



California Office

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DOCKET

09-AFC-5

DATE APR 15 2010

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April 15, 2010

Craig Hoffman
Project Manager
Siting, Transmission and Environmental Protection Division
California Energy Commission
1516 Ninth Street, MS-15
Sacramento, CA 95814
via email to CHoffman@energy.state.ca.us; docket@energy.state.ca.us

Re: Comments on Staff Assessment for Proposed Harper Dry Lake/Mojave Solar Project (09-AFC-5)

Dear Mr. Hoffman:

Thank you for the opportunity to comment on the Staff Assessment (“SA”) for the Proposed Mojave Solar Project, located in the vicinity of Harper Dry Lake in San Bernardino County, California. These comments are submitted on behalf of Defenders of Wildlife (“Defenders”) and our more than 1 million members and supporters in the U.S., 200,000 of which reside in California.

Defenders submitted issue scoping comments on this proposed project in a letter dated December 30, 2009. Our comments addressed: (1) the use of groundwater for power plant cooling; (2) an error in mapping the location and boundary of the Harper Dry Lake Area of Critical Environmental Concern (ACEC); and (3) potential impacts to an existing water well and water pipeline located within the “beta unit” of the proposed project that is capable of providing water to the marsh within the ACEC. Water delivery to the ACEC was required as mitigation for the effects of previously permitted and operating solar power plants located to the northwest of the proposed project

The proposed Mojave Solar Project conforms very well to the general project siting criteria developed by numerous environmental organizations, including Defenders. We commend the project applicant, Abengoa, for proposing the project on private land that is largely void of a natural biological community and is in the vicinity of exciting electrical transmission lines, existing road access and other developments. Abengoa’s land holdings in the area also include sufficient natural habitat to fully satisfy the biological impact mitigation proposed by California Energy Commission (“CEC”) staff for the relatively minor effects to the Desert Tortoise and Mohave Ground Squirrel that will result from the proposed project. Abengoa has proposed to protect this habitat through a conservation easement on their deeded property.

Use of Groundwater:

Although we raised concerns about the use of groundwater for power plant cooling in our scoping letter, we believe this issue will be adequately analyzed and resolved through the CEC staff analysis, impact mitigation and project certification process. We encourage the staff to thoroughly analyze alternatives to the proposed project and recommend an alternative for consideration by the

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California Energy Commissioners that would substantially reduce the amount of groundwater use in the basin. This could be achieved by alternative power plant cooling technologies (i.e., hybrid cooling) or off-site conservation.

Extensive pumping for farming and ranching operations has severely reduced the amount of groundwater in the Harper Lake Basin. Current monitoring indicates that the groundwater level is approximately 140 feet below ground level, far below the baseline measurement of approximately 16 feet measured around 1920. According to the SA, significant reductions in farming and ranching operations dependent on groundwater has resulted in slow recovery of groundwater in the basin, at a rate of approximately five feet per year.

In planning for this project, Abengoa acquired rights to utilize groundwater from the Harper Dry Lake basin through the purchase of the Most Ranch, a former alfalfa farm that will now serve as the project site. At this time, the property is largely a fallow alfalfa farm with very little acreage under active irrigation. According to the SA of the proposed project, water used to cool the power plant would consume approximately 20 percent of the water that was used to irrigate the former alfalfa farm.

In a letter to the California Energy Commission dated December 17, 2009, the Mojave Basin Area Watermaster indicated that for water consumption calculation purposes, irrigation is assumed to consume 50 percent of the actual amount of water pumped whereas the proposed solar project would consume 100 percent. Please clarify if these assumptions were utilized in the SA groundwater impact analysis.

Defenders generally does not support the use of naturally occurring groundwater for power plant cooling in the California Desert, and consider long term recovery of this groundwater basin to be a worthwhile goal, and one that we will advocate during our participation in the Desert Renewable Energy Conservation Plan process.

We recommend that CEC staff address opportunities for overall water conservation in the basin, and consider that existing groundwater supplies will need to support existing and proposed renewable energy projects in the Harper Lake Basin. We recommend that such conservation be linked to a goal of partial recovery of the wetland at Harper Dry Lake through groundwater connectivity rather than relying exclusively on delivering pumped groundwater to the marsh via pipeline. Water conservation measures developed through mitigation or alternatives to the proposed project, such as dry cooling or hybrid cooling, should result in faster recovery of the groundwater aquifer and be made unavailable for allocation by the Watermaster. In such a scenario, Abengoa could be credited for reduction in use of groundwater they are entitled to use under allocation by the Watermaster.

We are very pleased that staff has recommended BIO-20 as a condition of certification. BIO-20 specifies that water to maintain the ACEC marsh would be supplied by an existing well on BLM managed land that would be upgraded and made functional by Abengoa.¹ BIO-20 requires Abengoa to ensure that the upgraded well would be capable of delivering up to 75 acre-feet of water to the

¹ BIO-20 addresses the potential issue of disruption in delivery of mitigation water to a portion of the ACEC marsh due to decommissioning of a well and pipeline currently situated within the boundary of the "beta unit."

ACEC marsh. It also ensures that this water supply system be in service at the time the existing well on Abengoa-owned land is decommissioned.

Evaporation Ponds:

In the event that evaporation ponds are required as part of the proposed facility, we fully support the requirement that they be fenced and netted to preclude avian and other wildlife use. The dry cooling alternative would negate the need for any evaporation ponds, and we believe this alternative merits strong consideration in the final document.

ACEC Issues:

We appreciate that CEC staff have correctly located the boundary of the ACEC and described it as immediately adjacent to the northern boundary of the proposed project site called the “beta unit.” The ACEC includes not only the wetland marsh and native upland vegetation, but a developed visitor use facility. In our scoping comment letter we identified potential impacts to the ACEC biological resources and the public use, namely birdwatching. We also recommended that a buffer between the ACEC and the proposed project site be established to mitigate the effects of the proposed solar project on the existing ACEC.

The SA contains staff recommendations addressing the ACEC issues noted above.² We do not consider the recommendations adequate to mitigate impacts below the level of significance. In our scoping comment letter we identified a potential buffer between the ACEC and the solar collectors located in the SW1/4 of Section 28, T. 11 N., R. 4 W. We urge the CEC staff to develop an alternative that incorporates a modest buffer between the existing ACEC and the proposed solar project within the common boundary of the ACEC and the proposed “beta unit.”

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

² See **BIO-10** requires pre-construction nest surveys and monitoring areas louder than 60 dBA; **BIO-7** and **VIS-3#** requires minimization of side-cast lighting; **BIO-14** requires nocturnal mammals to be cleared from the project area before construction).