

US EPA ARCHIVE DOCUMENT



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

June 30, 2011

Liana Reilly, NEPA Document Manager  
Western Area Power Administration  
PO Box 281213  
Lakewood, CO 80228-8213

Subject: Final Environmental Impact Statement for the Rice Solar Energy Project, Riverside County, California (CEQ# 20110182)

Dear Ms. Reilly:

The U.S. Environmental Protection Agency has reviewed the Final Environmental Impact Statement for the Rice Solar Energy 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 Environmental Impact Statement and provided comments to the Western Area Power Administration on January 19, 2011. We rated the DEIS as *Environmental Concerns—Insufficient Information* (EC-2), primarily due to potential direct and indirect impacts to ephemeral washes, site hydrology, and biological resources, as well as cumulative impacts associated with the influx of the multitude of large-scale solar energy projects proposed in the region. We also asked for a final determination of the geographic extent of jurisdictional waters in the project area, additional information on how climate change could affect the proposed project, and further information on tribal consultation conducted by the lead agency. Previously, on April 28, 2010, EPA provided extensive formal scoping comments for the proposed project.

We appreciate the efforts of WAPA, the applicant, and its consultants to discuss and respond to our DEIS comments. We are pleased to note that the FEIS indicates that the fiber-optic communication cable is no longer needed on the Parker-Blythe#2 transmission line, eliminating the need for additional jurisdictional determinations for potential impacts to waters of the US. We are also pleased to note that the FEIS includes additional discussion of climate change impacts to the project as relevant to surface and groundwater resources; clarifies potential cumulative impacts to water supplies; incorporates additional details on compensatory mitigation for desert tortoise and impacts to washes; details plans to manage on-site evaporation ponds; and, describes additional tribal consultation conducted since issuance of the DEIS.

While recognizing these improvements, EPA has continuing concerns regarding impacts to aquatic and biological resources, including ephemeral washes and desert tortoise, impacts to site hydrology, and the availability of adequate compensatory mitigation lands. These are discussed further in the enclosed detailed comments, in addition to our recommendations for meaningful tribal consultation and financial assurance. We recommend that WAPA 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, as well as the final California Energy Commission's Conditions for Certification, be adopted in the Record of Decision 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 proposed in the DEIS, FEIS, or by CEC, 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 ROM copy of the ROD to us when it is filed with our Washington D.C. office. If you have any questions, please contact me at 415-972-3521, or contact Tom Plenys of my staff at 415-972-3238 or plenys.thomas@epa.gov.

Sincerely,

/s/

Kathleen M. Goforth, Manager  
Environmental Review Office

Enclosure

cc: Allison Schaffer, Bureau of Land Management, Project Manager  
James Mace, US Army Corps of Engineers  
Jody Fraser, United States Fish and Wildlife Service  
Becky Jones, California Department of Fish and Game  
Jeanne Jussila, Aqua Caliente Band of Cahuilla Indians  
Bill Anderson, Augustine Band of Cahuilla Indians  
Gilbert Parra, Chemehuevi Indian Tribe  
David Harper, Colorado River Indian Tribes  
Stephen Gill, Las Vegas Tribe of Paiute Indians  
Sandra Stoneburner, Los Coyotes Band of Cahuilla and Cupeno  
Reginald Agunwah, Ramona Band of Cahuilla  
Daniel Daggett, Salt River Pima-Maricopa Indian  
Jacquelyn Gonzales, San Manuel Band of Serrano Mission Indians  
Steven Estrada, Santa Rosa Band of Cahuilla Indians  
Marshall Cheung, Twenty-Nine Palms Band of Mission Indians

## Aquatic and Biological Resources

### *Ephemeral Washes*

EPA recognizes that the fiber-optic communication cable is no longer needed on the Parker-Blythe #2 transmission line, which would obviate the need for additional jurisdictional determinations (p. 23). While this change may avoid impacts to waters of the US, EPA remains concerned with the impacts to 82.8 acres of desert dry washes and their associated hydrological and biological functions. Despite these impacts, we note that the project changes described in the FEIS do not include any modifications to avoid desert dry washes in the project area, and the impacted acreage of such washes, including microphyll woodlands, remains the same as identified in the DEIS. These washes provide many important ecosystem functions, including plant and animal habitat, wildlife connectivity, and flood control; and onsite impacts to these valuable resources can be expected to induce additional impacts beyond the project footprint.

The FEIS also reiterates the intent of the project owner to avoid disturbing washes and vegetation “*to the extent feasible*” during construction and use existing wash channels “*to the extent practicable*” (p. 26). In the absence of clear commitments to specific construction methods, design features and avoidance measures, it is unlikely that washes will be fully protected.

#### *Recommendations:*

- The ROD should include all measures to avoid washes and placement of heliostats and transmission towers in drainages for the proposed project, and include the final details and requirements of a compensatory mitigation plan. If any heliostats will be placed in drainages, the ROD should specify the number that will be so placed. Impacts from such construction to waters of the State should be described and quantified.
- Mitigation measure commitments in the ROD should avoid qualifying phrases such as ‘*to the extent feasible*’ or ‘*to the extent practicable*’. Strengthen the language used to describe the construction methods, design features, and avoidance measures by incorporating explicit stipulations that will maximize avoidance of drainages and preservation of vegetation.
- 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.
- Locate all structures outside of waters and commit to these measures in the ROD. Estimate acreages and number of species protected as a result of alternative design configurations.
- Discuss the availability of sufficient compensation lands to replace desert wash functions lost on the project site.

### *Site Hydrology*

EPA remains concerned about the increased erosion, migration of channels, local scour, and potential destabilization and damage that could result from installing equipment in drainages, and we strongly recommend maximum avoidance of these waters and flood hazard zones. Heliostats or transmission towers placed in drainages and flood hazard areas are subject to scour, and could become unstable if the scour undermines their structural foundation, resulting in collapse and potentially damaging and polluting the washes and ground surface with mirror fragments and other debris. As the FEIS notes, a proposed channel would be used to divert potential upstream flows from crossing the site. If the channel capacity were to be exceeded, it would allow a portion of the runoff to drain through the solar field which „may case erosion and destabilize some of the heliostats, but is not expected to cause a significant environmental consequence’ (p. 30). We reiterate our recommendation to proactively prevent and minimize direct and indirect impacts, such as erosion, migration of channels, and local scour, by not placing heliostats, or transmission towers, in washes or flood hazard areas.

Further, we remain concerned that the FEIS fails to demonstrate that downstream flows will not be disrupted as a result of proposed changes to natural washes, excavation of sediment, or increased sedimentation due to vegetation clearing and potential grading of surface irregularities. It is also unclear if, and how, the removal of the detention basin will affect downstream flows (p. 3). We continue to recommend that any drainage reports and plans include designs to minimize disruption of natural flows as well as minimize erosion, sedimentation, and impacts to habitat downstream as much as possible. For mitigation development that is deferred until after the ROD is signed, the ROD should identify the specific mitigation goals, specified in terms of measurable performance standards, to the greatest extent possible (Council on Environmental Quality (CEQ) Draft Guidance on NEPA Mitigation and Monitoring, February 18, 2010).

#### *Recommendations:*

- In the ROD, confirm removal of the detention basin and identify measurable performance standards for mitigation 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.
- Incorporate, into the ROD, explicit fence design features that would allow natural hydrologic flow and sediment transport through the site in major drainages and washes. Such a commitment is referenced in the FEIS (p. 26).
- Incorporate, into the ROD, vegetation removal and re-establishment conditions for construction that minimize vegetation removal in drainages, avoid impacts to drainage bank contours, and require restoration using low-lying native species, as appropriate, that would not require trimming nor impede the project’s operation.
- 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 WAPA if a substantial 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.

### *Species of Concern and Compensatory Mitigation*

According to the FEIS, information on the Biological Opinion will be included in the ROD (p. 31). The final BO 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. 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 Guidelines<sup>1</sup>, we also recommend that WAPA and the Bureau of Land Management coordinate to ensure that current and consistent surveying, monitoring, and reporting protocols are applied to all translocation and protection efforts.

Additionally, we note that the project's mitigation program includes the creation of a new desert tortoise preserve, owned and managed by a non-profit agency (p. 88). We also note the project owner will be required to place mitigation land in perpetual conservation easement, and to endow a fund for perpetual conservation management of this land. EPA is concerned that, at this stage in the environmental review process, it is not clear that sufficient compensatory lands have 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 nearby 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, golden eagles and desert tortoise, may serve as a limiting factor for development.

#### *Recommendations:*

- 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.
- 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.
- 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 guidances 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 and 3:1 mitigation ratios for tortoise habitat, as referenced in the FEIS on page 88, and how these relate to the mitigation ratios

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<sup>1</sup> See Draft Eagle Conservation Plan Guidelines, February 2011: See internet address: [http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)



- recommended by other agencies, as well as how they relate to mitigation ratios used for other renewable energy projects in California and Nevada.
- Specify, in the ROD, provisions that will ensure habitat selected for compensatory mitigation will be protected in perpetuity.

### **Tribal Concerns**

We note Appendix B in the FEIS includes a “Tribal Consultation Summary” describing consultation conducted, and tribal concerns addressed, since March 2010. This summary mentions that WAPA is working on a Memorandum of Agreement for the project and will invite tribes to be signatories to the document.

#### *Recommendations:*

- Ensure that all tribal representatives who are cc'd on EPA's cover letter for these comments are invited to participate in the development of the Memorandum of Agreement for this project, and are included in any further communications pertaining to tribal and cultural resources.
- Clarify, in the ROD, the relationship between the Memorandum of Agreement for this project and the programmatic agreement that had been previously under development by BLM, and other agencies, for tribal and cultural resources affected by renewable energy projects in the Desert Southwest.
- Clarify, in the ROD, whether the tribes are in agreement that the programmatic agreement, or the project-specific Memorandum of Agreement under development, will reduce impacts to prehistoric and sacred sites to less than significant.

### **Decommissioning/Follow-up Actions**

We note that, in response to our DEIS comments, the FEIS references the requirement that the project owner post a surety bond adequate to cover the cost of decommissioning and restoration (p. 32). The reference cited in the DEIS indicates the surety bond will apply to only site disturbance features located on public lands managed by BLM.

#### *Recommendations:*

- Clarify, in the ROD, the extent to which all site disturbance resulting from this project will be covered by the proposed surety bond.
- Identify, in the ROD, the model (e.g. Sherpa, SCRE, etc.) to be used for the financial assurance calculations and include a detailed estimate of the overall size of the bond necessary to cover the projected 30-year lifespan of the project.