

## CALIFORNIA ENERGY COMMISSION

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SACRAMENTO, CA 95814-5512  
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California Energy Commission

**DOCKETED****11-AFC-4**

TN # 67552

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September 28, 2012

**REQUEST FOR COMMENTS  
ON THE PRELIMINARY STAFF ASSESSMENT – PART A  
FOR THE PROPOSED RIO MESA SOLAR ELECTRIC GENERATING  
FACILITY (11-AFC-04)**

To: AGENCY DISTRIBUTION LIST

This notice is to inform you that the California Energy Commission (Energy Commission) staff has prepared a Preliminary Staff Assessment – Part A (PSA-Part A) for the Rio Mesa Solar Electric Generating Facility (Rio Mesa SEGF) Application for Certification (AFC). The PSA – Part A, which was published on September 28, 2012, contains the Energy Commission's preliminary engineering, public health, and environmental evaluation of the proposed Rio Mesa SEGF.

This PSA – Part A contains the California Energy Commission staff's independent, objective evaluation of the proposed Rio Mesa SEGF AFC. The PSA is being filed in two parts, this being Part A, with Part B anticipated for publication October 15, 2012. The PSA examines engineering, environmental, public health, and safety aspects of the proposed Rio Mesa SEGF project, based on the information provided by the applicant, government agencies, interested parties and other sources available at the time the PSA was prepared. This PSA includes staff's environmental and engineering evaluation of the Rio Mesa SEGF project in the following technical areas: **Air Quality, Hazardous Materials Management, Noise and Vibration, Public Health, Socioeconomics, Water Supply, Soil and Surface Water, Traffic and Transportation, Transmission Line Safety and Nuisance, Visual Resources, Waste Management, Worker Safety and Fire Protection, Facility Design, Geology and Paleontology, Efficiency, Reliability, and Transmission System Engineering.** PSA – Part B will contain staff's environmental and engineering evaluation of the proposed project for the balance of the remaining technical sections: **Alternatives, Biological Resources, Cultural Resources, and Land Use.**

The California Energy Commission encourages public participation in the review of the Rio Mesa SEGF Application for Certification (11-AFC-04). The public comment period for this PSA is from September 28, 2012 to November 14, 2012 (30-days from the anticipated October 15, 2012 publication date of PSA – Part B). Written comments on the PSA should be provided to Pierre Martinez, Project Manager, no later than 5:00 p.m., November 14, 2012 at the address on this letterhead (please add "MS-15" after 1516 Ninth Street) or by e-mail at [pierre.martinez@energy.ca.gov](mailto:pierre.martinez@energy.ca.gov). Technical or project schedule questions should also be directed to Pierre Martinez via the mail or e-mail options noted above or by telephone at (916) 651-3765.

Following the comment period on the PSA and one or more staff-led public workshops, the staff will prepare a Final Staff Assessment (FSA) which will serve as staff's formal testimony in evidentiary hearings to be held by the Energy Commission's Committee assigned to hear this case. The Committee will hold evidentiary hearings to consider the recommendations presented by staff, applicant, intervenors, government agencies, and the public prior to proposing its decision. In the last step, the full Energy Commission will issue the final decision.

## **SUMMARY OF THE PROPOSED RIO MESA ELECTRIC GENERATING FACILITY**

The Rio Mesa SEGF is proposed for development by Rio Mesa I, LLC and Rio Mesa II, LLC. Each entity would hold an equal one half ownership interest of certain shared facilities while separately owning each respective power plant. Both entities are wholly owned subsidiaries of Rio Mesa Holdings, LLC, which in turn is a wholly owned subsidiary of BrightSource Energy, Inc. The site is located in eastern Riverside County, approximately 13 miles southwest of Blythe, California. The project site is generally bounded on the east by the 161 kV Western Area Power Authority (WAPA) transmission lines, with undeveloped desert lands and active agriculture further east, on the south by undeveloped desert lands located in Imperial County, on the west by undeveloped desert lands and the Mule Mountains, and on the north by undeveloped public desert lands administered by the U.S. Bureau of Land Management (BLM).

As proposed, the Rio Mesa SEGF would encompass a total of approximately 3,805 acres on land leased from the Metropolitan Water District of Southern California (MWD). This area would include two proposed power plants, associated heliostat fields, and support facilities located within a common area. Additional land area, required to accommodate the project gen-tie transmission lines, emergency and construction electrical power supply line, and primary access road, would be located primarily on public lands administered by the U.S. Bureau of Land Management (BLM), although some properties within the gen-tie transmission corridor are private lands.

The Rio Mesa SEGF would comprise two solar concentration thermal power plants, associated solar fields, and an approximate 19.5-acre common area to accommodate a combined administrative, control, maintenance, and warehouse building; evaporation ponds; groundwater wells; a water treatment plant; and a common switchyard. An approximate 103-acre construction logistics area (CLA) would be established to accommodate construction parking, office equipment, and conference trailers; equipment staging assembly and material storage; a tire cleaning station; and other construction support facilities.

Each solar plant would generate 250 megawatts (MW) (net), for a total net output of 500 MW and would use heliostats – elevated mirrors guided by a tracking system mounted on a pylon – to focus the sun's rays on a receiver located atop a 750-foot-tall solar power tower near the center of each solar field. Each solar field would use approximately 85,000 heliostats. Rio Mesa I, the southernmost plant site, would occupy approximately 1,828 acres, and Rio Mesa II, the northernmost plant site, would occupy approximately 1,977 acres.

Each power plant would use a solar power boiler, located atop a dedicated concrete tower, and a solar field based on heliostat mirror technology developed by BrightSource Energy, Inc. The heliostat fields would focus solar energy on the solar power boiler, referred to as “solar receiver steam generator” (SRSG), which would convert the solar energy into superheated steam.

Each power plant would generate electricity using solar energy as its primary fuel source. However, auxiliary boilers would be used to operate in parallel with the solar fields during partial load conditions and occasionally in the afternoon when power is needed after the solar energy has diminished to a level that no longer would support solar-only generation of electricity. These auxiliary boilers would also assist with daily start-up of the power generation equipment and night time preservation.

The Rio Mesa SEGF is proposed to be interconnected to the Southern California Edison (SCE) grid through a new 220kV line that would be built as part of the project and would run north approximately 9.7 miles to connect to the Colorado River Substation.

Access to both plants would be via Bradshaw Trail (primary) – paved or unpaved – and a new secondary access road directly north and parallel to 34<sup>th</sup> Avenue off of State Route 78. The portion of Bradshaw Trail that would be used for the primary access route is currently a two-lane, east-west paved road for one mile west of Rannells Avenue. Beyond the paved segment it becomes a graded dirt road. The applicant proposes to improve the segment to a point where it connects to the northerly boundary of the northern plant, however, that portion of Bradshaw Trail traverses BLM land and how it is improved is at the discretion of BLM. The secondary access route would be improved and provide access to the southerly power plant north of the proposed metering station. In addition to the access roads, each plant would have perimeter access/maintenance.

## **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, as a certified regulatory agency pursuant to Public Resources Code section 21080.5, produces several environmental and decision documents rather than an Environmental Impact Report.

## **SUMMARY OF CALIFORNIA ENERGY COMMISSION STAFF'S PRELIMINARY CONCLUSIONS**

Based upon the information provided, discovery achieved and analyses completed to date, staff concluded that the while the project would comply with all laws, ordinances, regulations and standards (LORS), and would not result in unmitigable significant,



**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 *RIO MESA SOLAR*  
*ELECTRIC GENERATING FACILITY***

**DOCKET NO. 11-AFC-04  
PROOF OF SERVICE  
(Revised 8/14/12)**

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DECLARATION OF SERVICE

I, Cenne Jackson, declare that on October 5 2012, I served and filed copies of the attached, dated October 5 2012. This document is accompanied by the most recent Proof of Service list, located on the web page for this project at: [<http://www.energy.ca.gov/sitingcases/riomesa/index.html>].

The document has been sent to the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit or Chief Counsel, as appropriate, in the following manner:

*(Check all that Apply)*

For service to all other parties:

- Served electronically to all e-mail addresses on the Proof of Service list;
- Served by delivering on this date, either personally, or for mailing with the U.S. 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 "e-mail preferred."

**AND**

For filing with the Docket Unit at the Energy Commission:

- by sending electronic copies to the e-mail address below (preferred method); **OR**
- by depositing an original and 12 paper copies in the mail with the U.S. Postal Service with first class postage thereon fully prepaid, as follows:

CALIFORNIA ENERGY COMMISSION – DOCKET UNIT  
Attn: Docket No. 11-AFC-4  
1516 Ninth Street, MS-4  
Sacramento, CA 95814-5512  
[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)

**OR, if filing a Petition for Reconsideration of Decision or Order pursuant to Title 20, § 1720:**

- Served by delivering on this date one electronic copy by e-mail, and an original paper copy to the Chief Counsel at the following address, either personally, or for mailing with the U.S. Postal Service with first class postage thereon fully prepaid:

California Energy Commission  
Michael J. Levy, Chief Counsel  
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I declare under penalty of perjury under the laws of the State of California 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.

\_\_\_\_\_  
Originally Signed by Cenne Jackson