



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

July 12, 2010

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Ridgecrest, CA 93555

Eric Solorio  
Siting, Transmission, and Environmental Protection Division  
California Energy Commission  
1516 Ninth Street, MS-15  
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**Subject:** Staff Assessment and Draft Environmental Impact Statement (SA/DEIS) for the Ridgecrest Solar Power Project, Ridgecrest, California (CEQ # 20100111)

Dear Mr. Villalobos and Mr. Solorio:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Our detailed comments are enclosed.

EPA supports the increased 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 minimizing the generation of greenhouse gases. While renewable energy facilities offer many environmental benefits, appropriate siting and design of such facilities are of paramount importance.

BLM is currently considering several hundred proposed renewable energy projects, including thirty-four "fast track" projects that are expected to complete the environmental review process and break ground by December 2010 in order to be eligible for American Recovery and Reinvestment Act funding. Many, if not all, of the total projects being considered are proposed for previously undeveloped sites.

Given the large number of renewable energy project applications currently under consideration, particularly in the Desert Southwest, we encourage BLM to apply its land management 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. For decisions regarding right-of-way approvals for such projects, we recommend that BLM consider a broader range of reasonable alternatives to avoid and minimize adverse environmental impacts. Such alternatives could include alternative technologies, reduced project footprints at proposed sites, and alternate sites on and off BLM land, including inactive landfill or other disturbed sites

that may offer advantages in terms of available infrastructure and less vulnerable habitats. For example, the Garlock Road alternative, evaluated as a California Environmental Quality Act (CEQA) alternative, would be located on disturbed private land and would be less impacting. While the Garlock Road Alternative is outside BLM jurisdiction, EPA recommends that the FEIS fully evaluate this alternative, or another less damaging alternative not on or off BLM land, in accordance with Council on Environmental Quality NEPA implementing regulations which state that agencies “include reasonable alternatives not within the jurisdiction of the lead agency” (40 CFR Part 1502.14). If all evaluated NEPA alternatives for a given project result in significant impacts, we recommend that BLM consider that project in the context of the larger universe of proposed projects and select the No-Action alternative, which would not preclude consideration of the Garlock Road alternative by the California Energy Commission.

The Ridgecrest proposed project is an example of such a case. The proposed project site contains unique habitat for sensitive species, supporting one of the highest concentrations of the federally threatened desert tortoise in the western United States. It is also an important geographic area which supports connectivity and genetic linkage between populations of the State-listed threatened Mohave ground squirrel. The California Energy Commission’s Staff Assessment (SA) recognizes the value of these resources and does not recommend approval of the proposed project. EPA believes there are cases where effective mitigation for impacts on rare or unusual habitat can only be obtained by avoidance.

Our review has also identified significant environmental impacts to groundwater resources and desert wash hydrology, which relate to functioning habitat. As written, the SA/DEIS does not provide sufficient information regarding the viability and effectiveness of proposed mitigation measures that are intended to reduce these impacts to below the level of significance. We believe approval of a right of way for this project on such an ecologically valuable site, and with the potential for such significant environmental degradation, would set an unwise precedent<sup>1</sup> for the many renewable energy right-of-way applications currently under consideration by BLM, which, collectively, could result in severe and immitigable impacts to desert ecosystems. For these reasons, we have rated the DEIS’s preferred alternative as Environmental Objections – Insufficient Information (EO-2) (see enclosed “Summary of Rating Definitions”).

EPA appreciates the opportunity to review this SA/DEIS. When the Final EIS is released for public review, please send one hard copy and one electronic copy to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3843, or contact Karen Vitulano, the lead reviewer for this project, at 415-947-4178 or [vitulano.karen@epa.gov](mailto:vitulano.karen@epa.gov).

Sincerely,

/s/ *Connell Dunning for*

Enrique Manzanilla, Director  
Communities and Ecosystems Division

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<sup>1</sup> Rating System Criteria, p. 4-5. EPA’s *Policy and Procedures for the Review of Federal Actions Impacting the Environment*. October 3, 1984.

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

cc: Janet Eubanks, Project Manager, Bureau of Land Management  
Danielle Dillard, Brian Croft, U.S. Fish and Wildlife Service, Ventura, California  
Michael Picker, California Governor's Office, Sacramento, California  
Jim Abbott, Bureau of Land Management  
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## Water Resources

### *Impacts to Groundwater Resources*

#### Mitigation measures

The proposed mitigation measures for groundwater impacts are undeveloped, and insufficient information is provided to assess their viability. We are concerned that these undeveloped mitigation measures are being used as the basis for concluding that impacts are less than significant, and that resolving the issue of their viability is being deferred until after the lead agencies have already made their decisions.

The proposed project will utilize groundwater from the Indian Wells Valley Groundwater Basin. The Staff Assessment/Draft Environmental Impact Statement (SA/DEIS) indicates this basin is already significantly overdrafted and that project water use will exacerbate this overdraft condition (p. C.9-28). The applicant has proposed a mitigation plan with a portfolio of mitigation measures to offset the proposed project's construction and operation water demand of 215 acre-feet/year (average annualized) (p. C.9-29). The SA/DEIS states that implementing this offset plan (mitigation measure "Soil&Water-3"), along with a requirement to supply an executed agreement for water supply (Soil&Water-2), and a requirement to install water meters (Soil&Water-4), will mitigate impacts to below the level of significance (p. C.9-35, C.9-55).

NEPA requires that an EIS discuss mitigation measures with sufficient detail to ensure that environmental consequences have been fairly evaluated<sup>2</sup>, and an essential component of this discussion is an assessment of whether the proposed mitigation measures can be effective<sup>3</sup>. The SA/DEIS does not discuss the viability of the three mitigation measures it deems feasible, and the discussion that is included reveals significant weaknesses in the mitigation offset plan<sup>4</sup>. We note the following weaknesses for the three offset options that were deemed feasible:

1. *Utilizing the Los Angeles Department of Water and Power (LADWP) Aqueduct for construction water supply.* The offset plan simply states that contact with the Aqueduct Manager has been initiated, but "further details leading to an understanding of the viability of this option and a schedule for implementation are not yet provided but will be when they are understood" (offset plan p. 4-2). This mitigation is not sufficiently developed to support a conclusion that it will mitigate significant impacts.
2. *Underwriting an Indian Wells Valley Water District (IWWVD) xeriscaping program.* The SA/DEIS states that the IWWVD is currently in the process of developing a "cash for grass" rebate program for the City of Ridgecrest and that the project would underwrite a portion of the xeriscaping program to cover 625 homes needed to offset project water demand (p. C.9-

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<sup>2</sup> *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 352 (1989)

<sup>3</sup> *South Fork Band Council of Western Shoshone of Nevada v. DOI*, 588 F.3d 718 (9th Cir. 2009)

<sup>4</sup> Included in SA/DEIS as *Plan of Offsetting Proposed Construction and Operational Water Supply, Ridgecrest Solar Power Project, Data Request 170-172*, February 2010

29, offset plan p. 4-2). Since this program was already under review for development, it does not offer additionality<sup>5</sup> and is therefore not a viable mitigation measure for project impacts.

3. *Implementing an agricultural fallowing program for land grown by Brown Road Farming.* The offset plan states that the applicant would have to meet with the Brown Road Farming landowners to determine if they would be willing to participate in the fallowing program (offset plan p. 4-3). To date, there have been no discussions on how the Project can implement a fallowing program. The schedule for implementation of the program is planned following receipt of the license from the CEC and to be coincident with the initiation of the Project construction. This mitigation is undeveloped and depending on the level of interest by landowners, may not be viable.

Mitigation measures should be fully developed so that an evaluation of their effectiveness can inform the impact assessment conclusions. This evaluation is needed to substantiate conclusions of less-than-significant impacts, and to be consistent with recent court rulings<sup>6</sup>. Without effective viable offsets, impacts to groundwater resources would remain significant.

*Recommendation:* Because groundwater is the exclusive source of water for the area (p. C.9-66), EPA strongly recommends mitigation measures (offsets for project water use) be evaluated for effectiveness to reduce impacts prior to agency decisions. This evaluation should be included in the FEIS. Should they prove to be viable and effective, binding commitments to these measures should be included in the project description and in the lead agencies' conditions of certification and right-of-way terms and conditions.

#### Impacts to nearby water wells

The SA/DEIS acknowledges that local decline of groundwater levels within the cone of depression could affect nearby wells, but concludes that, since groundwater is supplied by the water purveyor under a basin management program, any impacts would be managed as part of the overall groundwater management plan of the groundwater basin (p. C.9-35). This mitigation approach is unclear, especially since the project does not appear to comport with some of the seven management objectives for the Indian Wells Cooperative Groundwater Management Group (p. C.9-11), specifically objectives 1, 2 and 4<sup>7</sup>. Additionally, the document states that miscellaneous private well owners constituted 24% of total production in the basin in 2007 (p. C.9-13). It is not clear how the project will affect these wells nor is there mitigation proposed for impacted residents.

*Recommendation:* In the FEIS, clarify how groundwater impacts would be managed as part of the overall groundwater management plan. Discuss the project's consistency with

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<sup>5</sup> Assurance that the planned reductions would not have occurred anyway (without the additional incentive provided by offset)

<sup>6</sup> *South Fork Band Council of Western Shoshone of Nevada v. DOI*, 588 F.3d 718 (9th Cir. 2009)

<sup>7</sup> Objective No. 1: Limit additional large-scale pumping in areas that appear to be adversely impacted;

Objective No. 2: Distribute new groundwater extraction within the Valley in a manner that will minimize adverse effects to existing groundwater conditions and maximize the long-term supply within the Valley;

Objective No. 4: Encourage the use of treated water, reclaimed water, recycled, gray and lower quality water where appropriate and economically feasible.

the management objectives of the groundwater management group. Discuss the options for use of reclaimed water (objective #4) for the project. Discuss how project impacts could affect private well owners, and discuss potential mitigation measures. A possible mitigation measure could be a provision for an alternative water supply should individual well owners be significantly impacted. Since groundwater is the only available source of water in the valley (p. C.9-66), this mitigation appears appropriate.

### ***Impacts to Desert Washes/Hydrology***

#### **Hydrologic and erosion impacts**

Hydrologic impacts are of concern. The drainage analysis from the applicant, as modified by CEC staff, predicts the potential for significant increases in post-development discharges at all outlet locations as a result of site development (p. C.9-38). The SA/DEIS describes significant hardening and modification of the drainage features to limit channel slope on the eastern side of the northern solar field, and because of sediment concerns, there is need for steeply constructed side slopes for the western side of the northern solar field. Because of the steepness and channelization that would be necessary, no biological benefits will be maintained (p. C.9-42). The document also notes that the operation of the proposed channels and erosion mitigation measures will require significant inspection and maintenance over the life of the facility to ensure the channels are operating as intended and that the potential and observed erosion issues are addressed promptly to minimize damage to the facility and areas beyond the project boundary (p. C.9-43). The document defers design of this mitigation to a later time via submittal of a revised drainage report and channel erosion engineering plans (Soil&Water-10 and 11) that support a drainage design resulting in no more than a 5% increase in post-development discharges at any of the designated outlet locations.

It is not clear whether these designs will be able to prevent unacceptable erosion that could impact El Paso Wash and significantly increase sediment loads to adjacent washes. We also have concerns that reliance on such substantial maintenance will reduce effectiveness of the mitigation, and question whether the main goals of the channel maintenance program, as identified on p. C.9-44, can be met. If such substantial maintenance is needed, the implementation mechanism, accountability, enforcement, and funding of such a program should be identified. In general, the viability of this mitigation is not discussed and the mitigation specifics are deferred to a later approval process. In order to fully evaluate environmental consequences, the EIS must discuss effectiveness of mitigation measures. Without a fully developed and evaluated drainage report and channel erosion engineering and maintenance plans, conclusions that impacts will be less than significant are not supported.

*Recommendation:* In the FEIS, discuss the viability of the needed drainage channel and berm design mitigation and the effectiveness of such designs to prevent significant erosion of El Paso Wash. Describe how post-development discharges within 5% of pre-development discharges would be achieved, and what effect there might be on the overall design of the project. Describe the specifics of the needed maintenance program necessary to prevent significant erosion in El Paso Wash and offsite damage and flooding, including the implementation mechanism, responsible parties, enforcement, and funding sources.

#### Compensation for loss of desert wash functions

We commend the project proponent for redesigning the project to avoid most of El Paso Wash. We understand that the Corps of Engineers has determined that the ephemeral washes on site are nonjurisdictional per Section 404 of the Clean Water Act and thus would not require a 404 permit. Regulatory requirements aside, the SA/DEIS acknowledges that mass grading of the unnamed washes on the proposed site would eliminate the hydrological and biological values and functions provided by these features and permanently alter the natural geomorphic and hydrological processes that currently characterize the project site, which, in turn, would fundamentally alter the biological processes that support recruitment of native vegetation and creation of wildlife habitat within the wash and on the associated floodplain. For these reasons, CEC staff has concluded that construction of the proposed project would significantly impact the biological functions and values of the desert washes (p. C.2-30). The project proposes to mitigate these impacts via acquiring compensation lands that contain acreage equal to or greater than that lost on the proposed project site. Availability of such compensation lands should be discussed, including a comparison of the quality and functions of the desert washes to those lost on the project site.

*Recommendation:* In the FEIS, discuss the availability of sufficient compensation lands to replace desert wash functions lost on the project site.

#### **Biological Resources**

##### ***Unique habitat and sensitive species***

The project site contains unique habitat for sensitive species and biological resources, supporting one of the highest concentrations of the federally threatened desert tortoise (DT) in the western United States. It also is an important geographic area which supports connectivity and genetic linkage between populations of the State-listed threatened<sup>8</sup> Mohave ground squirrel (MGS). Project construction and operation will have a substantial impact through fatality and loss of 2,002 acres of high value DT and MGS habitat (p. C.2-3, C.2-47). The SA/DEIS concludes that these unique qualities are irreplaceable and cannot be fully mitigated, and because of this, CEC staff believe the site should be protected and does not recommend its approval (Executive Summary p. 19). CEC Staff considers the No Project/No Action Alternative to be superior to the proposed project (p. B.2-1).

The proposed project also appears to conflict with the Bureau of Land Management's (BLM) direction regarding land use in relation to wildlife habitat management. The SA/DEIS states that the proposed project is consistent with BLM plans because it is not in a Desert Wildlife Management Area, an Area of Critical Environmental Concern (ACEC), or in designated critical habitat. But as the document notes, while it is not designated as a habitat conservation area or critical habitat, it has been found to support a high population of DT. In addition, the lower one-third of the property is within the Mojave Ground Squirrel Conservation Area (MGSCA), a BLM Wildlife Habitat Management Area (West Mojave Desert Management Plan (WEMO) p. 2-14). While the project right-of-way is only a small part of public lands set aside for MGS

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<sup>8</sup> The U.S. Fish and Wildlife Service published a positive 90-day finding on a petition to list the Mohave ground squirrel, which initiates a status review for determination on Federal listing of the species.

conservation, it contains part of the Sierra Foothills Habitat Connector, a particularly significant migration corridor linking MGS habitats in the northern and southern desert areas. The proposed project has the potential to substantially reduce these biological resource values of the project area, and cumulative impacts to DT are likely to remain significant even after compensatory mitigation (p. C.2-74). CEC staff believes that the impacts may not be mitigable and concludes that the project must be considered inconsistent with an existing land use (p. C.5-33) and the WEMO due to interference with the conservation and protection of sensitive species (p. C.5-41, 46).

EPA agrees with CEC staff that the No Action Alternative is superior to the proposed project. EPA considers habitat alteration and destruction to be among the greatest risks to ecological and human welfare<sup>9</sup> and believes that there are cases where effective mitigation for impacts on rare or unusual habitat can only be obtained by avoiding impacts. Rarely, if ever, is restoration or compensation an adequate mitigation for the loss of these habitats. In such cases, mitigation occurs by siting projects away from habitats of concern<sup>10</sup>.

*Recommendation:* We recommend that the decision-makers heed the recommendations of the CEC staff and pursue renewable resource development on less-pristine lands. Since there are 244 renewable energy projects proposed in California in various stages of the environmental review process or under construction (p. B.3-1), and 21 solar or wind projects within the Ridgecrest Field office, alone (p. C.1-36), sufficient new renewable resources may be developed in the absence of the Ridgecrest project to meet both the State's Renewable Energy Portfolio Standard, and BLM's mandates under the Energy Policy Act of 2005 and the Department of Interior's Secretarial Orders 3283 and 3285. We recommend full evaluation of a less-impacting alternative, such as the Garlock Road alternative (see alternatives comment below) in the FEIS, or the no action alternative.

We understand that consultation with the U.S. Fish and Wildlife Service under Section 7 of the Endangered Species Act has not yet been initiated for the proposed project. The FEIS should provide an update on the consultation process, and we strongly recommend including the Biological Opinion as an appendix.

#### ***Site reclamation/long-term productivity***

The SA/DEIS states that at the end of the term of the right of way, the land would be reclaimed and returned to its prior condition and use, returning to long term productivity (Executive Summary p. A-8), however the document also acknowledges that desert ecosystems are especially sensitive to ground disturbance and can take decades to recover, if at all (p. B.2-49).

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<sup>9</sup> *Habitat Evaluation: Guidance for the Review of Environmental Impact Assessment Documents* (January, 1993), p.1. Available: <http://www.epa.gov/compliance/resources/policies/nepa/habitat-evaluation-pg.pdf>; based on EPA's Science Advisory Board report *Reducing Risk: Setting Priorities and Strategies for Environmental Protection*. Info at: <http://www.epa.gov/history/topics/risk/01.htm>, Full Report available: [http://yosemite.epa.gov/sab/sabproduct.nsf/28704D9C420FCBC1852573360053C692/\\$File/REDUCING+RISK+++++EC-90-021\\_90021\\_5-11-1995\\_204.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/28704D9C420FCBC1852573360053C692/$File/REDUCING+RISK+++++EC-90-021_90021_5-11-1995_204.pdf)

<sup>10</sup> *Habitat Evaluation: Guidance for the Review of Environmental Impact Assessment Documents* (January, 1993), p. 88. Available: <http://www.epa.gov/compliance/resources/policies/nepa/habitat-evaluation-pg.pdf>



*Recommendation:* Provide, in the FEIS, a reasonable estimate of the success of site reclamation that would be expected, and modify the discussion of the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity to reflect this.

## **Purpose and Need/Alternatives**

An inappropriately narrow purpose and need statement and unclear site selection criteria have limited the range of reasonable alternatives considered in the SA/DEIS. The SA/DEIS identifies BLM's purpose and need for the project, under NEPA, to be to respond to the project proponent's application for a right-of-way grant (p. A-6). However, the Council on Environmental Quality (CEQ) Regulations<sup>11</sup> specify that the underlying purpose and need to which the agency is responding should be identified, which, in this case, is the need to develop renewable resources and to meet the direction of the Energy Policy Act and Department of Interior (DOI) Secretarial Orders related to renewable energy. Because of the narrow purpose and need statement in the SA/DEIS, BLM concludes that all offsite alternatives, some of which appear to have reduced environmental impacts, such as the Garlock Road Alternative<sup>12</sup>, are unreasonable because none would accomplish the purpose and need for the proposed action (p. B.2-2). This approach is not consistent with CEQ guidance that advises that alternatives outside the legal jurisdiction of the lead agency must still be analyzed in the EIS if they are reasonable<sup>13</sup>. The definition of a reasonable alternative used in the SA/DEIS is not consistent with CEQ guidance, which defines reasonable alternatives as those that are practical or feasible from the technical and economic standpoint and using common sense<sup>14</sup>.

In addition, it is unclear why the site selection criteria identified on page B.2-17 include a criterion that the site be large enough to include a 250 MW solar power plant, especially since two other alternatives that were evaluated under NEPA and, thus, presumably deemed reasonable, would construct smaller solar power projects (Alternatives 1 and 2 for 146 MW and 104 MW, respectively). This criterion of 250 MW was also used to dismiss alternatives that would locate the project on disturbed sites (Ridgecrest landfill, p. B.2-62) and that would use distributed solar photovoltaics (p. B.2-63, 71).

*Recommendation:* The FEIS should expand the range of alternatives to include those outside the legal jurisdiction of BLM, especially if they are evaluated for the State cooperating agency (CEC) such as the less impacting Garlock Road alternative. The FEIS should also consider those that are less than 250 MW in size. If the alternatives analysis is not expanded, the decision-makers should consider the larger universe of renewable energy projects under review on BLM land and strongly consider selecting the second or third No-Action alternative<sup>15</sup> for the proposed project.

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<sup>11</sup> 40 CFR 1500-1508

<sup>12</sup> The Garlock Road alternative would be located on disturbed land and would have fewer impacts to biology, cultural resources, land use, recreation, noise and vibration, public health and safety, and soils and water than the proposed action (p. B.2-46).

<sup>13</sup> *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, Question 2b, Available: <http://ceq.hss.doe.gov/nepa/regs/40/1-10.HTM#2>

<sup>14</sup> Ibid, Question 2a

<sup>15</sup> The 2<sup>nd</sup> No-Action alternative denies the project and amends the California Desert Conservation Area

## **Air Quality**

### ***General Conformity***

The statement in the SA/DEIS that compliance with existing Air District rules and regulations would ensure compliance with the air quality plans (p. C.1-39) is not a basis for conformity. The statement should pertain to conformity of project emissions with air quality plans. If the project is specified in the particulate matter greater than ten microns (PM<sub>10</sub>) maintenance plan for the area and its emissions were included as part of an emissions budget in that EPA-approved plan, that would be one basis for a positive determination of conformity. If the project is not specified in the plan, a letter from the Kern County Air Pollution Control District stating that the project emissions will not interfere with maintenance of the federal PM<sub>10</sub> National Ambient Air Quality Standards (NAAQS) and are of a type and extent that were included in development of their plan, that would be another basis for a positive conformity determination.

The proposed project would require that BLM conduct a formal federal conformity determination under the General Conformity rule (40 CFR Parts 51 and 93) for PM<sub>10</sub> since the estimated construction emissions would exceed the de minimis level of 100 tons per year.

*Recommendation:* Clarify the basis for conformity in the FEIS. Per 40 CFR 93.155, BLM is required to provide EPA Region 9, in addition to other agencies, a 30-day notice that describes the proposed action and BLM's draft conformity determination on the action. This conformity determination for PM<sub>10</sub> should be completed before the Federal action begins. While it is not required, we recommend that this determination be part of the NEPA documentation.

### ***Additional Air Quality comments***

- The analysis of greenhouse gas emissions does not include the impacts from the loss of carbon sequestration from vegetation loss (p. C.1-94).
- The air quality modeling included 17 sources (p. C.7-15), but the sources are not identified in the SA/DEIS. It is not clear, for example, whether emissions from the Land Treatment Unit (LTU) were included.

## **Cultural Resources**

The SA/DEIS identifies the concerns expressed by tribal groups, including the Kern Valley Indian Council, concerning the proposed project, specifically the likelihood of disturbing burials, destruction of archaeological sites, and the proximity of the project to the El Paso Mountains sacred lands. It notes that two individuals from the Kern Valley Indian Council took California Energy Commission and BLM staff on a tour of a portion of the sacred area. A programmatic agreement (PA) pursuant to Section 106 of the National Historic Preservation Act is being prepared, and the SA/DEIS, in some places, indicates that tribal groups are involved in this coordination, but omits them in other references to the PA preparation. It does state that BLM and Energy Commission staffs anticipate that the draft PA would be available for public comment concurrent with the publication of the final environmental impact statement.

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(CDCA) plan to classify the site as unsuitable for large-scale renewable energy development; the 3<sup>rd</sup> No-Action alternative simply denies the project and takes no action on the CDCA plan.

*Recommendation:* The FEIS should discuss how the concerns raised by Tribes were addressed and resolved, provide an update on the status of the programmatic agreement and whether coordination with Tribes is occurring, and indicate whether the Tribes are in agreement that the programmatic agreement will reduce impacts to prehistoric and sacred sites to less than significant.

## **Land Treatment Unit**

The SA/DEIS does not provide much information regarding the land treatment unit (LTU) and its operations. There is practically no information in the project description, and only limited information provided in the Waste Management chapter. We note a discrepancy in the description of the liner under the LTU: page C.13-16 states it will be constructed with a clay liner at least five feet deep, while page C.9-36 states that the clay liner will be two-feet thick on top of 3 feet of native soil.

*Recommendation:* We recommend providing additional detail regarding project operations as they relate to the identification and removal of soil contaminated by spills and leaks of Heat Transfer Fluid (HTF), including frequency, in the project description. Clarify the LTU liner composition.