

## CALIFORNIA ENERGY COMMISSION

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



April 7, 2009

Ms. Judy Hohman  
U.S. Fish and Wildlife Service  
Ventura Fish and Wildlife Office  
2493 Portola Road, Suite B  
Ventura, CA 93003

**DOCKET**  
**08-AFC-2**

DATE APR 07 2009

RECD. APR 07 2009

Dear Judy,

Thank you for taking the time to discuss the Beacon Solar Energy Project with my staff. As a follow up to your request, this letter is intended to provide the U.S. Fish and Wildlife Service with specific information regarding Commission staff's Preliminary Staff Assessment and to highlight staff's concerns with the project's potentially significant impact on water resources.

As you may be aware, historic groundwater pumping in the Fremont Valley Basin has resulted in groundwater overdraft and subsidence. The Department of Water Resources (DWR) has long defined groundwater overdraft as "the condition of a groundwater basin or subbasin in which the amount of water withdrawn by pumping exceeds the amount of water that recharges the basin over a period of years, during which the water supply conditions approximate average conditions. Overdraft can be characterized by groundwater levels that decline over a period of years and **never fully recover**, even in wet years." (DWR Bulletin 118, 2003, p96)

Continuous overdraft for a number of years may result in significant adverse impacts including increased extraction costs, costs of well deepening or replacement, land subsidence, water quality degradation, and other environmental impacts.

As currently proposed, staff estimates that construction and operation of the project would consume approximately 60,000 acre feet of potable water, equating to more than 20 billion gallons of potable water, during the 30-year life of the project. The water would be pumped from on-site wells, drawing approximately 10,000 acre feet during construction and more than 1,600 acre feet per year for operations, from an aquifer already in overdraft condition. After evaluating the project's proposed use of potable water, in this desert basin, staff has concluded the proposed project's estimated level of potable water consumption would result in significant impacts to the rate of groundwater recharge, potable water resources and wells in the basin.

Basin well data has indicated that current water levels remain substantially lower than historic high water levels and in some areas there is a continuing decline. Specifically, data evidences that basin wells are from eight to 129 feet below their historical maximum values. Since the cessation of agriculture operations at the site and the

surrounding area, it has taken nearly 25 years for the groundwater level to recover by 50 percent of previous levels. Staff concluded that the proposed project will result in additional water level reductions of five feet or more in at least 20 basin wells. Staff has also concluded that reductions of five feet or more may result in increased extraction costs, land subsidence and possible water quality degradation which staff considers significant impacts.

As a whole, increased groundwater consumption resulting from the proposed project would decrease the rate of storage recovery in the Fremont Valley Basin and could begin to remove groundwater from storage. Long-term ground water extraction may negatively impact water users in the basin by increasing pumping lifts, causing wells to go dry and negatively impacting the primary potable water supply to the Fremont Valley.

To date, the project applicant has not proposed any mitigation measures to address the potentially significant impacts discussed above. Staff concluded that in order to mitigate these impacts to less than significant levels, viable mitigation that can effectively replace the decline in the water available to the neighboring residents will need to be implemented. (Gray v. County of Madera, (2008) 167 Cal.App.4th 1099, 1116)

Given the potentially significant impact to ground water resources in the basin that would result from the proposed project's water use, staff is proposing the project implement dry cooling technology to reduce water use by 97 percent. Dry cooling would also eliminate the need to construct and maintain large evaporating ponds. Staff has concluded the evaporation ponds are expected to be a minimum of 44 acres in size and more likely total nearly 60 acres in size, not the 24 acres originally projected by the applicant.

We appreciate your ongoing cooperation. If you have any further questions, please contact Eric K. Solorio, Siting Project Manager, at (916) 651-0966 or at the address on this letterhead or by email to [esolorio@energy.state.ca.us](mailto:esolorio@energy.state.ca.us).

Sincerely,

Date: \_\_\_\_\_

\_\_\_\_\_  
TERRENCE O'BRIEN, Deputy Director  
Energy Facilities Siting Division



**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 2/9/09)*

**APPLICANT**

Scott Busa  
Kenneth Stein, J.D.,  
Meg Russell  
Duane McCloud  
Guillermo Narvaez, P.E.  
Nextera Energy Resources, LLC  
700 Universe Blvd.  
Juno Beach, FL 33408  
[Scott.Busa@Nexteraenergy.com](mailto:Scott.Busa@Nexteraenergy.com)  
[Kenneth.Stein@Nexteraenergy.com](mailto:Kenneth.Stein@Nexteraenergy.com)  
[Meg.Russell@Nexteraenergy.com](mailto:Meg.Russell@Nexteraenergy.com)  
[Duane.McCloud@Nexteraenergy.com](mailto:Duane.McCloud@Nexteraenergy.com)  
[Guillermo.Narvaez@Nexteraenergy.com](mailto:Guillermo.Narvaez@Nexteraenergy.com)

**APPLICANT'S CONSULTANTS**

Sara Head, Vice President  
AECOM Environment  
1220 Avenida Acaso  
Camarillo, CA 93012  
[sara.head@aecom.com](mailto:sara.head@aecom.com)

Bill Pietrucha, Project Manager  
Jared Foster, P.E.,  
Mechanical Engineer  
Worley Parsons  
2330 E. Bidwell Street, Suite 150  
Folsom, CA 95630  
[Bill.Pietrucha@worleyparsons.com](mailto:Bill.Pietrucha@worleyparsons.com)  
[Jared.Foster@worleyparsons.com](mailto:Jared.Foster@worleyparsons.com)

**COUNSEL FOR APPLICANT**

Jane Luckhardt, Attorney at Law  
Downey Brand Attorneys LLP  
621 Capital Mall, 18<sup>th</sup> Floor  
Sacramento, CA 95814  
[jluckhardt@downeybrand.com](mailto:jluckhardt@downeybrand.com)

**INTERESTED AGENCIES**

California ISO  
[e-recipient@caiso.com](mailto:e-recipient@caiso.com)

**INTERVENORS**

\*Tanya A. Gulesserian  
Marc D. Joseph  
Adams Broadwell  
Joseph & Cardozo  
601 Gateway Boulevard,  
Suite 1000  
South San Francisco, CA 94080  
E-MAILED PREFERRED  
[tgulesserian@adamsbroadwell.com](mailto:tgulesserian@adamsbroadwell.com)

**ENERGY COMMISSION**

KAREN DOUGLAS  
Chairman and Presiding Member  
[KLdougl@energy.state.ca.us](mailto:KLdougl@energy.state.ca.us)

JEFFREY D. BYRON  
Commissioner and Associate  
Member  
[Jbyron@energy.state.ca.us](mailto:Jbyron@energy.state.ca.us)

Kenneth Celli  
Hearing Officer  
[kcelli@energy.state.ca.us](mailto:kcelli@energy.state.ca.us)

Eric K. Solorio  
Project Manager  
[esolorio@energy.state.ca.us](mailto:esolorio@energy.state.ca.us)

Jared Babula  
Staff Counsel  
[jbabula@energy.state.ca.us](mailto:jbabula@energy.state.ca.us)

Public Adviser's Office  
[publicadviser@energy.state.ca.us](mailto:publicadviser@energy.state.ca.us)

**DECLARATION OF SERVICE**

I, Teraja` Golston, declare that on April 08, 2009, I served and filed copies of the attached Beacon Solar Energy Project (08-AFC-2), CEC Letter to US Fish and Wildlife Service. 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](http://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:**

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, CA with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

**AND**

**FOR FILING WITH THE ENERGY COMMISSION:**

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

**OR**

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

**CALIFORNIA ENERGY COMMISSION**

Attn: Docket No. 08-AFC-4

1516 Ninth Street, MS-4

Sacramento, CA 95814-5512

[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)

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

Original Signature in Dockets

Teraja` Golston