

## CALIFORNIA ENERGY COMMISSION

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



September 21, 2012



Todd Stewart, Senior Director of Project Development  
BrightSource Energy, Inc.  
1999 Harrison Street, Ste. 2150  
Oakland, CA 94612

**RE: RIO MESA SOLAR ELECTRIC GENERATING FACILITY (11-AFC-04)  
DATA REQUESTS, SET 3A (Nos. 186 - 190)**

Dear Mr. Stewart:

Pursuant to Title 20, California Code of Regulations, Section 1716, the California Energy Commission staff seeks the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project and alternatives, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

This set of data requests (Nos. 186 – 190) is being made in the area of Traffic and Transportation. Written responses to the enclosed data requests are due to the Energy Commission staff on or before October 22, 2012.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, you must send a written notice to both the Committee and me within 20 days of receipt of this notice. The notification must contain the reasons for not providing the information, the need for additional time, or the grounds for any objections (see Title 20, California Code of Regulations, Sec.1716 (f)). If you have any questions, please call me at (916) 651-3765 or email me at [pierre.martinez@energy.ca.gov](mailto:pierre.martinez@energy.ca.gov).

Sincerely,

Pierre Martinez, AICP  
Project Manager

cc: Docket (11-AFC-04)  
Proof of Service List

**Technical Areas: Traffic and Transportation (Primary)  
Cultural Resources and Alternatives (Support)**

**Authors:** Andrea Koch, Gregg Irvin, Melissa Mourkas, and Christina Snow

**BACKGROUND**

Page 2-6, Section 2.1.6 of the “Applicant’s Environmental Enhancement Proposal” states in part:

*The 34<sup>th</sup> Avenue access is being explored with an option to reach the crest of the mesa on the north and on the south side of the major wash that is directly to the west of 34<sup>th</sup> Avenue*

Page 5.6-17 of the “Applicant’s Environmental Enhancement Proposal” states in part:

*A new access road will be required and may potentially be paved directly north and parallel of 34<sup>th</sup> Avenue ROW, which is an existing dirt road.*

Page 5.12-2 of the “Applicant’s Environmental Enhancement Proposal” states in part:

*A secondary access route to the Project site is via 34<sup>th</sup> Avenue, which is accessible from State Route 78, 1.5 miles north of the community of Palo Verde at the Riverside/Imperial County line. From State Route 78, this dirt access route runs west between agricultural lands north and outside of a 60 foot wide County ROW before reaching the Project site.*

Figure 2-2 of the “Applicant’s Environmental Enhancement Proposal” does not clearly show the location of the County ROW compared to the location of the proposed 34<sup>th</sup> Avenue secondary access road improvements. In this figure, it actually appears that the portion of the access to be improved would be south of the County ROW.

**DATA REQUEST**

186. Please provide a map of the proposed 34<sup>th</sup> Avenue access (secondary access) showing the exact location of the County ROW and any public or private easements, the location and type of any project access improvements, and property ownership (County, private, BLM, etc.) of the land on which improvements would occur. This map should commence at the connection of State Route 78 to its termination within the project site.

## **BACKGROUND**

At 30<sup>th</sup> Avenue/Bradshaw Trail, property ownership is unclear in the vicinity of the access improvements. The location of any easements or County ROW is also unclear. Additionally, the lands adjacent to the roadway are agricultural lands that have been mapped as Prime Farmland and Farmland of Statewide Importance according to the Department of Conservation's Farmland Mapping and Monitoring Program.

## **DATA REQUEST**

187. Please provide a map of the 30<sup>th</sup> Avenue/Bradshaw Trail access showing the exact location of the County ROW and any public or private easements, the location and type of any project access improvements, and property ownership (County, private, BLM, etc.) of the land on which improvements would occur. Indicate on the map the portion of the road proposed to be paved. Also, indicate whether any agricultural lands would be impacted and if so, indicate by Prime Farmland and Farmland of Statewide Importance.

## **BACKGROUND**

Prior to project construction, all nearby intersections would operate at LOS A or B, better than Riverside County's LOS standard of C for all County-maintained roads. During peak construction, two intersections, SR-78 (Neighbours Blvd.)/28<sup>th</sup> Ave. (evening peak hour) and SR-78 (Rannells Blvd.)/28<sup>th</sup> Ave. (morning peak hour), would exceed LOS thresholds identified by local jurisdictions. At these intersections, LOS would change from LOS A pre-construction to LOS D during peak construction.

In the forthcoming Preliminary Staff Assessment (PSA), staff has proposed a condition of certification requiring implementation of a park-and-ride plan for busing construction employees to the project site. This would ensure that the identified intersections would continue to operate at an acceptable LOS during peak construction. As currently proposed, the project owner would be required to implement the park-and-ride plan during all phases of construction. However, staff acknowledges that employment would vary throughout project construction, and that there would be certain phases of construction where employment would not be sufficiently high to degrade LOS at the affected intersections to LOS D. For this reason, staff would like additional information in order to refine the timing of implementation of the park-and-ride plan. Also, staff needs to ensure that there are feasible park-and-ride sites available.

## **DATA REQUEST**

188. Please provide: the estimated number of employees during each month of construction and a traffic analysis determining the threshold number of individually commuting construction employees that would cause LOS at SR-78 (Neighbours Blvd.)/28<sup>th</sup> Ave. and SR-78 (Rannells Blvd.)/28<sup>th</sup> Ave. to degrade to LOS D. If the applicant submits this information to staff prior to publication of the Final Staff Assessment (FSA), staff will refine the proposed condition of certification to require implementation of the park-and-ride plan during only those months where construction employment would cause LOS at the affected intersections to reach LOS D. Alternatively, staff would be willing to consider a different measure to address the congestion issue.

189. Please provide feasible proposed park-and-ride locations and the approximate number of vehicles that they would accommodate. These park-and-ride locations should be on already developed lands. Park-and-ride locations could be in the parking lots of hotels where construction employees stay, underutilized parking lots, on vacant but disturbed properties along the I-10 corridor, etc.

## **BACKGROUND**

The appearance of the heliostats in relation to the position of the viewer will depend on the angle of the sun and the heliostats. Staff recognizes that the applicant will develop and apply heliostat positioning and transition strategies, using positioning algorithms to optimize path selection for minimizing reflected sunrays on all unintended areas and forbidden areas. These unintended and forbidden areas include the locations of ground-based observers such as construction workers, pedestrians, and motorists, and airborne observers, such as pilots.

The applicant states in the Application for Certification, Visual Resources Section 5.13.4.4, that “Glint and glare potentially created by the heliostat arrays are considered to have a minimal impact on sensitive viewers. This is because the reflective or mirror portions of the heliostats are located at a higher elevation than these receptors (See explanation provided in KOP 1, closest residence).”

The vector path of direct reflections from the heliostats depends on both the heliostat position as well as the position of the sun with respect to the heliostat. Although “the reflective or mirror portions of the heliostats are located at a higher elevation than these receptors”, heliostat positioning transitions and positions in which the reflections are not directed at the tower SRSGs could result in direct reflections at both ground and airborne observers (potential receptors). Additionally, reasonably possible malfunctions in heliostat positioning could lead to potential exposure of observers at locations outside the site.

## **DATA REQUEST**

190. For glint and glare from the heliostats, please identify potential receptors and receptor locations for both ground and airborne observers, and identify the heliostat movements and positions, including malfunctions, which could result in exposure of the identified locations to reflected solar radiation from the heliostats.

Please describe how the heliostat positioning plan algorithms (e.g., the establishment of positioning forbidden zones) would minimize direct solar reflections to known ground locations or to the anticipated intermittent presence of aircraft for either known or unknown flight paths.



**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)

**APPLICANTS' AGENTS**

BrightSource Energy, Inc.  
Todd Stewart, Senior Director  
Project Development  
1999 Harrison Street, Suite 2150  
Oakland, CA 94612  
[tstewart@brightsourceenergy.com](mailto:tstewart@brightsourceenergy.com)

BrightSource Energy, Inc.  
Michelle Farley  
1999 Harrison Street, Suite 2150  
Oakland, CA 94612  
[mfarley@brightsourceenergy.com](mailto:mfarley@brightsourceenergy.com)

BrightSource Energy, Inc.  
Brad DeJean  
1999 Harrison Street, Suite 2150  
Oakland, CA 94612  
[bdejean@brightsourceenergy.com](mailto:bdejean@brightsourceenergy.com)

**APPLICANTS' CONSULTANTS**

Grenier and Associates, Inc.  
Andrea Grenier  
1420 E. Roseville Parkway  
Suite 140-377  
Roseville, CA 95661  
[andrea@agrenier.com](mailto:andrea@agrenier.com)

URS Corporation  
Angela Leiba  
4225 Executive Square, Suite 1600  
La Jolla, CA 92037  
[angela\\_leiba@urscorp.com](mailto:angela_leiba@urscorp.com)

**COUNSEL FOR APPLICANTS**

Ellison, Schneider, & Harris  
Christopher T. Ellison  
Brian S. Biering  
2600 Capitol Avenue, Suite 400  
Sacramento, CA 95816-5905  
[cte@eslawfirm.com](mailto:cte@eslawfirm.com)  
[bsb@eslawfirm.com](mailto:bsb@eslawfirm.com)

**INTERESTED AGENCIES**

Mojave Desert AQMD  
Chris Anderson, Air Quality Engineer  
14306 Park Avenue  
Victorville, CA 92392-2310  
[canderson@mdaqmd.ca.gov](mailto:canderson@mdaqmd.ca.gov)

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

Bureau of Land Management  
Cedric Perry  
Lynnette Elser  
22835 Calle San Juan De Los Lagos  
Moreno Valley, CA 92553  
[cperry@blm.gov](mailto:cperry@blm.gov)  
[lelser@blm.gov](mailto:lelser@blm.gov)

Katherine Lind  
Tiffany North  
Office of Riverside County Counsel  
County of Riverside  
3960 Orange Street, Suite 500  
Riverside, CA 92501  
[klind@co.riverside.ca.us](mailto:klind@co.riverside.ca.us)  
[tnorth@co.riverside.ca.us](mailto:tnorth@co.riverside.ca.us)

**INTERVENORS**

Center for Biological Diversity  
Lisa T. Belenky, Senior Attorney  
351 California Street, Suite 600  
San Francisco, CA 94104  
[lbelenky@biologicaldiversity.org](mailto:lbelenky@biologicaldiversity.org)

Center for Biological Diversity  
Ileene Anderson  
Public Lands Desert Director  
PMB 447, 8033 Sunset Boulevard  
Los Angeles, CA 90046  
[ianderson@biologicaldiversity.org](mailto:ianderson@biologicaldiversity.org)

**ENERGY COMMISSION –  
DECISIONMAKERS**

CARLA PETERMAN  
Commissioner and Presiding Member  
[carla.peterman@energy.ca.gov](mailto:carla.peterman@energy.ca.gov)

KAREN DOUGLAS  
Commissioner and Associate Member  
[karen.douglas@energy.ca.gov](mailto:karen.douglas@energy.ca.gov)

Kenneth Celli  
Hearing Adviser  
[ken.celli@energy.ca.gov](mailto:ken.celli@energy.ca.gov)

Eileen Allen  
Commissioners' Technical  
Advisor for Facility Siting  
[eileen.allen@energy.ca.gov](mailto:eileen.allen@energy.ca.gov)

Jim Bartridge  
Advisor to Presiding Member  
[jim.bartridge@energy.ca.gov](mailto:jim.bartridge@energy.ca.gov)

Galen Lemei  
Advisor to Associate Member  
[galen.lemei@energy.ca.gov](mailto:galen.lemei@energy.ca.gov)

Jennifer Nelson  
Advisor to Associate Member  
[jennifer.nelson@energy.ca.gov](mailto:jennifer.nelson@energy.ca.gov)

**ENERGY COMMISSION STAFF**

Pierre Martinez  
Project Manager  
[pierre.martinez@energy.ca.gov](mailto:pierre.martinez@energy.ca.gov)

Lisa DeCarlo  
Staff Counsel  
[lisa.decarlo@energy.ca.gov](mailto:lisa.decarlo@energy.ca.gov)

**ENERGY COMMISSION –  
PUBLIC ADVISER**

Jennifer Jennings  
Public Adviser's Office  
[publicadviser@energy.ca.gov](mailto:publicadviser@energy.ca.gov)

DECLARATION OF SERVICE

I, Alicia Campos, declare that on September 21, 2012, I served and filed a copy of the attached document **RIO MESA SOLAR ELECTRIC GENERATING FACILITY (11-AFC-04) DATA REQUESTS, SET 3A (Nos. 186 - 190)** dated September 21, 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 marked **\*"hard copy required"** or where no e-mail address is provided.

**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-04  
1516 Ninth Street, MS-4  
Sacramento, CA 95814-5512  
[docket@energy.ca.gov](mailto:docket@energy.ca.gov)

**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  
1516 Ninth Street MS-14  
Sacramento, CA 95814  
[michael.levy@energy.ca.gov](mailto:michael.levy@energy.ca.gov)

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:**

Alicia Campos  
Siting, Transmission, and Environmental Protection Division