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Western Watersheds Project

Working to protect and restore Western Watersheds

July 1, 2010

By Email

Allison Shaffer, Project Manager
Palm Springs South Coast Field Office
Bureau of Land Management
1201 Bird Center Drive
Palm Springs, CA 92262

< CAPSSolarPalen@blm.gov >
< asolomon@energy.state.ca.us >

Re: Draft Environmental Impact Statement/Staff Assessment for the Chevron Energy Solutions/Solar Millennium Palen Solar Power Plant (PSPP) and Possible California Desert Conservation Area Plan Amendment.

Dear Ms. Shaffer:

On behalf of Western Watersheds Project and myself, please accept the following comments on the Draft Environmental Impact Statement/Staff Assessment for the Chevron Energy Solutions/Solar Millennium Palen Solar Power Plant (Palen Solar Power Plant) and Possible California Desert Conservation Area Plan Amendment.

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.

Western Watersheds Project submitted scoping comments for this project on December 23, 2009. We have attached a copy of those comments to this letter. We hereby incorporate by reference the entire contents of that scoping letter into these comments.

The Palen Solar Power Plant is a massive project will have significant direct, indirect and cumulative impacts on some of the desert's most sensitive biological resources and on important cultural resources. Specific issues of concern that we have identified in the DEIS 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.

The DEIS should be revised to include alternatives that meet the project need but that avoid the significant impacts to biological resources and to ecological processes that they depend upon such as sand flow.

(2) Desert Tortoise.

The NEPA requires agencies to take a "hard look" at the environmental effects of a project. This requires the BLM to describe, clearly characterize and identify the direct, indirect and cumulative effects.

As we outlined in our scoping comments, the proposed project site is within California's Colorado Desert and within the Eastern Colorado Desert Tortoise Recovery Unit as identified in the 1994 Desert Tortoise (Mojave Population) Recovery Plan. We raised the concern that the Palen project would disrupt connectivity between the Eastern Colorado Recovery Unit and the Northern Colorado Recovery Unit. This could reduce gene flow and impair desert tortoise recovery.

The DEIS takes the position outlined in the draft (i.e. not final) revised recovery plan that California's desert tortoise population be treated as a single recovery unit. This is a scientifically controversial position since there is data indicating that tortoises from the 1994 Northern and Eastern Colorado Recovery Units are discernible using genetic analysis (see Murphy et al, 2007[1]). However, whether or not there is a scientific basis for the 1994 recovery units being combined into a single recovery unit the issue of loss of connectivity remains. This has not been addressed in the DEIS.

As we stated in our scoping comments:

"The Palen site is a particular concern. This habitat provides crucial connectivity between the desert tortoises in the Eastern Colorado Recovery Unit and those in the Northern Colorado Recovery Unit. The project places connectivity between the two recovery units at risk.

The Project Applicant's application states that,

[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.

> "The PSPP would have less than significant impacts on biological resources with implementation of avoidance, minimizations, and mitigation measures, except for unmitigable significant impacts to desert tortoise (DT) and Mojave fringe-toed lizard (MFTL) movement." (Application at 5.3-1, emphasis added)

One of the objectives for desert tortoise recovery in the 2002 Northern and Eastern Colorado Desert Management Plan (NECO) is "e. Mitigate effects on tortoise populations and habitat outside DWMAs to provide connectivity between DWMAs." (NECO at 2-17). Clearly then, use of the Palen project location is incompatible with the biological goals and objectives of the NECO Plan. Construction of a this proposed power plant would thus be incompatible with the CDCA Plan, the governing land use plan.

Maintaining connectivity is important especially 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)"

In addition, a portion of the Palen project site is designated as desert tortoise critical habitat. The EIS should also consider the status of the tortoises in the affected recovery units. The latest reports from the Desert Tortoise Recovery Office cite a 37% decline in tortoise density between 2005 and 2007.[2]

The DEIS should be revised to take the requisite "hard look" at all the direct, indirect and cumulative impacts of the proposed project and all associated infrastructure including roads, facilities and transmission lines on the desert tortoise.

(3) Mojave Fringe-toed lizard.

The DEIS describes the Palen Project has having unmitigable significant impacts to the sand transport corridor. This will have serious impacts on the Mojave fringe-toed lizard. The FLPMA precludes the BLM from authorizing projects that will result in undue degradation and the BLM is also precluding from authorizing actions that could propel the listing of this sensitive species under the Endangered Species Act.

The DEIS should be revised to take a hard look at impacts to the Mojave fringe-toed lizard and explain the minimization and avoidance measures that will adopted if this project is approved that will reduce impacts to sand transport to less than significant.

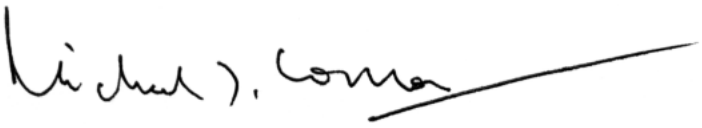
[2] USFWS. 2009. Range-wide Monitoring of the Mojave Population of the Desert Tortoise: 2007 Annual Report. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada.

(4) Streambed Alteration.

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] There must be full mitigation for impacts to streambeds as required under the California Fish and Game Code.

Western Watersheds Project thanks you for the opportunity to submit comments on the DEIS for the proposed Palen solar power 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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Attachment: Western Watersheds Project's December 23, 2009 Scoping Comments Re: Intent to Prepare Two Environmental Impact Statements/ Staff Assessments for the Proposed Chevron Energy Solutions/Solar Millennium Palen and Blythe Solar Power Plants, Riverside County, CA and Possible Land Use Plan Amendments. 7 pp.

cc. Alan Solomon, California Energy Commission <asolomon@energy.state.ca.us>

[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.

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Working to protect and restore Western Watersheds

December 23, 2009

By Email

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< asolomon@energy.state.ca.us >

BLM California Desert District
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Re: Notice of Intent to Prepare Two Environmental Impact Statements/ Staff Assessments for the Proposed Chevron Energy Solutions/Solar Millennium Palen and Blythe Solar Power Plants, Riverside County, CA and Possible Land Use Plan Amendments.

Dear Ms. Roberts and Mr. Solomon:

On behalf of Western Watersheds Project and myself, please accept the following scoping comments as you embark on the preparation of Environmental Impact Statements ("EIS") for the proposed Proposed Chevron Energy Solutions/Solar Millennium Palen and Blythe Solar Power Plants, Riverside County, CA and Possible Land Use Plan Amendments.

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, EIS and possible plan amendment for two separate right-of-way (ROW) authorizations filed by Chevron Energy Solutions/Solar Millennium (CESSM) to construct and operate the Palen and Blythe solar thermal power plants in eastern Riverside County, California with an expected combined

capacity of 1,452 megawatts (MW) using solar parabolic trough generating stations. Approximately 10,100 acres of BLM-administered public land are needed to develop the two projects.

These massive projects will have significant direct, indirect and cumulative impacts on some of the desert's most sensitive resources including species listed under the Endangered Species Act such as desert tortoise and on important cultural resources.

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.
(c) Alternative that features technology that requires significantly less water.
(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 sites are within California's Colorado Desert and both projects lie within the Eastern Colorado Desert Tortoise Recovery Unit.

A portion of the Palen project site is designated as desert tortoise critical habitat. The Project Applicants for both the Palen and the Blythe Projects describe the project sites as having low tortoise densities. Additional surveys should be conducted to confirm this. The EIS should also consider the status of the tortoises in the affected recovery units. The latest reports from the Desert Tortoise Recovery Office cite a 37% in tortoise density between 2005 and 2007.[1]

Both the Palen and Blyth Projects would disrupt connectivity between the Eastern Colorado Recovery Unit and the Northern Colorado Recovery Unit. This could reduce gene flow and impair desert tortoise recovery.

The Palen site is a particular concern. This habitat provides crucial connectivity between the desert tortoises in the Eastern Colorado Recovery Unit and those in the Northern Colorado Recovery Unit. The project places connectivity between the two recovery units at risk.

The Project Applicant's application states that,

> "The PSPP would have less than significant impacts on biological resources with implementation of avoidance, minimizations, and mitigation measures, except for unmitigable significant impacts to desert tortoise (DT) and Mojave fringe-toed lizard (MFTL) movement." (Application at 5.3-1, emphasis added)

One of the objectives for desert tortoise recovery in the 2002 Northern and Eastern Colorado Desert Management Plan (NECO) is "e. Mitigate effects on tortoise populations and habitat outside DWMAs to provide connectivity between DWMAs." (NECO at 2-17). Clearly then, use of the Palen project location is incompatible with the biological goals and objectives of the NECO Plan. Construction of a this proposed power plant would thus be incompatible with the CDCA Plan, the governing land use plan.

Maintaining connectivity is important especially 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 tortoise of the Eastern Colorado and Northern

[1] 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.

Colorado Recovery Units, and all associated infrastructure including the roads and transmission lines.

(3) Other Sensitive species and Rare Plants.

A number of sensitive species of wildlife and rare plants occur on the project or in the vicinity including the Mojave fringe-toed lizard and Harwoods' milkvetch.

The Palen Project Applicant's application describes impacts to Mojave fringe-toed lizard movement as significant and unmitigable. The EIS must explain how this project could move forward without the agencies propelling a listing of this species under the Endangered Species Act.

We are unaware of any extent occurrences of Harwoods' milkvetch on private lands. In light of this, the EIS must explain how this project could move forward without the agencies propelling a listing of this species under the Endangered Species Act.

The EIS should carefully consider and an analyze impacts to all State protected species such as burrowing owl, sensitive species, rare plants and Unusual Plant Assemblages (UPA) that would be affected by the project. It should provide detailed vegetation and wildlife maps to facilitate public input into the process.

(4) 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.

(5) Hazards and Hazardous Materials.

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

(6) Fire Prevention and Suppression.

The EIS should address the effects that each alternative for each project 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.

(7) 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.[2] The wash habitat impacted by each alternative should be evaluated and appropriate mitigations made for stream bed alterations.

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.

(8) 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.

(9) 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

[2] 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.

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.

(10) Visual Resources.

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

(11) Water Issues.

The EIS must provide information on the water needs of these power plants both in the construction and operation phases and the source of these waters. The EIS must fully analyze impacts to the local and regional water reserves.

(12) 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.

(13) 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.

(14) 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:

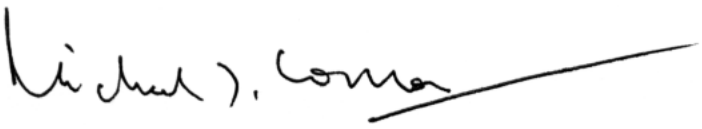
> (a) Avoiding the impact altogether by not taking a certain action or parts of an action.

(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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