UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

AUG 23 2012

Jeffery Childers, Project Manager
California Desert District Office, BLM
22835 Calle San Juan De Los Lagos
Moreno Valley, California 92553

Subject: Draft Environmental Impact Statement for the Proposed McCoy Solar Energy Project and California Desert Conservation Area Plan Amendment, Riverside County, California (CEQ #20120164)

Dear Mr. Childers:

The U.S. Environmental Protection Agency has reviewed the Draft Environmental Impact Statement for the proposed McCoy Solar Energy Project (MSEP) and California Desert Conservation Area Plan Amendment. Our review and comments are provided pursuant to the National Environmental Policy Act, the Council on Environmental Quality Regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

EPA continues to support increasing the development of renewable energy resources in an expeditious and well planned manner. Using renewable energy resources such as solar power can help the nation meet its energy requirements while reducing greenhouse gas emissions. We encourage BLM to apply its land management and regulatory authorities in a manner that will promote a long-term sustainable balance between available energy supplies, energy demand, and protection of ecosystems and human health.

On September 27, 2011, EPA provided extensive formal scoping comments for the project, including detailed recommendations regarding purpose and need, range of alternatives, cumulative impacts, biological and water resources, and other resource areas of concern. We are pleased that the DEIS indicates that there will be limited grading of the project site and the layout of the solar field will allow existing drainage patterns to be maintained where possible. We commend the inclusion of a comprehensive hydrological section and a detailed discussion of the groundwater and surface water modeling analyses. EPA also commends the early analyses of key resource areas, such as jurisdictional waters of the United States, impacts to threatened and endangered species, and cultural resources. This information is important to determine a project's viability and avoid potential project delays.

Notwithstanding the positive aspects of the proposed project, the DEIS identifies potential impacts to aquatic resources, air quality, desert pavement, biological resources, and tribal resources, as well as the cumulative impacts associated with other large-scale solar energy projects proposed in the area. Based on our review of the DEIS, we have rated the project and document as *Environmental Concerns – Insufficient Information* (EC-2) (see the enclosed "Summary of EPA Rating Definitions").

We recommend that the FEIS clearly explain the rationale for identifying Alternative 1 as BLM's preferred alternative. In addition, we recommend that the Final EIS include additional discussion of impacts to aquatic resources from of disc-and-roll grading and the use of engineered channels, and the effectiveness of the proposed mitigation measures to account for stormwater drainage and impacts from flooding events. We also recommend clarification of the subsurface connection of the Palo Verde Mesa Groundwater Basin to the Colorado River. With respect to PM_{10} air quality impacts resulting from the 46-month construction period, we recommend requiring additional mitigation measures as proposed in the neighboring South Coast Air Quality Management District (SCAQMD) Rule 403, phased construction,

and early coordination among multiple renewable energy project construction schedules to minimize adverse air quality impacts in the region.

We recommend that the Final EIS provide the outcome of government-to-government consultation between the BLM and the tribal governments and update discussions of, and demonstrate consistency with, the Desert Renewable Energy Conservation Plan and the Solar Programmatic EIS. The latter discussion should be supported by up-to-date maps illustrating proposed Solar Energy Zone development boundaries.

We appreciate the opportunity to review this DEIS, and are available to discuss our comments. Please note that starting October 1, 2012, EPA Headquarters will not accept paper copies or CDs of EISs for official filing purposes. Submissions on or after October 1, 2012, must be made through the EPA's new electronic EIS submittal tool: *e-NEPA*. To begin using *e-NEPA*, you must first register with the EPA's electronic reporting site - https://cdx.epa.gov/epa_home.asp. Electronic submission does not change requirements for distribution of EISs for public review and comment, and lead agencies should still provide one hard copy of the Final EIS released for public circulation to the EPA Region 9 office in San Francisco (Mail Code: CED-2). If you have any questions, please contact me at (415) 972-3843 or contact Anne Ardillo, the lead reviewer for this Project. Anne can be reached at (415) 947-4257 or ardillo.anne@epa.gov.

Sincerely,

Enrique Manzanilla, Director
Communities and Ecosystems Division

Enclosures: Summary of EPA Rating Definitions
EPA's Detailed Comments

Cc: Bill Miller, U.S. Army Corps of Engineers
Joe Marhamati, Department of Energy
Tera Keeler Baird, US Fish and Wildlife
Magdalena Rodriguez, California Department of Fish and Game

Jeff Grubbe, Acting Chairman and Jeanne Jussila, ED, Agua Caliente Band of Cahuilla Indians
Maryann Green, Chairperson and Bill Anderson, ED, Augustine Band of Cahuilla Indians
David Roosevelt, Chairman and Darlene Coombes, ED, Cabazon Band of Mission Indians
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Charles Wood, Chairman and Tom Pradetto, Environmental Director (ED), Chemehuevi Indian Tribe
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Maxine Resvaloso, Chairwoman and Gerardo Bojorquez, ED, Torres Martinez Desert Cahuilla Indians
Darrell Mike, Chairperson and Marshall Cheung, ED, Twenty-Nine Palms Band of Mission Indians

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

U.S. EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED MCCOY SOLAR ENERGY PROJECT, RIVERSIDE COUNTY, CALIFORNIA, AUGUST 23, 2012

Preferred Alternative

According to the DEIS, both Alternative 1and Alternative 2 would satisfy BLM's purpose and need; however, Alternative 2 would result in "less permanent disturbance, less time to construct, and less water" use. As noted in the DEIS, a NEPA Lead Agency may select a preferred alternative based on reasons other than environmental considerations; however, the DEIS does not explain BLM's reasons for selecting Alternative 1 as the Preferred Alternative.

The DEIS also evaluates three options for the gen-tie line that would support the project, and notes that any of those options could support the proposed site. It is our understanding that the applicant has recently acquired the neighboring Blythe Solar Power Project (BSPP). According to the DEIS, the Central Gen-Tie option would run through the center of that project. We encourage the BLM to consider this option.

> *Recommendations:*
> Provide an explanation of BLM's rationale for choosing Alternative 1 as the preferred alternative in the Final EIS.
>
> Consider incorporating the Central Gen-Tie option into the Alternative that is selected.

Aquatic Resources

Drainages and Ephemeral Washes

According to the DEIS, field observations on site indicate that numerous moderately defined washes traverse the site. The conveyance capacity of the washes is limited, and runoff during moderate to large events would break out of these features and be conveyed across the alluvial fan as shallow sheet flow (p. 3.20-15). As stated in the DEIS, the ephemeral washes within the study area provide significant hydrologic, biogeochemical, plant, and wildlife functions (p. 3.3-6). The potential damage that could result from disturbance of flat-bottomed washes includes alterations to the hydrological functions that natural channels provide in arid ecosystems, such as adequate capacity for flood control, energy dissipation, and sediment movement; as well as impacts to valuable habitat for desert species.

EPA commends the proposed design and layout of the solar arrays which would minimize the placement of the arrays in large, established channels (to the extent practical) and utilize equipment and protective measures that would allow existing drainage patterns to be maintained where possible. The proposed solar field would follow natural grade to the southeast, and minimal grading is proposed to maintain anticipated on-site runoff and infiltration close to the existing conditions (p. 2-17).

It appears there are instances where the grading and an engineered channel would be used. The DEIS states that, although not anticipated, if larger areas require grading, a disc-and roll-technique would be used (p. 2-17). In addition, Advanced Protection Measure (APM) VEG-10 Site Design Modifications proposes to design the engineered channel discharge points to maintain the natural surface drainage patterns between the engineered channel and the outlet of the natural washes that flow toward the south and east, downstream of the Project (p. 4.3-28).

Recommendations:
In addition to the proposed mitigation measures that would avoid and minimize direct and indirect impacts to desert washes, EPA recommends that the FEIS evaluate, and include commitments to, the following:

- implementing all practicable opportunities to further reduce the footprint of project elements (parking, buildings, roads, etc.);
- distributing PV panel support structures to avoid desert dry wash woodlands and minimizing placement in washes;
- configuring the project layout, roads, drainage channels and ancillary facilities, to avoid, to the extent practicable, ephemeral washes, including desert dry wash woodlands within the project footprint; and,
- minimizing the number of road crossings over washes and designing necessary crossings to provide adequate flow-through during storm events.

Quantify the disc-and-roll acreage. Demonstrate that downstream flows would not be adversely impacted as a result of disc-and-roll grading.

Discuss in further detail where the engineered channel would be used and how it would affect upstream and downstream hydrological conditions. EPA encourages utilizing existing natural drainage channels on site and more natural features, such as earthen berms or channels for site drainage, rather than engineered and armored channels.

Based on the above, clarify in the FEIS the flow path of exterior storm water flow, and summarize modeled impacts (hydraulics of flow, velocity, sediment transport, sediment delivery and potential stream channel changes) of diverting drainages and floodplains.

Flooding

The DEIS discloses that the area is subject to flooding, and that the distribution of artifacts across the Project site, found during cultural resource surveys, shows that few cultural resources were identified in the southwestern and eastern portions of the Project site, which may be a result of flooding events that have taken place over time. The area in question has deep washes, suggesting that a high volume of water has the potential to move through the area. There is also evidence of flooding from the McCoy Wash near the eastern edge of the Project site and beyond the surveyed area (p. 3.5-29).

Surface flow modeling referenced in the DEIS suggests that there would be up to a 24% increase in flow from the project, primarily from fencing and impervious road surfaces (p. 4.20-6-7). As discussed in Section 4.20, Water Resources, the Project would manage stormwater drainage by allowing washes to inundate much of the proposed solar field and associated facilities. Mitigation measures WATER-2 through WATER-5 are proposed to account for stormwater drainage and flood flows. The DEIS acknowledges that these measures would not, however, account for the potential increases in stormwater and flood flows that could result from climate change; therefore, implementation of mitigation measure CLIMATE-1 would be required to ensure that the application of mitigation measures WATER-2 through WATER-4 account for potential increases in flows associated with the indirect effects of climate change (p. 4.8-9).

Recommendations:
Include the finalized drainage plan for the construction and operational phases of the project in the FEIS to facilitate assessment of impacts and effectiveness of mitigation measures.

Describe the specifics of a maintenance program necessary to prevent significant erosion and offsite damage and flooding, including the implementation mechanism, responsible parties, enforcement, and funding sources.

The FEIS should clarify discharge locations for any detention or sediment basins and describe the impacts of excess water provided to some drainages and reduced or no discharges to other drainages.

Consider, in the FEIS, the damage to the nearby Genesis Solar Energy project that resulted from the recent summer monsoon event on July 31, 2012. Describe the design features for McCoy Solar that will be employed, during construction and operation phases, to ensure that a similar event in the Palo Verde Mesa will not result in similar damage or alteration to the site hydrology.

Groundwater

The DEIS is internally inconsistent regarding subsurface groundwater connectivity between the Palo Verde Mesa Groundwater Basin (PVMGB), the Palo Verde Valley Groundwater Basin (PVVGB) directly to the east, and the Colorado River. According to the DEIS, one of the sources for natural groundwater recharge to the PVMGB occurs from the Colorado River which is located to the east of both basins (pg. 3.20-4). The DEIS also states that subsurface inflow into the PVMGB occurs from the Colorado River, via the PVVGB (pg. 3.20-7). The DEIS further notes that geochemical and water level data (supplied by AECOM in 2009) suggested that groundwater from the Colorado River could potentially flow through the PVVGB to the PVMGB. However, the DEIS then states that "available data do not substantiate or support this hypothesis, and groundwater connection between the Colorado River and the PVMGB is not anticipated" (p. 3.20-7 to 8). It is unclear what subsurface connectivity exists between the project site and the Colorado River.

The DEIS concluded that, with consideration of a cumulative scenario that included seven solar power projects in the vicinity of the MSEP, total water usage of the Project would be about 1.3 percent of total cumulative scenario water usage and would not result in a cone of depression. The groundwater model used indicated that the higher areas of drawdown would occur around other projects (p. 4.20-15).

The DEIS refers to figure 4.20-9, which shows the resulting cone of depression under the cumulative scenario; however, figure 4.20-9 is not included in the document.

Recommendations:
The FEIS should clarify the subsurface connection between the PVMGB and the Colorado River. It should also further describe the estimation of the impacts from withdrawing groundwater that is recharged by the Colorado River. Indicate in the FEIS whether or not an entitlement to water from the Colorado River aquifer would be needed. This information should be made available in the FEIS and the ROD.

Address, in the FEIS, what mitigation measures would be taken, and by whom, should groundwater resources in the basins become overextended to the point that curtailment is necessary due to, for example, additional growth, the influx of large-scale solar projects, drought, climate change, or the utilization of existing or pending water rights in the basin.

Include figure 4.20-9 in the FEIS.

Desert Pavement

The DEIS states that broad expanses of desert pavement exist on the proposed MSEP site. The document acknowledges that it is of the mature variety; therefore, it is not subject to a great deal of wind erosion, it provides value to wildlife habitat, and often plays an important role in cultural resources. (pgs. 3.3-5, 4.2-4). Throughout the DEIS, the Applicant has proposed to minimize the disruption of desert pavement to the extent feasible. APMs have been proposed which include constraining vehicles and equipment to the active construction areas and roads; and application of non-toxic soil stabilizer where desert pavement has been disturbed.

Recommendations:
In addition to the proposed protection and mitigation measures, we recommend that the FEIS include the following measures:

1. Avoid or minimize grading for new access roads or work areas in areas covered by desert pavement.

2. Consider protecting desert pavement surfaces from damage or disturbance from construction vehicles by use of temporary mats on the surface.

Air Quality

Mitigation

While we commend the inclusion of APMs AIR-1 and AIR-2, which would minimize impacts on air resources, we remain concerned about the direct, indirect and cumulative impacts of construction and fugitive dust emissions associated with the project, even after mitigation measures have been taken into account. The DEIS states that, currently, the ambient air quality within the Mojave Desert Air Basin is classified in the non-attainment category for state ozone and fugitive dust particulate matter (PM_{10}) criteria. Included in the DEIS are estimated emissions for criteria pollutants and description of the mitigation measures that would be implemented to reduce the adverse air impacts identified in the DEIS; however, even with implementation of these mitigation measures, maximum daily construction emissions are predicted to exceed Mojave Desert Air Basin Air Quality Management District's (MDAQMD) thresholds of significance for PM_{10} (p. 4.2-11).

Recommendations:
In light of the influx of projects in the area and cumulative impacts, we recommend incorporating additional mitigation measures as proposed by the neighboring South Coast Air Quality Management District (SCAQMD) Rule 403to further reduce fugitive dust and PM_{10} emissions.

Ensure that mitigation measures in the DEIS, and additional mitigation measures that go beyond those in the DEIS (see recommendations, below), are implemented on a schedule that will reduce construction emissions to the maximum extent feasible.

Include, in the FEIS and ROD, all mitigation measures proposed in the DEIS and any additional measures adopted. Describe, in the FEIS, how these mitigation measures will be made an enforceable part of the project's implementation schedule. We recommend implementation of

applicable mitigation measures prior to or, at a minimum, concurrent with the commencement of construction of the project.

Additional mitigation for non-road and on-road engines

We commend the use of two 35-horsepower diesel-powered emergency (standby) generators that would comply with the interim Tier 4 off-road compression ignition engines exhaust emissions standards (p. 4.2-5) and mitigation measure MM AQ-1 to demonstrate that off-road equipment more than 50 horsepower would achieve a 45 percent PM_{10} reduction and 20 percent NOx reduction (p. 4.2-20).

Recommendations:
All applicable state and local requirements, and the additional and/or revised measures listed below, should be included in the FEIS, and the FEIS and ROD should include a condition that the applicant incorporate the following measures into construction contracts:

Mobile Source Controls:
- Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.

Administrative controls:
- Identify where implementation of mitigation measures is rejected based on economic infeasibility.
- Prepare an inventory of all equipment prior to construction, and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking.[1] Where appropriate, use alternative fuels.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow in coordination with other projects in the area.

Speed Limits

APM AIR-1states that no vehicle shall exceed 10 miles per hour on unpaved areas within the site, with the exception that vehicles may travel up to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions (p. 2-31). However, APM BIO-2- and MM VEG-8 indicate that the speed limit when traveling on dirt access routes within desert tortoise habitat shall not exceed 25mph (pgs. 4.3-22 & 24, 4.4-5).

Recommendation:
The FEIS should reflect a consistent policy throughout the document for speed limits on dirt roads. To minimize dust emissions, EPA encourages BLM to adopt the 10 mph limit for all dirt roads.

[1] Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.

Cumulative Air Quality Analysis

The Cumulative Air Quality analysis assumes that past, present and foreseeable projects highlighted in Table 4.1-1 would be constructed concurrently with the Project. It concludes that the impacts would occur from short-term construction-related PM_{10} emissions and associated cumulative impacts when combined with the emissions-related impacts of the cumulative projects; however, it does not provide data or analyze the other combined emissions that would result.

> *Recommendations:*
> Estimate, in the FEIS, the cumulative emissions from the proposed project combined with the present and reasonably foreseeable projects highlighted in Table 4.1-1. We recommend that these cumulative emissions data be used to evaluate, in consultation with the MDAQMD, a phased construction schedule in the FEIS, for projects that would undergo construction concurrently, that would not result in any violations of local, state or federal air quality regulations. EPA recommends incremental construction on-site to ensure air quality standards are not exceeded.
>
> If additional mitigation measures would be needed, based on the evaluation of cumulative emissions, or if the project would affect the ability of other foreseeable projects to be permitted, the FEIS should discuss this.

<u>Biological Resources</u>

Endangered Species and Other Species of Concern

The site supports a diversity of mammals, birds, and reptiles, including special status wildlife species. In addition to desert tortoise, the project site provides suitable habitat for Mojave fringed-toed lizards, Couch's Spadefoot toads, desert kit fox, western burrowing owls and Nelson's bighorn sheep, as well as foraging habitat for the golden eagle and various species of bats (pgs. 3.4 4-20). The project site is also located within 10 miles of known golden eagle nesting territories. Project construction would result in direct impacts to special status animal species through the removal of native vegetation that provides cover, foraging, and breeding habitat for wildlife. Long-term impacts may occur as a result of increased predation and habitat fragmentation. EPA understands that an ESA Section 7 formal consultation with the USFWS has been initiated and the Biological Opinion will be finalized in October 2012. The 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.

> *Recommendations:*
> The FEIS should provide an update on the consultation process and include the Biological Opinion as an appendix. If this is not possible, the FEIS should provide an update on the consultation process and explain how the BO will be factored into BLM's decision making.
>
> Mitigation and monitoring measures that result from consultation with USFWS to protect sensitive biological resources should be included in the FEIS and, ultimately, the ROD.
>
> Identify specific measures to reduce impacts to eagles. Specify in the FEIS how approval of the proposed project would comply with the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act.

Discuss the applicability of the recent Eagle Conservation Plan Guidelines[2] to the proposed project and, as necessary, describe compensatory mitigation to reduce the effect of permitted mortality to a no-net-loss standard.

Habitat Connectivity

The DEIS states that the effects of proposed and future actions on habitat connectivity and wildlife movement are likely to remain even after the application of mitigation measures. Permanent fencing that is proposed around the MSEP and BSPP projects would create a 5-mile-long wildlife movement barrier, which the DEIS concludes would alter, but not likely impede, the movement of large wildlife species. Desert tortoises would not be able to directly traverse the MSEP and BSPP sites; however, the DEIS indicates that the remaining 1-mile-wide movement corridor would be of sufficient size that remaining tortoise populations may be sustained and would not be isolated from the regional population. The reduced size of the movement corridor is described as presenting "an adverse, though not substantial, impact to the desert tortoise" (p. 4.4-26). EPA is aware that the adequacy of the movement corridor has been a subject of recent discussion with the U.S. Fish and Wildlife Service.

Recommendations:
As appropriate, update the description of the proposed project's impacts on the desert tortoise movement corridor per the outcome of discussions with USFWS.

Discuss, in the FEIS, potential impacts to wildlife movement in the area under future climate change scenarios.

Review University of California, Riverside's recently published article[3] on the sensitivity to climate change of the desert tortoise in the area of Joshua Tree National Park. Discuss the applicability of such research and modeling in the vicinity of the project, and how such issues will be addressed with this project.

Compensatory Mitigation

We note that mitigation measures provide extensive protocols to ensure adequate compensatory mitigation for impacts to desert tortoise, Mojave fringe-toed lizards, bighorn sheep, state jurisdictional waters and special status plants. In light of the numerous renewable energy projects in the Riverside East Solar Energy Study Zone area, the availability of 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:
Identify compensatory mitigation lands or quantify, in the FEIS, available lands for compensatory habitat mitigation for this project, as well as reasonably foreseeable projects in the Riverside East Solar Energy Study Zone. Demonstrate that sufficient lands are available to meet the compensation land selection criteria outlined throughout the DEIS.

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

[3] Barrows, C.W., 2011. Sensitivity to climate change for two reptiles at the Mojave-Sonoran Desert interface. Journal of Arid Environments 75, 629-635.

Specify provisions to be adopted in the ROD that set out a clear timetable for ensuring adequate compensatory mitigation has been identified, approved and purchased, as appropriate.

Table 2-7 APM HYDRO-1 contains impacts, proposed mitigation ratios and resulting mitigation acres to address impacts to state jurisdictional washes. Consider consolidating the other mitigation measure information in a table format, which may enable a clearer understanding of the total compensatory mitigation strategy.

Consistency with the California Desert Renewable Energy Conservation Plan and the Solar PEIS

The California DRECP, scheduled for completion in 2013, is intended to advance state and federal conservation goals in the desert regions while also facilitating the timely permitting of renewable energy projects in California. The DRECP will include a strategy that identifies and maps areas for renewable energy development and areas for long-term natural resource conservation. The Solar Programmatic EIS, scheduled for completion later this Fall, is being developed by the Department of Energy and the BLM and is intended to apply to all pending and future solar energy development right of way applications. The McCoy Solar project is located in the DRECP boundary area and in the Riverside East Solar Energy Zone identified in the PEIS.

Recommendation:
The FEIS should elaborate on the DRECP and Solar PEIS; include up-to-date maps illustrating the current boundaries and conceptual alternatives that are relevant to the proposed project; and acknowledge that additional requirements and/or conditions may apply upon approval of the DRECP and/or the Solar PEIS.

Cultural Resources and Consultation with Tribal Governments

According to the DEIS, the BLM invited 15 Indian tribes to consult on a government-to-government basis, and such consultation with interested Indian tribes is on-going. In addition, BLM has determined that seven archaeological sites identified in cultural resource inventories are eligible for the National Register of Historic Places (p. 3.5-28). The DEIS states that a Memorandum of Agreement is being developed for this Project for the purpose of resolving adverse effects to historic properties, and specific measures to resolve adverse effects will be developed in a Historic Properties Treatment Plan (HPTP) and included as an attachment to the MOA (p. 4.5-2). In addition, the DEIS indicates that the Applicant will be required to develop and implement a Long Term Management Plan for post-construction monitoring and condition assessment of sites in the Area of Potential Effects that could be subject to impacts from project operation and maintenance activities (p. 4.5-11).

Recommendations:
Describe, in the FEIS, the process and outcome of government-to-government consultation between the BLM and the tribal governments listed on page 5-4. Discuss issues that were raised, how those issues were addressed in relation to the proposed project, and how impacts to tribal or cultural resources will be avoided or mitigated consistent with Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments,* Section 106 of the National Historic Preservation Act, and Executive Order 13007, *Indian Sacred Sites.*

Include, in the FEIS, the NRHP eligibility determinations and the results of the indirect effects studies.

Provide an update on the status of the MOA. Include the Historic Properties Treatment Plan and Long Term Management Plan and the results of the ongoing cultural resource surveys in the FEIS and ROD.

Hazardous Materials/Hazardous Waste and Decommissioning–CdTe containing Solar Modules

The DEIS states that the Applicant is considering use of PV panels that contain a thin semiconductor layer containing cadmium telluride (CdTe). While CdTe, itself, is a hazardous substance in an isolated form, the CdTe in the PV panels is bound and sealed within the glass sheets and a laminate material (Fthenakis, 2008). According to the DEIS, the CdTe within the PV modules is highly stable and, even if the modules were damaged, CdTe would not mobilize from the glass and into the environment under any plausible Project conditions (p. 4.9.6). The EPA agrees that there is little risk of CdTe emissions during normal use, if the modules are properly handled, a systematic method for detection and removal of damaged modules is employed, and the modules are properly recycled. One review of the available literature by the Fraunhofer Institute stated that the main concerns with CdTe technologies is addressing unexpected incidents, such as releases in the case of fire, uncontrolled disposal, and leaching to groundwater. This review suggested a need for further research related to releases due to fire, as well as for toxicity or eco-toxicity studies[4].

Recommendations:
The FEIS should fully disclose the amount of CdTe and Cd that would be on site in the modules.

The FEIS should include a Broken PV Module Detection and Handling plan that will ensure broken modules are adequately detected and handled as California hazardous waste.

Studies and Plans

The DEIS indicates that there are numerous plans that will be developed and submitted to the appropriate agencies.

Recommendation:
The referenced plans should be completed and included in the FEIS and ROD.

[4] Fraunhofer Institute for Mechanics of Materials. Scientific Comment of Fraunhofer to Life Cycle Assessment of CdTe Photovoltaic's July 2010