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December 30, 2009

Craig Hoffman
Project Manager
Siting, Transmission and Environmental Protection Division
California Energy Commission
1516 Ninth Street, MS-15
Sacramento, CA 95814

Sent by E-mail to: CHoffman@energy.state.ca.us; docket@energy.state.ca.us

Re: Issue scoping comments – proposed Abengoa Mojave Solar Project (Docket Number 09-AFC-5)

Dear Mr. Hoffman:

On behalf of Defenders of Wildlife (Defenders) and our more than 1,000,000 members and supporters in the U.S., 200,000 of which reside in California, I am writing to provide issue scoping comments on the proposed Abengoa Mojave Solar Project located in the vicinity of Harper Dry Lake in San Bernardino County, California.

Defenders is dedicated to protecting all wild animals and plants in their natural communities. To this end, we employ science, public education and participation, media, legislative advocacy, litigation, and proactive on-the-ground solutions in order to impede the accelerating rate of extinction of species, associated loss of biological diversity, and habitat alteration and destruction.

Our comments on and recommendations regarding the proposed project are based on the project description contained in the Application for Certification (Docket Number 09-AFC-5) for the Abengoa Mojave Solar Project. For background information purposes, we include a brief summary of the project description, as follows:

Project Description: The proposed project is a solar thermal electrical generating facility located on approximately 1,800 acres fallow alfalfa farmland in private ownership. As proposed the facility would generate 250 MW of electrical power at peak production and use groundwater to cool the steam turbine generator system, wash mirrors and provide on-site water for human consumption. The proposed project would utilize approximately 2,200 acre-feet of groundwater per year for 30 years.

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Comments and Recommendations:

1. Wildlife Resources and Impact Assessment (Application for Certification (AFC), Chapter 5.7): The application dismisses the impact of the project on lands and wildlife resources adjacent to the proposed development site. The applicant's analysis of the effects of the project on the natural habitats wildlife along the edge of Harper Dry Lake, including the Harper Dry Lake Area of Critical Environmental Concern, states: *"The proposed Project site is not subject to any Habitat Conservation Plan or Natural Community Conservation Plan or within the boundaries of any wildlife preserve or critical habitat area. Thus, the proposed Project would not conflict with a habitat conservation plan or natural community conservation plan. The proposed Project does not go beyond private land into public lands and, therefore, would not have an effect on publicly-owned lands with habitat conservation plans."* (AFC, Chapter 5.7.7 Affected Environment).

The wildlife resources and values located on the public lands along the southwestern edge of Harper Dry Lake would be affected by the proposed project. The Harper Dry Lake Area of Critical Environmental Concern (ACEC) and Watchable Wildlife Site is located immediately north and east the proposed project, with approximately 2 ¼ miles of common boundary.

Description of the ACEC boundary in the AFC, including the corrected ACEC map submitted by Redell Engineering on October 12, 2009, does not reflect the current boundary and extent of the ACEC. By amendment to the California Desert Conservation Area Plan for the West Mojave Planning Area in 2006, the Bureau of Land Management (BLM) added approximately 110 acres of acquired land immediately north of Lockhart Road in Section 28 to the ACEC. (See West Mojave Plan Final Environmental Impact Report and Statement, page 2-25 and Map 2-5).

Within the ACEC addition are public visitor improvements including a parking area, informational signs, hiking trails and boardwalks leading to the marsh and restrooms. These facilities are associated with the Watchable Wildlife Site established by BLM. The facilities also include water pipelines feeding portions of the marsh habitat along the shoreline of the lakebed that originate from private land within the proposed project area located specifically in the NE ¼ Section 33, T. 11N, R. 4W. The water well and pipeline system is in support of impact mitigation for the effects of existing solar thermal power plants licensed by the California Energy Commission (CEC).

As per agreement signed by the CEC, BLM and Luz Solar Partners LLC in 2005, Luz Solar Partners has made available up to 75 acre-feet of groundwater to the BLM for maintenance of a portion of the wetland within the ACEC. Annual water pumping by the BLM for this purpose has been approximately half of the provided amount, thus limiting the extent of the wetland. We believe the wetland within the ACEC has the potential of being somewhat larger and stable because BLM has the ability to provide approximately double the amount of water it has delivered over the past several years. BLM also has a long range plan for wetland restoration

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and stabilization within the ACEC that includes maintenance of natural vegetation communities and elimination of saltcedar, and exotic phreatophyte.

Recommendation: A revised description of the wildlife habitat, wildlife species and wildlife values located on the southwestern edge of Harper Dry Lake within and adjacent to the ACEC should be prepared. Based on a revised description of the wildlife resources, a revised impact analysis should be prepared that addresses the impacts to the ACEC, the Watchable Wildlife Site, and the associated wildlife, especially birds. The impact of the project on public visitors to the ACEC and their wildlife viewing experiences should be included in the analysis.

Recommendation: Mitigation for the effects of the proposed project on the ACEC should include establishing a no-disturbance buffer in the SW ¼ of Section 28, T. 11N, R. 4W. Existing vegetation within this recommended buffer is Desert Sink Scrub and Disturbed Desert Saltbrush Scrub, according to the AFC, Appendix F, Biological Technical Report.

The applicant proposes to utilize a portion of this recommended buffer area to carry precipitation runoff toward the wetland within the ACEC. We do not object to a drainage canal being located in this area provided it does not carry an abnormal amount of sediment that would be discharged into the wetland in the ACEC and is designed in a manner that minimizes habitat loss. Our main concern is that the SW ¼ of Section 28 is proposed for solar field development in the applicant's AFC.

Recommendation: The existing water well and pipelines located on private land in the NE ¼ Section 33, T. 11N, R. 4W that are used by BLM to convey water to the wetland within the ACEC should be maintained and not removed or rendered inoperable as a result of the proposed project. We believe this can be achieved through minor change in the project footprint because the well and pipelines originate a relatively short distance from Lockhart Road.

2. Groundwater: We share CEC staff concern over the use of naturally occurring groundwater for power plant cooling. In a letter dated November 10, 2009 from Amanda Stennick of the CEC to Carrie Hyke of the County of San Bernardino Planning Department, the following concern regarding water resources was expressed: "*Energy Commission staff are concerned that even though the Project may be able to assert itself as a groundwater pumper in the basin, and stipulate to the physical solution implemented by the Watermaster, the basin is in an overdraft condition and any additional pumping could result in significant impacts to other users and the marsh. Staff are also concerned that improper stormwater control could result in impacts to the marsh area. In addition to working with the State Water Resources Control Board, the Lahontan Regional Water Quality Control Board, and the Watermaster, we would like to work with San Bernardino County, specifically regarding the Desert Groundwater Management Ordinance, to fully evaluate potential impacts and feasible mitigation measures to resolve these issues.*"

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We are concerned that the proposed use of groundwater for power plant cooling would increase the rate of overdraft of the basin. The localized impact associated with a cone of depression around proposed water supply wells could impact the ability of the BLM to pump water from their well located in the NE ¼ of Section 33 for delivery to the remnant wetland located in the adjacent ACEC.

We are aware of four proposed solar energy projects in the California Desert that would use air cooled steam condensers, and the Department of Energy conducted a study at Daggett, California in the 1990s that demonstrated air cooling was technically and economically feasible because it resulted in relatively minor impact to overall steam turbine efficiency. Turbine efficiency loss using air cooled steam condensers is relatively small, on the average of five percent over a one-year cycle.

Recommendation: An alternative to the proposed project that utilizes an air cooled steam condensers should be given very serious consideration. The long-term benefits of groundwater conservation, and elimination of elaborate facilities needed to utilize and process groundwater for use in power plant cooling should be carefully examined.

Thank you for considering our comments. If you have any questions, please contact me at (916) 313-5800 x110 or via email at jaardahl@defenders.org.

Sincerely,

Jeff Aardahl
California Representative

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