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Western Watersheds Project

Working to protect and restore Western Watersheds

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By Email

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California Energy Commission,
1516 Ninth Street, MS-15
Sacramento, CA 95814
Attn: Eric Solorio
< esolorio@energy.state.ca.us >

BLM California Desert District
22835 Calle San Juan de los Lagos
Moreno Valley, California 92553
Attn: Janet Eubanks
< CARSPP@blm.gov >

Re: Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Solar Millennium Ridgecrest Solar Power Project, Kern County, CA and Possible Land Use Plan Amendment and Staff Assessment.

Dear Ms. Eubanks and Mr. Solario:

On behalf of Western Watersheds Project and myself, please accept the following scoping comments as you embark on the preparation of an Environmental Impact Statement ("EIS") for the proposed Solar Millennium Ridgecrest Solar Power Project, Kern County, California – CEC Docket Number: 09-AFC-9.

Western Watersheds Project works to protect and conserve the public lands, wildlife and natural resources of the American West through education, scientific study, public policy initiatives, and litigation. Western Watersheds Project and its staff and members use and enjoy the public lands, including the lands at issue here, and its wildlife, cultural and natural resources for health, recreational, scientific, spiritual, educational, aesthetic, and other purposes.

According to the scoping notice, the Bureau of Land Management ("BLM") and the California Energy Commission ("CEC") are developing a PSA and EIS for the approximately 3,920-acre proposed ROW that would contain two solar fields, a power block, construction areas, a dry-cooling tower, steel transmission towers with associated transmission lines, access roads, three covered water tanks, an underground water pipeline, a water treatment facility, an electrical switchyard, a land treatment unit for bioremediation of any soil that may be contaminated by heat transfer fluid, an office, a warehouse, a parking lot, and facility perimeter fencing.

This is a massive project that will have direct, indirect and cumulative impacts on some of the desert's most sensitive resources including desert tortoise, Mohave ground squirrel and burrowing owl.

Specific issues of concern that should be addressed in the NEPA documents to ensure compliance with NEPA and to ensure that NEPA's requisite "hard look" at the environmental impacts include:

(1) Range of Alternatives.

The NEPA implementing regulations specify that NEPA documents must analyze a full range of alternatives. Based on the information and analysis presented in the sections on the Affected Environment (40 C.F.R. § 1502.15) and the Environmental Consequences (40 C.F.R. § 1502.16), the NEPA document should present the environmental impacts of the proposed action and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public

In order to comply with the spirit and letter of NEPA, the EIS must consider alternatives that meet the project goals and not simply propose "straw man" alternatives that can then be dismissed from further consideration. We suggest that the agencies consider the following reasonable alternatives in addition to any proposed action:

(a) "No Action Alternative" as is required by NEPA.
(b) Alternative sites on public lands with fewer resource conflicts outside the Mohave ground squirrel conservation area.
(c) A scaled back alternative that excludes parts of the proposed energy plant within the Mohave ground squirrel conservation area.
(d) A private lands alternative under which the project is built on private lands only.
(e) A distributed energy alternative using "roof top" solar to avoid the need for construction of a power plant.

Full analysis of these alternatives will help clarify the need for the proposed project, provide a baseline for identifying and fully minimizing resource conflicts, facilitate compliance with the BLM's FLPMA requirement to prevent the unnecessary and undue degradation of public lands and its resources, and will help provide a clear basis for making an informed decision.

(2) Desert Tortoise.

The NEPA/CEQA documents must describe, clearly characterize and identify the desert tortoise population that will be impacted by each alternative if the agencies are to take NEPA's requisite "hard look" at the environmental effects.

The proposed project site is within the West Mojave Desert Tortoise Recovery Unit. The West Mojave Recovery Unit spans a very heterogeneous area of the southwestern Mojave Desert. In a landmark genetic study published after the West Mojave DWMA were designated

in 2006, Murphy *et al.* (2007)[1] identified at least three genetically distinct desert tortoise populations (or Recovery Units) within the West Mojave Recovery Unit. They termed these the Western Mojave, Central Mojave, and Southern Mojave recovery units. The project site is within Murphy *et al.'s* Western Mojave unit.

The protocol surveys reported in the project proponent's Application for Certification indicate that large numbers of desert tortoises occupy the site. However, the data in the Application is confusing and is unclear as to how many tortoises will be impacted directly by this project. The Application states,

> Fifty DTs were observed during surveys in spring 2009, 40 of which were within the disturbance area. Twenty-two occupied DT burrows and 48 DT burrows with sign of recent use (presumed active), were also documented in the BRSA. Based on survey results, 69 adult DT are estimated to occur in the disturbance area, equivalent to a density of approximately 0.040 DT per acre. [Application at 5.3-28]

The entire 3,920-acre ROW is desert tortoise habitat. Using the "0.040 DT per acre" number, this calculates to 156.8 tortoises in the disturbance area, with a density of 25.6 tortoises per square mile or 9.9 tortoises per square km. This is twice the average density of 4.7 tortoises per square km estimated for the West Mojave Recovery Unit in the most recent USFWS range wide monitoring report (USFWS 2009[2]). It is four times the density of 2.7 tortoises per square km estimated for the Fremont-Kramer stratum. The site thus appears to support a relatively high desert tortoise density and likely provides high quality habitat.

<u>The NEPA/CEQA documents should provide frank estimates of the expected losses of desert tortoises that may occur for all alternatives considered</u>.

The EIS must identify what will be done with tortoises currently on the project site. If any tortoise relocations or translocations are anticipated, a threat assessment should be conducted for all potential relocation/translocation sites. Where possible, desert tortoises should be relocated to immediately adjacent protected sites. Threats that should be assessed on relocation/translocation sites include vehicle routes, off-road vehicle activity, livestock grazing and residual impacts from livestock use, invasive species and fire risk, predator levels (including ravens and coyotes) and proximity to human developments including housing, energy transmission corridors, and roads. Translocation sites should be located in areas with defensible boundaries and that can be conserved. Habitat quality of translocation sites should be comparable to the habitat from which the tortoises have been removed. This should be based on site-specific surveys of soils, hydrology, vegetation, invasive species, and anthropogenic threats. The current desert tortoise carrying capacity should be determined for any translocation site. Translocation sites should be designated for conservation use only.

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[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.

[2] USFWS. 2009. Range-wide Monitoring of the Mojave Population of the Desert Tortoise: 2007 Annual Report. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada.

The affected tortoises are part of the most northerly population of desert tortoise in California. The potential impacts of the project should be evaluated in light of the need to conserve tortoises in the more northerly portions of their range given the threats posed by global climate change. As the USFWS 2008 Draft Revised Recovery Plan notes,

> "Climatic regimes are believed to influence the distribution of plants and animals through species-specific physiological thresholds of temperature and precipitation tolerance. Warming temperatures and altered precipitation patterns may result in distributions shifting northward and/or to higher elevations, depending on resource availability (Walther et al. 2002). We may expect this response in the desert tortoise to reduce the viability of lands currently identified as "refuges" or critical habitat for the species." (USFWS 2008 at 133)

The NEPA/CEQA documents should provide a review of the direct, indirect and cumulative impacts of the proposed project on the West Mojave Recovery Unit, and all associated infrastructure including the roads and transmission lines.

(3) Mohave Ground Squirrel.

A large proportion of the proposed project site is within the Mohave Ground Squirrel Conservation Area established in the 2006 West Mojave Plan. The NEPA/CEQA documents should review all direct, indirect and cumulative impacts to this species.

The EIS should evaluate the significance of this area in conserving the Mohave ground squirrel, its contribution to maintaining connectivity between units of the Conservation Area, and its significance in dispersal of Mohave ground squirrel from "core areas". The EIS must address all projects that contribute or will contribute to loss of habitat in the Conservation Area in the cumulative effects analysis. Under the West Mojave Plan, the compensation ratio for Mohave ground squirrel habitat is 5:1. The EIS should document where and how this requirement would be fulfilled.

(4) Burrowing Owl.

The proposed project site provides occupied habitat for burrowing owl. The NEPA/CEQA documents should fully analyze impacts to this species and ensure compliance with State law, the West Mojave Plan's conservation strategy, and other applicable governing plans and laws.

(5) Other Sensitive species and Rare Plants.

A number of sensitive species of wildlife and rare plants occur on the project or in the vicinity. The EIS should carefully consider and an analyze impacts to all sensitive species, rare plants and Unusual Plant Assemblages (UPA). It should provide detailed vegetation and wildlife maps to facilitate public input into the process.

(6) Invasive Species.

Invasive weeds grow easily wherever the natural vegetation and biological soil crusts are disturbed. The disturbance to the soil and natural vegetation that will occur as a result of the construction and maintenance of this transmission project must not be allowed to establish a "weed corridor" across the landscape. Once established, weeds are almost impossible to remove permanently.

Invasive plants and weeds are threats to native habitat, rare plants, and sensitive species. They pose an immense fire hazard. Using chemicals to kill weeds requires exposing the environment, species, and watershed area to a toxic substance which can be the source of further damage to environmental and human health. Manual weed control requires much human effort, machinery, and can cause even more disturbance, leading to erosion, disturbance, and, in some cases, more weeds. The EIS should carefully consider how invasive plants and weeds will be manages and controlled.

(7) Hazards and Hazardous Materials.

The EIS should disclose any potentially toxic or hazardous wastes that may be associated with project during project construction, operation, and maintenance including pesticides and herbicides.

(8) Fire Prevention and Suppression.

The EIS should address the effects that each alternative may have on wildfire risks. Wildfires are becoming increasingly common in the Mojave Desert facilitated by the spread of invasive weeds and climate change. Wildfires can result in type conversion of large expanses of habitat. Wildfires could be caused by construction or operation of the transmission lines. Development of roads and transmission lines could encourage increased motorized vehicle access which increases fire risk especially when coupled with the spread of invasive weeds.

(9) Desert Washes, Ephemeral Streams and Soils.

Desert washes, drainage systems, and washlets are very important habitats for plants and animals in arid lands. Water concentrates in such places, creating greater cover and diversity of shrubs, bunch grasses, and annual grasses and forbs. The topography is often more varied, as are soil types and rock types and sizes, creating diverse sites for burrows, caves, and other shelters. The resulting "habitats" tend to attract more birds, mammals, reptiles, and invertebrates. For example, desert tortoises spend disproportionately more time in washes than they do on "flat" areas.[3] The wash habitat impacted by each alternative should be evaluated and appropriate mitigations made for stream bed alterations.

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[3] 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.

Soil erosion on low fill slopes and steeply graded areas could result in sedimentation of water bodies. Changes in hydrology and soil movements may impact rare plants and habitats for sensitive species, and may impact burrowing species such as the desert tortoise.

(10) Cultural & Paleontological Resources.

The EIS should discuss and analyze impacts to cultural and paleontological resources. The Mojave Desert is rich in structures and artifacts of significant cultural value that are irreplaceable once lost. The areas around dry lake beds are particularly rich in archaeological sites. Construction of structures and access roads could damage or destroy historic and archaeological sites, traditional cultural properties, or areas containing paleontological resources. Temporary use of staging areas and conductor pull sites could damage or destroy historic and archaeological sites, traditional cultural properties, or areas containing paleontological resources. Building new transmission lines through previously undisturbed areas could cause physical damage to artifacts and sites, expose cultural resources to looters, and could increase fires due to soil disturbance and subsequent weed invasion placing these cultural resources at risk of future damage.

(11) Global Climate Change.

Department of the Interior Order No. 3226 mandates that the BLM must consider the impacts of each proposed alternative with respect to global climate change in its NEPA reviews. The agencies should use the recently released USGS desert tortoise habitat model to determine likely changes in desert tortoise habitat quality in the area and the importance of the desert tortoise habitat. In addition to addressing climate change in the cumulative effects analysis, the EIS should address the carbon footprint of the project and any losses to carbon storage and sequestration it will engender.

(12) Visual Resources.

The public lands provide significant value as visual resources. The EIS should fully review the impacts of each alternative on visual resources.

(13) Cumulative Effects.

The EIS must considered the cumulative effects of this project in combination with all the other consumptive uses that are occurring on these public lands including livestock grazing, off road vehicle activity, and mining. New transmission line projects have the potential to open up more lands to energy (or other) development, placing wide swaths of habitat at risk, and greatly increase degradation and fragmentation of habitats and important wild land areas and have lasting and damaging impacts. The project will also facilitate and will act cumulatively with the many other energy developments that are planned for the area including utility-scale solar energy plants. All these activities will impact the same biological, cultural, geologic, and visual resources as the proposed project.

(14) Monitoring Programs.

The NEPA/CEQA documents must explain the monitoring programs that will be in place to monitor the short and long term impacts of the project. This should include the timelines, and estimated costs and sources of funding for the monitoring programs.

(15) Mitigation.

BLM is obligated under FLPMA to "minimize adverse impacts on the natural, environmental, scientific, cultural, and other resources and values (including fish and wildlife habitat) of the public lands involved." [43 U.S.C. §1732(d)(2)(a)] Other laws, including the Endangered Species Act and the California Endangered Species Act also entail the need for mitigations to minimize impacts. BLM is required to consider measures to mitigate potential environmental consequences in its NEPA analysis. [40 C.F.R. § 1502.16] The NEPA implementing regulations define "Mitigation" to include:

> (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
> (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
> (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
> (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
> (e) Compensating for the impact by replacing or providing substitute resources or environments.
> [40 C.F.R. §1508.20]

The EIS should describe the restoration and rehabilitation activities that will be required for habitat disturbed during construction. For example, construction material yards will lose their native vegetation, have their soils compacted, and increase the amount of wind and water erosion while leaving these areas at an increased risk of weed invasion. Transporting materials, labor, and equipment in and out of construction areas will also have their own set of impacts that must be minimized. Construction may also require the use of "temporary" roads that will require extensive rehabilitation if they are not to become permanent intrusions on the landscape. Rehabilitation of desert habitat is a long, slow and uncertain process.

Western Watersheds Project thanks you for the opportunity to submit scoping comments on the proposed solar plant project. Please keep Western Watersheds Project on the list of interested public for this project. If we can be of any assistance or 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,

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