



State of California - The Resources Agency
DEPARTMENT OF FISH AND GAME

<http://www.dfg.ca.gov>

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April 29, 2008

Kenneth Stein
 Beacon Solar
 700 Universe Boulevard
 Juno Beach, Florida 33408

**Subject: Beacon Solar Energy Project
 Application for State Incidental Take Permit**

Dear Mr. Stein:

The California Department of Fish and Game (Department) has reviewed the "Application for Incidental Take of Threatened and Endangered Species, Section 2081 of the California Endangered Species Act, In Accordance with California Code of Regulation, Title 14, Division 1, Subdivision 3, Chapter 6, Article 1, Section 783.2" (Application) submitted on behalf of Beacon Solar, LLC (Permittee). The Project is located in the Mojave Desert in eastern Kern County along State Route 14, approximately 4 miles north of California City. Implementation of the proposed Project would result in the construction of an estimated 2,012-acre solar plant site and supporting linear components. The plant site includes a solar array and power block area where steam turbine generators would be located and on-site support facilities, including administrative buildings and three evaporation ponds to handle wastewater from the Project's cooling water system. A 17.6 mile long eight-inch natural gas line will be constructed and will connect to an existing Southern California Gas pipeline in the California City area via Neuralia Road and California City Boulevard. The transmission line will connect to the Barren Ridge Substation located southwest of the solar plant site and across State Route 14. Two options have been proposed for the electric transmission lines. Option 1 would involve constructing a new, approximately 3.5-mile 230-kV transmission line. Option 2 would construct a new, approximately 2.3-mile 230-kV transmission line.

The Application is not sufficiently responsive to some of the required elements of the Incidental Take Permit application process (Title 14, Section 783.2) and is lacking in some critical information. The Department, therefore, must deem this application as incomplete. We offer the following comments.

Sections 783(a)(3) through 783(a)(10): Throughout the Application, the reader is referred to other figures, tables, and documents described as Attachments. The Application should be a standalone document and not cross reference other documents, figures, or tables. Figures and tables should be located on the pages immediately following their first citation. Information utilized by other documents should be incorporated into the Application, and the document cited as a reference.

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783.2(a)(1): This section is complete.

783.2(a)(2): This section is complete.

783.2(a)(3) and 783.2(a)(4): The Project description is not sufficient in detail for us to make our own calculations of the area that will be disturbed. Cross-sectional and linear drawings delineating the various Project activities should be provided. The Application needs to provide a full description of the disturbance caused by staging, storage, laydown, cut and fill activities, and temporary and permanent access. It should also include a description of the extent of the disturbance caused by the spoiling of the cut material.

It is unclear whether the acreage of the different habitat types within the Project boundary, specifically the proposed Solar Plant Site, has been delineated sufficiently. The Permittee has calculated the Solar Plant site at 2,012 acres. It appears that the total acreage for the various habitats mapped within the Solar Plant site is greater than 2,012 acres. In order to calculate adequate compensation for Project-related impacts to State-listed species, the different habitat types within the Project boundary should be adequately delineated.

Portions of the Project description and location have not been finalized, but are described as Options 1 and 2. The issuance of an Incidental Take Permit is considered a discretionary action subject to environmental review under the California Environmental Quality Act (CEQA). The Project description is currently insufficient for the Department, as a Responsible Agency, to base its own Findings and Notice of Determination under CEQA. The Department recommends that the Permittee submit a signed Incidental Take Permit Application after the Project description has been finalized.

783(a)(5) and 783(a)(6): The analysis required in these sections should include all aspects of Project disturbance resulting in the "take" of covered species. It has come to the attention of the Department that biological surveys have not been completed and are still ongoing, in particular botanical surveys of the Project site and transect surveys along the natural gas pipeline. A lack of survey results means that direct and indirect impacts potentially resulting in "take" of the covered species (State threatened desert tortoise (*Gopherus agassizii*) and Mohave ground squirrel (*Spermophilus mohavensis*)) have not yet been fully analyzed. The analysis of "take" and analysis of impacts portion of the Application should incorporate the results of all required biological surveys, as they pertain to these covered species.

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Section 783(a)(5) should include an analysis of all aspects of Project disturbance resulting in the "take" of covered species. Much of the responses provided are appropriate for inclusion in Section 783.2(a)(6).

The impact analysis required by Section 783.2(a)(6) is not necessarily Project specific. It requires a species-specific analysis of the impact of the Project when contrasted with the local and range-wide level and rate of "take." Elements of the analysis should include those similar to those required in Section 783.2(a)(7). This discussion should include each of the covered species. Much of the response provided in this section is appropriate for inclusion in Section 783.2(a)(5).

783.2(a)(7): This analysis is intended to answer the question of whether the species will be in jeopardy as a result of the Project and should contrast the impact of the Project on the species-wide population or locally critical populations. This section should include literature citations and footnotes, with generally unavailable references provided as attachments.

783.2(a)(8): The Application provided a discussion of proposed measures to minimize and fully mitigate the impacts of the Project. Based on the current Application, you should anticipate our refinement to some of the proposed measures and that we will add additional avoidance, minimization, and mitigation measures in the permit. This step will occur after we receive the completed application wherein the Project is described fully.

In order to satisfy the requirements in Section 783.4(a)(2) necessary to fully mitigate the impacts of "take" that would be authorized in an executed Incidental Take Permit, several items are required, such as adequate funding and habitat protection in perpetuity. The Application is deficient in these areas for the following reasons:

Compensation Acreage: The amount of compensation proposed in the Application will not meet the Department's fully mitigate standard. The Department does not concur that a 5- or 6-acre portion of the linear components of the Project, located in Creosote Scrub habitat, is the only portion of the Project site that will impact covered species. Surveys completed to date have demonstrated that portions of the 2,012-acre solar plant site are potentially occupied by covered species, in particular by desert tortoise. Sign of desert tortoise (scat, burrow, and carcasses) were documented within portions of the Project site consisting of 13.7 acres of desert swale and 352.6 acres of monospecific atriplex scrub (*Atriplex polycarpa*). These areas connect with native creosote bush scrub located adjacent to the Project boundaries, and surveys indicate that desert tortoise disperse through these areas on a transient basis. In addition, the Department must assume that a portion of the Project site is potentially occupied by

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Mohave ground squirrel because the Permittee chose to assume presence rather than conduct protocol "presence/absence" surveys for Mohave ground squirrel as recommended by the Department. The Department will require additional compensation in order to fully mitigate all potential impacts to covered species; although, we will certainly take into consideration that much, but not all, of the proposed Project site consists of ruderal, fallow agriculture with sparse vegetative cover. The Department will be able to make more specific comments on the amount of compensation required to meet the fully mitigate standard once biological surveys are completed and a more detailed habitat delineation provided.

Compensation Acquisition: Insufficient information has been provided for the Department to determine if the proposed acquisition of compensation habitat for the "take" of covered species is appropriate. The Department must make its own findings regarding the appropriate level of habitat compensation. This will be based on information about the location and features of the proposed compensation habitat and the ability to enhance and maintain it to compensate for the anticipated incidental "take" of covered species over the short- and long-term. In order to satisfy the requirement (Section 783.4(a)(2)) to fully mitigate the impacts of the "take" that is authorized in our permit, the Department will require that the Project applicant propose specific compensation habitat and assure its preservation and management for the covered species in perpetuity. The Project applicant should propose specific measures to accomplish this. Thus, the discussion should include specific proposed land acquisitions and the appropriate enhancement and endowment costs.

The final basis for compensation requirements will be established using the actual acreage disturbed as verified by aerial photographic interpretation or equally accurate means. The Permittee will be responsible for providing the evidence needed for such verification. We recommend recalculating the acreage of all proposed temporary and permanent ground disturbance.

Section 783.2(a)(9): The Application has provided, as an attachment, a discussion of measures included in the proposed mitigation, monitoring, and reporting program (MMRP). The MMRP ensures compliance with the measures developed to avoid, minimize, and fully mitigate the impacts of the Project. Mitigation, monitoring, and reporting are key components of the Department's California Endangered Species Act and CEQA responsibilities of the Project, and the Department may add additional MMRP measures during our CEQA review. The final MMRP must include features to monitor and report on the Habitat Compensation Lands that will be required mitigation for this Project.

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Section 783.2(a)(10): The Application is lacking in detail to assure the Department that sufficient money has been allocated to implement the required mitigation measures, habitat compensation lands, enhancement, and perpetual endowment. The calculations and analysis used to arrive at the proposed endowment, enhancement, and land acquisition costs should be provided. A Property Analysis Record (PAR) or PAR-like analysis should be used to calculate the monetary amounts necessary for acquisition of habitat compensation lands, endowment and enhancement fees. These costs must be paid prior to starting work and must be administered in a manner that assures the fiscal resources are available to fulfill their intended purpose. Alternatively, a Department-approved means of financial security must be in place.

Section 783.2(a)(11): Only those individuals listed in Section 783.2(a)(1) should certify the application.

The regulatory permit process (Section 783.5) directs the Department to return an incomplete Application to the applicant, with a description of the deficiency. The process states that the applicant shall have 30 days from the receipt of the returned application to correct the deficiency and re-submit the Application.

It appears from the Project description that "take" of State-listed species is likely and that it is appropriate to obtain a State Incidental Take Permit for this Project prior to commencing any ground-disturbing activities. Thus, any take that occurs prior to the issuance of an Incidental Take Permit would not be authorized.

If you have any questions regarding these issues and would like to arrange for consultation, please contact Annette Tenneboe, Environmental Scientist, at the address provided on this letterhead or by telephone at (559) 243-4014, extension 220.

Sincerely,



W. E. Loudermilk
Regional Manager

Enclosure

cc: See Page Six

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