### **BEFORE THE ENVIRONMENTAL APPEALS BOARD UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

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IN RE:

PIO PICO ENERGY CENTER, LLC

PSD Appeal Nos. 12-04, 12-05 & 12-06

PSD Permit No. SD 11-01

# BRIEF OF INTERVENOR PIO PICO ENERGY CENTER, LLC IN RESPONSE TO THE PETITIONS FOR REVIEW

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### **INTRODUCTION AND BACKGROUND**

The U.S. Environmental Protection Agency, Region IX ("the Region") issued a Clean Air Act Prevention of Significant Deterioration ("PSD") Permit, number SD 11-01 (the "Permit"), to Pio Pico Energy Center, LLC on November 19, 2012. Administrative Record ("A.R.") VII.2. The permit authorizes the construction of the Pio Pico Energy Center ("Pio Pico") in Otay Mesa, California. The proposed plant will consist of three 100 megawatt General Electric LMS100 simple cycle natural gas-fired turbines. A.R. IV.2, U.S. EPA Region IX, Fact Sheet and Ambient Air Quality Impact Report (June 2012) ("Fact Sheet") at 3. Pio Pico will be constructed to satisfy a request by San Diego Gas & Electric Company ("SDG&E") for new peaking generation. Fact Sheet, A.R. IV.2 at 10, n.4; A.R. VII.3, EPA Region IX, Responses to Public Comments on the Proposed Prevention of Significant Deterioration Permit for the Pio Pico Energy Center (Nov. 2012) ("RTC") at 28-29. The plant will support SGD&E's wind and solar power generation assets. Fact Sheet, A.R. IV.2 at 10, n.4. This requires Pio Pico to use quickstarting, simple cycle turbines that can rapidly scale through loads to produce power that will supplement intermittent generation gaps from wind and solar units. Id.; see also A.R. I.56, Attachment, Letter from James P. Avery, SDG&E, to Gary Chandler, APEX Power Group, LLC (April 4, 2012) at 1 (Pio Pico developed in response to California Public Utilities Commission Order requiring "SDG&E to procure dispatchable ramping resources that can be used to adjust for the morning and evening ramps created by the intermittent types of renewable resources.") (internal quotations omitted).

Pio Pico will provide steady, reliable, and efficient backup for renewable generation units which are not necessarily available to produce electricity 24 hours per day, 7 days a week. A.R. I.55, Letter from Steve Hill, Sierra Research, to Gerardo Rios, EPA Region IX (April 13, 2012) at 2. Using quick-starting, simple cycle turbines, Pio Pico will be able to respond to shifts in demand in order to avoid grid instability and the potential for the interruption of electricity delivery in SDG&E's service area. <u>Id.</u> In order to serve this purpose, Pio Pico's turbines can startup and reach their full load quickly. <u>Id.</u> at 1.

The Permit at issue requires Best Available Control Technology ("BACT") emission limits for, <u>inter alia</u>, nitrogen oxides, total particulate matter (respirable particulate matter ("PM<sub>10</sub>"), and fine particulate matter ("PM<sub>2.5</sub>"), collectively referred to herein as "PM"), and greenhouse gases ("GHGs"). The permit includes a PM BACT emission limit that is actually lower than the level guaranteed by the turbine manufacturer. A.R. I.31, Letter from Steve Hill, Sierra Research, to Gerardo Rios, EPA Region IX (Dec. 8, 2011) at 3. These emission limits will fully protect all applicable primary and secondary National Ambient Air Quality Standards and visibility in all Class I areas within 100 kilometers of the Pio Pico site. A.R. IV.2, Fact Sheet at 1. The LMS100 turbines used by Pio Pico are approximately 10% more efficient than other commercial simple-cycle gas turbines. <u>Id.</u> at 4.

Pio Pico Energy Center, LLC submitted its application for a PSD permit on April 1, 2011. A.R. I.2. On June 14, 2012, the Region deemed it to be complete. <u>See</u> A.R. I.61, Letter from Gerardo C. Rios, EPA Region IX, to Gary Chandler, Pio Pico Energy Center, LLC (June 14, 2012). The Region correspondingly issued a draft PSD permit for public comment on June 20, 2012, with the comment period closing on July 24, 2012. A.R. VII.3, RTC at 2. The Region held a formal public hearing on the draft permit on July 24, 2012 in San Diego. <u>Id.</u> at 3. Due to a mailing list error, the Region extended the public comment period on August 3, 2012 until September 5, 2012, <u>id.</u> at 2, and also provided one person until September 20, 2012 to submit comments on the project's Environmental Justice Analysis. <u>Id.</u> at 44. The Region issued the final PSD permit and its response to comments document on November 19, 2012.

Helping Hand Tools, Mr. Robert Simpson, and the Sierra Club all filed petitions for review on December 19, 2012. Together, the petitioners challenge several technical analyses supporting the Permit's conditions, including: (1) the Region's determination that use of a simple cycle gas turbine is warranted, given the design parameters of the facility, and that a combined cycle gas turbine would not allow the Pio Pico Energy Center to fulfill its purpose as a peaking power plant; (2) the determination of the GHG and PM BACT emission limitations; (3) the calculation of Pio Pico's potential to emit carbon monoxide; and (4) the use of specific monitoring data for ambient background air quality modeling purposes.

As explained in detail below, the Board should deny the petitions for review on these issues. For each of these challenges, the Region's determinations are supported by the extensive record for this Permit and the petitioners fail to meet their heavy burden in showing the Region's analysis was clearly erroneous, unsupported by the record, or otherwise arbitrary. At their core, Petitioners ask this Board to second guess EPA staff on highly technical subject matter; the precise types of issues to which this Board commonly defers to the permitting authority's technical experience and expertise. EPA has rigorously documented a rational basis for these decisions in the extensive record and petitioners present no basis for the Board to grant the petitions to review these issues. The petitioners also raise several procedural issues, including claims that the Region failed to respond to comments, failed to adequately extend the comment period, failed to consider a number of irrelevant documents, and failed to consider issues that are outside the scope of the PSD program, such as the "need" for the Pio Pico Energy Center and the use of emission credit offsets. As demonstrated below, each of these objections are groundless and the Board should promptly deny review.

#### **STANDARD OF REVIEW**

The Board will not grant review of a PSD permit unless it is based on a clearly erroneous finding of fact or conclusion of law or raises an important policy matter requiring review. 40 C.F.R. § 124.19(a). In re Zion Energy, LLC, 9 E.A.D. 701, 705 (EAB 2001). The petitioner has the burden of demonstrating that review is warranted. 40 C.F.R. §124.19(a); In re EcoEléctrica L.P., 7 E.A.D. 56, 61 (EAB 1997). Petitions for review must explain why the permitting authority's prior response to comments are clearly erroneous or otherwise warrant review. In re Prairie State Generating Co., 13 E.A.D. 1, 11 (EAB 2006). A petitioner cannot meet this burden by simply restating its objections from the public comment period. Id. Instead, the petitioner must "substantively confront the permit issuer's subsequent explanations." In re Peabody W. Coal Co., 12 E.A.D. 22, 33 (EAB 2005). In assessing a petition for review, this Board generally defers to the permitting agency's technical expertise and experience so long as it is supported by the record and not clearly erroneous. In re Dominion Energy Brayton Point, LLC, 12 E.A.D. 490, 510 (EAB 2006). Overall, "the Board's power of review 'should be sparingly exercised' and ... 'most permit conditions should be finally determined at the [permit issuer's] level." In re City of Palmdale, 15 E.A.D. \_\_\_\_, PSD Appeal No. 11-07, Slip Op. at 9 (EAB Sept. 17, 2012) (quoting 45 Fed. Reg. 33,290, 33,412 (May 19, 1980)) (quoting preamble to 40 C.F.R. § 124.19) (alteration in original).

### ARGUMENT

### I. THE REGION PROPERLY FOUND A COMBINED CYCLE GAS TURBINE TO BE TECHNICALLY INFEASIBLE AND INCOMPATIBLE WITH PIO PICO'S PURPOSE

Petitioner Sierra Club incorrectly claims that the Region erred by finding that a combined cycle design was technically infeasible for Pio Pico. Sierra Club Petition for Review ("SC Pet.") at 13. The Region, however, provided an extensive discussion as to why a combined cycle plant

lacks the flexibility and quick-start capability required for Pio Pico's role in providing peaking generation. A.R. IV.2, Fact Sheet at 16-17. In attempting to show that the Region committed clear error, Sierra Club makes two basic arguments: (1) the Region improperly considered the design parameters required by SDG&E to define the source as a simple-cycle turbine to the exclusion of combined cycle technology, SC Pet. at 14-15; and (2) the Region erred by finding a combined cycle plant to be technologically infeasible under Step 2 of its BACT analysis instead of under Step 1 of the analysis. Id. 16. In fact, the Region fully considered Sierra Club's first argument and explicitly rejected it, finding that, based on the record, the use of a combined cycle design would preclude Pio Pico from serving its intended purpose as a peaking facility and would be no more efficient in a peaking role than the simple-cycle turbine design proposed by Pio Pico. A.R. VII.3, RTC at 30. Since this determination is fully supported by the record and involves questions of technical expertise and experience, this Board should deny the petition for review on this issue. As for Sierra Club's second argument, it was never raised in the comments submitted to the Region. Therefore, pursuant to 40 C.F.R. § 124.13, this Board must deny review on this issue.

### A. The Region Properly Determined that a Simple Cycle Turbine Was Required to Fulfill the Pio Pico's Role as a Peaking Station

Pio Pico was developed in response to a Request for Offer by SDG&E to support renewable power generation. A.R. IV.2, Fact Sheet at 16. Because the electricity output from wind and solar renewable units varies, SDG&E required a "highly flexible" power plant "that can provide regulation during the morning and evening ramps," that "can be repeatedly started and shut down as needed" and "can be brought online quickly, even under cold-start conditions." <u>Id.</u> In response to these requirements, Pio Pico will utilize three 100 megawatt LMS100 simple cycle gas turbines specifically designed for the type of cyclical application required by SDG&E. <u>Id.</u> at 3-4. Together, the three turbines are capable of providing 300 megawatts of electricity from a "cold start" within 10 minutes.<sup>1</sup> <u>Id.</u> at 4, 16, n.2. The need to provide flexible, quick-starting power that this very configuration offers was a "[k]ey ... requirement[]" of the SDG&E request for offer. <u>Id.</u> at 16. By comparison, combined cycle plants involve much more complex systems, consisting of a gas turbine, heat recovery system, and steam turbine. <u>Id.</u> Since the heat recovery system and steam turbine require time to warm up in preparation for normal operations, they have much longer start-up times. <u>Id.</u> at 16-17.

The Region undertook an extensive analysis of whether a combined cycle plant could fill the role of providing flexible peaking power, as required by SDG&E. Relying on vendor data, it determined that Pio Pico's simple cycle turbines can reach full load within 10 minutes while a nominal 300 MW combined cycle plant, even with "fast-start technology ... may require up to 3½ hours to achieve full load under some conditions." <u>Id.</u> at 17. Therefore, the Region concluded that the "longer startup times" of combined cycle plants "are incompatible with the purpose of the Project to provide quick response to changes in the supply and demand of electricity." <u>Id.</u> Further, the Region noted that thermal mechanical fatigue, caused by frequent startups and shutdowns inherent in providing peaking generation, is greater for combined cycle steam turbines. <u>Id.</u> It determined that "even if the long startup durations were not prohibitive in this case, the use of" a combined cycle plant could not provide "flexibility to start up and shut down multiple times in a single day in response to changing demand" without "excessive wear to combined-cycle units." <u>Id.</u>; <u>see also id.</u> at 19 (SDG&E requires Pio Pico to be capable of 500

<sup>&</sup>lt;sup>1</sup> Pio Pico's motion to intervene inadvertently stated that the three turbines could collectively provide 100 megawatts of electricity within 10 minutes. Motion for Leave to Intervene, Dkt. No. 9, at  $\P$  3. This was an error derived from EPA Region IX's Fact Sheet at 16. Each LMS100 turbine offers quick-start capability allowing it to reach a full 100 megawatt load in 10 minutes. When starting up together, Pio Pico's three LMS100 turbines can reach their combined full 300 megawatt load in 10 minutes.

startups and shutdowns per year "as a direct requirement of its fundamental business purpose."). Considering both the need for flexible, quick-start power and frequent startups and shutdowns, the Region properly concluded that a combined cycle plant is "technically infeasible for the Project as defined by the applicant...." Id. at 17.

In finding a combined cycle plant to be technically incompatible with the project's purpose, the Region correctly followed the Board's long-standing determination that "[p]ermitting authorities ... are not required to consider inherently lower polluting technology alternatives that would require 'redefining the design' of the source as proposed by the permit applicant." City of Palmdale, Slip Op. at 40-41 (citations omitted). This Board has consistently upheld this interpretation of the BACT requirements. See, e.g., In re Russell City Energy Center, 15 E.A.D. \_\_\_\_, PSD Appeal Nos. 10-01, et al., Slip Op. at 95-100 (EAB Nov. 18, 2010); In re Prairie State Generating Co., 13 E.A.D. 1 (EAB 2006), affirmed, sub. nom, Sierra Club v. EPA, 499 F.3d 653 (7th Cir. 2007); In re SEI Birchwood, Inc., 5 E.A.D. 25 (EAB 1994); see also EPA, PSD and Title V Permitting Guidance for Greenhouse Gases (Mar. 2011) at 26 (permitting agencies need not require "lower polluting processes that would fundamentally redefine the nature of the source proposed by the permit applicant."). In ruling out the use of a combined cycle design for Pio Pico, the Region adhered to the Board's requirement that permitting agencies "examine first how the applicant initially 'defines the proposed facility's end, object, aim, or purpose."" City of Palmdale, Slip Op. at 43. Its analysis and conclusion that constructing a combined cycle plant would be incompatible with Pio Pico's purpose was fully supported by the administrative record. A.R. IV.2, Fact Sheet at 16-17.

### B. The Region Properly Considered and Rejected Sierra Club's Position that a Combined Cycle Plant Would be More Efficient as a Peaking Unit

In arguing that the Region committed clear error in not mandating that Pio Pico construct a combined cycle plant, Sierra Club primarily relies on a premise that a combined cycle plant would be "cleaner," SC Pet. at 18, than the simple cycle turbines proposed by Pio Pico. The Region squarely considered and rejected this position upon a thorough review of the record.<sup>2</sup> Sierra Club's petition presents nothing that satisfies its burden of showing that the Region committed clear error.

In its comments to the Region, Sierra Club asserted that a larger size combined cycle plant (<u>i.e.</u>, in excess of the 300 megawatt plant proposed by Pio Pico Energy Center, LLC) or some combination of a combined cycle plant <u>with</u> a simple cycle turbine could quickly start up and reach the necessary peaking generation capacity while supposedly reducing emissions through higher efficiency. A.R. VI.33, SC Cmts at 4-5. The Region determined that Sierra Club failed to provide any support for its proposition that these proposals "would be any more efficient than the proposed simple cycle design" submitted by Pio Pico. VII.3, RTC at 30. This was because each of Sierra Club's proposed configurations involved a combined cycle plant running at a low load, where it is "much less efficient." <u>Id.</u> Further, it found Sierra Club's recommendations to be "ill-supported and unpersuasive" because they would require the construction of a "grossly oversize[d]" generating unit that was unlikely to be fully utilized (and which would also be inconsistent with SDG&E's Request for Offer). <u>Id.</u> Therefore, the Region appropriately concluded that Sierra Club had "not demonstrated that a combined cycle plant that

<sup>&</sup>lt;sup>2</sup> Sierra Club did not specify for which pollutants it believes a combined cycle design would be "cleaner" than Pio Pico's simple cycle turbine design in either its petition for review or its comments to the Region. <u>See</u> A.R. VI.33, Public Comments of the Sierra Club (July 24, 2012) ("SC Cmts") at 3-5.

is larger than necessary but then operated at partial loads would be more efficient than" the proposed simple cycle turbines. <u>Id.</u>

Sierra Club's petition for review does not attempt to refute the Region's conclusions in any way, let alone meet its heavy burden of demonstrating clear error. It never disputes the Region's determination that Pio Pico's proposed simple cycle turbine design would actually be more efficient than Sierra Club's proposed over-sized combined cycle plant operating at partial loads to meet the project's basic objectives. Sierra Club's refusal to "explain why the permit issuer's previous response to its objections is clearly erroneous or otherwise deserves review" requires the Board to deny the petition for review on this issue. City of Palmdale, Slip Op. at 32. Furthermore, even if Sierra Club contested the Region's determination regarding combined cycle design efficiency when operating as a peaking facility, the Region's finding that an over-sized combined cycle plant operating at partial loads would be less efficient than a simple cycle turbine was not clearly erroneous and is owed deference due to its technical expertise and experience. In re Dominion Energy Brayton Point, LLC, 12 E.A.D. 490, 510 (EAB 2006). Therefore, because the central premise to Sierra Club's argument – that a combined cycle design is a "cleaner" control technology – was explicitly rejected by the Region and Sierra Club in no way demonstrates clear error in the Region's decision making, the Board should deny the petition for review on this issue.

### C. Sierra Club Failed to Raise Below Its Argument That a Combined Cycle Design Was Improperly Rejected at BACT Step 2

Sierra Club also argues in its petition that the Region improperly rejected a combined cycle design at BACT Step 2, instead of BACT Step 1. SC Pet. at 16. Sierra Club, however, failed to preserve this argument as it did not raise it in comments to the Region. <u>See</u> SC Pet. at 13-16 (failing to cite "with specificity to the record, including to the applicable documents and

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page numbers" where it raised this issue in its comments, as required by the Board's April 19, 2011 Order Governing Petitions for Review of Clean Air Act New Source Review Permits ¶ 7 ("NSR Order")); see generally, A.R. VI.33, SC Cmts at 2-5 (failing to raise this issue in its comments). Its failure to raise these comments below, or to explain why its argument was not reasonably ascertainable at the time, violates 40 C.F.R. § 124.13 and NSR Order ¶ 7. Therefore, the Board should deny the Sierra Club's petition for review on this issue. See City of Palmdale, Slip Op. at 30 (denying review where petitioner did not preserve BACT argument by failing to raise the issue with permitting authority below).

Even if the Board were to entertain Sierra Club's argument, its claim that the Region was prohibited from eliminating technically infeasible control options at BACT Step 2 rather than Step 1 is baseless and in no event amounts to clear error. The Board has repeatedly held that technically infeasible control technologies may be eliminated at BACT Step 2. <u>See, e.g., Prairie State Generating</u>, 13 E.A.D. at 34 (control technologies "are further evaluated at step 2 in order to eliminate any potentially applicable methods that are not technically feasible."). EPA's New Source Review Workshop Manual states clearly (and in all capitals) that permitting authorities should eliminate technically infeasible options at BACT Step 2. EPA, New Source Review Workshop Manual at B.6 (Oct. 1990) (draft). The Region fully explained that a combined cycle plant cannot function in a manner required to satisfy the purpose for which Pio Pico was conceived – to provide quick-dispatching peaking power for SDG&E – and that a combined cycle plant was not technically feasible for the purpose of the proposed project. <u>See</u> A.R. VII.3, RTC at 27-30. The Region's finding of fact was not clearly erroneous and is owed deference due to its technical expertise and experience. <u>Dominion Energy Brayton Point</u>, 12 E.A.D. at 510.

### D. The Region's Determination Not to Redefine the Source as a Combined Cycle Gas Turbine Is Fully Supported by the Record

Sierra Club's claim that the Region was required to consider mandating the construction of a combined cycle plant as a control technology under BACT, SC Pet. at 13-18, lacks any legal authority. It argues that, when considering potential control technologies during a BACT analysis, a permitting authority may impose dramatic design changes so long as it only preserves the general "type" of source under review (e.g., an electricity generating unit of no specific design). <u>Id.</u> at 15. By claiming that BACT analyses may disregard "the applicant's proposed purpose or specific design elements," SC Pet. at 15, Sierra Club necessarily seeks reversal of several prior Board decisions. For example, in <u>Prairie State Generating Company</u>, this Board explicitly rejected a similar Sierra Club argument, finding "no fundamental conflict in looking to a facility's basic 'purpose' or to its 'basic design' in determining the proper scope of BACT review...." <u>In re Prairie State Generating Co.</u>, 13 E.A.D. 1, 21 (EAB 2006), <u>affirmed, sub, nom, Sierra Club v. EPA</u>, 499 F.3d 653 (7th Cir. 2007). <u>Prairie State Generating Company</u> is only one of many decisions at odds with Sierra Club's argument here.<sup>3</sup>

Sierra Club mischaracterizes the Board's decisions as purportedly requiring the permitting authority to redefine the proposed source in determining BACT, so long as that new design serves the same "fundamental purpose." SC Pet. at 16-17. A close reading of these decisions, however, undercuts Sierra Club's position. This Board's decision in <u>In re Northern</u> <u>Michigan University</u>, 14 E.A.D. \_\_\_\_, PSD Appeal No. 08-02 (EAB Feb. 18, 2009) faulted the

<sup>&</sup>lt;sup>3</sup> See, e.g., In re Knauf Fiber Glass, GmbH, 8 E.A.D. 121, 136 (EAB 1999) ("EPA has not generally required a source to change (i.e., redefine) its basic design"); <u>Old Dominion Elec. Coop.</u>, 3 E.A.D. 779 (Admin. 1992) (rejecting claim that coal-fired power plant should be permitted only as a natural gas-fired plant); <u>In re Pennsauken County</u>, 2 E.A.D. 667, 673 (Admin. 1988) (Admin.) (BACT "permit conditions … are imposed on the source <u>as the applicant has defined it</u> … the conditions themselves are not intended to redefine the source.") (emphasis added); <u>see also</u> NSR Manual at B.13 (BACT is not "a means to redefine the design of the source when considering available control alternatives.").

Michigan Department of Environmental Quality's decision not to consider the use of lower sulfur coal for failing to provide adequate analysis and record support. Slip Op. at 26-27 ("The documentary trail offers no basis to conclude that any fundamental design change, or any source or facility design change whatsoever, would result were [Northern Michigan University] ... to burn lower sulfur non-Marquette or -Presque Isle coal."). Here, the Region thoroughly documented its basis for why a combined cycle plant was not technically feasible given SDG&E's request for flexible, quick-starting peaking power. A.R. IV.2, Fact Sheet at 16-17. Thus, the present situation is analogous to the seven Board decisions cited within In re Northern Michigan University which affirmed that BACT should not be used to impose design changes on the applicant. Slip Op. at 26 (citing cases). Similarly, Sierra Club cites to this Board's remand of a PSD permit in In re Desert Rock Energy Company LLC, 14 E.A.D. \_\_, PSD Appeal Nos. 08-03, et al., Slip Op. at 77 (EAB Sept. 25, 2009). As with Northern Michigan University, the Board in Desert Rock found that the permitting agency there also failed to provide adequate support for its decision.<sup>4</sup> Again, contrary to Desert Rock, Region IX provided an extensive analysis and record support for its decision on Pio Pico. See A.R. VII.3, RTC at 27-30; A.R. IV.2, Fact Sheet at 16-17. Sierra Club has made no demonstration to the contrary.

EPA interprets the Clean Air Act to allow a permitting authority to consider a broader BACT analysis, if it chooses, but the decision is one of discretion. <u>Prairie State Generating Co.</u>, 13 E.A.D. at 31 ("we hold that this authority is within the sound discretion of the permit issuer,

<sup>&</sup>lt;sup>4</sup> The other two cases cited by Sierra Club provide no support for its position. <u>In re Hibbing Taconite Company</u>, 2 EAD 838 (Adm'r 1989) required consideration of natural gas as a fuel because the plant <u>already</u> burned natural gas as a fuel and was seeking a permit for switching to petroleum coke. Thus, burning natural gas could not have required design changes. Sierra Club's citation to <u>In re Pennsauken County</u>, 2 E.A.D. 667 (Adm'r 1988) is curious as that decision is arguably the origin of EPA's interpretation against redefining the source. It held that BACT "permit conditions ... are imposed on the source <u>as the applicant has defined it</u> ... the conditions themselves <u>are not</u> <u>intended to redefine the source</u>." <u>Id.</u> at 673 (emphases added).

but is not required."). Based on the Region's analysis and the record in support here, Sierra Club cannot demonstrate that the Region abused its discretion in declining to require Pio Pico to construct a combined cycle plant or some combination of a combined cycle plant with a simple cycle turbine. As the Region determined, combined cycle plants have "longer startup times [that] are not compatible with the operational characteristics of the proposed facilities and that these technical difficulties would preclude successful deployment of a combined cycle operation in this case." A.R. VII.3, RTC at 27. The Region also pointed to Pio Pico's contractual obligation to San Diego Gas & Electric Company to use the LMS100 simple cycle turbines as a further reason why it should not redefine the source to require the construction of a combined cycle plant. <u>Id.</u> at 28. The Region's decision garners even more support from its finding that Sierra Club "has not shown that [a combined cycle design] would be any more efficient than the proposed simple cycle design." <u>Id.</u> at 30. Sierra Club's petition for review fails to explain why this decision was clearly erroneous or an abuse of discretion.

The Sierra Club's only reply to the Region's response to comments is to assert, for the first time, that the Region's fact sheet – issued with the draft PSD permit – failed to clearly specify the basis for Pio Pico's need to start-up and achieve full load quickly. SC Pet. at 18. Once again, Sierra Club has not complied with NSR Order ¶ 7, by failing to cite "with specificity to the record, including to the applicable documents and page numbers, that any issues raised were either raised during the public comment period or were not reasonably ascertainable....." The Sierra Club failed to do this in its petition for review. In fact, the Sierra Club did not raise this issue in its comments. <u>See</u> A.R. VI.33, SC Cmts at 2-5. Nor did any other person raise the issue before the Region. Given that Sierra Club bases its argument on the <u>draft</u> permit's Fact

Sheet, Sierra Club clearly could have raised this issue in its comments but it neglected to do so. For these reasons, the Board should deny Sierra Club's petition for review on this issue.

### E. Mr. Simpson's Petition for Review Regarding Consideration of Combined Cycle Gas Turbines Should Also be Denied

### 1. Mr. Simpson's Petition for Review Did Not Comply With the Board's April 19, 2011 NSR Standing Order

At the outset, we must note that Mr. Simpson's petition for review failed to comply with the Board's NSR Order. Despite raising issues related to comments on the draft permit by Mr. Simpson and others below, his petition never "cit[es] with specificity to the record, including to the applicable documents and page numbers" for any issue raised by his petition. NSR Order ¶ 7. Mr. Simpson cannot claim to be unfamiliar with this Board's rules, as he previously filed a petition for review with this Board while the NSR Order was in effect. See In re: City of Palmdale, PSD Appeal No. 11-07, Dkt. No. 9 (filed Nov. 24, 2011) (petition for review filed by Mr. Simpson). Therefore, under the terms of the NSR Order, the Board should decline to consider Mr. Simpson's instant petition for review. NSR Order ¶ 7.

## 2. The Region Properly Responded to Comments Regarding the Use of a Combined Cycle Design

Mr. Simpson's petition errantly claims that the Region failed to respond to his comments arguing for the use of a combined cycle design over a simple cycle design, Rob Simpson Petition for Review ("Simpson Pet.") at 7-8, although his petition concedes that the Region responded to another commenter raising the same issue. Id. at 7. The Region, however, has no duty to draft independent and duplicative responses to individual commenters where they raise the same or similar issues as others. In re NE Hub Partners, LP, 7 E.A.D. 561, 583 (EAB 1998) (providing a unified response to similar comments is "an efficient technique" and does not indicate that the permitting authority failed to respond to comments). Thus, by responding to another commenter

on the consideration of a combined cycle plant, the Region did not "ignore" Mr. Simpson's comment, as his petition asserts. His petition also claims, without any argument or legal citation, that the Region "should have required a combined cycle configuration." <u>Id.</u> For the reasons stated above, and since Mr. Simpson failed to confront the Region's responses to comments regarding why the construction of a combined cycle plant is technically infeasible for this project, his petition for review should be denied. <u>City of Palmdale</u>, Slip Op. at 32-34.

### II. The Permit's Greenhouse Gas BACT Limit is Supported by the Record

The Sierra Club's argument that the Permit's GHG BACT limit lacks support suffers from several defects. First, its petition for review fails to acknowledge, let alone address, the Region's thorough reasoning in the response to comments document providing a firm record in support of the limits and in response to Sierra Club's arguments. Second, Sierra Club's claims of a purported inconsistency between the Permit's GHG BACT limit and the heat input limit are belied by both the record and the differing purposes of those respective limits. Third, its challenges to the "safety factors" were either not raised below or are contradicted by supporting information in the permitting record. Lastly, Mr. Simpson's claim that the Region did not consider two irrelevant articles fails as well.

#### A. The GHG BACT Emission Limitation is Firmly Supported by the Record

The Region performed a formal, five-step, top-down BACT analysis for GHG emissions. A.R. IV.2, Fact Sheet at 15-22. During that process, the Region considered the use of a combined cycle design, reciprocating internal combustion engines, carbon capture and sequestration, and "the most energy efficient simple-cycle gas turbines" as control technologies. <u>Id.</u> at 15-16. After an extensive review, the use of a combined cycle design and carbon capture and sequestration were deemed to be technically infeasible, <u>id.</u> at 16-19. Internal combustion engines were eliminated due to their higher emissions of nitrogen oxides and San Diego County's nonattainment designation for the 8-hour ozone National Ambient Air Quality Standard. Id. at 19-20. GHG emissions from a power plant are driven by energy efficiency, as designated by an electricity generating unit's heat rate. Id. at 19. The LMS100 turbines to be used at Pio Pico are one of the most efficient simple cycle turbines available. Id. at 20 and n.15 (LMS100's 44% efficiency rating is well above that of other simple cycle turbines which had "efficiencies no higher than approximately 37%"). In establishing the GHG BACT emission limitation, the Region utilized vendor performance data to establish an enforceable heat rate limit that incorporated small adjustments to compensate for variables typically involved in the manufacturing and construction of the equipment, ambient operating conditions, and performance degradation over time. Id. at 20-22; A.R. VII.3, RTC at 14-16. As a result, the GHG BACT emission limitation reflects the use of a best-in-class, highly efficient turbine that could "avoid[] over 34,000 metric tons of [carbon dioxide] emissions compared to a typical simple cycle system." A.R. IV.2, Fact Sheet at 20 n. 15. Therefore, as described above, the Region's elimination of other processes and its establishment of the Pio Pico GHG BACT emission limit is fully supported by the administrative record.

### **B.** Sierra Club Failed to Address to the Region's Rationale in Setting the Greenhouse Gas BACT Emission Limitation

Sierra Club's petition for review regarding the Region's methodology for establishing Pio Pico's GHG BACT limit should be denied. Sierra Club contends that the operating assumptions relied on by the Region in establishing the GHG BACT limit are unsupported. SC Pet. at 18-20. Sierra Club, however, entirely ignores the Region's record basis for the limit, including its response to comments on this issue.

The Region set the GHG BACT limit "at a level achievable during the 'worst-case' of normal operating conditions – 50% load" so that Pio Pico may operate "within its designed

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operating range at all times." A.R. VII.3, RTC at 16. The Region separately explained that it made adjustments to the 50% load heat rate based on variations in ambient conditions, variability in new unit design, and to account for the degradation of unit performance over time. <u>Id.</u> Sierra Club does not dispute any aspect of this rationale. Its petition never suggests that a lower emission rate may be consistently achieved across the operating range of the facility, much less identifies any supporting record evidence.

Sierra Club faces a "heavy burden [in] obtaining review of a technical issue like a BACT limit" and must "demonstrate why [the permitting authority's] technical analysis is clearly erroneous." In re Newmont Nevada Energy Investment, LLC, 12 EAD 429, 458 (EAB 2005). This Board previously held that permitting authorities may reject lower emission rates where there is no record evidence showing that those rates may be consistently achieved during all periods of operation, so long as the permitting authority adequately explains its rationale for setting a less stringent limit. Id. at 440. The Board also has held that, where emissions are known to fluctuate, as Pio Pico's GHG emissions will fluctuate with load, permitting authorities should not set limits at their lowest point or else they "would make violations of the permit unavoidable." In re Masonite Corp., 5 E.A.D. 551, 560 (EAB 1994). Here, the Region fully explained that turbine efficiency decreases over time, varies with ambient conditions and load, that there are uncertainties involved in actual unit performance, and that BACT emission limits must be achieved at all times. A.R. VII.3, RTC at 14-17. Since Sierra Club's petition for review fails to address, or even acknowledge, this rationale or provide any additional information or analysis on why the Region should have established the GHG BACT permit limit differently, the Board should deny review on this issue. City of Palmdale, Slip Op. at 33; Newmont, 12 E.A.D. at 458.

## C. There is No Inconsistency Between the Permit's GHG BACT Limit and the Heat Input Limit

Sierra Club also complains that the GHG BACT limit is inconsistent with an operational limit for heat input which assumes 4,337 operating hours per year. SC Pet. at 19. Given that GHG BACT emission limits and heat input limits serve different purposes, there is no inconsistency at all. BACT limits are designed to reduce emissions "based on the maximum degree of reduction" for individual pollutants after considering a series of technical factors. 42 U.S.C. § 7479(3). The heat input limit, however, serves to limit maximum annual emissions to ensure that the facility's emissions will comply with National Ambient Air Quality Standards. A.R. VII.3, RTC at 9. Differing assumptions in setting these limitations are perfectly acceptable given that they serve differing purposes, and contrary to Sierra Club's inference, neither limitation was designed to arbitrarily restrict the loads or hours of operation for an electricity generating facility. Therefore, Sierra Club's petition for review should be denied on this issue.

#### D. The GHG BACT Limit "Safety Factors" Are Supported by the Record

The Sierra Club's petition incorrectly argues that there was no basis for the so-called "safety factors" used in calculating Pio Pico's GHG BACT limit. SC Pet. at 21-22. The Region clearly explained the bases for these safety factors. A 3% adjustment to the turbines' heat rate was made for "slight variations in the manufacturing, assembly, construction, and actual performance of the new turbines." A.R. IV.2, Fact Sheet at 20; A.R. VII.3, RTC at 16. The Region made another 3% adjustment to the heat rate for "unrecoverable losses in efficiency the plant will experience over its entire lifetime...." A.R. IV.2, Fact Sheet at 20-21; A.R. VII.3, RTC at 16. Finally, the Region made a 1.4% adjustment for variations in ambient conditions, which impact turbine performance. A.R. IV.2, Fact Sheet at 20-21; A.R. VII.3, RTC at 16.

These safety factors are used due to variations in actual operating performance to the extent they are expected and can be estimated at the time the Permit is written. This Board has repeatedly affirmed the use of such safety factors in setting emission limitations. <u>See, e.g., Newmont</u>, 12 E.A.D. at 442 ("we have approved the use of a so-called 'safety factor' in the calculation of the permit limit to take into account variability and fluctuation in expected performance of the pollution control methods."); <u>In re Knauf Fiber Glass, GmbH</u>, 9 E.A.D. 1, 15 (EAB 2000) (same). In setting the safety factors, the "permit issuer must provide a reasoned basis for its decision, which must include an adequate response to comments raised during the public comment period." <u>Newmont</u>, 12 E.A.D. at 442. As demonstrated by the Fact Sheet and Response to Comments document, the Region clearly provided such a reasoned basis for the safety factors. <u>See</u> A.R. VIII.3, RTC at 14-16, 53; A.R. IV.2, Fact Sheet at 20-21.

Sierra Club did not comment on the specific inclusion of a 3% safety factor for unit variability or the 3% safety factor for unit degradation even though the Fact Sheet discussed these issues. Fact Sheet at 20-21. Its failure to raise these comments below, or to explain why its argument was not reasonably ascertainable at the time, violates 40 C.F.R. § 124.13. This limits Sierra Club's petition for review to the 1.4% safety factor for ambient condition variations, which was the Region addressed in its response to comments. A.R. VIII.3, RTC at 16.

The Region stated that a 1.4% adjustment was appropriate due to known variations in performance due to temperature and humidity. <u>Id.</u> Sierra Club faces a "heavy burden [in] obtaining review of a technical issue like a BACT limit" and must "demonstrate why [the permitting authority's] technical analysis is clearly erroneous." <u>Newmont</u>, 12 EAD at 458. Yet, Sierra Club's petition for review wholly fails to "substantively confront the permit issuer's ... explanations." <u>Peabody W. Coal Co.</u>, 12 E.A.D. at 33; <u>see also City of Palmdale</u>, Slip Op. at 33.

Nowhere does Sierra Club's petition for review provide any information or analysis showing that the adjustment should be higher, lower, or not made at all. Contrary to Sierra Club's inference, such a safety factor, which is designed to compensate for unknown variables, cannot be calculated with precision. Instead, the Region relied on its expertise and experience with combustion turbine performance, which is deserving of deference from this Board. <u>Dominion Energy Brayton Point</u>, 12 E.A.D. at 510. Sierra Club's demand for some exacting calculation of the unknown is unreasonable and contrary to this Board's prior decisions. Therefore, its petition for review on this issue should be denied.

### E. The Region Properly Declined to Consider Irrelevant Documents Regarding GHG Emissions Submitted by Mr. Simpson

The Board should also deny Mr. Simpson's petition for review with respect to his claim that the Region's failure to consider two documents he submitted requires a remand of the permit. As stated in his petition for review, Mr. Simpson addressed these documents to the San Diego Air Pollution Control District, suggesting that they were relevant to the potential localized health effects of GHG emissions. Simpson Pet. at 4; A.R. VI.17, VI.19. Mr. Simpson never, either in his original e-mail to the Region, A.R. VIII.3, RTC at 74, or in his petition for review, specified the relevance of these articles to the proposed GHG BACT limit or any other matter considered in the PSD review process. As the permitting authority, the Region is only obligated to "respond to all significant comments on the draft permit ... raised during the public comment period." 40 C.F.R. § 124.17(a)(2). Neither the Region, nor the Board, is obligated to address issues such as potential localized health impacts of GHG emissions, which are beyond the scope of the PSD regulations. See In re Sutter Power Plant, 8 E.A.D. 680, 688 (EAB 1999) ("The Board will deny review of issues that are not governed by the PSD regulations because it lacks jurisdiction over them."); In re Russell City Energy Center, 14 E.A.D. \_\_\_, PSD Appeal No. 08-

01, Slip Op. at 39-40 (EAB July 29, 2008) (rejecting several claims by Mr. Simpson because they were beyond the scope of the PSD permit). The Region's failure to specifically address comments that are irrelevant and beyond the scope of this Board' jurisdiction does not constitute clear error. The Board should deny Mr. Simpson's petition for review on this issue.

### III. The Permit's PM BACT Limit Is Supported by the Record

Sierra Club and Helping Hand Tools both claim that different aspects of the Permit's PM BACT emission limit are unsupported by the record. Sierra Club challenges the 0.0065 lb/MMBtu limit applicable to Pio Pico at high loads (80% load and higher), SC Pet. at 22-28, while Helping Hand Tools challenges the 5.5 lbs/ hour PM emission limit that applies at all times. Helping Hand Tools' Petition for Review ("HHT Pet.") at 4. As demonstrated below, the Region has substantial record support for both emission limits and the petitions for review of these issues should be denied.

### A. The Record Supports the Permit's 0.0065 lb/MMBtu Limit

Sierra Club's claim that the permit's 0.0065 lb/MMBtu PM BACT limit is too high and lacks support ignores the record. In its comments and its petition for review the Sierra Club claims that testing data from other types of units demonstrates that a lower PM limit is achievable. SC Pet. at 23-24; A.R. VI.33, SC Cmts at 1-2. The Region provided an extensive explanation in support of the Permit's PM BACT limit: (1) the lack of available PM control devices means that Pio Pico cannot reduce PM emissions at lower loads; (2) the combustion of lubricating oils increases over time, increasing PM emissions; (3) the sulfur content of the gas used in the other units is not known, preventing an adequate comparison; (4) a single source test cannot be representative of unit performance for the life of that unit; (5) all of the tested units were a different, and significantly smaller (approximately 50 MW) turbine model; (6) even among tests for the same model turbine, PM emissions varied significantly; and (7) there is no

existing testing data for the LMS100 model turbine that will be used at Pio Pico. A.R. VII.3, RTC at 3, 26-27; A.R. IV.2, Fact Sheet at 21-22. Sierra Club does not dispute any of these explanations by the Region. Indeed, it even concedes that the Region's response demonstrates "concern that the [Pio Pico] units could not continuously achieve the lowest demonstrated rate in the record." SC Pet. at 24. Sierra Club's petition for review is devoid of any information or analysis necessary to meet its "heavy burden [in] obtaining review of a technical issue like a BACT limit" and never attempts to "demonstrate why [the permitting authority's] technical analysis is clearly erroneous." <u>Newmont</u>, 12 E.A.D. at 458.

Instead, Sierra Club argues that the Region failed to indicate how it calculated the 0.0065 lb/MMBtu PM BACT limit. SC Pet. at 26-27. However, the Region's rationale is clearly explained in the record. Pio Pico proposed a PM BACT "emission limit of 5.5 lb/hr, based on vendor guarantees...." A.R. I.31, Letter from Steve Hill, Sierra Resources, to Gerardo Rios, EPA Region IX (Dec. 8, 2011) at 1. This 5.5 lbs/hour emission limit converts to an emission rate of 0.0065 lbs/MMBtu. Id. at 1, 2, n.2.<sup>5</sup> Contrary to the Sierra Club's belief, this emission limit does not include any "compliance margin." SC Pet. at 25-26. In correspondence with the Region, Pio Pico's consultant, Sierra Resources, submitted data demonstrating that the 0.0065 lb/MMBtu emission rate "is lower than the level for which the turbine vendor will provide guarantees, and it is lower than the value suggested by" compliance testing from a recently constructed plant. A.R. I.31 at 3. Not only did the Region impose an emission limit <u>below</u> the vendor guarantee, it would have been well within its discretion to impose a higher emission limit as BACT. <u>See, e.g., In re Masonite Corp.</u>, 5 E.A.D. 551, (EAB 1994) (upholding emission limit based on control efficiency of 95% control efficiency even when vendor guaranteed a 97% control efficiency.

<sup>&</sup>lt;sup>5</sup> 5.5 lbs/hour / 851.5 MMBtu = 0.0065 lb/MMBtu.

Therefore, the PM BACT emission limit is fully supported by the record and Sierra Club's petition for review on this issue should be denied.

### B. The Region Adequately Responded to Comments Regarding the Permit's 5.5 lbs/ Hour Emission Limit

Petitioner Helping Hand Tools erroneously argues that the Region failed to adequately respond to a comment regarding the 5.5 lbs/hour PM BACT emission limitation. HHT Pet. at 4. Specifically, it argues that the Region "does not dispute" that another facility, the CPV Sentinel project, achieves a lower 5 lbs/hour PM emission rate in practice. Id. This is flatly incorrect. The Region explicitly rejected the contention that CPV Sentinel is actually meeting a 5 lbs/hour emission rate, noting that the lack of a second digit in CPV Sentinel's PM BACT limit (i.e., 5 lbs/hour instead of 5.0 lbs/hour) allows the plant to emit up to 5.49 lbs/hour while still meeting its permit. A.R. VIII.3, RTC at 51.<sup>6</sup> Further, the commenter submitted no evidence supporting the claim that CPV Sentinel was actually meeting a 5.0 lbs/hour emission limit in practice. Id. The Region stated that, by setting Pio Pico's emission limitation at 5.5 lbs/hour, its limit is comparable to that of CPV Sentinel, but allows for a much lower compliance margin. Id.

Helping Hand Tools' petition for review does not provide any rebuttal, new information, or analysis on this issue. Instead, it merely adopts Mr. Sarvey's comments without any further support. Thus, it failed to confront the Region's response to the comments on this issue. <u>City of Palmdale</u>, Slip Op. at 32-34. Even if it did, the Board typically defers to the permit issuer's technical expertise and experience so long as it explains its rationale and supports that reasoning with evidence in the administrative record. <u>Dominion Energy Brayton Point</u>, 12 E.A.D. at 510. The Region has done so in this case. As noted above, the 5.5 lbs/ hour emission limitation is based on a vendor guarantee. A.R. I.31, Letter from Steve Hill, Sierra Resources, to Gerardo

<sup>&</sup>lt;sup>6</sup> This claim was asserted by another commenter, Mr. Robert Sarvey. HTC Pet. 4; A.R. VI.35 at 3-4.

Rios, EPA Region IX (Dec. 8, 2011) at 1-2. Helping Hand Tools' petition for review provides no response to the Region's reliance on the vendor's guarantee. The Region's establishment of a 5.5 lbs/hour emission limitation is supported by the record, not substantively challenged by Helping Hand Tools, and is not clearly erroneous. Therefore, the Board should deny Helping Hand Tools' petition for review on this issue.

### IV. The Region's Finding that Pio Pico's Carbon Monoxide Emissions Will Be Below the PSD Threshold Is Supported by the Record

Petitioner Helping Hand Tools incorrectly argues that the Region mistakenly failed to account for higher carbon monoxide ("CO") emissions at lower loads. According to its petition, this led the Region to underestimate CO emissions in calculating Pio Pico's potential to emit and that the plant requires a CO BACT emission limit. This argument ignores the Region's response to Helping Hand Tools' comment. The Region explained that, although "<u>uncontrolled</u> CO emissions from the engines will vary between 50% and 100% load," the turbines' oxidation catalysts will ensure a consistent maximum CO emission rate "[r]egardless of load." A.R. VII.3, RTC at 75 (emphasis added). Contrary to Helping Hand Tools' assertion that "[t]he reasoning behind this claim is unknown", the Region provided the maximum emission rates it used for its potential-to-emit calculations. <u>Id.</u> These calculations were derived from vendor performance data. <u>Id.</u> at 75-76.

Helping Hand Tools' petition for review fails to confront the Region's response to its comment in any way. <u>City of Palmdale</u>, Slip Op. at 32-34. It does not challenge the Region's emissions calculations with any specificity, take issue with the underlying vendor performance data, or make any claims regarding the oxidation catalysts. Even if Helping Hand Tools provided some substantive response to rebut the Region's rationale, the Board should nevertheless defer to the Region's technical experience and expertise with emission calculations. <u>Dominion Energy</u>

Brayton Point, 12 E.A.D. at 510. Therefore, the Board should deny Helping Hand Tools' petition for review.

### V. The Region Properly Declined to Further Extend the Comment Period

Mr. Simpson's complaint that the Region abused its discretion for failing to extend the public comment period for its environmental justice analysis ("EJ Analysis") is baseless. He claims to be "prejudiced" by the Region's extension of the comment period for another commenter, Mr. Sarvey, who was inadvertently omitted from the Region's mailing list and originally did not receive a timely copy of the EJ Analysis. A.R. VII.3, RTC at 44. Mr. Simpson provides no explanation of how he was "prejudiced" by the extension for Mr. Sarvey or why he and all other interested persons should be provided additional time for submitting comments. The Region did, in fact, receive Mr. Simpson's comments on the EJ Analysis within the public comment period. See A.R. VI.53, E-mail from Johannes Epke, Helping Hand Tools, to Roger Kohn, EPA Region IX (July 24, 2012) at 8 (attaching comments from Mr. Simpson regarding EJ Analysis). It is undisputed that the Region provided the general public with a total of 65 days for public comments. See A.R. VII.3, RTC at 2 (noting first comment period of June 20, 2012 until July 24, 2012 and second comment period from August 3, 2012 until September 5, 2012). This is more than double the 30 day period for public comment required by 40 C.F.R. § 124.10(b). Mr. Simpson does not allege that he was deprived of a meaningful opportunity to submit his comments or that the comment period provided was inadequate in any way. See 40 C.F.R. § 124.13 (comment periods shall be extended "to the extent that a commenter who requests additional time demonstrates the need for such time."); In re Genesee Power Station, LP, 4 E.A.D. 852 (EAB 1995) (upholding denial of extension of comment period because public received a meaningful opportunity to submit comments). Therefore, Mr. Simpson's petition for review on this issue should be denied.

### VI. The Region Was Within Its Discretion to Decline Consideration of Whether the Pio Pico Plant Was Needed

### A. The Region Has No Obligation to Conduct a "Needs" Analysis

Contrary to the claim of Mr. Simpson's petition for review, the Region was not required to perform an unnecessary analysis of the "need" for Pio Pico. Simpson Pet. at 4-5. As this Board recently held in a similar challenge to a gas-fired power plant in California, "the decision of whether to apply agency resources to independently assess the 'need' for a facility in the context of PSD permitting is a matter of agency discretion." City of Palmdale, Slip Op. at 57; see also In re Eco Eléctrica, LP, 7 E.A.D. 56, 73-74 (EAB 1997) (Region reasonably declined to conduct an independent review of the need for an electric power facility). Here, the Region declined to consider the "need" for Pio Pico because this evaluation "would require a rigorous and robust analysis [that] would be time-consuming and burdensome for the permit issuer." A.R. VII.3, RTC at 73. It elaborated that "EPA would need to consider a myriad of extremely complex factors and detailed information that EPA has neither the resources nor the expertise to analyze." Id. Here, as in the City of Palmdale, "Mr. Simpson fails to demonstrate that the Region's decision not to conduct an independent review of the need for" Pio Pico "was in any way an abuse of discretion, particularly in light of the wide latitude afforded to the Region in making such determinations." Slip Op. at 59.

Mr. Simpson's petition for review further contests the Region's recognition of the Power Purchase Agreement between Pio Pico Energy Center, LLC and SDG&E because the California Public Utilities Commission ("CPUC") has proposed to find that Pio Pico is not needed by 2015 (although this decision remains under review).<sup>7</sup> Simpson Pet. at 6. First, as noted above, the

<sup>&</sup>lt;sup>7</sup> SDG&E's application for approval of Purchase Power Tolling Agreements with three merchant generators, including Pio Pico, is still pending before the California Public Utilities Commission. <u>In re: Application of San</u> Diego Gas & Elec. Co. (U 902 E) for Authority to Enter into Purchase Power Tolling Agreements with Escondido

Region was under no obligation to perform a review of the "need" for Pio Pico, making its mere reference to the Power Purchase Agreement irrelevant to its considerations as to whether is should issue a PSD permit. Second, this Board recognizes that "it is appropriate for a permitting authority to rely on mechanisms within the State of California to evaluate the need for the facility, rather than conducting its own independent analysis." <u>City of Palmdale</u>, Slip Op. at 58.

The CPUC's proposed decision is neither final nor relevant to the Region's exercise of discretion in this case. In fact, it only appears to validate the Region's decision not to undertake an independent "needs" analysis. The CPUC approval process, and any subsequent appeals of its final decision, will take a substantial amount of time to resolve and involves complex issues of state law. Nothing in the Clean Air Act requires a permitting authority to condition a PSD approval on various unrelated state regulatory approvals, and as this case illustrates, doing so would also preclude the Region from adhering to the one year statutory deadline for issuing a decision on PSD permit applications. See 42 U.S.C. § 7475(c); Avenal Power Center, LLC v. U.S. EPA, 787 F. Supp. 2d 1, 4 (D.D.C. 2010) (affirming that EPA must grant or deny a PSD permit application within one year of certifying a permit application as being complete). Here, if an appeal was taken of the CPUC's ultimate decision, waiting for California state regulatory proceedings to conclude would interfere with EPA's statutory obligation to issue or deny a PSD permit by June 14, 2013. See A.R. I.61 (June 14, 2012 letter certifying Pio Pico's PSD permit application as complete). In no way does Mr. Simpson's petition for review articulate why the CPUC's recent proposed decision demonstrates that the Region abused its discretion in declining to conduct its own parallel analysis of the need for Pio Pico. Therefore, his petition for review should be denied on this issue.

Energy Center, Pio Pico Energy Center and Quail Brush Power, Application A1105023 (Cal. Pub. Utilities Comm'n).

### B. The Region Rightly Declined to Consider Mr. Simpson's Submission of Voluminous and Irrelevant Documents

Mr. Simpson's further argument, that the permit should be remanded for the Region's declination to consider his submission of voluminous and irrelevant documents, is meritless. In what could only be described as a "document dump," Mr. Simpson forwarded to the Region several documents he previously sent to the San Diego Air Pollution Control District without any explanation of their relation to the PSD permit. A.R. VII.3, RTC at 74. His e-mail, addressed only to the District, asked it to consider "solar and wind assistance and alternatives". Simpson Pet. at 4. It provided no comments to the Region on their relation to the PSD permit. <u>Id.</u> The Region subsequently declined to consider them. A.R. VII.3, RTC at 74.

His petition for review claims that these documents support "an alternatives analysis or a no project alternative." Simpson Pet. at 3. Yet, as discussed above at pages 22-24, the Region was well within its discretion in refusing to spend its limited time and resources on a review of the project's "need" that is not required by the Clean Air Act and would only duplicate a review by California regulatory agencies. Even in his petition for review, Mr. Simpson fails to provide any explanation as to how these documents have any bearing on matters actually germane to the PSD permit. A brief review of these documents demonstrates their lack of relevance.

- Promotional material related to commercial batteries for power markets.
- Rebuttal testimony of Mr. Bill Powers to the California Energy Commission arguing that the Commission should conduct detailed analyses regarding rooftop solar panels and demand response alternatives.
- A 2008 report by Mr. Powers arguing for various alternative energy policies, such as community choice aggregation, further investment in conservation, renewable energy sources, and distributed generation, decoupling utility profits from energy sales, and smart meters, among others.

- A 1979 memorandum of understanding between the California Air Resources Board and the California Energy Commission regarding power plant compliance with air quality laws.
- A California Public Utilities Commission document setting out the standardized planning assumptions required for the filing of resource plans.
- Comments submitted by Mr. Simpson and Helping Hand Tools to the San Diego Air Pollution Control District commenting on the proposed state permit for Pio Pico.

Most of these documents relate to various existing or proposed policies regarding energy generation within the State of California or to various state permits, licenses, and approvals. In his petition for review, Mr. Simpson now asserts for the first time that the attached documents "should have been required in the BACT analysis for GHG[s] and other pollutants." Simpson Pet. at 4. As described in the NSR Order ¶7, "[f]or each issue appealed, to satisfy the requirements of 40 C.F.R. § 124.19(a), the petition must demonstrate, by citing with specificity to the record, including to the applicable documents and page numbers, that any issues raised were either raised during the public comment period or were not reasonably ascertainable...." Mr. Simpson failed to do this in his petition for review. In fact, neither Mr. Simpson nor any other person commented that the Region should consider constructing a wind or solar electricity generating unit in lieu of a gas-fired turbine under the guise of performing a BACT analysis for any pollutant. Therefore, Mr. Simpson's petition for review on this issue should be denied.

#### VII. The Region's Decisions Regarding Monitoring Data are Supported by the Record

Mr. Simpson's petition for review incorrectly claims that the Region erred in using ambient background monitoring data from the Chula Vista monitoring station, instead of the Otay Mesa-Paseo International monitoring station which is closer to the Pio Pico site. Simpson Pet. at 8. The Region, in its response to comments, provided an extensive explanation for its choice of monitoring stations. A.R. VII.3, RTC at 37-44. In its first step, the Region found that Pio Pico's predicted impacts were below the Significant Monitoring Concentration for nitrogen dioxide ("NO<sub>2</sub>") and PM<sub>2.5</sub>, and therefore, did not require site-specific monitoring. <u>Id.</u> at 37. It then determined that the Otay Mesa-Paso monitoring station, although it was closer to the Pio Pico site, was "heavily influenced by the emissions from hundreds of trucks queued and waiting at the Otay Mesa-Paseo International border crossing" leading to "artificially high NO<sub>2</sub> levels compared to the region" that are not "representative concentrations for the regional area." <u>Id.</u> at 40-41 (footnote omitted). In fact, the Otay Mesa-Paseo monitoring station's data has become so distorted by truck emissions that the San Diego Country Air Pollution Control District is proposing to move the station. <u>Id.</u> at 41.

Based on its analysis of the Chula Vista monitoring station's location, data quality, and vehicle traffic, the Region determined that the station was appropriately representative for the area surrounding the Pio Pico site and was consistent with EPA's PSD permit air quality monitoring requirements at 40 C.F.R. Part 51 Subpart W and related EPA guidance. A.R. VII.3, RTC at 37, 39, 42-43. Nevertheless, despite finding that the Otay Mesa ambient air quality data was artificially high, the Region still used data from Otay Mesa and the El Cajon monitoring station to perform a supplemental analysis to ensure that Pio Pico would not cause or contribute to a violation of the NO<sub>2</sub> National Ambient Air Quality Standards. <u>Id.</u> at 38-40.

Mr. Simpson's petition for review does not dispute any aspect of the Region's rationale. Instead, it simply re-states comments already made to the Region, albeit in far less detail. His petition for review does not even attempt to "explain <u>why</u> the permit issuer's previous response to [his] objections is clearly erroneous or otherwise deserves review." <u>City of Palmdale</u>, Slip Op. at 32. Therefore, his petition for review on this issue should be dismissed. Helping Hand Tools' petition for review raises a related issue, claiming that the Region failed to respond to comments by Mr. Sarvey requesting on-site monitoring due to environmental justice concerns related to two area prison facilities. Contrary to the petition's claim, the Region did in fact respond to Mr. Sarvey's comments. <u>See</u> A.R. VII.3, RTC at 65-66. The Region provided an extensive review of its EJ Analysis, performed pursuant to Executive Order 12898, detailing its public participation and outreach activities and determination that Pio Pico's emissions would comply with National Ambient Air Quality Standards, protecting the public's health, including the health of sensitive populations. A.R. VII.3, RTC at 56-59. Modeling of Pio Pico's air emissions found that the plant "will not result in disproportionately high and adverse human health or environmental effects on minority populations and low-income populations." <u>Id.</u> at 59. The Region further considered "the unique conditions" at the prisons, "such as overcrowding, social vulnerability and health related issues" and concluded that it "does not believe that mitigation for environmental justice impacts is necessary or appropriate in this case...." <u>Id.</u> at 60.

Instead of providing any substantive response to the Region, Helping Hand Tools simply "reiterate[s] comments [Mr. Sarvey] submitted on the draft permit." <u>City of Palmdale</u>, Slip Op. at 32. In doing so, it failed to "explain <u>why</u> the permit issuer's previous response to [Mr. Sarvey's] objections is clearly erroneous or otherwise deserves review." <u>Id.</u> Since Helping Hand Tools provides no additional information or analysis regarding environmental justice concerns, it failed to demonstrate that review is warranted on this issue. <u>Id.</u> at 33.

### VIII. Objections to the Region's Declination to Require Emission Reduction Credits is Not Properly Before the Board

This Board lacks jurisdiction to entertain Mr. Simpson's argument that the Region failed to require Pio Pico to use emission reduction credits to offset its emissions. Referencing a comment by another commenter, Ms. April Sommer, Mr. Simpson's petition for review claims that air pollution credits are invalid. Simpson Pet. at 8. The Region responded to Ms. Sommer's comment, providing a two-part response. First, it found that no mitigation for environmental justice impacts was necessary because its EJ Analysis found no disproportionately high impacts or environmental effects on minority or low-income populations. A.R. VII.3, RTC at 60. Mr. Simpson has not disputed this finding. Second, the Region noted that the use of emission reduction credits for Pio Pico is a matter of state law that is not regulated under the PSD program. Id. at 61. Not only has Mr. Simpson's petition for review failed to explain why the Region's response was clearly erroneous, <u>City of Palmdale</u>, Slip Op. at 32, but the matter of emission reduction credits is not governed by the PSD statute or any of its related regulations. <u>See Russell Energy Center</u>, Slip Op. at 40 (EAB July 29, 2008) (arguments regarding California emission reduction credits are beyond the Board's jurisdiction). Therefore, this matter is not properly before the Board and Mr. Simpson's petition for review on this issue should be denied.

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Respectfully submitted,

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### **CERTIFICATE OF COMPLIANCE WITH THE WORD LIMIT**

Pursuant to NSR Order ¶ 1, I hereby certify that the foregoing Brief of Intervenor Pio Pico Energy Center, LLC in Response to the Petitions for Review, contains 10,687 words, as calculated using Microsoft Word software.

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### **CERTIFICATE OF SERVICE**

I hereby certify that on this 6th day of February, copies of the foregoing Motion for Leave to Intervene were served by First Class mail to the following:

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