

State of California
Energy Resources Conservation and Development Commission

CALIF ENERGY COMMISSION
08-AFC-2
AUG 18 2010
RECEIVED IN DOCKETS

In the Matter of:)
Application for Certification)
for the Beacon Solar Energy Project)

Docket No. 08-AFC-2

**STAFF'S COMMENTS ON THE
PRESIDING MEMBERS PROPOSED
DECISION**

On July 20, 2010, the Committee issued the Presiding Members Proposed Decision, (PMPD). In addition to the joint letter, dated July 26, 2010, submitted to the Committee by staff and the applicant on the topics of Soil & Water and Cultural Resources, staff provides the following comments on the PMPD for the other technical areas. For the convenience of the Committee, recommended additions to the text are shown in underline while strikethrough represents text that should be deleted. Comments follow the order of the PMPD.

INTRODUCTION

PMPD: *Water for cooling will be tertiary treated recycled water supplied either by California City or Rosamond Community Services ~~Sanitary~~ District. Water for other industrial uses such as mirror washing, would be supplied from onsite groundwater wells, which also would be used to supply water for employee use (e.g., drinking, showers, sinks, and toilets). A package water treatment system would be used to treat the groundwater to meet potable standards for employee use and a septic system and onsite leach field would be used to dispose of sanitary wastewater. (PMPD p. 2)*

STAFF COMMENT: The correct name is Rosamond Community Services District.

ALTERNATIVES

PMPD: *identified and evaluated alternative sites to determine whether an alternative site would ~~mitigate~~ avoid or lessen impacts of the proposed site and whether an alternative site would create impacts of its own; (PMPD p. 17)*

STAFF COMMENT: The terms "avoid" and "lessen" better describe the criteria staff used in evaluating alternatives.

PMPD: Staff analyzed five alternatives to BSEP's original design: photovoltaic technologies, "dry cooling" (air cooled condenser), wet cooling using brackish water near Koehn Dry Lake, wet cooling using recycled water supplied by the Rosamond Community Services District (RCSD), and wet cooling using recycled water supplied by California City. Staff determined, and we concur, that all five were reasonably feasible alternatives that would accomplish most of the projects objectives while mitigating all the significant adverse impacts. ~~other than visual impacts.~~ (Ex. 500, pp. 6-6 to 6-14.) (PMPD p. 18)

STAFF COMMENT: CEQA only requires mitigation for significant adverse impacts. The committee found that there were no unmitigable significant adverse impacts to Visual Resources so given that finding, reference to staff's conclusion on the issue is not necessary and may cause confusion.

PMPD: #2. None of the site location alternatives to the project offer a superior alternative in terms of feasibly meeting project objectives or of reducing any significant potential environmental impacts without creating new and additional adverse impacts. (PMPD p. 21)

PMPD: #4. All five alternative generation technologies analyzed were reasonably feasible alternatives that would accomplish most of the projects objectives while mitigating all the adverse impacts ~~other than visual impacts.~~ (PMPD p. 21)

STAFF COMMENT: Suggested changes reflect evidence in the record regarding alternative project sites. Changes also avoid confusion about impacts to Visual Resources.

GENERAL CONDITIONS

PMPD: All hardcopy submittals shall be addressed as follows:
Chris Davis, Compliance Project Manager
(08-AFC-2C)
California Energy Commission
1516 Ninth Street (MS-2000)
Sacramento, CA 95814
CMDavis@energy.state.ca.us (PMPD p. 29)

PMPD: Confidential Information (COMPLIANCE-8)

Any information that the project owner deems confidential shall be submitted to the Energy Commission's ~~Dockets Unit~~ Executive Director with an application for confidentiality pursuant to Title 20, California Code of Regulations, section 2505(a). Any information that is determined to be confidential shall be kept confidential as provided for in Title 20, California Code of Regulations, section 2501 et. seq. (PMPD p. 32)

STAFF COMMENT: Under Commission regulations applications for confidentiality are to be directed to the Executive Director.

~~**PMPD: The Energy Commission has established a toll free compliance telephone number of 1-800-858-0784 for the public to contact the Energy Commission about power plant construction or operation-related questions, complaints or concerns. (PMPD p. 39)**~~

STAFF COMMENT: Staff understands that this service is no longer in operation.

ENGINEERING ASSESSMENT

PMPD: STRUCT-3 is missing the following verification: (PMPD p. 61)

Verification: On a schedule suitable to the CBO, the project owner shall notify the CBO of the intended filing of design changes and shall submit the required number of sets of revised drawings and the required number of copies of the other above-mentioned documents to the CBO, with a copy of the transmittal letter to the CPM. The project owner shall notify the CPM, via the monthly compliance report, when the CBO has approved the revised plans.

TRANSMISSION SYSTEM ENGINEERING

PMPD: However, since BSEP will take 25 months to complete and the certification hearing on the project will not even occur until late summer of 2010 or fall of 2011, we again find that such a condition is unnecessary for mootness. Therefore, we find that CURE has not proven that such a modification is necessary. (PMPD p. 84)

STAFF COMMENT: While operation of the facility is not expected until 2012 or 2013, the hearing on the project already occurred in 2010.

PUBLIC HEALTH AND SAFETY

PMPD: *The generation of electricity using fossil fuels, even in auxiliary equipment a back-up generator at a thermal solar plant, (such as heaters or back-up engine generators) produces air emissions known as greenhouse gases in addition to the criteria air pollutants that have been traditionally regulated under the federal and state Clean Air Acts. California is actively pursuing policies to reduce GHG emissions that include adding renewable generation resources to the system which do not emit GHG. (PMPD p. 100)*

PMPD: *Whether BSEP GHG construction and operation emissions will have significant impacts; and (PMPD p. 101)*

STAFF COMMENTS: The suggested language is more specific and reflects evidence in the record.

PMPD:

c. Emissions Performance Standard

Senate Bill (SB) 1368 of 2006, and regulations adopted by the Energy Commission and the Public Utilities Commission pursuant to the bill, prohibit utilities from entering into long-term commitments with any base load facilities that exceed an Emission Performance Standard (EPS) of 0.500 metric tonnes of CO₂ per megawatt-hour (this is the equivalent of 1100 pounds CO₂/MWh). (Pub. Util. Code, § 8340 et seq.; Cal. Code Regs., tit. 20, § 2900 et seq.; CPUC D0701039.) Currently, the EPS is the only LORS that has the effect of limiting power plant GHG emissions. The BSEP, as a renewable energy generation facility, is determined by rule to comply with the Greenhouse Gas Emission Performance Standard requirements of SB 1368 (Chapter 11, Greenhouse Gases Emission Performance Standard, Article 1, Section 2903 [b][1]). ~~BSEP is exempt from SB 1368 because, as a solar project which shuts down every night, it would operate at or below a 60 percent capacity factor.~~ (PMPD p. 102)

There is no adopted, enforceable federal or state LORS applicable to BSEP construction emissions of GHG. ~~Nor is there a quantitative threshold over which GHG emissions are considered "significant" under CEQA.~~ Nevertheless, there is guidance from regulatory agencies on how the significance of such emissions should be assessed. For example, the most recent guidance from CARB staff recommends a "best practices" threshold for construction emissions. [CARB, Preliminary Draft Staff Proposal, Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act (Oct. 24, 2008), p.

9]. Such an approach is also recommended on an interim basis, or proposed, by major local air districts. (PMPD p. 104)

The proposed project would be permitted, on an annual basis, to emit over ~~48000~~ 4,800 metric tonnes of CO₂-equivalent per year if operated at its maximum permitted level. The BSEP, as a renewable energy generation facility, is determined by rule to comply with the Greenhouse Gas Emission Performance Standard requirements of SB 1368 (Chapter 11, Greenhouse Gases Emission Performance Standard, Article 1, Section 2903 [b](1)). ~~BSEP is a solar project with a nightly shutdown so it will operate less than 60 percent of capacity; therefore, the project is not subject to the requirements of SB 1368 and the Greenhouse Gas Emission Performance Standard.~~ Nonetheless, the BSEP, at 0.008 MTCO₂E/MWh, would easily meet both. (PMPD p. 106)

California Electricity Supply	Annual GWh	
Statewide Retail Sales, 2008, estimated ^a	265,185	
Statewide Retail Sales, 2020, forecast ^a	308,070	
Growth in Retail Sales, 2008-20	42,885	
Growth in Net Energy for Load ^b	46,316	
California Renewable Electricity	GWh @ 20% RPS	GWh @ 33% RPS
Renewable Energy Requirements, 2020 ^c	61,614	101,663
Current Renewable Energy, 2008	29,174	
Change in Renewable Energy-2008 to 2020 ^c	32,440	72,489
Resulting Change in Non-Renewable Energy ^d	13,876	(-36,173)

Please remove the negative sign from the last cell in the table. It currently reads as a double negative. (PMPD p. 107)

STAFF COMMENT: The proposed language is a more accurate description of the project's compliance with greenhouse gas emission performance standards.

PMPD: FINDINGS OF FACT

1. *The GHG emissions from the BSEP construction are likely to be 16,770 MTCO₂ equivalent ("MTCO₂E") during the 25-month construction period, which is the annual equivalent of 4445 8,050 MTCO₂E. (16,770 X 25 / 12 = 8,050)*
2. *The construction GHG emissions are minimal in comparison to the GHG emission reductions that the project will enable in its lifetime. There is no numerical threshold of significance under CEQA for construction-related GHG emissions. (PMPD p. 112)*
9. *BSEP, as a renewable energy facility, is determined by rule to comply with the Greenhouse Gas Emission Performance Standard requirements of SB 1368. The SB 1368 EPS is not applicable to BSEP GHG emissions because the project will be shut down nightly, thus operating at less than a 60 percent capacity factor.*
14. *When it operates, BSEP will displace generation from ~~less efficient (i.e., higher heat rate and therefore higher-GHG-emitting)~~ power plants. (PMPD p. 113)*

CONCLUSIONS OF LAW

1. *BSEP construction-related GHG emissions will not cause a significant adverse environmental impact.*
2. *~~The GHG emissions from a power plant's operation should be assessed in the context of the operation of the entire electricity system of which the plant is an integrated part.~~ (STAFF COMMENT: Redundant, compared to #7 below)*
32. *BSEP operational GHG emissions will not cause a significant environmental impact.*
43. *BSEP as a solar energy facility complies with the Greenhouse Gas Emission Performance Standard requirements of SB 1368. The SB 1368 EPS does not apply to USEGS, but if it did BSEP GHG emissions will meet or exceed it.*
54. *BSEP operation will help California utilities meet their RPS obligations.*
65. *BSEP operation will be consistent with California's loading order for power supplies.*
76. *BSEP operation will foster the achievement of the GHG goals of AB 32 and Executive Order S-3-05.*

87. *The GHG emissions of any power plant must be assessed within the context of the operation of the entire electricity system on a case-by-case basis to ensure that the project will be consistent with applicable goals and policies.*

98. *Any new power plant that we certify must:*

- a) not increase the overall system heat rate;*
- b) not interfere with generation from existing renewables or with the integration of new renewable generation; and*
- c) have the ability to reduce system-wide GHG emissions. (PMPD p. 114)*

STAFF COMMENT: The proposed language creates consistency between the changes suggested to the analysis and the findings of fact and conclusions of law.

PMPD:

AIR POLLUTION

~~*The evidence indicates that the GHG emission increases associated with construction activities would not be significant for several reasons. First, the period of construction would be short-term and not ongoing during the life of the project. Second, the best practices control measures such as limiting idling times and requiring, as appropriate, equipment that meets the latest emissions standards, would further minimize greenhouse gas emissions. Third, the use of newer equipment will increase efficiency and reduce GHG emissions and be compatible with low-carbon fuel (e.g., bio-diesel and ethanol) mandates that will likely be part of the ARB regulations to reduce GHG from construction vehicles and equipment. For all these reasons, the short-term emission of greenhouse gases during construction will be sufficiently reduced and will, therefore, not be significant. (Ex. 500, p. 4.1-83.) (PMPD p. 120)*~~

STAFF COMMENT: Move to page 105 at the end of Subsection 3, GHG Emissions During Construction, in the Public Health and Safety Section of PMPD.

PMPD: ~~*The record shows that BSEP would emit considerably less greenhouse gases (GHG) than existing power plants and most other generation technologies, and thus would contribute to continued improvement of the overall western United States, and specifically California, electricity system GHG emission rate average. The project would*~~

~~lead to a net reduction in GHG emissions across the electricity system that provides energy and capacity to California. Thus, the project would result in a cumulative overall reduction in GHG emissions from the state's power plants, would not worsen current conditions, and would thus not result in impacts that are cumulatively significant. (Ex. 500, p. 4.1-83.) (PMPD p. 123)~~

STAFF COMMENT: Move to page 111 at the end of subsection 4(b), Assessment of Operational Impacts, in the Public Health and Safety Section of PMPD.

PMPD: ~~The Pine Tree Wind Development Project, which is located approximately six miles west of the site in rugged topography, was completed in June 2009, shortly after Energy Commission completed the Final Staff Assessment, is currently under construction and scheduled to be in service in July 2009. Therefore, its construction would not significantly overlap the construction of the BSEP. Additionally, The maintenance emissions from Pine Tree Wind Development Project are not considered to be of a magnitude, given they would occur six miles from the BSEP site, to affect the modeling analysis on a cumulative basis. (Ex. 500, p. 4.1-35.) (PMPD p. 124)~~

STAFF COMMENT: The evidence presented at the June 8, 2010, evidentiary hearing indicates the Pine Tree Wind Project is operating.

45. Compliance with LORS (should be numbered "5") (PMPD p. 124)

PMPD: Rule 402 - Fugitive Dust

*This rule limits fugitive emissions from certain bulk storage, earthmoving, construction and demolition, and manmade conditions resulting in wind erosion. With the implementation of recommended staff conditions **AQ- SC3** and **AQ-SC7** the facility is expected to comply with this rule. (Ex. 500, p. 4.1-37.) (PMPD p. 126)*

FINDINGS OF FACT

10. *The BSEP onsite stationary and mobile emission sources would include: two 30 MMBtu propane-fueled boilers; an 11 cell cooling tower with a high efficiency mist eliminator with a guaranteed drift efficiency of .0005%; onsite diesel and gasoline fueled maintenance vehicles; a 300-bhp diesel-fired emergency fire water pump engine; twenty two heat transfer fluid (HTF) expansion/ullage tanks with associated piping; an HTF system carbon adsorption based vapor emission control system; spent HTF waste loadout; and, a bio-remediation area to treat HTF contaminated soils. (PMPD p. 128)*

8. The project will employ the best available control technology (BACT) to control emissions of criteria pollutants. (PMPD p. 129)
9. ~~The project will result in a cumulative overall reduction in GHG emissions from the state's power plants, will not worsen current conditions, and will not result in impacts that are cumulatively significant. (PMPD p. 129) (STAFF COMMENT: This finding is already in the GHG discussion.)~~

Air Toxics

AQ-80 Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission. (PMPD p. 157)

STAFF COMMENT: Suggested changes to the Fugitive Dust and Air Toxics sections are recommended for consistency with the evidence or clarification.

WORKER SAFETY

PMPD: *Conditions of Certification **WORKER SAFETY-1** and **-2** require the project owner, prior to construction and operation of the project, to provide the final Fire Prevention Program to the Compliance Project Manager and the local fire authorities. These entities will then confirm its adequacy. ~~The record shows that the limited fire risks and potential for hazardous materials incidents at the facility do not pose significant added demands on local fire protection services.~~* (PMPD p. 169-170)

STAFF COMMENT: The suggested change better reflects the evidentiary record and the testimony by staff at the second evidentiary hearing.

PMPD: ***WORKER SAFETY-8** ~~Subject to a superseding agreement between the project owner and Kern County, the project owner shall fund its share of the ongoing capital and operational costs by making an annual payment of \$400,000 to Kern County for the support of the fire department's needs for capital, operations and maintenance commencing with the date of start of site mobilization and continuing annually thereafter on the anniversary until the final date of power plant decommissioning.~~*

~~**Verification:** At least sixty (30) days prior to the start of site mobilization, the project owner shall provide to the CPM, documentation that the first annual payment of \$400,000 has been paid to the KCFD, and shall also provide a statement in the Annual Compliance Report that subsequent annual payments have been made. Otherwise, the project owner shall provide to the CPM a fully executed contract between the project owner and Kern County specifying different terms for funding capital and operational costs for these emergency services. (PMPD p175)~~

WORKER SAFETY- 8 (as agreed to between applicant and Kern County)

The project owner shall make an annual payment to Kern County for the support of fire, sheriff patrol and investigation, County-wide public protection based upon the following fee schedule:

- A. Twenty –five percent (25%) of the monetary factors (\$579.90 per 1,000 square feet) calculated in the Draft Public Facilities Fee Study (written May 18, 2009) associated with fire, sheriff patrol and investigation and countywide public protection services
A = \$144.90/100 square feet.
- B. The area of land (per 1,000 square feet) directly underneath the solar collectors assemblies (assumed as horizontal) installed by April 30 of each calendar year.
- C. 30-year Project Term
Calculation of the fee schedule shall be as defined as follows:
A* B/C
The fee schedule shall remain fixed for the life of the project for a maximum total at build-out of \$258,074 per year. The amount will not be adjusted per year for inflation nor will any administrative fee apply.

Verification: During project construction the project owner shall provide to the CPM documentation in the May monthly compliance report showing the total number of square feet directly underneath installed collector assemblies (assumed as horizontal) as of April 30. The calculation of the fee amount due is based upon the formula in WORKER SAFETY -8 that has been paid to the Kern County Auditor-Controller for deposit in the identified account created to be used in the future for fire, sheriff and countywide public protection. Payment shall be remitted to the Kern County Auditor-Controller, with a copy of the transmittal to the Kern County Administrative Office, by April 30 of each calendar year that the BSEP remains in operation. The project owner shall provide to the CPM a statement in the Annual Compliance Report that subsequent annual payments have been made.

STAFF COMMENT: The applicant and county reached an agreement to address fire protection and emergency services. The Condition of Certification should reflect the agreement and not just refer to a “superseding agreement.”

HAZARDOUS MATERIALS MANAGEMENT

PMPD: *The record indicates that the placement of additional isolation valves in the HTF pipe loops throughout the solar array will add significantly to the safety and operational integrity of the entire system by allowing a loop to be closed if a leak develops in a ball joint, flex-hose, or pipe, instead of closing off the entire HTF system and shutting down the plant. Condition of Certification **HAZ-7** requires the installation of a sufficient number of isolation valves that can be activated either manually or remotely. (Ex. 500, pp. 4.4-8.) Additionally, the Cal-OSHA Process Safety Management (PSM) standard will apply and thus staff proposes a requirement be included in proposed Condition of Certification HAZ-2. (PMPD page 178)*

FINDINGS OF FACT

Based on the uncontroverted evidence of record, the Commission makes the following findings and conclusions:

- 1. The Beacon Solar Energy Project will use hazardous materials during construction and operation, including propane and Therminol VP1.*
- 2. The major public health and safety dangers associated with these hazardous materials include the accidental release of Therminol VP1 as well as fire and explosion from liquefied petroleum gas, (propane) natural gas. (PMPD p. 184)*

STAFF COMMENT: The identification of the Cal-OSHA Process Safety Management Standard reflect clarifications to HAZ-2 identified in staff’s prehearing statement in response to Question Nine, (proposed modifications to the Conditions of Certification). Reference to natural gas should be removed as the project will be using propane.

PMPD: HAZ-2: *The project owner shall concurrently provide a Business Plan and a Process Safety Management Plan (PSMP) to the Kern County Environmental Health Services Department (KCEHSD) and the CPM for review. After receiving comments from the KCEHSD and the CPM, the project owner shall reflect all recommendations in the final documents. Copies of the final Business Plan and Process Safety Management Plan shall then be provided to the KCEHSD for information and to the CPM for approval.*

Verification: *At least 60 days prior to receiving any hazardous material on the site for commissioning or operations, the project owner shall provide a copy of a final Business Plan and Process Safety Management Plan to the CPM for approval. (PMPD p.185-186)*

STAFF COMMENT: The identification of the Cal-OSHA Process Safety Management Standard reflect clarifications to HAZ-2 identified in staff's prehearing statement in response to Question Nine, (proposed modifications to the Conditions of Certification). These changes were discussed at the January 11, 2010, workshop.

PMPD: HAZ-4: *remove #7 as there is no text. (PMPD p. 186)*

PMPD: HAZ-5

7. Site access controls for employees, contractors, vendors, and visitors;

*a statement(s) (refer to sample, **Attachment C**), signed by the owners or authorized representative of ~~hazardous materials transport~~ Liquefied Petroleum Gas (propane) vendors, certifying that they have prepared and implemented security plans in compliance with 49 CFR 172.880, and that they have conducted employee background investigations in accordance with 49 CFR Part 1572, subparts A and B; (PMPD p.187)*

9 b. Power plant personnel on-site 24 hours per day, seven days per week and all one of the following:

*i. The CCTV monitoring system required in number 9 above shall include cameras that are able to pan, tilt, and zoom (PTZ), have low-light capability, are recordable, and are able to view 100% of the perimeter fence, the outside entrance to the control room, and the front gate from a monitor in the power plant control room; **AND-OR***

ii. Perimeter breach detectors or on-site motion detectors. (PMPD p. 188)

STAFF COMMENT: These changes to HAZ-5 were identified in staff's prehearing statement in response to Question Nine, (proposed modifications to the Conditions of Certification). The changes reflect clarification and consistency with the evidence and were discussed at the January 11, 2010, workshop.

Table PMPD A-12 Add this entry.

Process Safety Management: Title 8 CCR Section 5189 Requires facility owners to develop and implement effective process safety management plans when Toxic, reactive, flammable, or explosive chemicals Are maintained on site in quantities that exceed Regulatory thresholds.

STAFF COMMENT: This addition to Table A-12 was identified in staff's prehearing statement in response to Question Nine, (proposed modifications to the Conditions of Certification). The change reflects consistency with the evidence and changes to HAZ-2.

WASTE MANAGEMENT

PMPD: ~~CURE appears to assume that all~~ correctly states that HTF used by the Project is a "hazardous material" that poses acute and chronic health hazards. (CURE Opening Brief, p. 87.) But whether released HTF is a hazardous waste will depend on the concentration. The record clearly explains the method for determining the hazards posed by HTF. (Ex. 500 pp. 4.13-9 through 4.13-11.) DTSC makes a determination of whether a discharge of HTF constitutes a hazardous waste on a case by case basis. (Ex. 500 p. 4.13-9.) (PMPD p. 205)

The record indicates that the treatment and disposal methods comply with the Requirements of Waste Discharge developed by staff in consultation with established by the Lahontan Regional Water Quality Control Board (LRWQCB) and presented in **Soil and Water Resources Appendices E, F, and H.** Condition of Certification **WASTE-7** addresses the Requirements of Waste Discharge and requires the applicant to comply with the requirements for accidental discharges of HTF and ensures that hazardous concentrations of contaminated HTF-soil will not be treated in the LTU. (Ex. 500, p. 4.13-11). With the implementation of Condition of Certification **WASTE-7** we find there will be no significant impacts due to HTF spills during project operation. (PMPD p. 206)

FINDINGS OF FACT

Based on the uncontroverted evidence, the Commission makes the following findings:

14. The treatment and disposal methods comply with the Requirements of Waste Discharge developed by staff in consultation with established by the Lahontan Regional Water Quality Control Board. (PMPD p. 210)

STAFF COMMENT: The suggested change better reflects the evidentiary record and clarifies the distinction between hazardous materials and hazardous waste. The changes also clarify the Commission's role under its in lieu permit authority.

BIOLOGICAL RESOURCES

PMPD: *Preconstruction floristic surveys were required in spring 2010 in accordance with guidelines described in Condition of Certification **BIO-20**. (PMPD p. 236)*

STAFF COMMENT: This change reflects consistency with the evidence and Conditions of Certification BIO-20 which does not specify the year only the season.

PMPD: *The Conditions of Certification described below satisfy the following state LORS and take the place of terms and conditions that, but for the Commission's exclusive authority, would have been included in the following state permits:*

Incidental Take Permit: California Endangered Species Act (Fish and Game Code §§ 2050 et seq.)

Streambed Alteration Agreement: California Fish and Game Code §§ 1600 1607....

~~Federal Endangered Species Act (ESA) (16 USC §§ 1531 et seq.) (PMPD p. 247-248)~~

STAFF COMMENT: Permits issued under the Federal Endangered Species Act are not a state issued permit and therefore remain under the jurisdiction of the US Fish and Wildlife Service.

PMPD: #20. *Conditions of Certification **BIO-4**, **BIO-5**, **BIO-6**, **BIO-7**, **BIO-8**, **BIO-15**, and **BIO-17** and ~~**BIO-12**~~, will reduce the impacts to native birds to less than significant levels. (PMPD p. 250)*

STAFF COMMENT: The changes identify the conditions which relate to bird mitigation.

PMPD: 30. *Conditions of Certification **BIO-11** and **BIO-12** require the project owner to acquire and enhance 115 acres to compensate for the potential take of ~~two~~ Mohave ground squirrels and ~~two~~ transient desert tortoises during construction on the plant site and for impacts to the 5.0 acres of Mojave creosote bush scrub to the west. (PMPD p. 250)*

STAFF COMMENT: Although staff used the assumption of potential take of two individuals for the analysis, the conditions do not explicitly identify a number for take, nor does CDFG typically specify a number of individuals likely to be taken in their incidental take permits.

PMPD: 32. *Noise impacts to nesting birds and other wildlife at BSEP will be less than significant with implementation of measures in Condition of Certification **BIO-8**. (PMPD p. 251)*

STAFF COMMENT: Citing to BIO-8 is consistent with the general format of identifying the relevant Conditions of Certification which relate to the listed impact.

PMPD: 36. *Condition of Certification **BIO-14** requires installation of netting over the evaporation ponds to exclude birds and other wildlife, as well as monitoring of the effectiveness of the netting, which will reduce evaporation pond impacts to birds to less-than-significant levels. (PMPD p. 251)*

STAFF COMMENT: Staff's suggested insertion better reflects the terms of Condition of Certification BIO-14.

PMPD: 3. *Direct and indirect construction impacts to vegetation and wildlife will be reduced to less than significant levels with implementation of impact avoidance and minimization measures described in Conditions of Certification **BIO-1** through **BIO-8-21** (PMPD p. 252)*

STAFF COMMENT: Staff suggests that this conclusion of law contain all Conditions of Certification which reflects the entire package of mitigation the project should be subject to.

PMPD: *On page 261 the first sentences of numbers 7 and 8 should be underlined for consistency with the other numbered paragraphs. On page 266 the first sentence on paragraph number 4 also needs to be underlined. See also page 268 number 2 and page 275 number 1. On page 276 the numbering skips 5. On page 285 first sentence of the second paragraph needs to be underlined.*

PMPD: *The verification for **BIO-14** was omitted. (PMPD p. 279)*

STAFF COMMENT: Please include the following verification:

Verification: No less than 30 days prior to operation of the evaporation ponds the project owner shall provide to the CPM as-built drawings and photographs of the ponds indicating that the bird exclusion netting has been installed. For the first year of operation the Designated Biologist shall submit quarterly reports to the CPM, CDFG, and USFWS describing the dates, durations and results of site visits conducted at the evaporation ponds. Thereafter the Designated Biologist shall submit annual monitoring reports with this information. The quarterly and annual reports shall fully describe any bird or wildlife death or entanglements detected during the site visits or at any other time, and shall describe actions taken to remedy these problems. The annual report shall be submitted to the CPM, CDFG, and USFWS no later than January 31st of every year for the life of the project.

PMPD: *The list of plants observed during the 2010 special-status plant surveys of the Rosamond Alternative can also be used as a guide to site-specific plant selection for revegetation. (PMPD p. 297)*

STAFF COMMENT: This change reflects consistency with the evidence and Conditions of Certification BIO-20 which does not specify the year only the season.

GEOLOGICAL AND PALEONTOLOGICAL RESOURCES

PMPD: PAL-4 *Prior to ground disturbance and for the duration of construction activities involving ground disturbance, the project owner and the PRS shall prepare and conduct weekly CPM-approved training for the following workers: project managers, construction supervisors, foremen, and general workers involved with or who operate ground disturbing equipment or tools. Workers shall not excavate in sensitive units prior to receiving CPM-approved worker training. Worker training shall consist of an initial in-person PRS training or may utilize a CPM-approved video or other presentation format, during the project kick off for those mentioned above. Following initial training, a CPM approved video or other approved training presentation/materials or, in-person training may be used for new employees. The training program may be combined with other training programs prepared for cultural and biological resources, hazardous materials, or other areas of interest or concern. No ground disturbance shall occur prior to CPM approval of the Worker Environmental Awareness Program (WEAP) unless specifically approved by the CPM.*

The WEAP shall address the possibility of encountering paleontological resources in the field, the sensitivity and importance of these resources, and legal obligations to preserve and protect those resources.

The training shall include:

1. A discussion of applicable laws and penalties under the law;
2. Good quality photographs or physical examples of vertebrate fossils for project sites containing units of high paleontological sensitivity;
3. Information that the PRS or PRM has the authority to halt or redirect construction in the event of a discovery or unanticipated impact to a paleontological resource;
4. Instruction that employees shall halt or redirect work in the vicinity of a find and contact their supervisor and the PRS or PRM;
5. An informational brochure that identifies reporting procedures in the event of a discovery;
6. A WEAP certification of completion form signed by each worker indicating that he/she has received the training; and
7. A sticker that shall be placed on hard hats indicating that environmental training has been completed.

Verification: At least 30 days prior to ground disturbance, the project owner shall submit the proposed WEAP, including the brochure, with the set of reporting procedures for workers to follow. At least 30 days prior to ground disturbance, the project owner shall submit the training program presentation/materials script and final video to the CPM for approval if the project owner is planning to use a presentation format other than an in-person trainer for video for interim training. If the owner requests an alternate paleontological trainer, the resume and qualifications of the trainer shall be submitted to the CPM for review and approval prior to installation of an alternate trainer. Alternate trainers shall not conduct training prior to authorization from the CPM. In the monthly compliance report (MCR), the project owner shall provide copies of the WEAP certification of completion forms with the names of those trained and the trainer or type of training (in-person or other approved presentation format video) offered that month. The MCR shall also include a running total of all persons who have completed the training to date. (PMPD p. 392-393)

STAFF COMMENT: These changes to PAL-4 were identified in staff's prehearing statement in response to Question Nine, (proposed modifications to the Conditions of Certification). The changes reflect clarification and consistency with the evidence and were discussed at the January 11, 2010, workshop.

TRAFFIC AND TRANSPORTATION

PMPD: TRANS-2 Prior to start of construction of the pipelines ~~site mobilization activities~~, the project owner shall prepare a mitigation plan for Neuralia Road and Mendiburu Road due to open cutting of the roadways for the installation of the tertiary water pipeline. The intent of this plan is to ensure that if these roadways are disturbed by project construction, they will be repaired and reconstructed to original or as near original condition as possible. This plan shall include:

- Documentation of the pre-construction condition of the following roadways:

1. Neuralia Road from the project site south to Mendiburu Road and then east on Mendiburu Road where it reaches the California City waste water treatment plant.

- Prior to the start of construction of the pipelines ~~site mobilization~~, the project owner shall provide to the CPM photographs or videotape of water line routes discussed above.

- Documentation of any portions of Neuralia Road and Mendiburu Road that may be inadequate to accommodate oversize or large construction vehicles and identification of necessary remediation measures;

- Provision for appropriate bonding or other assurances to ensure that any damage to Neuralia Road, and Mendiburu Road due to construction activity will be remedied by the project owner; and

- Reconstruction of portions of Neuralia Road, and Mendiburu Road that are damaged by project construction due to oversize or overweight construction vehicles.

Verification: At least 90 days prior to the start of pipeline construction ~~site mobilization~~, the project owner shall submit a mitigation plan focused on restoring Neuralia Road and Mendiburu Road to its pre-project condition to Kern County and California City Public Works and Planning Department for review and comment and to the CPM for review and approval. Within 90 days following the completion of construction, the project owner shall provide photo/videotape documentation to the Kern County and California City Public Works and Planning Department and the CPM that the damaged sections of Neuralia Road and Mendiburu Road have been restored to their pre-project condition. (PMPD p. 420)

TRANS-3 Prior to start of construction of the pipeline site mobilization activities, the project owner shall prepare a mitigation plan for Rosamond Boulevard, Sierra Highway, Sopp Road, Lone Butte Road, California City Boulevard Avenue, and Neuralia Road, due to open cutting of the roadways for the installation of the tertiary water pipeline. The intent of this plan is to ensure that if these roadways are disturbed by project construction, they will be repaired and reconstructed to original or as near original condition as possible. This plan shall include:

- Documentation of the pre-construction condition of the following roadways:
 1. Rosamond Boulevard, Sierra Highway, Sopp Road, Lone Butte Road, California Boulevard , and Neuralia Road.
- Prior to the start of construction of the pipeline site mobilization, the project owner shall provide to the CPM photographs or videotape of water line routes discussed above.
- Documentation of any portions of Rosamond Boulevard, Sierra Highway, Sopp Road, Lone Butte Road, California City Boulevard and Neuralia Road that may be inadequate to accommodate oversize or large construction vehicles and identification of necessary remediation measures;
- Provision for appropriate bonding or other assurances to ensure that any damage to Rosamond Boulevard, Sierra Highway, Sopp Road, Lone Butte Road, California City Boulevard and Neuralia Road due to construction activity will be remedied by the project owner; and
- Reconstruction of portions of Rosamond Boulevard, Sierra Highway, Sopp Road, Lone Butte Road, California City Boulevard , and Neuralia Road that are damaged by project construction due to oversize or overweight construction vehicles.

Verification: At least 90 days prior to the start of pipeline construction site mobilization, the project owner shall submit a mitigation plan focused on Rosamond Boulevard, Sierra Highway, Sopp Road, Lone Butte Road, California City Boulevard, and Neuralia Road to its pre-project condition to Kern County and California City Public Works and Planning Department for review and comment and to the CPM for review and approval. Within 90 days following the completion of construction, the project owner shall provide photo/videotape documentation to the Kern County and California City Public Works and Planning Department and the CPM that the damaged sections of Rosamond Boulevard, Sierra Highway, Sopp Road, Lone Butte Road, California City Boulevard, and Neuralia Road have been restored to their pre-project condition.

(PMPD p. 421-422)

STAFF COMMENT: Changes to TRANS-2 and TRANS-3 were identified in staff's prehearing statement in response to Question Nine, (proposed modifications to the Conditions of Certification). The changes reflect clarification and consistency with the evidence and were discussed at the January 11, 2010, workshop.

NOISE AND VIBRATION

PMPD: NOISE RESTRICTIONS

NOISE-4 *Within 30 days of the project first achieving a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct a 25-hour community noise survey, utilizing the same monitoring sites employed in the pre-project ambient noise survey at a minimum. The survey shall include the octave band pressure levels to ensure that no new pure-tone noise components have been introduced. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints. Steam relief valves shall be adequately muffled to preclude noise that draws legitimate complaints. If the results from the survey indicate that the project noise levels are in excess of 34 dBA L_{3q} L_{eq} at the residence east of the project site, additional mitigation measures shall be implemented to reduce noise to a level of compliance with this limit. If the project is equipped with an air cooled condenser, project noise levels shall be restricted to 40 dBA L_{eq} at the residence east of the project site.*
(PMPD p. 469)

STAFF COMMENT: Correction of a typographical error.

VISUAL RESOURCES

PMPD: Landscaping

VIS-6 *The project owner shall provide a comprehensive landscaping and irrigation plan for the project site in accordance with the requirements of Chapter 19.86 of the Kern County Zoning Ordinance. Landscaping shall be installed or bonded prior to the start of commercial operation.*

An alternative, in whole or in part, to providing a comprehensive landscaping and irrigation plan for the project site, the project owner may provide to the CPM a copy of the receipt demonstrating payment of equivalent cost of the landscaping of the developed area of the project site excluding the solar field and power block to the Kern County Parks and Recreation District, a Kern County public school or other non-profit organization in the County of Kern prior to the start of commercial operation.

The project owner shall submit to the Director of the Kern County Planning Department for comment a comprehensive landscaping and irrigation plan, or shall discuss with the Director the alternative described above to a landscaping and irrigation plan.

The applicant shall allow the Director of the Kern County Planning Department up to ~~60~~ 45 calendar days to review the comprehensive landscaping and irrigation plan and provide written comments to the project owner. The project owner shall provide a copy of the Director of the Kern County Planning Department's written comments on the landscaping and irrigation plan or the alternative to the CPM for review and approval.

The project owner shall not implement the landscaping and irrigation plan or the alternative until the project owner receives approval from the CPM.

The planting must be completed by the start of commercial operation, and the planting must should occur during the optimal planting season, but if not, the owner will be responsible to replace landscaping that does not survive the first year. (PMPD page 469-470)

STAFF COMMENT: Changes to VIS-6 were identified in staff's prehearing statement in response to Question Nine, (proposed modifications to the Conditions of Certification). The changes reflect clarification and consistency with the evidence and were discussed at the January 11, 2010, workshop.

SOCIOECONOMICS

The PMPD has a paragraph highlighted on pages 429-430. It appears this highlighted paragraph is similar to a paragraph found on page 404 of the PMPD. Staff is unclear as to why the section is highlighted.

STAFF COMMENT: Staff has read the July 2, 2010, letter from the Kern County Planning and Community Development Department to Mr. Ken Celli, the hearing officer for this project, and notes that the mitigation, Worker Safety-4, documented in the July 2, 2010, letter fully mitigated all impacts on public services.

WASTE WATER TREATMENT FACILITIES

The **PMPD** states:

“At the second evidentiary hearing, Staff and Applicant presented abundant evidence to prove that both California City and RCSD will serve as the lead agency for the environmental analysis of their respective WWTF expansions under CEQA and that the planned upgrades will have minimal environmental impacts that are easily mitigable with standard conditions and BMPs which are likely to result in a mitigated negative declaration. Significantly, the evidence proves that the upgrades to either WWTF were conceived long before the BSEP and exist completely independently from the BSEP.” (**PMPD page 307**)

Staff agrees with the PMPD's findings, but recommends that the PMPD further discuss the full factual record that includes staff's analysis of the potential impacts from the WWTF expansions and expected mitigation. Although the potential impacts of the expansions are associated with the California City and RCSD projects, the PMPD's further discussion of the staff's analysis of impacts and mitigation measures from the expansions would eliminate any question that the Commission based its final decision on a comprehensive environmental review of the project and associated impacts, entirely consistent with the requirements of CEQA.

Dated: August 18, 2010

Respectfully submitted,



JARED J. BABULA
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APPLICATION FOR CERTIFICATION
For the *BEACON SOLAR ENERGY*
PROJECT

Docket No. 08-AFC-2

PROOF OF SERVICE
(Revised 2/8/10)

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DECLARATION OF SERVICE

I, Scott McDonald, declare that on August 18, 2010, I served and filed copies of the attached, Staff's Comments on the Presiding Member's Proposed Decision, dated August 18, 2010. 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/beacon/index.html>].

The documents have 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:

(Check all that Apply)

FOR SERVICE TO ALL OTHER PARTIES:

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

by personal delivery or by depositing in the United States mail at Sacramento with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

AND

FOR FILING WITH THE ENERGY COMMISSION:

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

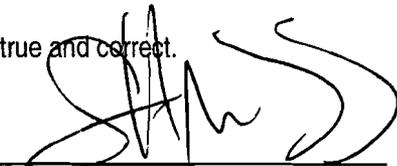
OR

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

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. 08-AFC-2
1516 Ninth Street, MS-4
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I declare under penalty of perjury that the foregoing is true and correct.



Scott McDonald