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STATE OF CALIFORNIA

Energy Resources Conservation
And Development Commission

In the Matter of:

Application for Certification
For the Palmdale Hybrid Power Project

Docket No. 08-AFC-9

Energy Commission Staff's Reply Brief

I. Introduction.

Pursuant to Committee order, staff, the applicant, and Center for Biological Diversity (CBD) submitted opening briefs on March 25, 2011. No brief was submitted by Desert Citizens Against Pollution (DCAP), although a late filing was docketed on March 29, 2011 indicating that DCAP wished to join in CBD's brief. Staff fully concurs with statements made in Applicant's opening brief. In accordance with Committee order, this is staff's reply brief responding to assertions made by CBD concerning the sufficiency of staff's analysis.

II. Standard of Review

CEQA does not require perfection or an exhaustive analysis; it simply requires adequacy, completeness, and a good faith effort at full disclosure, all of which staff has provided in the Final Staff Assessment (FSA) and subsequent testimony. (Cal. Code Regs., tit. 14, §15151; Exh. 300, Exh. 301.) CEQA requires that an EIR or equivalent document contain "a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences" the sufficiency of which is to be reviewed "in light of what is reasonably feasible." (Id.) Ultimately, "[a]n EIR must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project." (Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal.3d 376, 405.) The crux of CBD's argument is that staff's analysis of the Palmdale Hybrid Power Project (PHPP) does not rise to the level of detail required by the California Environmental Quality Act (CEQA), in terms of describing the existing environment and baseline information and analyzing the project's potential

impact and describing how the conditions of certification adequately mitigate the project's impacts to less than significant.

In sum, CBD finds fault with three aspects of staff's analysis: 1) the analysis of impacts to air quality; 2) the analysis of the potential impacts resulting from the proposal to pave roads as mitigation for air quality impacts; and 3) staff's analysis of alternatives to the proposed project or its location. For the reasons discussed below, the Committee should reject CBD's arguments.

III. There Is Substantial Evidence in the Record That the Project Will Not Result in a Significant Adverse Impact to Air Quality and Will Conform With All Applicable Laws, Ordinances, Regulations, and Standards.

CBD asserts a number of concerns with staff's air quality analysis, several of which were not raised in previous comments on the project or staff's analysis, in their prehearing conference statement, at the prehearing conference, or even at the evidentiary hearing itself. Nevertheless, since the Committee did not limit the subject matter of these briefs, staff addresses all significant arguments raised by CBD herein. The main concerns expressed by CBD regarding staff's air quality analysis are: 1) staff provided no information or analysis regarding impacts of the proposed use of interpollutant trading as a mitigation measure for particulate matter less than 10 micrograms (PM10) emissions; 2) the FSA fails to properly address the significance of additional emissions of pollutants for which the area is unclassified/attainment; 3) the FSA provides no analysis of whether or how the project would or could comply with the new prevention of significant deterioration (PSD) regulations for greenhouse gas (GHGs) emissions or other contaminants including particulate matter less than 2.5 micrograms (PM2.5) emissions; 4) staff does not explain why a 6 mile radius is used to analyze cumulative impacts, but no such limit is applied to emission reduction credits (ERCs) used to offset the project; 5) staff has failed to rebut CBD's testimony that road paving actually leads to increased PM2.5 emissions; and 6) staff's analysis of GHG impacts is incomplete and misleading and its conclusions are unsupported.

A. Staff Recommends Removing the Provision in AQ-SC19 Allowing for the Use of Interpollutant Trading for PM10 Emissions.

In Condition of Certification AQ-SC19, in addition to allowing for the applicant to pave roads to obtain the necessary PM10 emission reduction credits, staff also allows the applicant to provide, in lieu of the credits obtained from road paving, NOx ERCs at a 2.629 to 1 ratio and SOx ERCs at a 1 to 1 ratio. This provision was intended to provide the applicant with an alternative option for mitigating their PM10 emissions, and has been approved by the Commission for other projects in the area as well as at least eleven projects in other air basins. (Panoche Commission Decision, p.104; Avenal Commission Decision, p.125.) Nevertheless, staff did not complete a detailed analysis of this provision. Therefore, staff recommends this provision (contained in the second paragraph

of the condition) be removed from AQ-SC19. The removal of this provision would have no effect on the project, its conformance with LORS, or its ability to mitigate significant, adverse impacts. Staff believes the applicant would be agreeable to this rescission.

B. Substantial Evidence in the Record Supports Staff's Conclusion That Emissions of PM2.5 Do Not Result in a Significant, Adverse Impact to Air Quality and, Therefore, Do Not Require Mitigation.

CBD argues that staff has not properly analyzed PHPP's cumulative impacts to air quality resulting from its emissions of PM2.5. (CBD Opening Brief, p. 6.) PHPP is located in the Mojave Desert Air Basin and is under the jurisdiction of the Antelope Valley Air Quality Management District. (Exh. 300, p. 4.1-8.) The area is unclassified/attainment for PM2.5. (Id.) CBD argues an impossibly contradictory assertion that "this does not mean PM2.5 air quality is acceptable, only that it is not so bad that it violates the existing standards - in this basin the ambient background for PM2.5 is already, under existing conditions 80% (28/35) of the way towards a level that would violate the California standard for hourly PM2.5." On the contrary, compliance with these standards (Exh. 300, p 4.1-7 to -15) provides assurance that air quality is health protective for residents, including sensitive receptors such as the elderly, the very young, or those with pre-existing medical conditions. Further, the area has shown modest improvements (reductions) in PM2.5 levels from 2001 to 2009 (Exh. 300, p 4.1-11, Figure 1) despite significant population growth in the area, suggesting that the area is not "on the way towards a level that would violate the California standards for hourly PM2.5" as CBD incorrectly asserts.

Staff uses two criteria to determine whether a project will result in a significant adverse impact to air quality: whether the project would contribute to an existing violation of an ambient air quality standard or whether the project's construction and operational emissions would cause a new violation of the ambient air quality standards. (Exh. 300, p. 4.1-21.) The ambient air quality standards are health-based standards set at levels to adequately protect the health of all members of the public, including those most sensitive to adverse air quality. (Exh. 300, p. 4.1-21.) Staff concluded that the area does not currently exceed the PM2.5 standards and that PHPP will not cause a violation of the federal 24-hour PM2.5 or state annual PM2.5 air quality standards. (Exh. 300, p. 4.1-35.)

Staff conducted an analysis of PHPP's potential to result in a significant, adverse, cumulative impact to air quality, analyzing the proposed project's incremental effect viewed over time together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project. (Exh. 300, pp. 4.1-21 to -22.) This analysis included the following: a summary of projections for criteria pollutants in the air district and the air district's programmatic efforts to abate such pollution; an analysis of the project's localized cumulative impacts; and a discussion of secondary pollutant impacts. (Exh. 300, 4.1-36.) For purposes of analyzing the potential of PHPP to result in significant, adverse cumulative

impacts, staff identified several projects that were foreseeable and modeled these projects along with PHPP to determine if the resulting emissions would exceed any air quality standards. (Exh. 300, pp. 4.1-38 to 40.) Staff concluded that the projects, when combined, would not result in any exceedances for which full mitigation has not already been required of the applicant. (Exh. 300, p. 4.1-40.)

CBD's argument appears to be that the project must mitigate for all of its emissions because the emission of pollutants currently in attainment will eventually, at some point in the future, with the addition of other projects, lead to exceedance of the air quality standards. CBD, however, provided no testimony or evidence that PHPP's PM2.5 emissions are significant and adverse, nor have the courts held that an agency must find any emissions of criteria pollutants significant and adverse. Doing so would be akin to establishing a "one-molecule rule" whereby projects are required to mitigate for all emissions, significant or not.

C. Commission Regulations Do Not Require Analysis of Regulations That Are Not Currently Applicable.

CBD also argues that staff was required to analyze PHPP's conformance with the new PM2.5 increment regulations released by U.S. Environmental Protection Agency (EPA) on October 20, 2010 and applicable beginning October 20, 2011. (CBD Opening Brief, p. 6.) The Commission's regulations require staff to analyze all *applicable* LORS. (Cal. Code Regs., tit. 20, §1744.) As stated in the notice adopting the PM2.5 regulations, they are not applicable until October 20, 2011. (75 Fed. Reg. 64864-01, p. 6.)

D. The Use of a 6 Mile Radius in Conducting a Cumulative Impact Analysis Is Reasonable and Based on Substantial Evidence.

CBD also expresses confusion over the fact that staff's cumulative impact analysis reviews projects within a 6 mile radius from the project and yet, if mitigation is deemed necessary, does not impose a similar 6 mile radius requirement for the provision of emission reduction credits. (CBD Opening Brief, p. 6.) As explained in the Final Staff Assessment, the purpose of the 6 mile radius is to ensure that all projects that could contribute to a statistically significant concentration overlap for <u>non-reactive</u> pollutant concentrations between two stationary source plumes are accounted for in the cumulative impacts analysis. (Exh. 300, p. 4.1-37.) Beyond 6 miles, no plume interactions or modeled plume impacts would be seen. (Id.) If a significant impact was found and PHPP's contribution to that impact was cumulatively considerable, then mitigation addressing the contribution would be required. In the case of PHPP, no such cumulative impact or contribution was found; therefore, no mitigation is required. (Exh. 300, pp. 4.1-39 and -40.) That said, emissions offsets, as ERCs or other forms of reductions, located more than 6 miles from the proposed project are acceptable mitigation for regional pollutants such as ozone and particulate matter. (Exh. 300, pp. 4.1-27 to -32.) In this case, staff is accepting NOx and VOC ERCs as mitigation of project emissions of NOx and VOC, which contribute

to existing violations of the regional, or secondary, pollutant standard for ozone. (Exh. 300, pp. 4.1-27 to 32.) For PHPP, particulate matter emission reductions are locally generated, providing mitigation for direct and regional, or secondary particulate matter impacts.
CBD presented no witnesses or evidence to support any contention that the ERCs proposed by the applicant do not sufficiently mitigate for the project's proposed impacts due to their distance.

E. Substantial Evidence in the Record Supports Staff's Conclusion That the Road Paving Mitigation Will Not Result in Increased PM2.5 Emissions

CBD argues that staff fails to "directly rebut[] much of the substance of the Center's testimony regarding the inadequacy of road paving to act as a valid ERC for PM10 because it actually leads to an increase in the fraction of the PM that is PM2.5 and smaller fines." (CBD Opening Brief, p. 8.) This assertion mischaracterizes the testimony of CBD's witness, Mr. Tholen's. As discussed in our opening brief, the bulk of his testimony centers around this misunderstanding of what pollutant road paving was being proposed to mitigate for. (Energy Commission Staff's Opening Brief, p. 2.) He repeatedly refers to why the PM10 reductions obtained by road paving are insufficient to mitigate for PM2.5. As discussed in staff's analysis, the road paving is proposed to mitigate for the project's PM10 emissions, not it's PM2.5 emissions. (Exh. 300, p. 4.1-32.) The question Mr. Tholen's testimony appears to present is, therefore, not whether road paving is sufficient to provide PM10 offsets, but whether a side effect of the mitigation is an increase in PM2.5 emissions and, if so, whether this potential increase has been analyzed and, if necessary, mitigated. Mr. Tholen argues that road paving may result in an increase in PM2.5 in two ways: 1) during construction and periodic maintenance of the roads (from construction and maintenance vehicles, from fugitive dust emitted during site preparation, and from asphalt fumes); and from a possible increase in traffic. (Exh. 402, pp. 3-4.) On the stand, however, Mr. Tholen admitted that his testimony was based on a general understanding of the difference between dirt and paved roads in Northern California and is not reflective of an analysis of the proposed project currently before the Committee, admitting to not having reviewed the specific roads proposed by the applicant to be paved. (RT 3/2/11 pp. 108-110.)

In contrast, staff analyzed the potential of paving the specific roads proposed by the applicant to result in impacts and concluded that, with implementation of staff's proposed mitigation measures to address potential emissions from construction equipment used to construct the roads, the impact would be reduced to less than significant. (RT 3/2/11 pp. 55-59, 116.) As for potential emissions resulting from maintaining the roads, the dirt roads currently require periodic maintenance already; any maintenance required for the paved roads would result in similar, if not fewer, such emissions. (RT 3/2/11 p. 118.) With regard to any potential for an increase in PM2.5 emissions resulting from increased traffic, the areas surrounding the road segments proposed are predominantly already fully developed residential roads; paving them would not

induce growth into the area or significantly increase the amount of traffic utilizing these roads. (RT 3/2/11 pp. 115, 240-241, 247, 268-269.) Most of the roads consist of small segments abutting residential property; paving them will not change their use or encourage use by traffic not currently using them. (RT 3/2/11 p. 115.)

Mr. Tholen's testimony should be given less weight than testimony presented by staff and the applicant because Mr. Tholen's statements are not based on facts particular to the proposed project.

F. Substantial Evidence in the Record Supports Staff's Conclusion That PHPP Will Not Result in Significant, Adverse Impacts as a Result of Its Greenhouse Gas Emissions

CBD argues that staff's greenhouse gas emissions (GHG) analysis is deficient for several reasons: 1) there are too many unknown factors regarding the project's ability to obtain a contract, operate efficiently, and access the grid without impairing access by other renewable energy sources; 2) without a contract staff cannot assume that the project will operate with maximum efficiency; 3) staff fails to conduct a lifecycle analysis of GHG emissions from manufacture and transportation of the project components and natural gas extraction and transportation activities; and 4) staff failed to discuss measures to avoid or minimize the project's GHG emissions. (CBD Opening Brief pp. 12-13.)

The analysis of greenhouse gas emissions impacts is still an evolving field and will likely continue evolving for some time to come. The analysis of emissions from power plants is made more difficult by the reality that power plants cannot be analyzed in a vacuum – the construction and operation of one plant generally results in less electricity being produced by another plant. (Exh. 300, p. 4.1-88.) As CBD references, the Commission conducted an order instituting informational proceeding (OII) for the purposes of determining how best to consider the nature of the electricity production and distribution system when analyzing a proposed plant's potential to create significant impacts from greenhouse gas emissions. (Exh. 300, p. 4.1-89.) Staff's first full-scale attempt to conduct such an analysis took place in the Avenal Power Plant proceeding and staff's analysis of PHPP follows the same methodology. (Exh. 300, p. 4.1-91 to -92.)

CBD's main argument with regard to staff's analysis of PHPP is that without a contract for the sale of electricity from PHPP, staff does not have the information required to reach any conclusions regarding PHPP's greenhouse gas emissions and whether the project will be able to access the grid without impairing access by other renewable facilities. (CBD Opening Brief, p. 11.) The implication of this argument, that without a contract the project will operate inefficiently, is unsubstantiated; there is no evidence to support this, nor is there any evidence that the applicant would have any incentive to run the project in an inefficient manner. While a contract would narrow the range of expected annual PHPP operations, it would not change staff's approach to analyzing GHG emissions

and potential impacts. PHPP would operate in the context of the WECC system, regardless of whether its operations are bounded by a contract or undefined as a merchant power plant. Because electricity is not stored in appreciable quantities, or otherwise disposed of. Increased generation from one power plant is matched by reductions elsewhere in the system. (Exh. 300, p. 4.1-92.)

Staff analyzed PHPP based on information currently available and reasonable inferences about how the project's features and capabilities and how these would likely fit in with the existing electrical grid and dispatching needs. (Exh. 300, p. 4.1-101.) CBD has provided no evidence that staff's assumptions are incorrect. As discussed above, analyzing a power plant's GHG emissions is necessarily a complex undertaking involving many variables; CEQA simply requires that there be a good-faith effort at full disclosure based on available information, judged in light of what is reasonably feasible; it does not require the applicant to enter into a contract and interconnection agreement before obtaining a permit. (Cal. Code Regs., tit. 14, §15151.) PHPP would be more efficient, and emit fewer GHG emissions per MWh of generation, than most other new and existing units the area. (Exh. 300, p. 4.1-93.) Even if the project were operated inefficiently, its operations are still bounded by other air quality limits, as well as those imposed by other technical areas; operation within these limits, even if done inefficiently. would ensure the project would meet the emission performance standard imposed by SB1368. (Exh. 300, 4.1-53 and -91.) Based on available information, and based on PHPP's low heat rate, rapid ramping capabilities, and its solar hybrid design, staff was confident in reaching the following conclusions: 1) PHPP will not increase the overall system heat rate for natural gas plants; 2) PHPP will not interfere with generation from existing renewable facilities nor interfere with the integration of new renewable generation; and 3) certification of PHPP would not conflict with the goal of ensuring a reduction of system-wide GHG emissions or the goals and policies of AB 32. (Exh. 300, p. 4.1-89.) CBD offered no evidence calling into question staff's assumptions or conclusions.

CBD also argues that staff's analysis fails because it does not include a lifecycle analysis. Nowhere does CEQA require a cradle to grave analysis of greenhouse gas emissions, nor is there any evidence that such an analysis is possible or would result in useful information beyond mere speculation. Staff's analysis takes into consideration information on the likely operation of the project, combined with an understanding of how the project would likely operate within California's electricity grid and reaches conclusions based on these reasonable assumptions – this is what the CEQA and the courts require, not an analysis based on speculative assumptions.

CBD's last argument mischaracterizes staff's analysis. It claims that staff has failed to follow guidelines established during the OII process recommending that power plants be subject to "best practices" mitigation. (CBD Opening Brief, p. 13.) In fact, "best practices" (such as limiting idling times and, where appropriate, ensuring that construction equipment meets the latest emission standards) have been required by other conditions outlined in the air quality analysis and will ensure that PHPP's greenhouse gas emissions during construction are

minimized to the extent possible. (Exh. 300, p. 4.1-102.) There is no need to repeat these conditions in the Greenhouse Gas Analysis portion of the staff assessment.

IV. The Road Paving Analysis Provides Sufficient Baseline Information on Which to Base a Conclusion That PHPP Will Not Result in Any Significant, Adverse Impacts.

CBD also argues that staff's analysis fails to adequately describe the existing environment of the dirt roads that the applicant proposes to pave and fails to analyze the potential growth-inducing impacts of paving these roads. (CBD Opening Brief, pp. 8-10, 14.)

The proposal to pave a certain number of road segments in the vicinity of the proposed project is intended to serve as mitigation for the project's PM10 emissions. (Exh. 300, p. 4.1-32.) CEQA sets forth a different, somewhat lesser, standard for reviewing the environmental impacts of mitigation measures, specifying that less detail is necessary when discussing the environmental impacts of a mitigation measure as compared to the project itself. (Cal. Code Regs., tit. 14, §15126.4(a)(1)(D).) Nevertheless, staff has conducted a detailed analysis of the road paving proposal and concluded that with adoption of a few additional mitigation measures, there would be no significant, adverse impacts from implementation of this mitigation measure. (Exh. 301.) Staff's analysis identifies the 11 road segments that were under consideration at the time (one segment was subsequently removed due to concerns expressed by an environmental group regarding its proximity to wetland habitat), clearly identifying where road paving, were it to occur, would begin and end and how many miles of each particular road segment would be paved. (Exh. 301, p. 1.) Based on this preliminary information, staff concluded that eleven technical areas could potentially be affected by this proposal and further analysis in these technical areas was conducted. This analysis consisted of review of available literature and information in the surrounding areas, including maps and photographs of the proposed road segments and surrounding areas, and visits to all of the road segments contained in the proposal. (Exh. 301; RT 3/2/11 pp. 276-277.)

CBD's main complaint with this analysis appears to be that certain specific surveys were not conducted prior to staff reaching its conclusions, namely protocol surveys for biology and jurisdictional delineations of state or federal waters and, therefore there is an insufficient description of the baseline environment on which to conduct an analysis. (CBD Opening Brief, pp. 9-10.) Staff is unaware of any cases establishing that such surveys are absolutely required when analyzing a project or a proposed mitigation measure. As discussed above, CEQA does not require exhaustion, but "a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences" (Cal. Code Regs., tit. 14, §15151.) Staff believes that the baseline environment of the proposed road segments has been described in

sufficient detail to inform the public and the decision-makers about the potential for the project to result in significant, adverse impacts. The exact location and length of each road segment is identified, the land uses surrounding each road segment are described, the existing environment of each road segment and its surrounding land is identified, and the impacts involved with paving roads is described. This information is based on first-hand visits to the proposed road segments as well as review of information provided by the applicant and found in natural resources databases. (Exh. 301, RT 3/2/11 pp. 276-277.)

CBD argues that staff's use of mitigation measures amounts to a deferral of the identification of impacts. It is unclear what specific impacts could possibly be discovered that staff has not already discussed. The Biological Resources analysis identifies each road segment's potential for the existence of sensitive species (ranging from low to moderate) and describes the existing state of the roads as well as adjacent land and resources. (Exh. 301, pp. 4-5.) Based on this, staff concluded that there was sufficient information on which to base a conclusion regarding the project's potential to result in unmitigated significant, adverse impacts. While it is true staff cannot pinpoint the existence, and location of, or lack thereof, specific individuals of protected species on or near the road segments, staff has discussed the potential for such individuals to exist and established mitigation measures with which the applicant must comply were such individuals found. The Soil and Water Resources analysis describes the potential impacts that could occur in the process of paving roadways and identifies mitigation measures to ensure that these impacts are properly mitigated. Road paving is a fairly straightforward activity with a defined set of potential impacts. (Exh. 300, pp. 3, 26-27.) Where the paving occurs on dirt roads already in use, as here, such impacts are even more defined and limited. (Exh. 301, pp. 26-28.) Condition of certifications Soil and Water-10 and 11will ensure that any potential impacts to soil and water are mitigated to less than significant and Condition of certification Bio-23 will ensure that any potential impacts to streambeds are mitigated to less than significant. Similarly, staff's Cultural Resources analysis identifies potential impacts associated with road paving and proposes a condition of certification to ensure that all impacts are mitigated to less than significant. (Exh. 301, pp. 14-16.)

CBD also argues that the project may have growth inducing impacts, arguing that staff "provided opinion but no data or analysis for the statements that the road paving would not be growth inducing." (CBD Opening Brief, p. 14.) CBD fails to acknowledge, however, that staff's expert opinion is based on years of expertise in their respective fields, specific review of the proposed project, knowledge of the surrounding area, and several visits to the roads in question. (Exh. 301, RT 3/2/11 pp. 276-277) CBD argues that the analysis should have included "an analysis of the environmental effects of other reasonably foreseeable actions that could be the consequence of the proposed road paving." (CBD Opening Brief, p. 14.) CBD, however, failed to specify what "other reasonably foreseeable actions" it is referring to, and presented no evidence that paving the roads proposed by the applicant would result in any other foreseeable actions. As staff found none, there was nothing further for staff to analyze.

V. Staff Presented and Analyzed a Reasonable Range of Alternatives Under CEQA and Properly Rejected the Use of 100% Alternative Energy as Not Meeting Project Objectives

CBD argues that staff's alternatives analysis is deficient because staff did not analyze the all solar alternative and the rooftop photovoltaic alternative in more detail and staff failed to consider an alternative consisting of 20-33% solar or 100% photovoltaic (PV) at the site. (CBD Opening Brief, p. 15-16.)

CEQA requires the discussion of "a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects." (Cal. Code Regs., tit. 14, §15126.6.) CEQA defines the term "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (Pub. Resources Code, § 21061.1.) "A local agency must make an initial determination as to which alternatives are feasible and which are not. [Citation.] If an alternative is identified as at least potentially feasible, an in-depth discussion is required. [Citation.] On the other hand, when the infeasibility of an alternative is readily apparent, it 'need not be extensively considered.' " (Save Round Valley Alliance v. County of Inyo (2007) 157 Cal.App.4th 1437, 1457.) When agency finds alternatives are infeasible it must "describe the specific reasons for rejecting" them. (Cal.Code Regs., tit. 14, § 15091, subd. (c).)

Where a project will not result in any unmitigated significant, adverse impacts, the level of detail required in the alternatives analysis is presumably less. (Laurel Hills Homeowners Asson. V. City Council (1978) 83 Cal.App.3d 515, 521 ["if the feasible mitigation measures substantially lessen or avoid generally the significant adverse environmental effects of a project, the project may be approved without resort to an evaluation of the feasibility of various project alternatives contained in the environmental impact report…"[CEQA] does not mandate the choice of the environmentally best feasible project if through the imposition of feasible mitigation measures alone the appropriate public agency has reduced environmental damage from a project to an acceptable level]; Stevens v. City of Glendale, 125 Cal.App.3d 986 (1981) ["the requirements of Public Resources Code sections 21002 and 21002.1 are alternative rather than conjunctive requirements."]. Staff has concluded that with the proposed conditions of certification, PHPP would not result in any significant, adverse environmental impacts. Nevertheless, staff conducted a detailed evaluation of three alternative locations for the project site, and five alternative routes for the proposed transmission line. (Exh. 300, pp. 6-12 and 6-16.) Staff also discussed and analyzed the feasibility of several generation technology alternatives, including solar-thermal and photovoltaic. (Exh. 300, pp. 6-27 to 6-28.) All told, staff's alternatives analysis consists of over 250 pages. (Exh. 300, pp. 6-1 to A-230.)

Staff concluded that an all solar option, either thermal or photovoltaic, would not obtain the project objectives of ensuring that sufficient electricity was available to

meet the power needs of residential, commercial, and industrial users within the City of Palmdale and being located within City boundaries and would likely result in additional significant impacts. (Exh. 300, pp. 6-27 to -28.) An all solar facility would require approximately 2,280 to 5,700 acres of land to generate the equivalent of the proposed project: 570 megawatts. (Exh. 300, p. 6-27.) While such an alternative may reduce the already-mitigated impacts associate with air emissions, it would also likely result in a greater potential to impact biological resources. (Id.) Additionally, it would not be able to meet to electricity needs of City of Palmdale in the evening hours. (Exh. 300, p. 6-28.) For these legitimate reasons, this alternative technology was rejected.

Staff also considered replacing the proposed solar thermal component with rooftop photovoltaic, but dismissed that option because it would be unlikely to meet the objective of integrating the solar component to increase project efficiency. (Exh. 300, p. 6-28.) Staff did not reject any of these alternatives on the ground of economic infeasibility, as implied by CBD. (CBD Opening Brief, p. 15.)

CEQA only requires staff to analyze a reasonable range of alternatives; this does not require a discussion of every conceivable permutation of technology combinations that could possibly make up a power plant. Considering that the project will not result in any unmitigated significant, adverse impacts, staff's analysis is sufficiently exhaustive to provide the public and decision-makers enough information on which to base an informed decision.

VI. Conclusion

For the reasons discussed above, staff recommends the Committee reject CBD's arguments and approve the proposed project with the conditions of certification recommended by staff.

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Respectfully submitted,

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APPLICATION FOR CERTIFICATION
For the *PALMDALE HYBRID*
POWER PROJECT

Docket No. 08-AFC-9

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DECLARATION OF SERVICE

I, Janet Preis, declare that on, April 1, 2011, I served and filed copies of the attached *Energy Commission Staff's Reply Brief,* dated April 1, 2011. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: [http://www.energy.ca.gov/sitingcases/palmdale/index.html]. The document has been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

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__x___ sent electronically to all email addresses on the Proof of Service list;

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AND

For filing with the Energy Commission:

__x_ sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (preferred method);

OR

____depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 08-AFC-9
1516 Ninth Street, MS-4
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I declare under penalty of perjury that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

____/s/ Janet Preis_____