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THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

June 9, 2011

Via Electronic & U.S. Mail

Dale Rundquist
Siting, Transmission and Environmental
Protection Division
California Energy Commission
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Allison Shaffer
Project Manager
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To Whom It May Concern:

Notice of Availability of the Final Environmental Impact Statement for the Palen Solar I, LLC's Palen Solar Power Plant (PSPP) and Proposed California Desert Conservation Area Plan Amendment, CEC Docket No. 09-AFC-7, BLM Docket No. CACA 048810

The Metropolitan Water District of Southern California (Metropolitan) has reviewed the Bureau of Land Management's (BLM) Final Environmental Impact Statement (FEIS) for the Palen Solar I, LLC's Palen Solar Power Plant (Project). Metropolitan submitted comments on the draft EIS on June 15, 2010 that are attached hereto and incorporated by reference. In sum, as a contractor receiving delivery of Colorado River supplies, Metropolitan remains concerned about the Project's potential direct and cumulative impacts on water supplies, specifically potential impacts on Colorado River and local groundwater supplies.

Metropolitan is aware that BLM's current position is that groundwater pumping associated with the Project would neither result in direct impacts to the adjacent Palo Verde Mesa Groundwater Basin (PVMGB) nor would induce flow from the Colorado River, and therefore no significant impact to Colorado River water resources would occur. Metropolitan appreciates that BLM recognizes the uncertainty of this conclusion as indicated in the discussion of Colorado River-related concerns in:

- Section 4.19.2, "Discussion of Direct and Indirect Impacts" related to water resources impacts,
- Section 4.19.5 "Residual Impacts after Mitigation Measures were Implemented", and
- Section 5.5.2.10 "Common Response" related to water resources.

Metropolitan commends BLM for highlighting the concerns of various commentators that project-related groundwater use could affect the adjacent PVMGB by inducing flows from the

Dale Rundquist, Allison Shaffer

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Colorado River into that basin and that any resulting use of Colorado River water without an entitlement would be illegal.

As a result of these concerns, therefore, BLM proposes to mitigate potential effects on Colorado River water resources through implementation of mitigation measures SOIL&WATER-14, -15, -17 and -18. These mitigation measures require that the Project Owner submit to the Compliance Project Manager (CPM) for review and approval:

- (1) a Water Offset Plan thirty days before the start of extraction of groundwater for construction or operation (SOIL&WATER-14),
- (2) an annual Notice of Extraction and Diversion of Water (SOIL&WATER-15),
- (3) a report detailing the results of analysis, estimation and modeling within thirty days following certification of the Project (SOIL&WATER-17), and
- (4) a Groundwater Level and Quality Monitoring and Reporting Plan within 90 days prior to construction, a Well Monitoring Installation and Groundwater Level Network report at least 60 days prior to construction, and all groundwater quality and level monitoring data at least 60 days prior to use of any groundwater for construction (SOIL&WATER-18).

Metropolitan requests to be included, along with the Colorado River Board of California, in the process of reviewing all groundwater and hydrogeological monitoring and reporting provided by the Project Owner related to local groundwater and Colorado River resources prior to approval of the reports. These reports would include the various documents listed above, as well as any additional pertinent groundwater monitoring data submitted by the Project Owner to the CPM.

We appreciate the opportunity to provide input to your planning process and we look forward to receiving future environmental and related documentation on this project. If we can be of further assistance, please contact Dr. Debbie Drezner at (213) 217-5687.

Very truly yours,



John Shamma
Manager, Environmental Planning Team

DSD/rdl

(Public Folders/Environmental Planning&Compliance\COMPLETED JOBS\June 2011\Job No. 2011060901)

Attachment: Comment Letter on Palen Solar Power Plant DEIS dated June 15, 2010

cc: Mr. Christopher S. Harris,
Acting Executive Director
Colorado River Board of California
770 Fairmont Avenue, Suite 100
Glendale, California 91203-1068



MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Executive Office

JUNE 15, 2010

Via Electronic & U.S. Mail

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Siting, Transmission and Environmental
Protection Division
California Energy Commission
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Sacramento, CA 95814

Allison Shaffer
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Palm Springs South Coast Field Office
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To Whom it May Concern:

**Notice of Availability of the Draft Environmental
Impact Statement/Staff Assessment for the Chevron Energy Solutions/Solar
Millennium Palen Solar Power Plant and Possible California Desert Conservation
Area Plan Amendment; CEC Docket No. 09-AFC-7, BLM Docket No. CACA 48810**

The Metropolitan Water District of Southern California (Metropolitan) reviewed the Draft Environmental Impact Statement/Staff Assessment (collectively, "DEIS") for the Chevron Energy Solutions/Solar Millennium Palen Solar Power Plant and Possible California Desert Conservation Area Plan Amendment (Project). The U.S. Bureau of Land Management (BLM) is the lead agency under the National Environmental Policy Act (NEPA) for the DEIS and the California Energy Commission (CEC) is the lead agency (for licensing thermal power plants 50 megawatts and larger) under the California Environmental Quality Act (CEQA) and has a certified regulatory program under CEQA. Under its certified program, CEC is exempt from having to prepare an environmental impact report. Its certified program, however, requires environmental analysis of the project or a "staff assessment," including an analysis of alternatives and mitigation measures to minimize any significant adverse effect the project may have on the environment.

Metropolitan is pleased to submit comments for consideration by BLM and CEC during the public comment period for the DEIS and staff assessment.¹ In sum, Metropolitan provides these comments to ensure that any potential impacts on its facilities in the vicinity of the Project and on the Colorado River water resources are adequately addressed.

Background

¹ Comments on the DEIS and Revised Staff Assessment are due July 1, 2010 per the Federal Register notice. 75 Fed. Reg. 16786 (April 2, 2010). This comment deadline applies to the CEC's Revised Staff Assessment anticipated to be issued June 18, 2010 regardless of whether it is finalized separately from BLM's DEIS as the relevant comment periods may not be reduced or altered retroactively.

Metropolitan is a public agency and regional water wholesaler. It is comprised of 26 member public agencies serving more than 19 million people in six counties in Southern California. One of Metropolitan's major water supplies is the Colorado River via Metropolitan's Colorado River Aqueduct (CRA). Metropolitan holds an entitlement to water from the Colorado River. The CRA consists of tunnels, open canals and buried pipelines. CRA-related facilities also include above and below ground reservoirs and aquifers, access and patrol roads, communication facilities, and residential housing sites. The CRA, which can deliver up to 1.2 million acre-feet of water annually, extends 242 miles from the Colorado River, through the Mojave Desert and into Lake Mathews. Metropolitan has five pumping plants located along the CRA, which consume approximately 2,400 gigawatt-hours of energy when the CRA is operating at full capacity.

Concurrent with its construction of the CRA in the mid-1930s, Metropolitan constructed 305 miles of 230 kV transmission lines that run from the Mead Substation in Southern Nevada, head south, then branch east to Parker, California, and then west along Metropolitan's CRA. Metropolitan's CRA transmission line easements lie on federally-owned land, managed by BLM. The transmission lines were built for the sole and exclusive purpose of supplying power from the Hoover and Parker projects to the five pumping plants along the CRA.

Metropolitan's ownership and operation of the CRA and its 230 kV transmission system is vital to its mission to provide Metropolitan's 5,200 square mile service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

Project Understanding

Solar Millennium LLC and Chevron Energy Solutions, the joint developers of this project, propose to construct, own, and operate the Palen Solar Power Project. The Project is a concentrated solar thermal electric generating facility with two adjacent, independent, and identical solar plants of 250 megawatt (MW) nominal capacity each for a total capacity of 500 MW nominal.

The Project will utilize solar parabolic trough technology to generate electricity. With this technology, arrays of parabolic mirrors collect heat energy from the sun and refocus the radiation on a receiver tube located at the focal point of the parabola. A heat transfer fluid (HTF) is heated to high temperature (750 degrees Fahrenheit) as it circulates through the receiver tubes. The heated HTF is then piped through a series of heat exchangers where it releases its stored heat to generate high-pressure steam. The steam is then fed to a traditional steam turbine generator where electricity is produced.

The project water needs would be met by use of groundwater pumped from one of two wells on the plant site. Water for domestic uses by project employees would also be provided by onsite groundwater treated to potable water standards. During construction, the Project proponent anticipates using up to 1,500 acre-feet of water. Following construction and for long-term

operations, the average total annual water usage for all four units combined is estimated to be about 300 acre-feet per year (afy).

The project site would be located approximately 10 miles east of Desert Center, along Interstate 10 approximately halfway between the cities of Indio and Blythe, in Riverside County, California. An application has been filed with BLM for a right-of-way (ROW) grant of approximately 5,200 acres.

Land Use Issues: Potential Impacts on Metropolitan Facilities

Although Metropolitan has not yet identified any direct impacts, the Project is in the general vicinity of Metropolitan facilities, perhaps as close as 0.3 miles. As described above, Metropolitan currently has a significant number of facilities, real estate interests, and fee-owned rights-of-way, easements, and other properties (Facilities) located on or near BLM-managed land in southern California that are part of our water distribution system. Metropolitan is concerned with potential direct or indirect impacts that may result from the construction and operation of any proposed solar energy project on or near our Facilities. In order to avoid potential impacts, Metropolitan requests that the final EIS and staff assessment include an assessment of potential impacts to Metropolitan's Facilities with proposed measures to avoid or mitigate significant adverse effects.

Metropolitan is also concerned that locating solar projects near or across its electrical transmission system could have an adverse impact on Metropolitan's electric transmission-related operations and Facilities. From a reliability and safety aspect, Metropolitan is concerned with development of any proposed projects and supporting transmission systems that would cross or come in close proximity with Metropolitan's transmission system. Metropolitan requests that the final EIS and staff assessment analyze and assess any potential impacts to Metropolitan's transmission system.

Water Resources: Potential Impacts on Colorado River and Local Water Supplies

Metropolitan is also concerned about the Project's potential direct and cumulative impacts on water supplies, specifically potential impacts on Colorado River and local groundwater supplies. As noted above, Metropolitan holds an entitlement to imported water supplies from the Colorado River. Water from the Colorado River is allocated pursuant to federal law and is managed by the Department of the Interior, Bureau of Reclamation (USBR). In order to lawfully use Colorado River water, a party must have an entitlement to do so. *See Boulder Canyon Project Act of 1928, 43 U.S.C. §§617, et seq.; Arizona v. California, 547 U.S. 150 (2006).*

As noted above, the Project proposes to use approximately 1,500 af of water during construction and 300 acre-feet per year (afy) for long-term operations, using groundwater from a groundwater basin that is hydrogeologically connected to the Colorado River, within an area referred to as the "accounting surface." The extent of accounting surface area for the Colorado River was determined by the U.S. Geological Survey (USGS) and USBR as part of an on-going rule-making process. *See Notice of Proposed Rule Regulating the Use of the Lower Colorado River*

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Without an Entitlement, 73 Fed. Reg. 40916 (July 16, 2008); USGS Scientific Investigation Report No. 2008-5113. To the extent the Project uses Colorado River water, it must have a documented right to do so.

Entities in California are using California's full apportionment of Colorado River water, meaning that all water is already contracted and no new water entitlements are available in California. In addition, the California contractors have agreed in the 1931 Seven Party Agreement to prioritize the delivery of California's Colorado River water among themselves. Under this priority agreement, the following alternatives identified in SOIL&WATER-15 are no longer available to Proponents to mitigate impacts to Colorado River water resources:

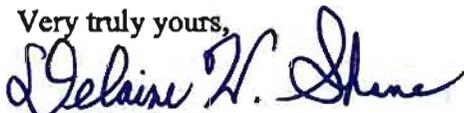
The [mitigation] activities shall include the following water conservation projects: payment for irrigation improvements in Palo Verde Irrigation District, payment for irrigation improvements in Imperial Irrigation District, purchase of water rights within the Colorado River Basin that will be held in reserve, and/or BLM's Tamarisk Removal Program.

Instead, Proponents would have to obtain water from the existing junior priority holder, Metropolitan, which has the authority to sell water for power plant use. Mitigation measure SOIL&WATER-15 should be revised accordingly. Metropolitan is willing to discuss the exchange of a portion of its water entitlement subject to any required approvals by Metropolitan's Board of Directors and so long as the Proponents agree to provide a replacement supply through an agreement with Metropolitan. Proponents must fully address the impacts on Colorado River water resources and provide full mitigation for such impacts, including replacement of supply.

Additionally, CEC and BLM should assess the potential cumulative impacts of the use of the scarce Colorado River and local groundwater supplies in light of other pending renewable energy projects within the Colorado River Basin and the local groundwater regions. Metropolitan requests that the final EIS and staff assessment address the Proponent's water supply and any potential direct or cumulative impacts from this use.

We appreciate the opportunity to provide input to your planning process and we look forward to receiving future environmental and related documentation on this project. If we can be of further assistance, please contact Dr. Debbie Drezner at (213) 217-5687.

Very truly yours,



Delaine W. Shane

Manager, Environmental Planning Team

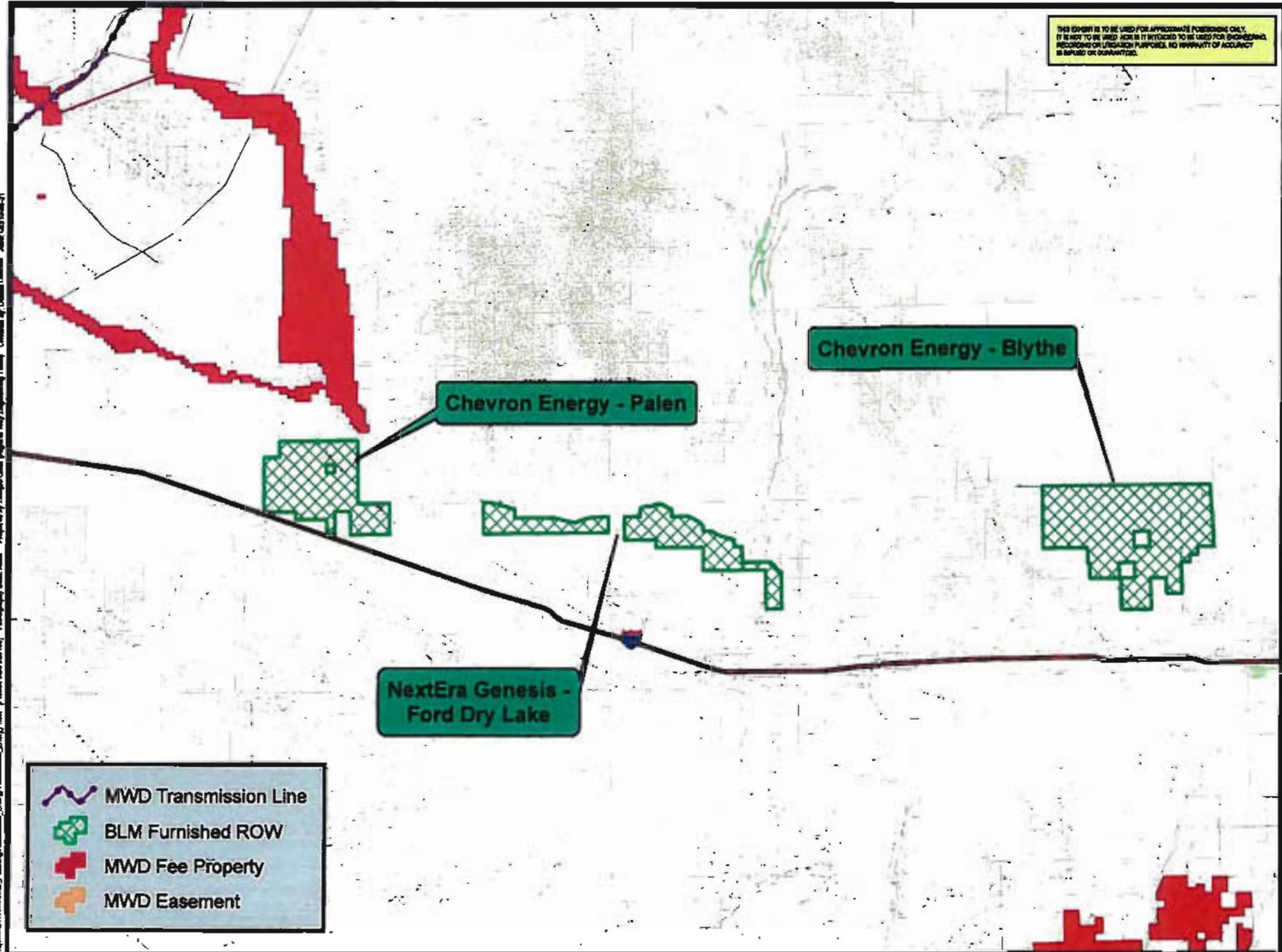
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(Public Folders/EPT/Letters/EPT Final Letter PDF/2010/15-JUN-10B.doc)

Enclosures: Map

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Project: Environmental Management - Energy Resources - Energy and Power (001201400) Photograph Date: 11/11/2011 Prepared by: Ecology Chart (Right of Way Engineering Team) Checked by: Debbie Dwyer Job #: 0210104-21



- MWD Transmission Line
- BLM Furnished ROW
- MWD Fee Property
- MWD Easement

The Metropolitan Water District of Southern California
Corporate Resources Group

 BLM Furnished ROW
 MWD Fee Free Property

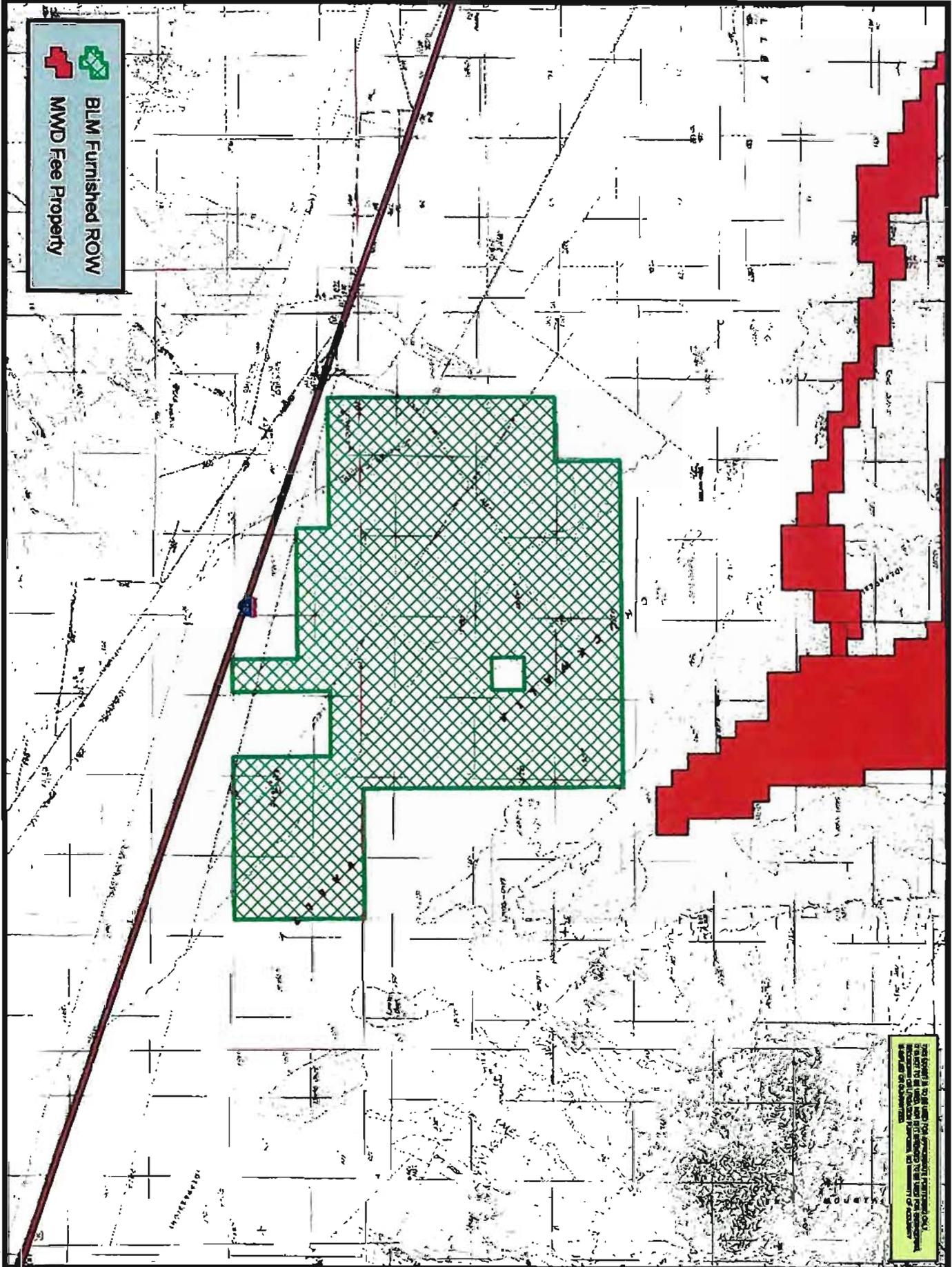
Renewable Energy Projects

Chevron Energy - Palen

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**Defenders of Wildlife
Natural Resources Defense Council**

June 10, 2011

Director (210)
Bureau of Land Management
Attention: Brenda Williams
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(Via Federal Express and email: Brenda_Hudgens-Williams@blm.gov)

And

Allison Shaffer, Project Manager
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(Via email: CAPSSolarPalen@blm.gov)

Re: Comments on and Protest of the Proposed Resource Management Plan
Amendment/Final Environmental Impact Statement for the California
Desert Conservation Area Plan and Proposed Palen Solar Power Project

Dear Ms. Williams and Ms. Shaffer:

By this letter, **Defenders of Wildlife** (“Defenders”) and the **Natural Resources Defense Council** (“NRDC”) provide comments on and formally protest the Proposed California Desert Conservation Area (“CDCA”) Plan Amendment and Final Environmental Impact Statement (“FEIS”) for the proposed Palen Solar Power Project issued by the Palm Springs – South Coast Field Office on May 6, 2011. The protest is being filed in accordance with 43 C.F.R. § 1601.5-2 and contains 1) a description of the interests of Defenders and NRDC (“the Parties”); 2) a statement of the parts of the FEIS and Proposed Resource Management Plan Amendment being protested; and 3) a concise statement explaining the ways in which the Bureau of Land Management (BLM) has acted unlawfully or in error. The Parties reserve the right to supplement this protest, either individually or as a group.

I. Interests of the Parties

Defenders is a national environmental organization with more than 1 million members and supporters in the U.S., 200,000 of whom reside in California. Defenders is dedicated to protecting all wild animals and plants in their natural communities. To this end, Defenders employs science, public education and participation, media, legislative advocacy, litigation and proactive on-the-ground solutions in order to prevent the extinction of species, associated loss of biological diversity, and habitat alteration and destruction. Defenders actively participated in the planning process for the proposed Palen Solar Power Project. Along with the other party to these comments and protest, Defenders submitted comments on the Draft Environmental Impact Statement (“DEIS”) for the project and proposed plan amendment on July 1, 2010. Approval of an amendment permitting this

project to go forward will affect the interests of Defenders and its members for reasons explained subsequently in this letter and protest.

NRDC is a non-profit environmental organization with 1.3 million members and online activists, more than 250,000 of whom live in California. NRDC uses law, science and the support of its members and activists to protect the planet's wildlife and wild places and to ensure a safe and healthy environment for all living things. NRDC, like the other Party, Defenders, has long worked to protect wildlands, wildlife and natural values on public lands managed by the BLM, including lands in the CDCA. Along with Defenders, NRDC submitted comments on the DEIS for the proposed amendment and this project on July 1, 2010. NRDC's interests relate to ensuring that the BLM in its decision-making process complies fully with all applicable laws, including the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321 *et seq.*, the Federal Land Policy and Management Act ("FLPMA"), 43 U.S.C. § 1701 *et seq.*, and the Endangered Species Act ("ESA"), 16 U.S.C. § 1531 *et seq.*, and applicable policies, as well as that the agency avoids and minimizes negative impacts to publicly-owned lands and resources in the area that would be affected by the proposed project, including especially at risk species.

II. Comments on and Specific Issues and Parts of the Proposed Amendment and FEIS Being Protested

The Parties to these comments and protest strongly support the development of renewable energy to reduce greenhouse gas emissions, avoid the worst consequences of global warming and assist California in meeting its emission reduction goals. However, we believe that renewable energy generation and transmission development must be appropriately sited and in full compliance with applicable laws, regulations and policies. We protest the FEIS and Proposed Amendment to the CDCA Plan for a variety of reasons, which include:

1. Failure to fully comply with the provisions of the National Environmental Policy Act regarding alternatives to the proposed project; analysis of alternatives and opportunity for public comment prior to issuance of the FEIS; and cumulative impacts to public lands and their sensitive biological, social and cultural resources and values.
2. Failure to provide complete documentation of the effects of the proposed plan amendment and proposed project on the threatened Desert Tortoise by not including the biological assessment that the BLM is required to prepare to initiate consultation with the U.S. Fish and Wildlife Service ("FWS") under the provisions of the ESA and FWS regulations.
3. Unnecessary and undue impacts of the proposed plan amendment and proposed project on at risk species and their habitats, including the threatened Desert Tortoise, the BLM-sensitive Mojave Fringe-toed Lizard, the federally protected Golden Eagle, and several rare plants.
4. Unnecessary and undue impacts of the proposed plan amendment and proposed project on BLM management goals and objectives for ecosystem conservation and BLM-designated wildlife habitat management plan areas established in the CDCA Plan through formal amendments.
5. Unnecessary and undue impacts of the proposed plan amendment and proposed project to the CDCA and its environmental quality due to failure to comply with the provisions of the Federal Land Policy and Management Act and the CDCA Plan.
6. Unnecessary and undue impacts to the CDCA for failing to select among the alternatives to the proposed plan amendment and project an alternative that would have provided a balance

between resource allocation and adherence to CDCA management principles and provisions contained in laws, regulations and policies.

Details of each of these six reasons are explained in the following section.

III. Concise Statement Explaining the Various Ways the Bureau of Land Management Acted Unlawfully or In Error

1. Failure to fully comply with the provisions of the National Environmental Policy Act regarding alternatives to the proposed project; analysis of alternatives and opportunity for public comment prior to issuance of the FEIS; and cumulative impacts to public lands and their sensitive biological, social and cultural resources and values.

In our comments on the DEIS submitted on July 1, 2010, we raised concern that new, significant information about the proposed project obtained or developed after public release of the DEIS on March 18, 2010 may not be available for public review and comment. We strongly suggested that BLM consider including such new information on the project in a supplemental DEIS in order to afford the public with a complete and accurate account of the project and its environmental effects, including an opportunity for public review and comment. Such new information may also have led to the identification of new alternatives to the proposed action that were not identified in the DEIS.

In fact, BLM obtained new information on various public land resources that would be affected by the proposed project after publication of the DEIS. Specifically, that information consisted of:

- Golden Eagle survey report - 9/13/2010
- Fall season botanical survey report - 10/26/2010
- Preliminary spring season 2010 survey results and corrected preliminary impact calculations report - 6/16/2010
- Report on wildlife movement and Desert Tortoise connectivity - 5/19/2010
- Report describing reconfigured alternative 2 and reconfigured alternative -7/2/2010

This new information was never provided to the public prior to release of the FEIS and thus the public was denied the opportunity to engage in meaningful review and comment upon it.

According to the FEIS, 24 alternatives to the proposed project were considered and evaluated, but only three were carried forward for analysis in the FEIS: the Proposed Action, Reconfigured Alternative 1, Reduced Acreage Alternative and three variations of a no-action alternative. The analysis of the effects of the three no-action alternatives is inconsistent. For example, the FEIS indicates there would be no impacts to soil, vegetation and wildlife under Alternative B (no project, amend CDCA Plan to preclude future solar energy development on the site), but then indicates for this same alternative that the impacts to lands and realty, and multiple use classes would be “[g]reater, comparable, or reduced compared to the Proposed Action.” For special designations (e.g. wilderness, Desert Wildlife Management Areas/Critical Habitat), the impacts would be “similar to the proposed action” and for visual resources, “Short Term: no impact / Long Term: similar to proposed action, in proportion with the size of the project.”

The FEIS' treatment of this alternative is not only inconsistent, it is superficial. The alternative of precluding some or all of the lands subject to the instant right of way application from solar development is definitely an option to the proposed project and, accordingly, under NEPA, it is an option that must be thoroughly analyzed and considered. Because the analysis of it is so superficial, however, the option of designating some or all of the lands in question cannot be chosen – as BLM has stated in other, similar cases. As such this option has been rendered infeasible, in violation of NEPA.

In addition, our examination of the FEIS's impact analysis indicates that BLM considers that the long-term condition of the site and its resources in general would be lost over time due to variety of multiple use activities allowed under the CDCA Plan. The impact analysis also suggests that BLM cannot predict future uses of the site, which under various alternatives would be subject to subsequent solar energy right of way applications; land uses other than solar energy (e.g., wind energy development); and/or other uses that can't be identified at this time. This approach to public land management, especially in the CDCA, is extremely troubling and contrary to the mandates established in FLPMA, as noted elsewhere in this protest. By taking this approach, which assumes ultimately that public lands will be developed and resources lost in perpetuity under the umbrella of "multiple use," BLM will embark on a sure path of facilitating the unnecessary and undue degradation of CDCA public lands and resources and the destruction of environmental quality generally. By taking this approach, BLM has determined that, since the site will be ultimately developed over time and the sensitive resources lost, the proposed action is entirely appropriate regardless of its significant adverse impacts to public lands and sensitive resources.

2. Failure to provide complete documentation of the effects of the proposed plan amendment and proposed project on the threatened Desert Tortoise by not including the biological assessment that the BLM is required to prepare to initiate consultation with the FWS under the provisions of the ESA and FWS regulations.

The FEIS indicates the applicant initiated consultation with the FWS on the effects of the proposed project on the threatened Desert Tortoise by submitting a draft biological assessment in March of 2010. Under regulations, the action agency, namely the BLM, is responsible for initiating such consultation, not the applicant for the right of way grant. It is inappropriate for the applicant to prepare a biological assessment and to initiate consultation under Section 7 of the Endangered Species Act. The BLM is responsible for preparing a biological assessment and is charged with conducting an independent and unbiased assessment of the effects of the proposed project on the Desert Tortoise and its habitat. Apparently, in haste to meet milestones in the permitting for this proposed project, BLM not only allowed the applicant to assume BLM's responsibilities with regard to consultation with the FWS, but also failed to include the biological assessment in either the DEIS or the FEIS. Such an omission deprives the public of an unbiased assessment of the effects of the proposed project on the Desert Tortoise and its habitat as well as the cumulative effects of existing and reasonably foreseeable projects within the region.

3. Unnecessary and undue impacts of the proposed plan amendment and proposed project on at risk species and their habitats, including the threatened Desert Tortoise, the BLM-Sensitive Mojave Fringe-toed Lizard, the federally protected and BLM-Sensitive Golden Eagle, and several BLM-Sensitive rare plants.

The Wildlife Element of the CDCA Plan, as amended, required that management plans for several species with large geographic ranges or wide distribution be developed and implemented in addition to specific management areas identified in the plan. The plan indicated that particular emphasis would be devoted to preparing management plans for sensitive species. Examples of such species were provide and included the Desert Tortoise, Desert Bighorn and Flat-tailed Horned Lizard. We believe additional species fit within this category and would be affected by the proposed plan amendment and project, namely the Mojave Fringe-toed Lizard and Golden Eagle, both BLM-designated Sensitive Species with wide distribution.

BLM has not prepared management plans for these species and their habitat, thus limiting conservation opportunities within the area affected by the proposed plan amendment and project. Indeed, the proposed project would impact substantial habitat for the Mojave Fringe-toed Lizard and its sand-based habitats within the Chuckwalla Valley which are occupied by this species. The proposed project would also affect foraging habitat for Golden Eagles. Furthermore, the cumulative impacts to these species and their habitats within the planning area are substantial, thus further limiting conservation opportunities. Cumulative impacts are significant in the region because of the large number of solar energy projects and their associated transmission systems: Genesis Ford Dry Lake (permitted), Blythe Solar Power Project (permitted), Desert Sunlight (proposed), Desert Harvest (application in process), Chuckwalla (application in process), Desert Quartzite (application in process), Mule Mountain (application in process), EnXco McCoy (application in process), Genesis McCoy (application in process), and Ward Valley (application in process). Limiting and foreclosing conservation opportunities for these species, for which management plans have yet to be developed by BLM, would result in unnecessary and undue impact to sensitive biological resources of the public lands. These wildlife habitat management needs and conservation commitments were established by BLM over 30 years ago in the 1980 CDCA Plan.

4. Unnecessary and undue impacts of the proposed plan amendment and proposed project on BLM management goals and objectives for ecosystem conservation and BLM-designated Wildlife Habitat Management Areas (“WHMAs”) established in the CDCA Plan through formal amendments.

The proposed plan amendment and project are contrary to the intent and provisions of the CDCA Plan, as amended, including amendments stemming from the Northern and Eastern Colorado (“NECO”) Plan in 2002. The NECO Plan amendments “emphasizes (*visi*) ecosystem management with strong conservation measures and also broadly provides for multiple uses of public lands.” (NECO Plan amendments, Record of Decision, page D-3). The emphasis on ecosystem management and strong conservation measures were to be achieved through 1) Regional Standards for Public Land Health, 2) 13 multi-species WHMAs totaling over a half million acres such that 80 percent of the distribution of all special status species and all natural community types are included in conservation management areas or zones (NECO Plan, Appendix A, Map 2-21), and 3) Discouraging habitat impacting projects in sensitive habitats (sand dunes, desert dry wash woodlands, and Desert Chenopod Scrub).

In the NECO Plan, BLM states, “Given the complex relationship among species and their habitats, the increasing number of species listings over the past several years, and the prospect of more listings, it is logical and prudent to broaden the scope of the plan to a multiple species/habitats level. A complex ecosystem approach offers the best opportunity to arrest the decline in biodiversity and eliminate or minimize the need for further listings.” (NECO Plan, FEIS, Chapter 1, Section 1.1-Purpose, Need and Scope).

- A. Regional Standards for Public Land Health. Regional Standards for Public Land Health apply to all resources and management programs. These standards are contained in the NECO Plan, Appendix B. BLM has failed to assess the effects of the proposed plan amendment and project on mandatory requirements for maintaining public land health described in the Regional Standards for Public Land Health. BLM is required to manage all activities for conformance with these standards which address: 1) Soils, 2) Native Species, 3) Riparian/Wetland and Stream Function, and 4) Water Quality. Specific attributes for each of these categories are contained in the NECO Plan, pages 2-11 through 2-13. Furthermore, BLM has failed to address the cumulative impacts of all current and reasonably foreseeable public land uses on these Regional Standards. The scale of assessments for Public Land Health can be at the project, watershed or landscape level. According to BLM Manual 4180 (Public Land Health), strong consideration should be given to using a watershed boundary (Fifth level, ten-digit Hydrologic Unit Code) for assessing public land health. Despite this lack of analysis, however, the effects of the proposed plan amendment and project on basic ecological processes over an area in excess of 4,000 acres are clearly contrary to the requirements to manage and maintain Public Land Health under the Regional Standards.

In fact, the effects of the proposed project on soils, vegetation, wildlife, watershed function and ecological processes, all of which are elements that are the subject of the Regional Standards, would be significant and adverse: “Direct impacts of the proposed project to ephemeral drainages and indirect impacts to additional drainages would be substantial. The extensive ephemeral drainage network at the site currently provides many functions and values, including landscape hydrologic connections, stream energy dissipation during high-water flows that reduces erosion and improves water quality, water supply and water-quality filtering functions, surface and subsurface water storage, groundwater recharge, sediment transport, storage, and deposition aiding in floodplain maintenance and development, nutrient cycling, wildlife habitat and movement/migration; and support for vegetation communities that help stabilize stream banks and provide wildlife habitat. The project would eliminate all of these functions and values.” (FEIS, page 4.17-4.18) Clearly, the proposed plan amendment and project contradict BLM’s national and regional requirements for maintenance of Public Land Health and, therefore, result in unnecessary and undue impact to public lands and resources, and contribute to the degradation of environmental quality in the CDCA.

- B. Wildlife Habitat Management Areas. Two WHMAs would be adversely affected: 1) Desert Tortoise Connectivity WHMA, and 2) Palen-Ford Dry Lake Multi-species WHMA (NECO Plan, Map 2-21). The NECO amendments in 1982 established these and other WHMAs as a means of conserving various listed and sensitive

species and their habitats within the region. WHMAs are described as elements of a “Conservation Zone” approach to public land management.

Management policies and actions in the NECO Plan were approved to facilitate conservation of special status species and their habitats. The BLM has failed to demonstrate how the proposed plan amendment and project would conform to or adversely impact the following plan goals and actions:

- Limit construction activity period to September 1 – February 1 if Burrowing Owls are present in a project area.
- Harvest of live vegetation, especially cactus and yucca, would be prohibited in the Multispecies Conservation Zone to protect perching and nesting sites for Thrashers.
- Acquire habitat within DWMAAs and WHMAs to ensure long-term manageability of these areas for conservation of biological ecosystems.

The sheer size of the proposed plan amendment and project, and its location entirely within two WHMAs established for conservation of BLM Sensitive species and their habitats, is clearly in conflict with the intent, goals and objectives of the CDCA Plan as amended by the NECO Plan.

C. Discouraging habitat impacting projects in sensitive habitats (sand dunes, desert dry wash woodlands, and Desert Chenopod Scrub).

The NECO Plan projected that public lands within the planning area would remain intact through the foreseeable future and the approximately 20-year life of the plan, and that demand for use would be limited to some development around urban centers, interstate freeway off ramps, upgrading of Highway 95 to four lanes, and a minor amount of new linear utility systems traversing public lands within designated utility corridors. (NECO Plan, FEIS, Chapter 4 – Environmental Consequences – Reasonably Foreseeable Future; Lands Actions).

Given this relatively low level of anticipated use of public lands for future development, and the absence of any anticipation of or planning for large-scale solar energy development involving public lands, BLM adopted additional requirements for the use of public lands in the form of compensation for habitat losses in certain sensitive habitats - sand dunes, desert dry wash woodlands, and Desert Chenopod Scrub. The 3:1 compensation ratio (3 acres acquired and protected for each acre lost) was clearly intended to be part of the strong ecosystem management intent of the NECO Plan, and BLM envisioned this requirement would discourage developments in these sensitive areas (NECO Plan, FEIS, Section 4.2.4.1). The proposed project would adversely impact significant amounts of public land containing each of these habitats.

Clearly, BLM’s acceptance of right of way application for use of over 4,000 acres of public land containing BLM-designated sensitive habitats, and its intent to discourage habitat loss within these areas from development activities, was contrary to the management goals and objectives of the NECO amendments to the CDCA Plan. Thus, BLM’s proposed plan amendment and project would result in unnecessary and undue impact to sensitive public land habitats in the planning area.

Additionally, the recommended habitat compensation requirements for this project, estimated to be nearly 8,000 acres (FEIS, page 4.17-33), would be a requirement to be met at some future date after a right of way grant for the project was issued. Absent studies indicating that such compensation would be effective in mitigating the adverse impacts of the project, and if sufficient habitat in private ownership exists and could be acquired, we consider this form of mitigation to be highly speculative and overly optimistic. Due to such risk, the mitigation envisioned for this proposed project could be ineffective and prone to failure. The competition among the solar energy project developers in the region for habitat compensation lands needed to satisfy project permit mitigation requirements is another factor contributing to the potential risk and ineffectiveness of the mitigation requirements. We also think the option of contributing in-kind fees for 3rd party acquisition of compensation habitats adds another layer of uncertainty.

5. Unnecessary and undue impacts of the proposed plan amendment and proposed project to the CDCA and its environmental quality due to failure to comply with the provisions of the Federal Land Policy and Management Act and the CDCA Plan.

Due to the significant adverse effects the proposed plan amendment and project would have on CDCA public lands and their resources, including soil, watershed functions, ecological processes, biological resources, and wildlife habitat connectivity and species movements, the environmental quality in the CDCA in the planning area would diminish. This is clearly contrary to the purpose and intent of Congress for management of the CDCA: “It is the purpose of this section to provide for the immediate and future protection and administration of the public lands in the California desert within the framework of a program of multiple use and sustained yield, and the maintenance of environmental quality.” [FLPMA, Section 601(b)].

BLM has failed to demonstrate how the proposed plan amendment and project would provide for maintaining environmental quality in the CDCA and the planning area. Furthermore, BLM has failed to address the requirement of maintaining environmental quality in the planning area from a cumulative impact perspective, especially given the large number of solar energy projects on public lands that have been permitted or proposed. In fact, BLM has failed to establish an operational definition of “environmental quality” in the CDCA, thus placing the CDCA’s public lands at risk as the cumulative impacts continue to increase over time, as evidenced by the proposed project and other similar projects under consideration. Having failed to address this issue, BLM would be responsible for causing unnecessary and undue impacts to public lands and their resources by approving the proposed plan amendment and project.

6. Unnecessary and undue impacts to the CDCA for failing to analyze and select from among the alternatives to the proposed plan amendment and project an alternative that would have provided a balance between resource allocation and adherence to CDCA management principles and provisions contained in laws, regulations and policies.

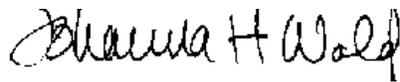
BLM claims to have evaluated many alternative to the proposed project, some of which were identified after release of the DEIS for the project on May 18, 2011. However, BLM chose to dismiss nearly all of the alternatives for the project based on the response of the project

applicant. Especially troubling is that BLM did not conduct an independent analysis of the alternatives to the proposed project, and dismissed all of the alternatives that would have entailed use of degraded private lands on the assumption that consolidation of numerous parcels was unreasonable and speculative. At a minimum, given the effects of the proposed project on special status species, sensitive habitats and BLM-designated WHMAs, the BLM should have selected the reduced project size alternative and brought it forward as the agency's proposed project.

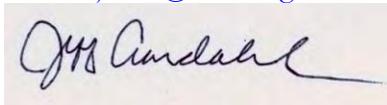
CONCLUSION

For the reasons set out above, the Proposed CDCA Plan Amendment and FEIS for the proposed Palen Solar Power Project violates NEPA, FLPMA and the provisions of the CDCA Plan, as amended. The Parties respectfully request that the State Director, in consultation with the Washington Office, determine that discussion and negotiation may lead to resolution of one or more of the issues identified above and agree to hold a protest resolution meeting as promptly as possible with the proponent of this project and representatives of these groups.

Sincerely,



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June 13, 2011

75524.00003

VIA OVERNIGHT MAIL AND EMAIL (CAPSSOLARPALEN@BLM.GOV)

Ms. Allison Shaffer
Project Manager
Bureau of Land Management
1201 Bird Center Drive
Palm Springs, CA 92264

Re: PA/FEIS Comments, Palen Solar Power Project, CACA - 048810

Dear Ms. Shaffer:

On behalf of Solar Millennium, LLC and its subsidiary Palen Solar I, LLC (collectively, "Solar Millennium"), we would like to provide the following comments on the Plan Amendment/Final Environmental Impact Statement (PA/FEIS) for the Palen Solar Power Project, CACA – 048810 ("PSPP"). BLM published the PA/FEIS on May 13, 2011, and provided a 30-day public comment period that closes on June 13, 2011 (taking into account the fact that the comment period ends on a Sunday). These comments therefore are timely-filed.

We appreciate the enormous amount of effort that has gone into preparing the PA/FEIS. We know that BLM, its consultants, coordinating agencies, and the U.S. Department of the Interior must allocate limited resources to many applications for utility-scale renewable energy projects on lands under BLM's jurisdiction, as well as to other priorities.

As with other utility-scale solar facilities recently approved by BLM, we believe the PSPP will play an important role in efforts to move our nation away from its detrimental reliance on traditional fossil fuel-based energy. If approved, the PSPP will help meet national and state renewable energy mandates and goals by generating roughly 500 MW of clean, renewable energy. This generation will displace greenhouse gases that traditional energy plants otherwise would generate and will help fight global climate change. The PSPP also will be located near existing energy infrastructure, including transmission, and near existing development. We are hopeful that BLM approves the PSPP and the associated Amendment to the California Desert Conservation Area ("CDCA") Plan in a Record of Decision ("ROD").

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Our comments on the PA/FEIS fall into three categories:

- (1) General comments on mitigation measures;
- (2) Comments concerning the BLM-specific mitigation measures/conditions that the PA/FEIS proposes; and
- (3) Comments on specific statements or issues that the PA/FEIS makes or identifies.

I. General comments

The PA/FEIS repeatedly refers to the conditions of compliance (COCs) that the California Energy Commission (CEC) has imposed in its parallel certification process for the PSPP. The PA/FEIS refers to the COCs contained in the December 15, 2010 Commission Decision, but those COCs may change as a result of amendments to the license. To ensure that Solar Millennium is required to comply with the most current COCs, we ask that BLM refer to the COCs in the license, as amended.

In addition, most of the CEC's COCs do not require Solar Millennium to submit compliance-related documentation to the CEC and to BLM and/or additional federal agencies. In the PA/FEIS, BLM appears to have re-inserted dual submission requirements for many conditions. If BLM decides to issue a ROD approving the PSPP, Solar Millennium requests that the agencies work together to avoid duplicative submissions where possible to avoid unduly burdensome compliance reporting.

II. Comments on BLM-specific mitigation measures

The PA/FEIS proposes just a handful of mitigation measures above and beyond those that the CEC has imposed. However, Solar Millennium has the following concerns with respect to two additional measures designed to lessen impacts on visual resources and Joshua Tree National Park ("JTNP"). In particular, the conditions aimed at mitigating impacts on JTNP largely appear to stem from a misconception that the PSPP is close to and would affect JTNP. Indeed, the PA/FEIS states that "other solar projects are either a similar or greater distance from the JTNP and therefore would be expected to have an equal or lesser impact (on a per worker basis) on park resources" (PA/FEIS at 4.15.10), which is simply not true. First Solar's Desert Sunlight, enXco 2, and Chuckwalla Solar 1 are all closer. In fact, as the PA/FEIS recognizes that with respect to most impacts, the project would have no or at most insignificant impacts, even on a cumulative basis, to JTNP because of, inter alia, the distance between PSPP and JTNP. Solar Millennium is fully committed to working with NPS on legitimate issues. The solutions imposed as conditions on the PSPP should, however, be tailored to the impacts that this particular project could realistically have on JTNP. Specifically, we believe that the following conditions, all directly or indirectly related to impacts on JTNP, are either unnecessary or require some revision:

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BLM-VIS-1 (PA/FEIS at 4.18-23): Mirrors with a white, non-reflective background are the international standard for solar thermal power projects. Solar Millennium is consulting with mirror vendors to determine whether they can alter the mirror background without affecting mirror performance. In the event they cannot, Solar Millennium would like to work with BLM to determine whether the standard background would sufficiently reduce visual impacts, and requests modification of this measure to allow for such consultation.

BLM-VIS-2 (PA/FEIS at 4.18-23): Generally, the PA/FEIS predicts that “due to its distance away from the JTNP relative to other projects in the cumulative scenario, [the PSPP] would have a minor contribution to a cumulatively adverse visual impact.” (PA/FEIS at 4.15-9.) More specifically regarding impacts to the night sky, the PA/FEIS concludes that

the presence and extent of nighttime operations and maintenance lighting would not be substantially out of character with other existing lighting sources found scattered throughout the Chuckwalla Valley As such, the project represents a minor addition to the total nighttime light environment within the Chuckwalla Valley and the project is unlikely to contribute much to sky glow given that skies remain dark in spite of the presence, extent and character of existing light sources.

(PA/FEIS at 4.15-8.) Based on these conclusions about the impacts of PSPP on JTNP at night, a night sky consultation does not appear to be necessary and should not be required.

MM-VR-3 (PA/FEIS at 4.15-5): The PA/FEIS states that “[l]ight pollution would be minimized with the implementation of mitigation measure MM-VR-3 and BLM-VIS-2.” (*Id.*) MM-VR-3 does not, however, appear to be defined anywhere in the PA/FEIS.

MM-SD-01 (PA/FEIS at 4.15-11): The PA/FEIS provides inconsistent estimates regarding the distance between the PSPP and JTNP. (*See* 3.13-2 (stating that the southeast end of JTNP is located about three miles west of the PSPP); 3.13-3 (representing the distance to be approximately seven miles); 3.16-1 (eight and a half miles); 3.19-2 (“[V]isitor-serving facilities such as hiking trails, campgrounds or picnic areas—these occur in the central and western portions of the park, in areas located over 15 miles east of the project site that are unlikely to have views of project.”); 4.15-4 (“[A]ll portions of JTNP are further than 5-miles in distances away from the project”).) Even using the most conservative of these representations, however, the statement in the PA/FEIS that “other solar projects are either a similar or greater distance from the JTNP” is, as noted above, inaccurate. (PA/FEIS at 4.15-10; *see also id.* at 4.15-5 (“Other projects within the cumulative scenario that are adjacent or west of the project are likely to affect a similar or

Ms. Allison Shaffer

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greater area of JTNP than the project.”.) The cited language, and the conditions imposed to address it, was copied from the Desert Sunlight FEIS and should not be included as a basis for affording NPS an opportunity to review and comment on mitigation measures that are unrelated to the impacts that a project as far away as PSPP might have on JTNP (such as the Weed Management Plan and the Construction Traffic Control Plan).

MM-SD-02 (PA/FEIS at 4.15-11): The PA/FEIS suggests that fugitive construction dust, if unmitigated, could impact JTNP. (PA/FEIS at 4.15-5). The provisions in MM-SD-02 that require Solar Millennium to reimburse the NPS for reasonable costs of monitoring measures to mitigate these potential air quality impacts thus may be warranted. However, with respect to noise impacts, the PA/FEIS concludes that “It is unlikely that noise levels associated with construction or operations of the project would be audible at JTNP.” (PA/FEIS at 4.15-6 to 4.15-7.) With respect to nighttime lighting issues, the PA/FEIS concludes that “the project, due to its distance away from the JTNP relative to other projects in the cumulative scenario, would have a minor contribution to a cumulatively adverse visual impact.” (PA/FEIS at 4.15-9.) In light of these circumstances, the NPS does not need to monitor many of the conditions identified in MM-SD-02.

MM-SD-03¹ (PA/FEIS at 4.15-11): The requirement to prepare a Signage and Guidance Plan for JTNP, to be reviewed and approved by both the NPS and the BLM prior to the start of construction of the project, is extraordinary. The PA/FEIS concludes that only one campground within the JTNP, located 45 minutes to an hour from the entrance to the PSPP, would have even “limited attraction as overnight accommodations for project workers.” (PA/FEIS at 4.15-10.) Informal camping “could be an issue”, but seems unlikely given that (1) population in-migration is expected to be minimal and (2) it “is unlikely that the construction workforce would require housing in excess of the existing supply,” and (3) informal camping offers no support facilities (i.e., shower facilities). ((PA/FEIS at 4.15-10.) It is not necessary or reasonable to require Solar Millennium to design, install, and remove temporary measures designed to manage the use of JTNP campgrounds in general based on the remote possibility that workers might utilize one particular JTNP campground as a temporary residence. Signage indicating off-limit areas would also seem to be an ineffective deterrent to informal camping, which could occur anywhere in the park. Solar Millennium asks that BLM remove this condition in light of the distance between the PSPP and JTNP and the unlikely events that would have to unfold for informal camping to become an issue.

III. Comments on specific statements/issues

Attachment 1 is a table of specific statements and issues in the PA/FEIS and our comments concerning them, organized by where each issue first appears in the PA/FEIS.

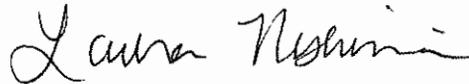
* * * *

¹ This condition is alternative identified as MM-NPS-03. (PA/FEIS at 4.15-10.) For clarity’s sake, this discrepancy should be remedied.

Ms. Allison Shaffer
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We appreciate the opportunity to provide comments on the Palen PA/FEIS. Please let us know if you have any questions or require further information.

Sincerely,

A handwritten signature in black ink that reads "Lauren Nishimura". The signature is written in a cursive, flowing style.

Lauren Nishimura
of PAUL, HASTINGS, JANOFSKY & WALKER LLP

cc: Jim Abbott, Acting State Director, BLM-California
(Via UPS and Email (jabbott@blm.gov))

ATTACHMENT 1

Attachment 1 (incorporated by reference)

Comments of Solar Millennium on PSPP PA/FEIS

* Comments are organized by where the issue or statement first appears in the PA/FEIS.

#	SECTION	PAGE	ISSUE	COMMENTS
Chapter 1				
1	Chapter 1	1-11	The FEIS states that the CDCA plan amendment “would read ‘Permission granted to construct the Palen solar energy facility.’”	To be consistent with the environmental review documents and right-of-way application and grant, Solar Millennium recommends that the amendment read “Permission granted to construct the Palen Solar Power Project.”
Chapters 2, 3 and 4 generally				
2	Chapters 2, 3, and 4	<i>passim</i>	The FEIS is inconsistent regarding the size of the disturbance area for the project.	The total disturbance area of Layout 1 would be 4,360.3 acres; for Layout 2, it would be 4,323.8 acres. The project is seeking a 4,412 acre ROW for Reconfigured Alternative 2.
3	Chapters, 2, 3, 4	<i>passim</i>	The Project Description states at page 2-17 that the Palen Solar Power Project’s (PSPP’s) planned life is 30 years, but could be shorter, while Chapters 3 and 4 inconsistently represent that the planned life is either 30 years or 30-40 years. (<i>Compare 4.2-9, 4.9-5, 4.9-7, with 4.8-2, 4.11-20.</i>)	The estimated operating life of the PSPP is 30-40 years.
Chapter 2 – Proposed Action and Alternatives				
4	Chapter 2	2-4	The FEIS lists the “Major Project Components,” including: <ol style="list-style-type: none"> 1. Power Block Unit #1 (east); 2. Power Block Unit #2 (west); 3. Access road, 1,350-foot long, paved, two-way, two-lane with graded shoulders, from existing I-10 Corn Springs Road exit to on-site office; 4. Class II all weather secondary emergency access road to I-10 exiting from the solar field at southern site fence line; 5. Office and parking; 6. Land Treatment Unit (LTU) for bioremediation/land farming of heat transfer fluid (HTF)-contaminated soil; 	This list is incorrect and should be revised as follows (corrections are in bold): <ol style="list-style-type: none"> 1. Solar Field & Power Block Unit #1 (east); 2. Solar Field & Power Block Unit #2 (west); 3. Access road, 1,350-foot long, paved, two-way, two-lane with graded shoulders, from existing I-10 Corn Springs Road exit to on-site office; 4. Class II all weather secondary emergency access road to I-10 exiting from the solar field at southern site fence line; 5. Office and parking;

Attachment 1 (incorporated by reference)
 Comments of Solar Millennium on PSPP PA/FEIS

#	SECTION	PAGE	ISSUE	COMMENTS
			7. Warehouse/maintenance building and laydown area; 8. Onsite transmission facilities, including central internal switchyard; 9. Dry wash rerouting; and 10. Groundwater wells used for water supply.	6. Land Treatment Unit (LTU) for bioremediation/land farming of HTF-contaminated soil; 7. Warehouse/maintenance building, assembly hall , and laydown area; 8. Onsite transmission facilities, including central internal switchyard; 9. Dry wash rerouting; and 10. Groundwater wells used for water supply; and 11. Telecommunications lines.
5	Chapter 2	2-4	The FEIS lists the components of each power block, including “3. One HTF freeze protection heat exchanger.”	Each power block will contain <u>two</u> HTF freeze protection heat exchangers.
6	Chapter 2	2-6	In describing the Heat Collection Elements (HCEs), the FEIS states: “The HCEs of the two solar plants would be comprised of a steel tube surrounded by an evacuated glass tube insulator. The steel tube would have a coated surface, which would enhance its heat transfer properties with a high absorptivity for direct solar radiation, accompanied by low emissivity. Glass-to-metal seals and metal bellows would be incorporated into the HCE to ensure a vacuum-tight enclosure. The enclosure would protect the coated steel tube and reduce heat losses by acting as an insulator.”	The HCEs are steel pipes, not steel tubes.
7	Chapter 2, Chapter 4 – Lands & Realty	2-1, 4.6-6, 4.22-1, 4.15-13	The FEIS is inconsistent in describing what level of post-project restoration will be required. For example: <ul style="list-style-type: none"> ▪ Page 2-13 does not specify level of required restoration; ▪ Page 4.6-6 states that land would be available for multiple use management by the BLM upon decommissioning of the project; ▪ In the context of onsite vegetation, page 4.22-1 states: “The project would irretrievably commit resources over the 30-40 year life of the project. After 30-40 years, the PSPP is planned to be decommissioned and the land returned to its pre-project state.” ▪ In the context of washes and drainages, page 4.15-13 states: 	Solar Millennium understands that BLM is in the process of preparing decommissioning guidelines for large-scale solar projects. Solar Millennium is preparing a general decommissioning plan prior to the issuance of any Notice to Proceed. We have understood that BLM intends to require stabilization of the site (including potential revegetation and removal of above ground equipment) but not to restore to “pre-project” or “existing” conditions, and seek confirmation of this understanding. We also seek confirmation that specific decommissioning requirements will be determined in a detailed decommissioning plan to be developed closer to the time that decommissioning will

Attachment 1 (incorporated by reference)
 Comments of Solar Millennium on PSPP PA/FEIS

#	SECTION	PAGE	ISSUE	COMMENTS
			“The existing landscape setting would be restored upon reclamation.”	actually occur.
8	Chapter 2	2-14	The FEIS states that the Palen Solar Power Project (PSPP) will be constructed of two <u>identical</u> units.	Although the proposed project has two identical units, Reconfigured Alternative 2 has two separate units with different facility layouts. Each unique layout consists of the same identical components.
9	Chapter 2	2-11	The FEIS states that “[t]he waste water treatment system would require two 4-acre evaporation ponds per power block. Two ponds were selected for reliability. The plant would operate on one pond for approximately 24 months, and then switch to the second pond.”	Each plant will operate using one evaporation pond for approximately <u>four</u> months, not 24 months, and then switch to the other pond.
10	Chapter 2	2-32	The FEIS states that linear Fresnel technology is outside Solar Millennium’s expertise.	As the CEC has noted in its September 1, 2010 RSA, Part One (pages B.2-53 and B.2-58), linear Fresnel technology is proprietary and not currently available to other developers. Solar Millennium would like to add that linear Fresnel technologies, as compared with the proposed solar trough technology, would not substantially change the severity of visual impacts, biological resources impacts and cultural impacts because land requirements and water use vary only marginally among the technologies. See CEC RSA at B.2-58 (Sept. 1, 2010) (explaining that linear Fresnel “technology would not eliminate the significant impacts of the proposed solar trough technology at this site.”).
11	Chapter 2	2-31	The FEIS explains why distributed generation was rejected as an alternative.	Solar Millennium would like to add that, while it is possible to achieve 1,000 MW of distributed solar energy over the coming years (California 1 million Solar Roofs Initiative), the limited numbers of existing facilities make it difficult to conclude with confidence that this much distributed solar will be available within the timeframe required for the PSPP. Barriers exist related to interconnection with the electric distribution grid.

Attachment 1 (incorporated by reference)
 Comments of Solar Millennium on PSPP PA/FEIS

#	SECTION	PAGE	ISSUE	COMMENTS
				<p>In addition, the costs of distributed solar projects tend to be supplemented by special funding programs. Of the 598 MW installed in investor-owned utility territories, 342 MW were installed under the CSI Program at 31,000 sites, and 256 MW were installed through other programs, including the California Energy Commission's New Solar Homes Partnership (NSHP), the Self-Generation Incentive Program (SGIP) and the Emerging Renewables Program (ERP). All of these installations took more than five years to complete.</p> <p>Distributed generation has certain advantages over remote installations, including the ability to avoid transmission and distribution system losses and the ability to defer transmission line upgrades. However, especially when installed in urban areas, the small scale of the projects sacrifices economies of scale and the solar resources are not as good as those found in the California desert. <u>See</u> Rebuttal Testimony of Arne Olson on Behalf of BrightSource Energy, Inc. and First Solar Inc., California P.U.C. Proceeding A 09-05-027 (July 31, 2010). For example, during the peak hour in 2009, CSI installed solar systems had a "peak-hour capacity factor" of 0.59, meaning that 59 percent of all installed solar capacity was performing at the peak hour. <u>See</u> "California Solar Initiative Annual Program Assessment" June 30, 2010, Prepared by the California Public Utilities Commission. In contrast, the PSPP will operate at an 80% capacity factor in the peak hours.</p> <p>California's RPS goals cannot realistically be met through the exclusive use of distributed generation systems. If every available commercial rooftop resource identified in prior feasibility studies were to be developed, the resulting</p>

Attachment 1 (incorporated by reference)
 Comments of Solar Millennium on PSPP PA/FEIS

#	SECTION	PAGE	ISSUE	COMMENTS
				<p>generation capacity would just barely meet the state's goals. This assumes that all commercial rooftops would be made available for such a program and that all projects would be connected on the utility side of the meter (client side connections do not count toward RPS goals). Setting aside the timing issues of negotiating the rights to develop on countless rooftops, it is simply not realistic to assume that every rooftop with potential use as an urban solar generation site will be made available. See Rebuttal Testimony of Arne Olson on Behalf of BrightSource Energy, Inc. and First Solar Inc., California P.U.C. Proceeding A 09-05-027 (July 31, 2010); see also CEC BSPP PMPD at 32 (Aug. 10, 2010) (describing challenges associated with distributed generation in meeting RPS goals).</p>
12	Chapter 2	2-32	The FEIS explains why wind energy was rejected as an alternative.	<p>Wind energy development in the San Geronio is significant and has its origins in the late 1970s. The lack of development of wind resources in the Desert Center and Palen area is a clear statement of the lack of a viable wind resource. The known viable wind resource areas in California are under active development to respond to California RPS goals. See CEC RSA at B.2-66 (September 1, 2010) (explaining that "there is little undeveloped land remaining for expansion beyond the already existing wind farms").</p> <p>Utility grade wind projects have their own significant environmental impacts on views, species (particularly birds), and other resources. A wind alternative would not necessarily reduce impacts in comparison to the PSPP.</p>
13	Chapter 2	2-34 to 2-35	The FEIS explains why geothermal technology was rejected as an alternative.	<p>Solar Millennium would like to reiterate that there is no demonstrated geothermal potential in or near the project area. This is true even though the FEIS states that "the area is identified as prospectively valuable for geothermal</p>

**Attachment 1 (incorporated by reference)
Comments of Solar Millennium on PSPP PA/FEIS**

#	SECTION	PAGE	ISSUE	COMMENTS
				resources.” FEIS at 3.8-5. The nearest known geothermal resource “is located at Brawley just south of the Salton Sea in the Imperial Valley basin about 40 miles southwest of project site” and the Department of the Interior has determined that it is unlikely that an undiscovered significant geothermal resource is lying in wait in California. See U.S. Department of the Interior, <u>U.S. Geological Survey Fact Sheet 2008-3082</u> (posted Sept. 2008) (noting that “regions with significant geothermal potential but few identified geothermal systems include northeastern Nevada, western Utah, southern Idaho, eastern Oregon, and parts of New Mexico and Colorado.”); FEIS at 3.8-4 (citing CEC RSA, 2010).
14	Chapter 2	2-38 to 2-39	The FEIS explains why conservation and demand-side management were rejected as an alternative.	In addition, as the CEC has explained, “[b]ecause of [California’s] energy efficiency standards and efficiency and conservation programs, California’s energy use per person has remained stable for more than 30 years while the national average has steadily increased.” Despite the progress that California has made in this area, “stabilizing per capita electricity use will not be enough to meet the carbon reduction goals of AB 32.” CEC, <u>2009 California Integrated Energy Policy Report, Final Commission Report</u> ; CEC-100-2009-003-CMF, at 4 (2009). This is true not least because electricity demand will increase as population increases. See <i>id.</i> at 227.
Chapter 3 – Affected Environment				
15	Chapter 3 – Cultural Resources	3.4-38	The FEIS notes that BLM held a meeting with interested Native American tribes on April 29, 2010 and “[a]t this meeting, representatives of Californians for Renewable Energy (CARE) and of La Cuna de Aztlan Sacred Sites Protection Circle expressed concern over geoglyphs and other sacred sites and ancient trails that could be affected by solar development in the Chuckwalla Valley on Palo Verde Mesa.”	As part of the planning process, BLM reached out to several regional tribes and sought their input on the PSPP. The project already has a Programmatic Agreement in place, which sets forth the process for completing phased compliance with Section 106 of the National Historic Places Act. The Colorado River Indian Tribe and Agua Caliente Tribe were signatories to the Programmatic

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Comments of Solar Millennium on PSPP PA/FEIS**

#	SECTION	PAGE	ISSUE	COMMENTS
				Agreement.
16	Chapter 3 – Mineral Resources	3.8-5	The FEIS states that “[t]here is potential for the project to use mineral materials on or near the site for its own construction needs after proper permitting for use of the material.”	<p>This statement is incorrect. The Project does not include plans to import/export mineral materials such as sand. When required, fill for the project will be taken from sand/soil that has already been cut for other project development purposes. In other words, soil cut and fill volumes will be equal and thus there is no net increase or decrease of site soils/minerals.</p> <p>Materials for the production of concrete for project use will need to be imported to the onsite concrete batch plant. However, Solar Millennium does not interpret the term “mineral material” to include concrete, its ingredients, or other engineered materials.</p>
17	Chapter 3 – Soils Resources	3.15-1	The FEIS states that “NRCS has not mapped soils at the site” and that Solar Millennium therefore “commissioned a general survey to characterize the soil conditions at the Project site”	<p>Solar Millennium conducted detailed soil surveys.</p> <p>The CEC requires a map at a scale of 1:24,000 and description of soil types. An investigation of the literature revealed that the Natural Resources Conservation Service (NRCS) was in the process of mapping the soils at the Project site but the publication date of the survey results was not known. Because soils at the site have not been mapped previously, a general survey to characterize the soil conditions at the Project site was commissioned. The US General Soils Map, while covering the entire site, was only conducted at a 4th-order level and a scale insufficient to meet the CEC requirement. As a result, the geotechnical program was expanded to include a soils mapping component, supplemented by laboratory analysis of soil properties from samples collected from the eight test pits and two soil borings dug at the site. The mapping produced eight soil units throughout the site within the series identified by the NRCS. The testing program was of sufficient density to address the lateral variability in soil</p>

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				types (i.e., facies variations) and support the hydrologic modeling and erosion potential analysis provided to the CEC.
18	Chapter 3 – Vegetation Resources	3.18-1	The FEIS notes that “more than half the region’s plant species are herbaceous annuals, which reveal themselves only during years of suitable precipitation and temperature conditions.”	Botanists from Solar Millennium’s consultant, AECOM, conducted fall botanical surveys during 2010 as directed by the CEC Conditions of Certification. No special status plant species were observed.
19	Chapter 3 – Wildlife	3.23-6	The FEIS states that “[a]side from developed areas and sand dunes, the entire Project Disturbance Area contains suitable habitat” for the desert tortoise.	As a result of field surveys, and as confirmed by the USGS model, the Palen site has been classified as consisting of <i>low quality</i> desert tortoise habitat with moderate quality habitat located south of I-10. No desert tortoises were observed within the project disturbance area during protocol surveys. The only desert tortoise sightings were south of I-10 in the outer edges of the buffer area and beyond and on the very western end of the transmission line corridor within the buffer area. Little sign was detected within the project disturbance area - only one class III burrow was identified within the plant site boundary. All other sign detected within the project disturbance area was class IV or V, indicating no recent sign of desert tortoise. No desert tortoises were found during protocol level surveys within or near the project footprint. One adult desert tortoise was found south of I-10 outside of the project disturbance area.
20	Chapter 3 – Wildlife Resources	3.23-9 to 3.23-10	The FEIS describes Couch’s spadefoot toads, their potential habitat on the PSPP site, and the PSPP’s potential impacts on that habitat. It specifically states “the general characterization of soils at the project (?) site as permeable is insufficient to eliminate the possibility of suitable habitat occurring onsite.” However, the FEIS also states that “[b]ased on review of an analysis of the ponding potential on the project site, it appears that the site does not have the potential due to the permeability of site soils or show evidence of sustained ponding, and that the species is not expected to occur on the project site”.	While the PSPP is near the western most range of the species, it is not within the range of the species identified by the NECO and no evidence that the species exists on the site was observed. The Palen site was assessed for evidence of ponding that could support breeding of this species (ponding that would last about nine days) and these areas were not observed. Therefore, the PSPP would not impact this species or its habitat.

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Chapter 4 – Environmental Consequences				
21	Chapter 4 - Introduction	4.1-1	The FEIS notes that “[t]he scope of the impact analyses presented in this chapter is commensurate with the level of detail for the alternatives provided in Chapter 2 and the availability and/or quality of data necessary to assess impacts.”	Solar Millennium would like to add that, except where noted in the FEIS, there is sufficient high-quality data to conduct a thorough analysis of impacts. These data are summarized in each section and references are included at the end of the FEIS. See also Attachment 2 (list of studies conducted and submitted by Solar Millennium).
22	Chapter 4 – Air Resources	4.2-6	The FEIS states that the PSPP’s stationary emissions sources include “e. One HTF expansion/ullage system” for each of the two power plant units.	The PSPP will employ one HTF ullage system venting at a low rate at each power block. Daily emission rates are limited by CEC COC AQ-21, which the CEC developed in consultation with the South Coast Air Quality Management District (SCAQMD), as follows: AQ-21 This engine shall not be operated more than 200 hours in any one year, which includes no more than 50 hours per year and one hour per week for maintenance and testing as required in Rule 1470(c)(2). Verification: The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.
23	Chapter 4 – Air Resources	4.2-6	The FEIS states that each of the PSPP’s four HTF piping systems will employ four pump seals and 10 pressure valves.	Each HTF piping system will employ seven pump seals and may employ more than 10 pressure valves depending upon final design requirements.
24	Chapter 4 – Air Resources	4.2-7	Table 4.2-7 lists emissions calculations based on the 2010 CEC RSA, not the updated emissions from the 2010 CEC Final Decision	Please see Table 5-Section V, B-9 of the 2010 CEC Final Decision, which provides a corrected emissions data table. The CEC Final Decision (license) limits emissions on an annual, not daily, basis.
25	Chapter 4 – Global	4.3-10	The FEIS states that “the proposed facilities would in no way support additional drying of soils on site, or otherwise exacerbate potential	Solar Millennium agrees with this statement and would like to explain why. Removal of vegetation during

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	Climate Change		changes in soil moisture associated with climate change.”	<p>construction will halt transpiration of water in soil, leaving evaporation from the surface as the only means of reducing soil moisture. In this sense, the soil under the PSPP will lose moisture more slowly than the soil under nearby undisturbed desert, regardless of changes in climate during the lifetime of the Project.</p> <p>Soil moisture to a depth of 10 feet below the ground surface (bgs) was measured during the geotechnical investigation at a range of 0.3% to 16% with most of the soil samples collected having moisture at percentages below 5%. The two mechanisms that have the potential to affect moisture content in the root zone (assumed to be surface-10 feet bgs) that are related to the PSPP are the change in evapotranspiration caused by the removal of the vegetation and the introduction of moisture through water applied during grading and during the daily washing of the mirrors (230 acre-feet annually). Removal of vegetation during construction will halt transpiration of soil water, leaving evaporation from the surface as the only means of reducing soil moisture. The site in general is largely un-vegetated, with most of the vegetation present in the drainage channels and swales. Given the historic climate condition, it is presumed that evaporate plays a much more significant role in the loss of moisture in the upper soil zone to 10 feet bgs. With the reduction in vegetation, the soil under the project will lose moisture more slowly than the soil under nearby undisturbed desert, regardless of changes in climate during the lifetime of the PSPP. The moisture content of the soils to a depth of 10 feet are not likely to change significantly given the area evapotranspiration rate of 71 inches.</p> <p>Moreover, the PSPP site does not have areas with dense vegetation that would provide substantive protection from</p>

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				moisture loss. Therefore the relative contribution from plants would not be substantive enough to affect the soil moisture content long term when it comes to global climate changes. The PSPP also would create shadows on the ground that could offset any soil moisture loss just as much as desert vegetation.
26	Chapter 4 – Global Climate Change	4.3-12	The FEIS states that if the Reduced Acreage alternative were selected, “other renewable projects could be developed that would compensate for the loss of generation”	This statement does not account for the benefits of concentrating renewable energy generation facilities. Concentrating renewable generation in a single project maximizes renewable energy production, minimizes sprawl, and reduces infrastructure investment to bring the power to market, thus reducing overall costs to ratepayers. Co-located facilities minimize disturbance to natural and visual resources by reducing the need for additional transmission corridors and by reducing the need for infrastructure such as water wells and/or water pipelines, natural gas pipelines, temporary laydown areas, and temporary and permanent access roads, all of which would be required in greater quantities if the PSPP units were developed at separate locations. Co-located facilities also consolidate impacts of lighting, noise, and human presence at a single location, rather than introducing them to multiple environments. Co-located facilities reduce edge effects compared to individual plants on separate sites (for example, the border of a single four square mile facility is eight miles, but four one-mile square facilities have 16 miles of border, increasing the amount of contact between facilities and natural resources). Finally, and related, co-located facilities reduce habitat fragmentation.
27	Chapter 4 – Cultural Resources	4.4-10	The FEIS describes the PSPP’s “unavoidable adverse impacts” on cultural resources.	Solar Millennium’s cultural resources consultant, AECOM, has conducted Class III intensive pedestrian surveys of the PSPP project sites and associated linears as well as CEC-required buffers around the limits of disturbance. Class III cultural resources technical reports detailing the findings of

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				these surveys have been submitted to BLM for review and approval. Solar Millennium is a signatory to the BLM's Programmatic Agreement (PA), which identifies potentially eligible cultural resources and provides guidelines for resource treatment and monitoring efforts. Solar Millennium will submit phased Historic Properties Treatment Plans (HPTPs) for each construction phase which will detail the site-specific measures to mitigate adverse impacts.
28	Chapter 4 – Lands & Realty	4.6-2, 4.6-6	The FEIS states that “Potential impacts to I-10 from the overhead gen-tie line and the overhead and buried portions of the redundant telecommunications and fiber optic lines would be mitigated by following requirements of the Federal Highway Administration (FHWA) and/or California Department of Transportation (CalTrans), and industry standards (SOPs) and best management practices (BMPs) for aerial and buried crossings of federal highways.”	CEC conditions TSE-5, 6 & 7 require that the gen-tie design and related interconnection facilities meet all laws, ordinances, regulations and standards (LORS) prior to construction, during construction, and throughout plant operations.
29	Chapter 4 – Lands & Realty	4.6-2	The FEIS states: “Once across the highway, the gen-tie line would turn to the east (or west depending on final site selection) and parallel the highway and existing power lines to the point of interconnection with the planned Red Bluff substation.”	This description should be updated. As currently planned, the gen-tie line will go due south into the planned Red Bluff Substation directly south of I-10.
30	Chapter 4 – Lands & Realty	4.6-6, 4.6-8	The FEIS states, as part of its cumulative impacts discussion, that permitting the PSPP and other renewable energy projects would “restrict the use of the lands during the life of those projects reducing the number of acres of lands available to be administered by the BLM for other uses.” The FEIS then goes on to conclude that “Approval of the PSPP would result in land not being available for other uses during the life of the project.”	BLM's California Desert Conservation Area (CDCA) Plan covers 25 million acres. Of this area, BLM administers approximately 10.5 million acres. The June 2010 BLM solar projects applications list (updated as of August 27, 2010) shows 37 projects in the area of CDCA/BLM jurisdiction. These projects propose to use 344,183 acres to generate 68,988 MW. As discussed in the FEIS and in these comments, many of these projects will not be developed, and even for those that are, excess land will be returned to BLM (in the case of the PSPP, excess land will amount to 83% of the land applied for). (See 4.6-7 (“Should one or more of these projects be authorized, the

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				<p>acreage included in the right-of-way grant(s) would be only that which is actually needed for a project(s), not the total number of acres identified in the application(s).”) Based on these numbers, solar development will occupy only a small fraction of the land that BLM administers under the CDCA Plan.</p> <p>The FEIS correctly indicates that the PSPP would be consistent with the CDCA Plan with an appropriate amendment. Among other things, FLPMA requires that BLM manage the lands under its jurisdiction for “multiple use and sustained yield.” <u>Public Lands Council v. Babbitt</u>, 167 F.3d 1287, 1301 (10th Cir. 1999), <u>aff’d</u>, 529 U.S. 728 (2000); <u>see also</u> 43 U.S.C. §§ 1701(a)(7), 1701(a)(8), 1702(c), 1712(c)(1); 43 C.F.R. § 1601.0-5(i) (2003). The courts recognize that BLM has broad discretion in meeting this mandate. <u>See Public Lands Council</u>, 167 F.3d at 1305; <u>Natural Resources Def. Council v. Hodel</u>, 624 F. Supp. 1045, 1058 (D. Nev. 1985), <u>aff’d</u>, 819 F.2d 927 (9th Cir. 1987). BLM does not need to permit every possible use on every acre, and one acceptable multiple use, including in the CDCA, is energy development.</p>
31	Chapter 4 – Public Health & Safety	4.11-2	The FEIS states, with regard to a hazardous materials release, “[w]hile the response time is not adequate given the remote location, the on-site team would be adequately trained to respond to any emergency.”	Solar Millennium agrees that the risk of wildland fire caused by the PSPP is slight. To prevent the spread of any fire resulting from facility operations, the facility will incorporate fire suppression facilities designed by a Fire Protection Engineer. Fire protection equipment will be installed and maintained in accordance with applicable NFPA standards and Project facilities will be designed and operated in conformance with Uniform Fire Code requirements for safe storage, dispensing, use, and handling of hazardous materials. Specifically, smoke, heat, and flame detectors will be included into the critical plant control systems. Automatic deluge and sprinkler systems are included in occupied areas like the control room. Flow

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				<p>valves, isolation valves and other prevention measures are incorporated to contain and control quantities of exposure in the solar field areas. Two fire fighting foam trucks (for suppressing heat transfer fluid (HTF) fires) will be onsite and centrally located near the assembly hall. Operations personnel will be trained / qualified in fire fighting methods and will be the first responders.</p> <p>Finally, no vegetation will be allowed onsite, meaning that no plants or other materials will be able to burn and carry a fire offsite. Solar fields, roads, and other areas will be paved or made of hardpacked dirt and kept free of weeds and other extraneous materials.</p>
32	Chapter 4 – Public Health & Safety	4.11-6 to 4.11-7 (Table 4.11-1), 4.11-9	<p>Table 4.11-1 of the FEIS identifies the hazardous materials that will be used during construction and operation of the PSPP.</p> <p>Page 4.11-7 states that PSPP would store 1.3 million gallons of HTF onsite.</p> <p>Page 4.11-9 states that PSPP would store 2.6 million gallons of HTF (Therminol).</p>	<p>The PSPP will use 4.2 – 4.6 million gallons of HTF (Therminol VP-1 Biphenyl (26.5 percent); Diphenyl Ether (73.5 percent)) per unit depending on which Option in the preferred alternative. This correct amount was identified in the CEC’s PMPD and was used to develop CEC COC HAZ-4. That COC references an Appendix A (Table 5.6-3R), the latest version of which Solar Millennium submitted to the CEC on August 13, 2010. However, FEIS Appendix G omits Table 5.6-3R. Solar Millennium requests that BLM include HAZ-1 Table 5.6-3R in Appendix G. We have included Table 5.6-3R as Attachment 2 to these comments. (Note that the quantities listed in Table 5.6-3R are cumulative, i.e., for both PSPP units.)</p> <p>Table 4.11-9 and the discussion that follows do not, but should, indicate that the PSPP will use hydrogen for turbine cooling. Specifically, the entire PSPP will use hydrogen in the generator cooling loop and “tube trailer.” The cumulative (i.e., both units) piping system inventory will be 700 pounds with 1,300 pounds in storage. The PSPP will employ a pressure safety tank, crash posts, and pressure relief valves to ensure that the hydrogen is used</p>

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				and stored safely. See HAZ-1 Appendix A (Table 5.6-3R) (Attachment August 13, 2010).
33	Chapter 4 – Public Health & Safety	4.11-9	The FEIS refers to high flammability of Therminol (HTF) and states that “fires have occurred at other solar generating stations that use it.”	<p>While previous fires have occurred at other solar thermal facilities, the risk of a fire at the PSPP will be significantly lower, for at least three reasons.</p> <p>First, Solar Millennium’s plant design will include design features that reduce the risk of HTF-related fires. Such features include: (1) larger solar collectors than previous solar thermal facilities, which have fewer ball joints and therefore fewer points at which HTF could leak, and (2) a sufficient number of isolation valves that can be manually, remotely, or automatically activated. The valves would be placed such that a maximum of 1,250 gallons of HTF would leak if all the fluid in the isolated loop should leak out. Should this leak catch fire, it would take only about 15 minutes for the HTF to burn off completely. This second feature is consistent with CEC COC HAZ-4..</p> <p>Second, the fire that is most frequently cited with respect to fire hazards posed by solar thermal plants is the January 1990 incident at the 80 MW SEGS VIII facility in Harper Lake, California. This incident involved a significant fire in the plant’s power block area caused by an explosion of HTF in one of the storage tanks. However, the SEGS VIII facility used HTF storage tanks that were blanketed with natural gas and were not installed or managed properly by the plant operator at the time. Since this 1990 incident, solar thermal plants have switched all components of the HTF system to use nitrogen blankets rather than natural gas blankets. Nitrogen blankets are much safer and more reliable than natural gas blankets, and therefore make the risk of a fire like the 1990 incident at Harper Lake much more remote.</p>

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				<p>Third, two fire-fighting foam trucks (for suppressing HTF fires) will be onsite and centrally located near the assembly hall. Operations personnel will be trained and qualified in fire-fighting methods and will be the first responders. In addition, when a leak is detected, operations personnel will defocus the mirrors, which will stem or stop the flow of HTF in all but the most severe leak events (i.e., rupture of a collection tube). But, even if the entire 1,250 gallons of HTF in a given loop were to drain and be ignited, it would take about 15 minutes for the fluid to completely burn.</p>
34	Chapter 4 – Public Health & Safety	4.11-30	<p>The FEIS states: “Even with the implementation of the Mitigation Measure identified above, a risk of accidental or unintentional detonation of UXO would remain, resulting in a continuing risk of immediate, acute physical injury from fire or explosion.”</p>	<p>No UXO were found during the Phase 1 ESA. Regardless of the low probability of finding UXO at the PSPP, on-site workers will be protected from exposure to UXO during excavation and construction, CEC COC WASTE-1 requires the project owner to implement an Identification, Training, and Reporting Plan. Under this plan, munitions experts will conduct geophysical surveys for UXO, train workers to avoid UXO, and supervise the removal and disposal of UXO in accordance with applicable LORS. WORKER SAFETY-1 also includes mitigation measures designed to reduce UXO exposure to insignificant levels.</p>
35	Chapter 4 – Public Health & Safety	4.11-39	<p>The FEIS states that “[t]he increased risk of safety hazards associated with construction traffic [from multiple projects under construction during the same timeframe] could be substantial.”</p>	<p>The cumulative impacts discussion does not mention that many renewable projects will not be built, and that those that are will be smaller than proposed (excess land requested in the application will go back to BLM).</p>
36	Chapter 4 – Public Health & Safety	4.11-40	<p>The FEIS discusses the PSPP’s potential effects on the Desert Center and Blythe Airports and the risk that the PSPP will attract additional birds to the area. The FEIS states that the evaporation pond netting and monitoring “may not be enough to preclude the ponds from serving as an attractant to birds.”</p>	<p>CEC COC BIO-26 requires that Solar Millennium “cover the evaporation ponds prior to any discharge with 1.5-inch mesh netting designed to exclude birds and other wildlife from drinking or landing on the water of the ponds.” The ponds and specifically the condition of the netting must be monitored at least once a month by a Designated Biologist or Biological Monitor. After set periods of one year or</p>

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				more during which there are “no bird or wildlife deaths or entanglements are detected at the evaporation ponds”, monitoring requirements can be relaxed.
37	Chapter 4 – Recreation	4.12-6	The cumulative impacts discussion does not mention that many renewable projects will not get built, and that those that do will be smaller than proposed (excess land).	<u>See</u> Comment on Issue #30.
38	Chapter 4 – Impacts on Soils Resources	4.14-11	The FEIS states that “Impacts to soil resources particularly in relation to sand transport corridors and local sand transport processes would be unavoidable and adverse unless the proposed action is reconfigured to avoid the obstruction of sand transport processes.”	To be clear, Solar Millennium has worked with BLM to design alternatives to lessen the impacts of the project on the sand transport corridor.
39	Chapter 4 – Impacts on Special Designations	4.15-7	The FEIS states that “The development of the proposed site would result in a permanent conversion of desert habitat to industrial/commercial uses within the NECO planning area, which includes the JTNP and the Joshua Tree Wilderness area.”	The PSPP is permitted only for a limited time and thus will not result in permanent conversion of desert habitat to industrial uses. Consistent with the CEC’s COCs, Solar Millennium will submit a decommissioning plan that fulfills specific decommissioning requirements. Solar Millennium would also like to make clear that the PSPP is located several miles from both JTNP and the Joshua Tree Wilderness area. PSPP is also collocated with active agricultural fields and I-10. The Project is not, as the quoted passage might suggest, wholly inconsistent with surrounding land uses.
40	Chapter 4 – Transportation & Public Access – OHV Resources	4.16-8 to 4.16-9	The FEIS states that “[t]he overlapping construction schedules of these projects [Blythe, Genesis, and Desert Sunlight] would result in cumulatively considerable impacts to I-10 as well as to local streets, highways, and intersections in the vicinity of the project [PSPP] site.” The FEIS states that CEC COC TRANS-4 will mitigate these construction-based cumulative impacts.	Solar Millennium would like to add that CEC COC TRANS-4 specifies several options for PSPP to choose from when developing a plan to limit worker traffic moving onto or off of the property during peak commute times. These measures account for the potential transportation impacts during the construction periods of other nearby solar projects.
41	Chapter 4 – Vegetation Resources	4.17-4, 4.17-34	The FEIS states that the “proposed action would greatly alter the hydrology of the area by re-routing ephemeral drainages through three engineered channels” and that “[a]ll 61 acres of the ephemeral	Solar Millennium would like to add that the washes would be rerouted to the same discharge points and would be required to have the same flows as pre-project conditions.

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			washes occurring downstream of the project boundaries would be adversely affected by the proposed project.”	The FEIS is correct that rerouting still might yield residual downgradient changes. However, as part of the PSPP, Solar Millennium designed the channels to minimize such impacts by maintaining the discharge location and flows (to the extent feasible) and proposing mitigation for potential indirect impacts.
42	Chapter 4 – Vegetation Resources	4.17-30	The FEIS notes that the project will rely on CEC COC BIO-14, which requires a Weed Management Plan for the project, to address the spread of noxious weeds. Weed control measures area also discussed as a mitigation measure in the section on Wildfires (4.20).	Among other things, CEC COC BIO-14 specifies that “[t]he draft Weed Management Plan submitted by the Applicant (AECOM 2010a, Attachment DR-BIO-100) shall provide the basis for the final plan” The draft plan calls for the use of certain pesticides, including Roundup, when necessary. <i>See also</i> PA/FEIS at 4.11-6. Pesticide use is thus a critical mitigation tool that PSPP needs to have readily available to deploy when needed. BLM’s Pesticide Use Permit, however, requires a review under NEPA. To ensure that PSPP can implement the Weed Management Plan when needed, Solar Millennium asks that BLM analyze the impacts of the implementation of the Weed Management Plan in the PA/FEIS.
43	Chapter 4 – Vegetation Resources	4.17-31 (Table 4.17-6)	Table 4.17-6, summarizing selected impacts on and mitigation measures for vegetation impacts states that mitigation for impacts to state waters, including the acquisition of off-site state jurisdictional waters, will be at a 3:1 ratio.	The mitigation ratio requirement presented does not differentiate between vegetated (3:1 for woodlands) and unvegetated (1:1) areas. Table 4.17-7 has the correct ratios and acreages.
44	Chapter 4 – Vegetation Resources	4.17-33 (Table 4.17-7), 4.21-18 (Table 4.21-1)	Table 4.17-7 sets forth the recommended mitigation acreage for the Proposed Action and Reconfigured Alternative 2. Table 4.21-1 shows the differences in impacts to selected Wildlife Resources from each of the alternatives.	The acreages in Tables 4.17-7 and 4.21-1 differ slightly from those included in the CEC Final Decision in the following ways: - The CEC Final Decision has 225 acres of critical habitat for desert tortoise. The PA/FEIS lists 228 acres for the Reconfigured Alternatives. - The CEC Final Decision has 3970 acres of noncritical desert tortoise habitat for Alternative 2, Option 1. The PA/FEIS lists 3977 acres for this alternative. - The CEC Final Decision has 3902 acres of noncritical

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				<p>desert tortoise habitat for Alternative 2, Option 2. The PA/FEIS lists 3909 acres for this alternative.</p> <ul style="list-style-type: none"> - For the Mojave Fringe-toed Lizard (MFTL), the CEC Final Decision has 187 acres of dunes for Alternative 2, Option 2. The PA/FEIS lists 188 acres of dunes for this alternative - For the MFTL, the CEC Final Decision has 1348 acres for non-dunes (sand fields) for Alternative 2, Option 2. The PA/FEIS lists 1347 acres of non-dunes for this alternative. - Table 4.17-7 could be improved by language that clarifies that the Western Burrowing Owl mitigation acreage is required for every two pairs or four individuals. As drafted, the requirement appears to apply to two pairs and four individuals. The required mitigation amounts correctly reflect the two pair or four individuals interpretation.
45	Chapter 4 – Vegetation Resources	4.17-34 to 4.17-35	The FEIS states that, “[d]espite mitigation measures, the chance of invasion and spread of weeds and the chance of human-caused wildfires would persist to the areas surrounding the proposed project, threatening the surrounding vegetation and special status plant species.”	The risk that the PSPP would contribute to the spread of invasive weeds will be fully addressed and mitigated in the Weed Management Plan required in BIO-14. The EIS should make a finding that the rates of application and application procedures will not have a significant impact on the environment so that the EIS can more clearly be relied upon for a pesticides use permit from BLM if and when one is required.
46	Chapter 4 – Visual Resources	4.18-6	Table 4.18-3 includes an entry for HTF heaters with 50 x 22 x 80 stacks.	The PSPP will not employ HTF heaters. Any visual impacts associated with these heaters, including their stacks, would be eliminated.
47	Chapter 4 – Visual Resources	4.18-24	The FEIS states that “Residual impacts of the project after implementation of mitigation measures would come from effects on the size and scale of the project.”	A smaller solar project would have similar impacts. See FEIS 4.18-19 (explaining that a reduced acreage alternative would still have strong and adverse visual impacts).
48	Chapter 4 – Water	4.19-2	Table 4.19-1 provides a comparison of the average annual basin budget for groundwater usage with the anticipated project water	The annual construction water supply documented in the table (480 ac-ft/yr) is incorrect. The correct value is

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	Resources		production requirements.	1,917 ac-ft. A value of 1,917 ac-ft corresponds to a total usage of 5,750 acre-ft. This amount, to be used over a 39 month period, is consistent with the Project description (page 2-14) and SOIL&WATER-3 (page B-110).
49	Chapter 4 – Water Resources	4.19-13	“A detailed analysis of the extent and hydraulic characteristics of flows along the West Channel has not been provided to allow for a complete assessment of the suitability of the diversion berms as depicted in the preliminary plans.”	The CEC conditions referenced in section 4-19 are sufficient to address drainage and channel design concerns as construction will not proceed until any concerns by the relevant regulatory agencies are met.
50	Chapter 4 – Water Resources	4.19-15	The FEIS explains that the Channel Maintenance Plan “addresses some of the potential issues associated with long term operation of the channels.” It goes on to state, however, that the plan “does not adequately address the issue of the collection of offsite flows or the use of soil cement along areas subject to inflows from offsite watersheds. The document also references the use of riprap for erosion mitigation which should not be allowed on the project.”	Consistent with the CEC’s COCs, Solar Millennium will submit a Final Channel Maintenance Plan prior to the start of construction on the PSPP’s drainage channels. Solar Millennium does not plan to use rip-rap in any primary drainage channels that are located outside desert tortoise fencing. As at other projects Solar Millennium should be able to use rip-rap inside solar fields that are wholly enclosed within tortoise fencing and are inaccessible to wildlife. Solar Millennium will seek approval from CDFG for limited use of rip-rap if needed.
51	Chapter 4 – Wildlife Resources	4.21-5	The FEIS states that “[t]ortoise moved outside their home ranges would likely attempt to return to the area from which they were moved, therefore making it difficult to isolate them from the potential adverse effects associated with proposed project construction.”	If BLM issues a ROD approving the PSPP, Solar Millennium will adopt a Desert Tortoise Relocation/Translocation Plan, as required by CEC COCs BIO-9 and BIO-10, as well as the Biological Opinion. The Plan will be reviewed and approved by the U.S. Fish & Wildlife Service, the CDFG, the CEC, and BLM.
52	Chapter 4 – Wildlife Resources	4.21-20 to 4.21- 21	The FEIS states that, with respect to Alternative 2, Option 1, “approximately 350 acres (8%) of the disturbance area for this alternative were not surveyed for desert tortoise or burrowing owl.” For Alternative 2, Option 2, “approximately 250 acres (6%) of the disturbance area for this alternative were not surveyed for desert	Habitat in the areas considered for both options on Alternative 2 were verified to be the same as other like habitat at the PSPP site during the CEC licensing process. The project will mitigate for these areas assuming the same impacts as the areas covered under the protocol level

Attachment 1 (incorporated by reference)
Comments of Solar Millennium on PSPP PA/FEIS

#	SECTION	PAGE	ISSUE	COMMENTS
			tortoise or burrowing owl.”	surveys conducted at the site.
53	Chapter 4 – Wildlife Resources	4.21-23	The FEIS states that “the proposed project’s contribution to cumulative effects after mitigation would . . . cause substantial incremental contributions to cumulative impacts to MFTL, desert tortoise habitat loss and connectivity, and other wildlife habitat values.”	Solar Millennium would like to emphasize that the impacts discussed in the cited passage refer to the impacts of the proposed project. Reconfigured Alternative 2 was designed to addresses impacts to certain species and habitat.
54	Chapter 4 – Wildlife Resources	4.21-30	“Impacts to most wildlife resources could be addressed adequately through the implementation of recommended mitigation measures. However, impacts of the proposed action to the sand transport corridor, sand dune habitat, washes in the project disturbance area, and dune-dependent species would remain quite serious if the proposed project were developed as proposed.”	See Comment on Issue 53 (directly above).
55	Chapter 4 – Short-Term versus Long-Term Productivity	4.23-1	The FEIS states: “As discussed earlier in Section 4.22, Irreversible and Irretrievable Commitment of Resources, the proposed action and alternative . . . would all also provide a long-term benefit by providing electric power without any increase in the use of non-renewable resources such as fossil fuels, which would result in a benefit to air quality and a reduction in carbon-based emissions.”	Solar Millennium would like to add that, by reducing carbon emissions that would otherwise result from fossil fuel-generated electricity, the PSPP also would aid in efforts to fight global climate change.
Chapter 5 – Consultation, Coordination, and Public Involvement				
56	Chapter 5 – Public Comments	5-48	“The Applicant will be preparing additional drainage engineering and design work, including adherence to proposed mitigation measures requiring an updated drainage plan.”	The CEC conditions referenced in section 4-19 are sufficient to address drainage and channel design concerns as construction will not proceed until any concerns by the relevant regulatory agencies are met.

ATTACHMENT 2

Attachment 2

Surveys Conducted by Solar Millennium at the PSPP

<u>SURVEY</u>	<u>DATE</u>	<u>SURVEY AREA</u>
Vegetation Mapping	2/11/09-4/21/09	Biological Resources Study Area (BRSA) (survey area for proposed project)
DT Habitat Assessment Surveys	3/10/09-3/11/09	BRSA
DT Protocol Surveys (Presence/Absence)	3/17/09-5/22/09	BRSA
WBO Phase I & II Surveys	3/10/09-5/22/09	BRSA
WBO Phase III Surveys	4/17/09-6/14/09	BRSA
Avian Point Count	4/12/09-5/8/09	BRSA
Rare Plant Surveys	2/11/09-4/21/09	BRSA
Jurisdictional Delineation	3/12/09-3/17/09	BRSA
DT Habitat Assessment Surveys	9/7/09-9/8/09	Substation site and associated portion of the 1-mile buffer where reconnaissance surveys occurred in fall 2009
DT Protocol Surveys (Presence/Absence)	9/24/09-9/25/10	Substation site and associated portion of the 1-mile buffer where reconnaissance surveys occurred in fall 2009
DT Habitat Assessment Surveys	2/17/10-2/18/2010	Data gaps for reconfigured alternatives
DT Protocol Surveys (Presence/Absence)	3/10/10-3/16/2010	Substation site and associated portion of the 1-mile buffer where reconnaissance surveys occurred in fall 2009
Spring 2009 Botanical	2/11/2009-4/21/2009	Entire transmission line (1.2 miles) and associated 1,000-foot buffer where focused surveys occurred in spring 2009
Spring 2010 Botanical	3/10/10-4/22/10	BRSA, areas for the first proposed reconfigured alternative that extend beyond the BRSA, and CEC Dec 2009 data request
Fall 2010 Botanical	9/17/2010	BRSA and areas for the first proposed reconfigured alternative that extend beyond the BRSA
Fall 2010 Botanical	10/11/2010 - 10/15/10	BRSA and areas for the first proposed reconfigured alternative that extend beyond the BRSA
Golden Eagle	9/13/2010	Within a 10-mile buffer surrounding the PSPP (in accordance with USFWS Guidance)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

JUN 13 2011

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BUREAU OF LAND MANAGEMENT
11 JUN 16 PM 1:26
PALM SPRINGS-SOUTH COAST
RESOURCE AREA

John Kalish
Field Manager
BLM Palm Springs-South Coast Field Office
Bureau of Land Management
1201 Bird Center Drive
Palm Springs, CA 92262

Subject: Final Environmental Impact Statement/Proposed Resource Plan Amendment for the California Desert Conservation Area and Palen Solar Power Project, Riverside County, California (CEQ#201100143)

Dear Mr. Kalish:

The U.S. Environmental Protection Agency (EPA) has reviewed the Final Environmental Impact Statement (FEIS) for the Palen Solar Power Project in Riverside County, California. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

EPA reviewed the Joint Draft Environmental Impact Statement (DEIS) and Staff Assessment and provided comments to the California Energy Commission (CEC) and the Bureau of Land Management (BLM) on July 12, 2010. We rated the DEIS as *Environmental Concerns—Insufficient Information (EC-2)*, primarily due to concerns regarding potential impacts to ephemeral washes, groundwater, and biological resources, as well as the need for reconsideration of the restrictive purpose and need statement in order to allow for evaluation of a full range of reasonable alternatives. In the event that BLM decided to grant a right-of-way permit, we encouraged BLM to select the Reduced Acreage Alternative, which would generate 25 percent fewer megawatts than would BLM's preferred alternative, while reducing the disturbance area by 50 percent.

EPA appreciates BLM's responses to many of our comments on the DEIS. We commend BLM for committing to include all mitigation commitments for biological, air, and water resources in the Record of Decision (ROD). We are pleased to note that the FEIS includes additional analysis of climate change impacts to the project as relevant to mitigation habitat values, vegetation, and wildlife resources; quantification of GHG emissions; as well as additional integration of groundwater quality monitoring, pumping limits, and mitigation. BLM did not, however, respond to our recommendation regarding selection of the Reduced Acreage Alternative.

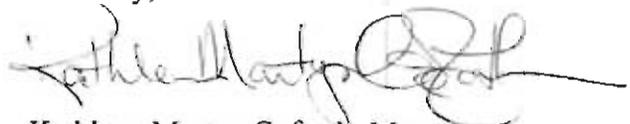
EPA notes that the BLM preferred alternative is now Reconfigured Alternative 2, which would avoid substantial impacts to valuable sand dune habitat, the sand transport corridor, and Mojave fringe-toed lizard. We strongly support those aspects of the new proposal. However, Reconfigured Alternative 2 would have greater impacts to ephemeral washes, dry wash woodlands, and desert tortoise habitat, compared to the Preferred Alternative in the DEIS (identified in the DEIS as Reconfigured Alternative and known in the FEIS as Reconfigured Alternative 1). In addition, the total disturbance area would be greater. The Preferred Alternative described in the DEIS would have a disturbance area of 3,097 acres

on currently undisturbed public land, and generate 500 megawatts of electricity. BLM's current Preferred Alternative would generate the same amount of electricity, but have a disturbance area of 4,366 acres on currently undisturbed public land. EPA recognizes the value of this project's contribution to California's renewable energy goals; however, we are not persuaded that greater impacts to washes, woodlands, and tortoise habitat are necessary to protect the sand dunes, sand transport corridor, and Mojave fringe-toed lizard while meeting the project's purpose and need. As noted above, the Reduced Acreage Alternative would reduce the project disturbance area by about 50 percent to 2,242 acres while avoiding impacts to ephemeral drainages -- including the most valuable desert tortoise habitat and State waters on the site -- as well as to sand dunes and the sand transport corridor. The ephemeral washes provide many important ecosystem functions, including plant and animal habitat, wildlife connectivity, and flood control. Onsite impacts to these valuable resources can be expected to induce additional impacts far beyond the project footprint. We continue to encourage BLM to consider selecting the Reduced Acreage Alternative, which would provide the greatest resource protection while still greatly advancing California's transition to renewable energy generation.

The enclosed detailed comments discuss EPA's continuing concerns regarding impacts to site hydrology, cumulative air quality impacts and the availability of adequate compensatory mitigation lands. We recommend that BLM address these issues prior to making a final decision on the proposed Project. We also recommend that *all* mitigation measures, including specific criteria for successful mitigation, be adopted in the ROD and be included as conditions in construction contracts and any other approvals, as appropriate, to minimize adverse environmental impacts to the extent possible. If any mitigation measures in the FEIS are not adopted, the ROD should provide justification for the decision not to adopt them.

We are available to discuss all recommendations provided. Please send one hard copy and one CD of the responses to FEIS comments and the ROD to us when they are filed with our Washington D.C. office. If you have any questions, please contact me at 415-972-3521, or contact Stephanie Skophammer, the lead reviewer for this project. Stephanie can be reached at 415-972-3098 or skophammer.stephanie@epa.gov.

Sincerely,



Kathleen Martyn Goforth, Manager
Environmental Review Office
Communities and Ecosystem Division

Enclosures: Detailed Comments

Cc: Jim Abbott, Bureau of Land Management, California State Office
Allison Shaffer, Bureau of Land Management, Palm Springs Field Office
Alan Solomon, California Energy Commission
Shannon Pankratz, US Army Corps of Engineers
Tannika Engelhard, United States Fish and Wildlife Service
Becky Jones, California Department of Fish and Game
Michael Picker, Office of the Governor

U.S. EPA DETAILED COMMENTS ON THE FINAL ENVIRONMENTAL IMPACT STATEMENT/PROPOSED RESOURCE PLAN AMENDMENT FOR THE CALIFORNIA DESERT CONSERVATION AREA AND PALEN SOLAR POWER PROJECT, RIVERSIDE COUNTY, CALIFORNIA JUNE 13, 2011

Alternatives Analysis

Compared to the Preferred Alternative, the Reduced Acreage Alternative would generate 25 percent fewer megawatts, but reduce the disturbance area by about approximately 50 percent to 2,242 acres, while avoiding impacts to ephemeral drainages -- including the most valuable desert tortoise habitat and State waters on the site -- as well as to sand dunes and the sand transport corridor. The ephemeral washes provide many important ecosystem functions, including plant and animal habitat, wildlife connectivity, and flood control. Onsite impacts to these valuable resources can be expected to induce additional impacts far beyond the project footprint. EPA previously recommended that BLM consider adopting the Reduced Acreage Alternative. The Response to Comments did not respond to that recommendation, and the FEIS provides no rationale for not selecting that alternative.

Recommendation:

We continue to encourage BLM to consider adopting the Reduced Acreage Alternative if the decision is made to grant a right-of-way for the Palen Solar Power Project.

Site Hydrology

In our comments on the DEIS, we requested additional information regarding BLM's finalized drainage plans. We requested demonstration that downstream flows would not be disrupted due to the elimination of 364 acres of ephemeral drainages in order to create a flat, uniform, and vegetation-free project site. According to the FEIS, downstream flows will be disrupted, and the existing Drainage Report and Channel Maintenance Plan are incomplete, insufficient for final design, and nearly all portions of the channels do not meet established and reasonable guidelines for allowable channel velocities (p. 4.19-13). Mitigation SOIL&WATER-12 indicates that a Channel Maintenance Program shall be submitted 60 days before project implementation and will include protecting wildlife habitat, providing flood protection, and supporting project mitigation (p. B-118). EPA acknowledges that BLM will commit to this mitigation in the ROD, and continues to recommend that the drainage reports and plans include designs to minimize impacts to habitat downstream as much as possible.

Recommendations:

- Because drainage reports and plans are in development, the ROD should identify the specific mitigation goals, specified in terms of measurable performance standards to the greatest extent possible, to avoid disruption of downstream flows due to proposed changes to natural washes, excavation of sediment, or increased sedimentation due to increased vegetation clearing and grading of surface irregularities. (Council on Environmental Quality (CEQ) Draft Guidance on NEPA Mitigation and Monitoring, February 18, 2010)
- Incorporate explicit fence design features that would allow natural hydrologic flow and sediment transport through the site in major drainages and washes, and include this measure in the ROD.
- The design features should mimic natural processes through use of natural materials. The use of native plantings and gentle side slopes, avoidance of hard structures, and the establishment of an appropriate buffer will help maintain the integrity of those washes. Channel restoration should prohibit roads, utility lines, trails, equipment or fuel storage, grading, firebreaks, mowing, plowing, or pesticide use. Detention basins should be

constructed off channel.

- Minimize the number of road crossings over washes in order to minimize erosion, migration of channels, and scour. Road crossings should be designed to provide adequate flow-through during large storm events. Commit to these measures in the ROD.
- Structure mitigation requirements to include adaptive management in order to minimize the possibility of mitigation failure.
- Specify, in the ROD, the response to be taken by BLM if any indication of mitigation failure is detected. This could include conditioning the right-of-way approval to require the applicant to restore any severely impacted watersheds that may result from mitigation failure.

Compensatory Mitigation

According to the FEIS, the Biological Opinion (BO) has not been completed (p. 1-5). We expect that the final Biological Opinion will play an important role in informing the decision on which alternative to approve and what commitments, terms, and conditions must accompany that approval. We recommend that the BO be included in the ROD and that any additional mitigation measures needed to protect species from potential adverse effects of the proposed activities be listed within the ROD, accordingly.

The FEIS states that it is “anticipated” that sufficient lands are available for compensation (p. 5-32). EPA is concerned that, at this stage in the environmental review process, sufficient compensatory lands have not been identified for the project. If the applicant is to acquire compensation lands, the location(s) and management plans for these lands should be fully disclosed in the ROD. In light of the numerous renewable energy projects in the Riverside East Solar Energy Study Zone area, available land to adequately compensate for environmental impacts to resources such as state jurisdictional waters, desert dry wash woodlands, and desert tortoise, may serve as a limiting factor for development.

Recommendations:

- In light of the recent findings of significantly higher numbers of desert tortoises than initially surveyed at the Ivanpah Solar Electric Generating System site, as well as the recent release of draft Eagle Conservation Plan Guidelines¹, BLM should ensure that current and consistent surveying, monitoring, and reporting protocols are applied to all translocation and protection efforts.
- Incorporate, into the ROD, mitigation, monitoring, and reporting measures that result from consultation with the US Fish and Wildlife Service and California Department of Fish and Game, and that incorporate lessons learned from other solar projects and recently released guidance to avoid and minimize adverse effects to sensitive biological resources, including habitat for desert tortoise and golden eagles.
- Clarify the rationale for the 1:1, 2:1 and 5:1 mitigation ratios for tortoise habitat and how these relate to the mitigation ratios recommended by other agencies, as well as how they relate to mitigation ratios used for other renewable energy projects in California and Nevada.
- Incorporate, into the ROD, final information on the compensatory mitigation proposals (including quantification of acreages, estimates of species protected, costs to acquire compensatory lands, etc.) for unavoidable impacts to waters of the State and biological resources such as desert tortoise and golden eagles.

¹ See Draft Eagle Conservation Plan Guidelines, February 2011: See internet address: http://www.fws.gov/windenergy/eagle_guidance.html

- Identify compensatory mitigation lands or quantify, in the ROD, available lands for compensatory habitat mitigation for this project, as well as reasonably foreseeable projects in the Riverside East Solar Energy Study Zone.
- Specify, in the ROD, provisions that will ensure that habitat selected for compensatory mitigation will be protected in perpetuity.

Air Resources – Cumulative Impacts

We recognize that Section 4.2.3 of the FEIS includes additional discussion of the cumulative impacts of projects in the vicinity that may have overlapping construction periods; however, the FEIS does not analyze the combined emissions from the proposed project and the reasonably foreseeable projects within the area. Furthermore, the FEIS indicates that there is potential for short-term significant cumulative fugitive dust impacts from the project in combination with other solar energy projects (p. 4.2-17). These impacts would be considered a cumulatively considerable contribution to air quality impacts under the California Environmental Quality Act (CEQA) within the South Coast Air Quality Management District (SCAQMD).

Recommendations:

- In consultation with the local air quality management agency, use cumulative emissions data to develop an incremental construction schedule that will not result in any violations of local, state or Federal air quality regulations. EPA recommends coordinated construction with the nearby solar projects, including Genesis, Desert Sunlight and Blythe (as well as potential future projects such as Chuckwalla Solar I and the Eagle Mountain Soleil Projects), to ensure air quality impacts due to construction are limited and sufficiently staggered.
- If the project would affect the ability of other foreseeable projects to be permitted, the ROD should discuss this and provide for a course of action.

General Comments

We suggest that BLM consider protecting non-developed portions of the Right-of-Way after final project approval. Some or all of the remaining acres within the Right-of-Way that the applicant has carefully chosen to avoid may now warrant protection from future development, particularly valuable sand dune habitat. We encourage BLM to consider such a land use policy modification through the development of the Desert Renewable Energy Conservation Plan (DRECP).



VIA FEDERAL EXPRESS OVERNIGHT DELIVERY AND EMAIL

June 13, 2011

BLM Director (210)
Attention: Brenda Williams
20 M Street, S.E., Room 2134LM
Washington, DC 20003.
Brenda_Hudgens-Williams@blm.gov

Re: Resource Management Plan Protest for the Palen Solar Power Project, California Desert Conservation Area Plan Amendment and Final Environmental Impact Statement
CACA #48810

Dear Director:

This Resource Management Plan Protest is submitted on behalf of the Center for Biological Diversity (“Center”) regarding Proposed Palen Solar Power Project California Desert Conservation Area Plan (CDCA Plan) Amendment and Final Environmental Impact Statement (“FEIS”) to approve this site for development of the PSPP. The proposed plan amendment and Final EIS for the project were issued by the Bureau of Land Management (“BLM”) on May 13, 2011 (76 Fed. Reg. 28064), with a Notice published in the Federal Register by the EPA on May 13, 2011 (76 Fed. Reg. 28029). This Protest is being timely filed in accordance with 43 C.F.R § 1601.5-2.

1. Protesting Party: Contact Information and Interests:

This Protest is filed on behalf of the Center for Biological Diversity, its board, staff, and members by:

Lisa T. Belenky, Senior Attorney
Center for Biological Diversity
351 California St., Suite 600
San Francisco, CA 94104
(415) 436-9682 x307
lbelenky@biologicaldiversity.org

The Center’s interests in the Proposed plan amendment and the proposed Project are detailed in our comments on the Draft Environmental Impact Statement (DEIS) submitted on November 24, 2010 along with references; those comments and references are incorporated herein by reference. However, because of the scope of the changes in the proposed project between the DEIS and the FEIS (including but not limited to adding public lands into the new *Arizona • California • Nevada • New Mexico • Alaska • Oregon • Montana • Illinois • Minnesota • Vermont • Washington, DC*

“preferred alternative” that are not within the right-of-way application and a new concrete batch plant that was not evaluated in the DEIS), the BLM should have provided a supplemental DEIS and a 90 day comment period. In submitting this protest and any comments within the inadequate 30 days provided by the BLM, the Center reserves and does not waive any claims regarding the inadequacy of the review period and the inappropriate procedure in issuing the FEIS.

Recent experiences with other large-scale projects that were permitted by BLM and then sold and are now proposed to be used for other technologies and/or in different configurations raise many issues that have not been addressed adequately by BLM. Similarly, several of the large-scale solar projects that were permitted by BLM on public lands are not moving forward expeditiously. The stated purpose of the ROWs for large-scale solar development on public lands was stated by BLM as being intended to provide alternative energy; the purpose was not to provide a source of speculative investments and profits to companies that “flip” the ROWs to other investors. The BLM and the interested public have acted in good faith and spent an enormous amount of staff resources and time working on the proposals for large-scale solar projects, and now it is clear that effort could better be spent on smaller projects that are more appropriately sited with fewer impacts to habitats and species, more likely to be built in a timely manner and provide renewable energy, and while providing a reasonable return to companies that are fulfilling the stated purpose of the projects.

The Center is a non-profit environmental organization with more than 320,000 members and online activists, including many members who live and recreate in California. The Center uses science, policy and law to advocate for the conservation and recovery of species on the brink of extinction and the habitats they need to survive. The Center has and continues to actively advocate for increased protections for species and habitats in the California deserts on lands managed by the BLM within the CDCA including the threatened desert tortoise and other species which will be affected by the proposed project. The Center’s board, staff, and members use the lands and waters within the CDCA planning area, including the lands and waters that would be affected by the proposed Project, for quiet recreation (including hiking and camping), scientific research, aesthetic pursuits, and spiritual renewal.

The Center has been actively involved in efforts to limit greenhouse gas emissions and supports the development of renewable energy including solar power as a critical component of those efforts. However, like any project, siting of proposed solar power projects should be thoughtfully planned to minimize impacts to the environment. As the Center has stressed throughout this process, renewable energy projects should avoid impacts to sensitive species and habitat, and should be sited in proximity to the areas of electricity end-use in order to reduce the need for extensive new transmission corridors and the efficiency loss associated with extended energy transmission. Only by maintaining the highest environmental standards with regard to local impacts, and effects on species and habitat, can renewable energy production be truly sustainable.

The Center’s interests also include interests in science-based conservation planning in the California desert on BLM lands and others. To that end, the Center is a stakeholder participant in the Desert Renewable Energy Conservation Plan process, where appropriate siting of

renewable energy projects is a key focus, and the Center has provided scoping comments and comments on the BLM's Solar Programmatic Draft EIS. In addition, the Center has been actively involved in the planning process for earlier amendments to the CDCA Plan including for the Northern and Eastern Colorado Desert Coordinated Management Plan ("NECO") planning area where the proposed project is sited. In particular, the Center has advocated for increased protections for the Mojave fringe-toed lizard, desert tortoise and other species that live in these fragile desert lands from the impacts of ORV use (both lawful and unlawful use) and other activities that destroy, degrade, or fragment habitat .

The proposed project is a 500 MW "nameplate" project that includes two possible solar field layouts (Option 1 and Option 2). Option 1 consists of public land administered by BLM as well as 240 acres of private land. Option 2 would avoid use of this private land and use only BLM-administered public land (with the exception of a 40-acre private parcel already owned by the Applicant). The total disturbance area of Option 1 would be 4,360.3 acres; for Option 2, it would be 4,323.8 acres. This alternative would require adjustment of the boundaries of the BLM ROW, as it includes land not currently included in the proposed ROW (FEIS at ES-3 to ES-4). It also includes a single circuit 230 kV power overhead transmission line (gen-tie) on the BLM-administered land (FEIS at 2-22) and an on-site concrete batch plant (FEIS at 2-14) which was not identified or analyzed in the Draft Environmental Impact Statement (DEIS)..

The proposed project regardless of the option impacts to the Wildlife Habitat Management Areas, connectivity of a variety of rare and common species, and rare sand habitats. Impacts are of even greater concern when viewed in the context of global climate change and the need for adaptation—to help ensure long term viability of the multiple species that depend on these public lands. Such impacts should be completely avoided. Therefore, the BLM should adopt the alternative under which the CDCA Plan would be amended to identify the project site as unsuitable for any type of solar energy development (FEIS 2-3, 2-26), and the ROW application should be denied.

The Center is concerned that the environmental review pursuant to NEPA, the FLPMA compliance, and the ESA compliance for this proposed project are inadequate to provide full and fair public review and participation. In addition, the Center is concerned that the lack of prior planning by BLM for siting of this proposed project and others could undermine the conservation goals of the CDCA Plan as a whole. As a result, if the plan amendment for the proposed project is approved (particularly along with other similar proposed plan amendments) it will result in industrial sites and transmission sprawling across the California Desert many within habitat that should be protected to achieve the conservation and other goals of the bioregional plan as a whole.

2. Issues Being Protested and Parts of the Plan Amendment Protested:

The Center protests the proposed plan amendment which would allow an industrial-scale solar power plant to be built on public lands that are remote, impact habitat for imperiled species and areas currently designated for conservation. The bases for this protest are that: the decision to adopt the plan amendment is not consistent with the CDCA plan; the decision to adopt the plan amendment is not consistent with FLPMA; the decision to adopt the plan amendment not

based on adequate environmental review as required by NEPA; and the decision to adopt the plan amendment is not consistent with BLM's policies regarding conservation and planning to protect habitat for imperiled species.

3: Why the Proposed Decision to Adopt the Plan Amendment is Wrong:

The Center has provided detailed comments showing that the proposed decision to adopt the plan amendment is wrong because it is inconsistent with the law and BLM has not undertaken adequate environmental review. A concise statement of those reasons is provided below.

- The Project Description for the proposed project is unstable and BLM cannot issue a “contingent” approval or “contingent” right-of-way.

The FEIS at 2-2 states:

Reconfigured Alternative 2 includes two possible solar field layouts, only one of which would be constructed if this alternative is approved. The first solar field layout (Option 1) would include the use of 240 acres of private land near the southeast corner of the project site that could be available if an agreement is reached between the Applicant and the landowner (Figure 2-5). In case no agreement is reached, the second solar field layout (Option 2) would call for the development of this alternative to proceed entirely on BLM-administered federal land (Figure 2-6).

The BLM has not explained in the FEIS or elsewhere how the decision would be made between the two “options”, when that decision would be made, or how the public would be informed of the decision. As a result the public is not being provided with a stable project description and is unable to adequately address the project proposal.

The FEIS appears to suggest that the BLM can amend the plan to allow for two different project configuration “options” and then issue a ROW that leaves the choice of which option to build to the applicant. This is incorrect. The BLM can only amend the Plan to allow for a specific project in the MUC M area, must provide a stable project description in its NEPA review, and can only issue a ROW for a single stable project. The proposal to allow two “options” meets none of these requirements. It is the BLM, not the applicant, that must make a determination of the final project approved, if any.

While in this case the two options within the reconfigured alternative 2 have many similar impacts however both include areas that were not fully considered in the DEIS and were areas that are not part of the ROW application. Most importantly, the BLM cannot yet choose either of the “options” in Reconfigured Alternative 2 because they include lands that are not part of the ROW application and were not included in the DEIS. On this basis, as well as others, the only alternatives BLM can adopt at this time are the no project alternative and the plan amendment putting these sensitive lands off-limits to solar development. Rather than address these critical questions, the FEIS focuses on whether the applicant can obtain site control of certain private lands. In its rush to make a decision, the BLM cannot simply “punt” the decisions

on siting and design to the applicant to make at a later time. It is the BLM that must make a determination of which project alternative or option (if any) will be approved at this time. At minimum, BLM must wait until all of the necessary site information is available before it can choose between the two options the FEIS provides as the preferred alternative.

- The Reconfigured Alternative 2 options 1 and 2 (*see* Figures 2-4, 2-5) both include lands that are not part of the ROW application that was identified or considered in the DEIS. As a result, the BLM cannot properly adopt that alternative because it was not properly evaluated in the NEPA process.
- The FEIS also includes as part of the proposed project, a cement batch plant (FEIS at 2-14) which was not identified or analyzed in the DEIS. The impacts from this newly proposed cement batch plant could have significant impacts on a variety of resources. The FEIS fails to identify the localities of where the batch plant would be staged, the number of different staging sites or the duration of the batch plant at the different staging sites. It does not evaluate the impacts from the batch plant on the environment including but not limited to potential impacts of noise on the surrounding receptors including sensitive wildlife, all water related issues (quantity, quality, source location), or green-house gas production and related issues associated with the production of concrete. The FEIS indicates that the batch plant will be operating at night (DEIS at 2-14), but fails to identify if night lighting will occur or discuss the impact of that night lighting could have on the biological resources and other sensitive adjacent receptors. Night lighting is well documented to negatively impact nocturnal species of many types¹, yet the FEIS fails to analyze this impact. While the FEIS identifies that the batch plant “would include ... provision for dust control.” (FEIS at 2-14), it fails to identify what that dust control measure would be and how it would be implemented.
- Adoption of a plan amendment to allow a large-scale industrial facility on public lands that are designated MUC M and L, in areas designated WHMA and DWMA is inappropriate. The nearly entire proposed PSPP, the gen-tie line, and the substation, are proposed within areas designated for conservation of multiple species, including the desert tortoise, and for species connectivity. The FEIS provides no meaningful analysis of the impacts to these important habitats and no mitigation measures for the impacts that include the loss of thousands of acres within the WHMA.

The CDCA was designated by Congress in 1976 as part of the Federal Land Policy and Management Act (“FLPMA), 43 U.S.C. § 1781(c). Congress recognized in FLPMA that:

the California desert environment is a total ecosystem that is extremely fragile, easily scarred, and slowly healed.

43 U.S.C. § 1781(a)(2). In light of the threats to the unique and fragile resources of the CDCA, Congress determined that special management was needed for this area and among the purposes of designating this area was “to provide for the immediate and future protection and administration of the public lands in the California desert within the framework of a program of

¹ Beier 2006, Bird et al 2004, Longcore and Rich 2004.

multiple use and sustained yield, and the maintenance of environmental quality.” 43 U.S.C. § 1781(b).

As part of FLPMA, Congress expressly required the development of a land management plan for the CDCA by a date certain (43 U.S.C. § 1781(d)), and the FLPMA planning criteria state that in developing land use plans the agency shall “give priority to designation and protection of areas of critical environmental concern” (43 U.S.C. §1712(c)(3)). FLPMA defines Areas of Critical Environmental Concern (“ACECs”) to mean

areas within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards.

43 U.S.C § 1702(a). The CDCA Plan was first adopted by BLM in 1980. As part of the CDCA Plan, the BLM adopted an initial set of ACECs and, through plan amendments, additional ACECs have been adopted since that time.

The proposed PSPP site directly and indirectly impacts *two* Wildlife Habitat Management Areas (WHMAs”) designated in the NECO Plan amendment – “the Palen-Ford WHMA, and the DWMA Continuity WHMA (which provides connectivity between the Chuckwalla DWMA/ACEC south of I-10 and the Palen-Ford WHMA north of I-10 in the immediate Project vicinity).”² The proposed PSPP gen-tie line and the associated Red Bluff substation will also directly impact the Chuckwalla Desert Wildlife Management Area (“DWMA”) (which is a type of ACEC) designated for the protection of the desert tortoise by BLM in the CDCA Plan as amended in the NECO Plan amendment in 2002 and designated critical habitat by U.S. Fish and Wildlife Service.³

The DWMAAs were adopted as areas for the conservation (that is—both survival and recovery) of the desert tortoise.

Proposed Desert Wildlife Management Areas (DWMAAs) address the recovery of the desert tortoise. These are stand-alone areas which cover much of the designated critical habitat for the desert tortoise. As such they may and do overlap some existing restricted areas. On BLM and CMAGR lands DWMAAs are designated areas of critical environmental concern (ACEC). Some additional use restrictions are proposed, but emphasis is placed on minimizing disturbance and maximizing mitigation, compensation, and restoration from authorized allowable uses.

NECO Plan at 2-2. For the desert tortoise, the NECO Plan states: “The overall goal of the desert tortoise conservation strategy in the planning area is to recover populations of the desert tortoise

² Map 2-21 from NECO plan.

³ FEIS Appendix E – Pg. E-4 Land and Realty Section

in the two NECO recovery units identified in the USFWS plan by meeting the criteria for recovery as specified in the plan.” NECO Plan at 2-17. The specific objectives for desert tortoise survival and recovery are tied to the designation of the DWMMAs:

The objectives are to

- a. Establish desert wildlife management areas (DWMMAs) where viable desert tortoise populations can be maintained.
- b. Implement management actions within DWMMAs to address conflicts with the goal.
- c. Acquire sufficient habitat within the DWMMAs to ensure that management actions are effective in the DWMMAs as a unit.
- d. Reduce tortoise direct mortality resulting from interspecific (e.g., raven predation) and intraspecific (e.g., disease) conflicts that likely result from human-induced changes in ecosystem processes.
- e. Mitigate effects on tortoise populations and habitat outside DWMMAs to provide connectivity between DWMMAs.

NECO Plan at 2-17.

The WHMMAs at issue here were also adopted in the NECO Plan to preserve wildlife and connectivity or habitat continuity. These two areas, which are contiguous on and adjacent to the Palen site, were adopted as part of a “Multi-species Conservation Zone.” NECO Plan at 2-2. The NECO Plan goals and objectives for “Other Special Status Animal and Plant Species, Natural Communities, and Ecological Processes” are very specific and focus on conservation:

Goals for special status animal and plant species, natural communities, and ecological processes are as follows:

- Plants and Animals. Maintain the naturally occurring distribution of 28 special status animal species and 30 special status plant species in the planning area. For bats, the term "naturally occurring" includes those populations that might occupy man-made mine shafts and adits.
- Natural Communities. Maintain proper functioning condition in all natural communities with special emphasis on communities that a) are present in small quantity, b) have a high species richness, and c) support many special status species.
- Ecological Processes. Maintain naturally occurring interrelationships among various biotic and abiotic elements of the environment.

The objectives are to

- a. protect and enhance habitat
- b. protect connectivity between protected communities

NECO Plan at 2-52. Further, the NECO Plan adopted action items to promote the objectives to “Protect and enhance habitat” (NECO Plan at 2-55), and “Protect connectivity between protected communities” (NECO Plan at 2-58). *See also* NECO Plan ROD at D-1, D-3.

For the first objective, to protect and enhance habitat, the first “action” is to

Designate seventeen multi-species WHMAs (totaling 555,523 acres) such that approximately 80 percent of the distribution of all special status species and all natural community types would be included in the Multi-species Conservation Zone (Map 2-21 Appendix A). See Appendix H for a description of the process used to define the WHMA and the concept of conservation zones.

NECO Plan at 2-55.⁴ For the second objective, to protect connectivity, one of the actions states that: “The fragmenting affects of projects should be considered in the placement, design, and permitting of new projects.” NECO Plan at 2-58.

The WHMAs affected by the proposed PSPP project were adopted in the NECO Plan to fulfill the plan objectives of protecting and enhancing habitat and protecting connectivity. The BLM has not shown that these areas are no longer needed to fulfill that purpose. To the contrary, it remains clear that these lands are extremely important for species protection and the proposed PSPP site is inappropriate for a large-scale industrial project.

- Adoption of a plan amendment to allow a large-scale industrial facility on MUC class M lands is inappropriate. Under the CDCA Plan, Multiple-use Class M (Moderate Use) “protects sensitive, natural, scenic, ecological, and cultural resources values.” For public lands designated as Class M the CDCA Plan intends a “controlled balance between higher intensity use and protection of public lands. This class provides for a wide variety o[f] present and future uses such as mining, livestock grazing, recreation, energy, and utility development. Class M management is *also* designed to conserve desert resources and to mitigate damage to those resources which permitted uses may cause.” CDCA Plan at 13 (emphasis added). The proposed project is a high-intensity, single use of resources that will displace all other uses and that will significantly diminish and eliminate access to over 4,300 acres for either Option 1 or 2 (a 400 acre increase over the DEIS proposal) of habitat and completely destroy habitat values on those lands by directly impacting habitat for desert tortoise and impacting thirteen other rare species and their habitats.

In addition, the adoption of a plan amendment to allow a gen-tie powerline and the Red Bluff substation on MUC class L lands is inappropriate. Under the CDCA Plan, Multiple-use Class L (Limited Use) “protects sensitive, natural, scenic, ecological, and cultural resources values. Public lands designated as Class L are managed to provide for generally *lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not*

⁴ NECO Appendix H explains that the WHMAs along with the DWMAs, and other areas comprise a “conservation zone” and that the “Multi-species WHMAs address all the special status species as well as the general diversity of species and habitats.” NECO Plan, Appendix H at H-5.

significantly diminished.” CDCA Plan at 13 (emphasis added). In particular, building the proposed Red Bluff substation on Class L lands is inconsistent with the goals of the Desert Plan (as well as being inconsistent with the designation of much of these lands as DWMA and WHMA), particularly when other alternatives on less sensitive lands are available.

- While we recognize that the preferred reconfigured alternative 2, with its two options was selected because it decreased impacts to the sand transport corridor and its concomitant impacts on the suite of sand dune dependent species including the Mojave fringe-toed lizard (MFTL), when compared to the proposed project alternative, the FEIS still fails to analyze impacts to the MFTL. For example, Table 4.17-7 indicates that reconfigured alternative 2, option 1 will still impact 1,647 acres of MFTL habitat and reconfigured alternative 2, option 2 will still impact 1,636 acres. While we support minimizing impacts, the discussion of the impacts to MFTL (FEIS at 4.21-20) only identifies that these acreages are a decrease in the amount of impact from the proposed project in the DEIS. The FEIS fails to disclose how much of an impact to the habitat in the Chuckwalla Valley the preferred reconfigured alternative 2 actually is, or why the project could not be reconfigured to further reduce or eliminate the impact to this regionally very rare natural community, which is apart of both WHMAs. We protest the fact that the FEIS fails to clearly fully evaluate the impact to the MFTL and its habitat, and leave unclear how the preferred reconfigured alternative options will ultimately affect the species within the Chuckwalla Valley based on the regional uniqueness of this species being located at the edge of its range (FEIS at 4.21-9)

- Indeed, the preferred reconfigured alternative 2, with its two options, actually increases the impacts to the federally and state threatened desert tortoise and its habitat. These data (FEIS at Table 4.21-1) reinforce that the proposed project is located in significantly sensitive habitats because in trying to decrease impacts to the sand transport corridor and MFTL and its habitat, impacts to the declining desert tortoise and its habitat are increased. The BLM needs to recognize the beneficial habitat conservation values of the proposed project site for species that are already sliding towards extinction while grappling with climate change and deny the project as proposed.

- The mitigation strategy is inadequate and biologically flawed because it proposes to develop the core habitat for the rare and threatened species and mitigate through acquisition of compensation lands. The generalized strategy of a mitigation ratio for desert tortoise and MFTL is proposed to mitigate a multitude of other species – burrowing owl, golden eagles, migratory/special status species birds, badger, kit fox, and rare plants. Furthermore, the FEIS actually fails to require that acquired mitigation lands must be habitat for these impacted species. Because that acquired habitat is already inhabited by the same species for which mitigation is sought, this mitigation strategy ensures a *net decrease* in habitat for impacted species. To actually provide mitigation that staunches species’ habitat losses, mitigation ratios must be actually address the impacts to each species and must be high enough to fully mitigate the impacts to those species⁵. A *minimum* 5:1 mitigation is more appropriate to assure, not only that the project impacts are mitigated, but that the net losses of habitat for rare species are stopped.

5 Moilen et al. 2009, Norton 2009

This strategy is also essential to prevent future listings under the federal Endangered Species Acts. The FEIS fails to identify this fact.

- The mitigation for rare species is not equitable. Besides for mitigation being a net loss to the species, the impacted rare species are not treated equitably. For example, indirect impacts to MFTL are proposed to be mitigated at a 0.5:1 ratio for indirect impacts. While indirect impacts can and do have as much of an impact to species as direct impacts, we note that despite similar indirect impacts, neither the desert tortoise or burrowing owls have any analysis of indirect impacts to them (FEIS at Table 4.21-1). We protest that the FEIS fails to evaluate the indirect impacts to the full suite of impacted species.
- Reliance on USFWS methodologies for estimating the number of desert tortoise on the proposed project site may significantly underestimate the number of desert tortoises on site. The estimation methodology used for the PSPP is the same estimation methodologies that were utilized on the ISEGS site in the Ivanpah Valley, where the numbers of desert tortoise on the entire three-phase site were originally estimated to be 38. As the BLM is well aware, the project construction was temporarily halted when the U.S. Fish and Wildlife Service's "take" limit was reached. After reconsultation, the new Biological Opinion allows for take of 405-1156 tortoises, a 10-30 times increase in desert tortoise take. Like the proposed PSPP project, the ISEGS site in Ivanpah Valley is also located in BLM designated "Category 3" habitat. And, like this proposed project site, where DWMA is separated from the solar facility project site by Interstate 10, the ISEGS Ivanpah Valley site is separated from DWMA by Interstate 15. Despite both of these linear road features having some permeability for desert tortoises, the boundaries of the DWMA's were arbitrarily designated based on human constructed features (in this case roads), not necessarily the habitat quality. As demonstrated by the recent experiences at the ISEGS site, the estimation methodologies used on this project may have significantly underestimated the number of desert tortoise on this project site as well. Therefore, we also protest the plan amendment because the environmental impact analysis in the FEIS relies on methodologies that have been shown to be inaccurate in estimating of the number of desert tortoises on the project sites as well as at the potential translocation sites.
- It is unclear if the desert tortoise surveys included the project footprints of the preferred reconfigured alternative 2, with its two options. Protocol level surveys were only done in 2009 (FEIS at 3.23-7), prior to the DEIS and prior to reconfiguration of alternative 2. While we recognize that only seven desert tortoise were located (four along the generation tie line and three other tortoises south of I-10) (FEIS at 3.23-7), protocol level surveys should be done on the two options of the reconfigured alternative 2, in order to more accurately evaluate the actual impacts to desert tortoise, especially in light of the project being sited on more desert tortoise habitat (FEIS at Table 4.21-1).
- The FEIS fails address our previous comment on the need for the NEPA document to provide a desert tortoise translocation/relocation plan, and despite the fact that desert tortoise are known to occur on the project site. This is a major failing of the FEIS and we protest that this important plan is not included. While the FEIS references the CEC RSA, 2010 DR-BIO 47, the actual preliminary desert tortoise relocation/translocation plan is DR-BIO 55.

The desert tortoise translocation and relocation plan must follow the recommendations of the currently adopted Desert Tortoise Recovery Plan⁶ (1994), which recommends that translocations not occur into DWMA's. The desert tortoise relocation/translocation plan as presented in DR-BIO 55 of the CEC RSA, 2010 actually fails to identify any recipient sites or control sites, which are essential in providing decision makers and the public enough information on what is planned for the on-site desert tortoises. In addition, it needs to follow the more recent Independent Science Advisor's recommendations⁷ for the Desert Renewable Energy Conservation Plan, which also opposes translocation into DWMA's.⁸ The translocation plan needs to clearly identify potential translocation sites and provide an evaluation of the "host" population both health-wise and the habitat for its carrying capacity.

The desert tortoise relocation/translocation plan as presented in DR-BIO 55 of the CEC RSA, 2010 is very vague and fails to incorporate all of the most recent information on desert tortoise translocation and relocation based on data from the most recent efforts.

Other translocation plans associated with BLM NEPA documents have proposed allowing up to 130% of the existing population density for translocation, but fail to provide science to support this percentage. While we recognize that this percentage comes from U.S. Fish and Wildlife Service's translocation guidance the data to support this still needs to be included in the missing translocation/relocation plan. The FEIS also needs to acknowledge the poor track record of desert tortoise translocation in general, and require measures to improve the success of relocation efforts including complete temporary fencing of the translocation areas for example. It should also require that tortoises that are identified to be moved, be moved only once to minimize impacts to the species. BLM should require that disease testing be done while the tortoises remain in their home habitat leaving the tortoises in situ until the test results are obtained. We are concerned that any alternative which requires moving tortoises into quarantine areas for long periods of time until test results are obtained increases the likelihood of harm to the individuals and may reduce the chances of successful translocation.

- The proposed Plan amendment is not consistent with the bioregional planning approach in the CDCA Plan. The overarching principles expressed in the Decision Criteria in the CDCA are applicable to the proposed project including minimizing the number of separate rights-of-way, providing alternatives for consideration during the processing of applications, and "avoid[ing] sensitive resources wherever possible." CDCA Plan at 93. The BLM should have taken a more comprehensive look at the plan amendment to determine: 1) whether industrial scale projects are appropriate for any of the public lands in this area; 2) if so, how much of the public lands in this area are suitable for such industrial uses given the need to balance other management goals including conservation of Mojave fringe-toed lizard and sand habitat, desert

6 http://ecos.fws.gov/docs/recovery_plans/1994/940628.pdf

7 <http://www.energy.ca.gov/2010publications/DRECP-1000-2010-008/DRECP-1000-2010-008-F.PDF>

8 While we recognize that the USFWS' Translocation of Desert Tortoises (Mojave Population) from Project Sites Plan Development Guidance (2010) recommends that desert tortoise be moved to lands that will "be managed for conservation so that potential threats from future impacts are precluded in perpetuity." it does not call out DWMA's as preferred translocation areas and clearly does not go against its own Recovery Plan recommendations.

http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/docs/dt/USFWS%20DT%20Translocation%20Guidance.docx

tortoise and habitat connectivity, burrowing owl, and others; and 3) the location of the public lands suitable for such uses, if any.

- The Center also protests that approval of this siting may encourage other projects to propose similar sites in remote areas (near this project or in other areas). Before considering approval of an industrial scale project in such a remote area, BLM should have fully analyzed how such a decision may exacerbate the worst impacts of sprawl—fragmentation and expansion of infrastructure into areas of the CDCA that should have remained intact in as large blocks as possible in order to protect habitat for imperiled species and other resources. This issue is particularly concerning because of the caveats in the Desert Sunlight FEIS related to the Sunlight Control Site, which is located northwest of the Desert Sunlight proposed project site, and was originally within the project ROW, but was abandoned due to desert tortoise conflicts. The translocation plan states that “this control site will only be used if BLM takes formal regulatory action to ensure protection of the control population from ROW or other encumbrances for the duration of the long-term monitoring period (Section 5).” (Desert Sunlight FEIS, Appendix H at H-106). The plan amendment for the PSPP project does not include protections for areas within the ROW that were abandoned to minimize environmental conflicts. Including this issue in the amendment would protect these identified sensitive areas from future development and the resultant conflicts. The FEIS needs to identify a mechanism to minimize conflicts with identified and avoided high-value biological areas and future development and fails to address this critical conservation issue.

- The proposed plan amendment is not consistent with FLPMA which requires BLM to prevent unnecessary or undue degradation of public lands. 43 U.S.C § 1732(b). The BLM has failed to show that it is necessary to approve the proposed large-scale solar industrial project on this site and that there are no other suitable alternative sites within the CDCA.

- The proposed Plan amendment is not consistent with FLPMA’s planning provisions which require that in developing and revising land use plans, the BLM consider many factors and “use a systematic interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences . . . consider the relative scarcity of the values involved and the availability of alternative means (including recycling) and sites for realization of those values.” 43 U.S.C. § 1712(c). It is also inconsistent with the FLPMA provisions which contemplate that BLM will prepare and maintain adequate inventory data on the resources of an area and that information be used to inform the planning process. 43 U.S.C. § 1711(a); 43 U.S.C. § 1701(a)(2).

- The additional inadequacies in the environmental review for the project required by NEPA include, but are not limited to, the following:

- Deferring identification and analysis of impacts to resources including “host” desert tortoise populations from the translocation.
- Failing to prepare and maintain an inventory of public land resources, BLM also failed to adequately address the resources of this area in reviewing the proposed plan amendment. *See Center for Biological Diversity v. Bureau of Land Management*, 422

- F.Supp.2d 1115, 1166-67 (N.D. Cal. 2006) (discussing need for BLM to take into account known resources in making management decisions); *ONDA v. Rasmussen*, 451 F.Supp. 2d 1202, 1212-13 (D. Or. 2006) (finding that BLM did not take a hard look under NEPA by relying on outdated inventories and such reliance was inconsistent with BLM's statutory obligations to engage in a continuing inventory under FLPMA).
- Failing to adequately describe the baseline condition of the environmental resources of the project footprint area and the project translocation areas.
 - Failing to adequately identify and analyze the likely impacts to desert tortoise, burrowing owl and downwind Mojave fringe-toed lizard and their habitats from the project including direct, indirect and cumulative impacts. The FEIS fails to adequately address the impacts on these species and its habitats. Further, the FEIS does not provide sufficient monitoring and reporting requirements for direct and indirect impacts to these species during construction and operations so that the agencies will be able to know whether additional protective measures are needed as construction proceeds or during the operational life of the project. The mitigation ratio of 5:1 for critical habitat impacts is appropriate. However, the mitigation ratios of 1:1 for "low density" and 2:1 for "medium density" desert tortoise habitat outside of critical habitat are far too low as identified above and do not provide any mitigation for indirect impacts or fragmentation impacts due to the proposed industrial-scale solar project in this remote location surrounded by wild-lands and adjacent to Joshua Tree National Park and wilderness areas.
 - Failing to provide adequate mitigation and monitoring for burrowing owls. Based on the best available science provided in our comments on the DEIS, the mitigation should be much greater than 13 acres of mitigation for each burrowing owl nest that will be impacted.
 - Failing to adequately address impacts to air quality particularly regarding any additional PM10 emissions in an already impaired basin and provide for adequate mitigation.
 - Failing to adequately assess the impacts to soils, including the loss of intact cryptobiotic soil crusts, desert pavements and other stable soils.
 - Narrowing the purpose and need to such an extent that the BLM failed to adequately address a meaningful range of alternatives.
 - Failing to analyze a range of appropriate project alternatives including distributed generation, off-site alternatives on previously disturbed or degraded lands, and alternative technologies that would provide more flexibility in project layout that could avoid additional sensitive resources.

- Failing to adequately address direct, indirect, and cumulative impacts to groundwater resources in the Chuckwalla basin during construction and operations.
- Failing to adequately address the impacts to surface waters from the loss of natural washes and other features as well as increased erosion.
- Failing to adequately address impacts to groundwater resources from the project and impacts to federal reserved water rights. The BLM must ensure that the PSPP project applicant or ROW holder does not accrue any water rights on federal lands --- BLM should require that any rights *arguably* created by use of groundwater on this site for the project are quit claimed back to the BLM at no cost at the end of the project term and expressly require the project proponent to agree that it will not assert any claim to or interest in any water rights to ground water or surface water on public lands as a result of the project or the ROW if it is issued. In no case should the ROW holder be able to transfer or sell any water rights that *arguably* could be created by use of groundwater for the proposed project to any third party or off site. In addition, the ROW holder must expressly agree not to seek any compensation for returning and such water rights to the BLM in favor of the public at the end for the project term. The Center raised this issue in comments as a way to protect public property—the water rights underlying public lands and the reserved water rights to surface waters. BLM should include a condition that any rights that could be claimed through any process can only accrue to the BLM and must be quit claimed back to the BLM at the end of the term. Finally, while it is understandable that BLM does not want to engage in speculative *analysis*, BLM should still include terms in the ROW that would protect these water rights if any adjudication occurs or any groundwater rights are *arguably* created in some other fashion. In sum, the BLM provides no valid reason for failing to include language in any ROW grant such as the one the Center proposed that would protect these important public property rights.
- Failing to adequately identify and analyze impacts to migratory birds, golden eagles and other wildlife.
- Failing to perform more than a single year of surveys for fall flowering rare plant species.
- Deferring development of a detailed plans to protect resources until after public participation is completed, including, but not limited to, the following: an Updated and Final Desert Tortoise Relocation/Translocation Plan, Operations Dust Control Plan, air quality construction mitigation plan, Fire Management Plan, Weed Management Plan, Groundwater Quality Monitoring and Reporting Plan, Drainage Erosion and Sedimentation Control Plan, Closure and Decommissioning Plan, Decommissioning and Reclamation Plan including adequate revegetation criteria above what the NECO Plan requires, Biological Resources Mitigation Implementation and Monitoring Plan, Groundwater Dependent Vegetation Monitoring Plan, Avian Protection Plan, Raven Monitoring and Control Plan, the Management Plan that reflects site-specific enhancement measures for the Mojave

fringe-toed lizard habitat on the acquired compensation lands, Project Construction Phasing Plan, Burrowing Owl Mitigation Plan, Monitoring and Adaptive Management Plan for golden eagles. In addition, other BLM has required that other solar projects include Vegetation Resources Management Plan; American Badger Protection Plan and the Vegetation Salvage and Restoration Plan, Compensatory Mitigation Plan for State Waters; Management Plan for Compensatory Mitigation Lands for tortoise, drainages and other species, and Special-status Plant Impact Avoidance and Mitigation Plan

- Failing to discuss any mitigation measures for greenhouse gas emissions (GHG) from the project, particularly construction and shipping. The FEIS still fails to discuss, no less adopt, any mitigation measures for the GHG created from the project. There is no discussion of reducing GHG by using alternative fuels or highly efficient vehicles and equipment during construction or reducing shipping by manufacturing or assembling project components in the local area.

Conclusion

As detailed above in this protest and in the comments submitted to the BLM on the Draft EIS by the Center, the environmental review to date is inadequate and incomplete and the proposed plan amendment is inconsistent with the CDCA Plan, FLPMA and other policies, laws, and regulations. Therefore, the Center protests the adoption of the proposed Plan amendment for the proposed PSPP project in Riverside County, California.

The Center is, however, interested in engaging in a protest resolution procedure such as a protest resolution meeting in order to attempt to resolve these issues. Therefore, the Center requests that the State Director, in consultation with the Washington Office, determine that discussion and negotiations may lead to resolution of one or more of the issues identified above and agree to hold a protest resolution meeting as promptly as possible. Please do not hesitate to contact me if you have any questions or to schedule a protest resolution meeting.

Sincerely,



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References

Beier, P. 2006. Effects of artificial night lighting on terrestrial mammals. In *Ecological Consequences of Night Lighting*, C. Rich and T. Longcore eds. chapter 2. pg. 19-42.

Bird, B.L., L.C. Branch and D.L. Miller. 2004. Effects of coastal lighting on foraging behavior of beach mice. *Conservation Biology* 18(5): 1435-1439.

Longcore, T. and C. Rich 2004. Ecological light pollution. *Frontiers in Ecology and Environment* 2(4): 191-198.

Moilanen, A., A.J.A. van Teeffelen, Y. Ben-Haim and S. Ferrier. 2009. How much compensation is enough? A framework for incorporating uncertainty and time discounting when calculating offset ratios for impacted habitat. *Restoration Ecology* 17(4): 470-478.

Norton, D.A. 2009. Biodiversity offsets: two New Zealand case studies and an assessment framework. *Environmental Management* 43(4):698-706