.4, the Board considers his statement to be a challenge to that determination. His challenge, however, must fail on procedural grounds. As BAAQMD correctly points out, this information was reasonably ascertainable during the public comment period. The press release he cites was dated August 10, 2009, and the comment period ended over a month later, on September 16, 2009. Mr. Sarvey has not demonstrated that he raised this issue in his comments on the permit, and he bears the burden of demonstrating that this issue was raised, and with sufficient specificity, during the public comment period. 40 C.F.R. § 124.19(a); *City of Pittsfield*, at 11; *ConocoPhilips*, 13 E.A.D. at 801; *see also In re Encogen Cogeneration Facility*, 8 E.A.D. 244, 249 (EAB 1999) ("It is not incumbent upon the Board to scour the record to determine whether an issue was properly raised below: this burden rests with Petitioners."). This issue is therefore procedurally barred for the reasons described above in Parts III and VI.B.1.a.ii.*b*. The Board notes that the record indicates BAAQMD did investigate this issue when it was preparing its final permit decision, and the information it had received did indicate that such technology was still "unavailable." *See* RTC at 106.

Resp. to Sarvey at 9; *see also* RCEC Resp. to Sarvey at 17, 24. BAAQMD asserts that the data in the record "show that startup emissions are highly variable," and thus it set the limits at "levels that would enable them to be consistently achievable over the life of the facility." BAAQMD Resp. to CAP at 54.

As noted previously, a petitioner challenging an issue that is fundamentally technical in nature bears a particularly heavy burden because the Board generally defers to the permit issuer on questions of technical judgment. *See supra* Part III. The Board has also stated, however, that BACT determinations, which are generally technical in nature, are one of the most critical elements in the PSD permitting process and thus "should be well documented in the record, and any decision to eliminate a control option should be adequately explained and justified." *In re Indeck-Elwood LLC*, 13 E.A.D. 126, 134 (EAB 2006) (citing *Knauf I*, 8 E.A.D. at 131); *accord In re Newmont Nev. Energy Inv., LLC*, 12 E.A.D. 429, 442 (EAB 2005). Consequently, in evaluating a BACT determination on appeal, the Board looks at whether the determination "reflects 'considered judgment' on the part of the permitting authority," as documented in the record.[47] *Knauf I*, 8 E.A.D. at 132; *accord In re Masonite Corp.*, 5 E.A.D. 551, 566-69 (EAB 1994) (analyses incomplete). Keeping this standard in mind, the Board looks first at BAAQMD's BACT analysis for startup and shutdown emissions for the gas turbines before turning to Petitioners' arguments concerning that analysis.

i. *BAAQMD's BACT Analysis for the Final Permit's Startup/Shutdown Emission Limits and Its Responses to Comments on the Analysis*

As noted above, *see supra* Part VI.A, in determining BACT startup and shutdown emission limits, BAAQMD utilized the "top-down method" articulated in EPA's NSR Manual. *See* SOB at 38-48; ASOB at 58-74; RTC at 92-125. In step 1 of its original BACT review[48] for gas turbine startups, shutdowns, and tuning, BAAQMD identified three potential strategies for reducing startup and shutdown emissions: once-through steam boiler technology;[49] low-load "turn-down"

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[47] The Board has remanded permits where the permit issuer's BACT analyses were incomplete or the rationale was unclear. *E.g., Knauf I,* 8 E.A.D. at 134, 140 (BACT rationale unclear); *Masonite*, 5 E.A.D. at 566-69 (BACT analyses incomplete); *see also NE Hub*, 7 E.A.D. at 568 (noting that the Board will not hesitate to order a remand on a technical issue "when a Region's decision * * * is illogical or inadequately supported by the record").

[48] BAAQMD initially presented its BACT review in its Statement of Basis.

[49] According to BAAQMD, turbine manufacturers have recently "been utilizing 'once-through' boiler technology that does not use the conventional steam drum to contain the steam. These once-through designs (and modified drum designs with the operational characteristics of the once-through boiler) use external steam separators and surge bottles, so they can be brought up to temperature more quickly." SOB at 39. Reducing the duration of the startup results in reduced startup emissions. *Id.*

technology;[50] and work practices to minimize emissions. SOB at 39-40.

In step 2 of its analysis, BAAQMD eliminated the technically infeasible options. In considering once-through steam boiler technology, BAAQMD concluded that only one type of that technology was technically feasible and should be carried forward into step 3 of the analysis: the Siemens "Flex-Plant 10."[51] *Id.* at 40. BAAQMD noted that a newer fast-start technology, "Flex-Plant 30," was still under development and had not yet been proposed for any power plant projects; BAAQMD thus concluded that Flex-Plant 30 was not technically feasible. *Id.*

With respect to "turn-down technology," BAAQMD explained that manufacturers were just beginning to apply this type of technology to the reduction of startup emissions. *Id.* at 41. BAAQMD first noted that Siemens was developing such a technology, but it had not yet been validated and was not commercially available. *Id.* BAAQMD also explained that GE had a turn-down technology called "Op-Flex"[52] but had only recently developed it for startup emissions and would not guarantee any emissions reductions.[53] *Id.* BAAQMD investigated whether any facility had tried to implement it for startup emissions. *Id.* BAAQMD discovered that Palomar Energy Center had taken drastic steps to reduce its emissions, including both operational changes[54] and the implementation of Op-Flex. *Id.* Initial evidence from Palomar indicated that emissions there had been reduced, but BAAQMD found that it was impossible to "determine based on this limited data what reductions, if any, are attributable to Op-Flex and what reductions are attributable to the operational changes the facility was able to make for its specific turbines."[55] *Id.* at 41-42. BAAQMD also explained that, because the facility had

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[50] "Turn-down" technology "has been developed to enable turbines to operate more cleanly at lower loads for energy conservation purposes. This technology enables a gas turbine to operate in a standby mode (low capacity) that facilitates a quick ramp-up of capacity to meet electrical demand." SOB at 40.

[51] BAAQMD noted, however, that this particular "fast-start" technology was inherently less efficient for a facility like the one proposed. SOB at 40. BAAQMD explained that this technology was optimized for peaking plants, which the Facility was not intended to be. *Id.* at 40.

[52] Op-Flex is a software package that optimizes the combustion process while maintaining low emissions. SOB at 40, 41 n.37.

[53] The manufacturer explained it would not provide a guarantee because "startup emissions, by nature, are highly variable and dependent on specific plant equipment and configuration." SOB at 41 n.37.

[54] These primarily involved adjusting the ammonia injection procedures. SOB at 41.

[55] In its initial discussion of this issue, BAAQMD did not compare Palomar's actual emissions to the emission limits proposed at the Facility. *See* SOB at 41-42. Later, in its Additional Statement of Basis, BAAQMD noted that the Facility's startup emissions would be the same without Op-Flex as Palomar's were with Op-Flex and early ammonia injection. See discussion in the text below.

been operating for a relatively limited period of time with these enhancements, it was difficult to determine from the limited data available what improvements could reliably be achieved throughout the life of the facility. *Id.* at 42. BAAQMD concluded that "the Palomar data does [sic] not sufficiently demonstrate that there are specific, achievable emissions reductions to be gained simply from using the Op-Flex technology itself." *Id.* BAAQMD further explained that EPA, in a recent permitting decision for Colusa Generating Station, had recently determined that the technology was not sufficiently developed to be required as BACT. *Id.* at 42 & n.41. Consequently, for all these reasons, BAAQMD concluded that turn-down technology, including Op-Flex, was not yet technically feasible for control of startup emissions. *Id.* at 40-41.

In step 3, BAAQMD ranked the remaining options. BAAQMD determined that best work practices could "keep startup times below 3 hours for warm and hot startups and below 6 hours for cold startups." *Id.* at 42. BAAQMD also found that once-through boiler technology would shorten startup and shutdown times and thus reduce emissions. BAAQMD ranked once-through boiler technology first and work practices second. *Id.*

Next, in step 4, BAAQMD evaluated the ancillary economic, environmental, and energy impacts of the remaining options. BAAQMD found that using Flex-Plant 10 would lead to a loss in energy efficiency, which would mean that the plant would "need to burn more fuel to produce the same amount of power output, which [would] generate greater emissions." *Id.* at 43. BAAQMD also found that, not only would emissions of several pollutants substantially increase with Flex-Plant 10, but the loss in energy efficiency would also be an adverse energy-related impact as well as an adverse economic impact. *Id.* For these reasons, it eliminated it as BACT and selected, in step 5, best work practices as BACT for startups, shutdowns, and tuning.[56] *Id.* at 44.

In step 5, using best work practices as the selected BACT control option, BAAQMD next determined the BACT emissions limit for startups and shutdowns for the proposed permit. To do so, BAAQMD looked to the permit limits from "the most recent similar facility" BAAQMD had permitted, Metcalf Energy Center, as a starting point. *Id.* at 44. That facility's permit limited "cold startups to 6 hours in duration, 480 pounds of NO_2 emissions, and 5028 pounds of CO emissions; warm and hot startups to 3 hours in duration, 125 pounds of NO_2 emissions,

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[56] As this summary of BAAQMD's top-down analysis demonstrates, BAAQMD performed its BACT analysis according to the recommended approach articulated in the NSR Manual. *See NSR Manual* at B.1 -.75. Thus, the Board concludes that the record contradicts Mr. Sarvey's and CAP's general, unsupported, and unparticularized allegations that BAAQMD performed its BACT analysis "backwards."

and 2514 of CO emissions; and shutdowns to 30 minutes in duration, 40 pounds of NO_2 emissions, and 90 pounds of CO emissions." *Id.* at 44.

BAAQMD then "examined data and permit conditions from other facilities to determine if lower limits could be reasonably achieved" by the Facility. *Id.* In particular, BAAQMD looked at actual emissions data from performance tests from Metcalf Energy Center, Delta Energy Center, Sutter Energy Center, and Los Medanos Energy Center. *Id.* at 44-46. BAAQMD found that, for cold startups, "[t]he data showed a very large amount of variability." *Id.* at 44. At the Sutter facility, the NO_2 emissions were "close to or even above the proposed 480 pound limit." *Id.* at 45 (chart showing emissions as high as 499 pounds, with other events at 488 and 480 pounds). BAAQMD also found "several of the startups [to] have taken all or nearly all of the full 6 hours proposed" for the Facility. *Id.* At the Delta facility, the longest startup was 4.5 hours, and the NO_2 emissions were lower than at the Sutter facility, but it had greatly increased CO emissions, above the levels proposed for the Facility. *Id.* BAAQMD noted that there is "normally a trade-off between decreased NO_x emissions and increased CO emissions." *Id.* at 46. Data for the Metcalf facility showed "emissions below both the proposed NO_2 limit and the proposed CO limit, although not with a great safety margin." *Id.* at 45 (showing the highest NO_x measurement at 335 pounds, the highest CO emissions at 4,792 pounds). The data from the Los Medanos facility showed emissions "close to the proposed 480 pound NO_2 limit on a number of occasions (with even one slight exceedance), although CO emissions are much lower." *Id.*

Based on these data, BAAQMD concluded as to cold startups that the data it evaluated "suggest that it would not be appropriate to reduce the emissions limits for the proposed Russell City Energy Center below the limits adopted for the Metcalf facility as a mandatory BACT limit." *Id.* at 46. BAAQMD explained:

> Although some turbines on some occasions have achieved lower emissions rates, the BACT limit must be achievable at all times throughout the facility's operational life. A reasonable safety margin must be included so that the facility will be able to comply with its limits during every startup, even if emissions for specific startups or as an average for startups as a whole may be less. The data from other similar facilities shows that if [BAAQMD] were to impose limits substantially below the Metcalf limits, the proposed facility could face difficulty in complying with them. [BAAQMD] is therefore proposing to require the same cold startup BACT emission limits as the Metcalf Energy Center: 6 hours total duration, 480 pounds of NO_2, and 5028 pounds of CO.

Id.

For hot and warm startups, BAAQMD came to a different conclusion. It concluded that the proposed Facility would be able to achieve limits below those imposed on the Metcalf facility because the applicant had "refined its hot and warm startup operations based on its experience with other facilities, and has committed to keeping hot and warm startup emissions below 125 pounds of NO_2." *Id.* BAAQMD noted that "[t]his emissions level represents a reduction of nearly half from the corresponding Metcalf startup limit, which is 240 pounds." *Id.*

BAAQMD received a number of comments questioning its selection of a control technology for reducing startup emissions as well as its selection of the emission limits. *See* ASOB at 68. Regarding the selection of the control technology, commenters claimed that Flex-Plant 30 was, in fact, available and being used at two facilities, Lake Side Power Plant and Caithness Long Island Energy Center. *Id.* BAAQMD investigated this claim and found that commenters were incorrect.[57] *Id.* at 68-69. Commenters also suggested BAAQMD require use of an auxiliary boiler. *Id.* at 69. BAAQMD consequently considered use of an auxiliary boiler but determined that it would not be cost-effective. *Id.* at 69-70; *see also* Part VI.B.1.a above. Commenters also suggested BAAQMD should consider the use of Flex-Plant 10 technology. ASOB at 70. BAAQMD again explained, and in more detail, why it believed that Flex-Plant 10 was not appropriate for the type of plant the proposed Facility was designed to be. *Id.*

A number of commenters also asserted that BAAQMD should require use of Op-Flex as BACT and/or should require the same emissions reductions as would be achieved with Op-Flex. *Id.* at 71. Among other things, they asserted that, based on the fact that the Palomar facility had installed Op-Flex, it should automatically be considered technically feasible. In response to the comments on the use of Op-Flex, BAAQMD first noted that "the Federal PSD BACT requirement is ultimately an emissions limit, not a control technology *per se* (although, obviously, it must be based on the performance of the best available technology taking into account all relevant factors)." *Id.* BAAQMD then stated that, "[b]ased on the data that [BAAQMD] has reviewed from the Palomar facility that uses Op-Flex and early ammonia injection, [BAAQMD] has concluded that the Russell City facility will have startup emissions that are the same as or lower than startup emissions achieved at Palomar." *Id.* While BAAQMD therefore "agreed" with the commenters who had stated "that it should require the same level of startup emissions reductions achieved at facilities that have installed Op-Flex," BAAQMD disagreed with commenters who claimed that it should explicitly require the use of Op-Flex (i.e., a specific technology) at the facility. *Id.* BAAQMD further stated

[57] Not only did BAAQMD look into the two facilities at issue, BAAQMD also specifically asked the manufacturer of the equipment about the availability of the technology, and Siemens informed BAAQMD that "no Flex-Plant 30 has been constructed or proposed at this time for a full-scale power plant project." RTC at 106 (citing a March 16, 2009 e-mail).

that none of the commenters had provided any reason for it to reconsider its original rationale that Op-Flex was not feasible, which (as summarized above) was "based upon the lack of a manufacturer's guarantee; the limited nature of the data from the only facility using Op-Flex, which is not sufficient to allow a determination that Op-Flex really is achieving any significant reductions in emissions beyond what is already achievable using other approaches; and the fact that no other permitting agencies have ever found Op-Flex to be an achievable technology for reducing startup emissions." *Id.* BAAQMD also stated that it still believed, as it had determined in its initial BACT analysis, "that Op-Flex is not yet an available technology, and is appropriately eliminated in Step 2 of the Top-Down BACT analysis." *Id.* at 72. BAAQMD added that, "based on the additional analysis referred to above, even if the Air District were to address Op-Flex as an available technology in Step 3 of the Top-Down analysis, there is no indication based on the available data that it should be ranked higher than the alternative the District ultimately selected, best work practices." *Id.*

BAAQMD also responded to commenters who claimed that the CEC had found that the applicant had rejected Op-Flex because of cost, and who had argued that cost should not affect BAAQMD's BACT assessment of Op-Flex technology. *Id.* at 72 n.131. In response, BAAQMD averred that cost was not a part of *its* analysis of Op-Flex. *Id.* at 72 n.132. BAAQMD also noted that "[t]he commenter has not identified any element of [BAAQMD's] BACT analysis regarding Op-Flex that is based on cost, and [BAAQMD] has not found any either." *Id.*

BAAQMD also received comments arguing that the permit emission limits should be more stringent. Commenters pointed to several other facilities from which BAAQMD should consider performance data: the Lake Side Power Plant in Utah, the Caithness Long Island Energy Center in New York, and the Palomar Energy Center in California.[58] *Id.* at 59. BAQQMD, after reviewing these additional facility emissions data, agreed with commenters that, in certain respects, "the [F]acility should be able to achieve lower BACT startup emissions limits" than BAAQMD had initially proposed. *Id.*

BAAQMD concluded that, for NO_2 emissions, "the BACT limit for hot startups should be lowered from 125 lbs. to 95 lbs. based on further review of the emissions performance achieved by other facilities, including the Palomar Energy Center." *Id.* The Palomar data had showed "an average NO_x emissions of 30.3 pounds and a maximum startup event of 75 pounds," which was slightly lower than the "highest high" at the Delta facility, which was 82.2 pound. *Id.* at 62. BAAQMD proposed lowering the limit "to bring the permit into line with the high-emissions startups that have been seen at other similar facilities, while

[58] BAAQMD noted that it had reviewed data from the Palomar facility, but that commenters had submitted additional data. ASOB at 59.

still providing an appropriate margin of compliance to take into account the fact that startups are by their nature highly variable and the highest startup emissions seen in the data collected to date may not necessarily reflect the highest emissions that would reasonably be expected under all circumstances over the life of the facility." *Id.*

For warm and cold startups, however, BAAQMD stated that the NO_2 emissions limits "it initially proposed are appropriate because the additional information it has reviewed supports these limits as the lowest that can reasonably be achieved over time." *Id.* With respect to cold startups, BAAQMD first reviewed the recent cold startup data from the Palomar facility. *Id.* at 61. BAAQMD noted that, while it now had additional Palomar data, it was "still somewhat of a preliminary picture of what the facility will be able to achieve over the long term given that it represents only a little over a year's worth of operation." *Id.* at 60. BAAQMD found that the average cold startup NO_2 emissions were 182.8 pounds, but the highest was 375 or 437 pounds (depending on whose calculation was considered),[59] which it noted were similar numbers to those from the Delta and Metcalf facilities that it had looked at in its Statement of Basis. *Id.* at 61. BAAQMD concluded that while the maximum startup emissions event of 375 or 437 were lower than the proposed 480 pounds, the compliance margin of 9-22% was not unreasonable for the following reasons:

> First, the data from Palomar includes only five available data points for cold starts, which does not generate a great deal of statistical confidence that the maximum seen in this data set is representative of the maximum that can be expected over the entire life of the facility. Moreover, the wide variability in the data that is available highlights the variability in individual startups, underscoring the need to provide a sufficient compliance margin to allow the facility to be able to comply during all reasonably foreseeable startup scenarios. For both of these reasons, the Air District has concluded that a cold startup limit of 480 pounds of NO_2 is a reasonable BACT limit that is consistent with the startup emissions performance seen at the Palomar facility.

Id.

[59] BAAQMD, using the San Diego Air Pollution Control District's raw data from the Palomar facility, recalculated the NO_2 emissions. ASOB at 60. For some reason not entirely clear from the record, BAAQMD's calculations differed from San Diego Air Pollution Control District's calculations. BAAQMD thereafter provided both Air Districts' calculations.

As to CO emissions, BAAQMD concluded that the limits should be "reduced from 5028 [pounds] to 2514 [pounds] for cold startups and from 2514 pounds to 891 pounds for hot startups" based on information commenters submitted on the Caithness facility. *Id.* at 59.

In addition to looking at operational data, BAAQMD also looked at the permit limits of the facilities commenters cited. BAAQMD noted that the startup limits in the Palomar facility permit were "far higher" than any of the limits BAAQMD had proposed for the Facility, *id.* at 60 n.111, that the Lake Side facility permit had no limits on startup emissions, *id.* at 63, and that the NO_2 limits in the Caithness permit[60] were higher than the limits BAAQMD proposed for the Facility. In addition, in considering a recent permit commenters argued demonstrated that a shorter startup timeframe could be achievable using best work practices, *id.* at 65-66, BAAQMD found that, although the startup timeframe in the Colusa permit was indeed shorter than the one proposed for the Facility, the Colusa permit's emissions limits were higher. *Id.* at 103. In particular, the permit allowed up to 779.1 pounds of NO_2 per cold startup and 259.9 pounds of NO_2 per hot startup. *Id.* BAAQMD concluded that the permit limits in the Colusa permit did not change its determination that the Facility's permit limits met the BACT requirements. *Id.* at 103-04.

In its Responses to Public Comments, BAAQMD addressed, at length, the comments it had received during both the first and the second comment periods[61] on its BACT analysis for the startup/shutdown emissions. *See* RTC at 92-125. Where there were no additional comments, BAAQMD typically repeated its earlier comments from the Additional Statement of Basis. *See* RTC at 93 (noting that responses to comments from both comment periods were included). Of note to this matter, in the Responses to Public Comments, BAAQMD responded to additional comments regarding its selection of emission limits for cold and hot startups.

In particular, commenters claimed that BAAQMD should base the permit limits on average emissions performance at other facilities rather than at the high end of the range. *Id.* at 100. BAAQMD disagreed, stating that "[t]he BACT limits will be enforceable, not-to-exceed permit limits that the facility will be required to comply with at all times and under all foreseeable operating conditions, not just during average startups. The limits therefore need to allow for a sufficient compliance margin to accommodate all reasonably foreseeable startups, not just the average case." *Id.* BAAQMD also reiterated that "the 480-pound cold-startup limit was

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[60] More specifically, the NO_2 permit limits applicable when the Caithness facility runs without the auxiliary boiler.

[61] BAAQMD provided a second public comment period when it issued its Additional Statement of Basis. *See supra* Part V.

based on early data from the Palomar facility showing emissions could be as much as 375-437 pounds for a cold startup, with a reasonable additional compliance margin to allow for the fact that startups are highly variable in nature and that the 375-437 pound startup emissions seen in the Palomar data may not necessarily be the highest startups the facility will experience over its lifetime." *Id.* For hot startups, BAAQMD reiterated that the limit "was based on the Palomar data showing hot startup emissions of up to 75 pounds (excluding the 145-pound data point as an apparent outlier) with a reasonable compliance margin." *Id.*

Having reviewed BAAQMD's BACT analysis, including its responses to comments on the analysis, the Board now turns to the specific issues raised on appeal. These issues are: (1) Should BAAQMD have considered, in its BACT analysis, recent information concerning the proposed use of Op-Flex as a Supplemental Environmental Mitigation Project at the Gateway facility, as Mr. Sarvey claims; (2) Has CAP or Mr. Sarvey demonstrated that BAAQMD clearly erred in its selection of 480 and 95 pounds for NO_2 permit limits for cold and hot startup emissions; (3) Has CAP shown that BAAQMD clearly erred in setting the emission limits by limiting its consideration to upgrades of existing equipment and in allegedly considering the cost of disposal of the old equipment. The Board discusses these issues in turn.

ii. *Should BAAQMD Have Considered, in its BACT Analysis, the Recent Information Concerning the Proposed Use of Op-Flex as a Supplemental Environmental Mitigation Project?*

In his petition, Mr. Sarvey asserts that "EPA has just required the Op-Flex technology at the Gateway Project" as a Supplemental Environmental Mitigation Project pursuant to a consent decree, "further eroding BAAQMD's arguments about [its] commercial availability and performance." Sarvey Pet. at 13; *see also* Sarvey Reply at 9. Mr. Sarvey asserts that BAAQMD is "fully aware" that Op-Flex was required at Gateway because BAAQMD has enforcement responsibility over Gateway's PSD permit. Sarvey Pet. at 13.

In his reply brief, Mr. Sarvey includes a section entitled "[BAAQMD's] elimination of Op-Flex technology at step 2 of the BACT analysis was clearly erroneous." Sarvey Reply at 8-9; *see also* Oral Arg. Tr. at 47 (raising similar argument). In it, he presents several reasons why he believes BAAQMD erred in rejecting Op-Flex as a feasible control option in step 2 and challenges statements BAAQMD made in its Statement of Basis. This claim is much broader than the

issue Mr. Sarvey raises in his petition,[62] and it includes a host of new arguments and assertions. *See* RCEC Resp. to Sarvey Pet. at 10 (arguing this same point). As the Board has stated in prior cases, "'new issues raised at the reply stage of the[] proceedings are equivalent to late filed appeals and must be denied on the basis of timeliness.'" *Dominion I*, 12 E.A.D. at 595 (quoting *Knauf I*, 8 E.A.D. 121, 126 n.9 (EAB 1999)); *see also In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 219-20 n.62 (EAB 2000) (declining to consider Petitioners' rebuttal argument which could have been raised earlier in the petition); *In re City of Ames*, 6 E.A.D. 374, 388 n.22 (EAB 1996) (denying petitioner's request to file a supplementary brief where the supplementary brief was filed after the appeal period under section 124.91(a) had passed and raised a related but "distinct" new issue). Moreover, the Board explicitly instructed parties that it would not consider new issues raised in their reply briefs, *see* Order of May 19, 2010 at 7; Order of May 6, 2010 at 1, and also reiterated this point at the Oral Argument, *see* Oral Arg. Tr. at 9. There is no reason why Mr. Sarvey could not have challenged BAAQMD's BACT step 2 analysis in his timely-filed petition. Accordingly, the Board finds this issue, raised for the first time in his reply brief, to be untimely.[63]

Turning to Mr. Sarvey's sole timely challenge, the Board concludes that BAAQMD did not clearly err in failing to consider Gateway's anticipated use of

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[62] In his initial reference to Op-Flex in his petition, while Mr. Sarvey mentions that BAAQMD concluded that Op-Flex was not feasible, he does not challenge that determination. *See* Sarvey Pet. at 8. He later mentions that he provided BAAQMD with additional data from Palomar, a facility using Op-Flex and other technologies to decrease startup emissions, and notes that BAAQMD, upon reviewing the data he had submitted, lowered the hot startup emission limits. *Id.* at 10-11. While he questions BAAQMD's failure to set the limits even lower based on the data he submitted, he does not challenge BAAQMD's step 2 determination. *Id.* at 11. He also states that comments from the CEC, which mention both Op-Flex and ammonia injection, "agree[] that a more stringent BACT limit on start up and shut down emissions is appropriate." *Id.* at 13 & n.16. Again, this is not a challenge to BAAQMD's BACT step 2 analysis. The Board reads it as a part of his lengthy argument challenging the cold startup and shutdown emissions BAAQMD established. *See id.* at 8-13. The only statement in his petition that can be read as a challenge to the determination that Op-Flex was not technically feasible (as opposed to a challenge to the emission limits) is the one the Board quotes above, that points out that EPA recently required Op-Flex at another facility, *id.*, a narrow and specific issue the Board does address.

[63] The Board further notes that, in his reply brief, Mr. Sarvey specifically challenges the conclusion BAAQMD made in its Statement of Basis, not the subsequent, more in-depth discussion of Op-Flex BAAQMD included in response to comments very similar to those Mr. Sarvey raises on appeal. Moreover, the arguments he raises are very similar to comments he submitted on the draft permit, but he fails to acknowledge or address BAAQMD's responses to comments on those same issues or explain why BAAQMD's explanations were clearly erroneous. As the Board has explained on many occasions, a petitioner must describe each objection it is raising and explain *why* the permit issuer's response to petitioner's comments during the comment period is clearly erroneous or otherwise warrants consideration. *See supra* Part III; *see also* discussion *infra* Part VI.B.3.b. Here, petitioner has failed to meet his burden and thus, had the Board considered this untimely issue, it would have found these particular arguments to be procedurally barred.

Op-Flex in its final permit decision, nor is it appropriate to remand the Final Permit so that BAAQMD can consider this new information.[64] According to RCEC, the consent agreement in which Gateway has agreed to install Op-Flex as a Supplemental Environmental Mitigation Project was proposed and open for public comment, but had not yet been finalized at the time of briefing. RCEC Resp. to Sarvey at 16. Significantly, as RCEC points out, EPA defines "supplemental environmental projects" or "SEPs," such as the one Gateway is proposing to conduct, as "environmentally beneficial projects which a defendant/respondent agrees to undertake in settlement of an enforcement action, but which the defendant/respondent is *not otherwise legally required to perform*."[65] Office of Enforcement and Compliance Assurance, U.S. EPA, *Final Supplemental Environmental Projects Policy* ("*Final SEP Policy*") at 4 (Apr. 10, 1998) (emphasis added). The Agency defines "not otherwise legally required to perform" to mean "the project or activity is not required by any federal, state, or local law or regulation." *Id.* The fact that Op-Flex was considered as a SEP at Gateway, and thus is something Gateway was "not otherwise legally required to perform," clearly demonstrates that Op-Flex was not considered to be BACT for the Gateway facility and does not support Mr. Sarvey's argument that the technology should have been considered BACT at the RCEC Facility. Mr. Sarvey has therefore failed to demonstrate that BAAQMD clearly erred in not considering the Gateway information, and review is accordingly denied on this ground.

iii. *Has CAP or Mr. Sarvey Demonstrated that BAAQMD Clearly Erred in Its Selection of 480 and 95 pounds for NO_2 Permit Limits for Cold and Hot Startup Emissions?*

As the Board summarized at length above, BAAQMD concluded, in step 5 of its BACT analysis, that the appropriate NO_2 emission limits for cold and hot startups were 480 pounds and 95 pounds, respectively. Final Permit at 10; RTC at 94; *see also* discussion of BACT analysis above in Part VI.B.1.b.i. CAP and Mr. Sarvey each seek review of these permit emission limits.[66] CAP Pet. at 24-25;

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[64] Mr. Sarvey's petition can be read as requesting a remand on this basis, though it is not clear if that was what he intended.

[65] A SEP "may include activities the defendant/respondent will become legally obligated to undertake two or more years in the future, if the project will result in the facility coming into compliance earlier than the deadline." *Final SEP Policy* at 4; *see also* Office of Enforcement and Compliance Assurance, U.S. EPA, EPA 325 R01-001, *Beyond Compliance: Supplemental Environmental Projects* at 4 (Jan. 2001) ("SEPs are designed to protect and improve the environment and public health, beyond that achieved by compliance with applicable laws.").

[66] CAP raises concerns with the NO_x limits both for cold startups, *see* CAP Pet. at 24-27, and for hot startups, *see id.* at 28. In his petition, while Mr. Sarvey appears to primarily challenge the NO_x limits for cold startups, *see* Sarvey Pet. at 8-13, he does, at one point, also criticize BAAQMD's selec-
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accord Sarvey Pet. at 8-13. Petitioners raise fairly similar overarching concerns about BAAQMD's general approach. Additionally, CAP raises a more procedurally-based issue and makes some specific assertions about errors in BAAQMD's analysis.

(a) *Petitioners' Assertions*

Petitioners' general challenge to BAAQMD's approach in selecting the NO_2 startup emissions limits is two-fold. First, both claim that BAAQMD clearly erred in its BACT analysis by failing to impose lower permit limits based on certain emissions measurements (sometimes called performance test data) from other facilities,[67] which they refer to as "already achieved" or "demonstrated in practice" limits.[68] *See* CAP Pet. at 24; Sarvey Pet. at 12. More particularly, Mr. Sarvey argues that, for cold startups, BAAQMD should have selected the highest NO_2 emissions measured during a cold startup at either the Delta, Metcalf, or Palomar facilities, which, respectively, would have been 281 pounds, 335 pounds, or 375[69] pounds. Sarvey Pet. at 11. CAP asserts that, because the Final Permit's cold startup limits are higher than "already achieved" limits demonstrated by other similar sources' performance data, BAAQMD "failed to meet its burden" of showing why "already achieved" emission limits are not BACT for the Facility. CAP Pet.

(continued)
tion of a 95-pound hot startup limit, *id.* at 11. Neither petitioner challenges BAAQMD's selection of warm startup emissions limits or cold or hot startup emissions limits for other pollutants, such as CO.

[67] In questioning BAAQMD's selection of the 480 and 95 pound limits in their petitions, CAP and Mr. Sarvey solely refer to performance data from certain sources as the basis for their arguments. Mr. Sarvey, however, in his reply brief, argues that BAAQMD erred in failing to consider a 300-pound cold startup NO_2 emissions limit that had been imposed in the Delta permit. Sarvey Reply at 5-6. He did not raise this issue in his petition; in fact, in his petition he argued that BAAQMD should have selected the Delta maximum emissions performance test measurement of 281 pounds. Sarvey Pet. at 11. For this reason alone, this claim is untimely and thus procedurally barred for the reasons the Board has already explained above in the previous section, Part VI.B.1.b.ii. Further, RCEC contends that Mr. Sarvey did not raise this issue in comments on the draft permit. RCEC Sur-Reply at 27. If true, because this issue would have been reasonably ascertainable, it would not have been properly preserved for review and thus would be procedurally barred for this reason as well. *See* discussion *supra* Part VI.B.1.a.ii.*b*.

[68] Petitioners use the term "limit" somewhat loosely in their petitions, creating some confusion as to their arguments. For example, Mr. Sarvey, at times, uses the term to refer to a permit limit and, at other times, he uses it to refer to an individual performance test result during a startup event (usually the maximum measured emissions from a facility). *Compare* Sarvey Pet. at 9 (referring to Metcalf's permit limit as a "limit") *with id.* at 11 (referring to Delta's maximum emissions measurement as a "limit"); *see also* CAP Pet. at 24 (using the phrase "limits that have been achieved in fact" when seemingly referring to startup event emissions). As discussed below, there are important distinctions between a permit limit and a performance test result.

[69] As noted in footnote 59 and accompanying text, the San Diego Air Pollution Control District calculated this figure to be 437 pounds.

at 24-25. While CAP titles its argument in terms of BAAQMD's "failure to meet its burden," as part of its argument, it raises an issue similar to Mr. Sarvey's: that BAAQMD should have established emission limits based on performance data. CAP primarily argues that BAAQMD should have relied on average emissions from other sources' performance data. *See id.* at 25 (claiming that BAAQMD "wholly ignores data from other facilities" that show "average emissions far below the permitted limit"). CAP and Mr. Sarvey make similar claims regarding hot startups.[70]

In connection with their arguments concerning "already achieved limits," both petitioners also challenge the compliance margin BAAQMD used in selecting the final permit limits.[71] CAP Pet. at 23, 26; Sarvey Pet. at 8-9, 11-12. Mr. Sarvey contends that BAAQMD, by selecting a permit limit of 480 pounds, erroneously incorporated a 22-42% compliance margin over the maximum measured startup emissions at these other facilities.[72] *Id.* at 11. CAP contends that "[t]here is no precedent for allowing the permitting agency a license to set arbitrary compliance margins that defeat the purpose of BACT," CAP Pet. at 26, nor is there any "precedent for allowing such a large margin," *id.* at 27. CAP also claims that BAAQMD did not provide a justification for the compliance margins it used for hot startups. *Id.* at 28.

Petitioners' arguments concerning BAAQMD's selection of the proper "achievable" emissions limit and BAAQMD's use of a "compliance factor" (sometimes referred to as a "safety factor" in Board decisions) are intertwined. "A challenge to a permitting authority's use of safety factors [] is not easily entertained separate and apart from the permitting authority's analysis of the record evidence pertaining to achievable emissions limits. This is the case because the concept of a 'safety factor' is intended to allow the permitting authority flexibility in setting the permit limits where there is some degree of uncertainty regarding the maximum degree of emissions reduction that is achievable." *In re Prairie State Generating Co.*, 13 E.A.D. 1, 55 (EAB 2006), *aff'd sub. nom Sierra Club v. U.S. EPA*,

[70] Mr. Sarvey argues that Palomar had a hot startup event with emissions at 75 pounds and Delta's highest hot startup was 82.2 pounds, but BAAQMD "failed to adopt a lower limit." Sarvey Pet. at 11. CAP contends that, for hot startups, BAAQMD should have selected the average emissions from plants like Delta, whose average emissions range from 25 to 29.8 pounds, rather than selecting a permit limit "three times the average NO_x emissions at those facilities." CAP Pet. at 28.

[71] CAP does not appear to challenge the idea of using a compliance margin, only how it was set. *See* CAP Pet. at 26-27. It is not entirely clear from Mr. Sarvey's petition whether he is questioning the size of the compliance margin, *see* Sarvey Pet. at 12 n.13 (distinguishing cases with small compliance margins), or the use of a compliance margin in general, *id.* at 11 (arguing that BAAQMD should have selected the highest measured NO_2 emissions figure, without mention of a compliance margin).

[72] Mr. Sarvey calculates that 480 pounds is 22% higher than Palomar's, 30% higher than Metcalf's, and 42% higher than Delta's highest startup emissions. Sarvey Pet. at 11.

499 F.3d 653 (7th Cir. 2007). For this reason, the Board considers these two issues together.

(b) *Analysis*

As mentioned earlier, the permit issuer, in step 5 of the BACT analysis, selects the most stringent control alternative found at step 2 to be available and technically feasible that was not eliminated in step 4. *See supra* Part VI.A. In establishing the actual permit limits, the permit issuer sets as BACT an emission limit or limits achievable by the facility using the emissions control alternative it selected rather than imposing a particular pollution control technology. *Prairie State*, 13 E.A.D. at 51; *In re Three Mountain Power, LLC,* 10 E.A.D. 39, 54 (EAB 2001); *see* 40 C.F.R. § 52.21(b)(12) (defining BACT as "an emission limitation"). Here, as described earlier, BAAQMD selected best work practices as the control technique for controlling startup and shutdown emissions for the Facility and then established the permit's startup emission limits it believed to be "achievable" using best work practices. *See supra* Part VI.B.1.b.i; *see also* SOB at 44; ASOB at 58-68, 74; RTC at 92-105.

Significantly, in selecting the emissions limits at issue here, BAAQMD found that "best work practices" is a control technique that shows wide variability across sources. *See, e.g.*, RTC at 96 ("wide variability" in cold startups data), 97; SOB at 44-46 (hot startups data "highly variable"). The NSR Manual recognizes that there are some control techniques with a wide range of performance levels and recommends that, in identifying the performance level for such a control technique, the "most recent regulatory decisions and performance data" should be evaluated. *NSR Manual* at B.23. BAAQMD followed this recommended approach, considering permit limits from similar sources as well as emissions performance data from those sources. SOB at 44-46; RTC at 93-101.

Ultimately, for cold startup emissions, BAAQMD relied on early performance data from the newest similar facility, Palomar, in establishing the permit's limit, while adding a compliance factor, which resulted in keeping the emission limits within the range of all the performance data it had considered from all similar sources. *See* RTC at 100. Similarly, for hot startups, BAAQMD relied on the highest measured startup event at Palomar with a compliance margin. *Id.* At bottom, Petitioners' primary contention is that BAAQMD's approach was clearly wrong because, in considering the range of performance data, it was required to select an emissions limit based on either the highest emissions measured in a performance test at a similar facility (Mr. Sarvey) or the "average" of all performance test results at a similar facility (CAP). As discussed in the next section, the "bright line" standards petitioners would like to impose are inconsistent with the Board's case law concerning the use of performance data and safety factors.

(i) *Previous Board Cases Concerning Performance Data and Safety Factors*

In a number of other cases, disputes have arisen where, as here, evidence in the record establishes a range of emissions rates for the most stringent control alternative and, at step 5 of the top-down analysis, the permit issuer set the permit's BACT limit at a different rate within the range than the petitioners believed appropriate. *Prairie State*, 13 E.A.D. at 51 (citing *In re Cardinal FG Co.,* 12 E.A.D. 153, 169 (EAB 2005); *In re Kendall New Century Dev.,* 11 E.A.D. 40, 52 (EAB 2003); *Three Mountain Power,* 10 E.A.D. at 53; *In re Steel Dynamics, Inc.,* 9 E.A.D. 165, 188 (EAB 2000); *In re Knauf Fiber Glass, GmbH ("Knauf II"),* 9 E.A.D. 1, 15 (EAB 2000); *In re Masonite Corp.*, 5 E.A.D. 551, 560-61 (EAB 1994)).

In addressing such disputes, the Board has discussed the proper consideration of performance tests in establishing final permit emissions limits as well as the application of safety factors. *E.g.*, *In re Newmont Nev. Energy Inv., LLC*, 12 E.A.D. 429, 441-43 (EAB 2005); *Prairie State*, 13 E.A.D. at 54. The Board has explained that, for a variety of reasons, the data on past performance may show differences across sources utilizing a given control technique. *E.g., Newmont*, 12 E.A.D. at 441. Several reasons that could explain such variability in measured emissions rates include test method variability, *Knauf II*, 9 E.A.D. at 15, fluctuations in control efficiency, *Masonite*, 5 E.A.D. at 560-61, and "characteristics of individual plant processes," *Knauf I*, 8 E.A.D. at 143. In *Newmont*, a case in which petitioners had raised several arguments similar to CAP's and Mr. Sarvey's, the Board looked at several of these cases and concluded that:

> The underlying principle of all of these cases is that PSD permit limits are not necessarily a direct translation of the lowest emissions rate that has been achieved by a particular technology at another facility, but that those limits must also reflect consideration of any practical difficulties associated with using the control technology. *Cardinal*, 12 E.A.D. at 170. Thus, we have held that a permit writer is not required to set the emissions limit at the most stringent emissions rate that has been demonstrated by a facility using similar emissions control technology. *In re Kendall New Century Dev.,* 11 E.A.D. at 50-54.
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> Instead, permit writers retain discretion to set BACT 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 Steel Dynamics, Inc.*, 9 E.A.D. 165, 188 (EAB 2000); *accord In re Three Mountain Power, LLC*, 10 E.A.D. 39, 53

> (EAB 2001). In particular, we have approved the use of a so-called "safety factor" in the calculation of the permit limit to take into account variability and fluctuation in expected performance of the pollution control methods. *See, e.g., Knauf II*, 9 E.A.D. at 15 ("There is nothing inherently wrong with setting an emissions limitation that takes into account a reasonable safety factor."). As we noted in *Masonite*, where the technology's efficiency at controlling pollutant emissions is known to fluctuate, "setting the emissions limitation to reflect the highest control efficiency would make violations of the permit unavoidable." 5 E.A.D. at 560.
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> In essence, Agency guidance and our prior decisions recognize a distinction between, on the one hand, measured "emissions rates," which are necessarily data obtained from a particular facility at a specific time, and on the other hand, the "emissions limitation" determined to be BACT and set forth in the permit, which the facility is required to continuously meet throughout the facility's life. Stated simply, if there is uncontrollable fluctuation or variability in the measured emission rate, then the lowest measured emission rate will necessarily be more stringent than the "emissions limitation" that is "achievable" for that pollution control method over the life of the facility.

Newmont, 12 E.A.D. at 441-42 (citations updated); *see also Prairie State*, 13 E.A.D. at 55-56 (quoting many of these same principles).

In *Newmont*, based on the above-quoted considerations, the Board concluded that "a permit issuer may appropriately consider, as part of its BACT analysis, the extent to which available data in the record evidence the ability to consistently achieve certain emissions rates or control effectiveness of the selected technology or pollution control method." 12 E.A.D. at 440. There, the Board consequently held that "a permit issuer's rejection of a more stringent emissions limit based on the absence of data showing that the more stringent rate has been consistently achieved over time is not a per se violation of the BACT requirements." *Id.* The Board noted, however, that "the permit issuer is obliged to adequately explain its rationale for selecting a less stringent emissions limit, and that rationale must be appropriate in light of all evidence in the record." *Id.* This is because the BACT analysis is one of the most critical elements of the PSD permitting process and must, therefore, be well documented in the administrative record. *Id.* at 442; *accord Knauf I*, 8 E.A.D. at 131. In particular, "the basis for choosing the alternate level (or range) of control in the BACT analysis must be documented." *NSR Manual* at B.24. The Board has repeatedly held that the permit issuer must

provide a reasoned basis for its decision, which must include an adequate response to comments raised during the public comment period. *E.g.*, *Knauf I*, 8 E.A.D. at 140-42; *see also In re Gen. Motors, Inc.*, 10 E.A.D. 360, 374 (EAB 2002); *Steel Dynamics*, 9 E.A.D. at 191 n.31; *Masonite*, 5 E.A.D. at 568-69, 572 (remand due to incomplete BACT analysis); *In re Brooklyn Navy Yard Res. Recovery Facility*, 3 E.A.D. 867, 875 (Adm'r 1992) (remand for failure to adequately consider public comments regarding BACT).

For reasons similar to those articulated in *Newmont* (and also reiterated in large part in *Prairie State*), the Board today likewise rejects Petitioners' suggestion that there should be a bright line rule concerning performance data and concludes that BAAQMD's rejection of more stringent emissions limits based solely on either the highest emissions measured in a performance test at a similar facility or the average of all performance test results at a similar facility is not a per se violation of the BACT requirements as petitioners are essentially arguing. BAAQMD, however, is obliged to adequately explain its rationale for selecting a less stringent emissions limit, and that rationale must be appropriate in light of all evidence in the record. The Board therefore turns to BAAQMD's reasoning for selecting the 480 and 95 pound startup emissions limits. In considering whether BAAQMD adequately explained its rationale, the Board also considers BAAQMD's use of a compliance margin. *See Prairie State*, 13 E.A.D. at 55 (explaining that the "appropriate application of a safety factor in setting an emission limit is inherently fact-specific and unique to the particular circumstances of the selected technology, the context in which it will be applied, and available data regarding achievable emissions limits").

(ii) *Was BAAQMD's Approach Rational in Light of the Record?*

Upon review of the administrative record which the Board summarized at length above in Part VI.B.1.b.i, the Board concludes that BAAQMD provided a reasoned basis for its decision and included an adequate response to comments raised during the comment period. The Board will not repeat its earlier summary of BAAQMD's extensive BACT analysis for cold and hot startup emissions but instead highlights several key points.

In developing the Final Permit's NO_2 startup emissions limits, BAAQMD used the startup permit limits from the most recently permitted similar source, Metcalf, as a starting point. SOB at 44. It then looked at permit limits from other sources as well as emissions performance data from those sources. SOB at 44-46; RTC at 93-101. In performing its initial analysis, BAAQMD found that the performance data from all the similar sources it considered ranged from 103 to 499 pounds for cold startups, SOB at 45-46; RTC at 94-97, 100-01, and up to

82.2 pounds for hot startups, RTC at 96-97.[73] Although the majority of performance data for cold startups showed emissions lower than the proposed 480 pounds, it found several data points at or above 480 pounds, the permit limit it was proposing to set. *See* SOB at 45-46 (listing cold startup NO_2 emissions at 480, 488, and 499 pounds at one facility and 485 pounds at another); *see also* RTC at 96 (noting highest emissions at Palomar at 375 or 437, depending on whose calculations were used). It also found that nearly all of the cold startup permit limits for NO_2 were higher than Metcalf's, which it had used as a starting point.[74]

When commenters suggested BAAQMD consider more recent data from several other facilities, BAAQMD investigated information from those facilities and included the data in its analysis. *See*, *e.g.*, RTC at 94-101. In particular, BAAQMD focused on the performance data from Palomar, the only recently permitted facility with any performance data, as well as the permit limits from Caithness. *Id.* at 94-101. BAAQMD found the Palomar data to be completely consistent with the data it had already analyzed. *Id.* at 96. In fact, as noted above,

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[73] The record has more performance data results for cold starts.

[74] The cold startup NO_x limits for permits other than Metcalf, which, as mentioned, had a 480-pound permit limit, were reported in the administrative record as: 400 pounds *per hour*, not per startup, at Palomar, RTC at 94 n.191; 488 pounds at Caithness (startups without a boiler), ASOB at 65; and no limit at Lake Side, ASOB at 63. BAAQMD also mentioned that another permit commenters recommended it consider, the one for Colusa Generating Station, has an NO_2 permit limit of 779.1 pounds per cold startup, RTC at 103, but has CO limits that are lower than the Final Permit's, *id.* at 103 n.203. BAAQMD explained that it did not favor reducing CO in exchange for increasing NO_x "because the Bay Area is in attainment of the applicable CO NAAQS but is non-attainment with the applicable ozone NAAQS (and NO_x is an ozone precursor)." RTC at 103-04 n.203; *see also id.* at 66-68 (explaining the CO/NO_x tradeoff); SOB at 22, 29, 31(same). BAAQMD did not mention Delta or Sutter's permit limits in its analyses. As revealed in the parties' reply and sur-reply briefs, Delta's NO_2 permit limit is 300 pounds, which is substantially lower than the Final Permit limit. Sarvey Reply at 5-6; BAAQMD Sur-Reply at 27-28; RCEC Sur-Reply at 24-29.

Mr. Sarvey is procedurally barred from raising this issue as noted above. *See supra* note 67. In any event, while it may have been appropriate for BAAQMD to at least consider this limit, it does not appear that doing so would have changed the result. *See In re Three Mountain Power, LLC*, 10 E.A.D. 39, 54-55 & n.15 (EAB 2001). BAAQMD's response to this issue, which is articulated for the first time in its sur-reply (in response to Mr. Sarvey's reply brief), explains that the Delta permit has a very high CO limit, 9750 pounds, which is much higher than the Final Permit's CO limit of 2514 pounds. BAAQMD Sur-Reply at 28. Delta's test results also show CO emissions up to 8288 pounds, results much higher than the Final Permit's CO limit. *Id.* As BAAQMD had noted in its Statement of Basis and further explained in its Responses to Public Comments, there is an inherent trade-off between reducing NO_2 emissions and reducing CO emissions. *Id.*; *see also*, *e.g.*, RTC at 66-68, 103-04 & n.203; SOB at 22, 29, 31. "The Delta permit therefore does not show that a lower NO_2 cold-startup limit of 300 would be achievable at Russell City with its low CO limit." BAAQMD Sur-Reply at 28. Had Mr. Sarvey raised this point earlier, the District apparently would have responded to it and explained that it is not willing to allow such high CO emissions in order to reduce the already-stringent NO_2 limits further. *See id.* at 28.

BAAQMD stated that it had ultimately relied on the Palomar facility's performance data, with an additional compliance margin, in establishing the Final Permit's emissions limits for both hot and cold startups. *Id.* at 100.

With respect to that compliance margin, which commenters questioned and petitioners challenge, BAAQMD provided an explanation in the record for it as well. For cold startups, BAAQMD primarily relied on two reasons. First, BAAQMD felt a compliance factor was appropriate because it had only five data points for cold startups, "which does not generate a great deal of statistical confidence that the maximum seen in this data set is representative of the maximum that can be expected over the entire life of the facility." *Id.* at 96. Second, BAAQMD explained that "the wide variability in the data that is available highlights the variability in individual startups, underscoring the need to provide a sufficient compliance margin to allow the facility to be able to comply during all reasonably foreseeable startup scenarios." *Id.* For hot startups, BAAQMD provided a similar explanation. *Id.* at 97 (noting that startups are, by nature, highly variable and that "the highest startup emissions seen in the data collected to date may not necessarily reflect the highest emissions that would reasonably be expected under all circumstances over the life of the facility"). Notably, BAAQMD reduced the hot startups limit in response to comments and the new Palomar data to impose a more stringent compliance margin. *Id.* BAAQMD also provided several reasons for the wide variability across sources. It explained that "factors that can make individual startups take longer or shorter and generate more or less emissions include ambient temperatures of the equipment, limitations on the loading sequence prescribed by the gas turbine manufacturer to assure safe loading of the equipment, and limitations on the steam-cycle side of the facility necessary to ensure that the steam turbine and associated piping are safely warmed." SOB at 44.

Upon consideration, the Board concludes that BAAQMD's rationale for selecting an emissions limit less stringent than an emissions limit based on either the highest emissions measured in a performance test at a similar facility or the average emissions performance that a similar facility achieved appears rational in light of the evidence in the record. BAAQMD's approach was fully consistent with the NSR Manual's recommended approach for determining an emission limit for a control technique that has a wide range of performance levels. BAAQMD's approach is also consistent with the Board's prior cases, which, as quoted above, held that permit issuers retain discretion to set BACT levels that "do not necessarily reflect the highest possible control efficiencies but, rather, will allow permittees to achieve compliance on a consistent basis." *Newmont*, 12 E.A.D. at 442 (quoting *Steel Dynamics*, 9 E.A.D. at 188); *accord Prairie State*, 13 E.A.D. at 55; *Three Mountain Power*, 10 E.A.D. at 53. BAAQMD also adequately responded to comments raised during the comment period on its approach. The Board, in fact, finds BAAQMD's reasons for disagreeing with CAP's comment that it base the permit's limits on average emissions performance data from other facilities to be

compelling. It makes no sense from a compliance standpoint to base permit limits on average performance emissions measurements from a facility, a limit which, theoretically, the other facility may have potentially exceeded half the time. While Mr. Sarvey's approach – setting the emissions limits based on the maximum measured emissions in a performance test – is more reasonable than CAP's, it may not take into account the long-term variability, especially in light of the limited data BAAQMD had on the newest facilities.

The Board likewise finds BAAQMD's use of a compliance factor to be rational in light of the evidence in the record. As noted, BAAQMD repeatedly emphasized the wide variability in the facility data, and the record amply supports these statements. The performance data for cold startups at Palomar, for example, ranges from 22 to 375 pounds (or 26 to 435 pounds depending on which air district's calculations is considered), which is a large range. RTC at 95 n.192. BAAQMD also provided several reasons for the wide variability across sources, as noted above. BAAQMD's other explanation for its use of a compliance factor for cold startups – that it only had a small number of data points – is consistent with the Board's discussion of the consideration and significance of long-term data in *Newmont*, where the Board explained that "because 'emissions limitation' is applicable for the facility's life, it is wholly appropriate for the permit issuer to consider, as part of the BACT analysis, the extent to which the available data demonstrate whether the emissions rate at issue has been achieved by other facilities over the long term."[75] 12 E.A.D. at 442. The Board finds BAAQMD's analysis particularly reasonable here, where the control technique that was used was "best work practices," a control technique that the Board expects would more widely vary across sources.

Nothing in the petitions convince us otherwise. In particular, the Board is unpersuaded by CAP's argument that BAAQMD inappropriately found that "a compliance margin is reasonable because the Palomar data 'includes only five available data points for cold starts, which does not generate a great deal of statistical confidence that the maximum seen in this data set is representative of the maximum that can be expected over the life of the facility.'" CAP Pet. at 25 (quoting RTC at 96). CAP argues the statement meant that BAAQMD "chose as BACT for the performance the equipment [BAAQMD] speculates might achieve after years of unspecified degradation." *Id.* The Board does not read BAAQMD's statement that way. Rather, as the Board noted in the previous paragraph, the Board reads BAAQMD's statement to be consistent with *Newmont.*

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[75] Mr. Sarvey argues that BAAQMD, if it was concerned that there were insufficient data points, should have obtained additional data that might have become available, Sarvey Pet. at 11, presumably after the comment period ended, as the Board assumes commenters had sent BAAQMD the most recently available data they were able to obtain. The Board does not believe BAAQMD's failure to obtain additional data after the close of the comment period constitutes clear error; at some point a permit issuer necessarily needs to stop taking in data so that it may make a final decision.

CAP argues that the Board has recognized safety margins on occasion, but they must be "fact-specific and unique to the particular circumstances of the selected technology, the context in which it will be applied, and available data regarding achievable emissions.'" *Id.* at 26-27 (quoting *Prairie State*, 13 E.A.D. at 55). CAP then asserts that "safety factors are allowed, *for example*, to account for 'test method variability, location specific technology variability, and other practical difficulties in operating a particular technology.'" *Id.* at 27 (quoting *Prairie State*, 13 E.A.D. at 55) (emphasis added). As CAP properly recognizes, this list contains *examples* of some factors that may justify imposition of a safety factor. It is by no means exclusive. Thus, the alleged failure of BAAQMD "to examine [the Facility's] startup emissions in the context of any of the factors mentioned" in *Prairie State*, *id.*, is not necessarily fatal to the imposition of a safety factor. Furthermore, CAP's argument on this point is unavailing because, as the Board has already recognized, BAAQMD provided a rational explanation of the compliance factor it used, providing sufficient justification for its use of the compliance factor in this permit decision.[76]

CAP's and Mr. Sarvey's challenge to the size of the compliance margin as being too large is equally unavailing. CAP Pet. at 27; Sarvey Pet. at 11. The Board has upheld a range of safety factors, compliance factors, and/or safety margins. *E.g.*, *Newmont*, 12 E.A.D. at 459-64 (upholding the permit issuer's limit based on a control efficiency of 66.5%, where reductions of up to 80 to 90% "can be achieved"); *Kendall*, 11 E.A.D. at 50-54 (upholding permit issuer's selection of 25 ppmvd, even though similar facility has a 20 ppmvd limit); *Steel Dynamics*, 9 E.A.D. at 188 (upholding the permit issuer's decision to use "the most stringent PM limit ever imposed" on similar facilities, 0.0018, rather than the "lowest ever achieved," .0001 grains per standard cubic feet); *Knauf II*, 9 E.A.D. at 15 (upholding permit issuer's use of a 25% safety factor); *Masonite*, 5 E.A.D. at 560-61 (upholding permit issuer's selection of a 95% control efficiency rather than vendor's proposed guarantee of 97%); *In re Pennsauken Cnty.*, 2 E.A.D. 768, 769-70 (Adm'r 1989) (concluding that 35.7% removal efficiency rate, as opposed to the 50% rate suggested by petitioners, was not clear error).[77] Attempting to interpret the Board's cases as setting a maximum safety factor value, as both CAP and Mr. Sarvey do, is inappropriate. Importantly, in each case, the Board's look at the facts and circumstances surrounding the permit issuer's imposition of a safety factor analysis was fact- and case-specific. Certainly selection of a reasonable safety factor is not an opportunity for the permittee to argue for, or for the permit issuer to set, a safety factor that is not fully supported by the record, or that does not reflect

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[76] The Board is unpersuaded by CAP's assertion that the compliance margin was "arbitrary." CAP Pet. at 26. As discussed in the text above, BAAQMD provided a reasoned basis for the margin.

[77] Note that these values are not necessarily equivalent. Some references are to control efficiency rates, while others are to actual safety factors. The Board presents these data to show that there has been a range of "safety" margins that have been considered in developing BACT permit limits.

the exercise of the permit issuer's considered judgment in determining that the emissions limit, including the safety factor, constitutes BACT. While there no doubt can be cases where the safety margin crosses the line from permissible to impermissible, for example, because it is excessively large or is not sufficiently documented and supported, that is not the case here. Although it could be argued that the compliance margins selected here tend towards the more generous side, when viewed in the context of the entirety and thoroughness of the explanation supporting the limits set and the reasons supporting the margins, the Board cannot conclude that they constitute clear error.

CAP's assertion that there is "no evidence" in the record that BAAQMD "attempted to determine why startup emissions can be high or low" is not accurate. *Id.* at 26. As noted above, in its Statement of Basis, BAAQMD did describe several factors which impact startup emissions. SOB at 44.

CAP's argument that BAAQMD "failed to justify why a limit could not be set for both an average and maximum emissions" is similarly unpersuasive. CAP Pet. at 25. In its RTC, BAAQMD devoted an entire section to this issue. *See* RTC at 104-05. CAP's claim is a reiteration of its comments on the draft permit and does not address, or even mention at all, BAAQMD's responses to that comment. Because CAP fails to explain why BAAQMD's response was clearly erroneous, this claim is procedurally defaulted for the reasons discussed above in Part III.[78]

Finally, the Board finds completely unconvincing CAP's allegation that BAAQMD, in selecting the Final Permit's cold startup emission limits, "wholly ignores data from other facilities * * * which show average emissions far below the permitted limit." CAP Pet. at 25. This assertion is patently contradicted by the record. As summarized above, *see* Part VI.B.1.b.i, BAAQMD responded to comments pointing to cold startup emissions from other facilities.[79]

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[78] CAP similarly claims that BAAQMD "ignored public comments asking for a staggered limit as opposed to setting a high limit if indeed there was basis for assuming that the equipment could not reasonably be maintained over time." CAP Pet. at 25. The comments it cites to support its contention that commenters requested a staggered limit do not demonstrate that, in fact, such comments were raised during the comment period. *See id.* (citing CAP's Feb. 5, 2009 Comments at 16; CAP's Sept. 16, 2009 Comments at 5). As the Board has noted, in order to be preserved for review, comments must have been raised during the comment period. Because CAP has not demonstrated that this issue was raised by commenters, the Board concludes that CAP may not raise it on appeal for the same reasons discussed in Parts III and VI.B.1.a.ii.*b*.

[79] Along these same lines, CAP asserts that BAAQMD did not respond to comments that the College District had submitted indicating that the Lake Side facility "had achieved" 102 pounds of NO_x. CAP Pet. at 25 (referring to College District's June 15, 2009 Comments). The 102 pounds reference appears to be vendor data, *not* performance data as CAP implies. *See* College District's June 15, 2009 Comments at 2. Moreover, BAAQMD did address this comment, first noting that the Lake Side permits had no startup permit limits whatsoever, and then stating that the vendor data "were for one

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In sum, BAAQMD clearly did an extensive BACT analysis for startup emissions, was open to considering comments, and even adjusted some of the permit's limits (e.g., cold and hot startup CO emissions and hot startup NO_2 emissions) based on comments and data submitted. The issue is whether petitioners have demonstrated clear error and, particularly given the technical deference the permit issuer is granted, the Board concludes that petitioners have not demonstrated that BAAQMD clearly erred in selecting BACT emission limits for controlling cold and hot startup NO_2 emissions.

iv. *Has CAP Demonstrated That BAAQMD Erred in Setting the Emission Limits By Limiting Its Consideration to Upgrades and in Allegedly Considering the Cost of Disposal of the Old Equipment*

The Board next turns to CAP's assertions that BAAQMD erred in its BACT review by "limiting itself to upgrades of RCEC's already purchased Westinghouse 501FD2 turbines" and "by improperly relying on emissions limits achieved at existing facilities that have turbines like the one RCEC purchased." CAP Pet. at 23. On a related note, CAP also suggests that BAAQMD rejected "newer existing advances for reducing startup emissions," such as Op-Flex and Fast-Start technologies, because of "the cost of disposing of the already acquired equipment," not because of technical reasons as BAAQMD had claimed.[80] *Id.* at 11 (citing BAAQMD's statements in the SOB at 40 n.31 and notes from the underlying meeting referred to in footnote 31).

Importantly, BAAQMD addressed similar concerns in two sections of its Responses to Public Comments. *See* RTC at 4-7 (section II), 106, 116-17 (section VIII.C.5); *see also* ASOB at 72 n.131 (responding to commenters that claimed BAAQMD improperly rejected Op-Flex because of cost). In responding to comments questioning whether alternative, and presumably newer, equipment "might be cleaner and more efficient" than the equipment the applicant had already purchased, BAAQMD first stated that, generally:

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specific operating temperature and were not presented as vendor guarantees of what the equipment could reliably achieve under all foreseeable operating circumstances." RTC at 98 n.195. CAP has not addressed this response nor has it explained why it is clearly erroneous. As discussed above in Part III, in order to demonstrate that review is warranted, a petitioner must explain why the permit issuer's response to its objections is clearly erroneous or otherwise deserves review.

[80] The Board notes that, to the extent Mr. Sarvey is claiming, in footnote 16 of his petition, that BAAQMD inappropriately rejected CEC staff's proposed technical options, such as Fast-Start and Op-Flex, based on cost considerations, the Board's discussion in the text and footnotes below addresses this issue.

> [I]t agrees with the premise underlying these comments that the BACT permit requirements established for a facility need to be based on the emissions performance of the best equipment currently available, and may not be based on a lower level of performance of older equipment simply because an applicant may have already purchased existing equipment. The commenters are incorrect, however, in implying that the Air District bases its BACT determinations on the performance of older equipment in situations where an applicant may have already purchased equipment that it would like to use at a facility. To the contrary, the Air District bases its BACT limits on the emissions performance of the most current technology. Where appropriate, the Air District has not hesitated to impose more stringent limits for this project than were considered achievable in 2002 when the project was first permitted.

RTC at 4. BAAQMD next explained that it had determined that the current state-of-the-art electrical generating equipment was "FD3" turbine technology, which was "slightly more efficient than the 'FD2' technology that the applicant had originally proposed." *Id.* at 5. BAAQMD stated that RCEC had agreed to upgrade its equipment to incorporate the FD3 technology and, by doing so, the efficiency of the facility would be the highest of any similar facility and would thereby "generate fewer emissions for a given amount of power generation." *Id.* (specifying ten of the upgrades that would be performed). BAAQMD further noted that, to the extent that emissions of pollutants are a function of turbine efficiency, "the emissions performance from these FD3-equivalent turbines will be the lowest achievable because FD3 turbines are the most efficient for this type of application." *Id.* at 6 n.4. Thus, according to BAAQMD, the BACT permit conditions were based on the emissions performance of the "current state-of-the-art FD3-level technology, and not on some lesser performance level based on older equipment." *Id.* at 6.

BAAQMD also explained that "it is not proposing permit requirements specifying exactly what equipment must be used to satisfy the applicable BACT permit limits. BACT requires emission limits to be imposed based on the best emissions performance achievable by current state-of-the-art technology, but once the BACT limits are established based on this technology * * * the specific equipment the facility uses to achieve that limitation is irrelevant." *Id.* In essence, "how the applicant meets current emission standards is up to the applicant." *Id.*

BAAQMD addressed questions about Op-Flex along similar lines. As explained above, BAAQMD had originally concluded that Op-Flex was not "available" and later responded to comments on this issue. As summarized above,

BAAQMD explained that BACT is essentially an emissions limit, not a technology *per se,* and that the Facility's startup limits would be the same as or lower than startup emissions achieved at the Palomar facility, which has Op-Flex. RTC at 116-17; *accord* ASOB at 71. With respect to comments claiming that BAAQMD should not consider cost in its assessment of Op-Flex technology, BAAQMD averred that cost was not a part of its analysis of Op-Flex. RTC at 117 n.243. BAAQMD also pointed out that, in its Additional Statement of Basis, it had explained that it had not considered cost and noted that the commenter had not referenced anything in the record indicating that *BAAQMD* had considered cost.[81] *Id.* No commenter had come forward in the second comment period with any information contradicting BAAQMD's earlier conclusion. *Id.*

BAAQMD, later in its BACT analyses for specific pollutants, again noted that it had received comments charging it with basing its BACT analysis on outdated technologies. *Id.* at 106 n.206. BAAQMD explicitly disagreed, stated that it had based its BACT determinations on current technology, and noted that, with respect to questions about its Flex-Plant analysis, it had "not taken the costs of Flex-Plant technology into account in its analysis of that technology because it [had] concluded that it is not an available technology for this type of facility."[82] *Id.* At oral argument, BAAQMD reaffirmed that the limits would have been the same whether they used current but upgraded turbines or new turbines and that the costs associated with replacing and disposing of older turbines played no part in its analysis. Oral Arg. Tr. at 98-99.

In its petition, CAP fails to address any of BAAQMD's responses to comments on the issue of upgrading the equipment and the connected issue of outdated technologies. In fact, CAP does not even acknowledge that BAAQMD responded to these issues. In particular, CAP does not explain why BAAQMD's claim that the upgrades would be equivalent to the state-of-the-art technology is incorrect nor does it explain why BAAQMD was incorrect in stating that BACT requires permit limits, not specific equipment. CAP merely makes conclusory as-

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[81] There appears to be a suggestion in the administrative record and some of the parties' briefs that the applicant and/or CEC had considered cost at one point as a reason to reject Op-Flex as an option. RTC at 117 n.243; ASOB at 72 n.131; CAP Pet. at 11. Whether or not other entities properly or improperly considered cost in their analyses is irrelevant. The question the Board is concerned about is whether BAAQMD impermissibly considered cost in its BACT analysis in its elimination of Op-Flex. No party has pointed to any place in the record that suggests that *BAAQMD*, as opposed to RCEC and CEC, impermissibly considered cost in its analysis of Op-Flex.

[82] In one footnote in its Statement of Basis, BAAQMD observed that utilizing fast start technology would require retrofitting RCEC's equipment, which "would require a complete redesign of the project and the purchase of new equipment." SOB at 40 n.31. There is no suggestion, however, that BAAQMD relied on this factor in making its decision and, in fact, it retained one type of fast start system, Flex-Plant 10, in its BACT analysis as a feasible option. *Id.* at 40-44. As noted above, Flex-Plant 10 was rejected primarily on energy efficiency grounds in step 4. *Id.* at 43-44.

sertions that BAAQMD erred by limiting its review to upgrades, assertions that the administrative record appears to contradict.[83]

Likewise, in challenging BAAQMD's rejection of Op-Flex based on cost considerations, CAP does not respond to BAAQMD's responses to comments on this issue. In fact, CAP's argument tends to be based on statements that BAAQMD made early in the permitting process[84] rather than focusing on the updated explanations BAAQMD provided in its Additional Statement of Basis and Responses to Public Comments.

As the Board has explained on many occasions, petitioners must describe each objection they are raising and explain *why* the permit issuer's response to Petitioners' comments during the comment period is clearly erroneous or otherwise warrants consideration. *E.g., In re Deseret Power Electric Cooperative*, 14 E.A.D. 212, 226 (EAB 2008); *In re Peabody W. Coal Co.*, 12 E.A.D. 22, 33 (EAB 2005); *In re Indeck-Elwood LLC*, 13 E.A.D. 126, 143, 170 (EAB 2006) ("[A] petitioner's failure to address the permit issuer's response to comments is fatal to its request for review."); *see also supra* Part III. Here, CAP has failed to meet its burden. Accordingly, the Board denies review on these grounds.

2. *Has Mr. Sarvey Demonstrated that BAAQMD Clearly Erred or Abused Its Discretion in Setting BACT for Particulate Matter Emissions from the Cooling Tower?*

As part of the project, RCEC plans to use water from the adjacent Hayward Waste Water Treatment Plant for cooling purposes at the Facility. ASOB at 52. Because the cooling tower may contribute to PM emissions when solids dissolved in the cooling system water are emitted in the water vapor exhausted through the cooling tower, BAAQMD established BACT limits for PM emissions from the

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[83] CAP's sweeping one-line assertion that BAAQMD "improperly rel[ied] on emissions limits achieved at existing facilities that have turbines like the one RCEC purchased" (presumably a turbine using FD2 technology) without providing any further explanation is similarly conclusory and also unpersuasive. CAP Pet. at 23. CAP's argument on this point is particularly unpersuasive without additional factual support in light of the fact that BAAQMD considered the Lake Side facility and Lake Side appears to be a plant incorporating FD3 technology. *See* RTC at 107 (noting that Lake Side is a turbine utilizing FD3 technology).

[84] CAP suggests that certain statements BAAQMD made in its Statement of Basis, where it "worried about the cost of disposing of the equipment," show that the primary reason the technology was rejected was on cost grounds. CAP Pet. at 11-12. The Board addressed this statement above. *See supra* note 82. CAP also relies on statements made by the applicant to staff at the CEC. CAP Pet. at 11-12 & n.5. As already stated earlier, *see supra* note 81, the Board is unpersuaded that comments RCEC made to another agency's staff should be read to contradict later findings and conclusions BAAQMD made.

cooling tower.[85] *See id.* at 51; RTC at 86.

Mr. Sarvey generally alleges that BAAQMD, in its BACT analysis for the cooling tower, erred by considering only one technology, drift eliminators, and "failed to consider technologies, work practices, or other sources of water that would reduce the impact from the project[']s cooling tower emissions." Sarvey Pet. at 16; *see also id.* (asserting that BAAQMD failed to examine "operating practices"). More particularly, Mr. Sarvey claims that BAAQMD "never provided any analysis of what level and what technology or work practices could provide a lower level of TDS [Total Dissolved Solids] to lower PM-10 emissions from the cooling tower." *Id.* Mr. Sarvey additionally asserts that BAAQMD failed to appropriately consider dry cooling in its BACT analysis. *Id.*; *see also* Sarvey Reply at 11 ("[I]t is hard to defend the failure of the District to consider dry cooling in the top down BACT analysis.").

In response to these assertions, BAAQMD argues that it "conducted a very thorough and robust BACT evaluation of control technologies and limits." BAAQMD Resp. to Sarvey at 28; *see also* RCEC Resp. to Sarvey at 42-47. BAAQMD claims that it "provided a detailed response in which it evaluated whether it could even consider requiring dry cooling as BACT without impermissibly 'redefining the source'; and ultimately concluded that even if a BACT analysis could consider dry cooling, [BAAQMD] would not require it in this case because of the ancillary environmental benefits from using a wet cooling system with this particular project." BAAQMD Resp. to Sarvey at 29 (citing RTC at 86-89). BAAQMD and RCEC also assert that most of the cooling tower-related issues Mr. Sarvey raises in his petition were not mentioned in the comments on the proposed permit below. *Id.* at 32; RCEC Resp. to Sarvey at 42.

As noted above, *see supra* Parts III and VI.B.1.a.ii.*b*, a petitioner must demonstrate, as a threshold procedural matter, that any issues being appealed were raised, and with reasonable specificity, during the public comment period. Consequently, with respect to Mr. Sarvey's arguments concerning BAAQMD's BACT analysis for the cooling tower emissions, the Board must first determine, as a threshold matter, whether any of the issues he raises in his petition were raised with reasonable specificity during the public comment period, thereby preserving them for review.

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[85] In fact, according to Mr. Sarvey, "[t]he largest PM-10 concentration from the project will be a direct result of the project's use of recycled water." Sarvey Reply at 11.

a. *Threshold Procedural Issue: Have Any of Mr. Sarvey's Arguments Concerning the Cooling Tower BACT Emissions Been Preserved for Review?*

In its Responses to Public Comments, BAAQMD stated that it had received no comments on its proposed cooling tower limits during the first comment period. RTC at 86. BAAQMD further stated that during the second comment period, although it had not received any comments on the numerical standard it proposed as the BACT limit, it had received comments "suggesting that it should be requiring the facility to use a dry cooling system instead of a wet cooling system as the BACT technology choice." *Id.* at 87.

Based on these statements, the only BACT-related issue seemingly raised by commenters in connection with the cooling tower emissions – and therefore the only issue that would have been preserved for review – was whether dry cooling should be required instead of wet cooling. Nowhere in Mr. Sarvey's petition or reply brief has he identified any comment that was submitted to BAAQMD raising issues concerning work practices, sources of water, the TSD levels, or operating practices. Nor did he point to any at oral argument. *See generally* Oral Arg. Tr. at 40-50, 124-26. Consequently, the *only* cooling tower-related BACT issue that *was* preserved for review – and that he may properly raise in his petition – is BAAQMD's decision not to require dry cooling. Accordingly, the Board concludes that the remainder of Mr. Sarvey's arguments regarding the cooling tower BACT limits were not properly preserved. Review of these other issues is therefore denied.

b. *Preserved Issue: Has Mr. Sarvey Shown that BAAQMD Abused Its Discretion in Determining that Dry Cooling Would Redefine the Source and Thus Need Not Be Considered in the BACT Analysis?*

Mr. Sarvey, while acknowledging that BAAQMD addressed the issue of dry cooling in responding to comments, argues that dry cooling should have been included as an available control technology in BAAQMD's top-down BACT analysis. Sarvey Pet. at 16; Sarvey Reply at 11-12. He disputes BAAQMD's position that requiring dry cooling would "redefine the source," asserting that "[t]he source would still be a combined cycle natural gas electrical generating facility" if it used dry cooling. Sarvey Reply at 12. He further argues that BAAQMD's claim that, if it had included dry cooling as a control option, "it would have eliminated it due to ancillary impacts" is inadequate because BAAQMD "never reached step four of the BACT analysis because it failed to include the top control alternative in the analysis." *Id.* He asserts that "[t]his approach defeats the purpose of the BACT

analysis."[86] *Id.* at 12.

The Board, in several recent cases, has considered challenges to a permit issuer's determination that a technology would "redefine the source" and therefore need not be included in the BACT analysis. *E.g., In re Desert Rock Energy Co.*, 14 E.A.D. 484, 524-39 (EAB 2009); *NMU*, 14 E.A.D. at 300-03; *Prairie State*, 13 E.A.D. at 14-28. In those cases, the Board delineated the history, basis, and application of the "redefining the source" policy and also articulated the standard for determining whether a permit issuer appropriately determined that a technology would indeed be a redefinition of the source. *E.g., Desert Rock*, 14 E.A.D. at 526-30; *Prairie State*, 13 E.A.D. at 20-23; *see also NMU*, 14 E.A.D. at 301-02. Rather than repeating those analyses in full here, the Board summarizes several key points.

"'Redefining the source is a term of art described in the NSR Manual,' although the concept predates the 1990 manual." *Desert Rock*, 14 E.A.D. at 526 (quoting *Knauf I*, 8 E.A.D. at 136, and citing *In re Hibbing Taconite Co.*, 2 E.A.D. 838, 843 & n.12 (Adm'r 1989); *In re Pennsauken Cnty.*, 2 E.A.D. 667, 673 (Adm'r 1988)). As the NSR Manual explains, "[h]istorically, EPA has not considered the BACT requirement as a means to redefine the design of the source when considering available control alternatives." *NSR Manual* at B.13. Thus, while "it is legitimate to look at inherently lower-polluting processes in the BACT analysis, [] EPA has not generally required a source to change (i.e., redefine) its basic design." *Knauf I*, 8 E.A.D. at 136; *accord Desert Rock*, 14 E.A.D. at 526; *Prairie State*, 13 E.A.D. at 21. Consequently, where a permit issuer properly concludes that an alternative technology would amount to a redefinition of the source,

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[86] Mr. Sarvey also seems to imply that BAAQMD somehow erred by explaining its rationale concerning dry cooling for the first time when it responded to comments. *See* Sarvey Reply at 16 ("[BAAQMD] replies in its response to comments which were issued after the public comment period expired that dry cooling was not included in the BACT analysis because it would redefine the source and the ancillary impacts would have eliminated dry cooling anyway. Both of these arguments fail because the public was never given an opportunity to address these excuses because the excuses were proffered after the close of the comment period."). Mr. Sarvey's statements show a misunderstanding of the part 124 permitting process as a whole, including the purpose of the part 124.19(a) review process. Significant issues are often raised for the first time in comments on a draft permit. *See* 40 C.F.R. § 124.13. When that occurs, the permit issuer is expected to address those newly raised, significant issues in its responses to comments. 40 C.F.R. § 124.17(a)(2). Those commenters not satisfied with the response may petition the Board for review of the issue or issues, explaining why the permit issuer's response was clearly erroneous, an abuse of discretion, or otherwise warrants Board review. *Id.* § 124.19(a). This is, in fact, the very process that has occurred with respect to the dry cooling issue. It is certainly not clear error for a permit issuer to address such an issue for the first time in its response to comments. *See Prairie State*, 13 E.A.D. at 45 n.41 ("Because [the permit issuer]'s analysis explaining why it was rejecting dry cooling was not provided in the record prior to the public comment period, but instead was provided for the first time in response to comments, [the permit issuer]'s reasoning was not ascertainable before the close of public comment and may be challenged for the first time on appeal.").

the permit issuer need not consider the alternative as part of its BACT analysis. *See, e.g., In re Hillman Power Co.*, 10 E.A.D. 673, 691-92 (EAB 2002); *Knauf I*, 8 E.A.D. at 135-44; *In re SEI Birchwood, Inc.*, 5 E.A.D. 25, 29-30 n.8 (EAB 1994); *In re Haw. Commercial & Sugar Co.*, 4 E.A.D. 95, 99-100 (EAB 1992); *In re Old Dominion Elec. Coop.*, 3 E.A.D. 779, 793 n.38 (Adm'r 1992); *Hibbing*, 2 E.A.D. at 843 & n.12. On the other hand, while "it is not EPA's policy to require a source to employ a different design, redefinition of the source is not always prohibited. This is a matter for the permitting authority's discretion." *Knauf I*, 8 E.A.D. at 136; *accord Desert Rock*, 14 E.A.D. at 526.

In both *Desert Rock* and *Prairie State*, petitioners challenged the permit issuers' determinations that a technology would "redefine the source." *See Desert Rock*, 14 E.A.D. at 518 n.48; *Prairie State*, 13 E.A.D. at 19-20. In considering these challenges, the Board noted that the permit issuer has broad discretion in determining whether a control option would redefine the source. *E.g., Desert Rock*, 14 E.A.D. at 526, 530, 538. Such discretion, however, is not unlimited. *See id.* at 538-39 (concluding that the Region had abused its discretion). The Board articulated the following test to determine whether a control option would "require enough of a redesign of the proposed facility that it strays over the dividing line to become an impermissible redefinition of the source." *Id.* at 530. While "the permit applicant initially 'defines the proposed facility's end, object, aim, or purpose – that is the facility's basic design,' * * * the inquiry does not end there." *Id.* (quoting *Prairie State*, 13 E.A.D. at 22) (footnotes and citations omitted); *accord NMU*, 14 E.A.D. at 301-02 & n.28. "The permit issuer * * * should take a 'hard look' at the applicant's determination in order to discern which design elements are inherent for the applicant's purpose and which design elements 'may be changed to achieve pollutant emissions reductions without disrupting the applicant's basic business purpose for the proposed facility,' while keeping in mind that BACT, in most cases, should not be applied to regulate the applicant's purpose or objective for the proposed facility." *Desert Rock*, 14 E.A.D. at 530 (quoting *Prairie State*, 13 E.A.D. at 23, 26); *accord NMU*, 14 E.A.D. at 301-02. Notably, the permit issuer's "hard look" should "include consideration of whether the permit applicant's basic design is [for reasons] independent of air quality permitting."[87] *Prairie State*, 13 E.A.D. at 26; *accord Desert Rock*, 14 E.A.D. at 530; *see also NMU*, 14 E.A.D. at 302 n.28.

Upon consideration of the administrative record, including BAAQMD's rationale for declining to consider dry cooling in the BACT analysis for the Facility,

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[87] Thus, "considerations such as cost savings or avoidance of risks associated with new, innovative, or transferable technologies would generally not justify treating a proposed facility's design element as basic or fundamental." *Desert Rock*, 14 E.A.D. at 530 n.62; *accord Prairie State*, 13 E.A.D. at 23 n.23; *NMU*, 14 E.A.D. at 302 n.28. Such factors could, however, be considered elsewhere in the BACT analysis, potentially at either step 2 or 4. *Desert Rock*, 14 E.A.D. at 530 n.62; *see also Prairie State*, 13 E.A.D. at 23 n.23 (citing examples).

the Board concludes that BAAQMD did not abuse its discretion. In its Responses to Public Comments, BAAQMD noted that, in considering the comments suggesting it require dry cooling at the Facility rather than wet cooling, as was proposed, it "has been mindful that it cannot require an applicant to redesign its facility in a manner that alters inherent design elements or changes a fundamental purpose of the facility." RTC at 87. BAAQMD explained that:

> [T]his facility was specifically designed from the very beginning to make use of recycled water from the City of Hayward wastewater treatment plant. A central element of the project design is a tertiary treatment plant that will utilize the City's wastewater effluent and clean it further to enable it to be used for cooling purposes. The benefit of being able to recycle the City's wastewater was also one of the reasons the City cited in agreeing to a property exchange that allowed the applicant to go forward with the project in its current location. And the Energy Commission explicitly found that the ability to use recycled wastewater was an objective of the project when it initially approved the facility.

Id. (footnotes omitted).[88] BAAQMD concluded that "[t]he use of a wet cooling system taking advantage of the City's wastewater is thus clearly an integral design element of the project." *Id.* It is clear that, in considering whether dry cooling would "redefine the source," BAAQMD did take a "hard look" at the proposed facility's design. Based on several key factors, including the fact that the facility was initially designed to utilize the City's wastewater, and the fact that the City transferred land to RCEC to allow the facility to be located in that particular location specifically to facilitate use of that wastewater, BAAQMD determined that dry cooling would be a "redefinition of the source." *Id.* Mr. Sarvey has not presented any information that casts doubt on BAAQMD's determination.[89] In

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[88] Significantly, in the footnotes of its discussion, BAAQMD cited RCEC's initial application, in which RCEC proposed to build an "Advanced Wastewater Treatment Plant" that would treat water from the City's nearby wastewater treatment facility so that the water could be used to cool the Facility. RTC at 87 n.178. RCEC later proposed redesigning the wastewater portion of the project to be a "Title 22 Recycled Water Facility." *Id.* (referring to RCEC's Amendment Number 1). BAAQMD also cited to a 2001 report that explained the site was selected in part because it was near the wastewater treatment plant. RTC at 87 n.177.

[89] In fact, rather than providing any real argument as to why BAAQMD's determination is factually incorrect, Mr. Sarvey's argument is a general disagreement with BAAQMD's conclusion without examining the factors set forth for this analysis in prior Board cases. *See, e.g.*, Sarvey Reply at 12 ("[D]ry cooling would not redefine the source. The source would still be a combined cycle natural gas electrical generating facility."). Mr. Sarvey also does not seem to recognize, as explained

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fact, his claims essentially boil down to conclusory assertions of error. Accordingly, the Board concludes that BAAQMD did not abuse its discretion in determining that dry cooling would "redefine the source" and therefore need not be included in the BACT analysis. *See Prairie State*, 13 E.A.D. at 28 (concluding that permit issuer's determination that consideration of low-sulfur coal, which would necessarily require use of a fuel source other than the coal at the co-located mine, would require a redefinition of the fundamental purpose or basic design of the proposed facility); *see also Sierra Club v. U.S. EPA*, 499 F.3d 653 (7th Cir. 2007) (affirming Board and permit issuer's conclusion that non-local coal would redefine the source where facility was designed to be a mine-mouth power plant).

In sum, the only issue Mr. Sarvey raises in connection with BAAQMD's BACT analysis for PM emissions from the cooling tower that was properly preserved for review is his disagreement with BAAQMD's determination that dry cooling would "redefine the source." Mr. Sarvey, however, has failed to demonstrate BAQMD abused its discretion on this point. Accordingly, Mr. Sarvey has failed to demonstrate that BAAQMD clearly erred or abused its discretion in setting BACT for the PM emissions from the cooling tower.

3. *Has Mr. Sarvey Demonstrated that BAAQMD Clearly Erred in Its BACT Analysis for NO_2 By Failing to Properly Consider the Collateral Impacts of Ammonia Slip?*

a. *Participants' Arguments*

In his petition, Mr. Sarvey generally asserts that BAAQMD's BACT analysis for NO_2 is "defective" because, in selecting SCR as BACT for the Facility, BAAQMD failed to take into account "the collateral impact of ammonia slip."[90] Sarvey Pet. at 4; *see also id.* at 13-15. More specifically, Mr. Sarvey claims that BAAQMD erred in concluding that "the secondary particulate from the 60 tons of ammonia slip from the SCR would not be a significant environmental impact."[91] *Id.* at 13. He further argues that a 1997 memorandum BAAQMD relied upon "provides no scientific justification" for BAAQMD's conclusions and that the memorandum, by its very terms, applies elsewhere in the Bay Area, not in Hayward. *Id.* at 14-15. He also claims that BAAQMD provides no evidence, including

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above, that when a control technology is considered an impermissible "redesign of the source," the permit issuer need not consider it in the BACT analysis.

[90] "Ammonia slip" is a term that refers to ammonia that is not completely used up in the SCR process and is later emitted in the SCR exhaust. *See* SOB at 24; Sarvey Pet. at 14; *see also In re Three Mountain Power, LLC*, 10 E.A.D. 39, 56 n.18 (EAB 2001).

[91] In his reply brief, Mr. Sarvey alleges the Facility will have the potential to emit 120 tons of ammonia. Sarvey Reply at 4, 11.

in its recent draft report,[92] that the Hayward area is nitric acid limited, which was an important assumption underlying BAAQMD's conclusion. *Id.* at 15.

In response to Mr. Sarvey's assertions, both BAAQMD and RCEC claim that Mr. Sarvey is raising the same comments he and other commenters raised on the draft permit rather than explaining why BAAQMD's previous responses to these same objections are clearly erroneous. BAAQMD Resp. to Sarvey at 25-26; RCEC Resp. to Sarvey at 37 (referring to comments of Mr. Sarvey and CARE). More particularly, BAAQMD asserts that it had based its determination not to undertake a BACT analysis of ammonia slip "on EPA's recent $PM_{2.5}$ rulemaking, in which it made clear that ammonia is presumptively excluded from federal PSD regulation under 40 C.F.R. Section 52.21," and that Mr. Sarvey has not offered any reason "why this interpretation of Section 52.21 was erroneous." BAAQMD Sur-Reply at 30-31. BAAQMD additionally argues that "[a] review of the District's comprehensive and detailed consideration of this issue in the record shows that the District's analysis was more than adequate and that its determination not to reject SCR based on ammonia slip concerns was fully justified." BAAQMD Resp. to Sarvey at 23.

The participants' arguments raise an underlying issue the Board must decide in addressing the overarching issue of whether BAAQMD clearly erred in its BACT analysis for NO_2 by failing to consider ammonia slip: Has Mr. Sarvey confronted BAAQMD's responses to comments and explained why they are clearly erroneous? As BAAQMD and RCEC argue, and as explained above, *see supra* Part III, in order to demonstrate that review is warranted in a particular case, a

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[92] Mr. Sarvey also claims that BAAQMD's "new Draft Study has not been provided for [sic] the record nor is it available anywhere else." Sarvey Pet. at 15 n.22. While Mr. Sarvey's claim is not altogether clear, the Board reads it to be that the draft study was not properly added to the administrative record. This claim appears to be unfounded. Because BAAQMD referred to its recent draft report in its responses to comments, *see* RTC at 81-82, under the regulations, such document must be included in the administrative record. *See* 40 C.F.R. §§ 124.17(b), .18. Significantly, the draft report is listed in the Certified Index of the Administrative Record. *See* Certified Index of the A.R. at 5 (entry no. 2.24). According to the certification statement in the Certified Index, the documents listed are contained in a document repository located at BAAQMD's headquarters and are available for public inspection. *Id.* at 1; *see also* ASOB at 3; BAAQMD Resp. to Sarvey at 25 n.6. This is all that is required.

Mr. Sarvey later asserts, in replying to BAAQMD's response on this issue, that "[BAAQMD] and RCEC claim that the study was part of the administrative record and yet the study was not referenced of [sic] disclosed before Feb[ruary]." Sarvey Reply at 10 n.20. Again, it appears that Mr. Sarvey's concerns, at bottom, are connected to a misunderstanding of the permitting procedures. Under the regulations, in responding to comments, a permit issuer may rely on a document for the first time. *See* 40 C.F.R. § 124.17 ("If new points are raised or new material supplied during the public comment period, EPA [or its delegate] may document its response to those matters by adding new materials to the administrative record."); *see also supra* note 86. This is exactly what BAAQMD did in this case.

petitioner must explain *why* the permit issuer's previous response to its objections is clearly erroneous or otherwise deserves review and may not simply reiterate comments it submitted on the draft permit. *See, e.g., In re City of Pittsfield*, NPDES Appeal No. 08-19, at 7, 11 (EAB Mar. 4, 2009) (Order Denying Review), *aff'd,* No. 09-1879 (1st Cir. July 16, 2010); *In re Peabody W. Coal Co.*, 12 E.A.D. 22, 33, 51-53 (EAB 2005); *In re City of Irving*, 10 E.A.D. 111, 129-30 (EAB 2001), *review denied sub nom. City of Abilene v. EPA*, 325 F.3d 657 (5th Cir. 2003).

b. *Has Mr. Sarvey Confronted BAAQMD's Responses to Comments and Explained Why They Were Clearly Erroneous?*

In its Responses to Public Comments, BAAQMD responded to concerns about ammonia slip as a potential particulate matter precursor that were similar to the concerns raised by Mr. Sarvey. *See* RTC at 79-83. BAAQMD first explained that:

> EPA has addressed the issue of regulating ammonia as a precursor to particulate matter in its recent $PM_{2.5}$ rulemaking. EPA established there that it *presumes that ammonia is not a secondary particulate matter precursor and should not be included in the PSD BACT analysis*. EPA did provide that states will have the discretion to include ammonia in particulate matter regulations when adopting their own SIP-approved NSR permitting programs, provided they can make a technical showing that ammonia will be a significant contributor to $PM_{2.5}$ concentrations. But until that time, while states are applying EPA's rules for particulate matter, EPA has established that *ammonia is not to be included in the permitting analysis as a precursor to secondary PM formation*. This is clear from the definition of "Regulated NSR Pollutant" in 40 C.F.R. Section 52.21(b)(50)(i), which includes several precursors but specifically excludes ammonia. Based on this clear regulatory direction from EPA about what to include in a PSD analysis for particulate matter, the Air District disagrees that it should or could apply BACT in this permit for ammonia based on the potential for secondary particulate matter formation.

Id. at 80 (emphasis added) (footnote omitted) (referring to Implementation of the New Source Review (NSR) Program for $PM_{2.5}$, 73 Fed. Reg. 28,321, 28,330, 28,347-49 (May 16, 2008)); *see also id.* at 152 ("With respect to ammonia, EPA

has established that ammonia is 'presumed out' as a $PM_{2.5}$ precursor, and is not included as [sic] the PSD analysis.").

BAAQMD went on to explain that, despite "the[] legal requirements excluding ammonia slip from federal PSD permitting," it had further examined the technical aspects of this issue "both in response to the[] comments and because the District will need to consider whether ammonia should be included when it adopts Non-Attainment NSR regulations for $PM_{2.5}$." *Id.* BAAQMD then noted that "[s]econdary particulate matter formation is a complex process that is not fully understood" and that EPA's preamble statements similarly suggest as much. *See id.* at 80. BAAQMD then stated that it had received comments criticizing its reliance on a 1997 memorandum in concluding that the Hayward area was nitric acid limited,[93] because, according to the commenters, the memorandum only applied to Livermore and San Jose. *Id.* at 79, 81. In response, BAAQMD "disagree[d] that the evidence it evaluated from the San Jose and Livermore areas should necessarily be discounted simply because those are different locations than Hayward, and the commenters have not provided any information from which to conclude that there may be more available nitric acid in the Hayward area." *Id.* at 81. BAAQMD then stated that it had continued to investigate this issue, citing a recent draft report in which computer modeling was used to predict $PM_{2.5}$ levels around the Bay Area. *Id.* at 81-82. According to BAAQMD, the draft report indicated that the entire Bay Area is indeed nitric acid limited. *Id.* In particular, according to the model, the Hayward area "has among the lowest levels of available nitric acid in the entire region, in the vicinity of 0.25 ppb [parts per billion] or less." *Id.* at 82. Thus, according to BAAQMD, the study discussed in the 1997 memorandum "regarding the Livermore and San Jose areas would be useful in assessing the situation in the Hayward area." *Id.*

BAAQMD next addressed comments arguing that ammonia slip could be a significant contributor to the formation of secondary particulate matter. In response, BAAQMD stated that "the computer model predicted that emissions of all secondary particulate precursors from the facility will have a maximum additional impact on ambient $PM_{2.5}$ levels of 0.11 $\mu g/m^3$ [micrograms per cubic meter], *which is not a significant additional impact* given the relative size of the direct $PM_{2.5}$ impact and background levels in the area." *Id.* at 82 (emphasis added); *accord id.* at 152-53. BAAQMD explained that, in sum, it "continues to conclude that the evidence at this stage shows that additional ammonia emissions from the Russell City facility will not make a significant additional contribution to secon-

[93] An area is considered to be "nitric acid limited" when "the formation of ammonium nitrate in the [] air basin appears to be constrained by the amount of nitric acid in the atmosphere and not driven by the amount of ammonia in the atmosphere." SOB at 26-27. "Where an area is nitric acid limited, emissions of additional ammonia will not contribute to secondary particulate matter formation because there is not enough nitric acid for it to react with." *Id.* at 27.

dary $PM_{2.5}$ formation" and that "it would not be appropriate to subject this facility to a BACT requirement for ammonia slip at this time, even if the federal PSD regulations did not prohibit it." *Id.* at 82-83.

A careful reading of Mr. Sarvey's petition reveals that he did not confront the major point BAAQMD made in its responses to comments, namely, that EPA has established the presumption that ammonia is not a secondary particulate matter precursor and that ammonia should not be included as part of the PSD BACT analysis. Nowhere in his petition does Mr. Sarvey even mention EPA's recent rule. Nor does he address this point in his reply brief. As BAAQMD explained, EPA's recent NSR $PM_{2.5}$ rule clearly indicates that, in the PSD context, ammonia is not a "regulated NSR pollutant" in attainment areas and therefore should not be considered to be a particulate matter precursor. RTC at 80; *see also* 73 Fed. Reg. at 28,330, 28,349 (amending the pollutants listed in section 52.21 and, unlike nitrogen oxides and volatile organic compounds, not including ammonia at all as a regulated pollutant in attainment areas);[94] *see also* Proposed Rule to Implement the Fine Particle NAAQS, 70 Fed. Reg. 65,984, 66,036 (proposed Nov. 1, 2005) ("[EPA] is not proposing to identify ammonia as a regulated NSR pollutant for purposes of PSD in any attainment * * * areas."). Thus, not only is Mr. Sarvey's failure to address BAAQMD's response concerning EPA's rule alone sufficient for the Board to conclude that Mr. Sarvey has failed to demonstrate that review is warranted on this issue, EPA's recent rule itself suggests that BAAQMD did not clearly err in its treatment of ammonia slip in its particulate matter analysis.[95]

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[94] In the rule, nitrogen oxides were explicitly added to the list of regulated NSR pollutants and precursors for purposes of the PSD program. Specifically, nitrogen oxides are "presumed to be precursors" of $PM_{2.5}$ in all attainment areas unless there is a demonstration that "emissions of nitrogen oxides from sources in a specific area are not a significant contributor to that area's ambient $PM_{2.5}$ concentrations." 73 Fed. Reg. at 28,349 (to be codified at 40 C.F.R. § 52.21(b)(50)(i)(*c*)). EPA took a different approach with volatile organic compounds. Such compounds are presumed not to be precursors to $PM_{2.5}$ in attainment areas unless there is a demonstration that "emissions of volatile organic compounds from sources in a specific area are a significant contributor to that area's ambient $PM_{2.5}$ concentrations." 73 Fed. Reg. at 28,349 (to be codified at 40 C.F.R. § 52.21(b)(50)(i)(*d*)). In contrast to these two approaches, EPA left ammonia off the PSD list of pollutants altogether. *See id.*; *see also* 70 Fed. Reg. at 66,036 (proposed rule).

[95] In his petition, Mr. Sarvey also asserts that the Board "must take under consideration whether the additional PM precursor, ammonia, from the project's SCR will prevent or interfere with the attainment or maintenance of the Federal PM_{10} and $PM_{2.5}$ Standards." Sarvey Pet. at 15. This issue has been partially mooted, insofar as the area is now out of attainment for 24-hour $PM_{2.5}$. See discussion below in Part VI.B.7.b. Moreover, BAAQMD considered this same issue in its responses to comments, and Mr. Sarvey has neither acknowledged that fact nor explained why BAAQMD's response was clearly erroneous. *See* RTC at 153-54 (considering the impacts of all of the precursors on the particulate matter NAAQS). As discussed in the text, in order to establish that review of the permit is warranted, a petitioner must not only state his objections to the permit but must also explain why the permit issuer's previous responses to those objections are clearly erroneous.

Furthermore, even if the Board were to consider the technical dispute between BAAQMD and Mr. Sarvey over the collateral impacts of ammonia, the Board would similarly conclude that Mr. Sarvey failed to demonstrate clear error for several reasons. First, the issues Mr. Sarvey raises in his petition are very similar to comments BAAQMD addressed in its response to comments document and, for the most part, Mr. Sarvey fails to even acknowledge BAAQMD's responses on these technical issues. For example, with respect to the question of whether nitric acid is limiting, BAAQMD, as summarized above, provided new information about the nitric acid levels in the Hayward area. *See* RTC at 81-82. Not only does Mr. Sarvey's petition make no mention of this new information, his allegations suggest the opposite, stating that BAAQMD "provides no evidence in the permit that [the] Hayward area is nitric limited." Sarvey Pet. at 15. Mr. Sarvey therefore would have failed to meet his burden of demonstrating that review is warranted for this reason as well. *See* discussion *supra* Parts III and VI.B.1.b.iv.

Second, even if the Board were to consider the administrative record, BAAQMD's conclusions appear to have been adequately explained and supported. BAAQMD considered the issues raised by commenters, and its conclusions appear rational in light of the scientific information in the record. Moreover, contrary to Mr. Sarvey's assertions, BAAQMD also appears to have provided scientific justification for its conclusions. Mr. Sarvey has failed to point to any evidence, in the record or otherwise, showing that BAAQMD's analysis of this issue is clearly erroneous.[96, 97]

4. *Should the Board Review, as an Important Policy Consideration, Whether the Recently Issued NO_2 Standard Should Be Applied to the Final Permit as Mr. Sarvey Argues?*

In his petition, Mr. Sarvey asks the Board to take into account, as an important policy consideration, the "new federal NO_2 standard" when considering emission limits for the Facility. Sarvey Pet. at 4, 16. Mr. Sarvey is referring to a recent final rule EPA issued establishing a new one-hour primary NAAQS for NO_2, which supplements the existing annual standard. *See* Primary National Ambient Air Quality Standards for Nitrogen Dioxide, 75 Fed. Reg. 6474, 6474 (Feb. 9,

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[96] Ironically, while Mr. Sarvey claims that BAAQMD's position is "speculative at most," it is in fact Mr. Sarvey's assertions that are speculative in nature. This is yet another justification for the Board's denial of review on this issue. *See Three Mountain Power*, 10 E.A.D. at 58 ("The Board will not overturn a permit provision based on speculative arguments.").

[97] In his reply brief, Mr. Sarvey additionally argues that a statement in BAAQMD's recent draft report "concludes that ammonia emissions are the only precursor that would significantly lower formation of secondary $PM_{2.5}$" and thus supports his contentions. Sarvey Reply at 3; *see also id.* at 10. Not only is this argument procedurally barred because it was not raised in his petition but instead raised for the first time in his reply brief, *see supra* Part VI.B.1.b.ii, Mr. Sarvey also quotes this phrase out of context, thereby misinterpreting the report's conclusions.

2010). Although the rule was issued on February 9, 2010, the Agency set an effective date of April 12, 2010. *Id.* As noted above, BAAQMD issued the Final Permit on February 3, 2010, several days before issuance of the new NO_2 rule and two months before the rule's effective date. Thus, in effect, Mr. Sarvey is seeking to have a rule that was promulgated after BAAQMD issued the Final Permit applied to the Final Permit.[98] At oral argument, Mr. Sarvey contended that the Final Permit should not be considered "issued" because it is on appeal before the Board.[99] *See* Oral Arg. Tr. at 40-42 (citing several permitting regulations including 40 C.F.R. §§ 124.15, .19(f)(1)).[100]

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[98] Mr. Sarvey appropriately does not assert that BAAQMD clearly erred in issuing the Final Permit under the pre-2010 regulation. A permit issuer must "apply the [] statute and implementing regulations in effect at the time the final permit decision is made." *In re Phelps Dodge Corp.*, 10 E.A.D. 460, 478 n.10 (EAB 2002); *accord Dominion I*, 12 E.A.D. at 616.

[99] In connection with this issue, Mr. Sarvey filed a motion requesting that the Board take official notice of two recent EPA memoranda: (1) Memorandum from Stephen D. Page, Director, Office of Air Quality Planning & Standards, U.S. EPA, to Regional Air Division Directors (June 29, 2010) (Subject: Guidance Concerning Implementation of the 1-hour NO_2 NAAQS for the PSD Program); and (2) Memorandum from Stephen D. Page, Director, Office of Air Quality Planning & Standards, U.S. EPA, to Regional Air Division Directors and Deputies (Apr. 1, 2010) (Subject: Applicability of the Federal PSD Permit Requirements to New and Revised NAAQS). The Board generally takes "official notice" of relevant non-record information contained in statutes, regulations, judicial proceedings, public records, and Agency records, including EPA guidance documents and memoranda. *See* discussion *supra* Part VI.B.1.a.ii.*c.i.*(*a*); *see also*, *e.g.*, *In re City of Denison*, 4 E.A.D. 414, 419 n.8 (EAB 1992) (taking official notice of regional orders regarding the "line of succession" in a region); *In re Hawaiian Commercial & Sugar Co.*, 4 E.A.D. 95, 102 n.13 (EAB 1992) (taking official notice of a basic Agency reference document); *In re Rubicon, Inc.*, 2 E.A.D. 551, 556 n.11 (CJO 1988) (taking notice of an Agency memorandum); *see also In re Arecibo & Aguadilla Reg'l Wastewater Treatment Plants*, 12 E.A.D. 97, 145 n.86 (EAB 2005) (explaining the Board's general standard and taking notice of information filed in relevant judicial proceedings). Accordingly, the Board takes official notice of these two Agency memoranda.

[100] As Mr Sarvey notes, several of the part 124 permitting procedural regulations refer to the "issuance" of the final permit decision. Section 124.15, which is entitled "Issuance and effective date of permit," states that "[a]fter the close of the public comment period under § 124.10 on a draft permit, the Regional Administrator [or delegatee] shall *issue* a final permit * * * ." 40 C.F.R. § 124.15(a) (emphasis added). The regulation later provides that "[a] final permit decision * * * shall become effective 30 days after the service of notice of the decision unless," among other things, "review is requested on the permit under 124.19." *Id.* § 124.15(b). Thus, according to this regulation, even though the permit issuer has "issued" the final permit decision, its effective date is delayed by an appeal. Consistent with this provision, section 124.19(c) states that the Board, within a reasonable time following the filing of a petition for review, "shall issue an order granting or denying the petition for review. To the extent review is denied, the conditions of the final permit decision become final agency action." *Id.* § 124.19(c). Section 124.19(f)(1), however, somewhat incongruously with subsection (c), provides that "[a] final permit decision shall be *issued* by the Regional Administrator [or delegatee]: (i) When the [Board] issues notice to the parties that review has been denied." *Id.* § 124.19(f)(1) (emphasis added). It is to this ambiguity about when the permit is "issued" that Mr. Sarvey cited at oral argument. Notably, in a recent guidance document, the Agency addressed this ambiguity in the context of the applicability of new rules or guidance, explaining that "[u]nder EPA's procedural regulations, a

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The Board and its predecessors have, on a number of occasions, addressed the extent to which new rules or guidelines issued after initial permit issuance should be considered in ongoing permitting proceedings. *E.g.*, *Dominion I*, 12 E.A.D. at 614-18 (seeking application of a new interpretation in a rule EPA issued after Region issued the final permit but while on appeal with the Board); *In re J&L Specialty Prods. Corp.,* 5 E.A.D. 31, 65-67 (EAB 1994) (seeking application of a revised water quality standard that Agency issued after the final permit was issued); *In re Homestake Mining Co.*, 2 E.A.D. 195, 198 (CJO 1986) (seeking application of regulatory changes proposed at the time of permit issuance); *In re U.S. Pipe & Foundry Co.*, NPDES Appeal No. 75-4 (Adm'r 1975) (seeking application of a new regulation issued after permit issuance but while on appeal at the Agency), *aff'd in relevant part, rev'd in part sub nom. Alabama ex rel. Baxley v. EPA*, 557 F.2d 1101, 1108 (5th Cir. 1977). In *Dominion I*, the Board provided a lengthy examination of Agency cases that have considered this issue. *See* 12 E.A.D. at 614-16. Rather than repeating that entire discussion in full here, the Board summarizes several key points.

In one of the earliest cases considering the question of whether to apply a new rule to a permit that had been issued by a permit issuer but was on appeal, the Administrator stated that:

> Although matters contested in [a permitting proceeding] do not become final for purposes of judicial review until the Administrator has acted on an appeal, the Administrator's review of the original action taken by the [permit issuer] should be based on the standards and guidelines in existence at the time the original action was taken, and thus, to that extent, finality must be accorded the original action taken.

U.S. Pipe, NPDES Appeal No. 75-4, *quoted in Alabama v. EPA*, 557 F.2d at 1108. Consequently, the Administrator concluded that "the proper point in time for fixing applicable [] standards and guidelines is when the [permit issuer] initially issues a final permit." *Id.*; *see also Rubicon*, 2 E.A.D. at 555 & n.10 (stating that guidelines promulgated after permit issuance do not automatically apply during appeal, but that permit issuer may withdraw permit and apply new guidelines); *Homestake Mining*, 2 E.A.D. at 199-200 & n.9 (explaining that permit issuer need not apply rule only proposed when permit was issued and not applying the final rule on appeal).

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permit is 'issued' when the Regional Office makes a final decision to grant the application, not when the permit becomes effective or final agency action." Office of Air & Radiation, U.S. EPA, *PSD and Title V Permitting Guidance for Greenhouse Gases* at 3 n.6 (Nov. 2010).

The Board has, however, on at least two occasions, remanded permits in light of new requirements. *See J&L Specialty*, 5 E.A.D. at 66; *In re GSX Servs. of S.C., Inc.*, 4 E.A.D. 451, 465 (EAB 1992). Notably, in one of these cases, the permittee, who was also the petitioner, had already filed a permit modification request based on the new regulatory change. *J&L Specialty*, 5 E.A.D. at 66. The Board, in concluding that remand was appropriate, stated that "[i]n the interests of efficiency, the [permit issuer] should reconsider this permit condition simultaneously with its consideration of [the permittee's] modification request". *Id.* at 67. In the other case, the Board noted that the new rule required the permit applicant, who also was the petitioner, to apply for a permit modification to meet the new standards of the rule. *GSX*, 4 E.A.D. at 465 n.17. The Board also pointed out that "the new rule expressly provides for a reevaluation of all pending and issued permits where construction has not begun." *Id.*

In *Dominion I*, based on a comprehensive review of the cases addressing this issue, the Board concluded that "during administrative review, the Agency has the discretion to remand permit conditions for reconsideration in light of legal requirements that change before the permit becomes final agency action."[101] 12 E.A.D. at 618; *accord J&L Specialty*, 5 E.A.D. at 66. Based on the facts and circumstances in that case, the Board decided it was not appropriate to remand that permit based on the new rule. *Dominion I*, 12 E.A.D. at 617.

Similarly here, upon consideration of the recently issued NO_2 NAAQS final rule and the facts and circumstances of this case, the Board does not believe it appropriate to remand the permit to BAAQMD for it to reconsider the Final Permit in light of the new rule. First and most significantly, the rule itself does not

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[101] The Board, however, made the following observation:

> "[A]t one time, the part 124 regulations contained a provision that allowed a party, during the pendency of an evidentiary hearing, to file a motion with the Presiding Officer requesting that a new regulatory requirement be applied to its permit. *Homestake Mining*, 2 E.A.D. at 200 n.8 (discussing 40 C.F.R. § 124.86(c) (1986)). The decision of whether to do so was within the Presiding Officer's discretion. *Id.* The Chief Judicial Officer noted in *Homestake Mining* that this regulation was intended to grant some flexibility from the general principle articulated in *U.S. Pipe* that disfavored new rules from being applied after an initial decision was issued. *Id.* This provision allowing for a motion to request application of a new rule was deleted when the part 124 regulations governing evidentiary hearings were removed in their entirety from part 124. *See In re USGen New England, Inc.*, 11 E.A.D. 525, 529 (EAB 2004). While not central to our analysis, this deletion raises a question of whether discretion to apply a new rule still exists absent circumstances where the rule specifically states that it applies retroactively.

Dominion I, 12 E.A.D. at 617.

indicate that it is intended to be applied retroactively to permits for which a final permit decision has already been issued. In fact, by using the future tense and by referring to "applications" in the context of the impacts of the rule on the PSD program, the language in the preamble to the final rule suggests the reverse.[102] *See, e.g.,* 75 Fed. Reg. at 6525. In explaining how the new rule will apply, EPA states that "major new and modified sources *applying for* NSR/PSD permits will *initially* be required to demonstrate that their proposed emissions increases of NO_X will not cause or contribute to a violation of either the annual or 1-hour NO_2 NAAQS and the annual PSD increment."[103] *Id.* This language suggests that the rule was not intended to require permit decisions already issued to be reopened to await the development of such tools.

Second, these permit proceedings have been ongoing since at least November 2006.[104] *See Russell City I*, 14 E.A.D. at 167-68. Thus, BAAQMD has spent several years and significant resources during this time considering the permit application in light of the existing rules and standards. The other participants have likewise spent significant time and resources in participating, commenting, and/or addressing various permit-related issues. Should the Final Permit be remanded to reconsider the NO_2 NAAQS final rule, it is possible that another standard may be issued during the remand period, which would delay the permit proceedings even further and result in an endless loop of permit issuances, appeals, and remands. Notably, as discussed below, significant regulatory changes already occurred between draft and final permit issuance that affected the PSD requirements, requiring new analyses and resources (e.g., the non-attainment $PM_{2.5}$ rule).

For these reasons, the Board believes it inappropriate to remand the permit to BAAQMD for it to reconsider the Final Permit in light of the new NO_2 rule. The Board therefore declines to review this issue.

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[102] Notably, in *GSX* – a case in which the Board did remand the permit to the permit issuer to consider the new rule – the recently issued rule in question specifically required reevaluation of pending permits where construction had not begun. *GSX*, 4 E.A.D. at 465 n.17.

[103] Moreover, the preamble notes that not all necessary tools are yet available "under the NSR/PSD program for completing NO_2 analyses." 75 Fed. Reg. at 6525 (referring to screening tools, such as significant impact levels, significant emissions rate, and significant monitoring concentrations).

[104] In 2006, RCEC submitted an application to the CEC requesting an amendment to the 2002 certificate CEC had granted it, thereby triggering PSD permitting procedures. *Russell City I*, 14 E.A.D. at 167 & n.11. The time frame cited above does not take into account the work performed in considering the original 2001 application and in issuing a draft PSD permit. *See id.* at 167 n.11.

5. *May the Board, as an Important Policy Consideration, Review the Final Permit and Require Inclusion of Penalties for Violations Because of BAAQMD's Alleged Lax CAA Enforcement as Mr. Sarvey argues?*

Mr. Sarvey also requests that the Board remand the Final Permit to BAAQMD so that it may "include meaningful penalties for non compliance with permit conditions." Sarvey Pet. at 18, 21. He claims that the Final Permit must provide for meaningful penalties "because BAAQMD has lax enforcement policies which do not deter repeat offenders." *Id.* at 18. He frames this request as an "important policy consideration" for the Board. *See id.* at 16, 18.

As the Board has explained on several occasions, fear of lax enforcement by the permit issuer is not grounds for review of the permit. *In re EcoEléctrica, LP*, 7 E.A.D. 56, 70-71 (EAB 1997); *In re Federated Oil & Gas*, 6 E.A.D. 722, 730 (EAB 1997); *In re Genesee Power Station*, 4 E.A.D. 832, 865 (EAB 1993) (explaining that issue relating to permit issuer's ability to enforce a valid permit "is not an issue the Board can address in the context of a PSD permit appeal"); *In re Brine Disposal Well*, 4 E.A.D. 736, 746 (EAB 1993) (explaining that the Board "cannot undertake to review th[e] permit decision on the basis of [petitioner's] assertion that EPA's inspection (i.e., enforcement) capabilities are inadequate"); *see also Knauf I*, 8 E.A.D. at 172 (denying review of an enforcement-related issue); *In re Gen. Elec. Co.*, 4 E.A.D. 358, 365 (EAB 1992) (explaining that Board's purpose is to determine whether permit was appropriately issued and not to retain oversight responsibility for implementation of a validly issued permit). "This Board's role is to examine specific permit conditions that are claimed to be erroneous, not to address generalized concerns broadly directed toward the enforcement capabilities of [the permit issuer] or any other regulatory agency."[105] *EcoEléctrica,* 7 E.A.D. at 70; *accord Federated Oil*, 6 E.A.D. at 730. Although the Board may review specific provisions of a permit that might tend to make subsequent enforcement of the permit more or less effective, such as conditions related to monitoring and reporting requirements, Mr. Sarvey has not challenged any such existing provisions here. *See EcoEléctrica,* 7 E.A.D. at 71; *Knauf I*, 8 E.A.D. at 172; *Federated Oil*, 6 E.A.D. at 71; *accord Brine Disposal*, 4 E.A.D. at 746 & n.14. Accordingly, the Board declines to review the Final Permit based on BAAQMD's alleged lax CAA enforcement, and Mr. Sarvey's request for review based on this objection must be denied.

[105] "[A] general statement of concern regarding the administration of an entire regulatory program * * * fails to satisfy a basic prerequisite for obtaining Board review under 40 C.F.R. § 124.19, namely, the identification of a specific permit term that is claimed to be erroneous." *Federated Oil*, 6 E.A.D. at 730.

6. *Has CalPilots Demonstrated Why BAAQMD's Responses to Comments Concerning Aviation-Related Risks Are Clearly Erroneous or Otherwise Warrant Review?*

In its petition, CalPilots raises several concerns associated with aviation-related health and safety. *See generally* CalPilots Pet. at 1-7. CalPilots states that the Facility is proposed to be located within one-and-a-half miles of Hayward Executive Airport and generally within the airspace of the San Francisco area, one of "the most complicated in the country." *Id.* at 2, 4. CalPilots asserts that a power plant so close to the Hayward Airport will limit airspace use, which will have a deleterious effect on the Bay Area's air traffic management. *Id.* at 5. CalPilots also argues that power plant exhaust fumes may have adverse health effects on pilots and passengers, *id.* at 2, and requests that a risk analysis study for mobile sensitive receptors be done, which should also include consideration of the effects of the plume emissions on the aircraft themselves. *Id.* at 5-6. CalPilots further claims that "[h]azardous material releases have been omitted as part of the air analysis during this process." *Id.* at 7. CalPilots also asserts that the facility may create additional aircraft operation problems, such as turbulence and visual interference.[106] *Id.* at 4, 7.

Significantly, CalPilots raises these aviation-related concerns in its petition without even acknowledging that BAAQMD considered comments on these very

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[106] In connection with these aircraft safety issues, after the parties had finished filing briefs in this matter, CalPilots submitted a document entitled "Administrative Notice" to which it attached a copy of one of the changes FAA was making to the AIM. *See supra* notes 6-7 and accompanying text; *see also* CalPilots Admin. Notice App. B. CalPilots requests this new provision "be made as part of the Administrative Record." CalPilots Admin. Notice at 1. It is not entirely clear whether CalPilots is requesting that the Board take official notice of this document or supplement the administrative record with this document. The Board considers both.

As explained above, *see supra* Part VI.B.1.a.ii.*c.i*, it is not appropriate to supplement the administrative record with documents the permit issuer did not consider in making its permitting decision. The effective date of "Change 1" was August 26, 2010. It therefore post-dates BAAQMD's final permit decision, and BAAQMD could not have considered it. The Board therefore denies CalPilots' request to supplement the record with this document. Nevertheless, as noted above, *see supra* Part VI.B.1.a.ii.*c.i*, the Board generally takes official notice of relevant non-record governmental documents. Consequently, the Board takes official notice of this official FAA manual. The FAA manual and amendment, however, do not change the Board's analysis or conclusions here. The amendment CalPilots' cite contains information about potential hazards around thermal plumes and recommends that "when able, a pilot should fly upwind of possible thermal plumes." CalPilots Admin. Notice App. B, at 1. While this document supports CalPilots' general allegations that the FAA has some concerns about thermal plumes, it does not provide any detailed additional evidence disputing the safety analysis BAAQMD performed specifically for the Facility, nor does it reference the Facility in any way.

same issues and responded to them.[107] *See, e.g.,* RTC at 57, 59 n.125, 188-89, 225-27. BAAQMD addressed comments regarding the potential health risks to pilots and passengers flying near the facility, *see* RTC at 188-89, as well as potential impacts of hazardous air pollutants, *see* RTC at 57-59, 227 n.393 (discussing potential hazards from ammonia emissions), at 188-89 (discussing health impacts from maximum potential hazardous air pollutants emissions generally). In fact, in response to comments, BAAQMD conducted an additional health risk assessment to determine emission impacts above ground level. *See id.* at 188-89. BAAQMD also addressed comments concerning the proposed facility's potential impacts on airspace use and aviation and aircraft operations.[108] *See id.* at 226-27. CalPilots' failure to address BAAQMD's detailed responses to these same comments is fatal to its petition for review of this issue. As explained above in Parts III and VI.B.1.b.iv, in order to demonstrate that Board review is warranted, a petitioner must not only present its objections to a permit, but it must also explain *why* the permit issuer's previous response to its objections is clearly erroneous or otherwise deserves review. A petitioner may not simply reiterate the comments it made on the draft permit.[109]

Moreover, not only has CalPilots failed to demonstrate that review is warranted by failing to address or even acknowledge BAAQMD's responses to comments, CalPilots has also failed to demonstrate that the aviation-related issues it raises fall within the Board's PSD jurisdiction. BAAQMD and RCEC each dis-

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[107] CalPilots' petition appears to be, in large part, a reiteration of its comments on the draft permit. *Compare* CalPilots Pet. at 1, 3-8 *with* RCEC Resp. Seeking Summ. Disposition Ex. 8 (Letter from Carol Ford, Vice President, CalPilots, to Weyman Lee, BAAQMD (Feb. 6, 2009)).

[108] BAAQMD first noted that the "Federal PSD Program is designed to address certain air quality issues, not to address safety issues such as potential hazards to aviation and aircraft operations." RTC at 227. BAAQMD then went on to explain, however, that "the potential for aviation hazards was examined in detail by the Energy Commission during the licensing proceedings for the facility. The Commission reviewed a sophisticated analysis of vertical plume velocities and a 2006 FAA study entitled 'Safety Risk Analysis of Aircraft Overflight of Industrial Exhaust Plumes,' and concluded that the FAA would characterize this risk as extremely remote and within acceptable ranges. The Energy Commission therefore found that the impact from potential aviation hazards would be less than significant." *Id.*

[109] CalPilots additionally states that the FAA is currently conducting a "plume safety study" and requests that the Board remand the Final Permit "for further comment by the FAA and others." CalPilots Pet. at 2. The Board does not believe it appropriate to remand the permit based on CalPilots' request for several reasons. First, CalPilots does not suggest, nor is it likely, that this new study will impose new legal PSD-related requirements. Second, BAAQMD provided two comment periods in which these entities could have submitted any comments they had on the draft permit. Third, the administrative record for a decision essentially "closes" at the time the final permit decision is issued. *See* 40 C.F.R. § 124.18(c) ("The record shall be complete on the date the final permit is issued."); *see also* discussion *supra* Part VI.B.4. BAAQMD properly issued the Final Permit based on the administrative record as it existed at the time BAAQMD issued its final permit decision rather than on speculation regarding future studies, reports, or recommendations.

cussed this threshold procedural issue in their motions requesting summary disposition. BAAQMD Resp. to [CalPilots'] Pet. for Review Seeking Summ. Dismissal at 9-10; RCEC Resp. Seeking Summ. Disposition at 7; *see also* BAAQMD Resp. to CalPilots at 7-8. Nowhere in its petition does CalPilots cite to a specific PSD provision that concerns aviation risks, nor did it file a reply to the response briefs. Consequently, during oral argument, the Board asked CalPilots to point to a "specific requirement" of the PSD regulations that it believed BAAQMD had violated based on these aviation-related concerns. *See* Oral Arg. Tr. at 17. CalPilots failed to provide any such specific reference, responding only that "[a]ll the parts[,] because the PSD prevents significant deterioration of the environment." *Id.* Thus, CalPilots' only potential reference to a PSD basis for jurisdiction is its general citation to the BACT definition at 40 C.F.R. § 52.21. Notably, there is no mention of aviation-related risks in that definition. Thus, CalPilots has failed to sufficiently demonstrate that its aviation-related issues fall within the Board's PSD jurisdiction. *See, e.g.*, *In re Encogen Cogeneration Facility*, 8 E.A.D. 244, 259 (EAB 1999) (declining review where petitioners failed to show how the issues fell within the Board's PSD jurisdiction); *see also Knauf I*, 8 E.A.D. at 161-62 (explaining Board's jurisdiction).

7. *Have the College District's 24-Hour $PM_{2.5}$ Claims Been Essentially Rendered Moot in the PSD Context Because the Bay Area Was Designated as Nonattainment for the 24-Hour $PM_{2.5}$ NAAQS at the Time of Final Permit Issuance?*

In addition to challenging the Final Permit's start-up conditions, an issue already addressed in Part VI.B.1 above, the College District also makes several arguments in connection with BAAQMD's air quality analysis for 24-hour $PM_{2.5}$. More particularly, the College District disagrees with BAAQMD's conclusion that there will be no violation of the 24-hour $PM_{2.5}$ NAAQS, arguing that this conclusion is clearly erroneous because, in conducting its air quality analysis, BAAQMD failed to utilize the worst case scenario in its modeling run, used an emissions rate that is "non-achievable," and excluded emissions from several significant roadways. College Dist. Pet. at 26-35. On a related note, the College District asserts that BAAQMD's "environmental justice analysis is built on a faulty foundation" because of the alleged errors BAAQMD made in its $PM_{2.5}$ analysis. *Id.* at 37.

In response, BAAQMD argues that, because the Bay Area was designated nonattainment by EPA prior to issuance of the Final Permit, as a matter of law, the 24-hour $PM_{2.5}$ NAAQS standard is inapplicable to this PSD permit. BAAQMD Resp. to College Dist. at 3, 10-11 (referring to Air Quality Designations for the 2006 24-Hour Fine Particle ($PM_{2.5}$) NAAQS, 74 Fed. Reg. 58,688, 58,696 (Nov. 13, 2009)). Thus, according to BAAQMD, the College District's "claim that the facility is not eligible for a PSD permit because it will cause or contribute to a violation of the 24-hour $PM_{2.5}$ NAAQS is legally irrelevant and

should be dismissed." *Id*. at 14. RCEC similarly contends that the College District "fails to demonstrate any error in [BAAQMD's] determination that the non-attainment designation obviated the need for any 24-hour impact analysis." RCEC Resp. to College Dist. at 6.

In light of these arguments, before considering the College District's substantive claims concerning BAAQMD's 24-hour $PM_{2.5}$ analysis,[110] the Board must first address the question of whether these claims have essentially been mooted by EPA's nonattainment designation. To do so, the Board reviews the relevant statutory and regulatory background and considers EPA's recent $PM_{2.5}$ air quality designation rule.

a. *Statutory and Regulatory Background*

As explained above, the CAA requires EPA to designate geographic areas within states, on a pollutant-by-pollutant basis, as being in either "attainment" or "nonattainment" with the NAAQS, or as being "unclassifiable." CAA § 107(d), 42 U.S.C. § 7407(d). For areas designated nonattainment, "states must develop a State Implementation Plan (SIP) and tribes may develop a Tribal Implementation Plan that provides for attainment of the NAAQS as expeditiously as practicable, in accordance with the requirements of the CAA and applicable EPA regulations." 74 Fed. Reg. at 58,689; *see* CAA § 172, 42 U.S.C. § 7502 (nonattainment plan provisions in general). In comparison, "[f]or those areas designated unclassifiable or attainment, states must meet other statutory and regulatory requirements to *prevent significant deterioration* of air quality in those areas." 74 Fed. Reg. at 58,689.

Importantly, the PSD program is not applicable in nonattainment areas; it only applies in areas deemed to be in attainment or unclassifiable. *See* CAA § 161, 42 U.S.C. § 7471; *In re Sutter Power Plant*, 8 E.A.D. 680, 681-82 (EAB 1999); *see also In re Prairie State Generating Co.*, 13 E.A.D. 1, 5-6 (EAB 2006) ("The PSD permitting program regulates air pollution in 'attainment' areas, where air quality meets or is cleaner than the [NAAQS], as well as areas that cannot be classified * * * ."). In nonattainment areas, the nonattainment area ("NAA") NSR requirements of the CAA and implementing regulations apply in

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[110] Both BAAQMD and RCEC also disagree with the College District's challenge to the substance of the 24-hour $PM_{2.5}$ air analysis BAAQMD conducted pursuant to the PSD permitting requirements. *See* BAAQMD Resp. to College Dist. at 15-32 (arguing that even if an analysis were required, BAAQMD did not clearly err in its thorough and well-documented analysis that concluded the Facility would not cause or contribute to a violation of the 24-hour standard); RCEC Resp. to College Dist. at 6-8 (arguing that to the extent BAAQMD was required to demonstrate compliance with the 24-hour standard, the College District failed to demonstrate that BAAQMD erred in its analysis). Based on the Board's conclusion below that the nonattainment designation mooted the College District's substantive challenges to BAAQMD's PSD air quality analysis, the Board does not discuss the participants' allegations concerning the substantive claims further.

lieu of the PSD requirements. *See* CAA §§ 171-193, 42 U.S.C. §§ 7501-7514; 40 C.F.R. §§ 51.160-.165; *Sutter*, 8 E.A.D. at 682 n.2; *see also NSR Manual* at 3-5 (explaining when PSD versus NAA permitting requirements apply), at G.1-.9 (containing an overview of the NAA preconstruction review requirements). Although a single geographic area may be designated as attainment or unclassifiable for one or more of the six criteria pollutants and as nonattainment for the others, the PSD permitting requirements will only apply to the attainment/unclassifiable pollutants in that geographic area. *Sutter*, 8 E.A.D. at 8 n.2; *see also NSR Manual* at 4 ("[A] source may have to obtain both PSD and NAA permits if the source is in an area which is designated nonattainment for one or more pollutants."). In those circumstances where the SIP for a nonattainment area has not yet been fully approved by EPA, Appendix S of part 51 applies. *NSR Manual* at 5; *see* 40 C.F.R. pt. 51 app. S.

b. *Impact of the Bay Area's Recent 24-Hour $PM_{2.5}$ NAAQS Nonattainment Designation*

While RCEC's permit application was pending before BAAQMD and prior to BAAQMD's issuance of the Final Permit, EPA designated the San Francisco Bay Area as "nonattainment" for the 24-hour $PM_{2.5}$ NAAQS.[111] 74 Fed. Reg. at 58,696. Consequently, California must develop a SIP that provides for attainment with the NAAQS as expeditiously as possible; submission of such SIP is due within three years. *Id.* at 58,689. More importantly for the matter at hand, the Bay Area's designation as nonattainment for 24-hour $PM_{2.5}$ also means that the NAA NSR permitting requirements rather the PSD permitting requirements apply to 24-hour $PM_{2.5}$ in that area. CAA §§ 107(d), 161, 171-193, 42 U.S.C. §§ 7407(d), 7471, 7501-7514; 40 C.F.R. pt. 51 app. S; *NSR Manual* at 4-5, F.7, G.1; *see also* discussion *supra* Part VI.A; *cf.* 40 C.F.R. § 52.21(a)(2)(i) ("the requirements of this section [52.21] apply to the construction of any new major stationary source * * * in an area designated as attainment or unclassifiable").

BAAQMD, while it still had the draft permit under consideration, realized that the Bay Area might be designated nonattainment for the 24-hour $PM_{2.5}$ NAAQS before the final permit decision was issued, acknowledged the issue, and explained its proposed approach in its Additional Statement of Basis as follows:

> [T]he outgoing EPA administrator signed a Federal Register notice on December 18, 2008, that would have the effect of designating the Bay Area as non-attainment of the National Ambient Air Quality Standard for $PM_{2.5}$ (24-hour average). Although the document was signed by the outgoing EPA Administrator, the incoming adminis-

[111] The effective date of the final rule was December 14, 2009. 74 Fed. Reg. at 58,688.

> tration has thus far declined to go ahead and actually publish it in the Federal Register. For that reason, the non-attainment designation has not become effective, and will not become effective for 90 days after Federal Register publication. This situation leaves the Bay Area in a sort of regulatory limbo on this issue, as the region is technically still unclassified for $PM_{2.5}$ (24-hour average) but is subject to an impending non-attainment designation that could become effective in the near future. This situation impacts the proposed Russell City permit because if the Bay Area remains unclassified, it will continue to be subject to PSD permitting requirements for $PM_{2.5}$ (24-hour average), but if the Bay Area becomes non-attainment the facility will be subject to Non-Attainment NSR permitting requirements for $PM_{2.5}$ (24-hour average).
>
> The Air District is addressing this rapidly-evolving situation by proposing two separate alternative routes for public review and comment: First, the Air District is proposing that in the event that the Bay Area remains unclassified for $PM_{2.5}$ (24-hour average), it will issue a Federal PSD Permit addressing $PM_{2.5}$ for both the 24-hour and annual standards. Second, the Air District is proposing that in the event the Bay Area is designated non-attainment during the remainder of this proceeding, the Air District will issue a Federal PSD Permit addressing $PM_{2.5}$ for the annual standard only, and will leave NSR applicability issues regarding the 24-hour standard subject to 40 C.F.R. Part 51, Appendix S, which contains the regulatory requirements for non-attainment areas in the interim between the date of designation as non-attainment and the time that the state can adopt its own SIP-approved Non-Attainment NSR permit requirements. These two alternative approaches are set forth below. The Air District seeks input and comment from the public on both alternatives, and proposes to proceed with the appropriate alternative depending on how regulatory developments unfold during the remainder of this permit proceeding.

ASOB at 52-53; *see also id.* at 54-55 (providing additional specifics about its proposed approach for the $PM_{2.5}$ 24-hour standard if the area became nonattainment); RTC at 78 (noting that "[i]t is this latter scenario that has come to pass," and thus BAAQMD was going ahead with the second alternative in the Final Per-

mit). BAAQMD further explained that "it had analyzed the applicability of Appendix S in the event that the Bay Area's $PM_{2.5}$ (24-hour) re-designation becomes effective during this permitting proceeding. Here, the facility would be exempt from Appendix S because it will emit less than 100 tons per year of $PM_{2.5}$." ASOB at 55 (citing 40 C.F.R. pt. 51 app. S ¶ II.A.4(i)(a), which establishes a 100-tons-per-year threshold for regulation of major stationary sources).

Notably, in its comments on the draft permit, while the College District mentioned BAAQMD's two-pronged approach, the College District did not appear to object to it. The College District stated that "the Additional SOB purports to perform a 'split' analysis applicable to $PM_{2.5}$ given the District is not in attainment, although the designation was fully executed, but remains 'ineffective' until finally published. However, absent from the Additional SOB is the required analysis for non-attainment as outlined above in the 40 CFR Parts 51 and 52 relied upon by the District." College Dist. Sept. 16, 2009 Comments at 2 (citations omitted). Thus, not only did the College District fail to challenge BAAQMD's proposed approach should the area be designated nonattainment, but the College District's statement that BAAQMD failed to perform the "required analysis for non-attainment" under parts 51 and 52 suggests that the College District agreed with BAAQMD that the CAA's nonattainment sections would apply if the area was designated nonattainment.

Later in its comments, the College District again touched upon the Bay Area's nonattainment status, but again did not clearly challenge BAAQMD's interpretation that a nonattainment designation for 24-hour $PM_{2.5}$ would mean that the NAA NSR permitting requirements would apply. *Id.* at 8. There, the College District commented on BAAQMD's Air Quality Impact Analysis – *which BAAQMD performed in case the Bay Area remained unclassifiable*, *see* ASOB at 53-54, 84-85 – and, in particular, BAAQMD's reliance on EPA's proposed PSD rule addressing increments, significant impact levels ("SILs"), and significant monitoring concentrations for $PM_{2.5}$ to determine whether the project's contribution to air pollution concentrations would be below the significant impact levels. *See* College Dist. Sept. 16, 2009 Comments at 7-8 (discussing and quoting PSD for Particulate Matter Less Than 2.5 Micrometers ($PM_{2.5}$) – Increments, Significant Impact Levels and Significant Monitoring Concentration, 72 Fed. Reg. 54,112 (Sept. 21, 2007) [hereinafter Proposed PSD $PM_{2.5}$ SILs Rule]). In commenting on BAAQMD's PSD Air Quality Impact Analysis, the College District first emphasized language in the Proposed PSD $PM_{2.5}$ SILs Rule that applies to a *PSD source* located in an *attainment* area that has an impact on an adjacent nonattainment area. *See id.* The College District then stated:

> Here, as acknowledged by the [ASOB], the Bay Area is in nonattainment for $PM_{2.5}$, and at any time that designation will become officially effective. Applying the [Proposed PSD $PM_{2.5}$ SILs Rule], the concentrations from the project

> itself are three to five times the [SILs] and clearly fall within the provisions discussed above that "the source is considered to cause or contribute to a violation of the NAAQS and may not be issued a PSD permit without obtaining emissions reductions." As a nonattainment region, this is where the analysis stops and starts.

Id. at 8 (citations omitted). While not altogether clear what the College District was arguing in this section of its comments,[112] at best, the College District appears to have been suggesting that even if the Bay Area were designated nonattainment, the Proposed PSD $PM_{2.5}$ SILs Rule should still be applied to it. The Board's reading of the College District's comments is consistent with the College District's statements at oral argument: "We had always gone under the theory and our argument has been consistent throughout that this PSD permit must examine all criteria pollutants, including that which is nonattainment."[113] Oral Arg. Tr. at 25.

Similar to its approach in its comments on the draft permit, the College District's arguments in its petition primarily focus on alleged errors in BAAQMD's *PSD* analysis, and in particular, in its air quality impact analysis and SILs calculations. *See generally* College Dist. Pet. at 26-35. Regarding BAAQMD's position that the recent nonattainment rule requires NAA permitting requirements, the College District states: "The Response [to Comments] attempts to brush off RCEC's violation of the 24-hour NAAQS by contending, without citation to any support, that because the Bay Area already is in violation of the Clean Air Act for the 24 hour $PM_{2.5}$, this fact in reviewing whether to issue a PSD permit is irrelevant. It is not." College Dist. Pet. at 30-31. The College District next discusses the alleged applicability of the Proposed PSD $PM_{2.5}$ SIL Rule to the RCEC permit, reiterating the statements it made in its comments on the draft permit. *Compare id.* at 32 *with* College Dist. Sept. 16, 2009 Comments at 8. The College District then argues that "BAAQMD completely ignores RCEC's viola-

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[112] It is difficult to discern the College District's arguments because, while acknowledging that the area was about to be designated nonattainment, the College District then argued that attainment regulatory provisions should be applied to it without any explanation of why or how the two sets of statutory and regulatory provisions could or should be read together. The College District's argument is particularly confusing because the language in the proposed regulation that it quotes concerns a PSD source in an attainment area that has an impact on an adjacent nonattainment area. In light of the fact that the area is nonattainment for 24-hour $PM_{2.5}$ and nowhere does the ASOB or even the College District refer to adjacent nonattainment areas in this context, the connection between the circumstance referenced in the proposed regulation and the Facility at hand is unclear. Because the provision cited applies only to attainment areas, and the Bay Area is no longer an attainment area, the Board finds that this provision has no relevance to the permit at issue. Therefore, to the extent that College District reiterates this argument in its petition, review is denied.

[113] Likewise, in response to the Board's question, "[D]id you say that the PSD regime still would apply if the area went nonattainment," the College District answered, "Yes. That has always been our position." Oral Arg. Tr. at 25-26.

tion of the NAAQS for 24-hour $PM_{2.5}$, essentially contending that as long as RCEC's yearly contribution falls below 100 tons/year, it may violate the 24-hour standard without consequence because the Bay Area is already in non-attainment. Such a construction is clearly erroneous." College Dist. Pet. at 32. Reading these statements together, the College District appears to be making an argument that, even though the area has been designated nonattainment for 24-hour $PM_{2.5}$, the PSD provisions should still be applied to 24-hour $PM_{2.5}$.[114]

The College District's position is a conclusory disagreement with BAAQMD's approach and does not explain the College District's basis for this legal theory or how the statutory or regulatory provisions may be read to authorize applying PSD permitting requirements – which, by statute, apply to areas that *are* designated attainment or unclassifiable – to an area that has been designated nonattainment. Conclusory arguments such as these are not sufficient to demonstrate that review is warranted. This is especially true where the arguments are seemingly inconsistent with the statutes and regulations.[115]

In sum, for the most part, the College District's primary challenge to BAAQMD's 24-hour $PM_{2.5}$ analysis was to the substance of BAAQMD's $PM_{2.5}$ analysis, which BAAQMD had performed in case the Bay Area remained unclassifiable. *See, e.g.*, College Pet. at 26-35 (challenging various values and assumptions BAAQMD made in modeling 24-hour $PM_{2.5}$). Insofar as the College District's arguments can be read to challenge BAAQMD's interpretation of the CAA and implementing regulations that, now that the Bay Area is in nonattainment for 24-hour $PM_{2.5}$, the NAA NSR permitting requirements apply for 24-hour $PM_{2.5}$ rather than the PSD requirements, the College District has merely disagreed with BAAQMD's conclusions and has failed to provide any explanation of how the statute or regulations may be read to support the College District's position that

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[114] Again, the Board's reading of the College District's petition is consistent with the College District's statements at oral argument. *See* Oral Arg. Tr. at 22-26, 122-23.

[115] In its reply brief, the College District finally provides some sort of legal basis for its position, contending that "40 C.F.R. § 52.24, otherwise known as the 'construction moratorium' for major stationary sources such as RCEC, clearly prohibits the approval of any PSD for RCEC." College Dist. Reply at 8. This is the first time, however, that the College District raised concerns about or referenced the construction moratorium provision; this issue was not raised in the College District's comments on the draft permit or in its petition. At oral argument, when asked whether it had challenged the position BAAQMD had laid out in the Additional Statement of Basis, the College District claimed that BAAQMD's position was ambiguous and confusing, implying that its failure to raise the issue was justified. *See* Oral Arg. Tr. at 22-23. While this could arguably excuse the College District's failure to raise the construction moratorium issue in its comments, it does not excuse the failure to raise the issue in its petition. Accordingly, because this argument concerning a completely different regulatory provision is raised for the first time in the College District's reply brief and is an argument that could have been raised in the College District's petition (if not in the College District's comments on the draft permit), it is untimely and thus procedurally barred and will not be considered. *See* discussion *supra* Parts III and VI.B.1.b.ii.

the PSD permitting requirements should apply to a pollutant in a nonattainment area. Consequently, the Board concludes that the College District has failed to demonstrate that BAAQMD clearly erred in concluding that it need not address the 24-hour $PM_{2.5}$ standard in the PSD permit because of the recent nonattainment designation. As noted above, a permit issuer must "apply the [] statute and implementing regulations in effect at the time the final permit decision is made." *In re Phelps Dodge Corp.*, 10 E.A.D. 460, 478 n.10 (EAB 2002); *accord Dominion I*, 12 E.A.D. at 616. Because the Bay Area was designated nonattainment for 24-hour $PM_{2.5}$ at the time BAAQMD issued the Final Permit, BAAQMD properly concluded that it was no longer required to address 24-hour $PM_{2.5}$ in the PSD permit. Consequently, all of the College District challenges to the substance of BAAQMD's analysis of 24-hour $PM_{2.5}$ have essentially been rendered moot by EPA's designation.[116]

8. *Has CARE Demonstrated that BAAQMD Violated the Procedural Permitting Regulations or Clearly Erred in Any Other Way?*

In its petition, CARE raises five arguments, primarily procedural in nature. *See* CARE Pet. at 2. CARE first alleges that BAAQMD "circumvented public participation" in the permitting process. *Id.* at 4. Second, CARE raises a concern about the preliminary determination of compliance ("PDOC") BAAQMD's Air Pollution Control Officer issued, claiming that BAAQMD should have "re-noticed" it following the Board's remand in *Russell City I.*[117] *Id.* at 6-9, 27. Third, CARE asserts that BAAQMD improperly failed to consider greenhouse gas emissions as regulated pollutants. *Id.* at 9-12. Fourth, CARE raises "specific 'amended' PSD permit issues for remand," which are primarily additional alleged procedural violations, such as BAAQMD's alleged failure to respond to Public Records Act requests and its alleged failure to properly respond to comments. *Id.* at 12-16. CARE lastly argues that BAAQMD "did not adequately respond to com-

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[116] This includes the College District's challenge to BAAQMD's environmental justice analysis, which, as noted above in the text, was premised on the College District's underlying assertion that the $PM_{2.5}$ analysis was erroneous, thereby leading to a faulty environmental justice analysis. Significantly, at oral argument, the Board noted that BAAQMD had interpreted the College District's environmental justice issue to be an "offshoot of [the College District's] concern about the effects of $PM_{2.5}$ 24-hour" and specifically asked the College District whether that was an accurate depiction of its environmental justice concerns. Oral Arg. Tr. at 29. The College District did not dispute this interpretation of its environmental justice claim and, in fact, again referenced its $PM_{2.5}$-related arguments, asserting that BAAQMD's $PM_{2.5}$ air modeling showed that there was a "violation" and "additional sensitive receptors." *Id.*; *see also* College Dist. Pet. at 27-28 (arguing that BAAQMD's air modeling for $PM_{2.5}$ is flawed and the modeling run showed more than 2,400 additional receptors).

[117] For a detailed discussion of the state certification process, including the PDOC procedures, see *Russell City I*, 14 E.A.D. at 164-66.

ments."[118] *Id.* at 16-26. The Board considers these arguments in this order below.

a. *Claim that BAAQMD Circumvented Public Participation*

In alleging that BAAQMD "circumvented public participation," CARE generally asserts that BAAQMD failed to implement 40 C.F.R. § 52.21, 40 C.F.R. part 124, and the CAA.[119] CARE Pet. at 4. CARE describes a number of actions it believes violate the permitting regulations. Specifically, CARE claims that BAAQMD failed to provide access to the administrative record, alleging that it made numerous requests for access and that "[a]fter no less than 10 requests," BAAQMD provided a limited response. *Id.*; *see also id.* at 14-15 (alleging slow responses to public records requests).[120] CARE also claims that when Mr. Simpson went to BAAQMD's office to review the requested documents, he was shown to a room containing the requested documents that CARE describes as a "windowless storage closet." [121] *Id.* at 14.

In conjunction with this assertion, CARE states that "[i]t has been impossible for the public to participate with no discernible docket for the facility as would be provided if the EPA issued the permit." *Id.* CARE claims that when EPA issues PSD permits, it provides an accessible docket on its website but that BAAQMD's electronic record was incomplete. *Id.* at 4-5; *see also id.* at 14 (pointing out that EPA Region 9 and the Board have a continually updated electronic docket).

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[118] CARE, in connection with one of its motions requesting leave to file a reply, asked the Board to take official notice of petitions filed in two cases: (1) a Ninth Circuit case brought by Mr. Simpson against, among others, the EPA Administrator and BAAQMD; and (2) a case brought by Mr. Boyd, CARE's president and a signatory of the petition, against the EPA before the Department of Labor's Administrative Review Board. *See* Second Motion Requesting Leave to File a Reply Brief at 1. The Board previously reserved judgment on this request, stating that "[i]f petitioners wish the Board to take official notice of these filings, they must provide [] an explanation in their reply brief" of the relevance of these cases to the one currently before the Board. Order of May 19, 2010 at 5-6. Petitioner CARE failed to provide the requisite explanation in its reply brief. Consequently, the Board denies CARE's request that official notice be taken of those two petitions.

[119] CARE also claims that the "amended" permit was not issued in a timely manner in violation of 40 C.F.R. § 51.166(2)(vii). CARE Pet. at 5. The Board assumes petitioner is actually referring to section 51.166(q)(2)(vii). As BAAQMD notes, it responded to this comment at length in its Responses to Public Comments. BAAQMD Resp. to CARE at 22; *see also* RTC at 196-98. CARE does not explain why this response, or any other portion of BAAQMD's response, is clearly erroneous or warrants review. Accordingly, for the reasons discussed in Parts III and VI.B.6, this issue is procedurally barred and review on this issue is denied.

[120] Some of these arguments were raised as part of CARE's fourth claim. *See* discussion *infra* Part VI.B.8.d.

[121] These claims appear to primarily raise concerns under the state's Public Records Act. The Board discusses the Public Records Act issue below in Part VI.B.8.d. To the extent CARE's claims touch on procedural rights under part 124, the Board addresses them in this section.

CARE also claims that the documents BAAQMD issued, in particular BAAQMD's fact sheets, "are fatally flawed." *Id.* at 5. CARE further asserts that BAAQMD issued "no less than 4 'fact sheets,'" and that they conflicted with each other. CARE also seems to generally raise concerns with the number of public notices, statements of basis, and fact sheets that BAAQMD issued.

In response, BAAQMD provides a lengthy description of all the public processes it provided throughout the permitting process. *See* BAAQMD Resp. to CARE Pet. at 5-8. BAAQMD also claims that it "not only complied with all of the requirements of Part 124, it went over and above" what was required of it. *Id.* at 11. BAAQMD also states that it received two requests from Mr. Simpson under the California Records Act and provides copies of those requests. *Id.* at 9; *see also* BAAQMD Decl. Exs. 1-2. BAAQMD states that it complied with these requests by making the boxes of documents available for Mr. Simpson's review on December 18, 2008, and by later mailing him photocopies of the documents. BAAQMD Resp. to CARE Pet. at 9.

Although CARE alleges numerous procedural violations, for most of its claims,[122] CARE fails to point to any specific regulatory provisions that BAAQMD has violated. Unlike Mr. Simpson's first appeal in which he demonstrated that BAAQMD had violated certain requirements explicitly described in section 124.10, *see Russell City I*, 14 E.A.D. at 174-76, petitioner has failed to make such a demonstration here.

Most of CARE's concerns seem to relate to inconvenience in dealing with BAAQMD rather than to any actual regulatory violations. For example, one of CARE's primary concerns appears to be that the administrative record is not available electronically. While this may be preferable, the regulations do not require it. *See* 40 C.F.R. §§ 124.9, .18 (administrative record requirements for draft and final permits); *see also Dominion I*, 12 E.A.D. at 530 (explaining that there is no requirement for an electronic index of the administrative record). The regulations only require that the administrative record be available for review. *See* 40 C.F.R. § 124.10(d)(vi) (requiring that the permit issuer specify "the times at which the record will be open for public inspection"). BAAQMD apparently did make the record available for public review because, as admitted by CARE, Mr. Simpson visited BAAQMD's office in order to review the record or a portion of it. *See* CARE Pet. at 14-15. BAAQMD also provided the public with instructions on accessing and viewing the administrative record. *See, e.g.,* ASOB at 3. CARE challenges the size and nature of the room in which the administrative record was displayed, but it points to no requirements concerning the type of room the administrative record should be kept in, and the Board knows of none.

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[122] The one exception is CARE's contention that BAAQMD violated 40 C.F.R. § 124.8(3) and (4), which the Board addresses below.

One provision that CARE does specifically allege BAAQMD violated is 40 C.F.R. § 124.8, the provision governing fact sheets. CARE alleges that BAAQMD failed to include the degree of increment consumption and a brief summary of basis in its fact sheets, as required by 40 C.F.R. § 124.8(3)-(4). CARE Pet. at 5. In its Responses to Public Comments, however, BAAQMD explained that its statement of basis and additional statement of basis were intended to be what the PSD permitting regulations refer to as a "fact sheet," noting that they did include the degree of increment consumption. RTC at 207. CARE did not acknowledge this response in its petition, nor did it explain why the response was clearly erroneous. As the Board has noted previously in this decision, *see supra* Part VI.B.6, a petitioner must not only present its objections to a permit, it must also explain why the permit issuer's previous response to its objections is clearly erroneous or otherwise deserves review; it may not simply reiterate the comments made during the public comment period. Thus, review of this particular issue is denied on procedural grounds.

Finally, with respect to CARE's claim that BAAQMD issued numerous notices, fact sheets, and statements of basis, the Board notes that the multiple issuances of these documents, rather than showing procedural error and the circumvention of public participation, seem to suggest the opposite: that BAAQMD was trying to keep the public as informed as it could on the ongoing and evolving process. The Board further notes that some of these additional issuances arose out of the Board's remand of the earlier permit based on Mr. Simpson's first appeal. *See* discussion of background *supra* Part V. Finally, BAAQMD explained its rationale for issuing a series of amended and/or proposed permits and associated documents in several of those very documents, which CARE neither acknowledges or addresses. *See, e.g.,* Statement of Basis 7-8; RTC at 213-14 (explaining the history behind some of BAAQMD's issuances).

Because CARE has failed to demonstrate that BAAQMD has violated any of the part 124 or section 52.21 procedural regulations, the Board denies review on this ground.

b. *Claim Concerning BAAQMD's Preliminary Determination of Compliance*

Although obliquely written,[123] CARE's second claim appears to be that BAAQMD should have "re-noticed" the PDOC following the Board's remand in *Russell City I*. CARE Pet. at 6-9, 27. The PDOC is a document BAAQMD's Air

[123] Although CARE does not clearly articulate its argument in its discussion of its second claim, CARE later states, in the conclusion section of its petition, that BAAQMD "should re-notice the PDOC along with a 'new' draft PSD permit consistent with the requirements of the CAA and [BAAQMD's] Regulations." CARE Pet. at 27.

Pollution Control Officer issued in connection with the California Energy Commission's certification process pursuant to California's Warren-Alquist State Energy Resources Conservation and Development Act, Cal. Pub. Res. Code §§ 25000 *et seq*, and implementing regulations. *See Russell City I*, 14 E.A.D. at 164-66.

As the Board and its predecessors have explained, "where a permit proceeding involves requirements under both state and federal law, the scope of the Board's review is limited to issues relating to the federal PSD program and the Board will not assume jurisdiction over permit issues unrelated to the federal PSD program." *In re W. Suburban Recycling & Energy Ctr., LP*, 6 E.A.D. 692, 704 (EAB 1996); *see also In re Sutter Power Plant*, 8 E.A.D. 680, 688 (EAB 1999); *In re Spokane Reg'l Waste-to-Energy Project*, 3 E.A.D. 68, 70 (Adm'r 1990); *In re Am. Ref-Fuel Co.*, 2 E.A.D. 280, 283 (Adm'r 1986). The Board therefore "will deny review of issues that are not governed by the PSD regulations because it lacks jurisdiction over them." *Knauf I*, 8 E.A.D. at 127; *accord Russell City I*, 14 E.A.D. at 187; *Sutter*, 8 E.A.D. at 688.

The Board recognized in *Russell City I* that the California permitting process is intertwined with the federal PSD process. 14 E.A.D. at 164. This determination, however, does not dispose of this issue. What is dispositive is that the PDOC itself, unlike the final permit the Board has reviewed in today's decision, was issued pursuant to state statutory and regulatory authority and not under federal PSD-related authority. Consequently, the Board lacks jurisdiction to review this issue.[124]

c. *Claim Concerning Greenhouse Gases*

As noted above, CARE asserts that BAAQMD failed to "consider greenhouse gas emissions as regulated pollutants." CARE Pet. at 9. CARE then quotes a portion of BAAQMD's response on this issue, *see id.* at 10-11 (quoting RTC at 18-19), and refers to several EPA Federal Register notices and the Supreme Court's decision in *Massachusetts v. EPA*, 549 U.S. 497 (2007). CARE Pet. at 10-12. Importantly, even though CARE quotes from BAAQMD's responses to comments, CARE does not address the responses in any real way or explain why they are clearly erroneous. In particular, CARE fails to explain why this issue is not "moot because the facility would satisfy all PSD requirements for greenhouse gases even if they were legally applicable at this time," as BAAQMD contended. RTC at 19. Thus, CARE has failed to demonstrate why BAAQMD's response to comments on this issues is clearly erroneous or otherwise warrants review. The

[124] Insofar as CARE may be implying that the Board, in *Russell City I*, indicated that the PDOC should be renoticed, CARE is incorrect. The Board did not address that question in its earlier decision and never stated or implied that BAAQMD was required to renotice the PDOC.

Board therefore denies review on this issue.[125]

d. *CARE's Specific Issues Concerning the 'Amended' PSD Permit*

CARE, in its fourth claim, primarily raises additional procedural violations, such as BAAQMD's alleged failure to respond to Public Records Act requests.[126] *See* CARE Pet. at 14-15 (alleging that "public records requests have often been ignored, misguided or delayed up to a year in response"). As the Board noted above in Part VI.B.8.b, the Board "will deny review of issues that are not governed by the PSD regulations because it lacks jurisdiction over them." *Knauf I*, 8 E.A.D. at 127; *accord Russell City I*, 14 E.A.D. at 187. CARE's claim that BAAQMD violated California's Public Records Act solely raises a state law issue and thus is not within the Board's PSD review authority. Accordingly, the Board denies review of this issue.

e. *BAAQMD's Alleged Failure to Respond to Comments*

CARE's fifth claim is another procedural challenge. CARE argues that "[b]ecause [BAAQMD] restated the comments and did not identify which comments they were restating or responding to[,] they did not adequately respond to any of our comments."[127] CARE Pet. at 16. CARE similarly questions BAAQMD's responses to comments as part of its fourth issue, asserting that "[i]t is indiscernible to determine which comments they are responding to." *Id.* at 14. CARE also specifically questions several of BAAQMD's responses, contending that BAAQMD did not actually respond to its comments. *See id.* at 18-20.

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[125] The Board also notes that on March 30, 2010, only a few days after CARE filed its petition, the Administrator finalized her interpretation of "subject to regulation" under the PSD regulations following a notice-and-comment process. *See* U.S. EPA, EPA-HQ-OAR-2009-0597, *Reconsideration of Interpretation of Regulations that Determine Pollutants Covered by Clean Air Act Permitting Programs* (Mar. 30, 2010), *available at* http://www.epa.gov/nsr/documents/psd_memo_recon_032910.pdf. In that final decision, the Administrator concluded that BACT limits for greenhouse gases are not required until January 2, 2011. CARE never acknowledges this interpretation in its reply brief.

[126] CARE also raises concerns about the lack of a "running" electronic docket, see CARE Pet. at 14, which the Board has already addressed above in Part VI.B.8.a, and concerns about BAAQMD's greenhouse gas analysis, CARE Pet. at 13, which the Board has already addressed above in Part VI.B.8.c. The remaining arguments in this section of CARE's petition challenge the adequacy of BAAQMD's responses to comments. CARE Pet. at 13-14. The Board addresses those issues in the next section of this decision.

[127] CARE also claims that BAAMD's "responses are often misleading or without basis[,] and they chastise those who would dare seek informed participation." CARE Pet. at 14. With respect to the alleged "misleading" and "chastising" responses, CARE has not specified which responses are allegedly misleading or where BAAQMD "chastises" commenters. The Board notes, however, that in its review of the document, it did not see any evidence of this alleged behavior.

Under the NPDES procedural regulations, permit issuers are required 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) (emphasis added). As the Board has explained on several occasions, "'[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.'" *In re Kendall New Century Dev.*, 11 E.A.D. 40, 50 (EAB 2003) (quoting *In re NE Hub Partners, LP*, 7 E.A.D. 561, 583 (EAB 1998), *review denied sub nom. Penn Fuel Gas, Inc. v. U.S. EPA*, 185 F.3d 862 (3rd Cir. 1999)); *accord In re Hillman Power Co.*, 10 E.A.D. 673, 696 & n.20 (EAB 2002). Consequently, the Board has concluded that even though a permit issuer's response document was shorter than petitioner's comments and did not provide individual responses to each comment, because "the responsiveness summary and supplemental response to comments succinctly addressed the essence of each issue raised by [p]etitioners," the permit issuer satisfied its obligation under the procedural regulations. *NE Hub*, 7 E.A.D. at 583. Moreover, while the permit issuer should demonstrate in its response to comments documents that it considered all significant comments, a permit issuer "may provide a unified response to related comments" rather than individually responding to each and every comment. *Kendall*, 11 E.A.D. at 50 n.13; *accord NE Hub*, 7 E.A.D. at 583. In fact, as the Board has noted, providing a unified response for each issue raised is "an efficient technique" in responding to a group of similar comments and, in and of itself, does not indicate that the permit issuer is unresponsive. *NE Hub*, 7 E.A.D. at 583.

In this case, BAAQMD issued an extensive 235-page response-to-comments document in which it grouped together comments raising a specific issue and then provided one unified response to that set of comments. Contrary to CARE's assertion, BAAQMD's combined responses do not mean that BAAQMD failed to respond to the comments or violated the part 124 procedural regulations. BAAQMD reasonably grouped and addressed the vast number of comments it received. This is all the regulations require, "especially in light of the call for brevity." *NE Hub*, 7 E.A.D. at 583; *accord Kendall*, 11 E.A.D. at 50 n.13. The Board has reviewed many of the responses in the course of considering the petitions for review and finds them generally clear and comprehensive. With respect to specific responses that BAAQMD made and that petitioner contends were inadequate, the Board has reviewed the comments and responses, as well as the arguments of the parties, and does not find that petitioner has demonstrated that BAAQMD's response to comments on these issues are clearly erroneous or otherwise warrant review.[128]

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[128] Although CARE only specifically raises the five issues the Board has addressed, CARE's petition includes a number of conclusory assertions that do not seem connected to its five raised issues.
Continued

VII. *CONCLUSION AND ORDER*

For the foregoing reasons, the Board concludes that none of the petitioners have demonstrated that review of PSD Permit No. 15487 is warranted on any of the grounds presented. The Board therefore denies review.

So ordered.

(continued)
The Board does not address these assertions except to note that many of them seemingly relate to issues that fall outside the Board's jurisdiction over PSD permit decisions. *See, e.g.,* CARE Pet. at 24-25 (raising questions about California Power Plant Licensing and the Warren Alquist Act), at 26 (alleging problems with a U.S. Fish and Wildlife Service ("FWS") report). In fact, the Board previously addressed a nearly identical assertion in *Russell City I*, stating that the Board "does not have jurisdiction over Mr. Simpson's arguments challenging the adequacy of FWS's concurrence." 14 E.A.D. at 187. Several of the other assertions appear to be related to other PSD permitting activities and are therefore beyond the scope of this appeal. *See* CARE Pet. at 15-16, 25-26 (referring to a Gateway and a Humboldt Bay permitting action). Finally, the Board notes that CARE raises a number of issues in its reply brief that were not raised in its petition and thus, as discussed above in Part VI.B.1.b.ii, are considered to be untimely raised.