AIRPORT LAND USE COMMISSION
RIVERSIDE COUNTY

California Energy Commission
DOCKETED
11-AFC-4
TN # 68779
DEC. 04 2012

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November 27, 2012

SENT VIA: U.S. Postal Service and
Email pmartine@energy.state.ca.gov

California Energy Commission
Siting, Transmission and Environmental Protection Division
ATTN: Pierre Martinez, AICP, Project Manager
1516 Ninth Street, MS-2000
Sacramento CA 95814-5112

RE: Comments regarding Preliminary Staff Assessment of the Rio Mesa Solar Electric Generating Facility (Docket No. 11-AFC-4)

Dear Mr. Martinez:

Thank you for giving the Riverside County Airport Land Use Commission ("ALUC") the opportunity to participate in review of the Rio Mesa Solar Electric Generating Facility proposed by BrightSource Energy, Inc. ("Project"). The Preliminary Staff Assessment (PSA) Traffic & Transportation chapter addresses many of the concerns raised in our January 19, 2012 letter commenting on the applicant's Application for Certification (a copy of which is attached hereto and incorporated herein by reference). However, the PSA does not include a recommendation that the Project proponent actually file an application directly with ALUC for project review through the ALUC public hearing process, which was the intent of one of our comments in the original letter.

ALUC would request the opportunity to consider the Project locally at a public hearing in Riverside County and forward its conditions to the California Energy Commission for its consideration. Pursuant to Policy 1.5.3.(c) of the Countywide Policies of the 2004 Riverside County Airport Land Use Compatibility Plan, proposals "for construction or alteration of a structure (including antennas) taller than 200 feet above the ground level at the site" constitute major land use actions subject to ALUC review "[r]egardless of location within Riverside County." Furthermore, it is noteworthy that the California Energy Commission (CEC) has often recommended that project applicants file with ALUC, most recently in relationship to the Blythe Solar Power Plant facility.

The PSA includes a wealth of information and analysis, but its contents raise additional concerns relative to potential flight hazards, as stated below.

On page 4.11-26 of the PSA, it is stated that thermal plume vertical velocity could exceed 4.3 meters per second at altitudes of approximately 200 feet above ground level or below. The authors then proceed to state that the impact would be less than significant because aircraft "would generally be flying at altitudes much higher than 200 feet above ground level." This statement is true for itinerant aircraft overflying the area, but would not hold for emergency medical evacuation helicopters. (There is record of a helicopter crash in Bakersfield resulting from a direct flyover through a power plant's thermal plume.) Provision should be made for the wet surface air cooler, auxiliary boiler, and nighttime boiler to be shut down in the event of an emergency requiring an airborne evacuation.

Additionally, there is no discussion of the potential thermal plume effect resulting from convective heat transfer occurring at the top of the tower. On page 4.2-222, there is a reference to the normal operating temperature on the surface of the receiver being 540 degrees Celsius. Would this not result in high air temperatures directly above the tower?

Although not a thermal plume in the strict sense due to its extensive area, the extremely high temperatures associated with the solar radiant flux within the heliostat 'beam' at locations directly between the heliostats and the tower with its associated focal points also constitute a hazard to flight. Thus, in the event that an emergency medical evacuation is needed from a location at or near the tower and/or the heliostats, it may be necessary to shut down the entire facility to reduce the temperatures sufficiently to allow the helicopter to safely exit the facility, or to transfer the patient(s) to a ground location that would allow the helicopter to safely land and take off without entering the superheated airspace.

The glint and glare analysis states on page 4.11-50 that "[in] the standby position the heliostats reflect sunlight back into the sky where the distinct potential exists for the heliostat 'beam' to intercept aircraft." Given this potential impact, ALUC would recommend the application of the following condition:

> In the event that any incidence of glint, glare, or flash affecting the safety of air navigation occurs as a result of the operation of the Rio Mesa SEGF, upon notification to the Blythe Airport manager of an incidence, the Blythe Airport manager shall notify the operator of the Rio Mesa SEGF in writing. Within 30 days of written notice, the Rio Mesa SEGF operator shall be required to promptly take all measures necessary to eliminate such glint, glare, or flash. An "incidence" includes any situation that results in an accident, incident, "near-miss," or specific safety complaint regarding an in-flight experience to the Blythe Airport manager or to federal, state, or county authorities responsible for the safety of air navigation. The Rio Mesa SEGF operator shall work with the Blythe Airport manager to prevent recurrence of the incidence. For each such incidence made known to the Rio Mesa SEGF operator, the necessary remediation shall only be considered to have been fulfilled when the Blythe Airport manager states in writing that the situation has been remediated to the Blythe Airport manager's satisfaction.

This is one of many solar energy generation facilities (both thermal facilities subject to CEC certification and photovoltaic facilities subject to County permitting) proposed within a 15-mile radius of Blythe Airport. There is a potential for the airport to be surrounded by solar energy generation facilities in the event that all of the projects are eventually developed. Airport Land Use Commissioners have expressed increasing concerns regarding the adverse cumulative impacts created by these facilities on an airport.

Given the foregoing, ALUC would request the opportunity to consider the Project locally at a public hearing in Riverside County and forward its conditions to the CEC for its consideration. If you have any questions regarding this response, please contact John Guerin, Principal Planner, Riverside County Airport Land Use Commission staff, at (951) 955-0982.

Sincerely,
RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

Ed Cooper, Director

Cc: Gregg Irvin, Ph.D., CEC
Andrea Koch-Eckhardt, CEC
Juan Perez, Director, Riverside County Transportation & Land Management Agency
Carolyn Syms-Luna, Riverside County Planning Director
Colby Cataldi, Riverside County Economic Development Agency
Daryl Shippy, Riverside County Economic Development Agency
Blythe Airport
Tiffany North, Office of Riverside County Counsel

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January 19, 2012

SENT VIA: U.S. Postal Service and
Email pmartine@energy.state.ca.gov

California Energy Commission
Energy Facilities Siting Office
ATTN: Pierre Martinez, Project Manager
1516 Ninth Street
Sacramento CA 95814-5112

RE: Request for Agency Participation in the Review of the Rio Mesa Solar Electric Generating Facility, Application for Certification (Docket No. 11-AFC-4)

Dear Mr. Martinez:

Thank you for giving the Riverside County Airport Land Use Commission ("ALUC") the opportunity to participate in review of the Rio Mesa Solar Electric Generating Facility proposed by BrightSource Energy, Inc. ("Project") The comments below are responsive to the California Energy Commission's notice dated October 28, 2011 requesting that the ALUC identify its significant concerns and the substantive permitting requirements that it would apply but for the CEC's certification authority.

The Application for Certification ("AFC") identifies many of the laws, ordinances, regulations, and standards applicable to the Project. However, it does not reference the Riverside County Airport Land Use Compatibility Plan ("RCALUCP") adopted by the ALUC. The ALUC is a separate legal entity from the County of Riverside created under the Public Utilities Code. The ALUC is charged with protecting public health, safety and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent these areas are not already devoted to incompatible uses. In light of this charge, the ALUC often works with California Department of Transportation's Division of Aeronautics. As adopted in 2004 (following the adoption of the Riverside County General Plan and, therefore, not reflected therein), the Countywide Policies of the RCALUCP identify "any proposal for construction or alteration of a structure (including antennas) taller than 200 feet above ground level at the site" as a major land use action requiring review by the ALUC, "regardless of location within Riverside County." Accordingly, the portions of the Project not on federal land would be subject to ALUC review, as well as County review, absent the CEC's certification authority.

The Project proposes not one, but three separate 750 foot high towers, that would focus sunlight from three concentric rings of heliostats. Given the proximity of the Project to the Blythe Airport, airport operations may be adversely impacted. The Project is not the first or only solar power plant project potentially impacting Blythe Airport. The ALUC has previously commented to the CEC on the Blythe Solar Power Project northwest of the airport. There are additional photovoltaic solar power plant projects on and around the Blythe Airport. The volume of solar power plant projects and mix of solar thermal and photovoltaic technologies raises pilot safety issues associated with glint and glare. The ALUC is concerned that the cumulative glint and glare effects of the multiple solar power plant projects may affect the usability of Blythe Airport. While only one solar power plant project with County approval has been constructed in the

vicinity to date, a 100 megawatt ("MW") facility has been approved on airport grounds and four additional solar power plant projects with a combined potential capacity of 1,039.75 MW are in process. We, therefore, urge the CEC to require the Project proponent to file an application with the ALUC for project review. The ALUC would require a comprehensive analysis of the glint/glare effects potentially affecting the safety of air navigation in the vicinity of Blythe Airport.

In addition to glint and glare, the Project proponent should be required to analyze whether the auxiliary boilers, air cooled condensers, or any other element of the Project would produce thermal plumes, and the characteristics of those plumes, if any, that could potentially affect aircraft handling.

The Land Use section of the AFC references Blythe Airport runways as being 5,800 feet and 6,543 feet in length and states that the proposed 220 kilovolt (kV) generator tie-line structures ("gen-tie") will, at their closest point, be located approximately 25,000 feet from the end of the nearest runway. However, the Blythe Airport Land Use Compatibility Plan, and the Airport Master Plan upon which it was based, call for a runway extension to the west, which may reduce the distance from the proposed gen-tie to the runway. The Project proponent should be required to provide information regarding the distance from the gen-tie to the nearest point on the runway as proposed for extension. The ALUC has concerns about the location and elevation of the gen-tie in relation to the Blythe Airport runways.

We also note that the Appendix to the AFC includes an Obstacle Evaluation Study prepared by Capitol Airspace Group of Alexandria, Virginia. The report notes that the proposed facility "is located within the lateral boundaries of VR-296, a visual military training route used for terrain following operations originating at March Air Reserve Base, California. This route may be used by military pilots to conduct operations as low as 300 feet above ground level." Accordingly, the CEC should require the Project proponent to provide documentation establishing military approval of the Project.

We look forward to continuing to work with the CEC on this Project. The comments contained in this letter are preliminary and summarize our review of the materials provided for evaluation. The ALUC reserves the right to issue additional comments as the Project moves forward. The ALUC also requests that it be allowed to meaningfully participate in the preparation of the CEC's certified regulatory program documentation to ensure that all potentially significant impacts, mitigation measures and Project alternatives are identified.

If you have any questions regarding this response, please contact John Guerin, Principal Planner, Riverside County Airport Land Use Commission staff, at (951) 955-0982.

Sincerely,
RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

Ed Cooper, Director