

**CALIFORNIA ENERGY COMMISSION**

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



**DOCKET**  
**09-AFC-5**

March 16, 2010

DATE MAR 16 2010

REC'D MAR 17 2010

Dear Librarian:

**DOCUMENT HANDLING FOR THE ABENGOA MOJAVE SOLAR PROJECT (09-AFC-5)  
 and POSTING OF PUBLIC NOTICE**

The enclosed Staff Assessment (SA) contains the California Energy Commission staff's engineering and environmental evaluation of the proposed Abengoa Mojave Solar project. Please make this SA available for those who may wish to be informed about the project. We request that you not allow the SA or any of its contents to be removed from the library. To increase accessibility of the document, we ask, if possible, that you cross reference it as a general reference work under the title and author categories, as well as under such subjects as "Energy Commission," "electricity energy/generation," "power plant siting," or any other relevant subject. Please retain the enclosed letter to the public behind the front cover of the SA.

The Energy Commission's siting process is open to the public and incorporates the input of the public as well as local, state and federal agencies. To facilitate public participation in our review process, the Commission distributes copies of staff documents such as the SA to public libraries in communities near the proposed project, and in major cities throughout the state. As such, please retain a copy of the enclosed Notice of Availability / Notice of Public Workshop behind the front cover of the SA and also post a copy of the Public Notice in a place conspicuous and accessible to those members of the general public who visit the library.

Thank you for your cooperation. If you have any questions, please contact Craig Hoffman, Siting Project Manager, at (916) 654-4781 or at the address on this letterhead or by email to [choffman@energy.state.ca.us](mailto:choffman@energy.state.ca.us).

Sincerely,

Original signed by: \_\_\_\_\_  
 Eileen Allen  
 Siting Office Manager

Enclosure

Mailed to list:  
 7288 - Library

PROOF OF SERVICE (REVISED 03/04/10) FILED WITH  
 COPIES MAILED FROM SACRAMENTO ON 03/17/10

AA

**CALIFORNIA ENERGY COMMISSION**

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



March 16, 2010

**NOTICE OF AVAILABILITY  
STAFF ASSESSMENT FOR THE PROPOSED  
ABENGOA MOJAVE SOLAR PROJECT  
(09-AFC-5)**

**NOTICE OF PUBLIC WORKSHOPS**

**Tuesday, April 6, 2010  
Starting at 10:15 am**

**California Energy Commission  
Fourth Floor North Conference Room A  
1516 9<sup>th</sup> Street  
Sacramento, CA 95814-5512  
(Wheelchair Accessible)  
(Map Attached)**

**To participate in the meeting by telephone,  
please call: 800-369-2193 (toll-free in the U.S. and Canada)  
Enter passcode: 54011**

**Wednesday, April 7, 2010  
Starting at 1:00 pm**

**Barstow City Hall  
220 E. Mountain View Street  
Barstow, California 92311**

**(Wheelchair Accessible)  
(Map Attached)**

**To participate in the meeting by telephone,  
please call: 800-369-2193 (toll-free in the U.S. and Canada)  
Enter passcode: 54011**

TO: MEMBERS OF THE PUBLIC

This notice is to inform you of the availability of the Staff Assessment (SA) for the Abengoa Mojave Solar project Application for Certification (09-AFC-5). The SA was published on **March**

**16, 2010.** The SA contains the California Energy Commission staff's engineering and environmental evaluation of the proposed Abengoa Mojave Solar project.

This notice is also to inform you that the Energy Commission staff will hold a workshop to discuss the SA and to further encourage public participation, regarding the proposed Abengoa Mojave Solar project and the Energy Commission's permitting process. The workshop will provide an opportunity for agencies, the public and other interested parties to present questions and comments on the SA. All interested agencies and members of the public are invited to participate. **The workshops will be held on Tuesday, April 6, 2010 starting at 10:15 am in Sacramento at the California Energy Commission's Fourth Floor North Conference Room A, 1516 9<sup>th</sup> Street and Wednesday, April 7, 2010 at 1:00 pm in Barstow at the Barstow City Hall, 220 E. Mountain View Street.**

Based on the workshop dialogue, written comments received regarding the SA, and additional information that will be gathered, the Energy Commission staff will revise the SA where appropriate and issue a Supplemental Staff Assessment (SSA).

The California Energy Commission encourages public participation in the review of the Abengoa Mojave Solar Application for Certification (09-AFC-5). **The public comment period for this SA is from Tuesday March 16, 2010 to Thursday, April 15, 2010.** Written comments on the SA should be provided to Craig Hoffman, Siting Project Manager, no later than 5:00 p.m., Thursday, April 15, 2010 at the address on this letterhead or by email to [choffman@energy.state.ca.us](mailto:choffman@energy.state.ca.us). Technical or project schedule questions should be directed to Craig Hoffman at (916) 654-4781 or by email.

Following a 30-day public comment period on the Staff Assessment, a Supplemental Staff Assessment will be prepared and published based on Staff Assessment workshops and written comments, staff may refine its analysis, correct errors, and finalize conditions of certification to reflect areas where agreements have been reached with the parties and will then publish a Supplemental Staff Assessment (SSA). The SSA will be a limited document representing revisions and additions rather than a document including each technical section.

The Staff Assessment and Supplemental Staff Assessment will serve as staff's formal written testimony in evidentiary hearings to be held by the Energy Commission Committee assigned to hear this case. The Committee will hold evidentiary hearings and will consider the testimonies presented by staff, applicant, interveners, government agencies, and the public prior to preparing the Presiding Member's Proposed Decision. In the last step, the full Energy Commission will issue the final decision.

### **Summary of the California Energy Commission Staff's Conclusions**

Based upon the information provided to date and the analysis completed to date for each technical section, staff has concluded that with implementation of staff's recommended mitigation measures described in the conditions of certification, all potential environmental impacts will be mitigated to a less than significant level. The project analysis complies with

the requirements of the California Environmental Quality Act (CEQA). For a detailed review of potentially significant impacts and the related mitigation measures, please refer to each chapter of the SA.

Within the technical areas of **Air Quality, Biological Resources, Soil and Water Resources, Transmission System Engineering** and **Waste Management** additional analysis will be needed in regard to specific issues that are described in each section's summary of conclusions. These are outstanding issues that will be resolved in the SSA as identified on the following page.

Staff also concludes that with implementation of staff's recommended mitigation measures described in the conditions of certification, the project would comply with all applicable laws, ordinances, regulations, and standards (LORS), with the exception of the **Soil and Water Resources** section.

The state has expressed a strong interest in developing its solar energy resources. However, the construction and operation of solar energy facilities requires the use of water, which state policy also protects. The Energy Commission must balance the state's interest in promoting solar energy development with its interest in conserving and protecting the state's water resources. Several projects currently proposed in the Mojave and Colorado deserts would use water for power plant cooling, which staff believes is contrary to the state's long term interest in maximizing solar power generation and minimizing adverse environmental impacts. This will be an especially critical issue in the renewable development areas that will be identified in the joint state/federal Renewable Energy Action Team's Desert Renewable Energy Conservation Plan (DRECP). Later this year, staff plans to file a request for an Energy Commission Order Instituting an Informational Proceeding to address the overall issue of water use by power plants. For a more detailed discussion of water policy and related LORS, see staff's technical analyses in the **Soil and Water Resources** section of the SA.

### **Summary of the proposed Abengoa Mojave Solar project**

The proposed AMS project is a solar electric generating facility to be located on approximately 1,765 acres. The proposed project site is located approximately nine miles northwest of the Town of Hinkley in unincorporated San Bernardino County, approximately halfway between the City of Barstow and Kramer Junction (Highway 395 / Highway 58 junction). Project access is provided by Harper Lake Road, which is located approximately twenty miles west of Barstow along the Highway 58 corridor. The project site is approximately six miles north of where Harper Lake Road intersects with Highway 58. The existing Solar Electric Generating Stations VIII and IX facilities, owned by NextEra<sup>™</sup> Energy Resources, are located immediately northwest of the project site.

The project site is comprised of private property that was historically used as the Lockhart Ranch complex. The property has served as an agricultural and cattle center for over sixty years and, in that capacity, has utilized water from ground wells; farming activities have

included flood irrigation and ultimately the pivot system of irrigation of quarter section areas. Currently there are no ranching or residential activities on the property, and there is only one active pivot irrigation field in production on the site.

The project would utilize solar parabolic trough technology to activate a heat transfer fluid. The proposed collector fields of parabolic trough solar collectors are modular in nature and comprise many parallel rows of solar collectors, aligned on a north-south axis. Each solar collector has a linear, parabolic-shaped reflector that focuses the sun's radiation on a linear receiver known as a heat collection element located at the focus of the parabola.

As heat transfer fluid is circulated through the solar field, light from the sun reflects off the solar collector's parabolic troughs and is concentrated on the heat collection elements located at the focal point of the parabola. This heat transfer fluid provides a high-temperature energy source which is used to generate steam in solar steam generators. As this steam expands through the steam turbine generators, electrical power is generated.

The project will have a combined nominal electrical output of 250 megawatts (MW) from twin, independently-operable solar fields, each feeding a 125-MW power island. The plant sites, identified as Alpha (the northwest portion of the Project area) and Beta (the southeast portion of the project area), will be 884 acres and 800 acres respectively and joined at an on-site transmission line interconnection substation to form one full-output transmission interconnection. This proposed substation, located at the southwest corner of the Beta solar field, is referred to as the "Hinkley" substation. An additional 81 acres shared between the plant sites will be utilized for receiving and discharging offsite stormwater drainage.

The applicant has a power purchase agreement with Pacific Gas and Electric.

### **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.

### **Public Resources, Contact Information and Additional Sources for Information**

If you desire information on how to participate in the Energy Commission's review of the proposed project, please contact Jennifer Jennings, the Energy Commission's Public Adviser, at (916) 654-4489 or toll free in California at (800) 822-6228, or by email at: [publicadviser@energy.state.ca.us](mailto:publicadviser@energy.state.ca.us).

March 16, 2010

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To request special accommodations for those persons with disabilities, please contact Lourdes Quiroz, the Energy Commission's Equal Employment Opportunity Officer at [lquiroz@energy.state.ca.us](mailto:lquiroz@energy.state.ca.us) or by telephone (916) 654-5146. For those persons with limited English knowledge, request interpreter services by contacting the Project Manager, Craig Hoffman, at (916) 654-4781.

The status of the project, an electronic copy of the SA, copies of notices, and other relevant documents are also available on the Energy Commission's web site at: <http://www.energy.ca.gov/sitingcases/abengoa>.

News media inquiries should be directed to Assistant Director, Susanne Garfield, at (916) 654-4989, or by email at: [mediaoffice@energy.state.ca.us](mailto:mediaoffice@energy.state.ca.us).

Sincerely,

Date:

Original signed by E. Allen for: \_\_\_\_\_  
TERRENCE O'BRIEN, Deputy Director  
Siting, Transmission and Environmental  
Protection Division

**Note: Please retain a copy of this Public Notice behind the front cover of the Staff Assessment (SA) and post a copy of the Public Notice in a place conspicuous and accessible to those members of the general public who visit the library. Thank You.**

**SA WORKSHOP FOR ABENGOA MOJAVE SOLAR (09-AFC-5)**

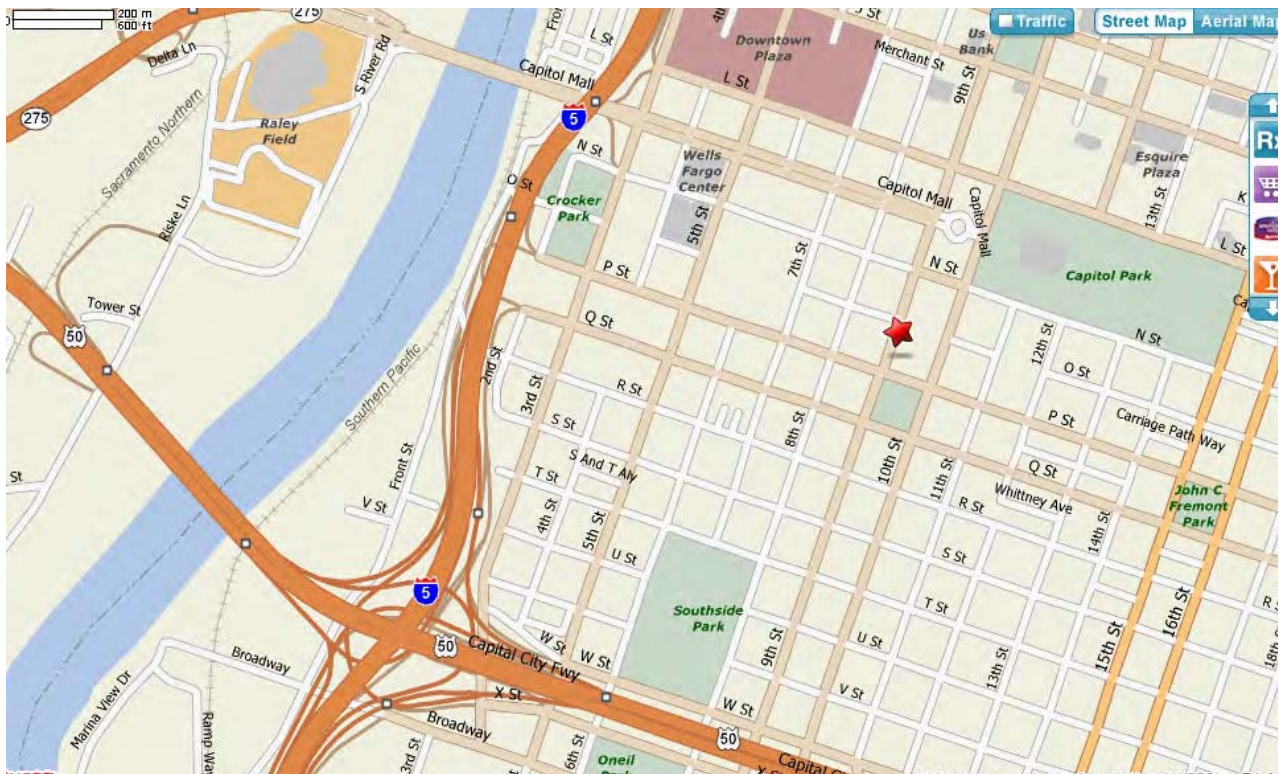
**NOTICE OF PUBLIC WORKSHOP**

**Tuesday, April 6, 2010**

**Starting at 10:15 am**

**California Energy Commission  
Fourth Floor North Conference Room A  
1516 9th Street  
Sacramento, CA 95814-5512**

**(Wheelchair Accessible)**



**SA WORKSHOP FOR ABENGOA MOJAVE SOLAR (09-AFC-5)**

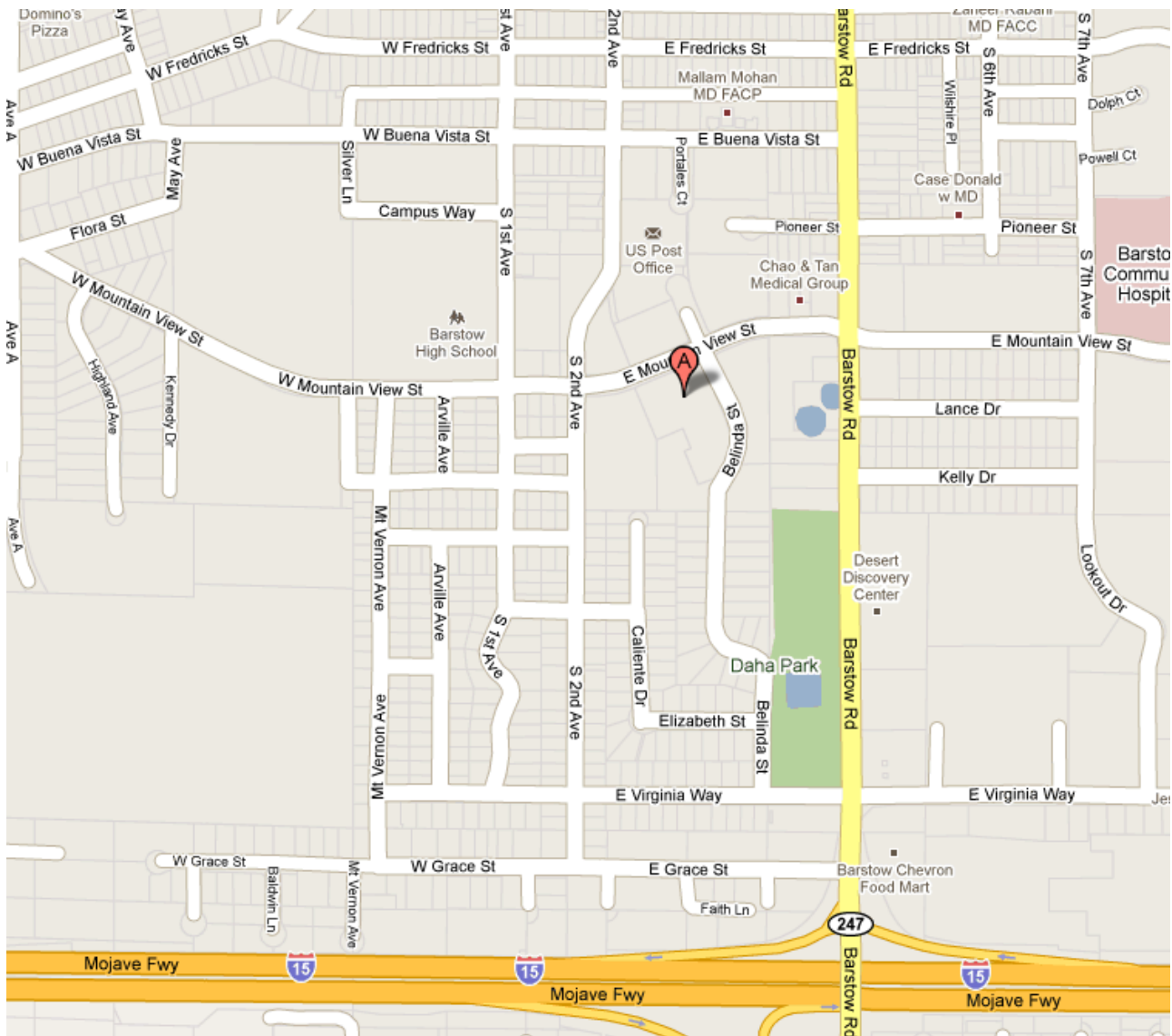
**NOTICE OF PUBLIC WORKSHOP**

**Wednesday, April 7, 2010**

**Starting at 1:00 pm**

**Barstow City Hall  
220 E. Mountain View Street  
Barstow, California 92311**

**(Wheelchair Accessible)**







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](http://WWW.ENERGY.CA.GOV)

APPLICATION FOR CERTIFICATION  
FOR THE **ABENGOA MOJAVE**  
**SOLAR POWER PLANT**

*Docket No. 09-AFC-5*  
**PROOF OF SERVICE**  
(Revised 3/4/2010)

**APPLICANT**

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**INTERESTED AGENCIES**

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**INTERVENORS**

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Jennifer Jennings  
Public Adviser's Office  
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**DECLARATION OF SERVICE**

I, April Albright, declare that on March 17, 2010, I served and filed copies of the attached Library Letter for; Request for Agency Comments on; and Notice of Availability of the 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: [\[http://www.energy.ca.gov/sitingcases/abengoa/index.html\]](http://www.energy.ca.gov/sitingcases/abengoa/index.html).

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 personally delivery;
- by delivery on this date, for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date 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. 09-AFC-5  
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, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

Original signed by: \_\_\_\_\_  
**April Albright**