

APPEAL OF PSD PERMIT FOR PALMDALE HYBRID POWER PROJECT

STANDARD OF REVIEW

“a permitting authority’s decision to issue a PSD permit will ordinarily not be reviewed unless the decision is based on either a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants Review” PRAIRIE STATE GENERATING COMPANY PSD Appeal No. 05-05

124.19(a) requires that a petitioner both state the objections to the permit that are being raised and explain why the permit decision maker’s previous response to those objections (i.e., the decision maker’s basis for the decision) is clearly erroneous or otherwise warrants review. *See Kawaihae Cogeneration*, 7 E.A.D. at 114; *see also In re P.R. Elec. Power Auth.*, 6 E.A.D. 253, 255 (EAB 1995); *In re Genesee Power Station L.P.*, 4 E.A.D. 832, 866-67 (EAB 1993). It is not enough simply to repeat objections made during the comment period. *E.g.*, *Zion Energy*, 9 E.A.D. at 705; *Knauf Fiber Glass*, 8 E.A.D. at 127..

THE EPA FAILED TO RECORD COMMENTS FOR RESPONSE

The Response indicates; “In the case of EPA’s proposed PSD permit for the PHPP, EPA determined that it would be appropriate to conduct a public information meeting on September 14, 2011, prior to the public hearing, in order to provide an opportunity for the public to have face-to-face informal discussions with EPA staff, and to raise questions, regarding any issues the public wished to discuss relevant to EPA’s proposed PSD permitting action, including environmental justice issues...EPA responded to questions at these meetings but did not formally record remarks from those in attendance.” The EPA can have all the public meetings that it chooses but when they fail to “formally record” the public comments for response, during a comment period they violate the Clean Air Act’s adherence to the constitution. The EAB in the Russell City Energy Center Remand stated; “Mr. Simpson represents that the “public attended this workshop believing that this was a hearing and made ‘comments’ believing that they would be considered.” Opening Statement of Rob Simpson at 2. While there is no independent verification of this representation, it is certainly plausible. In any event, the fact that the workshop occurred during the time frame of the draft permit comment period with likely District participation and that no recording was made of any public comments (including air quality issues) raises legitimate concerns about whether the District showed sufficient diligence in

addressing public input into the permitting process for RCEC...As we noted in *Weber and Rockgen*, the essence of the alleged “harm” from the procedural violation is not simply its potential impact on the final permit decision, but rather the deprivation of the public’s opportunity to have its views considered by the permitting agency. *See* §124.17.”

The above referenced workshop was merely another agencies function, that the permitting authority participated in. The EPA actions here are particularly egregious in light of this EAB guidance. This “public information meeting” was conducted by the permitting authority, announced on the only public notice for the permit and held on the same day as the public hearing, before the hearing. The EPA “did not formally record remarks from those in attendance.” It was purportedly; “to provide an opportunity for the public to have face-to-face informal discussions with EPA staff, and to raise questions, regarding any issues the public wished to discuss relevant to EPA’s proposed PSD.” or comment and have their comments considered. There was no public benefit by the permitting authority to conduct “informal discussions” The only purpose that conducting this meeting before the Hearing could have possibly served is to derail formal discussions and appear to alleviate the permitting authority from its duty to adequately consider comments. The EPA relegated any commenter’s who attended the “information meeting” to the back of the bus. They deemed all comments insignificant under 40 CFR 124.17 The Board need read no further and should simply remand the permit on this threshold issue and allow the EPA to conduct a comment opportunity which includes the recording of the comments.

Response 29

“40 CFR Part 124 provides that EPA is to consider all public comments on its proposed PSD permit submitted in writing during its public comment period or submitted at a public hearing held with respect to its proposed action. EPA has met this requirement.”

In response to my comment 29 regarding the EPA failing to consider oral comment, the EPA seemed to wish to interpret, the expansion of the peoples comment rights into the written and hearing opportunities of 40 CFR Part 124 as somehow negating the underlying plain meaning of the word comment. When a person attends an event announced by the permitting authority, on the public notice for a draft permit, and makes oral comments to the permitting authority regarding the draft permit, the comments should be considered and responded to consistent 40 CFR Part 124.17

THE EPA FAILED TO CONSIDER IF THE PROJECT WAS NEEDED?

I posed comments regarding the need for the facility or the “no build” alternative. In Praire; “The statutory text’s plain meaning does not lend itself to excluding public comments

that request consideration of the “no build” alternative to address air quality concerns. Moreover, the Board’s and Administrator’s prior decisions would appear to recognize that consideration of “need” is an appropriate topic under section 165(a)(2). See *In re EcoEléctrica, LP*, 7 E.A.D. 56, 74 (EAB 1997) (recognizing that question of need for the proposed facility may be raised in a PSD permitting appeal, but declining to grant review on the grounds that it was not clear error for the permit issuer to defer to the state agency tasked with the responsibility to consider need for the facility); *In re Kentucky Utils. Co.*, PSD Appeal No. 82-5, at 2 (Adm’r 1982) (same).”

Page 35-36 of the response to comments talks about a need assessment or no project alternative and defers the need analysis to the CEC or PUC. The PUC has not reviewed the project and no permit condition or California law requires it. The developer is not an “investor owned utility”. (Response)

The CEC Decision states” “Staff’s expert testified that they do not analyze need..... Senate Bill No. 110, which became Chapter 581, Statutes of 1999 repealed Public Resources Code sections 25523(f) and 25524(a) and amended other provisions relating to the assessment of need for new resources. SB 110 removed the requirement that, to certify a proposed facility, the Commission must make a specific finding that the proposed facility is in conformance with the adopted integrated assessment of need.” (emphasis added) CEC Decision (notably the EPA response repeatedly refers to the “California Energy Commission’s (CEC) Presiding Member’s Proposed Decision (PMPD)... which is a 700-page document.” This is not the is not the Official Policy Document of the CEC for this project, known as the Commission Decision which is a 669 page document. It is unclear if the EPA is referring to a document on the CEC docketed as the PMPD a 665 page document.)

The EPA recognized the “integrated assessment of need” also known as the Integrated Energy Policy Report (IEPR) (an official policy document of the CEC) in its response; “Various mechanisms are in place within the State of California that provide a structure for considering the need for new natural gas-fired power plants in the context of the State’s renewable energy requirements and policies. These mechanisms include, among other things, a regular integrated assessment by the CEC of major energy trends and issues facing the State’s electricity and natural gas sectors,”

But then the EPA relied on another document to demonstrate a “need” for the facility, on page 35-36 of their response a document, they identified as; “CEC Committee Guidance on Fulfilling CEQA Responsibilities” This appears to be the same document titled; COMMITTEE GUIDANCE ON FULFILLING CALIFORNIA ENVIRONMENTAL QUALITY ACT RESPONSIBILITIES FOR GREENHOUSE GAS IMPACTS IN POWER PLANT SITING APPLICATIONS. The document states; “The views and recommendations contained in this document are not official policy of the Energy Commission but express the recommendations of

the Siting Committee. “

The 2009 IEPR (Official Policy Document) states; “Once CHP targets and OTC replacements were made, only a few new natural gas plants had to be added to meet local capacity and energy needs. Those were in the Sacramento Municipal Utility District, Turlock Irrigation District, and Imperial Valley control areas, which have no OTC and limited numbers of large host industrial” 191 *(Combined Heat and Power (CHP), Once Through Cooling(OTC)), Notably the OTC facilities have their own replacement projects and the record does not demonstrate that any of them have delegated their replacement to this developer.*

The IEPR further states; “the possibility of overgeneration, a condition when more generation is provided than there is available load, will require additional analysis. In the June 29, 2009, IEPR Committee workshop on renewable integrating issues, SCE reported that a Nexant study suggests a possible overgeneration problem in April and May as the state moves to 2020” 193 (Southern California Edison (SCE) is the Utility in the area where the project is planned)

The Response states; “a rigorous and robust analysis would be time-consuming and burdensome for the permit issuer...In California, in order to conduct a reasoned analysis to determine the need for new natural gas-fired power plants in general, or a specific natural gas-fired power plant in particular, either within the State as a whole, or in a particular geographic location within the State, 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. Therefore, EPA does not believe that it is appropriate to conduct the type of rigorous and robust analysis that would be required to definitively determine the need for the Project. We note that even if EPA did have the expertise and resources to conduct such an analysis, the level of analysis and information submitted by the commenter does not consider all of the relevant factors or provide the type of detailed information necessary for such an analysis.” 36

It appears that the EPA merely needed to read the IEPR, which it referenced in its response, and look at a map. I do not suggest that review of the entire document is necessary to derive that; since the project is not near Sacramento, Turlock, or Imperial Valley, it is not needed. It was clear error for the permit issuer to issue the permit and shirk its responsibility to consider the No build alternative by deferring analysis to state agencies that are statutorily prohibited from considering the need for the project, have expressed a lack of need in the area, or have not opined on the project at all.

THE EPA FAILED TO ADEQUATLY CONSIDER CONTROL OPTIONS

In consideration of Carbon Capture and Storage (CCS) The fact sheet discontinued consideration

at step 2 of a BACT analysis and the response to comments begins consideration at step 4. Step 3 of a BACT analysis is omitted. The response states; “*GHG BACT Analysis – Step 4 - CCS Cost Analysis* As provided in the CEC’s PMPD, the estimated capital costs for the PHPP are \$615-\$715 million dollars. For comparison purposes, if these capital costs were annualized (over 20 years) they are about \$35 million. In comparison, the estimated annual cost for CCS is about \$78 million, or more than twice the value of the facility’s annual capital costs.” In the absence of the data required from step 3 which demonstrates the value of control measures, the EPA simply compared a price for CCS to the price for the facility. It is unclear how a comparison of the purported cost of control to the purported cost of the facility comports with a BACT analysis. The PSD and Title V Permitting Guidance for Greenhouse Gases states; BACT STEP 4.. “The economic impacts component of the analysis should focus on direct economic impacts calculated in terms of cost effectiveness (dollars per ton of pollutant emission reduced).”

and

“For over 20 years, EPA has applied and recommended that permitting authorities apply the top-down approach to ensure compliance with the BACT criteria in the CAA and applicable regulations. EPA Regional Offices that implement the federal PSD program (through Federal Implementation Plans (FIPs)) and state permitting authorities that implement the federal program through a delegation of federal authority from an EPA Regional Office should apply the top-down BACT process in accordance with EPA policies and interpretations articulated in this document and others that are referenced.” 19

BACT step 3 states;

“In determining and ranking technologies based on control effectiveness, applicants and permitting authorities should include information on each technology’s control efficiency (e.g., percent pollutant removed, emissions per unit product)” *the response includes no such determination* <http://www.epa.gov/nsr/ghgdocs/ghgpermittingguidance.pdf>

It is also unclear the basis for the \$78 million per year for CCS. The response relies on Report of the Interagency Task Force on Carbon Capture and Storage *but it states;*

“**III.A.4 CO₂ Capture Cost** DOE analyses indicate that for a new 550 MWe net output power plant, addition of currently available pre-combustion CO₂ capture and compression technology increases the capital cost of an IGCC power plant by approximately \$400 million (~25 percent) compared with the non-capture counterpart.” pg. 33

and

“Additional revenues from oil production may offset some costs for CO₂ storage in the context of an EOR operation. CO₂-EOR provides two potential economic incentives for encouraging the deployment of CCS, 1) CO₂ sales revenues at the individual project level, and 2) an increase in the total amount of domestic crude oil production. At the present time, an important limiting factor in new CO₂-EOR projects is a shortage of CO₂.”

The low end of the DOE estimate - 10% for the solar component “annualized (over 20 years)” equals \$1,300,000 per year as opposed to the EPA estimate of \$75,944,187.00 which is 58 times higher. This does not consider the potential “Additional revenues” A BACT analysis should indicate a control cost per ton of emission controlled.

The response ignored the potentials to pay for the technology through ancillary sources as described in the actual CEC policy document that should have been considered, The 2009 IEPR, which states: “The U.S. Department of Energy (DOE) recently solicited proposals for large-scale industrial CC S projects at facilities fueled chiefly by noncoal energy; it is poised to award more than \$1.3 billion in project cofunding authorized by the ARA of 2009. Further, DOE has added funds to its cooperative agreement with the Energy commission for the West Coast Regional Carbon Sequestration Partnership (WESTCAR B; a public-private research collaborative involving more than 80 organizations) to work with PG&E to conduct an engineering-economic evaluation of CC S at natural gas combined cycle plants in California. WESTCAR B also continues to work with the California Geological Survey and industry partners to characterize California deep saline formations suitable for commercial-scale CO 2 storage; two CO 2 storage field tests in the Central Valley are planned. Although the cost of applying CCS to natural gas power plants or oil refinery furnaces is relatively high using proven technologies (about \$75 per metric ton of CO2 avoided), the prospect of energy-saving technology improvements and the sale of captured CO2 to oilfield operators for oil recovery has increased likelihood that CCS can be economically competitive and, as a consequence, the interest of state agencies working on AB 32 compliance.” 109

The PSD and Title V Permitting Guidance for Greenhouse Gases states; “As a key step in the process of making GHGs a regulated pollutant, EPA has considered scientific literature on impacts of GHG emissions and has made a final determination that emissions of six GHGs endanger both the public health and the public welfare of current and future generations.107 Among the public health impacts and risks that EPA cited are anticipated increases in ambient ozone and serious ozone-related health effects, increased likelihood of heat waves affecting mortality and morbidity, risk of increased intensity of hurricanes and floods, and increased severity of coastal storm events due to rising sea levels. With respect to public welfare, EPA cited numerous and far-ranging risks to food production and agriculture, forestry, water resources, sea level rise and coastal areas, energy, infrastructure, and settlements, and ecosystems and wildlife. The potentially serious adverse impacts of extreme events such as wildfires, flooding, drought and extreme weather conditions also supported EPA’s finding. 107 *Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act; Final Rule*, 74 FR 66496, December 15, 2009 “ 40-41 <http://www.epa.gov/nsr/ghgdocs/ghgpermittingguidance.pdf>

“In such cases the ability of design considerations to make the process inherently less polluting must be considered as a control alternative for the source. Inherently lower polluting processes/practice are usually more environmentally effective because of lower amounts of solid wastes and waste water than are generated with add-on controls. These factors are considered in the cost, energy and environmental impacts analyses in step 4 to determine the appropriateness of the additional add-on option.” NSR manual

THE COMMENT PERIOD WAS INADEQUATE

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After refusing to extend the comment period, the EPA did not fully quote my request for an extension of the comment period in its response to comments. Their quote excludes the basis for the request. The exclusion of the basis serves to bolster their argument that I failed to meet the threshold requirement of 40 CFR 124.13. In context it is clear that I exactly met the requirement of the statute. To interpret the statute in a more restrictive manner and deny the extension of the comment period was a clear error that served to deprive me of my rights and preclude my, and others, participation. My request stated;

Dear Ms. Beckham,

We will be commenting on the above referenced project. There is a massive amount of information to review. Please extend the comment period by 30 days so that we can submit more complete comments.

Thank you

Rob Simpson

The response states; “EPA reviewed the documents made available and estimated the number of pages of all documents at around 1,000 pages.” Even if the administrative record and applicable laws equated to around 1000-2000 pages (which they did not) it is too much to read, form an opinion and comment consistent with 40 CFR 124.13. The fact is that the administrative record for this proceeding is much larger. The CEC docket for this proceedings indicates over 13,000 pages of records. The EPA Administrative Record indicates, many thousands of pages of documents. Relevant EAB Decisions plus other guidance documents and a review of the Clean Air Act make effective comments virtually impossible in 30 days

The EPA exceeded its authority in denying an extension of the public comment period. 30 days was not an adequate time period to comment on the proposed action in compliance with 124.13. The EPA demonstrated this in its response to comments to each commenter (except the applicant). In each instance that my, and others comments, were dismissed, what the EPA was really saying is that the comments did not reach the threshold of 40 CFR 124.13. More time to

comment could have cured commenter's purported inability to reach the threshold.

It appears that the one commenter best able to affect change to the permit through comments was the applicant, who was given a free hand to rewrite the permit through comments, without public scrutiny. Ironically the EPA quipped in response to a comment of mine "EPA does not agree with the commenter's suggestion that changes to a permit are the only way to measure whether adequate public participation has occurred." Although the response misstates my suggestion, apparently changes are a measure for the applicant, and they are a measure for those of us in the public who seek changes.

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The commenter questioned whether the EPA or other involved government entities posted notice of the NAAQS, the area attainment status, or the Project's effects in relationship to those standards.

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EPA did not identify any other commercial or industrial growth associated with the source. Although not germane to the residential, commercial and industrial growth that is likely to occur to support the source under review, the analysis also briefly noted the applicant's projections concerning growth associated with the power generated by the Project, which indicated that the PHPP would supply energy to accommodate the existing demand and projected growth in the Southern California region.

Fact sheet **9.3 Growth**

"With regards to the question of whether the Project's power generation would induce growth, the applicant anticipates that the Project would likely displace the older once-through cooling facilities in the Southern California region that are expected to be retired in the future. Therefore, rather than induce growth, PHPP would supply energy to accommodate the existing demand and projected growth in the Southern California region."

PUBLIC UTILITY?

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In response to my comment the EPA determined; "The proposed facility will not operate as a public utility, so it is not clear that the applicant has the authority to obtain the needed ROWs outside the city limits." It is unclear from the record how the EPA made this determination and it appears at odds with the facts. The project is apparently to be publicly owned, by the City of

Palmdale, and will generate the utility, electricity. By definition this appears to be a public Utility or in service of one. Right Of Ways (ROWs) already exist on this record and the government could obtain new ones if needed.

THE EPA FAILED TO CONSIDER ALGAE SEQUESTRATION?

39

The EPA appears to have misunderstood my comment regarding Algae sequestration of emissions. If I had additional time to comment I could have made more complete comments. Algal sequestration is not necessarily a mitigation or offset practice as suggested in their response. It can be an add-on control technology. Relevant quotes from, The United States Department of Energy (DOE) National Algal Biofuels Technology Roadmap, include; “this report could be “influential scientific information” as that term is defined in the Office of Management and Budget’s Information Quality Bulletin for Peer Review (Bulletin). This report has been peer reviewed...

Since photoautotrophic algae growth requires CO₂, and productivity can be enhanced by supplementing the limited CO₂ available from the atmosphere, concentrated sources flue gas from fossil-fuel burning power plants and other CO₂-emitting industrial sources can be beneficially used in algae production...

This chapter provides an overview of the issues associated with site location and key resources for various microalgae and macroalgae production approaches (Exhibit 9.1). Further, an in-depth discussion is included on the potential to couple land-based microalgae biomass production with wastewater treatment and industrial sources of concentrated CO₂, both of which influence siting decisions for algal biofuel production. Integration with wastewater treatment can play an additional important role in the sourcing of nutrients from both the input wastewater and from possible nutrient recycling from residual algal biomass...

Exhibit 9.4 Rough scoping assessment of preferred site locations for outdoor algae production



a) Regions with annual average climate conditions meeting selected criteria: ≥ 2800 hour annual sunshine, annual average temperature $\geq 55^\circ$ F, and ≥ 200 freeze-free days



b) Fossil-fired power plant sources of CO₂ within 20 miles of municipal wastewater facilities in the preferred climate region

From a resource use standpoint, integrating algae production with wastewater treatment, discussed later in this chapter, has the potential benefits of productively using non-fresh wastewater resources for renewable fuels, putting less additional demand on limited fresh water supplies, reducing eutrophication of natural water bodies, and recycling nutrients...

ADVANTAGES OF CO-LOCATION OF ALGAE PRODUCTION WITH STATIONARY INDUSTRIAL CO₂ SOURCES

Abundant quantities of concentrated CO₂ available from stationary industrial sources can supplement low concentration CO₂ from the atmosphere.

Excess heat or power may be available to provide heating or cooling for improved thermal management of algae cultivation systems – this will allow developing algal cultivation facilities under a broader range of geographic and climate conditions on or near a year-round basis.

Excess wastewater or cooling water may be available, found often in proximity of power plants – overcoming a primary resource challenge for algae cultivation at scale, while providing beneficial re-use of cooling water and wastewater.

Potential carbon credit for utilities. This will require establishing a U.S. policy on carbon absorption and re-use as transportation fuel in lieu of permanent sequestration....

Coal-fired power plants may be a convenient source of CO₂ for algae production, but from an emissions control perspective, construction of algae systems at natural gas-fired power plants may be a better investment.”

The document also contemplates; “commercialization of algal cultivation facilities co-located with industrial CO₂ sources and/or wastewater treatment facilities.”

http://www1.eere.energy.gov/biomass/pdfs/algal_biofuels_roadmap.pdf

The project appears to meet the siting criteria identified in Exhibit 9.4 of the above DOE report. I am not necessarily suggesting that the algae produced should be converted to biofuel as the DOE proposes. A venturi scrubber would capture a variety of pollutants including CO₂, its discharge could be drained to ponds, perhaps the existing algae ponds at the wastewater treatment plant. Photosynthesis is not an unproved technology.

The, EPA Basic Concepts in Environmental Sciences, states;

Venturi Scrubber “(Wet scrubbers are air pollution control devices.) In venturi scrubbers, a scrubbing liquid is introduced into the gas stream, which then passes through a contracted area of the scrubber at a high velocity creating a high dispersion of fine droplets. These fine droplets capture the gaseous and particulate pollutants.” (emphasis added)

<http://www.epa.gov/apti/bces/glossary/#W>

The EPA failed to consider the wet scrubbers and/or on site algal sequestration opportunities as GHG control equipment.

THE EPA FAILED TO DEMONSTRATE BACT FOR SOLAR?

40

The EPA failed to do a BACT analysis of the Solar component, my comment should have been responded to with a BACT determination using the 5 step BACT analysis described in the PSD and Title V Permitting Guidance for Greenhouse Gases. If I had more time I could have written more complete comments. The EPA did not identify if Photovoltaic was a greater control or the solar thermal planned. It appears that the solar thermal will only be effective when fossil fuel is being burned. If the State of California estimates are correct there will be no demand for the facility to operate and so the solar component will not function. Conversely a photovoltaic component could generate, on a daily basis, as a first response without the necessity to burn fossil fuel. Photovoltaic could also serve the water heating requirements that the solar thermal is designed to serve without the associated emissions that the solar thermal emits. The solar project planned may also include use emissions of the nitrogen used in their operation A BACT analysis could have considered the planned emissions from the solar project and included appropriate limits

In response to my comment “If 50 MW of solar represents a control technology would a greater solar component represent greater control? What is the ideal ratio of solar to natural gas for maximum GHG and EJ benefits for this proposal?” the EPA responded; “The applicant is proposing to use 251 acres of a 331-acre lot for solar generation. An-all solar facility would not be feasible because of the space constraints of the 331-acre lot and because solar energy is not available at all times to meet baseload demands.” The nuances of “ratio” seemed to escape the response the response went straight from 251 acres to “An-all solar facility” The response identifies a “331-acre lot”. The CEC main page for the proceeding states; “The Palmdale Hybrid Power Project (PHPP) would be located on a 333-acre site that is currently vacant and undeveloped, and is part of a 613.4-acre property owned by the city of Palmdale. In February 2009, the city approved a general plan amendment, zone change, and tentative parcel map for the entire 613.4- acre city-owned property, including the 333-acre PHPP site. As a result, according to Resolution PC-2009-008, the entire city-owned site is intended for the PHPP and for other future industrial uses. Part of the resolution and ordinance state that the proposed discretionary actions are in the public’s best interests as they would result in the development of the PHPP and the generation of electricity through the use of both natural gas and solar power.” This purported “tentative parcel map” directly preceding the PSD application is not a final parcel map and so at least at the time of the application the parcel was 600 acres. The record does not indicate if a final map was recorded.

The “space constraints” identified by the EPA, as a basis for rejection of consideration of different project configurations is without basis. The project proponent owns at least 600 acres at the location. Even if the artificially created space constraint exists the EPA did not consider the difference between the 251 acre solar facility and one that matched the purported 331 acre lot. Surely the facility rooftops, drainage areas and roadways could be shaded by solar panels. The project proponent should not be allowed narrow a project description to creates space constraints, where none exist and accomplish evasion of consideration of control options. The record indicates no particular approved plan for the rest of the 600 acres or that solar energy collection would interfere with any other proposed use. The EPA should consider the 600 acre site or at least the 331 acres in a BACT analysis which demonstrates the potential types of solar generation, control effectiveness and cost. If the EPA were to accept the site constraint created by the developer than a permit condition requiring the developer to at least provide heat to future site developments in a Combined Heat and Power (CHP) configuration should be included.

The CEC Final Staff Assessment (FSA) states. “Power plants using all solar technology, whether solar-thermal or photovoltaic (PV), would require large areas of land for siting equipment. Solar power plants use between 4 acres per MW for the Linear Fresnel Technology to 10 acres per MW.” If this project were to generate 50 megawatts on 251 acres that would be 5.02 acres per megawatts or 25% less efficient than the CEC purported 4 acres per megawatt which could have been considered BACT for this facility. The problem is that the permit is so vague that it is unclear what solar is to be built. The Permit and response indicate that; “Integrated (through the HRSG and STG) with a 251-acre solar-thermal plant (STP) consisting of parabolic solar-thermal collectors and associated heat-transfer equipment designed to contribute up to 50 MW of generation from the STG” “up to 50 MW” could be anything under 50. The applicant could wipe out 251 acres of habitat without adequate benefits. It appears that the applicant could build 1 MW of inefficient solar and comport with the permit condition. There is inadequate information as to scale or efficiency of the system.

The EPA’s contention that solar can not meet baseload demands is without basis. The IEPR states; “Examples of energy storage technologies commercially available and under development include advanced technology batteries, flywheels, compressed air energy storage, pumped hydroelectric energy storage, capacitors, and others. These technologies can provide value at each level in California’s electric grid – generation, transmission and distribution, and end use – with storage technologies varying in type and size depending on the level of service needed. <http://www.energy.ca.gov/2009publications/CEC-100-2009-003/CEC-100-2009-003-CMF.PDF>

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It is difficult to opine on the EPA response until the EPA chooses to make available the

modeling data and provide an adequate venue to comment. In response 26; “EPA reviewed the documents made available and estimated the number of pages of all documents at around 1,000 pages” This is not an adequate number of pages to include modeling files.

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It appears that the decision to deny an extension of the Public comment period served to allow this permit to be issued at 5 pm on the eve before the rules changed. Notably the EPA took 35 days to respond to comments which consisted of a couple hundred pages.

We would also caution against the literal and uncritical application of very prescriptive procedures for identifying which background sources should be included in the modeled emission inventory for NAAQS compliance demonstrations, including those described in Chapter C, Section IV.C.1 of the draft New Source Review Workshop Manual (EPA, 1990), noting again that Appendix W emphasizes the importance of professional judgment in this process.

With regards to the question of whether the Project’s power generation would induce growth, the applicant anticipates that the Project would likely displace the older once-through cooling facilities in the Southern California region that are expected to be retired in the future. Therefore, rather than induce growth, PHPP would supply energy to accommodate the existing demand and projected growth in the Southern California region.

The response claimed; “Our EJ Analysis also described health effects associated with ground-level ozone exposure and described the planning process that is being undertaken to address ozone nonattainment in the area. The EJ Analysis noted that the local air districts are working diligently to ensure that there is a comprehensive plan with adequate controls for attaining the 0.08 parts

per million (ppm) NAAQS for ozone, and that EPA is currently reviewing the State of California plan for the Western Mojave Desert nonattainment area, which includes Antelope Valley.

EPA reads the language in EO 12898 directing federal agencies to identify and address impacts “as appropriate,” and “[t]o the greatest extent practicable and permitted by law,” to afford considerable discretion to the Agency in determining how to address any impacts or issues that we may identify in our review of environmental justice considerations. In addition, since the EO references all of the programs, policies and activities of each federal agency to which it applies, .” response 23

The EPA misinterpreted and misapplied the “language in EO 12898” to afford itself “considerable discretion”, when this exercise of discretion deviates from the diligence of

exercising its duties to; “greatest extent practicable and permitted by law” as it did here then the action warrants review. Rushing to permit this facility in the hours before the rules changed, that could have better protected EJ communities, is an example of this deviation. Failing to extend the comment period is an example of this deviation.

The Response states that “EPA may consider how best to respond to the environmental justice concerns raised in public comments within the larger context of the actions EPA is taking to reduce environmental hazards in the communities potentially affected by emissions from the Project. EPA also believes it is appropriate to consider actions being taken by State and local government agencies to address these concerns” except that the EPA has taken no action. The EPA has not approved “the State of California plan for the Western Mojave Desert nonattainment area” despite having years to have done so. This is the plan that would allow the, presently illegal, inter district, inter basin trading that the EPA and CEC commented against for this project.

The EPA did not find it “appropriate to consider actions” when advised by commenters. The response states. this PSD permitting action is not the appropriate context for EPA to exercise its oversight authority, as the District’s permitting process is not among the parameters that the PSD provisions of the CAA direct EPA to consider in this action.” The EPA apparently has made no attempt to correct the CEC’s misplaced reliance on the EPA in approving the project. The Response states; “ To the extent that the CEC expressed the view that EPA reviews non-PSD requirements such as offsets as part of its PSD review, the CEC was incorrect. Reviewing the NNSR permit and offsets is a part of EPA’s oversight activities of a SIP-approved program.

THE EPA FAILED TO ADEQUATLY CONSIDER THE WORK OF PROFESSOR JACOBSON IN RELATIONSHIP TO THE LOCALIZED EFFECTS OF GHGS AND AS A PRECUSSER TO OTHER EMISSIONS.

THE EPA FAILED TO DEMONSTRATE THE EFFECTIVENESS OF THE PRECONSTRUCTION MONITORING

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