

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

In re:)
))
Russell City Energy Center) PSD Appeal Nos. 10-02, 10-03, 10-04 & 10-05
))
PSD Permit No. 15487)
))

**RUSSELL CITY ENERGY COMPANY, LLC'S
SUR-REPLY BRIEF**

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I. INTRODUCTION

Permittee Russell City Energy Company, LLC (“RCEC”) hereby submits its sur-reply to the reply briefs filed by Chabot-Las Positas Community College District (“Chabot”), Citizens Against Pollution (“CAP”), Robert Sarvey, and Californians for Renewable Energy, Inc. and Rob Simpson (“CARE/Simpson”) (collectively, “Petitioners”). RCEC respectfully requests that the Environmental Appeals Board (“Board”) disregard Petitioners’ replies to the extent they raise new issues, offer new arguments or evidence that should have been included in petitions, or repeat contentions already made during these proceedings. The remainder of the replies consists of legally incorrect propositions, misstatements of the record, and immaterial contentions – none of which meets the heavy burden faced by Petitioners in seeking to challenge technical determinations made by the Bay Area Air Quality Management District (“Air District”) or provides any basis for Board review or remand of RCEC’s Prevention of Significant Deterioration (“PSD”) permit.

II. PROCEDURAL BACKGROUND

Four of the five remaining Petitioners in this case¹ filed motions requesting leave to file a reply brief: (1) Chabot (PSD Appeal No. 10-02), (2) CAP (PSD Appeal No. 10-03), (3) Robert Sarvey (PSD Appeal No. 10-04), and (4) CARE/Simpson (PSD Appeal No. 10-05). *See* Order Granting Motions to File Reply Briefs and Allowing Sur-Reply Briefs, Denying Motion to Conduct Discovery and a Hearing, and Rescheduling Oral Argument, PSD Appeal Nos. 10-01, 10-02, 10-03, 10-04 & 10-05 (May 19, 2010) (“May 19, 2010 Order”) at 1. The Air District and RCEC filed detailed oppositions to these requests with “point-by-point responses to the arguments raised by petitioners in their motions.” *Id.* at 3. In response, the Board provided that, “[i]n the interests of expediting this matter, rather than taking the considerable time it would take to review the oppositions in detail, thus potentially delaying completion of briefing,” it “believes it is preferable to grant the requests to file reply briefs and allow [the Air District] and RCEC to reiterate any objections they still have in the context of sur-reply briefs” *Id.* at 3-4.

¹ Petitioner California Pilots Association (PSD Appeal No. 10-01) did not request leave to file a reply brief.

III. STANDARD OF REVIEW

As the Board recently reminded Petitioners, “they may not raise any new issues in their reply briefs.” May 19, 2010 Order at 7. “Nor may any reply brief raise issues not raised by the original petition.” Order Dismissing Two Petitions for Review as Untimely, PSD Appeal Nos. 10-12 & 10-13 (June 9, 2010) at 7 n.8. “New issues raised for the first time at the reply stage of . . . proceedings are equivalent to late filed appeals and must be denied on the basis of timeliness.” *In re Knauf Fiber Glass, GmbH*, 8 E.A.D. 121, 126 n.9 (EAB 1999) (“*Knauf I*”); *see also In re City of Attleboro, MA Wastewater Treatment Plant*, NPDES Appeal No. 08-08, slip op. at 72 n.105 (EAB, Sept. 15, 2009) (rejecting as untimely argument made for the first time in a reply brief).

Similarly, a reply brief cannot be used to supplement a deficient appeal because “‘allowing petitioners to do so typically constitutes an unwarranted expansion of a party’s appeal right and prejudices the permittee’s interest in the timely resolution of the permitting process.’” *In re Arecibo & Aguadilla Reg. Wastewater Treatment Plants*, 12 E.A.D. 97, 123 n.52 (EAB 2005) (citations omitted). Moreover, “to the extent that some of [the] arguments [in a reply brief] raise substantive nuances that are not set forth in the petition . . . they constitute, in essence, ‘late-filed appeals’ because they could have been raised in the petition but were not so raised.” *In re Keene Wastewater Treatment Plant*, NPDES Appeal No. 07-18, slip op. at 20 (EAB, Mar. 19, 2008). In addition, the Board need not consider a reply brief that merely repeats comments submitted on the draft permit or arguments made in a petition. *Id.* at 19-20.

IV. THE BOARD SHOULD REJECT THE ARGUMENTS IN PETITIONERS’ REPLIES

A. Chabot Fails in Its Reply To Demonstrate Any Error Warranting Review

1. Chabot Introduces a New Argument in Its Reply that Cannot Be Raised at This Time; Moreover, This Argument Concerning the Alleged Construction Moratorium Is Without Any Merit

In its reply, Chabot again disputes the legal conclusion that the Air District was not required to demonstrate that the source would not cause or contribute to a violation of the 24-hour PM_{2.5} standard, once the nonattainment designation for that standard became effective for the Bay Area. Chabot Reply at 6. Chabot further contests the legal conclusion that the Project does not qualify as a major stationary source for PM_{2.5} or designated precursors under 40 C.F.R. Part 51, Appendix S, and therefore is not subject to separate non-attainment New Source Review (“NSR”) permitting requirements. *Id.* at 8.

According to Chabot, “[s]uch a construction of the Clean Air Act, including BAAQMD and RCEC’s contention that this Board has no jurisdiction to address this important statutory question, impermissibly attempts to apply the different parts of the Act in isolation rather than construing the parts together to accomplish Congress’s purpose to protect the public’s health.” *Id.* Chabot then introduces a new argument, never before raised by any party in these proceedings, that “the ‘construction moratorium’ for major stationary sources such as RCEC, clearly prohibits the approval of any PSD for RCEC.” *Id.*

Chabot failed in its petition² to provide any legal basis to support its bald assertion that the 24-hour PM_{2.5} standard remains relevant for purposes of PSD permitting.³ Chabot similarly failed to provide anything to support its objection to the conclusion that the Project would not be subject to non-attainment NSR permitting under Appendix S. Now, in reply, it attempts to raise a wholly new argument – one never raised by any party to these proceedings – alleging that the “construction moratorium” precludes issuance of the PSD permit. Chabot had its chance in its petition to raise any law, regulation, or other authorities that might support this assertion, but failed to do so. Accordingly, it should not be allowed to introduce a completely new legal argument at this late stage of the proceedings.

Regardless, Chabot is simply wrong that the “construction moratorium” applies in this instance. As provided by the same regulatory provisions cited by Chabot in its reply, the moratorium applies only in areas “where the Administrator has determined that the applicable implementation plan is not being adequately implemented for the nonattainment area” 40 C.F.R. § 52.24(b) (cited by Chabot Reply at 10). Further, the moratorium applies only “to any major stationary source or major modification that would be major for the pollutant (or precursors, where applicable) for which the area is designated nonattainment” 40 C.F.R. § 52.24(e) (cited by Chabot Reply at 10).

Neither of these two applicability criteria is met in this instance. First, EPA has made no finding that the applicable implementation plan is not being implemented or fails to meet the requirements of the

² See Petition for Review of Prevention of Significant Deterioration Permit and Request for Oral Argument by Chabot-Las Positas Community College District, PSD Appeal No. 10-02 (Mar. 22, 2010) (“Chabot Petition”) at 32.

³ See RCEC’s Response to Petition for Review Filed by Chabot-Las Positas Community College District, PSD Appeal No. 10-02 (Apr. 23, 2010) (“RCEC Response to Chabot Petition”) at 7; Air District’s Response to Petition for Review, PSD Appeal No. 10-02 (Apr. 23, 2010) (“Air District Response to Chabot Petition”) at 12.

Clean Air Act; indeed, it could not do so at this time, since the applicable implementation plan for achieving compliance with the 24-hour PM_{2.5} NAAQS is not yet due. Rather, as also provided by the regulations cited by Chabot in its reply, Appendix S applies “during the period between the date of designation as nonattainment and the date the NSR permit program meeting the requirements of part D is approved.” 40 C.F.R. § 52.24(k) (cited by Chabot Reply at 11). This is abundantly clear in EPA’s rulemaking concerning applicability of NSR/PSD to PM_{2.5}: “During the [state implementation plan (“SIP”)] development period, where they have legal authority to do so, States must issue [nonattainment (“NA”)] NSR permits under Appendix S (as revised for purposes of the PM_{2.5} program).” Implementation of the New Source Review (NSR) Program for Particulate Matter Less than 2.5 Micrometers (PM_{2.5}), 73 Fed. Reg. 28,321, 28,343 (May 16, 2008) (hereinafter, “PM_{2.5} Implementation Rule”). Chabot has failed to introduce any argument or evidence that would call into question the applicability of Appendix S prior to development of a SIP for attainment of the PM_{2.5} NAAQS in the Bay Area.

Second, Chabot has failed to introduce any evidence or argument that would suggest that the Project is subject to the nonattainment NSR permitting requirements of Appendix S. Appendix S applies only to a source that would locate in an area designated as “nonattainment for a pollutant for which the source or modification would be major.” 40 C.F.R. Pt. 51, App. S, § I. The Project would not be “major” for PM_{2.5} or designated precursors. In promulgating the PM_{2.5} Implementation Rule, EPA made clear that it was retaining the 100 ton per year (“tpy”) major source threshold for emissions of PM_{2.5} and designated precursors for nonattainment NSR permitting programs.⁴ This major source threshold applies for purposes of implementing both the construction moratorium and interim permitting programs under Appendix S.⁵

Chabot essentially contends that, because of alleged significant impacts to ambient PM_{2.5}

⁴ See 73 Fed. Reg. at 28,331 (noting that, although Section 189(b) of the Clean Air Act establishes a 70-tpy major source threshold for “serious” PM₁₀ nonattainment areas, EPA does not “believe the Act gives us the discretion to promulgate a lower major source threshold for pollutants such as PM_{2.5} that are only subject to subpart 1 of part D of the Act.”).

⁵ See 40 C.F.R. § 52.24(f) (“The provisions in §51.165 of this chapter shall apply in interpreting the terms under this section.”).

concentrations, the Clean Air Act precludes issuance of a PSD permit unless the source were also required to obtain a nonattainment NSR permit under Appendix S. However, there is no basis in law, regulation, or policy for Chabot's suggestion that ambient impacts should cause RCEC to require a permit under Appendix S, even though the Project's emissions do not exceed the major source threshold for PM_{2.5} or designated precursors. Indeed, upon promulgating the PM_{2.5} Implementation Rule, EPA specifically rejected that potential impacts on ambient air quality should cause it to require nonattainment NSR permits for sources with emissions falling below the 100-tpy threshold:

EPA does not read the Act to authorize the agency to lower the major source threshold for PM_{2.5} on the basis of the potential for a source less than 100 tpy to have a high ambient impact on PM_{2.5}. We do not see any provision in the Act (under either subpart 1 or subpart 4) that gives EPA the authority to lower the major source threshold on the basis of the potential ambient air impact of a source emitting less than 100 tpy of PM_{2.5}.

Exhibit 60, Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers in Diameter (PM_{2.5}), Response to Comments, EPA (Mar. 2008) at 32.⁶

In sum, there is absolutely no basis in law for Chabot's assertions that Appendix S is not the applicable permitting regime prior to development of a SIP; that RCEC is required to obtain a nonattainment NSR permit under Appendix S; or that the Air District could not issue the PSD permit without demonstrating that the source would not cause or contribute to a violation of the 24-hour PM_{2.5} NAAQS. Moreover, even if such a demonstration were required (which it is not), the Air District has adequately demonstrated that RCEC would not cause such a violation of the NAAQS, as described in detail by both the Air District's and RCEC's responses to Chabot's petition.

2. Chabot Fails to Demonstrate Any Error in the Air District's Use of the Permit Limit of 7.5 lb/hr PM_{2.5} for the Air Quality Impacts Analysis

Chabot repeats its contention that the federally enforceable emissions limit of 7.5 lb/hr PM_{2.5} does

⁶ See also *id.* at 29 ("Although we have considered the technical merit of the 100 tpy major source threshold for PM_{2.5} in nonattainment areas, as discussed above, we do not interpret the CAA to give the Administrator the authority to establish a lower threshold for PM_{2.5} based on technical considerations."); *id.* at 30 ("We do not believe that using 100 tpy for the NA NSR program for PM_{2.5} will adversely affect attainment of the PM_{2.5} NAAQS.").

All references to Exhibits 1-34 are to RCEC's Consolidated Exhibits to Its Responses to Petitions for Review. References to Exhibits 35-59 are to RCEC's Exhibits to its Opposition to Petitioners' Motions for Leave To File a Reply Brief and Request for Expedited Consideration. References to Exhibits 60-65 are to RCEC's Exhibits to Its Sur-Reply Brief.

not provide an appropriate basis for the PSD modeling analysis. *See* Chabot Reply at 12. Chabot again suggests that this limit “may not be achievable” and that it was therefore wrong for the Air District not to publish preliminary modeling results based on the higher limit of 9 lbs/hr, which had appeared in the December 2008 draft version of the PSD permit. *Id.* at 13.

Again, Chabot does nothing more than assert the same legally incorrect propositions provided by its petition. Further, none of the Board decisions cited by Chabot in its reply supports its erroneous conclusion that the air quality impacts analysis must be based on an emissions rate higher than permitted by the PSD permit. While Chabot continues to assert that the case cited by its petition, *In re Northern Michigan University Ripley Heating Plant*, PSD Appeal No. 08-02 (EAB, Feb. 18, 2009), lends support to its position, Chabot is simply wrong. The issue in *Northern Michigan* was that the emissions limits used for purposes of modeling had significantly longer averaging periods than the relevant ambient air quality standards.⁷ In this case, however, no such concern exists, since the emissions limit is stated as 7.5 lb/hr and the relevant NAAQS is stated as an annual average. Further, even if the 24-hour standard were still relevant for purposes of the PSD permit (which it is not), it is beyond dispute that the emissions limit of 7.5 lb/hr is a shorter-term limit than the 24-hour NAAQS.

In its reply, Chabot also asserts that the Board’s decision in *In re Prairie State Generating Co.*, PSD Appeal No. 05-05 (EAB, Aug. 24, 2006), *aff’d sub nom.*, *Sierra Club v. EPA*, 499 F.3d 653 (7th Cir. 2007), supports Chabot’s contention that emissions modeling must be based on higher than the permitted emissions limit. Chabot Reply at 14-15. However, *Prairie State* and the other cases cited therein dealt with an inapposite set of facts, one in which the agency had established limits that would be subject to downward adjustment based on post-construction performance data. There, the Board found that the permitting agency’s decision to set such a limit was acceptable where uncertainty regarding whether the source could reliably achieve a lower limit precluded imposition of a lower limit in the permit, as long as the air quality impacts analysis was based on the higher applicable limit. *See Prairie State*, slip op. at

⁷ In *Northern Michigan*, Sierra Club had “raised serious and substantial concerns touching on whether the modeled emissions . . . are truly ‘worst case’ emissions” (slip op. at 53), arguing “that modeled emissions limits can only represent ‘worst-case’ emissions when they incorporate averaging times that are equal to or shorter than those of the compliance standards against which they are being measured (here, the NAAQS and PSD increments).” *Id.* at 50.

111-12. It is beyond dispute that RCEC's permit imposes a limit of 7.5 lb/hr PM_{2.5} and that this limit applies across all operating scenarios and is not subject to upward adjustment based on performance data. Chabot has never suggested imposition of such an adjustable limit; nor could it do so by way of reply.⁸ In sum, the cases cited by Chabot fail to support its allegation of error in the Air District's use a short-term emissions limit for purposes of emissions modeling.

Regarding the alleged wrongfulness of the Air District in not publishing preliminary modeling runs that had relied upon the higher limit that appeared in the December 2008 draft version of the PSD permit (Chabot Reply at 3-5), Chabot points to no basis in law, regulation, or guidance that would require an agency to publish preliminary modeling runs. While Chabot focuses on the fact that the Air District previously proposed 9 lb/hr as the emissions limit for PM₁₀, Chabot neglects to mention that, at the time when that limit was proposed, the Air District was not required to demonstrate compliance with the PM_{2.5} NAAQS because EPA's "surrogate policy" remained in effect.⁹ Rather, "[s]ubsequent to the initial Statement of Basis and first comment period, EPA issued a stay of the surrogate policy under 40 C.F.R. 52.21(i)(1)(xi) and proposed to repeal it." Exhibit 5, Responses to Public Comments at 77 (referencing the Administrator's notice proposing to repeal the surrogate policy at 74 Fed. Reg. 26,098 (June 1, 2009)). Accordingly, "the Air District changed its position and determined that PSD review was required for PM_{2.5} specifically, and that it was no longer appropriate to rely on the surrogate policy. The Air District therefore conducted a PM_{2.5} Source Impact Analysis" *Id.* at 145. Thus, no PM_{2.5} impacts analysis was required or conducted when the proposed permit limit was 9 lb/hr PM₁₀. Chabot's suggestion that the Air District wrongfully failed to disclose preliminary modeling runs that had used the 9 lb/hr emissions rate is at odds with the fact that PM_{2.5} modeling was not required when that was the

⁸ To the contrary, as described by RCEC's response to Chabot's petition, Chabot previously argued in favor of an even lower limit than 7.5 lb/hr. RCEC Response to Chabot Petition at 16-17 ("Regarding Petitioner's allegation that 7.5 lb/hr is too low to constitute an achievable emissions limit, the Air District received a comment from Petitioner's legal counsel after the close of the public comment period, wherein Petitioner argued *just the opposite*: Petitioner alleged that the draft PSD permit's proposed limit of 7.5 lb/hr for both particulate matter less than 10 microns in diameter ("PM₁₀") and PM_{2.5} was not low enough and that a lower emissions limit should be imposed instead.").

⁹ See Exhibit 5, Responses to Public Comments at 76 ("At the time, EPA's regulations required the District to address PM_{2.5} issues in PSD permitting by relying on its PM₁₀ analysis as a surrogate for ensuring compliance with PM_{2.5} requirements ('surrogate policy').").

proposed limit.

In any event, Chabot has focused solely on the analysis concerning the 24-hour PM_{2.5} standard; it has made no allegation that the preliminary modeling would demonstrate any violation of the relevant NAAQS, which, due to the nonattainment designation for the 24-hour PM_{2.5} standard, includes only the annual PM_{2.5} standard. As a consequence, Chabot fails to demonstrate any error warranting review.

3. Chabot Fails to Demonstrate Any Error in the Air District's Exclusion of Certain Roadways from the Cumulative Modeling Analysis

Chabot again objects to the exclusion of certain roadways from the cumulative modeling analysis, notwithstanding evidence that such roadways would not cause a “significant concentration gradient” in the vicinity of the Project’s significant impacts. *See* Chabot Reply at 16. In its response, RCEC explained that the rationale for excluding such highway segments from the cumulative impacts analysis was clear:

if a given highway segment does not cause a significant concentration gradient in the same location as the source’s significant impacts, due to the exponential drop-off in emissions that occurs over distance, then that highway segment’s contribution would already be represented within the ‘background’ concentration taken from ambient monitoring data for purposes of determining compliance with the NAAQS.

RCEC Response to Chabot Petition at 34. According to Chabot’s reply, “[t]he problem with that argument, however, is that *there is no ambient monitoring data.*” Chabot Reply at 16 (emphasis in original). Chabot is plainly wrong in this regard. Ambient monitoring data from Fremont, California were used for purposes of the NAAQS compliance demonstration. *See* Exhibit 5, Responses to Public Comments at 134-36. Given this fact, RCEC assumes Chabot is objecting to the absence of monitoring data from the actual location of the Project site. However, Chabot never previously raised – in its petition or otherwise – any argument concerning the appropriateness of the Air District’s selection of Fremont monitoring data.¹⁰ Accordingly, it cannot be raised now by way of reply, and the Board should reject Chabot’s contention on this point. Should the Board wish to consider the merits of Chabot’s assertion on

¹⁰ In fact, in its comments, Chabot argued about which of the most recent three-years’ data from Fremont should be used for purposes of establishing background; it never asserted that the Air District should be obtaining data from the Project site instead. *See* Exhibit 8, Letter to Weyman Lee, BAAQMD, from Jewell J. Hargleroad, at 12-13 (commenting on use of the three-year average of ambient monitoring data to establish background).

this point, RCEC would refer the Board to the Air District's detailed responses to public comments on this issue. *See Exhibit 5, Responses to Public Comments at 134-36.*

Chabot attempts to suggest that the Air District conceded that certain highway segments would result in a significant concentration gradient in the vicinity of the Project's significant impacts. Chabot Reply at 17-18. This is not true. The very text of the Air District's response cited by Chabot makes clear that exclusion of such highway segments was "based on the conclusion that they will not cause a significant concentration gradient at any location where the facility's impacts will be above the SIL." Chabot Reply at 17 (citing "BAAQMD at 30, fn. 18 [*sic*]"). The fact that such roadways "could cause significant PM concentration gradients nearby to those roadways" cannot be taken to mean they would result in a "significant concentration gradient in the vicinity of the proposed new source." Chabot Reply at 17 (emphasis omitted) (citing NSR Workshop Manual at C-32). For Chabot to suggest otherwise is both illogical and misleading.

4. Chabot's Efforts To Shift the Blame for Its Own Errors Fail to Demonstrate Any Error in the Cost-Effectiveness Analysis for an Auxiliary Boiler

Chabot next appears intent on revisiting the errors it made, first, in submitting the wrong vendor data in support of its own calculations of the emissions reduction that would be achieved through use of an auxiliary boiler, and then, in wrongly assuming that the boiler used for purposes of the Air District's analysis was more than four times larger than it actually is. With respect to the former error, Chabot fails to provide any evidence to demonstrate that it actually submitted the correct vendor data to the Air District.¹¹ With respect to the latter error, Chabot now seeks to shift the blame to RCEC, identifying Calpine as "the source for confusion by apparently combining different facilities." Chabot Reply at 21 n.8. However, as already explained by RCEC in its response, "[t]he only reference to a 320-MMBtu/hr boiler in the administrative record left no room for such confusion." RCEC Response to Chabot Petition at 44. Furthermore, as explained by RCEC, "[h]ad Petitioner [Chabot] or anyone else raised any question about the reference to the 320-MMBtu/hr boiler at Los Medanos Energy Center that appeared in the spreadsheet, the Air District or RCEC could have clarified any confusion and provided an appropriate

¹¹ *See* Chabot Reply at 19 n.5 ("Not emailed but mailed was the four page Siemens vendor information.").

response.” *Id.* But the issue was never raised and, accordingly, was not preserved for appeal. Chabot’s effort to shift the blame for its own error – due to its own apparent inattention to the detail contained by the administrative record – is much belated and should not be accepted by the Board.

Moreover, Chabot fails to demonstrate that the difference between the actual size of the auxiliary boiler used in the Air District’s analysis – 70 MMBtu/hr – and the size of the other auxiliary boilers mentioned by Chabot is in any way material or reflects any error on the part of the Air District. With respect to the auxiliary boiler at Caithness Long Island Energy Center, Chabot cannot demonstrate that the marginal difference in capacity between these two auxiliary boilers – 0.08 MMBtu/hr per MW generated by the steam cycle¹² – would be material to, or reflect any error in, the conclusions of the Air District’s analysis. Likewise, any difference between the size of the auxiliary boiler at Lakeside Power Plant – 49 MMBtu/hr¹³ – and the actual size of the boiler used for purposes of the Air District’s analysis – 70 MMBtu/hr – is immaterial. Chabot has provided no argument or evidence that this incremental capacity of 21 MMBtu/hr would affect the outcome of the Air District’s cost-effectiveness analysis.

5. Chabot Is Wrong That the Board’s *Prairie State* Decision Confirms the Inadequacy of the Air District’s Environmental Justice Analysis

In its reply, Chabot claims that the Board’s decision in the *Prairie State* case “Confirms The Inadequacy Of BAAQMD’s Environmental Justice Analysis.” Chabot Reply at 23. Chabot objects to RCEC’s conclusion that a modeled concentration in excess of a significant impact level (“SIL”) in an environmental justice community does not, on its own, provide any basis for remand of the PSD permit. *Id.* While Chabot suggests that the *Prairie State* decision somehow supports its view of the matter, that decision provides no basis for concluding that the occurrence of a modeled concentration in excess of a SIL in an environmental justice community warrants denial of a PSD permit. Nor does *Prairie State* support that such a modeled concentration indicates the presence of adverse impacts on any community, whether an environmental justice community or not.

¹² See RCEC Response to Chabot Petition at 45-46.

¹³ See Chabot Petition at 25-26.

6. Chabot Is Wrong To Suggest That the Project's Significant PM_{2.5} Impacts Fall Within an Identified Environmental Justice Community

Chabot also seeks to refute RCEC's contention that the maps submitted by Chabot as part of its Supplemental Errata, which depict certain areas identified as "priority communities" by the Air District for purposes of its Community Air Risk Evaluation ("CARE") program, fail to support Chabot's allegation that the Project will significantly impact an environmental justice community. Chabot Reply at 24. In its Supplemental Errata, which was filed four days after the deadline for appeals and without seeking or obtaining leave from the Board to do so, Chabot said the enclosed maps showed the Project location, in relation to the "surrounding nearby roadways and the communities which BAAQMD's CARE program identifies as 'at risk.'" Supplemental Errata to Petition for Review of Prevention of Significant Deterioration Permit by Chabot-Las Positas Community College District (Mar. 26, 2010), Supplemental Appendix at 2. In response, RCEC pointed out that these maps actually provide no support for Chabot's contention that the Project would result in significant impacts to communities already disproportionately impacted by air pollution. RCEC Response to Chabot Petition at 51. To the contrary, "[u]pon close examination of the map attached to Petitioner's Supplemental Appendix Exhibit 2 and RCEC's Source Impact Analysis, it is clear that all of the significant impacts of the source lie *outside* of the identified priority community." *Id.*

In its reply, Chabot "strongly disagrees" with RCEC's conclusion that all significant impacts lie outside of the identified priority community. Chabot Reply at 24. According to Chabot, "[a]s reflected by the map provided by the School District, even applying RCEC's understated air modeling analysis, its particulate matter will most heavily impact the communities within one mile –the CARE line lies just within a half mile of RCEC." *Id.* Chabot then notes that, "[b]ased on the School District's understanding, the BAAQMD CARE lines were drawn along the residential zoning lines. The School District can supplement the record with this information if requested." *Id.* at 24 n.10. Thus, Chabot again provides nothing more than its bare assertion that the Project's significant impacts lie within an environmental justice community; instead, Chabot says it "can supplement the record with this information if requested." *Id.* However, any additional evidence Chabot might submit at this stage of the proceedings to demonstrate alleged deficiencies in the environmental justice analysis would be untimely. *See, e.g., Keene*, slip op. at 20; *Arecibo*, 12 E.A.D. at 123 n.52.

Moreover, there is absolutely no basis for Chabot to disagree with RCEC's observation that all modeled 24-hour PM_{2.5} impacts in excess of the SIL lie outside of the priority community's boundaries. Attached as Exhibit 61 are maps showing RCEC's modeled 24-hour PM_{2.5} impacts in excess of the SIL, along with the boundaries of the CARE priority community. As described by the Declaration of Kevin Poloncarz, Esq., in Support of RCEC's Sur-Reply Brief, these maps were prepared by RCEC's consultant, Atmospheric Dynamics, using the geographical coordinates published by the Air District at an FTP-website.¹⁴ These maps clearly illustrate that all impacts in excess of the SIL lie outside of the identified priority community. Accordingly, even if modeled impacts in excess of a SIL within the priority community's boundaries were demonstrative of adverse impacts on an environmental justice community, as suggested by Chabot, RCEC would cause no such adverse impacts.

B. CAP Fails to Demonstrate in Its Reply Any Error Warranting Review

1. CAP Demonstrates No Error in the Air District's Reliance Upon the 6 x 16 Operating Profile Required by the Power Purchase Agreement as the Basis for Its BACT Determination

Whereas CAP argued in its petition that the Air District failed to establish *any* credible operating scenario for the Project, CAP now appears to concede that the Air District's BACT analysis was, in fact, based on such an operating scenario. CAP nevertheless uses its reply to raise new arguments and rehash old ones. None of CAP's arguments has merit or demonstrates any error by the Air District.

a. CAP Is Wrong That the Operating Scenario Is Not Supported by the Evidence and That the Air District Failed to Respond to Comments

At the outset, CAP alleges that "the undisputed facts show that the operating scenario that the District asserts as likely is unsupported by the evidence, and the permitted number of cold or warm starts could be much higher, although the District and the public lack information on that number because the District failed to respond to comments seeking that information." CAP Reply at 1. Further, CAP alleges that "the total daily and annual emissions limits . . . allow for more" startup and shutdown events than

¹⁴ See Exhibit 62, Applied Method for Developing Polygon Boundaries for CARE Impacted Communities, Technical Memorandum, Bay Area Air Quality Management District (Dec. 2009) at 2 ("An electronic shapefile that can be used with geographical information systems software provides the polygon boundaries of the CARE impacted communities. This file is available on the Internet via anonymous ftp at: ftp://ftp.baaqmd.gov/CARE/Impacted_communities_boundaries/impacted_boundaries.zip.").

provided by the likely operating scenario and, as a consequence, “there are no enforceable permit limits on the number and kind of startup events.” *Id.* at 2. As explained by both the Air District’s and RCEC’s responses to CAP’s petition, however, the Air District looked at multiple lines of evidence regarding operation of the facility, including the order of dispatch by the California Independent System Operator (“ISO”), the record of proceedings before other California regulatory agencies, and the Power Purchase Agreement. *See* Air District’s Response Petition for Review, PSD Appeal No. 10-03 (Apr. 23, 2010) (“Air District Response to CAP Petition”) at 18-19, 26-27; RCEC’s Response to Petition for Review Filed by Citizens Against Pollution, PSD Appeal No. 10-03 (Apr. 23, 2010) (“RCEC Response to CAP Petition”) at 5-9. CAP’s only response to this evidence is a misinterpretation of the Power Purchase Agreement. *See infra* section IV.B.1.c. With respect to the number of startup events, the Air District explained that it disagreed that it should impose a specific numerical limit:

Power plants need flexibility to be dispatched as determined by the ISO in order to ensure a reliable and efficient electrical grid, and a specific limit on the number of times a facility can start up and shut down over a given period of time would hinder that goal. *Moreover, the number of startups and shutdowns are already subject to indirect limits because startup and shutdown emissions are included in the daily and annual limits the facility will be subject to.* The [Board] has approved of such an approach as sufficient to satisfy BACT for startup emissions even in the absence of stringent numerical limits on emissions per startup as the Air District is imposing here.

Exhibit 5, Responses to Public Comments at 124 (citing *In re Sumas Energy 2 Generation Facility*, PSD Appeal Nos. 02-10 & 02-11 (Order Remanding in Part and Denying Review in Part), Slip Op. at pp. 19-20 (March 25, 2003); *In re Sumas Energy 2 Generation Facility*, PSD Appeal No. 05-03 (Order Denying Review), Slip Op. at pp. 21-22 (May 27, 2005)). In neither its petition nor its reply does CAP offer anything that calls into question these daily and annual limits.

Further, CAP is plainly wrong in alleging that the daily limit for CO of 7,360 pounds per day “likely allows one to two cold starts per day,” “although the answer is uncertain.” CAP Reply at 4. As a matter of fact, two cold startup events cannot ever occur in the same day. If more than one startup were to occur on any given day, by definition, only the first event could be “cold;” any additional startup event would have to be either “warm” or “hot,” depending upon whether more or less than eight hours had

elapsed since the time when the respective turbine was last shut down.¹⁵

b. CAP Is Wrong That Use of the Worst Case Startup Emissions Would Impact the Auxiliary Boiler Cost-Effectiveness Analysis

Regarding CAP's central contention – which it raises for the first time in its reply – that the NSR Workshop Manual requires the use of “worst case uncontrolled emissions” as the basis for a cost-effectiveness determination (CAP Reply at 1-2, 5), CAP's argument is without any merit and fails to demonstrate any error in the Air District's cost-effectiveness analysis concerning an auxiliary boiler. Because CAP failed to raise this argument in its petition, the Board should disregard the argument. In any event, CAP fails to demonstrate that use of what might be viewed as the “worst case” startup emissions in the Air District's cost-effectiveness analysis would in any way alter the Air District's decision to reject an auxiliary boiler as BACT.

CAP alleges that, “[i]n the absence of enforceable permit limits, the District ought to have used the maximum number of cold starts or other scenarios that represent that worst uncontrolled startup emissions to calculate the cost effectiveness number in determining whether an auxiliary boiler should be BACT.”¹⁶ CAP Reply at 5. Although it would represent a wholly unrealistic dispatch scenario for the Project (or for any other power plant, for that matter), one could assume that, at worst, the Project was operated only in cold or warm startup events. This assumption would be incredibly conservative and altogether unrealistic, since it is both physically and economically impossible that the Project would ever be operated only in startup mode. (Indeed, even if it were only ever started up and then immediately shut down, some emissions would occur during shutdown events; use of an auxiliary boiler would not assist during shutdowns.) Further, the manner in which power plants are dispatched by the ISO would preclude

¹⁵ Cold startups are startups when the turbine has been off-line for more than 48 hours; warm startups are when the turbine has been off-line for between 8 and 48 hours; and hot startups are when the turbine has been offline for less than 8 hours. See Exhibit 4, Final PSD Permit at 5.

¹⁶ Relying on *In re Pennsauken County, New Jersey Recovery Facility*, 2 E.A.D. 667, 672 (Adm'r 1988), CAP also claims that the Air District “erroneously states the law on who has the burden to establish that a control technology is not cost effective.” CAP Reply at 5. Regardless what *Pennsauken* says about an applicant's obligation to demonstrate cost-ineffectiveness, the case clearly provides that “[t]he burden of demonstrating that the permit conditions should be reviewed is therefore on the petitioners.” 2 E.A.D. at 667. Therefore, *Pennsauken* in no way diminishes the Air District's point that, as long as the *agency* (not the applicant) has given the BACT determination its “considered judgment,” “as the District has done here, the burden then shifts to the petitioner to show how the agency's response was inadequate.” Air District Response to CAP Petition at 50 n.16.

dispatching the Project solely for the purpose of startup because it would waste both the utility's fuel and ratepayers' dollars. Nevertheless, assuming that the Project operated only in cold or warm startup events, given the annual emissions limit of 330 tpy CO and the per event limit of 2,514 lbs CO, this would allow up to 262 cold or warm startup events per year.¹⁷

For cold startups, applying the percentage reduction that the Air District found would be achieved through use of an auxiliary boiler based on the Mankato data (31%)¹⁸ would mean that, at most, use of auxiliary boiler could achieve a reduction of 102.1 tpy CO.¹⁹ At the annualized cost assumed by the Air District for purposes of its cost-effectiveness analysis, this amounts to approximately \$10,083 per ton of CO,²⁰ which is significantly greater than the \$4,500 per ton cost figure that the Air District rejected as requiring additional reductions in CO emissions during normal operations.²¹ For NO_x, the total potential reduction that could be achieved assuming 262 cold start events would be approximately 19.5 tons per year.²² At the annualized cost assumed by the Air District, this amounts to approximately \$52,796 per ton of NO_x reduced, which is significantly greater than the Air District's cost-effectiveness threshold for NO_x.²³ Further, even if the percentage reductions indicated by the Siemens vendor data were applied

¹⁷ 330 tpy CO equals 660,000 lbs CO per year, which, divided by the cold or warm startup limit for CO of 2,514 lbs, results in 262 allowable events per year. For both warm and cold startups, the limit on CO, as opposed to NO_x, controls, because if the annual limit on NO_x emissions of 127 tpy were divided by the cold or warm startup limits for NO_x (480 and 125 lbs, respectively), the result would be greater than the 262 events that can be accomplished without exceeding the CO limit.

¹⁸ See Exhibit 3, Additional Statement of Basis at 69 (citing the Excel spreadsheet "Aux Boiler start profile DJ.xls"). See Declaration of Alexander G. Crockett, Esq. in Support of Responses to Petitions for Review 10-02, 10-03, 10-04 (Apr. 23, 2010) ("Crockett Decl.") Exh. 11.b.1.

¹⁹ The product of 262 (cold startup events) and 2,514 (the limit on CO per cold startup event) is 658,668 lbs. Taking 31% of that results is 204,187 lbs or approximately 102.1 tpy CO.

²⁰ The annualized operating cost used for purposes of the cost-effectiveness analysis is \$1,029,521. Crockett Decl., Exhibit 11.c.1, Table 3, Calpine Corp.-Russell City Energy Center, Hayward, CA, Aux Boiler Start Cost Effectiveness analysis, Capital Cost Summary, "Costs for emissions reductions for CO and NO_x for the addition of an Aux Boiler."

²¹ See Exhibit 3, Additional Statement of Basis at 48; Exhibit 5, Responses to Public Comments at 70, 74 ("the Air District disagrees with the comments that a lower CO limit should be required at a cost-effectiveness of \$4,500 per ton").

²² Taking the cold start limit of 480 lbs/event NO_x and multiplying that by 262 events yields 125,760 lbs total NO_x; 31% of that is 38,985.6 lbs or approximately 19.5 tons per year NO_x.

²³ The Air District has established a cost-effectiveness threshold for NO_x of \$17,500 per ton. See Bay Area Air Quality Management District Best Available Control Technology (BACT) Guideline, Section I: BACT/TBACT Policy and Implementation, Policy and Implementation Procedure; available at: <http://hank.baaqmd.gov/pmt/bactworkbook/default.htm>.

instead (61.5% for CO; 61% for NO_x),²⁴ the greatest reduction that could be achieved from use of an auxiliary boiler would be 202.5 tpy CO and 38.4 tpy NO_x.²⁵ For CO, this would result in a cost per ton of reductions of about \$5,084, which is still greater than the \$4,500 per ton figure the Air District rejected as requiring additional reductions in CO emissions during normal operations.²⁶ For NO_x, this would result in a cost per ton of about \$26,810 per ton of NO_x, which is still substantially higher than the Air District's NO_x cost-effectiveness threshold.

For warm starts, the same holds true: Given the annual emissions limit of 330 tpy and the per event limit of 2,514 lbs CO, this would, again, only allow for up to 262 warm startup events per year. Because the percentage reduction for warm startup events used by the Air District in its analysis (18%)²⁷ is lower than the percentage reduction for cold startups, the resulting reductions from use of an auxiliary boiler would be fewer and the cost would, as a consequence, be higher on a dollars per ton basis. Further, even if the percentage reductions indicated by the Siemens vendor data for warm starts were used instead (61.7% for CO; 64.4% for NO_x),²⁸ the greatest reductions that could be achieved from use of an auxiliary boiler if all operations were to consist of warm startups would be 203.2 tpy CO and 10.5 tpy NO_x.²⁹ This would result in a cost per ton of reductions of about \$5,067 per ton of CO and \$98,050 per ton of NO_x, which is still greater than the cost that would require its use as BACT.³⁰

Because the number of startup events used in this analysis is wholly unrealistic, RCEC does not

²⁴ See Chabot Reply Attachment 1, Siemens Westinghouse Power Corporation, "Caithness – Bellport Energy Center – Total Estimated Startup and Shutdown Emissions W501FD Upgrade in Combined Cycle Operation on Natural Gas – No Aux. Boiler – With Stack Damper – Rev. 03" (Dec. 14, 2004) at 1 (estimating cold startup emissions without auxiliary boiler at 2,164 lbs CO and 375 lbs NO_x at 51 °F) and "Caithness – Bellport Energy Center – Total Estimated Startup and Shutdown Emissions W501FD Upgrade in Combined Cycle Operation on Natural Gas – With Aux. Boiler – With Stack Damper – Rev. 01" (Dec. 14, 2004) at 1 (estimating cold startup emissions with auxiliary boiler at 833 lbs CO and 147 lbs NO_x at 51 °F).

²⁵ 61.5% of 658,668 lbs CO is 405,080.8 lbs or approximately 202.5 tpy; 61% of 125,760 lbs NO_x is 76,713.6 lbs or approximately 38.4 tpy NO_x.

²⁶ See *supra* note 21.

²⁷ See *supra* note 18.

²⁸ See *supra* note 24 (estimating warm startup emissions without auxiliary boiler at 2,157 lbs CO and 351 lbs NO_x at 51 °F and with auxiliary boiler at 826 lbs CO and 125 lbs NO_x at 51 °F).

²⁹ 61.7% of 658,668 lbs CO is 406,398.2 lbs or approximately 203.2 tpy CO. For NO_x, the warm startup emissions limit (125 lbs) multiplied by 262 events equals 32,750 lbs; 64.4% of that yields a total potential reduction of 21,091 lbs or approximately 10.5 tpy NO_x.

³⁰ See *supra* notes 21 and 23.

agree that it represents an appropriate basis for evaluating BACT for the Project. However, as these incredibly conservative estimates make clear, even assuming the “worst case” startup emissions allowed under the PSD permit – that the facility was operated up to the maximum number of cold or warm startup events that could be accomplished in compliance with the annual limit of 330 tpy CO – and in the absence of any express limitation on the number of startup events, the cost for the reductions that would be achieved by use of an auxiliary boiler would fall outside the range that the Air District has found would require its use as BACT. Moreover, this demonstrates the immateriality of CAP’s contention that the Air District erred in performing a cost-effectiveness analysis based on the credible 6 x 16 operating scenario for the Project – which CAP contends is “a ‘trust me’ scenario” (CAP Reply at 6) – rather than the “worst case” number of startups that might be accomplished under the federal enforceable permit limits.

c. That the Power Purchase Agreement Does Not Require Operation “At Least” 6 Days Per Week, 16 Hours Per Day Is Immaterial

In its reply, CAP seeks to create some false distinction between the Power Purchase Agreement’s requirement that RCEC obtain air permits allowing “up to” 50 weeks of operation in 6 x 16 mode for “up to” 16 hours per day and the Air District’s paraphrase of this requirement as “mean[ing] that the facility will be required to be available for commercial operation at least 16 hours per day, 6 days per week.” CAP Reply at 2 (quoting Air District Response to CAP Petition at 10, 26, 29). The Power Purchase Agreement requires RCEC to obtain air permits that allow for operation for up to 16 hours per day, 6 days per week for up to 50 weeks per year. *See* CAP Reply at 3 (citing Exh. 13 to Crockett Decl. at A-97). This 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. Thus, the semantic distinction CAP intends to draw between whether the Power Purchase Agreement requires operation “at least” or “up to” as often as specified is immaterial and demonstrates no error in the Air District’s conclusion that the 6 x 16 operating profile represents a credible operating scenario for the Project.

At bottom, CAP alleges that the Project will have many more cold and warm startup events than anticipated by the assumed 6 x 16 operating scenario and that the Air District failed to impose enforceable permit conditions that will assure operation in a manner consistent with the assumed scenario. In essence, CAP contends that, to assure that “Flex-Plant 10” (“once through” boiler) technology should not have

been selected as BACT instead of higher efficiency “triple pressure” boiler technology, the PSD permit must contain conditions that will assure the Project is operated “at least” (rather than “up to”) 16 hours per day (so that the following day’s startup is a hot, rather than a warm, startup event) and “at least” six consecutive days per week (so the planned shutdown over the weekend only amounts to one day offline and, as a consequence, the following start-up is a warm, rather than a cold, startup). If such a condition were required to satisfy BACT for a facility designed to operate at a higher efficiency than a quicker starting peaking-to-intermediate duty facility, then the permit would need to mandate that the facility remain online at least 16 hours a day and at least six days a week, even when the power is not required and the plant has not been dispatched by the grid operator. Apart from the fact that such a mandate would ignore the practical realities of how power plants are dispatched to meet instantaneous demand, it would also result in even greater emissions than would otherwise occur. Moreover, CAP can point to no guidance or precedent that would require imposition of such a mandate to satisfy the federal BACT requirement. Accordingly, CAP’s contention that the Air District based its BACT determination on a “trust me” scenario (CAP Reply at 6) and therefore violated the Clean Air Act is without merit.

In sum, CAP fails to demonstrate any error in the Air District’s reliance on the anticipated operating scenario for purposes of the BACT analysis.

d. The Gateway Records Do Not Support CAP’s Contentions

In its reply, CAP introduces operating records from another facility, which it alleges “show that cold starts are much more common in the Bay Area than the District asserts because the region does not need new fossil-fuel capacity to meet local energy reliability demands.” CAP Reply at 5. This newly submitted information, taken from Pacific Gas and Electric Company’s Gateway Generating Station, allegedly “shows 16 cold starts in about a year.” *Id.* at 6. CAP asserts that, because CAP did not receive these data in an unrelated legal proceeding until recently, it could not previously provide them, either in public comment or its petition. *Id.* RCEC objects to introduction of this information at this late stage of the proceeding. Moreover, seven months of data from a single facility cannot possibly support CAP’s sweeping contentions that “cold starts are much more common in the Bay Area” “because the region does not need new fossil-fuel capacity.” *Id.* at 5. Nor does CAP support its contention that Gateway is “similar” (*id.* at 5) to the Project, *e.g.*, that the two facilities would be dispatched similarly by the ISO, or

that these seven months' data are in any way reflective of the intended operation of the Project. Thus, the relevance of the Gateway information to this proceeding is unknown, and the Board should disregard it.

e. CAP's "Legal" Argument Impermissibly Raises a New Issue

CAP concludes its operating scenario arguments with "[i]n sum, the issue for the Board is a legal one: whether BACT was properly set without providing the public with information concerning the maximum number of high emission startup events allowed under the permit." CAP Reply at 6. RCEC objects to CAP's assertion of this argument at this late stage of the proceedings. The "legal" issue raised by CAP is not the same issue presented by its petition, but rather represents a substantive shift in both emphasis and argument. While CAP alleged in its petition that the Air District failed to establish *any* credible operating scenario for the Project and failed to respond to comments requesting such a scenario,³¹ CAP now appears to concede that the Air District's BACT analysis was, in fact, based on such an operating scenario. However, CAP now argues that the daily or annual emissions limits allow for more startup and shutdown events than provided by the assumed scenario. *See* CAP Reply at 1. This represents a substantial shift in both emphasis and argument, which the Board should not allow in a reply. *See Keene*, slip op. at 20 (finding that arguments in reply raised "substantive nuances" not set forth in the petition and as such "constitute, in essence 'late-filed appeals.'").

2. There Is No Merit to CAP's Argument That "Achieved in Practice" Technology Should Have Been Required as BACT Without a Cost-Effectiveness Determination

a. CAP Failed To Preserve Its Argument on the Relevance of Cost to Whether an Auxiliary Boiler Should Be Required to Meet BACT

In their respective responses, both the Air District and RCEC contend that CAP failed to preserve

³¹ In its petition, CAP alleged that "the District failed in its most fundamental job of ascertaining the impact of RCEC's operating scenario on [startup/shutdown] emissions." Petition for Review of Prevention of Significant Deterioration Permit, PSD Appeal No. 10-03 (Mar. 22, 2010) ("CAP Petition") at 8. CAP further alleged that, "[t]he District's response to comments violates the [Clean Air Act] because it does not respond to the public's significant comments asking for a credible scenario of likely [startup/shutdown] events as required by [40 C.F.R.] § 124.17." *Id.* at 14. In support of its position that the Air District failed to ascertain a credible operating scenario, CAP alleged, incorrectly, that certain evidence of the Project's anticipated "6 x 16" operating scenario was not contained within the record. *Id.* CAP then suggested that the record is replete with inconsistencies concerning the Project's intended duty cycle. *Id.* at 14-17.

the argument raised by its petition that the Air District was precluded by its own rules and its Delegation Agreement with EPA Region IX from considering cost in its analysis of whether to require use of an auxiliary boiler during startup to meet BACT.³² As explained by RCEC's response, "Petitioner [CAP] misleadingly cites to its earlier comments concerning a wholly different subject matter." RCEC Response to CAP Petition at 17.

In its reply, CAP admits that it raised the comment concerning whether the Air District's own rules and the Delegation Agreement precluded consideration of cost in a wholly different context, months before it ever commented on the auxiliary boiler analysis. CAP Reply at 7-9. However, CAP suggests that, because the Air District said commenters who had submitted comments in the first comment period need not resubmit them during the second comment period, it believed it did not need to make this point with respect to an auxiliary boiler as well. *Id.* at 8. Relying upon the Air District's "promis[e]" to address its earlier comment concerning "once-through" boiler technology, CAP said it "did not make the same comment that 'achieved in practice' technology need not undergo a cost-effectiveness analysis as to the auxiliary boiler." *Id.* CAP further suggests that the Air District failed to respond to its comment that the Delegation Agreement required Regulation 2-2 to be applied to the RCEC proceeding, citing portions of the Air District's Responses to Public Comments that generally addressed the relationship of Non-Attainment NSR Permitting and PSD permitting.³³ *Id.*

While CAP suggests it was misled by the Air District to believe "a response on the legal issue of

³² See Air District Response to CAP Petition at 44 ("As a threshold matter, Petitioner did not present this argument – that the District cannot consider the cost-effectiveness of an auxiliary boiler here under the PSD BACT rules but must instead impose a LAER level of control – in its comments and so it should not be allowed to object on this basis on appeal."); RCEC Response to CAP Petition at 17-19.

³³ CAP is wrong to suggest that the Air District failed to adequately respond to its earlier comment, which alleged the Air District wrongly rejected "once-through" boiler (*i.e.*, Siemens' "Flex-Plant") technology due to the applicant's representations that it "will kill project because of cost." CAP Petition Exhibit 3 at 5. As a threshold matter, CAP did not raise in its petition any alleged inadequacy in the Air District's Responses to Public Comments in this respect and, as a consequence, cannot assert such a deficiency now in reply. Regardless, the Air District responded directly and definitively to CAP's comment on this point, noting that "the Air District has not taken the costs of Flex-Plant [*i.e.*, "once-through" boiler] technology into account in its analysis of that technology" and that "[t]he only places where cost-effectiveness has been taken in account in the District's BACT analyses are specifically addressed." Exhibit 5, Responses to Public Comments at 106 n.206. The fact that the Air District did not go on to address the specific legal basis upon which CAP had asserted cost could not be considered is immaterial, since the issue was mooted by the Air District's confirmation that it had not considered cost in eliminating Flex-Plant technology from its BACT analysis.

whether and how Regulation 2-2 applies to the RCEC proceeding” would be forthcoming (CAP Reply at 9), a permitting agency cannot be expected to assume that every legal basis asserted by a commenter attacking the agency’s BACT analysis of one technology was intended to apply equally to its analyses of wholly different technologies. Furthermore, as explained by the Air District, “Petitioner [CAP] specifically engaged the District on the cost-effectiveness issue, and far from objecting to the use of a cost-effectiveness analysis, Petitioner claimed that the District *should* perform such an analysis, only with more justification for the operating profile on which it was based.” Air District Response to CAP Petition at 44 (emphasis in original). Thus, CAP’s assertion on appeal that the Air District cannot consider cost in determining whether to require an auxiliary boiler to meet BACT would amount to a “bait and switch.”

CAP goes on to suggest that requiring it to raise again the argument it had previously raised with respect to once-through boiler technology would be unfair, “when reiterating the same argument as to the auxiliary boiler would have elicited the same response from the District – that Regulation 2-2 does not apply.” CAP Reply at 9. In essence, according to CAP, raising this argument would have been an exercise in futility. But that does not alleviate CAP’s burden to demonstrate that the all arguments asserted in its petition were raised with specificity during the public comment period. Further, in light of the Air District’s detailed responses to comments, which resulted in refined analyses and lower limits in several instances, CAP’s expression of futility falls flat and provides no basis for allowing it to raise an argument on appeal that was never raised in public comment.

b. The Delegation Agreement Does Not Preclude Consideration of Cost

There is absolutely no merit to CAP’s position that the Delegation Agreement between the Air District and EPA Region IX precludes consideration of cost for achieved-in-practice technologies. *See* CAP Reply at 9. According to CAP, the Delegation Agreement “provides that the Air District should apply the District’s State Implementation Rule 2-2 to PSD proceedings,” which, in turn, “provides that ‘achieved in practice’ technology does not require a cost effectiveness determination.” *Id.* In strained, indecipherable logic, CAP contends, “[t]hat the rule is an NSR rule does not make it a PSD rule, when EPA stated that the District should apply the rule in a PSD proceeding.” *Id.*

As explained by both the Air District and RCEC in their respective responses, the Clean Air Act and PSD rules expressly require consideration of cost as part of a BACT analysis. *See* Air District

Response to CAP Petition at 43-45; RCEC Response to CAP Petition at 20. CAP's argument essentially seeks to conflate issuance of a PSD permit under delegated authority, with issuance of a PSD permit under a SIP-approved permitting program. RCEC Response to CAP Petition at 20. "In so doing, [CAP] seeks to eliminate any distinction between the requirement to achieve BACT under the PSD rules, and the obligation to achieve the 'lowest achievable emissions rate' ('LAER') under the Clean Air Act's Non-Attainment NSR provisions and the Air District's rules implementing same." *Id.*

Both the Air District and RCEC cited *In re West Suburban Recycling and Energy Center, L.P.*, 6 E.A.D. 692, 696 (EAB 1996) as a case that squarely addressed the issue raised by CAP. See Air District Response to CAP Petition at 48; RCEC Response to CAP Petition at 21. In reply, CAP claims that the *West Suburban Recycling* decision "Is Inapposite Because the Delegation Agreement There Did Not Incorporate the SIP." CAP Reply at 9. In contrast, according to CAP, "the Delegation Agreement applicable here specifically incorporated Regulation 2-2." *Id.* But that is not true, and CAP misapprehends both the actual terms and legal effect of the Delegation Agreement, which in no way "incorporate[s]" the Air District's SIP-approved rule. Rather, the Delegation Agreement provides merely that "[t]he District shall issue PSD permits under this partial delegation Agreement *in accordance with the PSD requirements of the District's Regulation 2 – Rule 2 and 40 CFR 52.21 . . .*"³⁴ Exhibit 63, U.S. EPA – Bay Area Air Quality Management District Agreement for Delegation of Authority to Issue and Modify Prevention of Significant Deterioration Permits Subject to 40 CFR 52.21 (Feb. 6, 2008) ("Delegation Agreement") at 3, § IV.1 (emphasis added). In effect, this allows the Air District to issue PSD permits and permits satisfying its own SIP-approved rules in an integrated fashion.

These terms are not substantively different than the terms of the delegation agreement at issue in *West Suburban Recycling*, which authorized the Illinois Environmental Protection Agency ("IEPA") to conduct its review of PSD permit applications "as an integral part of the Illinois construction permit

³⁴ The Delegation Agreement further provides that, "EPA may review the PSD permit(s) issued by the District to ensure that the District's implementation of this delegation Agreement is consistent with federal PSD regulations for major sources and major modifications (40 CFR 52.21)." *Id.* at § IV.3. Finally, under the heading "Permits," the Delegation Agreement requires that "[t]he District shall follow EPA guidance on any matter involving the interpretation of Sections 160-169 of the Clean Air Act or 40 CFR 52.21, relating to applicability determinations, PSD permit issuance and enforcement." *Id.* at 5, § VII.1.

program.” 46 Fed. Reg. 9,580, 9,582 (Jan. 29, 1981). As the Board decided in that case:

[w]hile the Delegation Agreement does allow IEPA to conduct its delegated PSD review authority as ‘an integral part of the Illinois construction permit program,’ nothing in that phrase can be reasonably read as abrogating the delegatee’s responsibility to conduct its review and make its decisions *on the basis of the federal PSD program contained in 40 C.F.R. § 52.21*.

West Suburban Recycling, 6 E.A.D. at 707 (emphasis in original).

Moreover, by attempting to draw a distinction between the terms of the delegation agreements at issue in *West Suburban Recycling* and this case, CAP ignores the fundamental distinction between issuance of a PSD permit pursuant to delegated authority and issuance of a PSD permit pursuant to a SIP-approved permitting program. *See id.* at 704 (“To read the Delegation Agreement as IEPA suggests would be to equate IEPA’s delegated PSD authority with a state PSD program that has been duly authorized by EPA as part of a state SIP.”). Neither EPA, nor the Air District, could, by virtue of a delegation agreement alone, displace the federal PSD rules as applicable to these proceedings. In sum, CAP’s urged interpretation – that the Delegation Agreement mandates LAER as part of a PSD permit and precludes consideration of cost for existing technologies – finds no basis in law and runs contrary to the clear dictates of the Clean Air Act, PSD rules, and Board precedent.

3. The Air District Fully Justified the Cold and Hot Startup Limits for NO_x

CAP contends in reply that the Air District’s justification for the compliance margin for cold and hot startup NO₂ emissions is “unsupportable” because the Air District allegedly did not “reference to any specific facts pertaining to RCEC.” CAP Reply at 10. In particular, CAP alleges that “[n]one of the cases [cited by the Air District] stand [*sic*] for the proposition that the District can set a large compliance margin based simply on the conclusory statement about the variability in startup emissions.” *Id.* Although CAP initially contends that “[n]one of the cases” supports the Air District’s position, it later concedes that *In re Knauf Fiber Glass GmbH*, 9 E.A.D. 1 (EAB 2000) (“*Knauf II*”) and *In re Kendall New Century Dev.*, 11 E.A.D. 40 (EAB 2003) “upholds [*sic*] limits that are at the higher end or that have a safety factor.” *Id.* at 11. Thus, the only case CAP cites in support of its argument is *In re Newmont Nevada Energy Investment, LLC*, 12 E.A.D. 429 (EAB 2005). *Id.* at 10-11. CAP’s reliance on *Newmont* is misplaced.

As the Air District explained in its response to CAP’s petition, the Board has upheld compliance

margins of 25% or more in other cases. *See* Air District Response to CAP Petition at 67 (citing *Newmont*, 12 E.A.D. 429 (17-26%); *Kendall*, 11 E.A.D. at 53 (25%); *Knauf II*, 9 E.A.D. at 15 (25%)). Compared to the maximum startup emissions observed at the Palomar facility, the compliance margins for the Project are 9 or 22% for cold startups and 21% for hot startups (excluding a high outlier in hot startup emissions).³⁵ CAP does not dispute that the Board has upheld these compliance margins, but argues that *Newmont* “provides an example of why the District’s justification for the large margin is unsupportable.” CAP Reply at 10. *Newmont* does no such thing. In *Newmont*, the Board upheld the agency’s NO_x BACT analysis for a coal-fired boiler after rejecting petitioner’s six examples of allegedly lower achievable emissions limits. 12 E.A.D. at 438-59. Far from calling into question the Air District’s BACT determination for startup emissions, *Newmont*’s main conclusion relevant to this case is the Board’s oft-repeated reminder of the “heavy burden” a petitioner bears in challenging an agency’s technical analysis. *See, e.g.*, 12 E.A.D. at 447, 448, 452, 454, 455 & 458.

CAP’s cherry-picked phrases from *Newmont* do not stand for the propositions that CAP suggests and do not meet this heavy burden. According to CAP’s reply, *Newmont* stands for the proposition that “[t]he agency³⁶ explained that the control system was relatively new at that time, and that higher efficiencies would require injection of higher volumes of ammonia. In contrast, the District failed to have any fact-based justification for the margin, including evidence that the reason for some of the higher startup emissions are [*sic*] due to the general variability factors that the District mentions.” CAP Reply at 11 (citations omitted). The Air District’s “fact-based justification” was its examination of “data and permit conditions from other facilities to determine if lower limits could be reasonably achieved by this facility.” Exhibit 1, Statement of Basis at 44. CAP offers no evidence or argument that calls into question the Air District’s extensive examination of startup emissions data from at least six other facilities. *See* Air District Response to CAP Petition at 55-74; RCEC Response to CAP Petition at 34-37, 41-43, 46-49. The reason data from other facilities using similar equipment was examined, and not

³⁵ *See* Air District Response to CAP Petition at 66 (cold startups), 72 (hot startups). For hot startups, the highest data point, other than a 145-pound startup event, was 75 pounds. The difference of 20 pounds between 75 pounds and the permit limit of 95 pounds represents a 21% compliance margin.

³⁶ This explanation was included in the applicant’s BACT analysis and was not an explanation by the agency. *See* 12 E.A.D. at 462.

“specific facts pertaining to RCEC” (CAP Reply at 10), is because such “specific facts” cannot be gleaned from a facility that is not yet built.

With respect to the “general variability factors,” CAP retreats from the argument it made in its petition that “there is no analysis of why there is variability” in startups (CAP Petition at 26),³⁷ and now asserts that the Air District should have produced “evidence that the reason for some of the higher startup emissions are [*sic*] due to the general variability factors that the District mentions.”³⁸ CAP Reply at 11. As the Air District explained in response to CAP’s petition:

Petitioner goes on to claim that the District did not evaluate in more detail the reasons for the variability and whether there may [be] additional measures that the facility could take to reduce emissions. But Petitioner has failed to provide any reason – either in its comments or in its Petition – to believe that a facility could do any more to address the factors that cause startups [*sic*] emissions to be so variable, and the District is not aware of any. Such speculation is not sufficient to warrant review of a BACT determination, as the Board has consistently held.

Air District Response to CAP Petition at 65.

Finally, CAP concludes that “[t]he case also confirms that the BACT analysis ‘must be solidly grounded on what is presently known.’” CAP Reply at 11 (citations omitted). RCEC agrees, which is why it worked with the Air District to examine startup emissions data from other facilities. In sum, CAP falls far short of showing any error in the BACT analysis for cold and hot startup NO₂ emissions.

4. CAP’s Arguments About the Mankato Energy Center Data Were Waived

CAP contends that its “arguments about the factual support for the District’s basis [for its auxiliary boiler cost-effectiveness analysis] should not be considered to have been waived.” CAP Reply at 12. This contention fails. CAP argues that “[g]iven that the District bears the burden on not requiring achieved technology based on cost ineffectiveness, it is proper for CAP to point out that the District’s

³⁷ As both the Air District and RCEC pointed out, the Statement of Basis includes a discussion of “factors that can make individual startups take longer or shorter [times] and generate more or less emissions.” See Air District Response to CAP Petition at 64; RCEC Response to CAP Petition at 54.

³⁸ CAP also cites *Newmont* for the proposition that “[e]xamples of relevant evidence include evidence that the lower rates were achieved incidentally or in performance tests.” CAP Reply at 11 (citation omitted). CAP plucks this idea out of a quote from the Nevada Division of Environmental Protection’s (“NDEP’s”) response to comments in the context of the Board’s discussion of whether an emission limit must be “achievable” or “achieved.” 12 E.A.D. at 439. CAP has no basis for translating NDEP’s statement into a duty of the Air District to examine each startup data point from other facilities and attempt to discern why some data points are high and others are low.

justification is without factual support.” *Id.* at 11. However, “public comments question[ing] the emissions assumptions that the District used” – in this case, Chabot’s comments related to *vendor data* that it obtained from Siemens – cannot preserve CAP’s arguments concerning *data from the Mankato Energy Center*. CAP Reply at 11-12. Such a result would be inconsistent with both CAP’s burden as a petitioner³⁹ and Board precedent on the requirements of petitioners to “raise issues with a reasonable degree of specificity.”⁴⁰ Thus, as both the Air District and RCEC explained, CAP’s allegations about the relevance or reliability of the Mankato data were not preserved for appeal. *See* Air District Response to CAP Petition at 52-53, 53 n.17; RCEC Response to CAP Petition at 25-26.

C. The Board Should Reject Mr. Sarvey’s Arguments

1. Mr. Sarvey’s Arguments About the BACT Limit for Startup NO₂ Emissions Come Too Late and Are Not Supported by the Record

According to Mr. Sarvey, his “appeal asserts that the District should have required a NO₂ limit for cold starts much lower than the 480 pound BACT limit proposed by the District.” Sarvey Reply at 4. Whereas Mr. Sarvey argued in his petition that the limit should have been 281, 335, or 375 pounds (*see* Petition for Review of Prevention of Significant Deterioration Permit, PSD Appeal No. 10-04 (Mar. 23, 2010) (“Sarvey Petition”) at 9, 11, 12), he now chooses a different number – 300 pounds – which is the limit for cold startups at the Delta Energy Center. *See* Sarvey Reply at 2-8. The problem, however, is that neither Mr. Sarvey nor anyone else suggested a 300-pound limit during the public comment period. Nor did Mr. Sarvey include this argument in his petition. Thus, the Board should not consider Mr. Sarvey’s late-filed argument. Moreover, Mr. Sarvey is wrong that the Air District “ignored the permit limit that [it] established for the Delta Energy Center.” Sarvey Reply at 6.

As the Board recently reminded Petitioners, “they may not raise any new issues in their reply briefs.” Order at 7. The Delta Energy Center cold startup NO₂ limit is a new issue. Mr. Sarvey did not

³⁹ A petition “must contain ‘a demonstration that any issues being raised were raised during the public comment period.’” *In re Encogen Cogeneration Facility*, 8 E.A.D. 224, 249 (EAB 1999) (citing 40 C.F.R. §§ 124.13, 124.19(a)).

⁴⁰ *In re Knauf Insulation, GmbH*, PSD Appeal Nos. 06-01 through 06-06, slip op. at 4 (EAB, Nov. 14, 2006) (“[t]he Board has also frequently emphasized that petitioners must raise issues with a reasonable degree of specificity and clarity during the comment period in order for the issue to be preserved for review.”).

raise this issue in his petition. Indeed, he could not have since the issue was never raised during the public comment period and was not preserved for review.⁴¹ In his petition, Mr. Sarvey discussed observed emissions rates at the Delta, Metcalf, and Palomar facilities, which he mistakenly referred to as “limits.” Sarvey Petition at 9, 11; *see* RCEC’s Response to Petition for Review Filed by Robert Sarvey, PSD Appeal No. 10-04 (Apr. 23, 2010) (“RCEC Response to Sarvey Petition”) at 27. In particular, he contended that “the District should have chosen either the Delta limit of 281 pounds the Metcalf limit of 335 pounds or the Palomar limit of 375 pounds as BACT for NO₂ startup emissions.” Sarvey Petition at 11. Nowhere did he discuss the actual Delta permit limit. Neither the Air District nor RCEC mentioned the Delta permit limit in their responses. Thus, Mr. Sarvey’s argument comes too late and should be disregarded by the Board. *See Knauf I* at 126 n.9, *Attleboro*, slip op. at 72 n.105.

Moreover, had Mr. Sarvey (or anyone else) raised this issue previously, the Air District would have had an opportunity to explain in its responses to comments that it had, in fact, considered analysis submitted by the applicant, demonstrating why the 300-pound Delta permit limit for NO₂ during cold startups was not an appropriate basis for establishing BACT. As the Air District explained with respect to the Project’s BACT limits in general, there are “tradeoffs between lowering NO_x emissions and lowering CO emissions” Exhibit 5, Responses to Public Comments at 68. “These tradeoffs are important considerations to take into account when adopting BACT emissions limits. For the NO_x/CO tradeoff, the technical realities of controlling these two pollutants means that lowering combustion temperatures to decrease NO_x formation necessarily means that CO emissions will be increased because lower temperatures increase incomplete combustion.” *Id.* at 68.

In December 2008, the applicant submitted an analysis to the Air District that expressly discusses both the emissions rates observed at Delta and Delta’s permit limits and whether these observed rates or limits should be established as BACT for the Project:

Calpine reports that, for its Delta Energy Center (DEC), which also uses Siemens/Westinghouse F-class gas turbines, cold start-up events occur less than two times per year, on average, typically only after an annual outage. . . . [B]ecause emissions

⁴¹ *Cf. In re Scituate Wastewater Treatment Plant*, 12 E.A.D. 708, 724 (EAB 2006) (“The Board will not entertain a claim raised for the first time in a reply brief filed on appeal.”) (citations omitted), *appeal dismissed upon stipulation of parties*, No. 06-1817 (1st Cir. Aug. 4, 2006).

are significantly greater during such events than in steady-state operations or hot or warm start-up events, the District has focused on assuring that the limits imposed upon RCEC during cold start-up events represent the maximum degree of controls achievable for such periods.

In 2005, prior to the commercial operation of the Metcalf Energy Center, LLC (MEC), which like RCEC, uses Siemens/Westinghouse F-class gas turbines, Calpine applied for, and obtained, a change in its permit conditions to specify a higher limitation on emissions of each of NO_x, CO and POC during a cold start-up event, to 480 lbs NO_x, 5028 lbs CO, and 96 lbs POC. These changes to MEC's permit followed similar conceptual changes to permit conditions for Calpine's Los Medanos Energy Center (LMEC) and DEC, which were made to address compliance issues observed during cold start-up and tuning events at Calpine's other facilities. *For DEC, which also uses Siemens/Westinghouse F-class gas turbines, the changed conditions authorized a 25% increase in NO_x emissions during cold start-up and combustor tuning events (240 vs. 300 lbs NO_x), and a 288% increase in CO emissions during such events (2,514 vs. 9,750 lbs CO).*

Since the time when the changes were made to MEC's permit conditions in 2005, Calpine has obtained significant additional experience and data on controlling emissions during start-up and shutdown events at its facilities. These data demonstrate that, for cold start-up events, the NO_x and CO emissions specified by MEC's permit (480 lbs NO_x and 5,028 lbs CO per turbine per cold start-up event) represent the lowest levels achievable for these two pollutants on a continuous basis. *Although the levels of NO_x emissions during such events are somewhat higher than those achieved by DEC, the CO emissions limits applicable to MEC and proposed for RCEC – 5,028 lbs CO per turbine per cold start-up event⁴² – are substantially lower than the corresponding limits for DEC, as demonstrated by data on numerous cold start-up events for DEC, which has experienced CO emissions as high as 8,288 lbs CO for Unit No. 2 on May 22, 2005 and 7,298 lbs CO for Unit No. 1 on April 28, 2007. . . .*

While not necessarily the lowest emissions of either NO_x or CO demonstrated at Calpine's other facilities during such events, *these limits reflect the best degree of control that is achievable for both pollutants* taking into account their respective environmental impacts and concerns regarding such impacts.

Exhibit 64, Proposed Draft Permitting Analysis Language Regarding Startup and Shutdown BACT Analysis (Dec. 3, 2008) at 1-3 (emphases added) (footnotes omitted). The very data cited by Mr. Sarvey illustrate this tradeoff between NO_x and CO emissions: while the highest NO_x emissions were 281 pounds, the six data points for CO emissions ranged as high as 8,288 pounds and averaged 4,300 pounds. *See Sarvey Reply at 5.* Only one of the six start-up events would have been in compliance with RCEC's cold startup limit for CO of 2,514 pounds.

The above analysis of Delta's emissions rates and limits is included in the Air District's Certified

⁴² After the first public comment period, the Air District lowered the CO limit for cold startups from 5,028 pounds to 2,514 pounds based on its review of data from other facilities. *See Exhibit 3, Additional Statement of Basis at 59, 64-65.*

Index of Administrative Record as Document No. 5.4. See Air District's Certified Index of Administrative Record, PSD Appeal Nos. 10-01 through 10-10 (Apr. 25, 2010) at 9. Accordingly, Mr. Sarvey's assertion that the Air District "clearly erred in that it propounded the limit for the Delta Energy Center in 2004 and then failed to consider it in the BACT analysis for the RCEC in 2010" (Sarvey Reply at 6 (footnote omitted)) simply has no basis in fact.⁴³ Similarly, Mr. Sarvey's contention that "[t]he Districts [*sic*] analysis focused on the NO_x cold start permit limit set for the Metcalf Energy Center and ignored the permit limit that the District established for the Delta Energy Center in September of 2004" (*id.*) is not supported by the record.⁴⁴ Had Mr. Sarvey been diligent in his review of the record, he would have seen that the Delta limit was, in fact, considered very early on, but rejected as an appropriate basis for BACT because it was coupled with much higher CO emissions. Moreover, on a technical issue such as the appropriate trade-off between NO_x and CO controls during startup, a petitioner bears an especially "heavy burden" and must come forth with more than a permit limit that was never raised by anyone in public comments as the basis for demonstrating clear error.⁴⁵ For all of the reasons discussed above, the

⁴³ Mr. Sarvey's only support for this statement is the cryptic comment that "Petitioner hopes the oversight was unintentional see RCEC Exhibit 22 Pages 8-15 Roberts [*sic*] Sarvey comments on Additional Statement of Basis." *Id.* at 6 n.11. However, the referenced comments from Mr. Sarvey discuss the Gateway Generating Station not the Project (pages 8-10) and attach teleconference notes (pages 11-15), again concerning Gateway. See Exhibit 22 at 8-15. Thus, this citation has nothing to do with the Delta Energy Center or startup limits and provides no support for Mr. Sarvey's argument.

RCEC notes that, in response to the CAP Petition, the Air District said, "Petitioner has not pointed to a single facility with a cold startup NO₂ limit of less than 480 pounds, either in its comments or in its Petition, and the District did not find any in its BACT review either." Air District Response to CAP Petition at 60-61. While this last statement – that the Air District did not find any cold startup limits lower than 480 pounds NO₂ – is contradicted by inclusion of the applicant's analysis of the Delta limit as part of the administrative record, this merely underscores how prejudicial it would be to both the Air District and RCEC to allow Mr. Sarvey to raise Delta's 300 lb NO₂ limit for the first time in his reply, when it was never previously raised by anyone during either public comment or on appeal.

⁴⁴ The remainder of Mr. Sarvey's argument consists of his contention that the largest compliance margin cited by the Air District to defend its decision at RCEC "is 25%, which is considerably less than the 38% margin represented by the BAAQMD approved Delta Energy Center permit limit of 300 pounds of NO₂ per cold start." Sarvey Reply at 7-8. The Air District, however, "was clearly justified in incorporating a compliance margin to account for the variability in startup emissions." Air District Response to Petition for Review, PSD Appeal No. 10-04 (Apr. 23, 2010) ("Air District Response to Sarvey Petition") at 16; see also *id.* at 21-22; RCEC Response to Sarvey Petition at 29-30. Moreover, the value of a compliance margin depends on the point of comparison: due to the tradeoff between NO_x and CO emissions discussed above, Delta's permit limit of 300 pounds is not a correct point of comparison. The compliance margin compared to the maximum startup emissions at the Palomar facility is 9 or 22% for cold startups. See *supra* section IV.B.3.

⁴⁵ See, e.g., *In re Three Mountain Power, LLC*, 10 E.A.D. 39, 50 (EAB 2001) ("we assign a heavy burden to persons seeking review of issues that are quintessentially technical.") (citations omitted); see

(Footnote Continued on Next Page.)

Board should not consider Mr. Sarvey's late-filed argument regarding the cold startup limit for NO₂.

2. Mr. Sarvey Falls Far Short of Establishing Any Error by the Air District with Respect to OpFlex Technology

As the Air District discussed in its response to Mr. Sarvey's petition, "the Petition also complains in passing about the District's selection of BACT control technology [but] does not present any specific challenge to the District's determination beyond expressing general disapproval with the District's decision not to require additional control technologies." Air District Response to Sarvey Petition at 19. Although Mr. Sarvey has apparently decided to raise this as an issue and provide supporting argument now in his reply (Sarvey Reply at 8-9),⁴⁶ he nevertheless "falls far short of showing that the Air District's decision was clearly erroneous." RCEC Response to Sarvey Petition at 17.

Mr. Sarvey's contends that he provided "adequate documentation that the OP-Flex technology is a feasible technology that has demonstrated great success in reducing start up emissions at the Palomar Facility in Escondido." Sarvey Reply at 8. The Air District disagreed with similar comments raised during the public comment period:

The Air District disagree[d] with these characterizations of the information from Palomar. The data is limited and preliminary at best, and it provides no firm indication of what reductions may have come from the use of Op-Flex, what reductions may have resulted from starting to inject ammonia earlier during the startup process, and what reductions may have come from other changes such as improved work practices.

Exhibit 5, Responses to Public Comments at 117. Mr. Sarvey does not address any of these issues in his reply. Next, Mr. Sarvey contends that "[t]he OP-Flex technology has been offered commercially by GE since 2005 so it is certainly a feasible technology" Sarvey Reply at 8. The Air District was fully aware of commercial availability, but found that "GE is not prepared to guarantee these [startup] numbers, or any specific level of emissions reductions, for the product at this time." Exhibit 1, Statement of Basis at 41. The Air District's decision to eliminate OpFlex technology was based on this lack of

(Footnote Continued from Previous Page.)

also Attleboro, slip op. at 32 (in a challenge to technical issues, the Board expects a petitioner to present it "with references to studies, reports or other materials that provide relevant, detailed, and specific facts and data about permitting matters that were not adequately considered by a permit issuer").

⁴⁶ Notwithstanding the absence of any substance in Mr. Sarvey's petition on this point, both the Air District and RCEC provided a detailed explanation in their respective responses concerning the Air District's BACT technology selection for startups. See Air District Response to Sarvey Petition at 19-21; RCEC Response to Sarvey Petition at 10-17.

guarantee, combined with “the limited nature of the data from the only facility using Op-Flex . . . and the fact that no other permitting agencies have ever found Op-Flex to be an achievable technology for reducing startup emissions.” Exhibit 3, Additional Statement of Basis at 71. Mr. Sarvey’s assertion about commercial availability does not call into question this reasoned conclusion.

Nor do Mr. Sarvey’s bare assertions about the California Energy Commission’s (“CEC’s”) “recommendation” or Gateway Generating Station’s use of OpFlex call into question the Air District’s decision. See Sarvey Reply at 8-9. The CEC decision he cites specifically references fast start technology as an *option* that would relieve RCEC of certain startup prohibitions. See Exhibit 65, CEC Final Commission Decision, Russell City Energy Center, Amendment No. 1 (01-AFC-7C) (Oct. 2007) at 77 n.14. As to the Gateway facility, Mr. Sarvey argues that the Air District is “fully aware of the installation of Op-Flex technology” (Sarvey Reply at 9), which is true, of course, but he never addresses RCEC’s response that “the very fact that OpFlex is required by the proposed consent decree as an ‘Environmental Mitigation Project’ demonstrates that it was not required to meet BACT” or that the proposed consent decree “has not been finalized at this time.” RCEC Response to Sarvey Petition at 16.

Mr. Sarvey next cites the NSR Manual on technical infeasibility and claims that the Air District’s BACT analysis “failed to clearly establish that the Op-Flex technology is not available or applicable to the RCEC” Sarvey Reply at 9. What Mr. Sarvey fails to recognize is 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).” Exhibit 3, Additional Statement of Basis at 71. Consequently, the Air District “agree[d] with the comments stating that the Air District should require the same level of startup emissions reductions achieved at facilities that have installed OpFlex . . . [but] disagree[d], however, with the commenters who claimed that the Air District should specifically require the use of Op-Flex as a technology.” *Id.* In fact, Mr. Sarvey actually acknowledges that the Air District lowered RCEC’s hot startup NO₂ limit based on the Palomar data: “[t]he District even used results from the Op-Flex product evaluation to justify lowering the hot start NO₂ limits for RCEC from 125 pounds to 95 pounds but concluded it was infeasible for the RCEC.” Sarvey Reply at 9 (footnote omitted).

In sum, although Mr. Sarvey attempts to raise the Air District’s rejection of Op-Flex technology

as a specific issue in his reply, he “provides no grounds for granting review of the District’s BACT technology selection.” Air District Response to Sarvey Petition at 21.

3. Mr. Sarvey’s Arguments about Ammonia Emissions Should Be Barred from Consideration and Are, In Any Event, Meritless

a. Mr. Sarvey Is Incorrect that the District’s Draft Study Concerning Secondary PM_{2.5} Formation Was Not Part of the Record

In his reply, Mr. Sarvey discusses the findings of the Air District’s draft study concerning secondary particulate formation in the Bay Area.⁴⁷ Sarvey Reply at 10. Mr. Sarvey says that, “[t]he District and RCEC claim that the study was part of the administrative record and yet the study was not referenced of [*sic*] disclosed before Feb.” *Id.* at 10 n. 20. In his petition, Mr. Sarvey alleged that “[t]he district new Draft Study has not been provided for the record nor is it available anywhere else.” Sarvey Petition at 15 n. 22. In response, the Air District clarified that “the study clearly was part of the record on which the District made its decision, as the District discussed the document in detail and cited it extensively in the Responses to Public Comments.”⁴⁸ Air District Response to Sarvey Petition at 25 n. 6. There is absolutely no basis for Mr. Sarvey’s allegations that the draft study was not included in the record. Nor is there any basis for Mr. Sarvey to allege that he could not have raised any arguments pertaining to this study as part of his petition. (His petition references the draft study, but wrongly alleges that it was not part of the record or otherwise available.) Accordingly, the Board need not consider any additional argument raised by Mr. Sarvey concerning the draft study at this late stage of the proceeding.

b. Mr. Sarvey Should Not Be Allowed to Raise a New Argument Regarding Whether BACT Limits Are Required for Ammonia Emissions; Regardless, There Is No Merit to His Argument

In his reply, Mr. Sarvey proffers the draft study as support, not for the argument he made in his

⁴⁷ The study to which Mr. Sarvey refers is titled “Draft ‘Fine Particulate Matter Data Analysis and Modeling in the Bay Area.’” It is included in the Air District’s Certified Index of Administrative Record as Document No. 2.24. *See* Air District’s Certified Index of Administrative Record, PSD Appeal Nos. 10-01 through 10-10 (Apr. 25, 2010) at 5 (“Saffet Tanrikulu, BAAQMD, *et al.*, Draft ‘Fine Particulate Matter Data Analysis and Modeling in the Bay Area,’ dated 10/1/2009).

⁴⁸ Further, the Air District confirmed that it had “included the document in its collection of record documents it made publicly available for this proceeding and included it on its index of record documents.” Air District Response to Sarvey Petition at 25 n. 6. “The District also made clear that all such documents were available for public review at District headquarters . . .” *Id.*

petition alleging defects in the NO₂ BACT analysis due to ancillary impacts related to selection of SCR as BACT, but for what appears to be a wholly new argument, which he raises for the first time in reply: that the PSD permit must include BACT limits on emissions of ammonia slip. Sarvey Reply at 10-11 (“The Board should remand the permit back to the District to evaluate a lower ammonia slip limit for the RCEC.”). Mr. Sarvey cannot raise such an argument for the first time in his reply. Accordingly, the Board should disregard his argument on this point.

Notwithstanding that he failed to raise this issue in his petition, there is absolutely no merit to Mr. Sarvey’s suggestion that a BACT analysis or limit is required for ammonia emissions. The Air District included the following analysis of this issue in its Responses to Public Comments:

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 BACT 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 formation.

Exhibit 5, Responses to Public Comments at 80 (footnote omitted). While Mr. Sarvey now appears to take issue with this conclusion, he did not raise this issue in his petition and cannot do so by way of reply. Regardless, Mr. Sarvey provides no legal basis that would call into question the Air District’s conclusion that regulation of ammonia as a PSD pollutant due to potential secondary particulate formation is not allowed at this time under the federal PSD rules.

c. Mr. Sarvey Fails To Demonstrate Any Error in the Conclusion That the Project’s Ammonia Emissions Will Not Significantly Contribute to Secondary Particulate Formation

Mr. Sarvey also fails to demonstrate any clear error in the Air District’s analysis of the relationship between ammonia emissions and secondary particulate formation.⁴⁹ Mr. Sarvey does not

⁴⁹ Both the Air District and RCEC provided detailed descriptions of the analysis supporting the
(Footnote Continued on Next Page.)

challenge this analysis in his reply, but instead merely suggests that, given high ambient 24-hour PM_{2.5} concentrations at certain locations in the Bay Area and the fact that the Air District's draft study identifies some marginal benefit in terms of secondary particulate formation as a result of reductions in ammonia emissions, "it appears that any secondary formation of PM 2.5 would be significant." Sarvey Reply at 10. This parrots the claim made by Mr. Sarvey in his petition that "[a]ny additional PM 2.5 concentration is significant." Sarvey Petition at 15 n. 22.

However, just as he failed in his petition, Mr. Sarvey has again failed to introduce any evidence that would meet the heavy burden he faces in challenging the Air District's technical determination that the Hayward area is "nitric acid limited."⁵⁰ Further, his bald assertion that "any secondary formation of PM 2.5 would be significant" (Sarvey Reply at 10) is baseless and is, in fact, specifically refuted by the Air District's conclusion, "based on the best available information, that the facility would not have any significant secondary PM_{2.5} impacts and would not cause or contribute to a violation of the PM_{2.5} NAAQS, even if precursors had to be included in the PSD source impact analysis." Exhibit 5, Responses to Public Comments at 154.

Finally, in arguing that, "[t]he Board should remand the permit back to the District to evaluate a lower ammonia slip limit for the RCEC" (Sarvey Reply at 11, emphasis added), Mr. Sarvey apparently acknowledges that the Project will be subject to an ammonia limitation of 5 parts per million by volume ("ppmv").⁵¹ However, Mr. Sarvey provides no evidence or argument to suggest that a lower limit than 5 ppmv would be achievable or that such a lower limit is required either by law or to avoid significant impacts on secondary particulate formation. Thus, Mr. Sarvey has failed to demonstrate any basis for review concerning the facility's emissions of ammonia and alleged secondary particulate formation.

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conclusion that the Project's ammonia slip emissions will not significantly contribute to secondary particulate formation. See Air District Response to Sarvey Petition at 22-27; RCEC Response to Sarvey Petition at 36-41.

⁵⁰ See *Three Mountain Power*, 10 E.A.D. at 57-58 (rejecting as purely speculative claims that ammonia slip would result in secondary particulate formation where EPA Region IX provided rationale that rural areas, such as where proposed plant would be located, were "ammonia-rich" and therefore nitric acid-limited).

⁵¹ See Exhibit 4, Final PSD Permit at 9, condition no. 19(e) (shown in strike-through text to indicate that the ammonia limit, which appears in the CEC license and corresponding Air District Authority to Construct, is not part of the PSD permit).

4. Mr. Sarvey's Arguments about BACT for Cooling Tower Emissions Are Incorrect and Ignore the Record

In contrast to the many cooling tower issues in his petition, Mr. Sarvey focuses his reply solely on dry cooling (perhaps realizing that none of the others was preserved for appeal). He argues that the Air District erred in its conclusions that including dry cooling in the BACT analysis would redefine the source and that it would have declined to require dry cooling as BACT due to ancillary impacts. Sarvey Reply at 12-13. Neither of his arguments has merit or provides any basis for Board review.

As an initial matter, Mr. Sarvey complains throughout his arguments that the Air District's dry cooling analysis fails because it came after the close of the comment period. *See id.* at 11-13. This complaint makes no sense. Under the federal regulations, at least 30 days must be allowed for public comment (40 C.F.R. § 124.10(b)), and then, *at the time the final permit is issued*, the permitting agency must issue a response to comments. 40 C.F.R. § 124.17(a). There is no obligation to hold the response to comments itself open to public comment. Moreover, in this case, the Air District held *two* public comment periods totaling more than *15 weeks* and *two* public hearings.⁵² Thus, to the extent Mr. Sarvey complains that the Air District's dry cooling analysis was not "fully vetted" before the close of the comment periods, he demonstrates no error by the Air District.

Mr. Sarvey's primary contention is that "dry cooling would not redefine the source. The source would still be a combined cycled natural gas electrical generating facility." Sarvey Reply at 12. Mr. Sarvey offers no support for this contention. In particular, Mr. Sarvey ignores the Board's direction to permitting agencies to "discern which design elements are inherent to [the] purpose [of the proposed facility], articulated for reasons independent of air quality permitting, and which design elements may be changed to achieve pollutant emissions reductions without disrupting the applicant's basic business purpose for the proposed facility." *Prairie State*, slip op. at 30 (footnote omitted). This is exactly what the Air District did before expressing hesitation "that it could require the applicant to redesign this source to use dry cooling in this case, as it would disrupt one of the basic objectives of the proposed facility."⁵³

⁵² Neither Mr. Sarvey nor anyone else submitted a comment on dry cooling or any other cooling tower issues during the first comment period. CAP submitted a comment on dry cooling during the second comment period, which the Air District responded to at length in its Responses to Public Comments. *See* RCEC Response to Sarvey Petition at 44-47.

⁵³ *See also* RCEC Response to Sarvey Petition at 45-46, 55-57. For example, "[t]he benefit of

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Exhibit 5, Responses to Public Comments at 87-88. Mr. Sarvey’s bare assertion that, with dry cooling, “[t]he source would still be a combined cycle natural gas electrical generating facility” (Sarvey Reply at 12) is an overly broad characterization of the source that runs contrary to Board precedent.⁵⁴

Mr. Sarvey then faults the Air District for “never reach[ing] step four of the BACT analysis.” Sarvey Reply at 12. However, that is plainly false. Notwithstanding that it found that inclusion of dry cooling would redefine the source, the Air District conducted a full analysis of the ancillary environmental and energy impacts of wet versus dry cooling and concluded that the “net environmental benefit would support the choice of wet cooling over dry cooling for this particular facility.” Exhibit 5, Responses to Public Comments at 88. To assail this analysis of ancillary impacts, Mr. Sarvey throws out a number of unsupported allegations, apparently in the hope that one will stick. None does. First, Mr. Sarvey claims that the Air District “fails to consider the amount of energy that the water treatment facility that treats the wastewater for the cooling tower will consume” and “fails to quantify and consider the energy necessary to transfer the water from the water treatment plant and the energy and environmental impacts . . . of the Zero Liquid Discharge System.” Sarvey Reply at 13. This is simply false. The Air District’s energy analysis was *net*: “[w]hile the use of an air cooled condenser would reduce the load required by the tertiary water treatment and Zero Liquid Discharge by approximately 2,850 kilowatts, the *net result* would still be a reduction in plant output of approximately 3,086 kilowatts” Exhibit 5, Responses to Public Comments at 88-89 (emphasis added). Second, to the extent that Mr. Sarvey raises the “solid waste impacts” of the Zero Liquid Discharge System (Sarvey Reply at 13), this issue was never raised during the public comment period and, thus, was not preserved for appeal. Third, Mr. Sarvey offers an unsupported allegation that the Air District “failed to consider the environmental impacts from the construction of the water pipeline through sensitive habitat.” Sarvey Reply at 13. The water pipeline will be located within the existing footprint of the Hayward Wastewater Treatment Plant and adjacent

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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 at its current location.” Exhibit 5, Responses to Public Comments at 87.

⁵⁴ See, e.g., *Prairie State*, slip op. at 31-32 (upholding agency’s finding that the facility’s central purpose is “production of electricity from a dedicated 30-year supply of coal” and not “the production of electricity, from coal” as contended by petitioners).

industrial parcels, *i.e.*, the pipeline will not affect any sensitive habitat. Fourth, Mr. Sarvey raises a concern of “higher uses for reclaimed water from the Hayward Wastewater Treatment Plant than power plant cooling.” Sarvey Reply at 13. Again, Mr. Sarvey fails to acknowledge that the District considered this issue and “disagree[d] that there would be a net environmental harm from using recycled water.” Exhibit 5, Responses to Public Comments at 88 n.182. Moreover, Mr. Sarvey’s unsupported allegation about “higher uses” falls far short of calling into question the Air District’s analysis of a technical issue. *See, e.g., Attleboro*, slip op. at 32. Fifth, Mr. Sarvey raises a concern of the cooling towers’ “visibility impacts on aviation activities at the Hayward Executive Airport.” Sarvey Reply at 13. Not only is this issue outside the Board’s jurisdiction, the Air District addressed it. *See* Exhibit 5, Responses to Public Comments at 227 (“The Energy Commission therefore found that the impact from potential aviation hazards would be less than significant.”). In sum, Mr. Sarvey falls far short of establishing any grounds for Board review of the Air District’s cooling tower BACT analysis.

D. CARE/Simpson Fail to Raise Any Issue in Their Reply Warranting Review

CARE/Simpson filed a reply brief covering a wide range of topics, from the Gulf Oil Spill (CARE/Simpson Reply at 1), to claims of racketeering (*id.* at 8), to alleged deprivations of civil rights (*id.* at 18-19). Given the breadth and irrelevance of nearly all of these arguments to the PSD permitting process, RCEC will not attempt to address all of the arguments raised by CARE/Simpson in their reply, but will focus on a small number of claims that warrant a specific response.⁵⁵

1. CARE/Simpson Fail To Demonstrate That The Application Was Not Part of the Administrative Record

CARE/Simpson’s claims concerning alleged defects in the public notice or the administrative record due to failure to include a copy of the application lack merit. *See* CARE/Simpson Reply at 6, 9. As previously explained by the Air District, the administrative record includes a copy of the application and this was made available to all interested parties. *See* Air District Response to Petition for Review No. 10-05 (Apr. 29, 2010) (“Air District Response to CARE/Simpson Petition”) at 20 (“A review of the index shows that the application is the very first document listed The document was available in the

⁵⁵ Should the Board wish to request additional briefing on any of the issues or arguments not addressed by this sur-reply, RCEC would be pleased to respond to such request in a timely fashion.

administrative record collection at District headquarters for anyone to review, as several interested parties did.”). CARE/Simpson make no credible argument to the contrary. Instead, CARE/Simpson insinuate that the document referenced by the Air District is not the permit application, but some other document. *See* CARE/Simpson Reply at 9 (“The statement appears to indicate a document titled; Application for Permit Modification for Russell City Energy Center (with transmittal letter)* 11/20/2006 not a ‘permit application’.”). Other than their speculation that the referenced document is not the application, CARE/Simpson provide nothing to support their allegation. Therefore, CARE/Simpson have not provided the Board with any supportable reason as to why review is warranted. *Knauf I*, 8 E.A.D. at 127.

2. CARE/Simpson Cannot Raise Alleged Effects from Vaporization of Chlorine or Other Biocides for the First Time By Way of Reply

In their reply, CARE/Simpson dispute that the “District adequately considered the potential impacts from using recycled wastewater.” CARE/Simpson Reply at 12 (initial capitalization omitted). CARE/Simpson reference the Air District’s response to their comment on the risk of Legionnaire’s disease posed by cooling tower emissions, wherein the Air District found that cooling tower emissions would not pose any significant risk of Legionnaire’s disease because the facility will implement several safeguards, including treatment of cooling tower water with chlorine or other biocides. *Id.* (referencing Exhibit 5, Responses to Public Comments at 186-87). CARE/Simpson now claim for the first time in these proceedings that, “CARE/Simpson have seen no study of the effects of vaporizing the ‘chlorine or other biocide’ and contend that it is required to asses [*sic*] the air quality impacts of the facility.” CARE/Simpson Reply at 12. Because this issue was not raised in their petition (indeed, it was never raised by anyone in any public comments), CARE/Simpson’s assertion of it now, by way of reply, is untimely. Accordingly, the Board should deny any consideration of this issue.

3. CARE/Simpson May Not Raise New Arguments Concerning the Fremont Monitoring Data; Regardless, They Fail to Demonstrate Any Error in Selection of Fremont Data

In their petition, CARE/Simpson alleged that, “[t]he Monitoring station is not from the same impact area as demonstrated by the Districts [*sic*] own report (Exhibit xx).” CARE/Simpson Petition at 23. That was the entire sum and substance of their argument on this point. Now, however, CARE/Simpson make two specific allegations in reply: (i) that the “reason for using Fremont monitoring

instead of local monitoring or representative monitoring appears simple enough; with factual information on the area air quality status the facility could not be permitted”; and (ii) that monitoring data from the Oakland station should be used instead. CARE/Simpson Reply at 14. CARE/Simpson provide no justification why these allegations were not included in their petition. CARE/Simpson should not be allowed to supplement their deficient petition with additional argument and allegations at this late stage of the proceedings. Accordingly, the Board should disregard CARE/Simpson’s attempts to introduce new arguments concerning the appropriateness of use of Fremont monitoring data. Regardless, the allegations raised by CARE/Simpson in their reply fail to meet the heavy burden faced by petitioners in seeking to challenge a quintessentially technical determination, such as selection of appropriate monitoring data. *See, e.g., Three Mountain Power*, 10 E.A.D. at 50. *See supra* section IV.A.3 (referencing the Air District’s detailed responses to public comments on ambient monitoring data).

4. CARE/Simpson Fail To Demonstrate Any Error in Air District’s Consideration of Flex-Plant Technology

CARE/Simpson allege that the Air District failed to provide an adequate response to public comments, in particular concerning the availability of Siemens’ Flex-Plant 10 or Flex-Plant 30 technology for the Project:

In our comments pages 17, 31-33 and Simpson comments 9-10 of 13 we attempted to determine the viability of utilizing modern turbine technology instead of what is proposed, specifically Flex Plant 10 and 30. The District dismissed our comments with little consideration. The attached communication between the District and Helen Kang demonstrates that the District did not have the information regarding the Flex system prior to permitting. It is now apparent that the District did not adequately consider these options. Exhibit 4 e-mails from Helen Kang and two attachments Exhibit 5 and 6. These show the District has demonstrated that they have not adequately responded to comments.

CARE/Simpson Reply at 15.

To clarify, the email communication attached as Exhibit 4 to the CARE/Simpson Reply is not “between the District and Helen Kang,” but between RCEC’s legal counsel and Helen Kang, who is legal counsel for another Petitioner (CAP). CARE/Simpson are entirely wrong to suggest that this communication demonstrates that the Air District lacked sufficient basis for finding that use of Flex-Plant 10 would result in a substantially less efficient plant than proposed for the Project. The communication was in response to a request CAP’s technical representatives made to the Air District for calculations

supporting comparisons of thermal efficiency among various turbine choices that appeared in the Additional Statement of Basis. While RCEC had submitted its engineer's "long-hand" calculations illustrating the expected increase in thermal efficiency that would be achieved by the Project through proposed upgrades to the gas turbines, RCEC had not provided similar supporting calculations for all of the comparisons of plant efficiency, including for Flex Plant 10. By responding to CAP's request with the actual Excel file containing all of the embedded data and formulae used to generate those comparisons, RCEC was assisting CAP representatives to understand the basis for the comparisons that were already part of the record. CARE/Simpson are plainly wrong to suggest that providing the actual Excel file during the appeals period reveals any inadequacy or error in the analysis that supported issuance of the permit.⁵⁶ Further, CARE/Simpson fail in both their petition and reply to identify any error or deficiency in the Air District's detailed responses concerning Flex-Plant 10 or 30 technology.⁵⁷ Accordingly, the Board should dismiss all of their claims on this issue.

V. CONCLUSION

RCEC respectfully requests that the Board reject the arguments made by Chabot, CAP, Mr. Sarvey, and CARE/Simpson in their replies. In addition to impermissibly introducing new issues and arguments, the replies fall far short of establishing any error by the Air District.

Respectfully submitted,

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Dated: June 11, 2010

⁵⁶ Indeed, far from demonstrating any error, RCEC actually referenced this communication in its response to the Chabot Petition and submitted it as an exhibit thereto to suggest that, had Chabot similarly asked for clarification on an unrelated point, it would have been provided. *See* RCEC Response to Chabot Petition at 44, n. 8; Exhibit 14, Email from Kevin Poloncarz to Helen Kang.

⁵⁷ *See* Exhibit 5, Responses to Public Comments at 108-10.

CERTIFICATE OF SERVICE

I hereby certify that on the 11th day of June, 2010, a copy of the foregoing Russell City Energy Company, LLC's Sur-Reply Brief was served via first-class U.S. mail, postage prepaid, to:

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