

CALIFORNIA ENERGY COMMISSION

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July 12, 2013

Mr. Dan Neville
Project Director, Development
NextEra Energy Resources
505 14th Street, Suite 310
Oakland, CA 94612

California Energy Commission

DOCKETED
09-AFC-6C

TN 71556

JUL 12 2013

**RE: BLYTHE SOLAR POWER PROJECT AMENDMENT (09-AFC-6C)
DATA REQUEST SET No. 2 (Nos. 20–25)**

Dear Mr. Neville,

Energy Commission staff has reviewed the Petition to Amend (Petition) for the Blythe Solar Power Project and requires additional information to supplement the environmental analysis, pursuant to Title 20, California Code of Regulations, Section 1769(a)(1)(E). 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;
- 2) assess whether the facility would be constructed and operated in compliance with all applicable laws, ordinance, regulations, and standards;
- 3) assess whether the project would result in significant environmental impacts;
- 4) assess whether the facilities would be constructed and operated in a safe, efficient, and reliable manner; and
- 5) assess potential mitigation measures.

This set of data requests (Nos. 20–25) is being made in the technical areas of Biological Resources (No. 20) and Socioeconomics (Nos. 21–25). Staff requests that written responses to the enclosed data requests be provided on or before August 2, 2013.

Cover Letter, BSPP Data Request Set No. 2

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If you are unable to provide the information requested, need additional time, or you object to providing the requested information, please send a written notice to both the Siting Committee for the Blythe Solar Power Project Amendment and me within 20 days of receipt of this information request. The notification should contain the reasons for not providing the information and the grounds for any objections.

If you have any questions, please call me at (916) 651-8891, or email me at mary.dyas@energy.ca.gov.

Sincerely,

Mary Dyas
Compliance Project Manager
Siting, Transmission, & Environmental Protection

Enclosure: Data Requests

**BLYTHE SOLAR POWER PROJECT (09-AFC-6C)
DATA REQUEST SET No. 2**

Technical Area: Biological Resources
Authors: Andrea Martine and Carol Watson

BACKGROUND: OPERATIONAL IMPACTS

Polarized light pollution, an impact associated with photovoltaic (PV) technology, is an environmental impact that may have adverse effects on birds. Polarized light occurs when ordinary white light becomes strongly aligned in a single, often-horizontal plane by reflection from artificial surfaces that alters the manner in which organisms would normally receive light. Light is naturally polarized by large bodies of water, but light is often artificially polarized by smooth, large, dark surfaces such as roads, large glass windows, buildings, and PV panels. Many taxa of birds, reptiles, fish, insects, and crustaceans utilize artificially polarized light; polarized light has been shown to play a role in habitat selection and may affect foraging behaviors, navigation, and orientation in birds (Horvath, et al., 2009; Horvath, et al., 2010).

Studies at several PV solar power-generating facilities identified that solar modules, or panels, could cause an increase in polarized light pollution and therefore could pose a possible risk of collision for birds.¹ At the Desert Sunlight Solar Farm project site, a PV installation of approximately 4,000 acres, over 50 birds have been documented to have collided with the panels. Of these, the majority consisted of waterbirds, species that would not typically be found foraging in desert habitat, and whose presence would not have been expected at the project site (Pagel 2013). A federally endangered species, the Yuma clapper rail, was among the recorded mortalities.

DATA REQUESTS:

20. a. Please discuss the features of the proposed modified Blythe Solar Power Project (BSPP) that might attract birds, bats, and insects, and the various behavioral, flight, and life history traits which would ultimately influence a species's collision risk.
- b. Please provide an evaluation of the various types of PV technology that the BSPP owner is considering constructing, such as fixed-tilt system or single-axis tracking, and the potential adverse effects associated with each technology type on birds, bats, and insects.
- c. Please identify facility design measures, such as installing non-polarizing white borders or white grids intermittently between polarized dark

¹ The reports include: Topaz Solar Farm Draft Environmental Impact Report, the California Valley Solar Ranch Final Environmental Impact Report, and the Desert Sunlight Solar Farm Project California Desert Conservation Area Plan Amendment and Final Environmental Impact Statement. See: http://www.sloplanning.org/EIRs/topaz/FEIR/FEIR/Vol1/C%20files/C06%20Biology_.pdf; http://www.sloplanning.org/EIRs/CaliforniaValleySolarRanch/feir/c06_biology.pdf; and http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/palmsprings/desert_sunlight.Par.56634.File.dat/Desert%20Sunlight%20FEIS%20chapter%204.pdf.

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surfaces, non-reflexive flat-plate panels, and other minimization and mitigation measures that would offset any negative ecological impacts.

- Horvath 2009. G. Horvath, G. Kriska, P. Malik, and B. A. Robertson. 2009. Polarized light pollution: a new kind of ecological photopollution. *Frontiers in Ecology and the Environment* 7:317–325.
- Horvath 2010. G. Horvath, M. Blaho, A. Egri, G. Kriska, I. Seres, and B. Robertson. 2010. Reducing the Maladaptive Attractiveness of Solar Panels to Polarotactic Insects. *Conservation Biology* 6:1644–1653.
- Pagel 2013. Dr. Joel Pagel, U.S. Fish and Wildlife Service, personal communication with Carol Watson, Staff Biologist, California Energy Commission, June, 2013.

**BLYTHE SOLAR POWER PROJECT (09-AFC-6C)
DATA REQUEST SET No. 2**

Technical Area: Socioeconomics
Author: Steven Kerr

BACKGROUND: CONSTRUCTION WORKFORCE AND SCHEDULE

The Blythe Solar Power Project (BSPP) Revised Petition to Amend (RPTA) presents the number of construction workers needed for the project during peak construction and the average number of construction workers needed. With the change in technology and project size proposed in the RPTA, staff requires additional information.

DATA REQUEST

21. Please provide a construction schedule presenting the trades required for construction of the proposed modified BSPP and the number of employees required by trade on a monthly basis for the duration of construction.

BACKGROUND: OPERATIONS WORKFORCE

The BSPP RPTA presents the total number of operations workforce that would be employed on the project and compares the proposed modified BSPP workforce with the operations workforce needed for the approved project. Additional detail is required for staff's analysis.

DATA REQUEST

22. Please provide a list of positions for the operational workforce required for the proposed modified BSPP, including the number of employees required for each position type.

BACKGROUND: FISCAL BENEFITS

The BSPP RPTA presents summaries of the modified project's total economic impacts/benefits from construction and operation in Tables 6.3-1 and 6.3-2. Additional detail is required for staff's analysis.

DATA REQUEST

23. Please provide updated approximate values for the modified project's Fiscal, Non-Fiscal, Direct, Indirect, and Induced Benefits, as listed in Socioeconomics and Environmental Justice Table 10, BSPP Economic Benefits, on page C.8-34 of the July 2010 *Blythe Solar Power Project Revised Staff Assessment* (<http://www.energy.ca.gov/2010publications/CEC-700-2010-004/CEC-700-2010-004-REV1-PT2.PDF>).

**BLYTHE SOLAR POWER PROJECT (09-AFC-6C)
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BACKGROUND: ESTIMATIONS OF WORKFORCE RELOCATION

The BSPP RPTA makes no assumptions about the number of construction workers who would likely relocate closer to the project site, relative to the number who would commute daily during construction of the proposed modified project. Likewise, for the proposed modified project, the RPTA made no assumptions about the number of its operations workforce who would relocate. For the approved project, Energy Commission staff estimated 15 percent of the construction workers would temporarily relocate closer to the project site and 25 percent of operations workers would permanently relocate closer to the project. Energy Commission staff currently analyzing the BSPP RPTA has accepted these assumptions presented in the previous analysis of the BSPP approved project.

DATA REQUEST

24. Does the project owner have any estimates of how many construction workers and operations workers would relocate closer to the project site? If so, please provide these estimates.

BACKGROUND: LABOR AGREEMENT

Staff considers the geographic range from which a project could draw workers, and the availability of labor within that geographic range, as a way of estimating how much of the workforce would seek lodging closer to the project site rather than commute daily to work at the project site. A large influx of workers can strain local services and resources, potentially resulting in an impact to the service-provider or resource. In cases where available labor residing in another state lives within a reasonable commute-range of the project site, as is the case for BSPP, it is helpful for staff to know if the project has or plans to sign a labor agreement with the local unions, due to union rules of labor sourcing. Staff requests the following information:

DATA REQUEST

25. Has the project owner entered a labor agreement with the local unions, and if not, do they plan to enter such an agreement?