

CALIFORNIA ENERGY COMMISSION

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



November 7, 2007

Dear Librarian:

**DOCUMENT HANDLING FOR THE CARRIZO ENERGY SOLAR FARM PROJECT,
APPLICATION FOR CERTIFICATION (07-AFC-8)**

On October 25, 2007, Ausra CA II, LLC (dba Carrizo Energy, LLC) submitted an Application for Certification (AFC) to the California Energy Commission to develop a nominal 177 megawatts (MW) net solar thermal power plant, in San Luis Obispo County, California.

The power plant project is subject to the Energy Commission's siting authority. The power plant certification process examines engineering, environmental, public health, and safety aspects of power plant proposals and provides analyses required by the California Environmental Quality Act (CEQA). When issuing a license, the Energy Commission is the lead state agency under CEQA, although it prepares several environmental documents rather than an Environmental Impact Report.

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 Energy Commission has sent copies of the AFC to libraries in the project area, and to libraries in Eureka, Sacramento, San Francisco, Fresno, Los Angeles, and San Diego.

Please make the enclosed AFC available for those who may wish to be informed about the proposed project. We request that you not allow the AFC or any of its contents 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.

Thank you for your cooperation. If you have any questions, please contact Mary Dyas, Energy Commission Project Manager, at (916) 651-8891, or by e-mail at mdyas@energy.state.ca.us, or Christina Flores, Project Secretary, at (916) 654-3925, or by e-mail at cflores@energy.state.ca.us.

Sincerely,

Roger E. Johnson, Manager
Energy Facilities Siting and Compliance Office

DOCKET	
07-AFC-8	
DATE	NOV 07 2007
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Enclosure

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November 7, 2007

To: MEMBERS OF THE PUBLIC

**PUBLIC PARTICIPATION IN THE CARRIZO ENERGY SOLAR FARM PROJECT,
APPLICATION FOR CERTIFICATION (07-AFC-8)**

On October 25, 2007, Ausra CA II, LLC (dba Carrizo Energy, LLC) submitted an Application for Certification (AFC) to the California Energy Commission to develop a nominal 177 megawatts (MW) net solar thermal power plant, in San Luis Obispo County, California. The proposed Carrizo Energy Solar Farm (CESF or proposed project) would be owned and operated by Carrizo Energy, LLC.

Project Description

The CESF would consist of approximately 195 Compact Linear Fresnel Reflector (CLFR) solar concentrating lines. Each line contains 10 rows of reflectors divided into 4 segments. In addition, the project will include associated steam drums, steam turbine generators (STGs), air cooled condensers (ACCs), and infrastructure. The 640-acre proposed project site is located immediately adjacent to California State Route 58 (SR-58)/Carrisa Highway, approximately 3 miles west of Simmler.

The proposed site is in an area zoned for agricultural uses as specified in the San Luis Obispo County General Land Use Plan. Electrical generation is listed in the San Luis Obispo County Land Use Ordinance as an allowed use within the agricultural zone. The land adjoining the proposed project is primarily open, undeveloped land. The 380-acre construction laydown area is located south and adjacent to the proposed project site. Main access to the CESF and the general vicinity will be provided via SR-58, immediately south and adjacent to the site. Project construction is proposed to begin during the first quarter of 2009 and take 35 months to complete. Commercial operation is expected to begin in the first quarter of 2012.

Project Technology

The proposed project design will incorporate Ausra's proprietary CLFR technology consisting of a series of slightly curved linear solar reflectors that concentrate solar energy on pipes in an elevated receiver structure approximately 17 m (56 feet) tall. The concentrated solar energy boils water within a row of specially coated stainless steel pipes in an insulated cavity to produce saturated steam. The steam produced in the receivers is collected in a series of pipes, routed to twenty steam drums located in the solar field, and then to two steam drums and two STGs in the power block. Steam used by the steam turbines is condensed in two ACCs and returned to the solar field.

The CESF would include the construction of a new 230 kV switchyard located between the two STGs. The STGs provide the driving force to spin the generator, which converts the mechanical energy into electrical output. The STGs would generate electricity at

13.8 kV. To provide transmission level capability, the electricity generated will be stepped up using two 13.8/230 kV generator step-up transformers. A new single-circuit 230 kV overhead transmission line, approximately 850 feet in length, will interconnect the facility with Pacific Gas and Electric's (PG&E) existing Midway Substation in Kern County by looping into the existing Morro Bay–Midway 230 kV line located north and adjacent to the CESF site.

The project is expected to consume approximately 21.8 acre-feet of water per year. Water will be required for make-up to the solar thermal and steam turbine system, washing of solar reflectors and collectors, potable water, service water, and fire protection. All water for the proposed project will be obtained from an existing onsite well and used for all process and potable needs. The water is expected to be treated on-site to varying degrees depending on use. The water will be treated using a skid-mounted water treatment system as provided by a contract service. The treatment system would be comprised of equipment for filtering, softening, demineralizing, and sanitizing the raw water. Blowdown and oil/water separator clear discharge will be routed to the onsite raw water storage tank for reuse. Stormwater would be collected onsite and directed to swales and detention areas for percolation into the ground. The sanitary system will consist of a buried septic tank and sanitary leach field.

The CESF cooling system for heat rejected from the steam cycle will utilize ACCs in order to minimize water use at the CESF. The STGs will exhaust to an exhaust trunk, which carries the steam to the ACCs. All auxiliary cooling systems are closed-loop with fin-fan air coolers.

Energy Commission's Facility Certification Process

The Energy Commission is responsible for reviewing and ultimately approving or denying all applications to construct and operate thermal electric power plants, 50 MW and greater, 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), but it produces several environmental documents rather than an Environmental Impact Report.

As part of our review process, the staff of the Energy Commission works closely with local, state and federal agencies to ensure that all laws, ordinances, regulations and standards are addressed in the final decision of the California Energy Commission. The first step in the review process is for Energy Commission staff to determine whether or not the AFC contains all the information required by our regulations. When the AFC is deemed "data adequate", we will begin data discovery and issue analysis phases. At that time, a detailed examination of the issues will occur.

Public Participation

Over the coming months, the Energy Commission will conduct a number of public workshops and hearings to determine whether the proposed project contains the information required by the Commission's data adequacy regulations (Cal. Cod Regs., Title 20, §17104) and should be approved for construction and operation and under what set of conditions. The workshops will provide the public as well as local, state and federal agencies the opportunity to participate in reviewing the proposed project. The Energy Commission will issue notices for these workshops and hearings at least 10 days prior to the meeting. If you are not currently receiving these notices and want to be placed on the mailing list, please contact Christina Flores, Project Secretary, at (916) 654-3925, or by e-mail at cflores@energy.state.ca.us.

Please direct your technical or project schedule questions to Mary Dyas, Energy Commission Project Manager, at (916) 651-8891, or by e-mail at mdyas@energy.state.ca.us. If you desire information on participating in the Energy Commission's review of the project, please contact the Energy Commission's Public Adviser's Office, at (916) 654-4489, or toll free in California at (800) 822-6228, or by email at pao@energy.state.ca.us. News media inquiries should be directed to Assistant Director, Claudia Chandler, at (916) 654-4989, or by email at mediaoffice@energy.state.ca.us. The status of the proposed project, copies of notices, an electronic version of the AFC, and other relevant documents are also available on the Energy Commission's Internet web site at: <http://www.energy.ca.gov/sitingcases/carrizo>. You can also subscribe to receive email notification of all notices at <http://www.energy.ca.gov/listservers>.

Note: Please retain this letter behind the front cover of the AFC. Thank You.