STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:

Beacon Solar, LLC's	)	
Application for Certification of the	)	Docket No. 08-AFC-2
Beacon Solar Energy Project	)	
	)	

DOCKET 08-AFC-2	
DATE	APR 08 2009
RECD.	APR 08 2009

BEACON SOLAR, LLC'S PRELIMINARY COMMENTS ON THE PRELIMINARY STAFF ASSESSMENT FOR THE BEACON SOLAR ENERGY PROJECT

April 8, 2009

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BEACON SOLAR, LLC'S PRELIMINARY COMMENTS ON CEC STAFF'S PRELIMINARY STAFF ASSESSMENT

The Preliminary Staff Assessment (PSA) for the Beacon Solar Energy Project (BSEP or Project) was issued by Staff on April 1, 2009, and a PSA Workshop has been scheduled for Tuesday, April 14, 2009. At Staff's request and in order to make the Workshop most productive and resolve as many of the issues noted in the PSA as possible, Beacon Solar, LLC (Beacon) is providing these initial comments on the PSA. As the PSA is a complex document and this review was prepared within a week of release, it is necessarily very preliminary and should not be construed as a complete listing of Beacon's comments on the PSA. While it is hoped that many issues can be resolved at the scheduled Workshop on April 14th, Beacon will provide additional comments on the PSA within the public comment period.

For purposes of this review in advance of the April 14th Workshop, Beacon's preliminary comments fall into three general categories:

1. Beacon has not identified major issues in its initial review, and expects to agree with the PSA.
2. Beacon has identified issues which it would like to discuss at the Workshop.
3. Beacon has identified significant issues and respectfully disagrees with the PSA. These issues are considered unlikely to be resolved at the Workshop, although Beacon will be prepared to discuss a few of the major topics contained in the comments below. Additional comments will be provided later during the PSA comment period and/or Beacon will provide supplemental evidence as needed.

I. TOPICS FOR WHICH BEACON HAS NO COMMENTS AT THIS TIME

In its preliminary review, Beacon did not find significant issues in the analysis, conclusions or mitigation requirements for the following PSA topics, and has no comments at this time:

- Land Use
- Socioeconomics
- Public Health
- Transmission Line Safety and Nuisance
- Waste Management
- Geology and Paleontology
- Power Plant Efficiency and Reliability

II. ISSUES FOR POSSIBLE RESOLUTION AT THE WORKSHOP

Beacon has identified relatively minor disagreements with the PSA in the following areas: Air Quality, Biological Resources, Cultural Resources, Hazardous Materials Management, Noise and Vibration, Traffic and Transportation, Visual Resources, and Worker Safety and Fire Protection.

A. Air Quality

Staff has revised several of the emissions and other input parameters for the construction modeling. Beacon has not had the opportunity to review the actual modeling files and hence cannot provide specific comments at this time. Beacon requests that Staff's revised emission spreadsheets and modeling files be provided for review.

Staff proposes several additional mitigation requirements. In particular, Beacon takes issue with **AQ-SC3**, **AQ-SC4** and **AQ-SC6**. In **AQ-SC3**, Staff indicates that the AQCMM must demonstrate compliance with the mitigation measures for the purpose of "preventing all fugitive dust plumes from leaving the project" site. When BSEP construction occurs near the edge of the property, it will simply not be feasible to prevent visible dust plumes from leaving the site under some conditions. **AQ-SC4** then implies that construction activities may need to be temporarily shut down if an off-site visible plume persists after the implementation of the mitigation measures. Beacon indicated in its response to Data Request 12 that measures such as curtailment

of construction activities should only be required when plumes might impact an actual non-project structure, as existing structures currently are located well away from the property line. Furthermore, KCAPCD Rule 402 – *Fugitive Dust* does not prohibit visible plumes from leaving the project property during construction. During construction, Reasonably Available Control Measures such as use of wind breaks and application of dust suppressants are the types of measures required by the Rule.

Staff proposes **AQ-SC6**, which requires the use of gasoline powered light trucks for parabolic mirror washing activities and facility maintenance. The parabolic mirror solar energy facilities at Kramer Junction and Harper Lake have significant operating experience and have developed the design of the water wash trucks and other apparatus to maximize efficiency. Use of smaller vehicles for mirror washing would require multiple trips due to lower carrying capacity and would likely increase both vehicle and dust emissions. In addition, maintenance activities require the use of welding rigs and lifting rigs, both of which exceed light truck standards and are not available as electric vehicles. For support of maintenance, electric all-terrain vehicles would also result in more travel due to lower ranges, and may pose a safety issue due to limited availability of air conditioning in such vehicles.

Staff also performed revised modeling of operations for NO_2 and PM10/PM2.5 (which has not been reviewed by Beacon). Although the results of the modeling analyses indicate that the Project's stationary source operational impacts would not create violations of most air quality standards, Staff concludes that the Project will have a significant impact to PM10 air quality due to the fact that the State PM10 ambient air quality standard is already exceeded in the area. Staff does not give consideration to Beacon's representation that a solar plant will reduce regional particulate impacts due to the nature of a solar energy facility's need to minimize dust on the mirrors in order to maintain plant efficiency. Based on operating experience at other solar facilities, Beacon does not believe that the Project will cause a significant air quality impact during operation with respect to fugitive dust emissions.

The Kern County Air Pollution Control District (KCAPCD) issued a notice on March 12, 2009 that the District had made a decision to issue the Final Determination of Compliance (FDOC), but Beacon's consultant was told by the KCAPCD in mid-March that it had not actually been issued yet. However, the PSA references a FDOC issued on March 5. Beacon has not yet been provided with a copy of the FDOC, but based on a response to comments letter

received by Beacon from KCAPCD, it appears that the CEC Staff has incorporated the KCAPCD's conditions into the PSA. The KCAPCD did not accept some of the comments that Beacon submitted on the PDOC and there are some emissions discrepancies which have not been completely resolved. These concerns include the following items:

1. **AQ-51**. The KCAPCD PDOC and the PSA contains the following VOC emission limits for the vapor control system: 0.63 lb/hr, 1.25 lb/day, and 0.23 tons/year. Beacon believes these limits should be 3.13 lb/hr, 6.26 lb/day, and 1.14 tons/year based on the calculation methodology applied by the District.
2. **AQ-70**. Requires weekly VOC readings in the bioremediation area. Beacon suggested that the frequency of the readings should be reduced and/or defined in the required protocol.
3. **AQ-77** contains daily and annual VOC limits for the bioremediation area. While Beacon agrees that these emissions will be negligible, Beacon does not believe that the emission can be quantified and hence compliance with these emission limits cannot be demonstrated.

B. Biological Resources

Recognizing the sensitivity of natural resources in the desert, Beacon worked diligently to select a location for its proposed solar project that would minimize biological impacts. The site selected for the BSEP is located on previously farmed lands that remain substantially disturbed today. The Plant Site would be located entirely within this disturbed area that is predominantly devoid of vegetation and does not provide suitable habitat for special status listed species.

Beacon commends CEC Staff on a thorough analysis of potential impacts to biological resources. However, Beacon has identified several areas of concern in the biological resources section of the PSA regarding Staff's interpretation of the level of significance of an impact, particularly with respect to vegetation, other special status species, and Waters of the State. Beacon has identified specific references within the PSA that reflect potentially misinterpreted information and a number of discrepancies. As a result of these discrepancies and potential misinterpretations of information, Beacon respectfully disagrees with some of Staff's conclusions regarding required mitigation. Beacon requests that Staff review the summary set

forth in the table below, which lists the issues of concern that Beacon has identified during this preliminary review, and reconsider the PSA's recommendations regarding significance of impacts and required mitigation.

No.	Page Location	Section Description	Issue Description
1	Pages 4.2-1; 4.2-14; 4.2-21	4.2-1 - 3rd Paragraph, 1st sentence 4.2-14 – 1st full paragraph, 3rd sentence 4.2-21 – Table 4, Waters of the State	References to desert wash scrub habitat in Pine Tree Creek and the unnamed dry wash need to accurately reflect the amount of vegetation in those two washes. Not all 60 acres of desert wash scrub habitat on the Project site is located within State jurisdictional areas. A total of 16.0 acres of Waters of the State are present onsite. Within the 16.0 acres of Waters of the State, only 2.4 acres are vegetated desert scrub habitat. The remaining 13.6 acres are unvegetated waters. Table 4 acreage for Waters of the States is incorrect. There are only 16.0 acres of Waters of the State, of which 2.4 acres is vegetated.
2	4.2-21	3rd bullet, jurisdictional waters significance criteria	The significance criteria suggest a significant impact exists if there is a substantial adverse biological impact resulting from rerouting Pine Tree Creek and the unnamed desert wash. Beacon does not concur that there is a substantial adverse biological impact from loss of the rerouted washes. There is a recognized impact to the hydrological function of the washes; however, the washes are substantially degraded and consist of sparse, highly disturbed habitat resulting from historical agricultural operations in the area that covered much of the wash area. Surveys did not identify any sensitive species using either Pine Tree Creek wash or the unnamed wash. Because there is no biological evidence to suggest that biological impacts to the washes are substantial, mitigation for replacing biological functions and values should not be required.
3	4.2-21 to 22	Table 4, Last row – Other Special-Status Birds	BIO-11 does not address birds and therefore is not an applicable mitigation measure for this resource.
4	4.2-21 to 22	Table 4, Special Status Wildlife – Desert Tortoise and Mohave Ground Squirrel	The loss of 430 acres of poor quality habitat (fallow atriplex scrub, desert wash scrub) on the plant site does not impact either DT or MGS because this vegetation does not provide suitable habitat for either of those species. Delete "permanent loss of 430 acres of poor quality . . . habitat on the plant site."

No.	Page Location	Section Description	Issue Description
5	4.2-23	3rd full paragraph	This paragraph implies that there are direct constructions impacts to vegetation that are considered significant. There are no significant impacts to vegetation from the Project. Remove the following text from the sentence: "…to less than significant levels…" as it applies to vegetation.
6	4.2-24	Top of page, (under "Spread of Noxious Weeds")	Impacts from noxious weeds are not considered to be significant. Delete the following from the end of the paragraph: "…to less than significant levels."
7	4.2-24	Dust, end of paragraph	The reference to SOIL&WATER-1 and 2 should be to SOIL&WATER-5.
8	4.2-24	Impacts to Waters of the State; Alternatives	An alternative design that includes a wash through the center of the Plant Site is not necessarily biologically beneficial or less significant than the current proposed design.
9	4.2-27	Staff's Response to Beacon's Mitigation Proposal; First paragraph, 3rd sentence	To accurately reflect mitigation, the text should read – "However, Staff does not concur with the specific goal of revegetating 4.8 acres within the larger 18.4-acre mitigation area (equating to 26 percent vegetative cover) within the low flow channel." In addition, Staff's perspective that the proposed mitigation does not replace biological functions of the existing washes does not appropriately recognize the existing disturbed condition of the existing washes and limited existing functions and values. This was discussed at length with the CDFG during initial negotiations on appropriate mitigation for impacts to Waters of the State. The proposed mitigation as described in the current proposal by Beacon reflects an approach to achieve appropriate mitigation for a highly disturbed wash system and was based on input from CDFG staff who visited the site. Staff has not established that the biological functions are such that additional mitigation is necessary beyond what has been proposed by Beacon. See also response to issue No. 3 provided above.
10	4.2-28	Migratory Special Status Birds 1st paragraph, 2nd sentence	There is no evidence that loggerhead shrike, LeConte's thrasher or California horned lark are breeding on the site.

No.	Page Location	Section Description	Issue Description
11	4.2-29	1st full paragraph	There is no known nesting for special status species other than Burrowing Owls in the Project Area. Nesting should be deleted from the first sentence. The sentence should read: "Loss of foraging habitat…" ` In addition, there is no evidence that this is a significant loss, therefore "significant" should be removed after the word "cumulative" in the first sentence, and the words "…to less than significant levels" should be removed from the end of the paragraph.
12	4.2-30	1st paragraph, 1st full sentence	Beacon did not agree to have a 3rd party beneficiary establish and manage a conservation easement for the 6-acre burrowing owl passive relocation area. Beacon has agreed to place a conservation easement on the 6-acre passive relocation area. Beacon will only name a 3rd party beneficiary conservation organization in the event that the project proponent does not properly manage the conservation easement.
13	4.2-31	MGS, last paragraph	The Project is seeking take coverage for incidental take of MGS, including loss of habitat, west of SR-14, and for incidental take of two transient MGS on the Plant site. This is not reflected in the language provided. The language needs to be clear that the compensation acreage includes coverage for the habitat and the take of individuals for the area west of SR-14, and for two transient MGS on the Plant Site, during construction *and operation*.
14	4.2-32	Impacts to American badger and Desert Kit Fox	Beacon would like confirmation that the CEC is not requiring separate surveys, apart from DT clearance surveys, for American badger and desert kit fox.
15	4.2-34	1st full paragraph (DT mitigation)	The Project is seeking take coverage for incidental take of DT, including loss of habitat, west of SR-14, and for incidental take of two transient DT on the Plant site. This is not reflected in the language provided. The language needs to be clear that the compensation acreage includes coverage for the habitat and the take of individuals for the area west of SR-14, and for two transient DT on the Plant Site, during construction and operation.
16	4.2-45	Migratory Birds/Burrowing Mammals; 2nd sentence	There are no significant impacts identified to migratory birds. Therefore, this sentence should be reworded to state that Staff's mitigation measures "…would minimize impacts to nesting birds." The language "…would avoid these potentially significant…" should be removed.

No.	Page Location	Section Description	Issue Description
17	4.2-45	Burrowing Mammals; 3rd paragraph, last sentence	Although there is the potential for desert kit fox to occur on the Plant Site, there is no evidence that desert kit fox are "known to occur on the site." This portion of the last sentence therefore should be deleted.
18	4.2-45	Impacts to Pine Tree Creek	This language states that this there is a significant biological impact resulting from the elimination of Pine Tree Creek and the unnamed dry desert wash on the Plant Site. However, as stated previously, Beacon does not believe that the impacts to the washes are biologically significant. Please see Issue No. 3 and 10 above. In addition, only 2.4 acres of desert wash scrub, not 60 acres, is located within Waters of the State.
19	4.2-53/54	BIO-8; No. 4 – Monitoring During Construction	The following language needs to be added to end of the measure: "Monitors will not be required within the Plant Site after the DT exclusionary fencing has been installed."
20	4.2-56	BIO-9; No. 1 – Fence Installation	Beacon would like the option of either conducting clearance surveys prior to fence installation, or having a monitor onsite during fence installation. The following text is proposed to be added at the end of the 2nd sentence: "…or have a biological monitor is onsite during fence installation."
21	4.2-58	BIO-9; No. 4 – Translocation Plan for Desert Tortoise East of SR-14	A translocation plan should not be required because the Project will be relocating any DT found on the Plant Site out of harm's way and within their home range. Relocation procedures have been prepared by Dr. Alice Karl and were transmitted to the CEC December 30, 2008.
22	4.2-58	BIO-9; No. 5 – Burrow Inspection	It is not standard protocol to require relocation of DT to artificial burrows. Tortoises are relocated to appropriate areas per relocation procedures and Designated Biologist recommendations.
23	4.2-58	BIO-9; No. 7 – Monitoring During Clearing	Translocation is not proposed for the Project. The first sentence should be modified to state that "Following the tortoise clearance and relocation…" In addition, after completion of the DT clearance surveys and relocation of any DT found on the Plant Site, biological monitors should not be required inside the DT exclusionary fencing.
24	4.2-59	BIO-9; Verification	As stated above, a translocation plan for DT is not necessary. Relocation procedures have been prepared by Dr. Alice Karl.

No.	Page Location	Section Description	Issue Description
25	4.2-59	BIO-10; MGS Clearance Surveys	It is not feasible or appropriate to implement a clearance survey for MGS. The DT exclusionary fence is not intended, nor can it be designed, to exclude MGS. In addition, neither MGS, nor suitable habitat, have been identified on the Plant Site.
26	4.2-60	BIO-10; Verification	As stated above (Issue No. 26), a translocation plan for the MGS is not a realistic or protective measure and therefore is unnecessary.
27	4.2-61	BIO-11; No. 1 - Selection criteria for compensation lands.	Beacon will seek to find lands that provide the best compensation for identified impacts. All relevant factors should be considered for the lands to be acquired. (e) It is not feasible to confirm occupancy of compensation lands. Therefore, this condition should be modified to replace "currently occupied" to "historically occupied." This measure should be modified by changing the introductory text to remove "shall" and to read as follows: "The compensation lands selected for acquisition may include:…"
28	4.2-62	BIO-11; No.3 – Mitigation Security for Compensation Lands and Avoidance/Minimization Measures	This condition should be modified by moving the last paragraph to follow the 1st full sentence in the introduction to read: "…disturbing project activities. If Security is provided, …". Second paragraph of the measure should start: "Prior to initiation of ground-disturbance activities…", in place of "Prior to submittal to the CPM,…"
29	4.2-63	BIO-11; No. 4(d) - Endowment Fund	Strike out first part of sentence "…Prior to ground-disturbing project activities" and start the paragraph with "The Project owner…"
30	4.2-64	BIO-11; No. 4(e); Second bullet - Withdrawal of Principal	Beacon is requesting an explanation of the meaning of this provision in the condition.
31	4.2-64	Verification	The first sentence should say "…minimum of two months…," not three months. In addition, the 2nd paragraph, 1st sentence should be revised to read "…shall be submitted to Energy Commission Staff for review and approval…prior to land acquisition," and not prior to issuance of the FSA.

No.	Page Location	Section Description	Issue Description
32	4.2-65	BIO-12, No. 2 – Monitoring During Grading	This should only occur outside of the DT exclusionary fencing.
33	4.2-70	BIO-16; Badger and Kit Fox	Beacon requests confirmation that the requested surveys are not independent of DT clearance surveys. In addition, this understanding needs to be consistent with the timing in the verification, to make sure that the requirement to submit survey results 30 days prior to site disturbance does not prevent Beacon from conducting the requested surveys as part of the DT clearance surveys.
34	4.2-70	BIO-17 ; No. 1 - Artificial Burrow Installation	It is unreasonable to expect artificial burrows to be installed at least one-year prior to construction. Burrows will be installed per recommendation by the Designated Biologist and the BUOW consortium guidelines and will be summarized and scheduled in the relocation plan. The conservation area was proposed to be surveyed for one year following installation, during spring and winter seasons, to evaluate use of artificial burrows. Surveys will follow the protocol survey methodology for surveys (to include Phase II and III) identified in the Burrowing Owl Consortium Guidelines. In addition, Beacon will conduct ongoing maintenance and monitoring of the conservation area for exotic weed control only for a 5-year period following construction of the burrows.
35	4.2-71	BIO-17; No. 2 – Protect Translocation Area in Perpetuity No. 4 – Acquire 20 Acres of Burrowing Owl Habitat	The last sentence should be deleted. Under 4(a), change first sentence to read "The conservation acreage must provide suitable habitat for burrowing owls. The 20 acres of burrowing owl…" The last sentence in the introduction of No. 4 should be deleted.
36	4.2-73	BIO-18; No. 1 – Proposed Channel Requirements	Beacon's proposed mitigation plan was approved by CDFG during a field visit (Julie Means) on June 12, 2008. This included the monitoring approach for the mitigation plan. See Issue 3 and 10.

No.	Page Location	Section Description	Issue Description
37	4.2-72	BIO-18; No. 2 – Review and Submittal of Plan	This measure should be modified to start as follows: "Prior to initiation of any ground-disturbance activities in Waters of the State, the Project owner…."
38	4.2-73	BIO-18; No. 3 – Equipment Laydown Plan	This requirement should be part of the requirement of the SWPPP, not a biological condition. It will be prepared as part of the SWPPP and submitted in accordance with those requirements.
39	4.2-74	BIO-18; No. 5 - Security for Implementation of Mitigation	Delete the second sentence… "This amount shall be based on an…"
40	4.2-74	BIO-18; No. 6 – Reporting of Special-Status Species	This measure should be moved to a more appropriate section. This is not appropriate in the conditions for the washes.
41	4.2-75	BIO-18; No. 8 – Code of Regulations	Should be moved to a more appropriate section. This is a generic measure and is not appropriate in the conditions for the washes.
42	4.2-75	BIO-18; No. 9 – Stop Work Provisions	Change "CDFG" in second sentence to "CEC".
43	4.2-78	BIO-18; No. 12 – Acquire Off-site Desert Wash	Beacon has not proposed to acquire offsite lands for mitigation because mitigation is being implemented onsite. Beacon has acknowledged that offsite land being acquired for impacts to special status species and habitat may include wash habitat; however, it is not currently being acquired for the purpose of mitigating impacts to Waters of the State. However, Beacon is requesting that offsite mitigation should be considered an alternative for onsite mitigation (but not an additional condition). In addition, the 4th sentence in this section ("Agreements to delegate land acquisition to CDFG…") should be deleted.
44	4.2-78	Verification, 2nd paragraph	Delete the following text… "and no later than 60 days after publication of the Energy Commission Decision…"

C. Cultural Resources

Regarding a data request to conduct a geoarcheology study and submit a report, on page 4.3-33 (1st full paragraph, 2nd sentence), the PSA states that Staff foresees Beacon "being able to provide preliminary responses prior to the publication of the Final Staff Assessment." However,

at Staff's request, Beacon **did** provide a preliminary report in early February, almost two months before the PSA was issued. It is anticipated that the *Final* report, which will be submitted prior to the FSA, will contain no major changes, but will include refinements based on the additional radiocarbon dates. Beacon had understood that its aggressive schedule for completing the preliminary report was undertaken so that Staff could incorporate those preliminary findings into the PSA.

Staff has introduced the concept of an Archaeological Zone 1 that needs to be defined in more detail. A phased inventory sampling approach involving ground-penetrating radar or magnetometry, and possibly mechanical grading is included in the PSA, but no parameters or limits to these efforts are discussed. A two tiered sampling approach to data recovery excavations is also presented in the PSA without a discussion of the parameters or limitations. Beacon requests that these sampling approaches remain in the FSA as optional ways to conduct site investigations prior site grading thereby reducing the risk that additional eligible features are discovered during the actual site grading.

Beacon initiated a cultural resources investigation that resulted in the discovery of five eligible hearth features. As a result, Beacon responded to the CEC Staff's request to do an additional geomorphological investigation. During this subsequent investigation, one additional hearth feature was identified. The features discovered during investigations conducted to date appear to be similar. Data recovery on the eligible hearth features identified to date will confirm this. Investigative work conducted to date and recovery of the eligible hearth features already identified onsite should be considered sufficient mitigation to meet the requirements under CEQA and allow Beacon to forego recovery of any additional and similar hearth features.

Beacon recognizes the requirement to perform data recovery on known sites identified to date; however, there is a point at which collection of data from similar features no longer provides new or useful information, therefore Beacon is requesting that there be a limit to the level of data recovery required.

Beacon acknowledges that the BSEP has the potential to encounter other buried archaeological resources and would like to have the option to conduct preconstruction investigations along with the more standard approach of monitoring construction and conducting data recovery if additional cultural resources are discovered. Beacon believes that the preconstruction investigations and construction phase monitoring should be alternative measures

and implementation of both is beyond the requirement of CEQA to minimize impacts to a less than significant level.

It is anticipated that in the FSA the requirement of CUL-6 will be revised to reduce monitoring requirements based on comments made in the 2nd complete paragraph on Page 4.3-62.

Beacon supports a recommendation of not eligible for Site 3 and Site 54 based on a low potential for subsurface deposits. Site 6 and BSPL-H-02 are well outside of the area of proposed disturbance and will not be affected by the Project. Beacon supports the original recommendation of not eligible for Sites 16, 17, 18, 19, and 59. Beacon plans to avoid Site 8 and CA-KER-3366H by implementing avoidance measures.

D. Hazardous Materials Management

Both the AFC and PSA conclude that hazardous materials use would not propose a significant impact. However there are several mitigation measures that the PSA proposes that are either problematic or seem to go significantly beyond the scope of the analysis.

> **HAZ-1** The project owner shall not use any hazardous materials not listed in **Appendix A**, below, or in greater quantities than those identified by chemical name in **Appendix A,** unless approved in advance by the Compliance Project Manager (CPM).

Appendix A lists all chemicals planned for use in "large quantities", which was defined as 55 gallons/500 pounds/200 scf. There is already a requirement in California to advise the KCEHSD of any new chemical brought on site above the threshold, or 100% increase in any existing chemical storage. Requiring prior approval via the CPM would be impractical and burdensome to both Beacon and the CPM, since numerous requests could be expected per year at a power plant of this size. It further seems unreasonable to propose an "any" standard, which would result in requiring approval to store, say, 11 drums of lube oil as opposed to 10. There would also be some difficulty in establishing whether or not a hazardous material has been previously listed; e.g., if the water treatment chemical NALCO pHreedom® 5200M is proposed to be replaced with a different brand of a similar/identical chemical, is this "not previously listed" and advance approval required? The definition of "use" is also a potential difficulty, for

example, chemicals on-site for less than 30 days do not need to be reported (e.g., contractors' use).

An alternative proposal would be to submit new/100% increase information to KCEHSD and simultaneously submit the same information to the CPM. The CPM could then review and raise an issue if the new use seems to deviate substantially from the project approval basis.

HAZ-4 and HAZ-5 require construction-phase and operations-phase security plans, systems, equipment and procedures. The basis for either is somewhat unclear, since both the AFC and PSA conclude the Project is not subject to the Chemical Facility Anti-Terrorism Standard (CFATS) standard. The PSA states that "The goal of these conditions of certification is to provide the minimum level of security for power plants needed to protect California's electrical infrastructure from malicious mischief, vandalism, or domestic/foreign terrorist attacks," which does not appear to relate specifically to hazardous materials.

Although **HAZ-4** is not burdensome, **HAZ-5** goes significantly beyond Beacon's plans for site security, including the requirement for background checks of any technical contract employees and the requirement for both a detailed CCTV system and perimeter monitoring system. These requirements appear to be unjustified and should be deleted.

E. Noise and Vibration

The PSA concludes that construction could create significant noise impacts on nearby sensitive noise receptors if steam blows are not mitigated – Staff recommends that silencing equipment for steam blow piping be employed in the construction of the facility. Beacon notes that the requirements for steam blows for a solar plant are significantly different than those required for a combined-cycle plant. Furthermore, the power block for the BSEP is located fairly distant from nearby residences and other receptors. Therefore, Beacon does not believe that silencing equipment for steam blows is needed and is investigating historical experience for steam blows of solar projects including the options outlined by Staff for low noise, long duration steam cleaning.

F. Traffic and Transportation

TRANS-1 requires that "Prior to the start of construction, the project owner shall complete the construction of the physical improvements at the SR-14 entrance into the project

site." It will not be practical for Beacon to mobilize a separate construction crew and contract just for these road improvements prior to initiating the general site construction, assuming that is the intent of this condition. More logically, this work would be done in conjunction with the early site civil work. Alternately Caltrans may elect to complete the work directly prior to project site development. Therefore, Beacon suggests this condition be reworded to say "The project owner shall initiate the construction of the physical improvements at the SR-14 entrance into the project concurrent with or before the start of site construction and complete such improvements prior to placement of any permanent project foundations, or alternately Beacon shall fund CalTrans to complete the improvements on a similar or earlier schedule."

G. Visual Resources

The PSA concludes that the BSEP would change the existing physical setting of the Fremont Valley floor from a moderately disturbed desert floor landscape to a highly human-altered landscape. Staff concludes that this change would be considered a significant "aesthetic impact" under CEQA. Beacon respectfully disagrees, for the following reasons.

In determining whether a project will have a significant impact on visual resources and/or aesthetics, the lead agency has the discretion to determine whether to classify an impact as "significant," depending on the nature of the area affected. *Mira Mar Mobile Comm. v. City of Oceanside* (2004) 119 Cal.App.4th 477, 493; see also *National Parks & Conservation Assn. v. County of Riverside* (1999) 71 Cal.App.4th 1341, 1357 (varying thresholds of significance may apply depending on nature of area affected). "In exercising its discretion, a lead agency must necessarily make a policy decision in distinguishing between substantial and insubstantial adverse environmental impacts based, in part, on the setting." *Mira Mar*, 119 Cal.App.4th at 493. Here, although Beacon agrees that the project would change the current view, Beacon does not agree with the significance of the impact. The ranch that comprises the project site was historically intensively farmed, which is also a highly human altered landscape. Historic aerial photographs of the area show the land to be substantially denuded and altered. Currently, the outlines of the ranch are clearly distinguishable from the surrounding desert landscape, even from low-level vantage points such as SR-14. Simply put, the project would change the view from one highly human-altered landscape to an alternative highly human-altered landscape.

Beacon provided simulations with and without BSEP features for eight Key Observation Points. The changes in visual characteristics from the KOPs were not found by Beacon to be significantly different between the existing and proposed conditions, certainly not to motorists driving by at high speed on SR-14. While some hikers on the neighboring hills would see a difference, the current view is far from pristine desert landscape, as discussed above, and the significance of the change should appropriately take that into account.

H. Worker Safety and Fire Protection

This section contains the following proposed condition of certification:

Worker Saftey-7: The project owner shall identify and provide a second access point for emergency personnel to enter the site. This access would enter from Neuralia Road, unless the Kern County Fire Department agrees to an alternative route. This access and the method of gate operation shall be submitted to the Kern County Fire Department for review and comment and to the CPM for review and approval.

Beacon has contacted the Kern County Fire Department and received approval of single access from SR-14 in writing. This approval was submitted to Staff prior to release of the PSA.

III. ISSUES WHERE SIGNIFICANT DISAGREEMENT EXISTS

Unfortunately, there were several areas where Beacon cannot agree with the statements, analysis, and/or conclusions in the PSA. Not unexpectedly, the major areas of disagreement between Beacon and Staff's analyses occur in the areas of Soils & Water and Alternatives. These topics are discussed below.

A. Soil & Water Resources

Staff makes the following conclusions (partial list) related to soils and water resources, as noted on pages 4.9-1 and 4.9-2:

- There is no compelling evidence that using the lowest quality water supply reasonably available (brackish water near Koehn Lake) would be environmental undesirable and economically unsound.

- Project groundwater pumping could result in well interference and impact nearby groundwater users.
- The groundwater model could be improved. Modification of boundary conditions including groundwater flux from the Antelope Valley and discharge at Koehn Lake, and changes to assumptions of agricultural return should be considered.
- Model revisions provided in December 2008 updated the calibration, but did not provide supporting simulations and model sensitivity analysis. As such, there are inconsistencies between what has been provided in the AFC and subsequent analyses.
- As proposed, the evaporation ponds for wastewater disposal are not sufficiently sized to contain the anticipated waste stream
- Staff recommends that …engineering studies be provided for review so Staff can complete an analysis of potential environmental impacts from the proposed reconfiguration of Pine Tree Creek.

Beacon's perspectives on these conclusions are discussed in turn.

Numerical Groundwater Modeling

The PSA indicates that numerical groundwater modeling completed for the AFC was properly constructed using acceptable computer code, designed generally consistent with the site conceptual model and noted that model simulations appear to have met calibration targets of acceptable mass balance and head closure. However, the PSA notes that there a some aspects of the model that should be revised to consider other published studies and historic conditions, including boundary conditions of groundwater flux from the Antelope Valley, discharge from Koehn Lake and agricultural return (recharge) of water to the groundwater basin. And upon making these modifications, uncertainty analyses as provided in the data response should be revised to reflect the updated model. Further, the PSA indicates that there were problems with model convergence for selected simulations, though these were resolved through manipulation of the numerical solver package.

Much of the suggested changes will not materially change the conclusions of the numerical simulations. However, Beacon is agreeable to investigating the proposed changes to the numerical model, including those of groundwater flux assumptions from the Antelope Valley and agricultural return and updating the uncertainty analysis varying key parameters within the model within the ranges provided previously, if deemed necessary to determine the significance

of the impacts. Beacon does not propose to change the discharge assumptions provided in the model for Koehn Lake. Prior information supported the model flux assumptions used in the model for Koehn Lake. Upon completion of these modifications, Beacon proposes to provide documentation and explanation of the results, and including explanation of the how the eastern portion of the model was calibrated northeast of Koehn Lake. The simulations will include both short-term and long-term pumping scenarios.

Additional Recharge Analysis

Additional analysis is needed to quantify recharge, groundwater inflow, and water level transients to reliably assess basin sensitivity to pumping and potential impacts from groundwater consumption. Beacon believes, however, that sufficient effort has been provided in the AFC and subsequent analyses in support of data requests to establish a reasonable understanding of recharge to support an impacts analysis of the project. As presented, the recharge estimates provided in the AFC and for the numerical model were within the ranges reported by GSi and EarthSat in the Samda Study. A sensitivity analysis provided varied the recharge within in a range of 10,000 to 25,000 acre-feet per year, which was within the range of values reported by several investigations, including the effort undertaken for the AFC. The results of the sensitivity analysis produced similar predictions to those provided by the calibrated model. The water level data provided in the PSA shows clearly that for the past two decades groundwater levels are in recovery within portions of the basin that would be affected by proposed project pumping. It is important to state that the proposed project pumping (1,600 acre-feet pre year) will be a fraction of the recharge estimated in the PSA (10,000 to 15,000 acre-feet per year – [4.9-25]).

Impacts to Nearby Wells

The PSA provides significance criteria for evaluation of groundwater impacts from the proposed pumping. The significance criteria stated in the PSA was defined as anything that would interfere with aquifer recharge such that there would be a net deficit in aquifer volume or lowering of the water table. This criterion was later applied using five feet or more of drawdown as predicted by the numerical groundwater model for adjacent water supply wells identified from literature and field research. The PSA concluded from predictions derived from the calibrated numerical model, that 20 wells would experience five feet or more of drawdown at the end of the Project.

Critically intrinsic to most of the groundwater discussion in the PSA, and the genesis for much of Beacon's disagreement, is the fact that Staff appears to have misconstrued and/or misapplied the standards of significance under CEQA with respect to impacts to groundwater. Page 4.9-14 of the PSA sets forth the thresholds for determining significance and lists the various items that staff assessed to evaluate whether if significant impacts to soil or water resources would occur. The vast majority of these items appear to have been copied almost verbatim from the model Environmental Checklist Form, as published in Appendix G of the CEQA Guidelines; however, with respect to groundwater standards, Staff did not accurately paraphrase the Environmental Checklist. Specifically, Appendix G queries whether a project would "Substantially deplete groundwater supplies or interfere **substantially** with groundwater recharge such that there would be a net deficit . . . ." Staff's iteration of this standard omits the second "substantially", thereby inferring that *any* interference with groundwater recharge is a significant adverse impact. This is an incorrect inference and logically untenable. Where the recharge rate of a basin or sub-basin will clearly outpace the annual or lifetime groundwater usage of the project, as is the case here, there is no basis for finding an adverse environmental impact on the grounds that the project will "interfere substantially with groundwater recharge."

In addition, although the PSA generally sets forth the remainder of the Environmental Checklist criteria for groundwater – which defines substantial interference as a "net deficit in aquifer volume or a lowering of the groundwater table (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)" – Staff's assessment does not in fact apply this standard and demonstrate that there will be a net deficit in aquifer volume or that the groundwater table would be lowered in a manner that would affect nearby wells to this degree. The modeling data provided by Beacon, the parameters of which Staff generally approved, demonstrates that no such results will occur, and that the Koehn Lake sub-basin would continue to experience a significant net recharge during the life of the Project. Staff's speculation on page 4.9-47 of the AFC that "increased groundwater consumption by existing or future users" could negatively impact groundwater storage and availability in the area "possibly causing wells to go dry" strays impertinently far outside the acceptable scope of consideration for cumulative impacts. Speculating as to hypothetical impacts from future population growth or new uses is neither

appropriate nor relevant to an evaluation of the cumulative impacts of the BSEP. Accordingly, Beacon requests that Staff remove the statements at the top of page 4.9-47 from the FSA.

In sum, Beacon is concerned that Staff has misconstrued and misapplied the standards for finding a significant impact to groundwater resources. Beacon is also concerned that Staff appears to have appropriated standards and language from Appendix G's model Environmental Checklist, which is meant to be utilized at the very outset of environmental review, and adopted them as thresholds of significance. This is somewhat worrisome, given that the Appendices to the CEQA Guidelines list a variety of potentially significant effects, but do not provide a means of judging whether they are indeed significant in a given set of circumstances. The Environmental Checklist prompts project reviewers to examine a spectrum of potential environmental effects, but leaves the determination of significance to the lead agency. Based on the data provided in the PSA, there does not appear to be substantial evidence supporting a determination that the BSEP will have a significant and unavoidable adverse impact to groundwater resources as proposed.

Availability of Brackish Groundwater near Koehn Lake

The PSA concluded that there was no compelling evidence that there is not economically viable brackish water that is available in the area of Koehn Lake.

Beacon believes that sufficient information has been provided to show that there is not brackish water that could be reliably produced for the Project period (i.e., 30 years) in the area of Koehn Lake, nor that historic agricultural pumping induced flow of this water toward the southwest from the lake. As predicted by the numerical groundwater model simulation provided for data response 96W2 (December 2008), any pumping in the vicinity of the southwest corner of the lake would ultimately draw some of the water preferentially from higher quality water to the southwest due to the permeability contrast between the lake sediments and surrounding more porous aquifer materials. Accordingly, drawing water for the Project from this area would eventually draw in water similar in quality to the water below the Project site. Further, the modeling provided in the AFC also shows that pumping in the area of the Project would not draw water from Koehn Lake and thus worsen water quality within the Koehn Sub-basin. The most recent available water quality data shows that there is no brackish water southwest and west of Koehn Lake. Wells immediately adjacent to the Koehn Lake have very low total dissolved solids (TDS) concentrations. These low concentrations would not support the notion that water

was drawn into groundwater depressions during historic agricultural pumping. Lastly, the TDS trends in water quality data for these wells are in general are in decline, suggesting influence from ongoing recharge to the groundwater basin.

It is also important to note that the feasibility of finding (much less purchasing the property rights to) non-potable water in an area southwest of Koehn Lake is highly questionable with no guarantee of success. Exploration of this nature is beyond what is reasonable under CEQA guidance. 14 CCR § 15126.6(f)(3), states: "An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative. (*Residents Ad Hoc Stadium Committee v. Board of Trustees* (1979) 89 Cal. App.3d 274)." Further, 14 CCR § 15126.6(f)(1), states that lead agencies should take into account whether the project proponent can reasonably acquire, control, or otherwise gain access to an alternative resource when determining whether the alternative is feasible.

In summary, Beacon believes it has demonstrated non-potable water is not likely available for the term of the Project water requirements in the area of Koehn Lake. Available data would not suggest that there is a long-term source of supply and modeling indicates that pumping would influence water of potable quality southwest and west of the lake. Additional exploration to find this water is beyond what is required by CEQA as its success is significantly in doubt.

Engineering Design Review Related to Soils & Water

A final Report of Waste Discharge (ROWD) application was submitted to the CEC and Lahontan RWQCB on March 18, 2009, and the PSA does not reflect this final ROWD application. However, the Lahontan RWQCB provided comments on January 12, 2009 on the Draft ROWD application submitted in May 2008 and Beacon provided responses to these comments on February 10, 2009. Many of the comments were addressed in the February 10, 2009 submission, with the remaining included in the final ROWD application. It does not appear that the PSA reflects the information provided in early February.

Evaporation Ponds

The description of the pond liner (page 4.9-13) is not consistent with the latest submission to the LRWQCB in the final ROWD application in the following areas:

1. PSA: *50 mil HDPE outer liner*, ROWD application: minimal 40 mil HDPE outer liner

2. PSA: *A sand layer would cover the liner system, and sloped pond sections would have both sand and riprap layers covering the liner*; ROWD application: HDPE liner system is covered by a hard protective layer (roller-compacted concrete) with a granular fill/free draining native soils layer. This layer acts as a supporting base and drainage layer between the HDPE and hard protective layer.

Additionally, Staff questioned the sizing of the evaporation ponds. By adjusting the wastewater flow to a 24-hr operating basis and applying the annual 26.5% factor, Staff determined that all three ponds would need to operate to accommodate the flow. To contain the flows, using a corrected evaporation rate of 72 inches per year, 43.5 acres of pond area would be required. A revised calculation was provided to the CEC which uses an annual evaporation rate of 75 inches per year. That is based on a lake factor of 0.7 and a salinity factor of .983 plus accounts for precipitation. The salinity factor was calculated based on TDS of 200,000 ppm. The outcome of this revised calculation was 40 acres (top area) of evaporation ponds are required to allow one pond to be taken out of service for up to one year. During periods of high use, all three ponds may be required to be in operation.

Staff has written "BSEP stated they would construct another pond (in addition to the three) to be used for dilution of potentially toxic salinity concentrations to the evaporation ponds" (page 4.9-30). The current evaporation pond design for BSEP is to use three ponds during operation, which will allow the flexibility for BSEP to operate all three ponds or fewer as needed.

Water Needs for Construction

There are discrepancies between calculations in the AFC and the PSA for the Project water needs and related data during construction. The AFC used a SCAQMD default silt content for the site soils of 7.5% for fugitive dust calculations, however Staff has determined that the silt content ranges from 11% to 65% (page 4.9-15), and use a conservative estimate of 15%.

The water demand during construction consists primarily of water needed to raise the soil water content to near optimum moisture levels for compaction, and to a lesser extent water needed for dust control. Beacon's engineer, WorleyParsons, estimated compaction water demand using test results for optimum moisture content for near surface soils, with an added factor of safety. Dust control water demand was estimated based on the number of anticipated earthwork vehicle groupings, our experience and engineering judgment. Although silt content is

a factor in both optimum moisture content for compaction as well as water needs for dust control, it was not directly used in our construction water demand estimates; however, the methods employed indirectly incorporate silt content. We believe the methods used are reasonable and appropriate for estimation of construction water demand. Beacon requests that Staff provide it's methodology to Beacon for evaluation.

Operation Wastewater

The numbers quoted in this section (page 4.9-29) are not consistent with the AFC or the recent ROWD application submission to the Lahontan RWQCB:

1. Summer Peak Discharge into Evaporation Ponds: PSA *563 gpm*, AFC 572 gpm
2. Average Discharge into Evaporation Ponds: PSA *462 gpm*, ROWD application & AFC 471
3. Evaporation Pond Residue: PSA *51,000 tons*, ROWD application 63,000 tons [126,000,000 pounds]

Stormwater

The PSA concludes the current Conceptual Drainage Report does not meet the County requirements and the Staff had the following comments:

> The use of an onsite retention basin does not address the LRWQCB and CDFG comments and Kern County requirements regarding un-detained discharge from industrial areas… discharges cause significant impacts to the receiving water…location of the pond within the solar field will make maintenance and sediment removal difficult…Design depth of only 5 inches would be difficult to monitor and determine when sediment should be removed…Rock lined weir is not a sufficient hydraulic control for a retention basin outlet structure that is based on only inches of hydraulic head…Low percolation rates in that area.
>
> Drainage ditches should have freeboard and drain into a retention basin as opposed to drainage directly into the proposed channel diversion (i.e multiple retention basins).

Staff refers to retention basin when the design calls out a *detention* basin. The detention basin on site is designed to discharge water at the post developed rate therefore discharges

should not cause significant impact to receiving waters as suggested. There would be an SPCC Plan on site which would address hazardous waste discharge and preventative measures to ensure there is no impact to the downstream waterways. Internal ditches are designed to carry the 100 year event stormwater flow without allowance for freeboard as sheet flow / overflow is acceptable through the solar fields. Detailed design of the channel and detention basins would need to address the other Kern County requirements.

Soil Engineering Report

The detailed geotechnical report is discussed in relation to the slope protection necessary at the re-routed wash. This study will take some time to complete. Staff has recommended this be completed, including Kern County comments, prior to an FSA to support the detailed level design of the re-routed channel. Assuming standard timeline between PSA and FSA, this soils engineering report cannot be complete in time for the FSA. However, Beacon believes that Staff can complete a reasonable analysis with the existing information.

Re-Routed Wash Design

Beacon is currently modeling the existing flood hazards based on the requirements for a Conditional Letter of Map Revision and expects to have an improved understanding of the site specific flood hazards associated with the Project. Therefore, Beacon proposes to defer this discussion until the study results are available.

B. Alternatives

Beacon respectfully disagrees with Staff's conclusions concerning alternatives to the BSEP as the Project was proposed in the AFC. Specifically, Staff opines that "there are seven feasible project alternatives that are reasonable alternatives" to the proposed Project: five of the alternatives rely on the use of non-potable water in the cooling process, the sixth alternative would utilize dry cooling, and the seventh alternative would switch technology from that proposed for this Project to photovoltaic, which does not require a cooling system. Staff also stated that there are possible alternative sites and alternative site layouts that could potentially lessen the purported significant environmental impacts of the proposed Project.

Beacon is concerned about Staff's attempts to redesign the Project by employing different site arrangements, breaking the Project into two separate projects, modifying the cooling system and selecting a different technology. Beacon understands Staff is attempting to follow

Commission policy by redesigning the Project to fit Staff's view of how it would like to see BSEP. Unfortunately, in order for any Project to move from a concept to an operating power plant it must meet engineering, financing and revenue goals. Staff's preferred alternatives of dry cooling or switching to photovoltaic technology do not meet these requirements. Furthermore and as discussed below, Beacon is concerned the Staff-identified alternative water supply is speculative and, in any case, not reliable for power plant operations.

Beacon has at various times explored a version of each of the alternatives presented by Staff, and determined, based on sound research and expert consultation, that these are not in fact feasible alternatives for the proposed BSEP. The basis for Beacon's position is set forth both in the AFC and in the responses to data requests and other supplemental filings that Beacon has submitted during this process. Beacon is reevaluating whether parts of the suggested alternatives could be employed. Nonetheless, the suggested alternatives of dry cooling and changing technology have been evaluated by Beacon and Beacon disagrees with Staff and finds these alternatives to be infeasible for this location.

Scope of the Alternatives Analysis

Beacon notes that critically absent from the alternatives analysis was a discussion of what constitutes a "feasible" alternative under CEQA. CEQA defines "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. Res. Code § 21061.2.) Without such a framework consistently in mind, any discussion of alternatives is logically flawed.[1] While Staff took efforts to evaluate the economic and technologic aspects of the dry cooling and photovoltaic alternatives, there was no similar evaluation of the five alternatives that rely on non-potable water. The discussion and analysis of alternatives that employed an economic analysis is also flawed. Although Beacon is still evaluating the economic analysis conducted by Staff, Beacon disagrees that BSEP can accept an additional $100 million in costs and remain an economically feasible Project.

[1] This is especially true as applied to the PSA's analysis of alternative water sources given that, in the 2003 Integrated Energy Policy Report (IPER), when discussing power plant water use and alternatives, the Energy Commission defined "economically unsound" to mean the same as "infeasible", referencing CEQA's definition of feasible (a definition which is repeated in the Energy Commission's siting regulations at section 1702(f)). *See* 2003 IPER at 41, fn. 64.

In addition, Staff's discussions of alternative sites and alternative site layouts are cursory and do not demonstrate that these are "feasible" alternatives as defined by CEQA. In particular, unless and until Staff presents an alternative site (which Beacon was unable to identify), it cannot be known whether that site could be acquired in a reasonable period of time, and/or that it would not have any economic, environmental, social, or technological ramifications that would make it a less attractive site than the proposed location. A "key question" in considering the feasibility of alternative sites is whether any of the significant effects of the project could be avoided or substantially lessened in an alternate location. Only locations that would achieve such a result should be considered for inclusion in an alternatives analysis. (14 C.C.R. § 15126.6(f)(2)(A).) In addition, the lead agency should consider whether the project proponent can reasonably acquire, control, or otherwise gain access to the alternative site. (*Id.* at § 15126.6(f)(1).) In the desert regions there are often many owners of land where assembling large contiguous blocks can be difficult and expensive if not secured quickly and privately. Unlike the amount of land needed for a gas fired power plant these facilities require large areas for collection of the solar energy. If land is fragmented or difficult to purchase due to the reluctance of a few landowners to sell, the site is not viable. Finally, a new site would require new spring surveys and beginning the permitting process with all of the affected agencies anew. Any of these alternatives would create an infeasible project due to the delays faced by beginning the permitting process from scratch.

Beacon notes that one option evaluated by the Staff is developing a photovoltaic facility. Such a facility would not require review under the Commission and would instead be permitted through local permitting. Such a proposal would create delays in permitting by requiring Beacon to file a request with Kern County and again jeopardize project feasibility.

Beacon further observes that that Staff's analysis under the "Power Plant Efficiency" section states:

> The most significant environmental impacts caused by solar power plants result from occupying large expanses of land. Even in a desert environment, disturbing and shading hundreds or thousands of acres of land can impact environmental resources. The extent of these impacts is likely in direct proportion to the number of acres affected. ... Employing the photovoltaic (PV) technology would result in a lower land use efficiency than the technology proposed for the BSEP. … Staff believes the BSEP represents one of the most

land use-efficient solar technologies currently available to satisfy the Project objective of using proven solar thermal technology.

Availability of Non-Potable Water

Five of the alternatives proposed by Staff rely on the ready availability of non-potable or "brackish" water, as defined by the State Water Resources Control Board. Staff appears to conclude, without analysis, that Koehn Lake could provide brackish water in a sufficient quantity to meet the approximately 1,600 acre/feet per year that will be used during operation of the BSEP. However, Beacon's field research has demonstrated that Koehn Lake could not reliably supply brackish water in these quantities, and that in fact attempting to place supply wells in the Koehn Lake basin could have severe negative impacts to the potable groundwater basin (see further discussion of this issue in the Soil and Water section above). Staff did not appear to identify any other feasible source of non-potable water for the Project. Accordingly, without a reliable source of non-potable water, these five alternatives are not attainable.

Summary of PSA Alternatives Analysis

In summary, Beacon disagrees with Staff's analysis and conclusions that each of the seven alternatives proposed by Staff are feasible alternatives. Beacon does not agree with Staff that these alternatives meet the requirements in the Commission's regulations or CEQA.

V. CONCLUSION

Beacon has identified many areas where there are differences between its findings in the AFC and subsequent documents as compared to Staff's conclusions in the PSA. The primary areas of disagreement are 1) the analyses and impacts related to Beacon's proposed use of groundwater for plant cooling and 2) the feasibility of alternatives that Staff have proposed to mitigate these impacts. While Beacon will be prepared to discuss these issues at the Workshop, as noted in the PSA, it may be necessary to take these issues to the Committee for resolution.

Beacon also identified some differences between its analysis and the PSA regarding the potential for impacts, and hence mitigation required, in the areas of biological and cultural resources. Beacon notes that Staff identified that revised analyses and modeling were undertaken in the areas of Air Quality and Water Resources, and Beacon requests that the data, modeling files, and other information that support these revised impact assessments be provided

for review, such that Beacon can determine their validity. Other topics have less substantial comments.

Beacon looks forward to the Workshop on April 14, 2009 with the goal of resolving as many of these differences as possible.

Respectfully submitted,

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April 8, 2009

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION
OF THE STATE OF CALIFORNIA

APPLICATION FOR CERTIFICATION FOR THE BEACON SOLAR ENERGY PROJECT	DOCKET NO. 08-AFC-2

PROOF OF SERVICE
(Revised 2/9/09)

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Declaration of Service

I, Sophia Rowlands, declare that on April 8, 2009, I served and filed copies of the attached **Beacon Solar, LLC's Preliminary Comments on The Preliminary Staff Assessment.** 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: www.energy.ca.gov/sitingcases/beacon. 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:

(check all that apply)

For Service to All Other Parties

__X__ 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, California with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service List above.

AND

For Filing with the Energy Commission

__X__ sending an original paper copy and one electronic copy, mailed and e-mailed respectively, to the address below **(preferred method)**;

OR

____ depositing in the mail an original and 12 paper copies as follow:

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.

Sophia Rowlands
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