

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov



September 12, 2008

Mr. Mike Augustine
Project Manager
FPL Energy, LLC
1465 Oak Hill Way
Roseville, California 95661

**RE: BEACON SOLAR ENERGY PROJECT (08-AFC-2)
DATA REQUESTS #2 (71-127)**

| | |
|---------------|-------------|
| DOCKET | |
| 08-AFC-2 | |
| DATE | SEP 12 2008 |
| RECD. | SEP 12 2008 |

Dear Mr. Augustine:

Pursuant to Title 20, California Code of Regulations, Section 1716, California Energy Commission staff requests the information specified in the enclosed data requests for the Beacon Solar Energy Project. The information requested is necessary to: 1) more fully understand the proposed project; 2) assess whether the project would result in significant environmental impacts; 3) assess potential mitigation measures; 4) assess whether the project would be constructed and operated in a safe, efficient, and reliable manner; and 5) assess whether the project is in compliance with applicable laws, ordinances, regulations, and standards.

These data requests are being made in the technical areas of Biological Resources, Cultural Resources, Socioeconomics, Soils, and Water Resources. Written responses to the enclosed data requests are due to the Energy Commission staff on or before October 12, 2008, or at such later date as may be mutually agreed upon.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, please send a written notice to the Committee and me within 20 days of receipt of this request. The notification must contain an explanation for any delays or inability to adequately respond, or grounds for any objections to providing the requested information [see Title 20, California Code of Regulations, Section 1716 (f)].

If you have any questions regarding the enclosed data requests, please contact me at (916) 651-0966 or by email at mstratta@energy.state.ca.gov.

Sincerely,

Shaelyn Strattan
Energy Facilities Siting Project Manager

Enclosure

cc: Docket (08-AFC-2)
Proof of Service List

PROOF OF SERVICE (REVISED 8/18/08) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 9/12/08

**BEACON SOLAR ENERGY PROJECT
(08-AFC-2)
DATA REQUEST #2**

Technical Area: Biological Resources
Author: Susan Sanders

BACKGROUND

Re-Routed Desert Wash: The July 16, 2008 *Response to CEC Data Requests 1 – 70* (Data Response) contains numerous inconsistencies in the discussion of the re-routed desert wash. Pages BR-11 through BR-13 of the Data Response describe the newly created drainage as a mostly natural, unarmored channel that could eventually replace the functions and wildlife values of the impacted desert wash by creating a meandering low flow channel with hummocks and small channels conducive to revegetation and creation of microhabitats. However, page 2 of Attachment DR-44 of the Data Response and the Streambed Alteration Agreement Application describes the low flow channel of the re-routed wash as lined with rock and includes other descriptions of the channel that are inconsistent with the discussion in the Biological Resources section of the Data Response.

DATA REQUESTS

71. Please provide a detailed discussion of the design of the rerouted desert wash and clarify any discrepancies and inconsistencies between information in the AFC and the July 16, 2008 Data Response #17.
72. Please provide a revised Drainage Study and channel design that would create the appropriate conditions in the proposed rerouted desert wash to promote natural hydrological/geomorphological processes and establish native vegetation.

BACKGROUND

Evaporation Ponds: Page BR-7 of the Data Response #14 states that “[B]ased on the biological monitoring associated with the evaporation ponds at the Harper Lake SEGs, salt toxicosis has been a rare occurrence (i.e., a single event was tied directly to high saline levels in the evaporation pond), and a recurrence has since been avoided by equalizing the water levels in all evaporation ponds that are active at any given time.” Page BR-7 also indicates that formation of salt crystals on hyper-saline ponds requires water temperatures of 4 degrees Celsius (39 degrees Fahrenheit), and page BR-8 describes how monitoring activities at the ponds would be triggered by overnight temperatures at or below 4 degrees.

DATA REQUESTS

73. With respect to the reference on page BR-7, please discuss the frequency and duration of biological monitoring (via cameras, human observers, etc.) that has occurred at Harper Lake SEGs.
74. Please explain the method and frequency for equalizing water in all evaporation ponds.

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75. Please provide a chronology of the summer 2007 waterfowl deaths and the factors leading to the conclusion that equalizing water levels in each evaporation pond would prevent recurrences of salt toxicosis.
76. Please provide data on migratory bird activity at Harper Lake SEGS in the months subsequent to the summer 2007 events.

BACKGROUND

Compensation for Impacts: Pages BR-15 through BR-17 describe the rationale for Mohave ground squirrel and desert tortoise compensation for impacts within the plant site boundary. The proposal is to mitigate for two transient desert tortoises and two transient Mohave ground squirrels within the site's 429.5 vegetated areas (369.2 acres of Fallow Agricultural-Disturbed Atriplex Scrub and 60.3 acres of Mojave Desert Wash Scrub). The foundation for the proposed compensation ratios is the assumption that good quality habitat would support six adult Mohave ground squirrels per 25 hectares, and 25 desert tortoises per square kilometer. The basis for the Mohave ground squirrel density estimate is described on page BR-17 as "long-term research in the Coso region during the current decade" with no reference, and the desert tortoise density estimate is cited as Berry 1997, but no reference is provided for this citation.

DATA REQUEST

77. Please provide electronic copies of the references that support the proposed compensation ratios for the Mohave ground squirrel and desert tortoise.

BACKGROUND

Burrowing Owl Relocation: Page BR-22 of the Data Response discusses measures to avoid direct impacts to burrowing owls and states that owls would be "passively relocated off-site with the use of supplemental burrows at a 2:1 replacement ratio. Mitigation in the amount of 6.5 acres was suggested. Passive relocation of burrowing owls into artificial burrows has been shown be effective(EDAW 2008).....Habitat will be managed in the vicinity of the Plant Site for preservation of the species." Staff needs additional information on the potential for long-term success of the proposed burrowing owl relocation and how lands near the Plant will be managed to provide foraging and breeding habitat for burrowing owls.

DATA REQUEST

78. Please provide additional detailed, site-specific information as to how and where owls would be relocated off-site and how lands would be managed in the vicinity of the site for long-term preservation of this species. This relocation/preservation plan should reflect close coordination with the California Department of Fish and Game and the U.S. Fish and Wildlife Service and should include the following elements:
 - a. A figure depicting the location of the off-site relocation area at a scale no less than 1 inch = 1000 feet;

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- b. A description of the ownership of the relocation area, an assessment of habitat suitability of the area for burrowing owls, and a discussion of proposed management of habitat within the relocation site;
- c. A description of the how lands would be managed near the Plant to promote long-term maintenance of a viable burrowing owl population; and
- d. A figure, at a scale of no less than 1 inch = 1000 feet, depicting the areas that would be subject to burrowing owl management.

**BEACON SOLAR ENERGY PROJECT
(08-AFC-2)
DATA REQUEST #2**

Technical Area: Cultural Resources

Authors: Michael McGuirt and Michael Lerch

Any information that identifies the locations of archaeological sites must be submitted under confidential cover.

BACKGROUND

The recent pedestrian survey of the project area, including associated linear corridors, identified 39 prehistoric archaeological sites, 13 historical archaeological sites, 6 dual-component, prehistoric and historical archaeological sites, and 16 built environment resources (Section 5.4, *Cultural Resources*, of the March 2008 *Beacon Solar Energy Project Application for Certification* (AFC)). In the AFC, the applicant proposes to avoid 34 of the archaeological sites and all of the built environment resources. The applicant is also in the process of evaluating the California Register of Historical Resources (CRHR) eligibility of 12 archaeological sites (3 of the 12 appear in the AFC as being part of the 33 cultural resources that the project would avoid), for which the applicant does not believe enough information is available to make eligibility recommendations (9 June 2008 *Beacon Solar Archaeological Site Evaluation* proposal). Staff needs additional information regarding the 15 prehistoric and historical archaeological sites that were preliminarily recommended in the AFC as not qualifying for eligibility to the CRHR.

DATA REQUEST

To enable staff to complete its analysis of potential project effects to historical resources:

79. Please clarify the strategy that the applicant plans to use to conclude the evaluation of the CRHR eligibility of the 15 archaeological sites (12 prehistoric lithic scatters and 3 historic refuse deposits) that the project apparently would not avoid and that are not presently undergoing evaluation.
80. Please provide a table of these resources, based on the information provided in (1) above, which includes the regulatory remedy proposed for each resource.
 - a. Please indicate whether the applicant has been able to determine, subsequent to the filing of the AFC, that the project would avoid any of these resources.
 - b. If not, please recommend the CRHP eligibility of archaeological sites that cannot be avoided, based on extant surface observations or a further round of field observation.
 - c. Should the applicant conclude that more field data is needed to evaluate any of the 15 subject archaeological sites, please provide, for staff approval, proposals for any protocols that the applicant wishes to use to programmatically evaluate resource types, prior to the implementation of those protocols.

BEACON SOLAR ENERGY PROJECT
(08-AFC-2)
DATA REQUEST #2

Technical Area: Socioeconomics
Author: Marie McLean

BACKGROUND

Section 5.11.3.2 – **Construction**, includes a section on employment and economy. However, it does not include information about state and local taxes paid during the construction period.

DATA REQUEST

81. Please provide the amount of state and local taxes projected to be paid during the construction period.
82. Please provide the tax rate.
83. Please provide an estimate of taxes projected to be paid for the life of plant and the tax rate on which the estimate was based.
84. Please provide the valuation year of dollars on which amounts are based or in constant dollars.

BACKGROUND

Section 5.11.3.2 - **Employment** includes information about indirect and induced revenues resulting from the construction of the plant. However, direct, indirect, and induced revenues from the operation of the plant were not provided.

DATA REQUEST

85. Please provide the amount of indirect and induced revenues resulting from the operation of the plant over the life of the project.

BACKGROUND

Section 5.11.3.3 (page 5.11-27) includes a section on **Utilities**. That section includes information about the project's use of natural gas from the Southern California Gas Company (SoCalGas). SoCalGas charges a franchise fee on the gas it sells to utilities, as well as a franchise fee surcharge.

DATA REQUEST

86. Please provide the amount of the gas franchise fee to be paid to SoCalGas during the operation of the project.
87. Please provide the amount of the gas franchise fee surcharge.
88. Please provide the valuation year of dollars on which amounts are based or in constant dollars.

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BACKGROUND

Section 5.11.3.3 - Fiscal Resources (page 5.11-28) includes information about a tax exemption for certain solar components. Currently, that tax exemption applies to tax liens ending with the 2008-2009 fiscal year and the exemption has not been extended. According to the AFC, the plant is scheduled to begin operation in the third quarter of 2011, after the tax exemption has expired.

DATA REQUEST

- 89. Please provide the projected dollar amount of property tax without the exemption.
- 90. Please provide the tax rate.
- 91. Please provide an estimate of taxes for the life of plant, tax rate on which the estimate is based, and valuation year of dollars or in constant dollars.

BACKGROUND:

Total capital costs—the total costs needed to bring the plant to a commercially operable status (including labor used for construction and one-time costs) provide a significant socioeconomic benefit to the community in which the plant is located, as well as to the surrounding areas. The AFC does not include information about total capital costs.

DATA REQUEST

- 92. Please provide the projected total amount of capital costs associated with this project.

**BEACON SOLAR ENERGY PROJECT
(08-AFC-2)
DATA REQUEST #2**

Technical Area: Soil
Author: Casey Weaver

BACKGROUND:

The BSEP site is bisected by a dry wash named Pine Tree Creek. Pine Tree Creek conveys water only following substantial rain events occurring in the Tehachapi Mountains, located to the southwest of the site. The maximum flow recorded for Pine Tree Creek was 7,500 cubic feet per second (cfs) in 1978. It is estimated that during a 100-year storm, flow in Pine Tree Creek could approach 20,000 cfs. To accommodate the planned use of the proposed project site, the applicant is proposing to reroute a reach of the creek around the southeastern corner of the property. The proposed realignment involves intercepting the northward-trending channel, directing it into a trapezoidal-shaped channel that would be located along the eastern side of the site and discharging the collected flow near the northeast corner of the site. Water flowing out of the channel is intended to escape as sheet flow, approximating natural conditions at that location.

DATA REQUEST

93. As presented in the AFC, there is no outlet structure at the end of the channel to equally dissipate flows across the width at the channel mouth. Please explain and provide revised drawings, as needed, to show how the channelized flows would be converted to sheet flow at the channel outlet.
94. On Figure C-4, the southern half of the "outlet" slopes toward the center of the channel, forcing flows to concentrate rather than dissipate. Please explain and provide revised drawings, as needed, to show how this proposed channel configuration returns channelized flow to sheet flow at the channel outlet.
95. The right (eastern) bank of the artificial channel intercepts a natural swale that likely conveys water during wet periods. This artificial barrier would cause flows to accumulate, concentrate, and flow down the eastern edge of the structure. This condition would likely cause excessive erosion along the edge of the structure and deposition of sediment on the neighboring property. Please explain and provide revised drawings, as needed, to show what erosion/sedimentation control measures would be implemented in this area.

**BEACON SOLAR ENERGY PROJECT
(08-AFC-2)
DATA REQUEST #2**

Technical Area: Water Resources
Author: Casey Weaver

BACKGROUND

In Data Request #58, staff requested an explanation of why available brackish water was not considered as an alternative water source for power plant cooling needs. The applicant responded to request #58 stating that existing information was inconclusive regarding the location of the boundary of a 1,000 parts per million (ppm) TDS isoconcentration in the site vicinity. The applicant also stated that AFC Figure 5.17-11 (depicting the location of the 1,000 ppm isoconcentration line) was based on old (1953) information. Further, the applicant stated that although the title of the figure is "TDS Concentrations 1953 -1958 and 1999-2007", it is not representative of existing site conditions. The applicant's response also discussed various wells identified by section numbers, but did not provide a map showing the well locations.

Staff needs to understand where the contemporary limits of poor quality (greater than 1,000 ppm TDS) groundwater occur in the site vicinity to make an assessment of the potential for the project to use lower quality groundwater.

DATA REQUEST

96. Please provide a map delineating the contemporary boundary between poor quality water (>1,000 ppm TDS) and high quality (<1, 000 ppm TDS) groundwater.
97. Please provide a map showing the locations of the wells described in Data Response #58.

BACKGROUND

In Data Request # 61, staff requested an explanation of how groundwater well construction details were determined. In the response to staff's data request, the applicant stated that Mr. Switzer knew the well construction details because of his prior experience and understanding, from a long history of site operations. It appears that some of the well construction information presented in the AFC is based solely on Mr. Switzer's recollection of events that occurred over 30 years ago.

DATA REQUEST

98. Please revise all figures and tables to show source of well construction details (e.g., field verification, written documentation, or Mr. Switzer's recollection).

BACKGROUND:

In Data Request # 66, staff requested an explanation of how the elongate cone of depression, shown on Figure 5.17-8, was determined, given the lack of data points available to make that determination. In the response to staff's data request, the applicant stated that the configuration presented on the figure was based on the data from the observation wells and from interpretation of published information that suggests the Cantil Fault is a barrier to groundwater flow. The applicant's interpretation

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of groundwater conditions is not based on actual observations of groundwater conditions in the areas south and east of the pumping well. Without field data or other documentation, staff cannot perform an analysis of groundwater conditions.

DATA REQUEST

99. Please revise and provide to staff Figure 5.17-8 to represent actual measured conditions. In areas where there is no data to support the interpretation, please indicate by using appropriate symbols.
100. Please revise and provide to staff the corresponding sections in the AFC to describe actual measured groundwater conditions.

BACKGROUND

In Data Request # 67, staff requested the evidence that was evaluated to arrive at the statement that the offsite wells located north and east across the Cantil Fault were "likely not affected during the period of the test." In the response to staff's data request, the applicant stated that the cone of depression referenced in Data Request #66 supports the statement. As previously noted, there is not sufficient data (no depth to groundwater measurements) to establish the presented configuration of the cone of depression and, as such, it cannot be used to support the conclusion that wells north and east of the Cantil Fault were not affected by pumping. Without data to support the statement that wells located north and east across the Cantil Fault were "likely not affected during the period of the test", staff cannot perform an analysis of the boundary conditions presented in the AFC.

DATA REQUEST

101. Please clarify the extent of the evaluation of offsite wells located north and east across the Cantil Fault to reflect the actual information collected in that area during the pumping test and the statistical support for the applicant's conclusions regarding the hydrogeologic conditions in that area.

BACKGROUND

In Data Request # 68, staff requested an explanation of why the groundwater model identifies a significant boundary to flow across the Cantil fault and how that was determined. In the response to staff's data request, the applicant stated that the boundary was determined through review of historic investigations and hydrogeologic data. However, the locations of those investigations and the data used in the interpretation were not provided. Figures 5.17-5 and 5.17-9 of the AFC do not indicate that a groundwater flow boundary exists at the project site. Additionally, hydrographs of wells located on both sides of the Cantil Fault (Figure 5.17-4, wells 30S/37E-36G01, 31S/37E-04J01 and 31S/37E-04Q01) indicate that they are screened in the same (no barrier) hydrostratigraphic unit. To perform an analysis of the site groundwater conditions, staff needs to know which data and reports provide the basis for the conclusions.

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DATA REQUEST

102. Please revise and provide to staff the figures pertinent to this data request to reflect the information collected during the site specific tests. Where the interpretation uses assumptions based on previous investigators' basin-wide evaluations, please identify those assumptions separately.
103. Please explain how hydrographs collected from wells located on both sides of the Cantil Fault are similar, given the assumption that the fault is a barrier to groundwater movement.

BACKGROUND

Staff has conducted a detailed review of the groundwater model provided in the AFC. During the review, numerous data needs were identified, that staff will need to complete its analysis.

DATA REQUEST

104. The purpose statement for the groundwater-flow model indicates potential impacts were developed by "superimposing" project pumping on to the calibrated flow model. Please explain whether the calibrated flow model was formally converted to a superposition model. If so, please provide the details describing the conversion. If not, please provide the details documenting the selection of simulated recharge, pumping, and specified-fluxes for the 30-year projection.
105. Please provide the complete citation for the following reference: Konikow (1978). It is missing from Section 6.0 (References) of Appendix J.2
106. Please provide a map showing locations of the model calibration targets (the well locations reported in Table 4.2).
107. Please provide a map that overlays and compares observed (Figure 3.2) and simulated (Figure 4.6) 1958 groundwater level contours. Figure 4.6 is titled "observed vs. simulated 1958", but there is only one set of contours and the figure does not identify which set is shown (i.e., observed or simulated).
108. Please provide a map that overlays and compares observed (Figure 3.4) and simulated 1976 groundwater level contours.
109. Please provide a map that overlays and compares observed (Figure 5.17-3) and simulated 2007 groundwater level contours.
110. For Figures 5.17-3, 5.17-7, 5.17-8, 5.17-9:
 - a. Please identify how contours were prepared.
 - b. Please post the values contoured.

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- c. Please query the contours as appropriate to show where data is lacking and/or assumptions were made in selecting the shape of the contours (i.e., faults assumed to act as partial barriers to flow). (See Figure 5.17-10 as an example of a contour map that more adequately considers data limitations and uncertainty.)

BACKGROUND

Portions of the report are confusing because “Fremont Valley” and “Koehn subbasin” appear to be used interchangeably, but the two are not the same thing (Koehn is a subbasin of the greater Fremont Valley). This is especially confusing when trying to understand and reproduce volumetric water budget components like recharge, pumpage, or underflows reported for the Fremont Valley, yet extracted for the Koehn subbasin model.

DATA REQUEST

111. Please clarify the ambiguity between the discussions of the two basins.
112. Please provide documentation of the specific data sources and calculations used to develop all simulated volumetric water budget components specified in the groundwater model.

BACKGROUND

The model documentation is incomplete and a number of specific questions would be more effectively answered if the applicant provides the raw MODFLOW files and the listing files for review.

The groundwater-flow model was constructed using the proprietary Groundwater Vistas software, which uses the U.S. Geological Survey’s source code MODFLOW 2000; MODFLOW 2000 is freely available from the U.S. Geological Survey. For this reason, the raw MODFLOW files and the resulting listing files are the most useful.

DATA REQUEST

113. Please provide MODFLOW files* for:
 - a. The model calibration run (1958 steady-state calibration);
 - b. The model “verification” run (1958-2007 simulation period); and
 - c. The two predictive impact assessments (1,600 AFY of continuous pumping for 30 years, and 5-month construction period pumping).

*Note: In order to keep the file size manageable, the binary heads and cell-by-cell flow files are not needed for review at this time.

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BACKGROUND

All calibrated models are influenced by uncertainty because definition of the magnitude and distribution of water transmitting and storage properties cannot be determined exactly (hydraulic conductivity, fault conductivity, and specific yield), and there is uncertainty in the definition of boundary conditions and stresses, particularly the magnitude and timing of recharge and pumpage. For example, in the Koehn sub-basin model, the report states the following:

- “One of the most difficult aspects of understanding the hydrogeology of Fremont Valley and the Koehn sub-basin is estimating the recharge in the basin.”
- “Groundwater recharge to Fremont Valley could therefore range from 3,300 to 22,000 AFY”.
- “The estimates of recharge to the Koehn sub-basin have varied widely, though most scientists report that recharge principally occurs from underflow from adjacent sub-basins rather than infiltration from precipitation and runoff.”

A sensitivity analysis is required to assess and quantify the effect of this uncertainty on the model calibration and predicted water levels. First, the plausible ranges for aquifer parameters, recharge, and pumpage need to be summarized, preferably in a tabular format. Then, the corresponding values in the model should be systematically changed and the magnitude of change in simulated impacts (drawdown) reported.

In all models, the aquifer parameters (hydraulic conductivity, fault conductivity, and specific yield) are coupled to the system stresses (recharge and pumpage). This means that different combinations of modeled recharge and aquifer parameters can conceivably be combined to simulate a statistically similar distribution of groundwater levels. For this reason, “verification for the calibrated [Koehn subbasin] model” by changing stresses “such as pumping rates and recharge rates” to match well hydrographs is questionable and it is important to conduct and report a sensitivity analysis for the model.

DATA REQUEST

114. Please provide a sensitivity analysis for the model that includes the plausible ranges for aquifer parameters, recharge, and pumpage, summarized in a tabular format.

115. Based on the sensitivity analysis, please report the magnitude of change in the simulated impacts.

BACKGROUND

Information in the groundwater model report suggests Koehn Lake is a groundwater sink. Specifically, the report indicates it is a closed basin (“The Koehn sub-basin is considered a closed basin; all water flowing into the basin remains within the basin. The only natural mechanism for water to exit is through evaporation.”) and 1958 groundwater level contours (Figure 3.2) indicate subsurface flow is toward the Lake.

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DATA REQUEST

116. Please explain why evaporation from shallow groundwater beneath Koehn Lake is not explicitly simulated in the model.

117. Please provide the simulated volumetric budget for all budget components.

BACKGROUND

The groundwater model report concludes the 1958 steady-state model calibration is acceptable. However, Figure 3.2 (observed 1958 groundwater level contours) indicates that groundwater levels southwest of Koehn Lake were greater on the north side of the Cantil Valley Fault than on the south, and a significant cone of depression was mapped southeast of the proposed plant boundary. Northeast of Koehn Lake, observed groundwater levels were the same on either side of the Fault. In contrast in Figure 4.6 (presumably showing simulated 1958 groundwater level contours), the simulated groundwater levels southwest of Koehn Lake are generally greater on the south side of the Cantil Valley Fault – opposite from what was observed. There is no cone of depression southeast of the proposed plant boundary. Northeast of Koehn Lake, simulated groundwater levels are greater on the north side of the Fault, which is not supported by observed groundwater levels, and further up the valley, there is an area where the simulated water level gradient is much steeper than the rest of the valley.

DATA REQUEST

118. Please clarify and provide justification for the above discrepancies between simulated and observed conditions.

BACKGROUND

A transient calibration step was conducted by simultaneously matching the observed drawdown in wells during three aquifer tests conducted on the proposed project site. The calibration is considered acceptable, based on a statistical comparison of simulated and observed heads, yet no statistical comparison of simulated and observed temporal trends in water levels is provided. Plots comparing observed and simulated water levels are required to document the model adequately reproduces the magnitude and rate of observed water level changes.

Four hydraulic conductivity subareas are shown beneath the project area. The hydraulic conductivity of the three subareas adjacent to the Cantil Valley Fault are fairly similar (50 to 58 feet per day), but the adjacent subarea located east of these subareas has a hydraulic conductivity that is 200 to 500 times lower than all the surrounding subareas (0.11 feet per day).

DATA REQUEST

119. Please provide plots comparing observed and simulated water levels for the data locations reported in Table 4.3

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120. Please provide the geologic data, analysis, and interpretation required to justify the simulated hydraulic conductivity distribution.

BACKGROUND

A “verification” run was conducted by applying the “calibrated” model to a different time period (1958-2007). Pumping and recharge rates were “changed to match well hydrographs” from three wells located in “Fremont Valley”. Comparisons between simulated and observed groundwater levels over time (hydrographs) are provided for only three wells, but there are substantially more wells having data that could be reported.

DATA REQUEST

121. Please provide hydrographs for additional wells. The number and distribution of wells should encompass as much of the geographic area represented by the model as possible.
122. Because recharge and/or pumpage were “changed” in the “verification” run in order to match between observed and simulated groundwater levels, please provide a comparison, using either tables or figures, of estimated and “changed” recharge and pumpage values over the 1958-2007 simulation period.
123. Please provide the simulated volumetric budget and compare to previously estimated flow components. Because it is a transient model run, and simulates the period 1958 through 2007, average, annual flow rates will suffice.

BACKGROUND

The applicant owns an existing solar facility in western San Bernardino County that is substantially similar to the proposed facility. The existing facility has had wildlife impacts at their evaporation ponds due to salt toxicity. During the data response workshop conducted in California City on July 1, 2008, the applicant stated that evaporation pond salt toxicity to wildlife may be mitigated at the proposed facility by diluting the salt concentration in the evaporation ponds with water.

DATA REQUEST

124. Please identify the origin of the proposed evaporation pond dilution water.
125. Please describe the quality of the water proposed to dilute the evaporation ponds.
126. Please provide an estimate of the volume of water required to adequately dilute the evaporation ponds.
127. Please revise the water budget description and diagram to include the use of water to dilute the evaporation ponds.



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV

APPLICATION FOR CERTIFICATION
For the *BEACON SOLAR ENERGY*
PROJECT

Docket No. 08-AFC-2

PROOF OF SERVICE
(Revised 8/18/08)

INSTRUCTIONS: All parties shall either (1) send an original signed document plus 12 copies or (2) mail one original signed copy AND e-mail the document to the address for the Docket as shown below, AND (3) all parties shall also send a printed or electronic copy of the document, which includes a proof of service declaration to each of the individuals on the proof of service list shown below:

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. 07-AFC-9
1516 Ninth Street, MS-15
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docket@energy.state.ca.us

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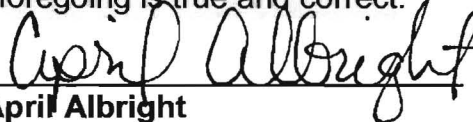
Public Adviser's Office
pao@energy.state.ca.us

DECLARATION OF SERVICE

I, April Albright, declare that on September 12, 2008, I deposited copies of the attached Beacon Solar Energy Project (08-AFC-2) Data Requests #2 (71-127) in the United States mail at Sacramento, CA with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above.

Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

I declare under penalty of perjury that the foregoing is true and correct.


April Albright