

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION  
AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105-3901

July 19, 2012

Noel Ludwig, Project Manager  
California Desert District Office, BLM  
22835 Calle San Juan De Los Lagos  
Moreno Valley, California 92553

Subject: Draft Environmental Impact Statement for the Proposed Ocotillo Sol Solar Project and Draft California Desert Conservation Area Plan Amendment, Imperial County, California (CEQ# 20120108)

Dear Mr. Ludwig:

The U.S. Environmental Protection Agency has reviewed the Draft Environmental Impact Statement for the Ocotillo Sol Project, Imperial County, California. Our comments are provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508) and our NEPA review authority under Section 309 of the Clean Air Act.

We have rated the DEIS as Lack of Objections (LO) (see enclosed "*Summary of EPA Rating Definitions*"). Although our review did not result in the identification of any substantive changes needed to the project to avoid significant environmental impacts, we recommend that certain information be added or clarified in the Final EIS. In particular, the EPA recommends that the Final EIS include additional discussion regarding the alternatives analysis and direct and cumulative impacts to air resources. Our enclosed detailed comments provide more information regarding these recommendations.

We appreciate the opportunity to review this DEIS and are available to discuss our comments. Please send one hard copy and one CD ROM copy of the FEIS to this office at the same time it is officially filed with our Washington D.C. Office. If you have any questions, please contact me at (415) 972-3521, or contact Scott Sysum, the lead reviewer for this Project, at (415) 972-3742 or [sysum.scott@epa.gov](mailto:sysum.scott@epa.gov).

Sincerely,

/s/

Kathleen Martyn Goforth  
Manager  
Environmental Review Office (CED-2)  
Communities and Ecosystems Division

Enclosures:

- (1) Summary of EPA Rating Definitions
- (2) EPA's Detailed Comments
- (3) Distribution List

cc: Distribution List

**US EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED OCOTILLO SOL SOLAR PROJECT AND DRAFT CALIFORNIA DESERT CONSERVATION AREA PLAN AMENDMENT, IMPERIAL COUNTY, CALIFORNIA, JULY 18, 2012**

Alternatives Analysis

CEQ Regulations for implementing NEPA (40 CFR, Parts 1500-1508) state that the alternatives section of an EIS should “rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly describe the reasons for their having been eliminated” (40 CFR, part 1502.14). “Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of applicant” (46 Federal Register 18026). Reasonable alternatives should include, but are not necessarily limited to, alternative sites, capacities, and technologies as well as alternatives that identify environmentally sensitive areas or areas with potential use conflicts.

The Draft Environmental Impact Statement states that the Applicant’s interests and objectives, including any constraints or flexibility with respect to their proposal, help to inform the BLM’s decision and cannot be ignored in the NEPA process (BLM IM 2011-059) (p. 2-1). Among the constraints listed by the Applicant is proximity (within 1.5 miles) to the Imperial Valley Substation (based on the project’s connection to a 12.47-kV site within the Imperial Valley Substation that limits the feasible length of an interconnection) (p. 2-2). Technically, it is feasible to connect to the substation over a longer distance by using higher voltage transmission lines without excessive power losses. This is currently planned for the Mount Signal Solar Energy project and the Sunrise Powerlink, both of which will connect to the Imperial Valley Substation. The EPA suggests that the restriction of a gen-tie line of only 12.47 kV severely limits the available alternatives and does not appear necessary to meet the project’s purpose and need.

*Recommendation:*

Discuss, in the FEIS, whether high voltage transmission line technology would allow a wider range of alternative sites, and any economic or other factors that would make the use of higher voltage transmission gen-tie lines infeasible.

Air Quality Cumulative Impacts Analysis

The DEIS states that the Salton Sea Air Basin is in attainment of all federal pollutant standards except for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The area that includes the Ocotillo Sol Project area is a Serious PM<sub>10</sub> Nonattainment area, is Nonattainment for the PM<sub>2.5</sub> 24-hour standard and is a Moderate 8-hour O<sub>3</sub> Nonattainment area.

The DEIS states that the geographic scope of air quality impacts is a 6-mile radius for regionally based impacts and a 1-mile radius for sensitive receptor impacts, and that these cumulative analysis impact areas are appropriate for air quality due to the state, regional, and local nature of air quality impacts that could occur cumulatively. According to the DEIS, the identification of cumulative projects for air quality generally ranges from approximately 1 mile to 6 miles from a proposed project because the

effect of downwind dispersion eliminates the potential for project-level significant cumulative air quality impacts over areas larger than a few square miles (p. 4-35).

EPA notes that other renewable energy projects in the area have used a larger geographic area for cumulative impacts analysis. For example, the Imperial Solar Energy Center West Draft EIR/EA used the Salton Sea Air Basin as the geographic scope for the analysis of cumulative air quality impacts, due to the existence of an Air Quality Management Plan, State Implementation Plan, and requirements set forth by the Imperial County Air Pollution Control District, which apply to all cumulative projects within the Salton Sea Air Basin.<sup>1</sup>

*Recommendations:*

Consider using the Salton Sea Air Basin as the geographic scope for the analysis of cumulative air quality impacts in the Final EIS. If it is determined that this scope is inappropriate for this project, explain why. The cumulative air quality impacts analysis should take into consideration all reasonably foreseeable projects that may cumulatively affect the region's ability to achieve air quality goals.

Grading and Fugitive Dust Control

The DEIS states that initial construction activities would include complete vegetation grubbing of the area. Grubbing would incorporate the clearing of vegetation, use of herbicides, and a water truck for fugitive dust control. Vegetation treatment and weed management would be ongoing throughout the life of the project. The site would be maintained free of vegetation with BLM-approved herbicides. The Ocotillo Sol Weed Management Plan, developed in consultation with the BLM, would outline the vegetation treatment and weed management program for the site (see Appendix D) (p. 2-10).

On page 2-9, the DEIS states that the Applicant's proposed Ocotillo Sol Project site was selected to minimize grading and to allow site hydrology to remain in a quasi-natural state. Site grading would match existing slopes and grades, minimize disturbance, and preserve existing drainage patterns. Soil would not be imported to or exported from the site. On page 4-44, however, the DEIS states that construction activities under Alternative 2 would involve grading to level the site.

The DEIS states that Dust Control Plans for construction and operation will be implemented to further avoid and reduce dust emissions in the project area associated with project construction and operation (p. 4-32). There is no mention of water use for dust suppression during operations, even though the area will be free of all vegetation.

*Recommendations:*

The FEIS should clarify whether the site would be graded to match the existing contour and slope or will be graded level. If the site will be graded level, discuss how this may affect soil erosion and stormwater flows.

---

<sup>1</sup> Imperial Solar Energy Center West, November 2010 Draft EIR/EA, page 5-30

The FEIS should include more details on the content of the two Dust Control Plans. If water is to be used for dust control during operations, the amount of water needed should be estimated.

The FEIS should explain why the site must be maintained free of vegetation; identify the herbicides that may be used on the site; and describe the anticipated frequency and manner of herbicide application.

#### Hazardous Materials/Hazardous Waste and Decommissioning– Cadmium Telluride containing Solar Modules

The actual photovoltaic technology to be used has not been decided. The DEIS discusses two different technologies that may be used: conventional crystalline and thin film (p. 2-6). The thin-film PV module technology that may be used for the Ocotillo Sol Project contains small amounts of cadmium telluride. According to the DEIS, the potential for CdTe release could only occur if severe pitting of the panel surface occurred, and human exposure to CdTe would only occur if the module, which is sealed in glass, generated flake or dust particles. The DEIS states that dust particles would not be generated unless the modules disintegrated during final disposal or vaporized in a fire. Final disposal of modules would occur off-site and would be covered under the decommissioning plan. The DEIS states that the proposed facility has a minimum expected lifetime of 25 years, with an option to renew the Right of Way for another 25 years (p. 2-4).

In an Environmental Impact Report for the Topaz Solar Farm utility scale thin-film PV power plant, it was stated that, out of the 9,000,000 modules, it was anticipated that 36,000 modules would break during the three-year construction period, and that an average of 2,880 modules would break per year during operation. The project applicant developed a Broken PV Module Detection and Handling plan as a means to ensure prompt detection, removal and proper disposal of broken modules<sup>2</sup>.

#### *Recommendations:*

The FEIS should fully disclose the amount of CdTe and Cd that would be on site in the modules for the thin-film option.

The FEIS should include a Broken PV Module Detection and Handling plan that will ensure that, if thin-film modules are used, broken modules are adequately detected and handled as California hazardous waste.

The FEIS should identify bonding or financial assurance strategies for decommissioning, module recycling, and reclamation.

---

<sup>2</sup> Final Draft Environmental Impact Statement and DOE Loan Guarantee for the Topaz Solar Farm, August 2011

## Climate Change

Scientific evidence supports the concern that continued increases in greenhouse gas emissions resulting from human activities will contribute to climate change. One report indicates that observed changes in temperature, sea level, precipitation regime, fire frequency, and agricultural and ecological systems reveal that California is already experiencing the measurable effects of climate change<sup>3</sup>. The report indicates that climate change could result in the following changes in California: poor air quality; more severe heat; increased wildfires; shifting vegetation; declining forest productivity; decreased spring snowpack; water shortages; a potential reduction in hydropower; a loss in winter recreation; agricultural damages from heat, pests, pathogens, and weeds; and rising sea levels resulting in shrinking beaches and increased coastal floods.

### *Recommendation:*

The DEIS should consider how climate change could influence the proposed project and assess how the projected impacts of the proposed project could be exacerbated by climate change, specifically within the Yuha Basin ACEC, a flat tailed horned lizard management area.

## Cultural Resources, National Historic Resources and Consultation with Tribal Governments

EPA commends the BLM for early consultation for tribal cultural resources as required under Section 106 of the National Historic Preservation Act. The DEIS states that the BLM invited Indian tribes to consult on the Ocotillo Sol Project on a government-to government basis at the earliest stages of project planning and that consultation with 15 Indian tribes will continue throughout the NEPA and Section 106 compliance processes (p. 5-6).

The DEIS states that, as explained in Chapters 3 and 4, no significant resources have been identified within the project's Area of Potential Effect, and no other issues have been raised, to date, with respect to the project as a result of Section 106 consultation (p. 5-7).

### *Recommendations:*

Consider expanding the number of tribes invited for consultation to include the Inaja Band of Diegueno Mission Indians of the Inaja Cosmit Reservation.

Describe, in the FEIS, the process and outcome of government-to-government consultation between the BLM and each of the tribal governments within the project area; issues that were raised (if any); and how those issues were addressed in relation to the proposed action and selection of a preferred alternative.

---

<sup>3</sup> Moser, Susie, Guido Franco, Sarah Pittiglio, Wendy Chou, Dan Cayan. 2009. The Future Is Now: An Update on Climate Change Science Impacts and Response Options for California. California Energy Commission, PIER Energy-Related Environmental Research Program. CEC-500-2008-071.

Distribution List

Chairperson Edwin Romero  
Barona Band of Mission  
Indians

Chairwoman Monique  
LaChappa  
Campo Band of Kumeyaay  
Indians

Chairperson Sherry Cordova  
Cocopah Indian Tribe

Chairman Robert Pinto, Sr.  
Ewiiapaayp Band of  
Kumayaay

Chairman Virgil Perez  
Iipay Nation of Santa Ysabel

Chairwoman Rebecca Osuna  
Inaja Band of Diegueno  
Mission Indians of the Inaja  
and Cosmit Reservation

Chairman Raymond Hunter  
Jamul Indian Village

Ms. Carmen Lucas  
Kwaaymii Laguna Band of  
Mission Indians

Chairperson Gwendolyn  
Parada  
La Posta Band of Mission  
Indians

Chairman Leroy Elliott  
Manzanita Band of the  
Kumeyaay Nation

Chairperson Mark Romero  
Mesa Grande Band of  
Diegueno Mission Indians

President Keeny Escalanti  
Quechan Indian Tribe

Chairman Allen Lawson  
San Pasqual Band of  
Diegueno Mission Indians of  
California

Chairman Daniel Tucker  
Sycuan Band of the  
Kumeyaay Nation

Chairwoman Maxine  
Resvaloso  
Torres Martinez Desert  
Cahuilla Indians

Chairperson Anthony Pico  
Viejas (Baron Long) Group of  
Capitan Grande Band of  
Mission Indians

Art Bunce  
Barona Band of Mission  
Indians

Melissa Estes  
Campo Band of Kumeyaay  
Indians

Kevin Conrad  
Cocopah Indian Tribe

Desiderio Vela  
Ewiiapaayp Band of  
Kumayaay

Melody Sees  
Iipay Nation of Santa Ysabel

Pam Arviso  
Inaja Band Of Diegueno  
Mission Indians of The Inaja  
And Cosmit Reservation

Robert Mesa  
Jamul Indian Village

Javaughn Miller  
La Posta Band of Mission  
Indians

Marc Anderson  
Manzanita Band of the  
Kumeyaay Nation

Darrel Langley  
Mesa Grande Band of  
Diegueno Mission Indians

Chase Choate  
Quechan Indian Tribe

John Flores  
San Pasqual Band of  
Diegueno Mission Indians of  
California

Lisa Haws  
Sycuan Band of the  
Kumeyaay Nation

Gerardo Bojorquez  
Torres Martinez Desert  
Cahuilla Indians

Donald Butz  
Viejas (Baron Long) Group of  
Capitan Grande Band of  
Mission Indians