

STATE OF CALIFORNIA

Energy Resources Conservation and Development Commission

In the Matter of:

APPLICATION FOR CERTIFICATION
FOR THE RIDGECREST SOLAR
PROJECT

DOCKET NO. 09-AFC-9

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DATE	MAY 21 2010
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**INITIAL COMMENTS BY
INTERVENOR WESTERN WATERSHEDS PROJECT
ON THE STAFF ASSESSMENT AND
DRAFT ENVIRONMENTAL IMPACT STATEMENT AND DRAFT
CALIFORNIA DESERT CONSERVATION AREA PLAN AMENDMENT
RIDGECREST SOLAR POWER PROJECT**

May 21, 2010

Michael J. Connor, Ph.D.
California Director
Western Watersheds Project
PO Box 2364
Reseda, CA 91337-2364
(818) 345-0425
mjconnor@westernwatersheds.org

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Dear Mr. Solario:

Western Watersheds Project offers the following comments on the Staff Assessment component of the joint *Staff Assessment and Draft Environmental Impact Statement and Draft California Desert Conservation Area Plan Amendment* for the Ridgecrest Solar Power Project. Western Watersheds Project submitted formal scoping comments for the Staff Assessment (“SA”) in two letters dated December 23, 2009 and January 21, 2010.

The Ridgecrest Solar Power Project (“Project”) site consists of contiguous public land that is largely high quality wildlife habitat that provides unique linkage habitat providing connectivity for listed species. This controversial Project was originally “fast-tracked”. The rush to meet fast-track deadlines has had, perhaps inevitably, consequences for the development of an adequate Staff Assessment. Many areas of the SA provided to the public are admittedly incomplete. In addition, the Applicant has recently revised the Project design. Important biological and cultural resources survey data for all Project disturbance areas are not yet available. These factors make it extremely difficult for the public to participate in the process in any meaningful manner.

Western Watersheds Project supports Staff’s analysis and conclusions that the Project will have significant impacts on Biological and Visual Resources that cannot be mitigated. Based on our review of the SA we are not convinced that impacts to Cultural Resources and impacts to Soil and Water Resources can be mitigated to insignificance. The CEC Staff should adopt the no project/no action alternative in the Final Staff Assessment (“FSA”), and should firmly recommend that the Commission deny the applicant’s application for certification.

Biological Resources

Western Watersheds Project agrees with Staff's conclusions that impacts to Biological Resources are significant and cannot be mitigated. We ask that Staff address the following issues in the Final Staff Assessment.

Biological Resources - Desert Tortoise

1. The FSA should note that the BLM's West Mojave Plan designation of the Mohave Ground Squirrel Conservation Area was expressly intended to benefit desert tortoise conservation in areas west and north of the Fremont-Kramer Desert Wildlife Management Area which includes the Project site. For example, in its Biological Opinion for the West Mojave Plan, the USFWS observes,

“The establishment of the conservation area for the Mohave ground squirrel is likely to promote the conservation of the desert tortoise to some degree in areas that are outside of desert wildlife management areas because the one percent limit on future ground disturbance will also be in effect within this area. In particular, desert tortoises located to the north and west of the Fremont-Kramer Desert Wildlife Management Area will likely derive conservation benefit from this action because the protective measures of a conservation area will apply.” 1-8-03-F-58 BO at 93.

2. Prior to the signing of the BLM's West Mojave Plan in 2006, the area to the west of the project site was designated as Category II desert tortoise habitat. It was designated as Category II habitat because it was known to support relatively high densities of tortoise in the late 1970s. The high tortoise density on the project site is thus not unexpected. The fact that tortoise densities west of the project site have declined considerably and are now low but densities are still relatively high on the project site emphasizes the unique value of the Project site for desert tortoise and the need to protect this population *in situ*.

3. The SA's description of the affected desert tortoise population is somewhat confusing. The tortoises in the project area are part of the Western Mojave Desert Tortoise Evolutionarily Significant Unit (“ESU”) as identified and defined in the 1994 *Desert Tortoise (Mojave Population) Recovery Plan*. The project area lies within the Western Mojave Desert Tortoise Recovery Unit which is the geographic area that encompasses the ESU. The more recent, detailed genetic analysis of Murphy *et al.* (2007)¹ has determined that within the Western Mojave ESU there are at least three populations (Western, Central, Southern) that can be identified. The desert tortoises at the project site are part of what Murphy *et al.* defined as the Western Mojave Recovery Unit which is a much smaller component of the Western Mojave Desert Tortoise Recovery Unit identified in the Recovery Plan. Tortoises within Murphy *et al.*'s Western Mojave Unit face a higher degree of threats compared to the Central and Southern

¹ Murphy, R. W., Berry, K. H., Edwards, T. and Mcluckie, A. M. 2007. A Genetic Assessment of the Recovery Units for the Mojave Population of the Desert Tortoise, *Gopherus agassizii*. *Chelonian Conservation and Biology* 6(2): 229–251.

Units. This underlines the need to conserve the high density desert tortoise population at the project site.

4. The SA incorrectly states, “In drought years, tortoises can be expected to wander farther in search of forage.” SA at C.2-18. Published work shows the exact opposite - tortoises tend to move less in drought periods (for example see Duda *et al.*, 1999²) thus saving energy reserves in difficult times. We believe this issue is of direct relevance to the project. The project applicant is proposing realigning the project boundary along washes. This raises the concern that during higher rainfall years when tortoises are most active, tortoises would have to use the El Paso Wash to cross the project site since upland areas would no longer be available and would be at increased risk of being inundated from water flows.

5. The applicant has submitted testimony in which it seeks to reduce the estimate of the desert tortoise density on the project site as calculated using the formula provided in the 2009 USFWS Survey Protocol methodology. Their basis for doing so is to remove from the calculation the eight tortoises that were not assigned to a size group by the Applicant’s biologists. The Applicant has provided no additional data that justifies considering these eight tortoises as juveniles. The estimated population should thus remain at 9.8 tortoises/sq km in the FSA, pending any appropriate modification resulting from the ongoing surveys.

6. Connectivity refers to the degree to which a landscape allows for the flow of organisms among habitat patches and populations. The range of the desert tortoise extends approximately 20 miles north of the project site to Rose Valley, where the most northwesterly population of desert tortoise in California occurs. Maintaining the desert tortoise population at the project site may be essential to retaining connectivity between the Rose Valley population and tortoise populations to the south. Genetic analyses show that the Mojave population as a whole shows a strong isolation by distance trend (Murphy *et al.*, 2007; Hagerty, 2008³) which underlies the importance of maintaining connectivity with outlying populations such that found in Rose Valley. Also, as we pointed out in our December 23, 2009 scoping letter, these northerly populations may be of particular significance to the future survival of the species given the expected effects of global climate change. This issue should be addressed in the FSA.

Biological Resources - Mohave Ground Squirrel

1. The FSA should note that on April 27, 2010 the USFWS published a positive 90-day finding on a petition to the list the Mohave ground squirrel under the federal Endangered Species Act (USFWS 2010⁴). The basis for this finding was that the petition presented substantial information indicating that listing the Mohave ground squirrel as endangered may be warranted due to destruction, modification, or curtailment of the species’ habitat or range. The Service did not consider the Ridgecrest Solar Energy Plant project or other proposed solar energy projects in

² Duda, J. J., Krzysik, A. J. and Freilich, J. E. 1999. Effects of Drought on Desert Tortoise Movement and Activity. *Journal of Wildlife Management*. 63(4): 1181-1192.

³ Hagerty, B. 2008. Ecological Genetics of the Mojave Desert Tortoise. PhD Dissertation. University of Nevada, Reno. 244 pp.

⁴ USFWS. 2010. Endangered and Threatened Wildlife and Plants; 90-day Finding on a Petition to List the Mohave Ground Squirrel as Endangered with Critical Habitat. *Fed. Reg.* Vol. 75, No. 80 Tuesday, April 27, 2010. 22063-22070.

making its finding since these projects had not been proposed at the time the petition was submitted. However, clearly this project will add to the destruction, modification, or curtailment of the species' habitat or range that has already occurred and may propel the federal listing.

2. The SA provides an excellent overview of the impacts of the proposed project on connectivity between Mohave ground squirrel populations. As the SA notes, at the project site the linkage is an approximate 2.5-mile wide area of low-relief habitat with alluvial/lacustrine soils bound by lava flows to the west and south and the developing areas of Ridgcrest near US 395 on the east. This linkage would be severely disrupted if the project goes ahead. The project applicant has recently proposed a modification that would provide a narrow corridor along El Paso Wash. While the minimal width for linkage habitat to provide functional connectivity is unknown, the FSA should note that in his recent overview of the status of the Mohave ground squirrel Dr. Leitner questions the effectiveness of a potential corridor between the Coso-Olancha and Little Dixie Wash core areas in part because of its minimal width (1-4 km) (Leitner 2008⁵). This is 10-40 times the width of the El Paso Wash corridor that would be available if the modified project was to proceed.

3. A large proportion of the proposed project site is within the Mohave Ground Squirrel Conservation Area that was established in the 2006 West Mojave Plan. While the West Mojave Plan allowed for a 1% cap on ground disturbance in the Conservation Area over the 30 year life of the plan this was never intended as a mechanism to allow large projects but rather was intended to discourage them by requiring heightened review.

Biological Resources - Burrowing Owl & Kit Fox

The desert kit fox is a protected furbearer under Title 14, California Code of Regulations (Section 460). The project site includes at least 4 active burrow complexes. The burrowing owl is a State Species of Special Concern. Seven active burrows with at least one pair with juveniles and four individual owls were found within the original proposed disturbance area and an additional pair and four additional individuals were found within the original buffer area. Additional surveys in newly proposed project disturbance areas are being conducted this spring. The results of the initial surveys and personal observations made on site visits suggest to us that Kit Fox numbers are unusually high on the site. The staff should provide data in the FSA comparing desert kit fox and burrowing owl occurrences on the project with numbers found on other projects so that the public and the decision makers can view the results of the surveys in an appropriate context.

Based on discussions at the recent workshops, CDFG guidance for burrowing owl mitigation may have changed compared to that proposed by the Applicant. This should be clarified in the FSA. Given the incomplete survey data and the uncertainties as to what CDFG considers appropriate mitigation in this case, we cannot provide additional comments on desert kit fox and burrowing owl at this time.

⁵ Leitner, P. 2008. Current Status of the Mohave Ground Squirrel. Transactions of the Western Section of the Wildlife Society. 44: 11-29.

Biological Resources - Streambed Alteration

As we discussed in our scoping letters, desert washes, drainage systems, and washlets are very important habitats for plants and animals in arid lands. For example, desert tortoises spend disproportionately more of their above-ground activity time in washes and on ridges than they do on “flat” areas.⁶ We commented on the need for wash habitat impacted by each alternative to be evaluated and appropriate mitigations made for stream bed alterations. According to the SA, “The applicant is currently preparing an updated delineation of waters of the state according to CDFG guidelines. Once that delineation is approved, the extent of impacts to state waters will be calculated.” SA at C.2-30. Given this data inadequacy, the public cannot provide meaningful comments on this issue nor can the Staff assume that the significant impacts will be mitigated. These inadequacies should be addressed in the FSA.

Visual Resources

We agree with Staff’s conclusion that the Project would have significant visual impacts that cannot be mitigated to less than significant levels. The SA also notes that “Cumulative impacts in combination with foreseeable future solar and other renewable energy projects would contribute to a perceived sense of industrialization of the open, undeveloped desert landscape along within the California Desert Conservation Area overall”. SA at C.12-1. We note that is impact could be minimized or avoided if the project was sited on the alfalfa fields to be targeted by the applicant for the *Land Fallowing Program* as we had suggested in our scoping comments.

Soil and Water Resources

The Applicant has recently proposed new modifications to the Project boundaries, modification of major washes, and the addition of an evaporative pond (location not yet disclosed) into the Project design. These changes all have ramifications for hydrology and sheet flow across the project site. We cannot provide meaningful comments on this issue because the Project description used in the SA is inadequate.

The Indian Wells Valley groundwater is already in a significant overdraft. The proposed mitigations for impacts to Water Resources are complex and highly uncertain. It is unclear how participation in the *Cash for Grass* program could provide mitigation for the life of the project. It is also unclear how effective the *Land Fallowing Program* is likely to be. According to the SA, a component of this program is that the Applicant will meet with landowners to determine if they would be willing to participate in the fallowing program. Because of this basic uncertainty, the mitigations cannot be considered adequate to offset the impacts to Water Resources.

⁶ Jennings, B.J. 1997. Habitat Use and Food Preferences of the Desert Tortoise, *Gopherus agassizii*, in the Western Mojave Desert and Impacts of Off-Road Vehicles. Proceedings: Conservation, Restoration, and Management of Tortoises and turtles—An International Conference, pp. 42–45. New York Turtle and Tortoise Society.

Cultural & Paleontological Resources

Cultural resources survey data for all proposed Project disturbance areas are not yet available so the Staff Assessment is necessarily incomplete. Because of this, we cannot provide meaningful comments on this issue at this time.

Cumulative Effects Analysis

We asked in our scoping comments that the cumulative effects of this project be considered in combination with all the other current and planned consumptive uses that are occurring on these public lands including livestock grazing, off road vehicle activity, and mining, other energy developments that are planned for the area including utility-scale solar energy plants and new transmission line projects that have the potential to open up more lands to energy (or other) development. The cumulative effects sections do not mention a number of large projects that should be considered in the analysis.

The cumulative effects section fails to include the Beacon Solar Project. Although the FSA references the Beacon Solar Energy Project a number of times including in the context of comparison of generation efficiencies and proximity to the Garlock alternative site, this major project is not included in the list of projects considered in the cumulative effects section.

The BLM has approved several projects within the Mohave Ground Squirrel Conservation Area since the West Mojave Plan was signed that did not incorporate the West Mojave Plan's required 5:1 mitigation requirement such as the COSO-Hay Ranch Water Pipeline Project and the Deep Rose Geothermal Exploration Well Project. The FSA should include an actual accounting of the amount of ground disturbance on public land since the West Mojave Plan Record of Decision was signed that includes all projects that the BLM has approved since the Mohave Ground Conservation Area was established.

According to Senator Feinstein's staff, during discussions of Senator Feinstein's new proposed Desert Protection Bill, there was an objection raised to including the area known as the Golden Valley Wilderness Additions in the bill by a China Lake Naval Air Weapons Station official because the Navy was considering training Navy Seals in that area. The Golden Valley Wilderness Additions is within the Mohave Ground Squirrel Conservation Area and is also within the Superior-Cronese Desert Tortoise DWMA. This large-scale project is not mentioned in the list of projects considered in the cumulative effects section.

The SA incorrectly proclaims the existence of the West Mojave Habitat Conservation Plan (see for example the LORS table on page C.5-37). Although the BLM's West Mojave Plan was signed in 2006, the Habitat Conservation Plan ("HCP") component of the West Mojave planning effort is still in the planning stages. If it is ever completed it would be the largest HCP in the country. A basic precept of the planned West Mojave HCP is to use actions on public lands as mitigation for impacts occurring on private land. The ongoing West Mojave HCP process is not addressed in the SA. The FSA should consider the impacts of the Project, both singly and cumulatively with similar projects, on the viability of the West Mojave HCP process.

Alternatives

Western Watersheds Project considers the range of alternatives reviewed in the SA to be inadequate. In our January 21, 2010 letter, we proposed that Staff consider an alternative site on private lands in the Inyokern area north and east of highway 14/395 and west of China Lake Naval Air Weapons Station. This is the same area proposed by the applicants to be targeted for the *Land Following Program*. Siting the plant at this location would not only avoid and minimize impacts to biological and cultural resources, but could positively benefit rather than impact water resources. This alternative was not addressed in the SA. The California Environmental Quality Act ("CEQA") requires agencies to evaluate and respond to comments received on environmental documents. (CEQA Guidelines § 15022).

If we can be of any further assistance to staff or can provide more information please feel free to contact me by telephone at (818) 345-0425 or by e-mail at <mjconnor@westernwatersheds.org>.

Yours sincerely,

A handwritten signature in black ink that reads "Michael J. Connor". The signature is written in a cursive style and is followed by a long horizontal line that extends to the right.

Michael J. Connor, Ph.D.
California Director
Western Watersheds Project
P.O. Box 2364
Reseda, CA 91337
(818) 345-0425
<mjconnor@westernwatersheds.org>