

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

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In re: )  
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La Paloma Energy Center ) Appeal No. PSD 13-10  
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PSD Permit No. PSD-TX-1288-GHG )  

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**EPA REGION 6'S RESPONSE TO  
PETITION FOR REVIEW**

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## INTRODUCTION

The EPA Environmental Appeals Board (“EAB” or “Board”) should deny review of the challenges brought by Sierra Club to the Greenhouse Gas (“GHG”) Prevention of Significant Deterioration (“PSD”) permit issued pursuant to section 165 of the Clean Air Act (“CAA”) by EPA Region 6 (“the Region” or “Region 6”) on November 6, 2013 to La Paloma Energy Center, LLC (“Permittee,” or “Applicant”) authorizing the construction and operation of the La Paloma Energy Center (“Project” or “LPEC”). The Region’s PSD permitting decision for the LPEC is fully supported by the record, including a detailed Statement of Basis and response to comments document (“RTC”), and Petitioners have failed to demonstrate clear error, an abuse of discretion, or an important policy consideration warranting review of Region 6’s decision.

## FACTUAL AND PROCEDURAL BACKGROUND

On May 3, 2011, EPA published a federal implementation plan that made EPA Region 6 the PSD permitting authority for the pollutant GHGs. *See* 75 Fed. Reg. 25178 (promulgating 40 C.F.R. § 52.2305). On March 20, 2013, Region 6 proposed to issue a GHG PSD permit (“Proposed Permit”) to the Applicant for the LPEC. *See* Sierra Club Ex. 3 (RTC) at 3 (“Summary of the Formal Public Participation Process”).<sup>1</sup> The LPEC, which would be located in the City of Harlingen, in Cameron County, Texas, is a natural gas-fired combined cycle electric generating plant with a generating capacity of either 637 Megawatts (MW), 681 MW, or 735 MW. *Id.* at 4. The electric generating capacity of the LPEC will be fixed by the Permittee’s election to install two identical turbines from any of three permitted turbine models. *Id.* at 4. The business purpose of the LPEC is to efficiently and reliably generate 637-735 MW of gross

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<sup>1</sup> Sierra Club’s excerpts of records are hereinafter denoted by numbers, while Region 6’s are denoted by letters. Region 6 understands that LPEC’s response to the petitions for review will mark any exhibits with doubled letters.

electrical power at a site having available reclaimed water from the City of Harlingen for plant cooling purposes and locally available natural gas and infrastructure to assure delivery of fuel in adequate volume and pressure. *See* Ex. 2 at Sec. 2.1; *see also* RTC at 9. In addition, the LPEC was designed to be well-placed in the dispatch queue of the primary electric grid operator in Texas, the Electric Reliability Council of Texas (“ERCOT”), with the objective of serving electricity consumers as a baseload facility, but also having flexibility to respond to other dispatch orders from ERCOT, as necessary. RTC at 21-22.

On November 6, 2013, after careful consideration of a 20-page comment letter submitted by Petitioner regarding the Proposed Permit, Region 6 issued a final decision to grant the Applicant a GHG PSD permit for the LPEC. *See* Ex. 1 (Final Permit). The Final Permit included a number of changes as compared with the Proposed Permit. *See* Ex. 3 at 39-43 (*Revisions in the Final Permit*). Along with the Final Permit, Region 6 prepared a 43-page RTC, which explained in detail the Region’s reasoning in responding to the comments received, including the basis for any permit changes made and additional analyses conducted by the Region as part of its response. *See generally* Ex. 3.

Petitioner filed its petition for review on December 6, 2013, and an accompanying certificate of service certifies that the Regional Administrator was sent a copy of the petition by FedEx on the same day. Consequently, this response from Region 6 may be considered timely if filed on or before December 30, 2013. *See* 40 C.F.R. § 124.20(d) ; 124.19(b), 124.19(b)(i)(3).

## STANDING AND STANDARD AND SCOPE OF REVIEW

When considering a petition for review of a PSD permit, the Board “first considers whether the petitioner has met key threshold pleading requirements such as timeliness, standing, and issue preservation . . . . [I]n order to demonstrate that an issue has been preserved for appeal, a petitioner must show that any issues being appealed were raised with reasonable specificity during the public comment period.” *In re Indeck-Elwood, LLC*, 13 E.A.D. 126, 143 (EAB 2006) (internal citations and footnotes omitted). The burden of establishing that issues have been preserved for review rests squarely with the petitioner. *In re Encogen Cogeneration Facility* (“*Encogen*”), 8 E.A.D. 244, 250 (EAB 1999). A petitioner must not only specify objections to the permit, but also must explain why the permit issuer's previous response to those objections is clearly erroneous or otherwise warrants review. *E.g., In re City of Palmdale* (“*Palmdale*”), PSD Appeal No. 11-07, slip op. at 10 (EAB Sept. 17, 2012). *See also* Revised Order Governing Petitions for Review of CAA NSR Permits (March 27, 2013) at 4 (“[T]he petitioner must also demonstrate with specific citation to the administrative record where in the response to comments the permit issuer responded to the comments and must explain why the permit issuer’s response to comments is inadequate.”). Alternatively, a petitioner may demonstrate that an issue or argument was not reasonably ascertainable during the public comment period. 40 C.F.R. § 124.13; *see In re Encogen*, 8 E.A.D. at 250 n.8.

If these threshold pleading requirements are met:

The Board's review of a PSD permit is ... discretionary. Ordinarily, the Board will not review a PSD permit unless the permit decision either is based on a clearly erroneous finding of fact or conclusion of law, or involves a matter of policy or exercise of discretion that warrants review . . . [using] an abuse of discretion standard. . . . [T]he Board examines the administrative record prepared in support of the permit to determine whether the permit issuer exercised his or her considered judgment. The permit issuer must articulate with reasonable clarity the reasons supporting its conclusion and the significance of the crucial

facts it relied upon when reaching its conclusion. . . . On matters that are fundamentally technical or scientific in nature, the Board will typically defer to a permit issuer's technical expertise and experience, as long as the permit issuer adequately explains its rationale and supports its reasoning in the administrative record.

*Palmdale*, slip op. at 8-9 (citations, quotation marks, parentheticals, and brackets omitted).

## ARGUMENT

Petitioner raises two narrow issues in its challenge to Region 6's GHG PSD permitting decision for the LPEC. As the Region demonstrates below, Board review is not warranted on either of these grounds. As an initial matter, while Petitioner has cited select pages of its comment letter, the petition fails to adequately cite the relevant analysis and reasoning provided by the Region in response to those comments. As a result, Petitioner fails to explain why the Region's responses to the comments were clearly erroneous. Accordingly, the Board should make use of summary disposition to resolve this case based on Petitioner's failure to adequately meet this threshold requirement.

Notwithstanding these deficiencies, the Board's review is not warranted. As explained below, Region 6 reasonably applied the relevant PSD regulatory criteria to the specific facts surrounding this Project, reasonably considered and responded to all comments submitted by Petitioner, and conducted additional analyses and made appropriate permit changes in response to Petitioner's comments. Petitioner fails to satisfy its burden of demonstrating that Region 6's permitting decision constituted clear error, or involved an abuse of discretion or an important policy consideration warranting Board review.

### **I. Petitioner Has Not Demonstrated that Region 6 Clearly Erred by Authorizing Construction Under Three Separate Capacity Scenarios, Each with Its Own BACT Limit.**

Petitioner's challenge to the Region's decision to issue separate BACT limits for three combined-cycle turbines based on three different capacity scenarios should be denied because

the petition fails to address the relevant responses offered by the Region and consequently fails “to explain why the Regional Administrator’s response to the comment was clearly erroneous.” *See* 40 C.F.R. § 124.19(a)(4)(ii). Importantly, Petitioner has totally failed to address two crucial points that the Region offered in its response. First, Petitioner has not acknowledged the Region’s explanation that higher capacity turbines trend toward lower emission rates on an output basis. Second, Petitioner has neglected to address the Region’s technical judgment that the permitted turbine models were comparably efficient on a performance basis and that the assigned BACT limits were therefore substantially equivalent except for marginal differences attributable to capacity.

In its comment letter on the Proposed Permit, Petitioner argued that CAA section 165(a)(4) and EPA’s PSD regulations precluded the Region from setting different emission limits for the three turbines under consideration by the Applicant. Ex. 4 at 2-4. In Petitioner’s view, the Region had to select the turbine model with the lowest emissions rate as BACT (without regard to its capacity) and set a single emission limit reflective of the emission rate achieved by that turbine model. *Id.* The Region provided a careful and reasoned response to these arguments in the RTC. *See* Ex. 3 at 4-10. First, the Region explained that setting three separate BACT limits was appropriate for the LPEC’s situation because the limits corresponded to the three potential capacity scenarios envisioned by the Applicant in the permit application.<sup>2</sup> *Id.* at 4-5. The Region noted that it is a fundamental principle that higher capacity turbines will be marginally more efficient than lower capacity turbines. *Id.* at 5. Consequently, the Region explained, the decision to set three separate limits was not intended to circumvent BACT

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<sup>2</sup> Naturally, in the Final Permit’s emission limitations, each turbine option has an annual ton per year (tpy) limit that takes appropriate account of turbine size. *See* Ex. 1 at 7-12 (assigning the smallest permitted option—the GE7FA turbine—an annual ton per year limit that is approximately 300,000 tpy CO<sub>2e</sub> lower than the larger permitted options).

requirements, but rather to ensure that the Applicant would be required to meet, consistent with BACT, the lowest GHG emission level achievable by the different capacity turbines under consideration. *Id.* The Region pointed out that Petitioner’s approach would have the undesirable effect of either disallowing particular turbine models and power plant-sizing scenarios altogether or forcing applicants to purchase oversized turbines and operate them at less than optimal capacity.<sup>3</sup> *Id.* at 6.

Second, the Region explained that all three turbine models were modern, top performing F-class turbines and were thus highly comparable from a performance perspective (aside from the marginal differences in efficiency attributable to capacity).<sup>4</sup> *Id.* The Region further elaborated:

To illustrate the comparability of the three turbine models at issue here, we note that the commenter has argued that manufacturer’s claims regarding efficient performance tend to be conservative by “0.5 to 1.0 percent.” With this in mind, even taking the commenter’s own data projections on efficiency into consideration . . . , the expected differences in efficiency are no greater than the equipment manufacturer margins meant to allow for variations in manufacturing tolerances and test uncertainties. These differences are also mere fractions of the compliance margin.

*Id.* The Region then exercised its judgment to simplify the BACT analysis and evaluate all three turbines as a collective control option, rather than as separate control options. This approach was not without basis in guidance and precedent. The Region noted that EPA has historically taken the position that alternatives having essentially equivalent emissions need not be examined in detail in subsequent steps of the top-down BACT Process. *See* PSD and Title V Permitting

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<sup>3</sup>While not argued here, Petitioner advocated such an unrealistic approach in its comment letter, stating: “In this case, the proposed LPEC is close to the next size class of CCGT’s that can perform at more efficient heat rates. The Region should therefore also require the applicant to demonstrate that the use of larger, more efficient designs is infeasible or would fundamentally change the project.” *See* Ex. 5 at 4.

<sup>4</sup> While Petitioner asserts that the turbine models are different “designs” or “technologies,” *e.g.*, Pet at. 3, 7, Petitioner has not articulated a single design element or technological characteristic, other than capacity, to distinguish them for BACT purposes. *See* Ex. 3 at 10 (“[T]he commenter has not furnished technical details that would distinguish” any of the turbine models).



Guidance for Greenhouse Gases (March 2011) (“GHG Guidance”) at 29; *In re Prairie State Generating Station*, 13 E.A.D. 1, 25 (EAB 2006) (quoting the NSR Workshop Manual at B.21-B.22). The Region applied this logic here because the three turbine models all fit within the same category of control, each model being comparably efficient. The Region further explained:

If the different models employ the same technology that has been demonstrated in practice, there is little value in assessing the technical feasibility of each model independently. Furthermore, the ranking of each model is not meaningful where the models employ the same technology and have comparable control efficiencies.

*Id.* While the Region ultimately set separate emission limits in Step 5 of the BACT analysis instead of a single limit, the separate limits merely reflected the marginal differences in efficiency attributable to capacity, not inefficiencies in the turbines’ performance.

Instead of addressing the Region’s thoughtful responses and explaining why they were clearly erroneous, the Petition pays short shrift to the RTC and merely restates or repackages the same arguments made in the comment letter. Indeed, the Petition casually dismisses the six single-spaced pages of the RTC that carefully explained why issuing multiple scenario BACT limits for the LPEC was appropriate, stating only that “the Region asserted an inconsistent response that first ignoring [sic] the difference in efficiency and emissions between turbine designs when identifying and ranking control options, but then relying [sic] on such differences to set different emission rates as ‘BACT.’” Pet. at 11. Nowhere does the Petition address the Region’s responses explaining the unique role capacity and the capacity range described in the application played in the Region’s decision to set separate emission limits. Ex. 3 at 4-5. Nor does the Petition address the Region’s explanation that all three models evaluated were some of the most efficient combined-cycle turbines available on a performance basis. *Id.* at 6-7. Consequently, Petitioner’s challenge should be dismissed for failure to explain how the Region’s responses were inadequate. *Palmdale*, slip op. at 10.

Even if the petition had adequately confronted the Region's responses, however, Petitioner has still failed to demonstrate clear error. The Petition paints a new gloss on the same arguments Petitioner raised in its comment letter by asserting that the Region erred not only by setting separate limits for each turbine scenario, but by identifying combined-cycle turbines as a single control option in Step 1 of the BACT analysis and then "unpacking" the category in Step 5. *See* Pet. at 11-12. Despite this new gloss, the RTC adequately addressed the issue. As the Region explained, combined-cycle combustion turbines are described as a collective option in the PSD and Title V Permitting Guidance for Greenhouse Gases. Ex. 3 at 6; GHG Guidance at 29. Because all three of the turbines being considered were largely equivalent from a performance perspective, the Region exercised its judgment to consider high efficiency combined cycle turbines as a single control option in Steps 1 through 4 of the BACT analysis. *Id.* In Step 5, the Region assigned separate BACT limits not to "allow[] the General Electric 7FA turbine design and the STG6-5000F(5) turbine design to ride through the first four steps of the top-down BACT process," Pet. at 13, but solely to account for the marginal differences in turbine efficiency attributable to capacity. Taking Petitioner's logic to the extreme, the Region would not have erred if it had simply conducted three separate BACT analyses, one for each capacity scenario, arriving at the same result but tripling the paperwork. Thus, Petitioner has failed to show how the Region clearly erred.

Petitioner also cites to *In re Mississippi Lime Co.*, PSD Appeal No. 11-01, slip op. at 21-22 (EAB, Aug. 9, 2011), for the principle that only unavoidable variability can justify a BACT limit that is less stringent than the maximum achievable emission rate. Pet. at 13. The Petition alleges that the Region violated this principle because two of the three BACT limits were set "to accommodate *avoidable* higher emissions caused by selecting a design known not to achieve the

pollution reductions possible with an available alternative design.” *Id.* at 14 (emphasis in original). On the contrary, as the Region clearly explained in the RTC, separate BACT limits were necessary to reflect the marginal differences in efficiency that were the *unavoidable* consequence of permitting multiple capacity scenarios. Ex. 3 at 5. Put differently, if each capacity scenario had been considered independently, then each BACT limit would represent “the lowest GHG level that is achievable with the turbine that is optimally sized for the particular capacity.” *Id.*

Furthermore, Petitioner’s analogies to add-on controls, Pet. at 15, and the sulfur content of coal, *id.* at 15 n.6, are inapposite and again ignore the important role that capacity played in the Region’s decision to set separate BACT limits for the LPEC. Indeed, Petitioner’s assertion that permitting authorities will begin to set multiple BACT limits for scrubbers of varying efficiency is nothing more than a red herring, tellingly unsupported by a single example of such a permit ever being proposed or issued. While separate BACT limits can be appropriate in instances like this one, where multiple power plant configurations are under consideration (due to the marginal yet unavoidable differences in the efficiency of different capacity turbines), the same would not be true where differences in efficiency were attributable to poorly designed equipment. As the Region stated in the RTC, “variability between different manufacturers or models of the same type of technology should be considered when the differences are so appreciable that a model might be characterized as poorly designed or non-representative of the efficiency capabilities of the technology category.” Ex. 3 at 6. This would hold true regardless of whether the “inefficient” control option in question was an efficiency measure (e.g., a poorly designed turbine model), an add-on control (e.g., a poorly designed scrubber), or a fuel type (e.g., high sulfur coal). Because this situation did not involve such appreciable differences in

efficiency, however, Petitioner has not demonstrated that the Region clearly erred in its decision to issue a permit with multiple BACT limits.

Finally, Petitioner characterizes the Region’s decision to permit three distinct capacity scenarios as part of an “emergent practice of permitting authorities” that should give the Board concern. Pet. at 7. On the contrary, the fact that other permitting authorities have recognized the need to offer flexibility to applicants that are entertaining multiple construction scenarios indicates that the Region’s decision fits comfortably within a well-established, historical practice. As Petitioner notes, the Region provided a non-exhaustive list of permitting decisions in the RACT/BACT/LAER Clearinghouse that authorized multiple turbine options.<sup>5</sup> Ex. 3 at 9. Many of those permitting decisions were over ten years old, illustrating not an “emergent practice,” but rather a common and accepted one. Moreover, Petitioner’s assertion that Board review is necessary to prevent the GHG permit program from becoming a “meaningless paper exercise” in which permit applicants “pick any turbine design they like,” Pet. at 8, is completely unfounded. To reiterate, the Region acknowledged in the RTC that “variability between different manufacturers or models of the same type of technology should be considered when the differences are so appreciable that a model might be characterized as poorly designed or non-representative of the efficiency capabilities of the technology category.”<sup>6</sup> Ex. 3 at 6. Because none of the three turbines at issue here were poorly designed or non-representative of the highest

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<sup>5</sup> In addition to this list, the Board may take official notice that LPEC received its PSD permit for regulated NSR pollutants other than GHGs from the Texas Commission on Environmental Quality on February 7, 2013. While LPEC’s state-issued PSD permit has a separate administrative record and is not subject to EAB review, the PSD permit—which was neither commented on nor challenged by Petitioner—includes conditions that authorize multiple turbine options with correspondingly modest variations in the criteria pollutant limits depending on the turbine option selected. In addition, the Board may take official notice of responses offered by the State of Washington to Sierra Club’s comments in another recent permitting decision that involved multiple turbine options. The Washington Department of Ecology’s responses to comments on Permit No. PSD-11-05 are excerpted for the Board’s convenience as Exhibit A.

<sup>6</sup> Petitioner has also left unmentioned or unchallenged the Region’s discussion of long-recognized, valid customer considerations that typically factor into an applicant’s turbine selection process. Compare Ex. 3 at 5 (“There are multiple factors, independent of air quality permitting that influence the selection of a particular turbine model by a permit applicant...”) with NSR Workshop Manual at B.61.

efficiency capable in the size-class, and even Petitioner fails to argue as much, Petitioner's hyperbole and speculation should not provide grounds for Board review.

**II. Petitioner Has Not Demonstrated that Region 6 Clearly Erred by Determining that Consideration of "Solar Thermal Hybrid Technology" as a Potential BACT Option Would Redefine the Source**

Petitioner has failed to demonstrate clear error in the Region's determination that solar auxiliary preheat would "redefine the source." The Board has stated that permitting authorities have "broad discretion" to make such determinations, and the Region's determination was proper in this case. *See Palmdale*, slip op. at 44-45.<sup>7</sup>

As an initial matter, however, Petitioner again fails to follow the Board's requirement to cite to the relevant response to the comment provided by the Region. In so doing, Petitioner both fails to follow the requirement for petition contents and fails to demonstrate clear error. The Board should deny review because Petitioner's omissions were calculated to avoid substantive confrontation of the permit issuer's response. The Petitioner has neither offered nor acknowledged that the Region had additionally stated, "Furthermore, the commenter has not explained how LPEC might incorporate such a solar component into its project, or even whether it has or can acquire the land necessary to do so, without redefining the source." Ex. 3 at 37. Petitioner does not explain even now how the LPEC might incorporate a solar component into the project, even though the Region has raised the well-understood issue and obstacle of added land demands necessary to produce solar energy. Rather than confront this issue, Petitioner has, for the first time in its Petition, confusingly referred to solar preheating as "Add-On Technology," Pet. at 16, even though the Petitioner elsewhere cites to a conventional,

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<sup>7</sup> Moreover, the Board has stated that an "abuse of discretion standard" applies to review of such determinations. Although review may be invalid under a "clear error" standard, the Region does not presume that review has been preserved under an "abuse of discretion standard," since the Petition nowhere invokes it, offers a demonstration under it, or cites to its regulatory basis at 40 CFR 124.19(a)(4)(B).

appropriate explanation of add-on controls.<sup>8</sup> Pet. at 5. However, a solar thermal auxiliary hybrid configuration has neither the qualities of an “add-on control” nor the scale and proportion of something that is merely “added on.” Petitioner’s Exhibit 10, which notably was not submitted with the comments, speaks more plainly when it describes the technology as “adding a solar plant.” Ex. 10 at 1.

As the Region explained in another portion of the RTC (again, not cited by Petitioner), LPEC “did not include renewable generation in its project purpose.” Ex. 3 at 21. Insofar as the Region’s response also included specific reference to the Palmdale Hybrid Power Project—a project known to use over 250 acres of land for 50 MW of solar generating capacity—the Region’s finding carried a specific meaning, namely that the Region did not conceive the Applicant’s plan for a electric generating station of no fewer than 637 MW to be served by an option that would require an additional 250 acres to produce well below 10% of the electric generating capacity requirements sought by the Applicant. These background facts on the Palmdale project are plain on review of the commenter-cited reference to the PSD Application for the Palmdale Hybrid Power Project, *see* Ex. 4 at 18, n. 50, and are accessible and recited with some thoroughness in the Board’s denial of review of the PSD permit for the Palmdale project. *See Palmdale*, slip op. at 45-52.

As required by 40 CFR 52.21(n), the Applicant submitted information to show, *inter alia*, the nature, location and plant layout for the LPEC. *See, e.g.*, Ex. 2 at 23 and 24 (“Plot Plan” and “Area Map”); *see also* Ex. B (“Intensive Cultural Resources Survey of the Proposed 78-Acre

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<sup>8</sup> Petitioner also newly claims that supplemental thermal energy is a “demonstrated technology” and that it is “permitted and actually constructed for full operation.” *See* Pet. at 16 and 19, n. 7. However, these claims appear to be made in reference to permitted projects that are not presently built and have no operational history. The Petitioner also asserts for the first time that “solar thermal hybrid incorporated into combined cycle natural gas plants” is an available and applicable technology. *See* Pet. at 19, n. 7. Even as Petitioner asserts “there can be no serious dispute” on these descriptors, the Region had no opportunity to pass on the issue and did not reach it in making its determination on source redefinition.

La Paloma Energy Center Tract”); appendices omitted).<sup>9</sup> Inherent in LPEC’s business purpose is that the power project fit within the plot plan and property limits identified in the application. While LPEC’s project is bounded within approximately 80 acres, the Palmdale Hybrid Energy Center project would cover 333 acres, 251 of which were dedicated to facilities for solar thermal generation equivalent to 50 MW. *See Palmdale*, slip op. at 49. As was concluded in *Palmdale* (where one petitioner had pressed that a solar component even larger than 251 acres should have been considered), LPEC’s “administrative record demonstrates that it would be infeasible to generate additional power in any significant amount at the proposed site due to space constraints.” *Id.* at 48. “[A] more fulsome explanation would not alter the fact that no more space is available at the site.” *Id.* at 49. Petitioner gives no credence, and only passing reference to this issue, *see* Pet. at 20, even as it necessarily applies to any study of the area map presented with the application (which incidentally shows the “nearest residence,” surrounding roads, and an airport approximately one mile away) and even as it figures prominently in Board precedent: “[A] substantial amount of additional acreage would be required to produce a significant amount [] of solar power...” *See Palmdale*, slip op. at 49 (also citing estimates that solar power plants require 5 to 8 acres per MW).

Lack of available land area for an option raises considerations of infeasibility that might validly be considered to obstruct the basic business purpose of an applicant as well as to raise considerations of technical infeasibility (assuming an option is studied under Step 2 of the BACT analysis). Recent Board decisions show a subtle correlation between Step 1 redefining the source considerations and Step 2 elimination of options for technical infeasibility. *See Palmdale*, slip op. at 45-49; *see also Pio Pico Energy Center*, PSD Appeal Nos. 12-04 to 12-06, slip op. at

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<sup>9</sup>It bears noting Region 6’s consultation obligations under the Endangered Species Act and National Historic Preservation Act were both fulfilled in this case with reference to LPEC’s 78-Acre tract and did not speculatively encompass the added land requirements or added impacts of so-called “solar preheat add-on technology.”

64, n. 46 (EAB Aug. 2, 2013). Analytically, they may be seen as mutually exclusive pathways. However, the facts that make an option unworkable can be relevant to either line of inquiry. For example, in the Pio Pico permit, Region 9 concluded that combined cycle turbines (although a demonstrated technology, generally) were technically infeasible for that particular project because of the applicant's objective to construct a facility capable of responding on demand to supply a specific amount of power in a short period of time. As earlier stated, in the case of LPEC, the administrative record demonstrates that adding a solar plant as was done for the Palmdale Hybrid Power Project and Victorville 2 is unworkable and inconsistent with the land area provided in the project plans. In light of the Region's response, Board precedent, and Petitioner's own familiarity with technical aspects of solar hybrid projects, the Petitioner may not feign ignorance of the land constraint issues that are known to apply to the technology. By failing to even acknowledge this issue, or the part of the Region's response that additionally cued them to the issue, Petitioner fails to demonstrate clear error.

The Region's determination that consideration of solar hybrid configurations would redefine the source was not limited to space constraints. When Petitioner asserted in their comments that the "Region must consider the entire range of electric generation technologies that" can "generate 637 to 735 MW of power," Ex. 4 at 4, the Region responded:

The application presents the source as a combined cycle EGU that is intended to utilize locally available pipeline natural gas and available infrastructure to support delivery of fuel in adequate volume and pressure to the facility. See Application at 2.1.

Ex. 3 at 9. In short, the Region did not agree that LPEC's business purpose was to generate electricity in any way possible, and did not find credible the commenter's suggestion to the contrary (aided by the commenter's selective quotation of only part of LPEC's project description). Just as LPEC's business purpose is plainly not to build and operate an all-solar



plant, but rather to take advantage of a specified project site with infrastructure advantages, pipeline gas availability advantages, and secured water rights all appropriate to a natural gas combined cycle project, the Region rightly viewed LPEC to not have the business purpose of building both a solar plant and a combined cycle EGU. While Petitioner may characterize “solar thermal preheating” as being accomplished by “add on technology” or to be an “auxiliary” design, the Region’s response correctly framed the import of the issue, namely that a natural gas combined cycle facility is one “source type” using fossil fuel combustion and a solar thermal generation is something that is accomplished by a “distinct and different source type[.]” Ex. 3 at 37. The Region did not dispute that steam or heat from a solar process and steam from fuel-combustion could be directed to a single steam generator, only that this was not LPEC’s project. Whatever the economies of hybridization, the “auxiliary” addition would require an additional design team and additional operator know-how well beyond that shown in the plans submitted with LPEC’s application. Thus, whatever labels apply, requiring a BACT analysis for a gas-fired power plant to consider renewable energy as an alternate fuel source “would produce extreme results.” *See Palmdale*, slip op. at 42, n. 27.

To the extent Petitioner is dissatisfied with the cursoriness of the Region’s response, Petitioner’s equivocation in its comment letter relieved the Region of any obligation to respond in greater detail. Petitioner’s challenge is based on a page from the comment letter titled “Solar Thermal Auxiliary Preheat Must be Considered in the BACT Analysis”; however, this seemingly narrow assertion quickly loses track because the commenter states that “solar thermal energy” can displace or obviate the need for duct burning. However, as the Region well explained, duct burning is supplemental firing to create additional steam in response to periods of high electrical demand. Ex. 3 at 17. Duct burners are not used for “preheat.” Given that Victorville 2 Plant is

in fact permitted to use duct burners, the Region in providing its response could not safely assume that the commenter's vision for a "solar hybrid configuration" was limited to those configurations permitted in Exhibits 8 and 9.

The entirety of Petitioner's comment letter lends support to Region's assumption that Sierra Club was asking for consideration of solar thermal auxiliary preheat to be evaluated without any predetermined limitations on scale or configuration. In reviewing the comments, the Region was left to wonder whether the phrase "solar hybrid" (omitting the word, thermal) was meant to encompass photovoltaic options. Petitioner's comments also left vague what was meant by "hybrid" or "configurations," although the comment plainly contemplated more possibilities and configurations than the two examples of Palmdale Hybrid Power Project and Victorville 2.<sup>10</sup> Exhibit 10 does not aid Petitioner's cause; it only multiplies the possibilities that, in Petitioner's view, must have been considered in the BACT analysis.

The Region was not required to guess at the commenter's conceptualization of a solar component or to further eliminate it on site-specific grounds, when the comment itself failed to define its vision and scale of a "solar hybrid configuration" that would apply to the facility. The lack of clarity and specificity in Sierra Club's comments effectively called upon the Region to analyze a myriad of potential solar configurations for LPEC. *Cf. Palmdale*, slip op. at 48-49. However, the Region is not obliged to anticipate and analyze multiple permutation or variations of conceivable options when confronted with vague and overbroad comments. *Id.* This goes well beyond the Region's obligations to consider and respond to public comments and satisfy the

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<sup>10</sup> To illustrate, the submitted comments made murky what was intended by the word "hybrid" when it was paired with the commenter's litany of alternatives to duct firing. See Ex. 4 at 9 (listing "battery storage, solar hybrid configuration (or a combination of battery and solar hybrid), a small combustion turbine, or using the auxiliary boiler for supplemental steam"). In response, the Region explained it was not clear whether the listed alternatives were for supplemental steam or self-standing peak energy production. See RTC at 18.

legal requirements in setting a BACT emissions limit. Thus, review of the petition should be denied for its failure to demonstrate any “clear error” on this issue.

### **III. Petitioner Has Not Preserved or Demonstrated Any Other Basis for Challenge.**

To the extent it will expedite the resolution of this appeal, the Region does not believe Petitioner has validly preserved a basis for challenge under 40 C.F.R. § 124.19(a)(4)(B). Petitioner does not allege or demonstrate that Region 6 abused any available discretion in its permitting decision. Furthermore, Petitioner’s assertion that Board review is warranted due to important policy implications is limited to two conjectural statements in the “Issues Presented for Review.” Pet. at 3. There, Petitioner twice asks “whether the Board should review this issue because it has important policy implication [sic] for implementing BACT for greenhouse gas emissions.” *Id.* The Petition’s simple reference to the fact that Region 6’s decision was here applied to GHG emissions does not demonstrate that important policy implications are at stake. The Region’s rationale for issuing multiple BACT limits and excluding a solar thermal control option was not unique to GHGs and would apply equally in the context of BACT for other pollutants.<sup>11</sup> As Region 6 explained in the RTC, “EPA guidance emphasizes that energy efficiency should be considered in BACT determinations for all regulated NSR pollutants (not just GHGs).” Ex. 3 at 10. Thus, Petitioner’s challenge cannot be said to raise important policy implications simply because GHGs were the focus of the Region’s permitting decision.

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<sup>11</sup> The instant petition also fails to demonstrate the presence of “an important policy consideration” by ignoring two recent EAB decisions on issues of solar technology and source redefinition. *See Palmdale*, slip op. at 45-52; *see also Sierra Pacific Industries*, PSD Appeal No. 13-01 to 13-04, slip op. at 59-62 (July 18, 2013). There being no marked difference in the rationale that Region 6 provided, as compared to the approaches upheld in those Region 9 permitting actions, the policy considerations here are unremarkable and denial of this petition is similarly appropriate.

## CONCLUSION

The Board has stated it will “consider the totality of the circumstances” in determining whether to exercise its discretion to review a PSD appeal. *See* Revised Order Governing Petitions for Review of CAA NSR Permits (March 27, 2013) at 5. In this case, Petitioner has not only failed to confront the permit issuer’s responses to the issues raised, it has in great measure avoided them. For this and for all of the reasons stated above, Region 6 respectfully requests that the Board deny review of Region 6’s Final GHG Permit for the LPEC.

Date: December 26, 2013

Respectfully submitted,

*/s/ Brian Tomasovic*

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**STATEMENT OF COMPLIANCE WITH WORD COUNT LIMITATION**

I hereby certify that this Response to Petition for Review submitted by EPA Region 6, exclusive of the Table of Contents, this Statement of Compliance, and the attached Certificate of Service, contains 6,098 words, as calculated using Microsoft Word word-processing software.

*/S/ Brian Tomasovic*

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Brian Tomasovic

## CERTIFICATE OF SERVICE

I hereby certify that I caused a copy of **EPA REGION 6'S RESPONSE TO PETITION FOR REVIEW** in the matter of La Paloma Energy Center, EAB Appeal No. PSD 13-10, to be served by electronic mail upon the persons listed below.

Dated: December 26, 2013

/s/ *Brian Tomasovic*

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Brian Tomasovic

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