#### CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET SACRAMENTO, CA 95814-5512



April 1, 2009

TO: AGENCY DISTRIBUTION LIST

# REQUEST FOR AGENCY COMMENTS ON THE PRELIMINARY STAFF ASSESSMENT FOR THE PROPOSED BEACON SOLAR ENERGY PROJECT (08-AFC-2)

NOTICE OF PUBLIC WORKSHOP Tuesday, April 14, 2009 Starting at 8:00am

California City
Council Chambers – City Hall
21000 Hacienda Blvd.
California City, CA 93505
(Wheelchair Accessible)
(Map Attached)

DOCKET 08-AFC-2				
DATE	APR	0	1	2009
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To participate in the meeting by telephone, please call: 1-866-469-3239 (toll-free in the U.S. and Canada) Enter passcode: 921 865 825

The enclosed Preliminary Staff Assessment (PSA) contains the California Energy Commission staff's initial engineering and environmental evaluation of the Beacon Solar Energy Project (BSEP) Application for Certification (08-AFC-2).

Summary of the California Energy Commission Staff's Preliminary Conclusions

Staff's preliminary analysis shows that, with the exception of Soil and Water Resources and Visual Resources, the BSEP's potential impacts could be mitigated to a less than significant level. Staff believes the impacts to Visual Resources cannot be mitigated.

Staff is currently waiting to receive from the applicant, new design data related to the engineering of the proposed diversion channel. At this time staff is unable to determine if the BSEP impacts to the floodplain and neighboring properties could be avoided or mitigated. Staff anticipates receiving this data from the applicant no later than April 30, 2009.

Staff's analysis concludes that as proposed, the BSEP would not comply with certain applicable laws, ordinances, regulations, and standards (LORS), nor comply with state water policies that pertain to the use of fresh water in industrial applications and power plant cooling systems. BSEP's proposed use of potable groundwater for power plant cooling and the project's process and potable water needs would cause a significant adverse impact to potable water resources and could affect current and future users of groundwater.

### Summary of the Proposed Beacon Solar Energy Project (BSEP)

On March 14, 2008, the applicant filed an Application for Certification (AFC) with the California Energy Commission seeking permission to develop the proposed 250 megawatt (MW) BSEP project. The applicant proposes to locate BSEP on 2,012 acres within the Mojave Desert, in San Bernardino County, California. The proposed project would also require on-site and off-site infrastructure improvements such as a natural gas pipeline and metering station, new ground water monitoring wells, storm water retention basins and diversion channels, telecommunications lines and road improvements.

The project site arrangement would generally consist of a 1,266-acre, rectangular arrangement of parabolic trough solar collectors surrounding a centrally located power block. The power block facility would house the majority of electrical generation equipment and related systems, with exception of the solar field. The solar collectors would be constructed in long rows across the project site and aligned side by side in a north-south orientation to allow the parabolic troughs to slowly rotate from east to west, tracking the movement of the sun. Adjoining the solar field, immediately to the west, would be various support facilities, including administration and storage buildings, and evaporation ponds.

The applicant's basic process for solar electric power generation would be to utilize parabolic trough solar collectors to concentrate solar energy onto heat collection elements (HCE) that contain a fluid, referred to as *heat transfer fluid* (HTF). After being heated in the solar troughs, the HTF would be run through a heat exchanger where it would heat water into steam. In the next stage, the steam would be converted into electricity utilizing a Rankine-cycle reheat steam turbine electric generator, which is housed in the power block facility. After the steam is cycled through the turbine, it would be processed through a cooling tower where it would be condensed back to a liquid form (water) and recycled through the system again to drive the steam turbine generator.

The proposed BSEP's primary point of interconnection would be the Los Angeles Department of Water and Power (LADWP) owned Barren Ridge Switching Station. The new connection would be made by installing a new 230 kilovolt transmission generation tie line (gen-tie line) from the project site to the switching station.

#### **Energy Commission Licensing Authority**

The Energy Commission is responsible for reviewing and ultimately approving or denying all applications for construction and operation of thermal electric power plants, 50 MW and greater, proposed for construction in California. The Energy Commission's facility certification process carefully examines public health and safety, environmental impacts and engineering aspects of proposed power plants, and all related facilities such as electric transmission lines and natural gas and water pipelines. The Energy Commission is the lead agency under the California Environmental Quality Act (CEQA), and produces several environmental and decision documents rather than an Environmental Impact Report.

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We request that you review the enclosed PSA for the areas for which your agency would normally be responsible but for the Energy Commission's permitting authority. Please provide any written comments to Eric K. Solorio, Siting Project Manager, no later than 5:00 p.m., April 30, 2009 at the address on this letterhead or by email to <a href="mailto:esolorio@energy.state.ca.us">esolorio@energy.state.ca.us</a>. Technical or project schedule questions should be directed to Mr. Eric K. Solorio at (916) 651-0966 or by email. You may also present your comments at the public workshop on the PSA.

Staff will conduct a workshop to discuss outstanding issues that were identified in the Preliminary Staff Assessment (PSA) for the proposed BSEP. The workshop will provide an opportunity for agencies, the public and other interested parties to present questions and comments on the PSA. All interested agencies and members of the public are invited to participate. The workshop will be held on Tuesday, April 14, 2009, starting at 8:00 a.m. in California City, Council Chambers – City Hall, 21000 Hacienda Blvd., California Oity, California 93505. Comments received will be used for preparing the Final Staff Assessment (FSA), which will be staff's testimony in evidentiary hearings.

The status of the project, an electronic copy of the AFC, copies of notices, and other relevant documents are also available on the Energy Commission's web site at: <a href="http://www.energy.ca.gov/sitingcases/beacon/index.html">http://www.energy.ca.gov/sitingcases/beacon/index.html</a>

Date: 4/1/09

TERRENCE O'BRIEN, Deputy Director Energy Facilities Siting Division

**Enclosure** 

Mailed to list: 7287 - Agency

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## PSA WORKSHOP FOR BEACON SOLAR ENERGY PROJECT (08-AFC-2)

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