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

**DEC 16 2013**

Jeffrey Childers, Project Manager
California Desert District Office
Bureau of Land Management
22835 Calle San Juan de Los Lagos
Moreno Valley, California 92553

Subject: Final Environmental Impact Statement for the Proposed Stateline Solar Farm Project, San Bernardino County, California (CEQ #20130324)

Dear Mr. Childers:

The U.S. Environmental Protection Agency has reviewed the Final Environmental Impact Statement for the Proposed Stateline Solar Farm 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.

EPA reviewed the Draft EIS and provided comments to the Bureau of Land Management on February 21, 2013. We rated the Draft EIS as *Environmental Concerns– Insufficient Information* (EC-2), primarily due to concerns regarding the project's potential impacts to waters of the US, site hydrology, groundwater, air quality, tribal resources, desert tortoise, as well as the cumulative impacts associated with the rapid development in the Ivanpah Valley from energy and transportation projects. Previously, on September 6, 2011, EPA also provided extensive formal scoping comments for the proposed project.

We appreciate the efforts of BLM, the applicant, and its consultants to respond to our Draft EIS comments, and we were pleased to note additional mitigations and site modifications that support environmentally preferable outcomes. In particular, we recognize the modifications to BLM's preferred alternative - Revised Alternative 3 - that would reduce impacts to aquatic and biological resources, including desert tortoise habitat, from 2,151 to 1,685 acres, while still maintaining 300 megawatts of energy output. We also commend the addition of a revised site preparation plan that reduces the need to grade or disk-and-roll the entire site by approximately 33% (p. 2.33). Along with these enhancements, Revised Alternative 3 would still avoid highly sensitive resources, such as the two major drainage channels emanating from the south end of nearby Metamorphic Hill, and include the addition of 23,821 acres to the existing Desert Wildlife Management Area.

Notwithstanding these and other improvements in the Final EIS, we have continuing concerns regarding impacts to site hydrology and Ivanpah Lake, as well as air quality, biological and tribal resources. While we were pleased to note a reduced project footprint and the revised site preparation plan that would limit on-site grading in favor of mowing, we continue to recommend that BLM and the applicant minimize the disturbance of on-site soils and on-site drainages to the greatest extent feasible. We recognize that the Final EIS includes a reference to the US Army Corp of Engineers' December 2, 2012 letter concurring that the project is not subject to USACE jurisdiction under Section 404 of the Clean Water Act. Irrespective of federal jurisdiction, the Final EIS identifies 128 acres of state jurisdictional waters that would be directly impacted under the preferred alternative (p. 4.17-17). To further reduce potential indirect impacts to Ivanpah Lake and direct impacts to on-site state jurisdictional waters, we encourage BLM and the applicant to utilize the streambed alteration permitting process, highlighted under MM-Veg-

6, to work closely with the California Department of Fish and Wildlife in consultation with the Lahontan Regional Water Quality Control Board. We support further refinement of the final project design and drainage plan to avoid disturbance of on-site ephemeral drainages that have remained relatively static over the last two decades. Further, we recommend limiting reliance on sediment and debris basins to maintain pre-project water and sediment flows to downstream areas, to the greatest extent feasible.

In light of the area's nonattainment status and the proposed project's modeled exceedances of Mojave Desert Air Quality Management District's thresholds of significance for oxides of nitrogen ($NO_x$) and particulate matter 10 microns or less in size ($PM_{10}$), all feasible measures should be implemented to reduce and mitigate air quality impacts to the greatest extent practicable. The Final EIS refers to Tier 4 engines as "equipment that is not yet available" (p. G-46). It is our understanding that various non-road engines less than 750 horsepower are certified and available. We also note that BLM has incorporated the use of Tier 4 equipment, when available, as part of construction of other renewable energy projects, such as Desert Harvest Solar. At a minimum, we recommend that the Record of Decision include the commitment in MM Air-2 to use 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. The use of Tier 4 engines would result in an approximately 90% reduction in $NO_x$ and PM emissions as compared to Tier 3. All mitigation measures should be included in the ROD and as conditions in construction contracts and other approvals, as appropriate.

Regarding biological resources, the Final EIS did not respond to our recommendation to explain, for each action alternative, whether adequate desert tortoise movement corridors would result and how such corridor buffer distances compare to those prescribed for BLM's nearby Silver State Solar project. We recognize that BLM and the applicant increased the area for potential desert tortoise connectivity between the solar facility and Metamorphic Hill to the west, and the slope of the Clark Mountains to the north, as part of Revised Alternative 3 (p. 4.22-37); however, the Final EIS does not describe the extent to which this modification will improve connectivity, nor does the Final EIS discuss results from consultation with the US Fish and Wildlife Service on this issue. We recommend that the ROD include an update on consultation with USFWS and, specifically, results of discussions with USFWS on whether adequate desert tortoise movement corridors would result under the preferred alternative and whether adequate compensatory mitigation lands are available for this project. Mitigation and monitoring measures that result from consultation with USFWS should also be included in the ROD.

Finally, we note the additional tribal outreach and consultation that the BLM and applicant have accomplished since the Draft EIS and the update included in Section 5. We continue to recommend that BLM ensure, through continued consultation, that the tribal issues raised to date are addressed and summarized in the ROD.

EPA appreciates the opportunity to review this Final EIS. Please send one hard copy of the ROD to the address above (mail code CED-2). If you have any questions, please contact Tom Plenys, the lead reviewer for this project. Tom can be reached at (415) 972-3238 or plenys.thomas@epa.gov.

Sincerely,

Kathleen Martyn Goforth, Manager
Communities and Ecosystems Division

cc: Aaron Allen, North Coast Branch Chief, US Army Corps of Engineers
Ray Bransfield, United States Fish and Wildlife Service
Shankar Sharma, California Department of Fish and Wildlife