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

MAR 2 4 2014

Frank McMenimen
Palm Springs South Coast Field Office
Bureau of Land Management
1201 Bird Center Drive
Palm Springs, California 92262

Subject: Draft Environmental Impact Statement for the proposed Modified Blythe Solar Power Project, Riverside County, California (CEQ #20140029)

Dear Mr. McMenimen:

The U.S. Environmental Protection Agency has reviewed the Draft Environmental Impact Statement for the proposed Modified Blythe Solar Power Project. 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.

Previously, the EPA prepared scoping comments on the Blythe Solar Power Project (BSPP) on December 23, 2009. The EPA also reviewed and prepared comments on the Draft Environmental Impact Statement and the Final Environmental Impact Statement for the BSPP July 12, 2010 and September 20, 2010, respectively. The EPA rated the DEIS as EC-2 – Environmental Concerns - Insufficient Information due to potential impacts to aquatic and biological resources, and the need for additional information on these impacts and measures to avoid or mitigate them. On November 4, 2010, the Bureau of Land Management issued a right-of-way (ROW) grant for the BSPP (Approved Project). On July 12, 2012, NextEra Blythe Energy Center, LLC purchased the un-built assets of the Approved Project from the original applicant, Palo Verde Solar I, LLC, as part of a bankruptcy proceeding.

NextEra Blythe Solar Energy Center, LLC has applied to the BLM to amend the approved ROW grant to reduce the overall acreage of the project; change the authorized technology from concentrating solar trough to solar photovoltaic; reconfigure the solar plant site to allow transmission and access road corridors through the BSPP site for two projects proposed to the north; and reduce the authorized capacity from 1,000 MW to 485 MW (Modified Project). The DEIS analyzes the grant holder's proposal to construct, operate, maintain, and decommission the Modified Project (Alternative 1), as well as BLM's denial of the variance request which would maintain the current ROW grant approvals on the site within the approximately 4,433-acre area now currently controlled by the grant holder (Alternative 2). The Agency Preferred Alternative is to approve the Modified Project (Alternative 1).

On September 19, 2013, the EPA submitted scoping comments on the Modified Project. We 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 appreciate the efforts of BLM, the grant holder and its consultants to discuss and respond to our previous comments. We are pleased that the Modified Project has been reduced in size, and that grading will be limited and existing drainage patterns will be maintained where possible. Of note, there will be a substantial decrease in water use, including a reduction in the number of

evaporation ponds, as well as additional mitigation measures to limit air quality impacts. Per our previous recommendations, the DEIS presents additional information on the following topics: valley fever; effects of the Modified Project on groundwater levels; subsurface connectivity between the Colorado River and the Palo Verde Mesa Groundwater Basin; and impacts to biological resources.

We note that the grant holder has proposed to incorporate facility design and other measures into the Modified Project as design features (DFs) to reduce or avoid potential environmental impacts that could result from the Modified Project. These DFs are substantially the same as the Conditions of Certification included in the California Energy Commission's Final Commission Decision (2014). These DFs would be implemented as features of project design, and are not considered "mitigation measures" as the term is frequently used within the context of NEPA (pg. 2-34). We also understand that BLM would monitor activities described in the DFs throughout the life of the Modified Project to ensure that decisions are implemented in accordance with the approved Record of Decision and ROW grant (pg. 4-5). We support that adaptive management is included as a component in various DFs, which will minimize the possibility of mitigation failure.

Based on our review of the DEIS, we have rated the preferred alternative as *Environmental Concerns – Insufficient Information* (EC-2). Please see the enclosed "Summary of EPA Rating Definitions." EPA is most concerned about the potential impacts to site hydrology, air quality, and biological and cultural resources. In addition, we are also concerned about the cumulative impacts associated with the rapid development of energy and transportation projects in this area. Because Eastern Riverside County provides rich habitat and supports a diversity of mammals, birds, and reptiles, we recommend that the grant holder and BLM continue to work with the U.S. Fish and Wildlife Service to protect habitat connectivity for the desert tortoise and other sensitive species and identify appropriate lands for habitat compensation.

In the enclosed detailed comments, we provide specific recommendations regarding the analysis of impacts to environmental resources and measures to avoid and minimize those impacts. We are available to further discuss all recommendations provided.

We appreciate the opportunity to review this DEIS and are available to discuss our comments and recommendations provided. Please send a hard copy of the FEIS to this office when it is officially filed with EPA's new electronic EIS submittal tool: *e*-NEPA. If you have any questions, please contact me at (415) 972-3521 or contact Anne Ardillo, the lead reviewer for this project. Anne can be reached at (415) 947-4257 or ardillo.anne@epa.gov.

Sincerely,

Connell Dunning

For Kathleen Martyn Goforth, Manager
Environmental Review Section (ENF-4-2)

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

Cc: Jessica Rempel, U.S. Fish and Wildlife Service

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 MODIFIED BLYTHE SOLAR POWER PROJECT, RIVERSIDE COUNTY, CALIFORNIA, MARCH 24, 2014

Aquatic Resources

Drainages, Ephemeral Washes and Site Hydrology
The Draft Environmental Impact Statement indicates that the Modified Project would eliminate three major drainage structures designed to reroute surface water through and around the original Blythe Solar Power Project, but may require smaller drainage features to maintain existing natural drainage patterns through the project site. Site preparation techniques and protective measures will be used that allow sheet flow across the site, while maintaining existing drainage patterns at both the project site and in off-site downstream areas. In addition, vegetation would be cleared for construction of any required drainage controls (pgs. 2-13, 14, 18).

According to the DEIS, storm water will be managed through implementation of several key design features including: a) SOIL&WATER-1: Drainage Erosion and Sedimentation Control Plan; b) SOIL&WATER-11: Revised Project Drainage Report and Plans; and c) SOIL&WATER-12: Detailed FLO-2D Analysis. The U.S. Environmental Protection Agency supports the proposed drainage improvements and encourages the use of natural features for site drainage and limited vegetation removal.

> *Recommendation:*
> Utilize existing natural drainage channels on site and use natural features, such as earthen berms or channels, for site drainage rather than rip-rap or concrete-lined channels, when feasible.
>
> Drainage reports and plans should include designs to minimize disruption of natural flows as well as minimize erosion, sedimentation, and impacts to habitat downstream as much as possible.
>
> Include the finalized the revised Project Drainage Report and Plan, and Drainage Erosion and Sedimentation Control Plan for the construction and operational phases of the project in the Final Environmental Impact Statement to facilitate assessment of impacts and effectiveness of the incorporated mitigation measures
>
> Page 2-13 states "the Modified Project would eliminate the major drainage channels, but may require smaller drainage features". EPA suggests that action to " eliminate the major drainage channels" be changed to "eliminate the *engineered* major drainage channels" since the former implies that the natural major drainage channels will be changed which we believe is not the grant holder's intent.

A Storm Water Damage Monitoring and Response Plan will be developed as part of design feature SOIL&WATER-19. The verification portion of this design features states "at least sixty (60) days prior to commercial operation, the project owner shall submit to the Compliance Project Manager (CPM) a copy of the Storm Water Damage Monitoring and Response Plan for review and approval prior to commercial operation." EPA is concerned that there is no plan that deals with storms that may take place during the construction phase. The proposed Project is located on an alluvial fan where flash flooding and mass erosion could cause significant impacts. As demonstrated by severe damage from storm flows during construction at other nearby solar projects under construction, it is important that the proposed design features address this issue and are incorporated into the FEIS.

Recommendations:
Include a copy of the Storm Water Damage Monitoring and Response Plan in the FEIS.

Describe the design features that will be employed, during both construction and operation phases, to ensure that storm events will not result in damage or alteration of the hydrology at the site and to downstream areas.

Describe the maintenance program necessary to prevent significant offsite erosion and offsite damage.

According to the DEIS, the amount of grading required for the Modified Project would be considerably less than the previously Approved Project (pg. 2-14). For the Modified Project, construction will include multiple types of grading in areas of highly variable terrain, as the existing grade cannot accommodate fencing, road, equipment or structures. Grading methods proposed include cut and fill with trenching, disc and roll, and micrograding (isolated cut and fill). The final site plan will be based on a detailed topographic survey of the site, as well as detailed hydrologic and topographic studies that would be performed as a part of the permitting and engineering design process (pgs. 2-19, 3.18-6).

Recommendations:
Quantify the acreage that will be graded and demonstrate that downstream flows will not be adversely impacted as a result of each of the grading methods.

The FEIS should include the response to be taken by the Bureau of Land Management if a substantial design feature 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.

The grant holder plans to use either a fixed-tilt ground mount or a single-axis tracking system for the structures that support the PV modules. A fixed-tilt system can generally follow the slope of the terrain, which reduces grading requirements. The support posts may vary in height above the ground surface to accommodate the variations in terrain (pg. 2-9). To further minimize disruption of the site's hydrology, we recommend consideration of the solar PV technology that allow PV panels to be mounted on sloping terrain and at sufficient height above ground to maintain natural vegetation. It is our understanding that other PV solar companies have proposed such designs which can reduce the need for site clearing and grading and potential fugitive dust air quality impacts

Recommendations:
Consider PV technology that allow PV panels to be mounted on sloping and variable terrain which may limit the need for grading.

The FEIS should evaluate mounting PV panels at sufficient height above ground to maintain natural vegetation and minimize drainage disturbance. Quantify the amount of acreage that would not require clearing and grading in the event that PV panels were elevated. Compare these results to existing alternatives, and incorporate project design changes into site design and conditions of certification.

The DEIS estimates that construction of the Modified Project would have direct impacts to 26 acres of desert dry wash woodlands, 265 acres of vegetated ephemeral streams supporting the big galleta grass association, and 3.3 acres of unvegetated ephemeral dry washes (pgs 3.3-5, 8). While not federally jurisdictional, such resources are important features of the desert ecosystem. We strongly recommend that

avoidance of these drainages and the desert wash woodlands on the site be maximized through design modifications to the photovoltaic array layout. EPA supports limiting disturbance and implementing erosion control measures for sensitive resources, such as waters of the State, as stated in design feature BIO-8.

As described in the 2010 ROD (Appendix B, p. 30), the BLM coordinated with California Department of Fish and Wildlife pursuant to CDFW's jurisdiction over impacts to waters of the State within the previously Approved site footprint (Fish and Game Code §1602). The BLM has reinitiated coordination with CDFW regarding impacts of the Modified Project to waters of the State (pg. 4-2). It is unclear whether a Streambed Alteration Agreement was needed for the previously Approved Project and whether that agreement needs to be amended for the proposed Modified Project.

Recommendations:
Maximize avoidance of ephemeral drainages and desert wash woodlands on site through design modifications to the photovoltaic array layout. Configure the project, including placement of support structures, roads and ancillary facilities, to avoid ephemeral washes and dry wash woodlands to the maximum extent possible.

Provide an update on the status of the Streambed Alteration Agreement.

Include the final requirements for BIO-22 (Mitigation for Impacts to State Waters) in the FEIS.

Characterize the functions of any aquatic features that could be affected by the Modified Project.

In addition to the proposed design features that would avoid and minimize direct and indirect impacts to desert washes, EPA recommends that the FEIS evaluate and commit to the following actions:

- Implement all practicable opportunities to further reduce the footprint of project elements (parking, buildings, roads, etc.);

- Minimize the number of road crossings over washes and design necessary crossings to provide adequate flow-through during storm events.

Fencing
Design feature SOIL&WATER-19 ensures that perimeter fencing will be designed to accommodate the 100-year storm event (pg. 2-137). However the DEIS does not provide information about the effects of security fencing and desert tortoise fencing on drainage systems. Fencing can interfere with natural flow patterns by entraining debris and sediment. Fence design should address hydrologic criteria, as well as security performance criteria.

Recommendation:
Describe, in the FEIS, where permanent fencing will be used and describe the potential effects of fencing on drainage systems. Ensure that the fencing proposed for this project will meet appropriate hydrologic performance standards.

Compensatory Mitigation
We are pleased that the DEIS includes design features that will be implemented to minimize and mitigate for direct and indirect impacts to aquatic resources and biological resources, including compensatory mitigation land acquisition. The DEIS does not, however, indicate that specific compensation lands are

available. In light of the numerous energy and transportation projects under construction or proposed, the availability of land to adequately compensate for environmental impacts to resources such as state jurisdictional waters, vegetative communities, and desert tortoise habitat, may not be easily identifiable and may serve as a limiting factor for development. EPA understands that the grant holder has proposed other forms of compensatory mitigation such as habitat enhancement/restoration, in-lieu fee mitigation, and funding research studies.

Recommendations:
Identify compensatory mitigation lands or quantify, in the FEIS, available lands for compensatory habitat mitigation for this project.

Consider stringent mitigation measures, when identified, to ensure appropriate compensation for direct and indirect impacts from the Modified Project.

Describe, in the FEIS, how these compensatory mitigation measures will be made an enforceable part of the project's implementation schedule. The FEIS and Record of Decision should discuss mechanisms and incorporate proposed conditions for certification

Air Quality

As disclosed in Section 3.2 of the 2010 PA/FEIS (Appendix A, p. 3.2-1 et seq.), the study area currently is designated as a non-attainment area for the state ozone standards and the state PM_{10} 24-hour standard. Air dispersion modeling conducted for the previously Approved Project found that when added to conservatively estimated ambient air quality concentrations, the pollutant concentrations were found to be below California Ambient Air Quality Standards and would not create new exceedances or contribute to existing exceedances for any of the modeled air pollutants with the exception of PM_{10} for both construction and operation phases (pg. 3.2-7). The DEIS discloses that the emissions of the Modified Project are projected to be 61 percent of the previously Approved Project, therefore the residual impacts on air resources would be substantially reduced, but not eliminated, by the Modified Project or Alternative 2 (pg. 3.2-9).

The EPA is pleased to see the incorporation of air quality design features which would minimize impacts on air resources. In particular, we are pleased to see design features AQ-SC2 (Air Quality Construction Mitigation Plan), AQ-SC-3 (Construction Dust Control Plan), and AQ-SC-7 (Operations Dust Control Plan) with mitigation measures that address construction fugitive dust. We appreciate the wind and water erosion modeling information for the various soil units; however, we remain concerned that fugitive dust may persist given the moderate wind susceptibility of the soil units and the anticipated disturbance of desert pavement. In addition, peak roundtrip construction traffic is estimated up to 1,000 worker commute trips, 2,000 worker trips and 150 construction trucks during the 48-month construction phase. In light of the nonattainment status, vehicular traffic, the close proximity of a federal Class I area, and the numerous projects proposed in the area, all feasible measures should be implemented to reduce and mitigate anavoidable air quality impacts to the greatest extent possible including more stringent emission controls for PM.

Recommendations:
Ensure that design features in the DEIS are implemented on a schedule that will reduce construction emissions to the maximum extent feasible. Consider additional mitigation measures as described below.

Include, in the FEIS and ROD, any additional measures adopted.

Describe, in the FEIS, how these design features will be made an enforceable part of the project's implementation schedule. We recommend implementation of applicable design features prior to, or concurrent with the commencement of construction of the project.

Additional Mitigation Measures for Non-road and On-road Engines
We recommend that the applicant and BLM commit to implementing best available emission control technologies for construction, ahead of the California Air Resources Board's in-use off-road diesel vehicle regulations, regardless of fleet size.[1] EPA began phasing-in Tier 4 standards for non-road engines in 2008;[2] however, the DEIS does not mention the availability of Tier 4 non-road engines. The use of such engines would result in an approximately 90% reduction in NO_x and PM emissions as compared to Tier 3.

Recommendations:
The FEIS should discuss, and include emission tables for, various classifications of on-road and non-road engines, highlighting emission levels for PM_{10}, $PM_{2.5}$ and NO_x.

The FEIS should indicate the expected availability of Tier 4 engines for the construction equipment.

The FEIS and ROD should commit to using non-road construction equipment that meets Tier 4 emission standards, when available, and best available emission control technology, for construction that occurs prior to Tier 4 standards availability.

All applicable state and local requirements, and the additional and/or revised measures listed below, should be included in the FEIS. The FEIS and ROD should include a condition that the grant holder incorporates 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.[3] Where appropriate, use alternative fuels.
- Develop a construction, traffic and parking management plan that minimizes traffic interference and maintains traffic flow.

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[1] See CARB's Factsheet at: http://www.arb.ca.gov/msprog/ordiesel/faq/overview_fact_sheet_dec_2010-final.pdf
[2] See EPA website: http://www.epa.gov/nonroad-diesel/2004fr/420f04032.htm#standards
[3] 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.

Climate Change

Scientific evidence supports the concern that continued increases in greenhouse gas emissions resulting from human activities will contribute to climate change. Effects on weather patterns, sea level, ocean acidification, chemical reaction rates, and precipitation rates can be expected. These changes may affect the Modified Project as well as the scope and intensity of impacts resulting from the Modified Project. Although the DEIS contains a substantive discussion on greenhouse gases, as well as estimates of carbon dioxide emissions from the construction of the Modified Project, it does not discuss measures to avoid, minimize, or mitigate for the effects of climate change on the Modified Project. In addition, the DEIS states that the impacts of climate change on the Modified Project and Alternative 2 are located in Sections 3.5.4.2 and 3.5.4.4 (pg. 3.5-1); however, these sections were not found in the DEIS.

Recommendations:
Considering that the project may be in operation for between 30 - 50 years, the FEIS should discuss how climate change may affect the proposed Project, particularly with respect to groundwater, increased storm flows, impacts to sensitive species such as the desert tortoise, and reclamation and restoration efforts.

The FEIS should also discuss measures to avoid, minimize, and mitigate for the anticpated impacts of climate change on the Modified Project.

Greenhouse Gas Emissions - Construction and Operation Bid Specifications
In soliciting future contracts for project construction and operations, consider including in the FEIS, and adopting in the ROD, the following additional requirements:

a) Soliciting bids that include use of energy- and fuel-efficient fleets;
b) Requiring that contractors ensure, to the extent possible, that construction activities utilize grid-based electricity and/or onsite renewable electricity generation rather than diesel and/or gasoline powered generators;
c) Employing the use of zero emission or alternative fueled vehicles;
d) Using lighting systems that are energy efficient, such as LED technology;
e) Using the minimum amount of GHG-emitting construction materials that is feasible;
f) Using cement blended with the maximum feasible amount of fly ash or other supplemental cementitious materials that reduce GHG emissions from cement production;
g) Using lighter-colored pavement where feasible; and,
h) Recycling construction debris to the maximum extent feasible.

Biological Resources

Endangered Species and Other Species of Concern
The proposed site supports a diversity of plants, mammals, birds, bats, and reptiles, including special status species. In addition to desert tortoise, the project site provides suitable habitat for Mojave fringe-toed lizards, couch's spadefoot toads, golden eagles, migratory birds, bats, western burrowing owls, American badgers, and desert kit fox. Analysis conducted for the Modified Project identified additional special-status plant and wildlife species not identified during the analysis of the Approved Project including: Abrams' spurge, desert unicorn plant, long-eared owl, brown pelican, Yuma clapper rail, and yellow-headed blackbird (pg 3.4-1). Project construction and operation would result in direct and indirect impacts to 4,070 acres, including permanent impacts to wildlife by eliminating habitat used for breeding, nesting, migration and foraging (pgs. 3.4-10).

The DEIS notes the BLM has consulted for the Modified Project consistent with the provisions of the BO (Appendix B2, p. 39) (pg. 4-3). Based on personal communication with the U.S. Fish and Wildlife Service (USFWS) we are aware that the USFWS expects a re-initiation of an Endangered Species Act Section 7 formal consultation by the BLM. 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.

According to design feature BIO-12 (Desert Tortoise Compensatory Mitigation), the project owner proposes to fully mitigate for habitat loss and potential take of desert tortoise by providing compensatory mitigation at a 1:1 ratio for impacts to 3,976 acres (pg. 2-64). However, it is unclear how this ratio was determined since other projects have incorporated higher mitigation ratios.

Recommendations:

The FEIS should provide an update on the ESA Section 7 consultation process. Any relevant documents associated with this process, including Biological Assessments and Biological Opinions, should be summarized and included in an appendix.

Mitigation and monitoring measures that result from consultation with the USFWS to protect sensitive biological resources, including desert tortoise and golden eagles, should be incorporated in the FEIS and, ultimately, the ROD.

Include, in the FEIS, results of discussions with the USFWS on whether adequate desert tortoise movement corridors would remain pending the development of each action alternative. Discuss, in the FEIS, how resulting habitat connectivity corridors would be preserved in light of reasonably foreseeable projects.

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

Clarify how the desert tortoise mitigation ration of 1:1 was derived.

Avian impacts

As noted in the DEIS, potential for direct and indirect impacts to bats and migratory and nesting birds will continue though the operation and maintenance phase of the Modified Project. Monitoring data from other Mojave Desert solar projects under construction suggest that there have been collisions with the solar panels by avian species, water birds in particular, that were not found during baseline studies which include Brown Pelican, Grebe, and Yuma clapper rail (pg. 3.4-8). Preliminary information suggests that the large-scale solar reflective panel fields may appear as bodies of water to migrating birds and may be attracting birds to the site. We understand that this issue is currently being investigated by the USFWS.

Therefore, we strongly support the development of a Bird and Bat Conservation Strategy, as detailed in BIO-15 (pgs. 2-70 to 72). We encourage the incorporation of avoidance and minimization measures, and ideally adaptive management, if appropriate, based on the results of avian mortality monitoring. Information obtained from monitoring and surveys should provide state and federal agencies with a better understanding of potential impacts from solar PV technology, and could potentially reduce future impacts for the Modified Project and other similar projects.

We understand that as part of the avian mortality monitoring, USFWS may request that the grant holder apply for a SPUT permit (special purpose utility permit) that will allow the grant holder to collect dead bird carcasses on the site for the purposes of data collection and research. We recommend consulting with

USFWS on this issue to determine whether obtaining a SPUT permit is appropriate to include as a mitigation measure.

Compliance reports from other solar projects have documented bird entanglements in the netting that covers the evaporation ponds on the project sites.

In addition to the proposed design features to lessen the biological impacts from the Modified Project listed in the DEIS, we provide the following recommendations:

- Review project monthly compliance reports for other nearby solar projects that are currently under construction or in operation, particularly the descriptions of wildlife and avian impacts. This information may be useful in developing adaptive management strategies that are effective in preventing similar occurrences at the Modified Blythe Solar Power Project.

- The netting over evaporative ponds should be installed correctly with an appropriate-sized mesh to prevent bird entanglements and keep them out of the ponds. Regular maintenance and inspection should be required during construction. Frequency of operation monitoring should be based on when avian species presence is highest (i.e. migration, breeding) as indicated by pre-construction baseline surveys.
- Research and implement additional deterrence methods if the current measures are deemed to be ineffective.

Consultation with Tribal Governments

According to the DEIS, BLM invited the Indian tribes who had participated in government-to-government consultation for the previously Approved Project to consult on the Modified Project. Government-to-government consultation meetings were held with Colorado River Indian Tribes and Quechan Tribes. Consultation with tribes to identify any additional resources of tribal, cultural, or religious significance is ongoing. In addition, the draft Programmatic Agreement Amendment was sent to all Consulting Parties to the Agreement, including the tribes (pg. 3.6-4).

The DEIS indicates that a vast array of cultural resources are present in the vicinity of the Modified Project, including 99 archeological sites, and several potential cultural landscapes. Of these, only 15 have been evaluated and were determined not eligible for listing in the National Register of Historic Places and 84 remain unevaluated (pg. 3.6-8). The evaluations were done in phases that coincided with the construction schedule of the previously Approved Project which reflected the conditions of the Programmatic Agreement. In addition, the ethnographic assessment resulted in the identification of 12 places of traditional cultural and religious importance (pgs. 3.6 1-3).

According to the DEIS, any adverse effects that the Modified Project or Alternative 2 may have on cultural resources would be resolved through compliance with the terms of the BLM's Programmatic Agreement, as amended, under the National Historic Preservation Act Section 106 (pg 3.6-8).

Recommendations:
Describe, in the FEIS, the process and outcome of government-to-government consultation between the BLM and the tribal governments listed on page 4-4.

Discuss issues that were raised, how those issues were addressed in relation to the Modified 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 NHPA, and EO 13007, *Indian Sacred Sites*.

Provide an update on the status of the Programmatic Agreement. The FEIS should indicate whether the Tribes are in agreement that the Programmatic Agreement will reduce impacts to prehistoric and sacred sites to less than significant. We recommend that these measures be adopted in the FEIS.

Develop a schedule for evaluations of the remaining archeological sites, cultural landscapes and places of traditional cultural and religious importance.

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

The California DRECP, scheduled for completion in 2014, 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 ROD was signed in October 2012 and is intended to apply to all pending and future solar energy development ROW applications. The Modified Blythe Solar Power Project is located in the DRECP boundary area and in the Riverside East Solar Energy Zone identified in the Solar PEIS.

Recommendation:
EPA encourages BLM to ensure that the Modified Project demonstrates consistency with the DRECP and the Solar PEIS, even though it is not subject to decisions made through these regional planning efforts.

Studies and Plans

The DEIS indicates that numerous plans will be developed and submitted to the appropriate agencies. Some of these include: Groundwater Level Monitoring Plan; Mitigation and Reporting Plan; Emergency Action Plan; Broken PVModule Detection and Handling Plan; Construction Waste Management Plan; and various biological resource plans.

Recommendation:
To assist in better-informed decision making and successful implementation of Best Management Practices included in additional planning documents, key measures and commitments from the referenced plans should be included in the FEIS and ROD.