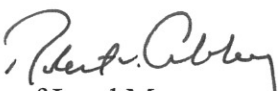




# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Washington, D.C. 20240  
<http://www.blm.gov>

## DECISION MEMORANDUM FOR THE SECRETARY

FROM: Robert Abbey   
Director, Bureau of Land Management

SUBJECT: Record of Decision – Desert Sunlight Solar Farm Project (CA)

### INTRODUCTION

The Applicant, Desert Sunlight Holdings, LLC (Desert Sunlight), submitted a right-of-way (ROW) application to the Bureau of Land Management (BLM) to construct and operate the Desert Sunlight Solar Farm (DSSF or Project), a 550 megawatt (MW) solar photovoltaic (PV) energy-generating project, and a corridor for the 220 kilovolt (kV) generation interconnection (gen-tie) line. The solar project application was evaluated in the Final Environmental Impact Statement (EIS) dated April 15, 2011, with a corresponding application from Southern California Edison (SCE) for the installation of a new substation (Red Bluff) and associated access road and telecommunication upgrades at the existing Chuckwalla communication site, and at a new Desert Center site.

The project decision (Decision) would include ROW authorizations for the following:

- Solar Farm (3,761 acres, does not include 12 private land acres);
- Gen-Tie Line (route A-1, 210.1 acres or route A-2, 112.78 acres public and 86 acres private land);
- DSSF ROW grant for 4,084 acres (until Desert Sunlight relinquishes the right away to one of the gen-tie options);
- Red Bluff Substation with access road and telecommunication upgrades (172 acres);
- 4,144 total acres to be authorized; and
- 12 acres of private land within the Solar Farm and A-1 gen-tie route.

The Decision and ROW grant would allow DSSF to select either of the two gen-tie line alternative locations after completing negotiations on the acquisition of easements on private lands along the A-2 route. The ROW grant is conditioned on relinquishment of the gen-tie line route not selected for development at the time a Notice To Proceed is requested for construction of that portion of the project.

The California Public Utilities Commission (CPUC) and Riverside County used the EIS to provide the environmental review required under the California Environmental Quality Act for approval of their portions of the project. The SCE applied to the CPUC for the Permit to Construct the Red Bluff Substation on November 17, 2010.

Red Bluff Substation would be located on BLM-administered land, approximately four miles southeast of California State Route 177, just south of I-10. The substation and related drainage features, access road, electrical distribution line transmission system, material yard/staging area, and related two telecommunication sites would be authorized on 172 acres of public land.

## **BACKGROUND**

The Project will utilize First Solar's technology for thin film cadmium telluride (CdTe) PV modules. First Solar began commercially producing its thin film PV technology in 2002, and since that time, the company has manufactured and sold approximately 2.2 gigawatts of modules that are in use throughout the world, including desert locations in the southwestern United States. The company conducts routine monitoring of existing deployed panels to assess durability and longevity to meet its warranty obligations.

In 2005, First Solar established a pre-funded PV module collection and recycling program, through which any module may be returned to First Solar for recycling, and resulting in no cost to the end user. The anticipated recycling costs are pre-funded into a trust account that is managed by a third-party trustee. The program funds are independently managed as a trust to ensure that they will be available when they are needed, regardless of the financial status of First Solar.

## **POSITION OF INTERESTED PARTIES**

The BLM received seven protests following publication of the Final EIS.

Following a series of meetings on issues, concerns, and agreements reached between BLM, DSSF, and the parties, four of the protests were withdrawn. Those included a joint protest filed by the Natural Resources Defense Council, Sierra Club, and Defenders of Wildlife, and separate protests filed by the Center for Biological Diversity, Western Watersheds, and Citizens for the Chuckwalla Valley.

Protests from Western Lands Project, Renee Castor (Chairman for the Desert Center Area Chamber of Commerce), and Shute, Mihaly & Weinberger, LLP on behalf of the Colorado River Indian Tribes, have been dismissed by the Director of the BLM.

The BLM has conducted additional tribal consultation in response to the protest from the Colorado River Indian Tribes and anticipates that the Tribes will sign the Memorandum of Agreement (MOA) and approve the Historical Property Treatment Plan as part of approval of the MOA.

## DECISION OPTIONS

The EIS considered three action alternatives, a no action alternative, and two no project alternatives:

1. The project as proposed by the applicant (550 MW, 4,176 acres).  
This alternative included substation A (the eastern substation) and a gen-tie line paralleling Kaiser Road. This is the Agency preferred alternative.
2. A reconfigured alternative (550 MW, 4,110 acres). This alternative included substation B (the western substation) and a gen-tie line paralleling Eagle Mountain Road.
3. A reduced acreage alternative (413 MW, 3,303). This alternative included substation A (the eastern substation), and a gen-tie line paralleling the Eagle Mountain 161kV transmission line (owned by SCE) that traverses mostly private lands.
4. No action alternative (no ROW grant and Plan Amendment).
5. No project alternative (no ROW grant and Plan Amendment to identify the area as unsuitable for solar development).
6. No project alternative (no ROW grant and Plan Amendment to identify the area as suitable for solar development).

The following measures will be implemented to avoid, minimize, or compensate for adverse impacts of the Decision:

- Compensatory Mitigation
  - Acquisition of a minimum of 6,813 acres (5,953 acres for DSSF of which 3,998 acres will be in the wildlife connectivity corridor and 860 acres for SCE substation) for acquisition and enhancement of suitable habitat for Desert Tortoise. The following compensatory requirements are also required in the Decision and it is anticipated that these requirements will be nested within the acquisition of lands for desert tortoise compensation.
  - State-jurisdictional streambeds (302 acres, including desert dry wash woodland, at 3:1 ratio).
  - Creosote bush scrub (4,072 acres at 1:1 ratio).
  - Occupied foxtail cactus habitat (estimated as 2 acres, at 1:1 ratio).
  - Undisturbed habitat for most wildlife species including desert kit fox and American badger (4,173 acres, at 1:1 ratio).
  - Suitable/occupied upland shrubland nesting habitat for migratory birds (4,173 acres, at 1:1 ratio).
  - Suitable foraging habitat for golden eagles, and within foraging range of a known nesting site (4,173 acres, at 1:1 ratio).
  - Suitable or occupied roosting habitat for special status bats (same as desert dry wash woodland (5,953 acres).
  - Habitat for Palm Springs round-tailed ground squirrel (estimated as 92 acres).

- Acquisition of 713 acres in addition to the compensatory mitigation listed above to offset loss of acres within the Palen-Ford multi-species Wildlife Management Area.
- Reduction of the solar farm footprint for Phase 3 by 136 acres to assist in minimizing impacts to wildlife connectivity as agreed to in protest resolution.
- Funding of a Signage and Guidance Plan to minimize potential impacts to Joshua Tree National Park and Wilderness Areas.
- Pre-construction, construction, and post-construction groundwater monitoring to avoid impacts to existing wells and sensitive vegetation communities within 3 miles of DSSF.
- Preparation of several management plans including, but not limited to: Avian and Bat Protection, American Badger and Desert Kit Fox, Nelson's Bighorn Sheep, Palm Springs Round-Tailed Ground Squirrel, and Mojave Fringed-toed Lizard.
- Completion of Golden Eagle Nesting Surveys, Nest Site Monitoring, an Adaptive Management Plan, and a Worker Environmental Awareness Program.

### RECOMMENDATION

I recommend you approve the decisions regarding the Desert Sunlight Solar Farm project. Your approval of this decision constitutes the final decision of the Department of the Interior and, in accordance with the regulations at 43 CFR 4.410(a)(3), is not subject to appeal under Departmental regulations at 43 CFR Part 4. Any challenge to this decision, including the BLM Authorized Officer's issuance of the rights-of-way as approved by this decision, must be brought in Federal district court.

### DECISION BY THE SECRETARY:

APPROVE:

DISAPPROVE:

COMMENTS:

  
Ken Salazar

SOLAR POWER PROJECT BRIEFING PAPER  
FOR THE OFFICE OF THE DEPARTMENT OF THE INTERIOR DEPUTY SECRETARY

**State Office:** California State Office    **Serial Number:** CACA-048649

**Project Name:** Desert Sunlight Solar Farm (DSSF or Project)

**Field Offices and Counties:** Palm Springs-South Coast Field Office, Riverside County

**Other Agencies part of the project and/or decision:** Department of Energy, U.S. Fish & Wildlife Service, National Park Service, California Public Utilities Commission, and California Department of Fish & Game.

**Summary of Preferred Alternative**

The Applicant, Desert Sunlight Holdings, LLC (Desert Sunlight), submitted a right-of-way (ROW) application to construct and operate the Desert Sunlight Solar Farm (DSSF), a 550 megawatt (MW) solar photovoltaic (PV) energy-generating project, and a corridor for the 220 kilovolt (kV) generation interconnection (gen-tie) line. The solar project application was evaluated in the Final Environmental Impact Statement (EIS) dated April 15, 2011, with a corresponding application from Southern California Edison (SCE) for the installation of a new substation (Red Bluff) and associated access road and telecommunication upgrades at the existing Chuckwalla communication site, and at a new Desert Center site.

The project decision (Decision) would include ROW authorizations for the following:

- Solar Farm (3,761 acres, does not include 12 private land acres);
- Gen-Tie Line (route A-1, 210.1 acres or route A-2, 112.78 acres public and 86 acres private land);
- DSSF ROW grant for 4,084 acres (until Desert Sunlight relinquishes the right away to one of the gen-tie options)
- Red Bluff Substation with access road and telecommunication upgrades (172 acres)
- 4,144 total acres to be authorized;
- 12 acres of private land within the Solar Farm and A-1 gen-tie route.

The Decision and ROW grant would allow DSSF to select either of the two gen-tie line alternative locations after completing negotiations on the acquisition of easements on private lands along the A-2 route. The ROW grant is conditioned on relinquishment of the gen-tie line route not selected for development at the time a Notice To Proceed is requested for construction of that portion of the project.

The California Public Utilities Commission (CPUC) and Riverside County used the EIS to provide the environmental review required under the California Environmental Quality Act for approval of their portions of the project. The SCE applied to the CPUC for the Permit to Construct the Red Bluff Substation on November 17, 2010.

Red Bluff Substation would be located on BLM-administered land, approximately 4 miles southeast of California State Route 177, just south of I-10. The substation and related drainage features, access road, electrical distribution line transmission system, material yard/staging area, and related two telecommunication sites would be authorized on 172 acres of public land.

**Summary of Technology**

The Project will utilize First Solar's technology for thin film cadmium telluride (CdTe) PV modules. First Solar began commercially producing its thin film PV technology in 2002, and since that time, the company has manufactured and sold approximately 2.2 gigawatts of modules

SOLAR POWER PROJECT BRIEFING PAPER  
FOR THE OFFICE OF THE DEPARTMENT OF THE INTERIOR DEPUTY SECRETARY

that are in use throughout the world, including desert locations in the southwestern United States. The company conducts routine monitoring of existing deployed panels to assess durability and longevity to meet its warranty obligations.

In 2005, First Solar established a pre-funded PV module collection and recycling program, through which any module may be returned to First Solar for recycling, and resulting in no cost to the end user. The anticipated recycling costs are pre-funded into a trust account that is managed by a third-party trustee. The program funds are independently managed as a trust to ensure that they will be available when they are needed, regardless of the financial status of First Solar.

**Summary of Process**

The EIS considered three action alternatives, a no action alternative, and two no project alternatives:

1. The project as proposed by the applicant (550 MW, 4,176 acres). This alternative included substation A (the eastern substation) and a gen-tie line paralleling Kaiser Road. This is the Agency preferred alternative.
2. A reconfigured alternative (550 MW, 4,110 acres). This alternative included substation B (the western substation) and a gen-tie line paralleling Eagle Mountain Road.
3. A reduced acreage alternative (413 MW, 3,303). This alternative included substation A (the eastern substation), and a gen-tie line paralleling the Eagle Mountain 161kV transmission line (owned by SCE) that traverses mostly private lands.
4. No action alternative (no ROW grant and Plan Amendment).
5. No project alternative (no ROW grant and Plan Amendment to identify the area as unsuitable for solar development).
6. No project alternative (no ROW grant and Plan Amendment to identify the area as suitable for solar development).

Important dates for this project are as follows:

- 01/13/2010: Notice of Intent to prepare an EIS
- 08/27/2010: Notice of Availability of the Draft EIS
- 04/15/2011: Notice of Availability of the Final EIS
- 06/16/2011: End of protest period
- Sept. 2011: Planned commencement of construction
- Nov. 2013: Target completion date

The BLM received seven protests following publication of the Final EIS.

Following a series of meetings on issues, concerns, agreements reached between BLM, DSSF, and the parties, four of the protests were withdrawn. Those included a protest filed by the Natural Resources Defense Council, Sierra Club, and Defenders of Wildlife, and separate protests filed by the Center for Biological Diversity, Western Watersheds, and Citizens for the Chuckwalla Valley.

SOLAR POWER PROJECT BRIEFING PAPER  
FOR THE OFFICE OF THE DEPARTMENT OF THE INTERIOR DEPUTY SECRETARY

Protests from Western Lands Project, Renee Castor (Chairman for the Desert Center Area Chamber of Commerce), and Shute, Mihaly & Weinberger, LLP on behalf of the Colorado River Indian Tribes, have been dismissed by the Director of the BLM.

The BLM has conducted additional tribal consultation in response to the protest from the Colorado River Indian Tribes and anticipates that the Tribes will sign the Memorandum Of Agreement (MOA) and approve the Historical Property Treatment Plan as part of approval of the MOA.

**Summary of Protests:** *See Attachment 1- Protest Summary*

- Compliance with NEPA:
  - Adequacy of the range of alternatives
  - Adequacy of impact analysis – visual, habitat connectivity, noise, invasive species, dry washes, and groundwater recharge and modeling
  - Adequacy of cumulative impact analysis of visual and air resources, and in relation to the Solar PEIS.
  
- Consistency with the California Desert Conservation Area (CDCA) Plan - consistency with the CDCA Multiple Use Class – Moderate Use and Limited Use designations and specific management principles of the CDCA plan.
  
- Consistency with National Park Service Organic Act – Department of the Interior’s mission to protect lands within the Joshua Tree National Park.
  
- Wildlife - Impacts to Golden Eagles and Desert Tortoises and adequacy of survey methods for Desert Tortoises.
  
- Visual Resources - Inadequate Key Observation Points and simulations.
  
- Cultural Resources - Adequacy of Section 106 (NHPA) consultation and deferral of analysis to MOA.
  
- Air Quality - Exceedence of regional thresholds; construction of facilities; and dust from disturbed soils.

**Summary of Mitigation Measures and Monitoring:**

The following measures will be implemented to avoid, minimize, or compensate for adverse impacts of the Decision

- Compensatory Mitigation
  - Acquisition of a minimum of 6,813 acres (5,953 acres for DSSF of which 3,998 acres will be in the connectivity corridor and 860 acres for SCE substation) for acquisition and enhancement of suitable habitat for Desert Tortoise. The following compensatory requirements are also required in the Decision and it is anticipated that these requirements will be nested within the acquisition of lands for desert tortoise compensation.

SOLAR POWER PROJECT BRIEFING PAPER  
FOR THE OFFICE OF THE DEPARTMENT OF THE INTERIOR DEPUTY SECRETARY

- State-jurisdictional streambeds (302 acres, including desert dry wash woodland, at 3:1 ratio).
  - Creosote bush scrub (4,072 acres at 1:1 ratio).
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- Acquisition of 713 acres in addition to the compensatory mitigation listed above to offset loss of acres within the Palen-Ford multi-species Wildlife Management Area.
  - Reduction of the solar farm foot print for Phase 3 by 136 acres to assist in minimizing impacts to wildlife connectivity as agreed to in protest resolution.
  - Funding of a Signage and Guidance Plan to minimize potential impacts to Joshua Tree National Park and Wilderness Areas, including air, noise, visual, and trespass.
  - Pre-construction, construction, and post-construction groundwater monitoring to avoid impacts to existing wells and sensitive vegetation communities within 3 miles of DSSF.
  - Preparation of several management plans including, but not limited to: Avian and Bat Protection, American Badger and Desert Kit Fox, Nelson's Bighorn Sheep, Palm Springs Round-Tailed Ground Squirrel, and Mojave Fringed-toed Lizard.
  - Completion of Golden Eagle Nesting Surveys, Nest Site Monitoring, an Adaptive Management Plan, and a Worker Environmental Awareness Program.

**Summary of Project Costs**

- DSSF represents approximately \$1.5 billion in project costs, conservatively.
- The DOE loan guarantee program could provide up to 50-60% of project costs in loan guarantees.
- Desert Sunlight will be responsible for paying back all loans received.
- Desert Sunlight will get 30% of eligible project costs in the form of an investment tax credit.
- Initial Bond Payment will be \$420,000.
- Initial Base Rental (for Aug., Sept., Oct., Nov., and Dec., 2011) will be \$562,569.45.
- Annual Base Rental (Jan-Dec 2012) will be \$1,375,636.62.
- Total Reclamation Cost Estimate is \$31,132,179.

**Summary of Potential Project Benefits**

Approval, construction, and operation of this project are anticipated to create a number of benefits in the public interest, including, but not limited to:

- Renewable Power Supply: The 550 MW nominal of clean electricity is estimated to power over 160,000 homes.



SOLAR POWER PROJECT BRIEFING PAPER  
FOR THE OFFICE OF THE DEPARTMENT OF THE INTERIOR DEPUTY SECRETARY

- Job Creation: Estimated creation of 630 (at peak) temporary direct construction positions and 15 direct permanent positions.
- Revenue Generation: Estimated 12 million in annual property taxes paid to Riverside County over the operating period. Estimated \$193 million filtered into the local economy during construction and \$2 million annually in overall economic output once the project is up and running.

**Summary of other Agency Actions**

1. The California Public Utilities Commission (CPUC) may issue a Permit to Construct the Red Bluff substation.
2. The U.S. Army Corps of Engineers (ACOE) provided a No Jurisdiction Determination for the DSSF project on December 28, 2010.
3. The U.S. Fish and Wildlife Service (FWS) issued a Biological Opinion (BO) on July 6, 2011. All mitigation measures associated with the BO will be added as terms and conditions in the ROW grant. The BO will be attached as an appendix to the ROD.
4. The State Historic Preservation Officer (SHPO) – As a result of Section 106 consultation a MOA has been completed and will be attached as an appendix to the ROD.
5. The South Coast Air Quality Management District issues the Federal New Source Review permit under 40 CFR Parts 52 and 60.

United States Department of the Interior  
Bureau of Land Management

# Desert Sunlight Solar Farm Project California Desert Conservation Area Plan Amendment and Final Environmental Impact Statement

For the  
Palm Springs – South Coast Field Office  
Palm Springs, California

April 2011  
CACA #48649



United States Department of the Interior  
Bureau of Land Management

# Desert Sunlight Solar Farm Project California Desert Conservation Area Plan Amendment and Final Environmental Impact Statement

For the

**Palm Springs – South Coast Field Office**  
Palm Springs, California

**April 2011**

  
\_\_\_\_\_  
John R. Kalish  
Field Manager

April 4, 2011  
\_\_\_\_\_  
Date

DOI Control #: FES 10-39

Publication Index #: BLM/CA/ES-2011-10+1793

NEPA Tracking # DOI-BLM-CA-060-0009-0033-EIS



# United States Department of the Interior



Bureau of Land Management  
1201 Bird Center Drive  
Palm Springs, CA 92262

Phone (760) 833-7100 | Fax (760) 833-7199  
<http://www.blm.gov/ca/palmsprings/>

In reply refer to:  
1610-670.36  
2800/ CACA 048649

April 15, 2011

Dear Reader:

Enclosed is the Proposed Resource Management Plan-Amendment/Final Environmental Impact Statement (PA/FEIS) for the California Desert Conservation Area (CDCA) Plan and Desert Sunlight Solar Farm (DSSF) Project. The Bureau of Land Management (BLM) prepared the PA/FEIS in consultation with cooperating agencies, taking into account public comments received during the National Environmental Policy Act (NEPA) process. The proposed decision on the plan amendment would add the DSSF site to those identified in the current CDCA Plan, as amended, for solar energy production. The proposed decision on the PA is whether to add the DSSF site to those identified in the CDCA Plan, as amended, for solar energy production. The proposed decision on the DSSF is whether to approve the issuance of the right-of-way grant applied for by Desert Sunlight Holdings, LLC.

This PA/FEIS for the DSSF has been developed in accordance with NEPA and the Federal Land Policy and Management Act of 1976. The PA is largely based on the preferred alternative in the Draft Resource Management Plan-Amendment/Draft Environmental Impact Statement (DRMP-A/DEIS), which was released on August 27, 2010. The PA/FEIS for the DSSF contains the proposed plan and project decisions, a summary of changes made between the DRMP-A/DEIS and PRMP-A/FEIS, an analysis of the impacts of the decisions, a summary of written comments received during the public review period for the DRMP-A/DEIS and responses to comments.

Pursuant to BLM's planning regulations at 43 Code of Federal Regulations (CFR) 1610.5-2, any person who participated in the planning process for the PA and has an interest that is or may be adversely affected by that planning decision may protest approval of that planning decision within 30 days from the date the Environmental Protection Agency (EPA) publishes its notice of availability for the PA/FEIS in the *Federal Register*. For further information on filing a protest, please see the accompanying protest regulations in the pages that follow (Attachment 1). The regulations specify the required elements in a protest. Protesting parties should take care to document all relevant facts and, as much as possible, reference or cite the planning documents or available planning records (e.g., meeting minutes or summaries, correspondence, etc.). To aid in ensuring the completeness of the protest, a protest checklist is attached to this letter (labeled as Attachment 2).

All protests must be in writing and mailed to one of the following addresses:

Regular Mail:  
Director (210)  
Attention: Brenda Hudgens-Williams  
BLM Protest Coordinator

Overnight Mail or Other Delivery:  
Director (210)  
Attention: Brenda Hudgens-Williams  
BLM Protest Coordinator

P.O. Box 66538  
Washington, D.C. 20035

1620 L Street, N.W., Suite 1075  
Washington, D.C. 20036

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Emailed and faxed protests will not be accepted as valid protests unless the protesting party also provides the original letter by either regular or overnight mail postmarked by the close of the protest period. Under these conditions, the BLM will consider the emailed or faxed protest as an advance copy and will afford it full consideration. If you wish to provide the BLM with such advance notification, please direct faxed protests to the attention of Brenda Hudgens-Williams - BLM Protest Expeditor at 202-912-7129, and emailed protests to [Brenda\\_Hudgens-Williams@blm.gov](mailto:Brenda_Hudgens-Williams@blm.gov).

The BLM Director will make every attempt to promptly render a decision on each valid protest. The decision will be in writing and will be sent to the protesting party by certified mail, return receipt requested. The decision of the BLM Director shall be the final decision of the Department of the Interior. Responses to protest issues will be compiled in a Director's Protest Resolution Report that will be made available to the public following issuance of the decisions.

Upon resolution of all protests, the BLM may issue a Record of Decision (ROD) adopting the Approved PA and making a decision regarding issuance of the right-of-way grant for the DSSF. Copies of the ROD will be mailed or made available electronically to all who participated in this NEPA process and will be available to all parties through the "Planning" page of the BLM national website (<http://www.blm.gov/planning>), or by mail upon request.

Unlike the PA decision, issuance of the proposed right-of-way grant decision is an implementation decision that is not subject to protest under the BLM planning regulations. Rather, once the BLM resolves the protests to the land use plan decision and issues the ROD, the right-of-way decision(s) may be appealed to the Interior Board of Land Appeals pursuant to 43 CFR Part 4, Subpart E, or challenged in federal district court.

Sincerely,



John R. Kalish  
Field Manager

*Attachment 1*

**Protest Regulations**

[CITE: 43CFR1610.5-2]

TITLE 43--PUBLIC LANDS: INTERIOR  
CHAPTER II--BUREAU OF LAND MANAGEMENT, DEPARTMENT OF THE INTERIOR  
PART 1600--PLANNING, PROGRAMMING, BUDGETING--Table of Contents  
Subpart 1610--Resource Management Planning  
Sec. 1610.5-2 Protest procedures.

- (a) Any person who participated in the planning process and has an interest which is or may be adversely affected by the approval or amendment of a resource management plan may protest such approval or amendment. A protest may raise only those issues which were submitted for the record during the planning process.
- (1) The protest shall be in writing and shall be filed with the Director. The protest shall be filed within 30 days of the date the Environmental Protection Agency published the notice of receipt of the final environmental impact statement containing the plan or amendment in the Federal Register. For an amendment not requiring the preparation of an environmental impact statement, the protest shall be filed within 30 days of the publication of the notice of its effective date.
- (2) The protest shall contain:
- (i) The name, mailing address, telephone number and interest of the person filing the protest;
  - (ii) A statement of the issue or issues being protested;
  - (iii) A statement of the part or parts of the plan or amendment being protested;
  - (iv) A copy of all documents addressing the issue or issues that were submitted during the planning process by the protesting party or an indication of the date the issue or issues were discussed for the record; and
  - (v) A concise statement explaining why the State Director's decision is believed to be wrong.
- (3) The Director shall promptly render a decision on the protest.
- (b) The decision shall be in writing and shall set forth the reasons for the decision. The decision shall be sent to the protesting party by certified mail, return receipt requested. The decision of the Director shall be the final decision of the Department of the Interior.

## **Resource Management Plan Protest Critical Item Checklist**

**The following items *must* be included to constitute a valid protest  
whether using this optional format, or a narrative letter.**

**(43 CFR 1610.5-2)**

BLM's practice is to make comments, including names and home addresses of respondents, available for public review. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be advised that your entire comment--including your personal identifying information--may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so. All submissions from organizations and businesses, and from individuals identifying themselves as representatives or officials of organizations and businesses, will be available for public inspection in their entirety.

**Resource Management Plan (RMP) or Amendment (RMPA) being protested:**

**Name:**

**Address:**

**Phone Number: ( )**

**Your interest in filing this protest (how will you be adversely affected by the approval or amendment of this plan?):**

**Issue or issues being protested:**

**Statement of the part or parts of the plan being protested:**

**Attach copies of all documents addressing the issue(s) that were submitted during the planning process by the protesting party, OR an indication of the date the issue(s) were discussed for the record.**

**Date(s):**

**A concise statement explaining why the State Director's decision is believed to be wrong:**



**Palm Springs South Coast Field Office**  
**Desert Sunlight Solar Farm Project California Desert Conservation Area Plan Amendment**  
**and Final Environmental Impact Statement**

Lead Agency: Bureau of Land Management (BLM)  
Palm Springs / South Coast Field Office (PSSCFO)  
Palm Springs, California

For further information, contact:  
Allison Shaffer, Project Manager PSSCFO -  
1201 Bird Center Drive, Palm Springs, CA 92262

**Abstract**

This Plan Amendment/Final Environmental Impact Statement (PA/FEIS) addresses the possible United States Bureau of Land Management (BLM) approval of an amendment to the *California Desert Conservation Area Plan* (CDCA Plan) to allow for solar energy and of a right-of-way (ROW) grant to lease land managed by the BLM for construction, operation and decommissioning of a solar photovoltaic energy generation facility. The Agency Preferred Alternative covers approximately 4,176 acres (ac), managed by the BLM, and would generate 550 megawatts (MW) of electricity annually. The PA/FEIS identifies impacts of the Agency Preferred Alternative, including impacts related to biological resources, cultural resources, land use, visual resources, hydrology, water quality, and water use. Many of these adverse impacts can be avoided or substantially reduced based on compliance with applicable laws, ordinances, regulations and standards, and compliance with measures provided in this PA/FEIS.

Chapter 2.0 discusses the Desert Sunlight Solar Farm Project (DSSF) (550 MW on approximately 4,176 ac), a reconfigured 550 MW Alternative (550 MW on approximately 4,110 ac), a reduced footprint 550 MW Alternative (550 MW on approximately 3,303 ac), the No Action Alternative (No ROW Grant and No CDCA Plan Amendment), the No Project Alternative (No ROW Grant and Amend the CDCA Plan for No Solar), and the No Project Alternative (No ROW Grant and Amend the CDCA Plan for Other Solar). Chapter 3.0 describes the existing conditions on and in the vicinity of the project site. Chapter 4.0 describes the potential adverse environmental impacts expected under each of the Alternatives, including the Agency Preferred Alternative.

The Field Manager of the PSSCFO has the authority for site management of future activities related to the ROW grant and is the BLM Authorized Officer for this FEIS.

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## **APPENDICES**

### Appendix

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## EXECUTIVE SUMMARY

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### ES.1 INTRODUCTION

*This Final Environmental Impact Statement (EIS) incorporates revisions since the Draft EIS was published as a result of input from community members, regulatory agencies and other stakeholders, and minor changes in the Project design by the Applicant. These revisions are shown as italicized and underlined text in this Final EIS. The Bureau of Land Management (BLM) has concluded that these revisions would not significantly increase, and in some situations would decrease, Project impacts as compared with the impacts described in the Draft EIS.*

The Applicant, Desert Sunlight Holdings, LLC (Sunlight), proposes to construct and operate a 550-megawatt (MW) solar photovoltaic (PV) energy-generating project known as the Desert Sunlight Solar Farm (DSSF). The PV generating facility (Solar Farm), most of the corridor for the Project's 220-kilovolt (kV) generation interconnection line (Gen-Tie Line), and one of two potential sites being considered for a new substation would be located on lands administered by the US Department of Interior (DOI), BLM, Palm Springs-South Coast Field Office. The Project includes development of a new 500- to 220- (500/220-) kV substation (referred to herein as the Red Bluff Substation), where the PV generating facility would interconnect with the Southern California Edison (SCE) regional transmission system. While the Red Bluff Substation is included as part of the Project for planning and environmental considerations, it would be constructed, owned, and operated by SCE, not the Applicant.

Because the Project would be located primarily on lands administered by the BLM, the Applicant filed a right-of-way (ROW) grant application with the BLM for a permit to construct and operate the Project (Case File Number CACA #48649). The decision regarding the issuance of the ROW grant will be based in part on an evaluation of the Project's potential environmental effects through the environmental review process under the National Environmental Policy Act of 1969 (NEPA) and the requirements of the Federal Land Policy and Management Act of 1976 (FLPMA).

In compliance with NEPA, the BLM prepared this Final EIS to inform the public about the proposed Project and to meet the needs of federal, state, and local permitting agencies in considering the Project. BLM authorization of a ROW grant for the Project would require a resource management land use plan amendment (PA) to the California Desert Conservation Area (CDCA) Plan (BLM 1980), as amended.

The California Public Utilities Commission (CPUC) has discretionary authority to issue a Permit to Construct (PTC) for SCE's proposed Red Bluff Substation, evaluated herein as a portion of the Project. *Because portions of the Project's alternative Gen-Tie Line routes would cross unincorporated privately owned land, Metropolitan Water District (MWD) owned land, and/or County of Riverside, California (Riverside County) owned land within the jurisdiction of Riverside County, the County has the authority to issue a Public Use Permit for the Project. Additionally, Riverside County has the authority to issue an Encroachment Permit for access to the County road ROW.* As allowed by the California Environmental Quality Act (CEQA) Guidelines Section 15221, the *CPUC and Riverside County* intend to use this EIS to provide the environmental review required for *their respective approvals of the relevant portions of the Project.*

## ES.2 PURPOSE AND NEED

Sunlight applied to the BLM for a ROW grant on federal public land to develop the Solar Farm, the Gen-Tie Line route, and the Red Bluff Substation. Sunlight also applied to the Department of Energy (DOE) for a loan guarantee under Title XVII of the Energy Policy Act of 2005 (EPAct 05), as amended by Section 406 of the American Recovery and Reinvestment Act of 2009, PL 111-5 (the Recovery Act). This section discusses the BLM's and DOE's purpose and need for the Proposed Action, as required by NEPA, Sunlight's objectives in proposing the Proposed Action, and CEQA project objectives for the Red Bluff Substation.

### ***BLM Purpose and Need***

The BLM's purpose and need for the Proposed Action is to respond to Sunlight's application under Title V of the FLPMA (43 USC 1761) for a ROW grant to construct, operate, maintain, and decommission a utility-scale 550-MW PV solar energy facility (Solar Farm), Gen-Tie Line, and a 500/220-kV substation on public lands, in compliance with FLPMA, BLM ROW regulations, and other applicable federal laws. The BLM will decide whether to approve, approve with modifications, or deny issuance of a ROW grant to Sunlight for the proposed DSSF Project and the related assignment of any ROW grant for the substation to SCE. Concurrently, the BLM also will consider amending the CDCA Plan of 1980, as amended. The CDCA, while recognizing the potential compatibility of solar generation facilities on public lands, requires that all sites associated with power generation or transmission not identified in that plan be considered through the land use plan amendment process. If it decides to approve the issuance of a ROW grant, the BLM also will amend the CDCA as required.

In conjunction with FLPMA, the BLM's applicable authorities include the following:

- Executive Order 13212, dated May 18, 2001, which mandates that agencies act expediently and in a manner consistent with applicable laws to increase the production and transmission of energy in a safe and environmentally sound manner.
- *Section 211* of the Energy Policy Act of 2005 (EPAct 2005), which *states that "the Secretary of the Interior should ... seek to have approved non-hydropower renewable energy projects located on the public lands with a generation capacity of at least 10,000 megawatts of electricity."*
- Secretarial Order 3285A1, Renewable Energy Development by the DOI, dated February 22, 2010. This Secretarial Order establishes the development of renewable energy as a priority for the DOI and creates a Departmental Task Force on Energy and Climate Change. It also announced a policy goal of identifying and prioritizing specific locations (study areas) best suited for large-scale production of solar energy.

### ***DOE Purpose and Need***

DOE is a cooperating agency on this EIS, in accordance with a memorandum of understanding between the DOE and BLM, signed in January 2010. DOE's purpose and need for agency action is to comply with its mandate under EPAct 2005 by selecting eligible projects that meet the goals of the act. DOE's proposed action is to issue a loan guarantee for this Project under Title XVII of the EPAct 2005, as amended by the Recovery Act, which requires that construction for the Project commence by September 30, 2011.

DOE's purpose and need for the agency action is based on federal laws addressing the financing and promotion of renewable energy projects and need for immediate economic stimulus. The EAct 2005 established a federal loan guarantee program within DOE for eligible energy projects. Title XVII of EAct 2005 authorizes the Secretary of Energy to make loan guarantees for a variety of types of projects, including those that "avoid, reduce, or sequester air pollutants or anthropogenic [human-caused] emissions of greenhouse gases; and employ new or significantly improved technologies as compared to commercial technologies in service in the US at the time the guarantee is issued." The two principal goals of the loan guarantee program are to encourage commercial use in the US of new or significantly improved energy-related technologies and to achieve substantial environmental benefits. EAct 2005 was amended by the Recovery Act to create Section 1705, authorizing a new program for rapid deployment of renewable energy projects and related manufacturing facilities, electric power transmission projects, and leading edge biofuels projects that begin construction before September 30, 2011. The primary purposes of the Recovery Act are job preservation and creation, infrastructure investment, energy efficiency and science, assistance to the unemployed, and state and local fiscal stabilization. The Section 1705 Program is designed to address the current economic conditions of the nation, in part, through renewable energy, transmission and leading edge biofuels projects.

### ***Applicant's Objectives for the Proposed Action***

Sunlight's fundamental objectives for the DSSF Project are as follows:

- Construct, operate, and eventually decommission a 550-MW PV energy facility and associated interconnection infrastructure; and
- Facilitate SCE's construction and operation of a substation in order to provide renewable electric power to California's transmission grid. This is to help meet federal and state renewable energy supply and greenhouse gas (GHG) emissions reduction requirements.

Sunlight is committed to constructing and operating the Project in an environmentally responsible manner and to providing a sustainable source of renewable energy to the state's investor-owned utilities and the public.

### ***CEQA Project Objectives***

SCE proposes to construct the Red Bluff Substation in response to interconnection requests from Desert Sunlight Holdings LLC as part of the Large Generator Interconnection Process (LGIP). CEQA Guidelines, Section 15124(b), requires a statement of project objectives, which are as follows for the Red Bluff Substation:

- Respond to interconnection requests as part of the LGIP from generators in the Desert Center area by constructing a substation to interconnect with the Devers Palo Verde (DPV) 500-kV transmission line;
- Provide safe and reliable electrical service consistent with the North American Electric Reliability Corporation, Federal Energy Regulatory Commission, California Independent System Operator, and SCE's planning design guidelines and criteria;
- Meet project need, while minimizing environmental impacts; and
- Meet project need in accordance with the Large Generation Interconnection Agreement.

### ES.3 PROPOSED ACTION AND ALTERNATIVES

The Project area is a largely vacant, undeveloped, and relatively flat area in the Chuckwalla Valley of the Sonoran Desert in eastern Riverside County. The area proposed for the DSSF is approximately six miles north of Interstate 10 (I-10) and the rural community of Desert Center and four miles north of Lake Tamarisk, between the cities of Coachella to the west and Blythe to the east. The Project area contains transmission lines, telephone lines, pipelines, and dirt roads. Joshua Tree National Park is north, east, and west of the area; at its closest point, the DSSF site is approximately 1.4 miles southwest of the national park boundary. The inactive Eagle Mountain Mine is approximately one mile west of the Project Study Area. The areas being considered for the Red Bluff Substation are seven to eight miles southeast or southwest (depending on the site) of the DSSF site, just south of I-10.

Alternatives considered in the EIS were evaluated as a result of the Applicant working with the BLM on evaluating and selecting Project locations, issues identified by the BLM, and comments received during the public scoping process. The BLM is required to consider in detail a range of alternatives that are considered “reasonable,” usually defined as alternatives that are realistic (not speculative), that are technologically and economically feasible, and that respond to the purpose of and need for the Proposed Action. Similarly, CEQA requires a “reasonable range” of alternatives that are feasible and that satisfy most of the Project sponsor’s objectives. For this EIS, the alternatives provided satisfy requirements under both NEPA and CEQA.

Three full action alternatives (Alternatives 1, 2, and 3), one No Action Alternative (Alternative 4), and two No Project Alternatives (Alternatives 5 and 6) are fully analyzed in the EIS. Each of the action alternatives would require an amendment to the CDCA Plan, as would the two No Project Alternatives.

Each action alternative consists of three main components associated with generating and delivering electricity:

- DSSF Site (the main PV generating facility);
- 220-kV Gen-Tie (interconnection) Line; and
- 500/220-kV Substation (Red Bluff Substation) and supporting facilities, including a separate telecommunications site (the Desert Center Telecommunications Site) and an electric distribution line to the substation.

In addition, the determination of the suitability of the Project application area for solar development would be made as part of the plan amendment process.

Multiple alternatives were considered for each component. For the DSSF, two alternative layouts were analyzed: Solar Farm Layout B and Solar Farm Layout C. For the Gen-Tie Line, three alternative routes were analyzed: two that exit the DSSF and go to Substation A (identified as GT-A-1 and GT-A-2) and one that exits the DSSF and goes to Substation B (identified as GT-B-2). For the Red Bluff Substation, two alternative locations were analyzed: Substation A (to the east) and Substation B (to the west). In addition, there are two access road alternatives considered for Substation A only.

### **Alternatives Considered in Detail**

The following alternatives are described in detail in Section 2.2.4 and are fully analyzed in the EIS. Table ES-1 provides a comparison summary of the permanent footprint for the three action alternatives.

**Table ES-1**  
**Comparison Summary of Permanent Ground Disturbance<sup>1</sup> for**  
**Action Alternatives 1, 2, and 3 (in Acres)**

<b>Project Component/Element</b>	<b>Alternative 1: Proposed Action</b>	<b>Alternative 2: Alternate Action</b>	<b>Alternative 3: Reduced Solar Farm Footprint Alternative</b>
<b>Project Power Output</b>	<b>550 MW</b>	<b>550 MW</b>	<b>314 MW</b>
Solar Farm Layout B (2)	<u>3,912</u>	<u>3,912</u>	-
Solar Farm Layout C (2)	-	-	3,045
Gen-Tie Line A-1 (3a)	<u>92</u>	-	-
Gen-Tie Line A-2 (3b)	-	-	<u>86</u>
Gen-Tie Line B-2 (3c)	-	<u>68</u>	-
Red Bluff Substation A	<u>76</u>	-	<u>76</u>
Red Bluff Substation-related features	-	-	-
- Drainage/Sideslopes	<u>14</u>	-	<u>14</u>
- Access Road (4a)	<u>31</u>	-	<u>31</u>
- Transmission System (5)	<u>33</u>	-	<u>33</u>
- Distribution Line	8	-	8
- <u>Material Yard/Staging Area</u>	<u>9</u>	-	<u>9</u>
- Telecom Site (6)	<1	-	<1
Red Bluff Substation B	-	<u>76</u>	-
Red Bluff Substation-related features	-	-	-
- Drainage/Sideslopes	-	<u>20</u>	-
- Access Road (4b)	-	1	-
- Transmission System (5)	-	<u>22</u>	-
- Distribution Line	-	<1	-
- <u>Material Yard/Staging Area</u>	-	<u>10</u>	-
- Telecom Site (6)	-	<1	-
<b>TOTAL ACREAGE</b>	<b><u>4,176</u></b>	<b><u>4,110</u></b>	<b><u>3,303</u></b>

**Notes:** (1) All ground disturbing impacts previously identified in the Draft EIS as temporary impacts are now considered permanent impacts, per CDFG guidance, due to the long time period for natural revegetation to occur in the desert.

(2) Includes area for all DSSF-related facilities.

*(3a) Permanent disturbance of 92 acres occurs within the ROW corridor totaling 256 acres (12.1 miles long by 160 feet wide with additional fan-shaped areas at corners for stringing).*

*(3b) Permanent disturbance of 68 acres occurs within a corridor totaling 203 acres (10 miles long by 160 feet wide plus additional fan-shaped areas at corners for stringing).*

*(3c) Permanent disturbance of 86 acres occurs within a corridor totaling 226 acres (10.5 miles long by 160 feet wide plus additional fan-shaped areas at corners for stringing).*

(4a) Assume 24,000-foot by 30-foot-wide road from Kaiser Road for Alternative 1 and 24,000 by 30-foot-wide road from Chuckwalla Valley Road/Corn Springs Road for Alternative 2, although acreage amount allows for additional disturbance for adequate engineering and unknown site constraints.

(4b) Assume 2,000-foot by 18-foot-wide road from Eagle Mountain Road.

(5) Includes transmission system associated with connecting Red Bluff Substation to Gen-Tie Line and DPV1.

(6) New Desert Center Communications Site.



***Alternative 1—Proposed Action Alternative with Land Use Plan Amendment***

With the Proposed Action Alternative, the following configurations of the three Project components are proposed, resulting in approximately 4,176 acres of permanent disturbance:

- Solar Farm Layout B (SF-B);
- Gen-Tie Line A-1 (GT-A-1); and
- Red Bluff Substation A, with Access Road 2.

Solar Farm Layout B is six miles north of the Desert Center and four miles north of Lake Tamarisk, northeast of and next to Kaiser Road, and southwest of Pinto Wash. SF-B encompasses approximately 3,912 acres entirely on BLM-administered land. Access would be provided by Kaiser Road. Once fully operational, it would produce 550 MW of power.

GT-A-1 exits the southwest of the DSSF, runs south along the west side of Kaiser Road, turns east just north of Desert Center, and then runs south across I-10 to the eastern location being considered for the Red Bluff Substation (Red Bluff Substation A). The 160-foot-wide Gen-Tie corridor and additional fan-shaped areas at corners used for wire stringing for GT-A-1 would encompass approximately 256 acres, although permanent disturbance within this corridor would be 92 acres. The total length of GT-A-1 is approximately 12.1 miles. Of the 12-mile ROW, approximately 11.4 miles would be on BLM land and approximately 0.6 mile would be on land owned in fee by the Metropolitan Water District of Southern California. For the Gen-Tie Line, the Applicant proposes to use steel monopoles, which are expected to be approximately 135 feet tall. Typical spacing between structures would be approximately 900 to 1,100 feet.

Red Bluff Substation A would be on approximately 76 acres of BLM-administered land, approximately four miles southeast of California State Route 177, just south of I-10. The substation would be constructed within the central portion of the parcel. Other substation-related Project elements would require an additional 96 acres. These elements include drainage features, access road, electrical distribution line, transmission system loop-in, material yard/staging area, and a telecommunications site.

***Alternative 2—Alternate Action Alternative with Land Use Plan Amendment***

With the Alternate Action Alternative, the following configurations of the three Project components are proposed, resulting in approximately 4,110 acres of permanent disturbance:

- Solar Farm Layout B (SF-B);
- Gen-Tie Line B-2 (GT-B-2); and
- Red Bluff Substation B.

Solar Farm B is as described for Alternative 1.

GT-B-2 would exit the southwest corner of the Solar Farm site, would run south along the west side of Kaiser Road, then would turn southwest, approximately 1.2 miles north of Desert Center. Then it would travel across Eagle Mountain Road, finally turning south across I-10 to the western location that is being considered for the Red Bluff Substation (Red Bluff Substation B). The 160-foot-wide Gen-Tie corridor and additional fan-shaped areas at corners used for wire stringing would

encompass approximately 203 acres, although permanent disturbance within this corridor would be 68 acres. The total length of GT-B-2 would be approximately 10 miles. Of the 10-mile ROW, approximately 9.4 miles would be on BLM land and approximately 0.6 mile would be on land owned in fee by the Metropolitan Water District of Southern California. The poles used for the Gen-Tie Line would be the same as those described for Alternative 1.

Red Bluff Substation B would be within a 160-acre parcel of private land south of I-10 at Eagle Mountain Road. This substation is expected to require approximately 76 acres and would be generally located in the center of the parcel. Other substation-related Project elements would require an additional 54 acres. Because this substation site is on a parcel of privately owned land, it would be need to be acquired and subsequently owned by SCE.

***Alternative 3—Reduced Solar Farm Footprint Alternative with Land Use Plan Amendment***

With the Reduced Solar Farm Footprint Alternative, the following configurations of the three Project components are proposed, resulting in approximately 3,303 acres of permanent disturbance:

- Solar Farm Layout C (SF-C);
- Gen-Tie Line A-2 (GT-A-2); and
- Red Bluff Substation A, with Access Road 2.

SF-C would be in the same general location as SF-B but would be smaller to reduce overall environmental impacts, particularly on the desert tortoise. The acreage required for this layout would be 3,045 acres, and the power output would be 413 MW. The construction schedule would be 26 months, the same as for SF-B.

GT-A-2 would exit the southwest corner of the DSSF would run for approximately 4,400 feet along the east side of Kaiser Road, until it intersects with the ROW of an existing SCE transmission line. Then it would run to the southeast, along the existing transmission ROW, for approximately 7.2 miles then would turn south for approximately 0.6 mile. Then it would continue due west for approximately 0.5 mile, finally turning south cross I-10 and would continue approximately 1,000 feet (not along any existing feature) to Red Bluff Substation A. The GT-A-2 160-foot-wide Gen-Tie corridor and additional fan-shaped areas at corners used for wire stringing would encompass approximately 226 acres, although permanent disturbance within this corridor would be 86 acres. The total length of GT-A-2 is approximately 10.5 miles. Of the 10.5-mile ROW, 6.5 miles would be on BLM land and 4.0 miles would be on private land. For the portions on private land, 21 separate parcels would be crossed.

Red Bluff Substation A is as described for Alternative 1.

***Alternative 4 – No Issuance of a Right-of-Way Grant and No Land Use Plan Amendment (No Action)***

With this No Action Alternative, the Project would not be approved (all components of the Project would be denied), no ROW grant would be issued to the Applicant, and no CDCA Plan amendment would be approved that would make the land available for large-scale solar development.

***Alternative 5 – No Issuance of a Right-of-Way Grant with Land Use Plan Amendment to Identify the Area as Unsuitable for Solar Development (No Project with Plan Amendment)***

With this No *Project* Alternative, the Project would not be approved (all components of the Project would be denied), no ROW grant would be issued to the Applicant, and the CDCA *Plan* would be amended to identify the Project area as unsuitable for future large-scale solar energy development.

***Alternative 6 – No Issuance of a Right-of-Way Grant with Land Use Plan Amendment to Identify the Area as Suitable for Solar Development (No Project with Plan Amendment)***

Under this No *Project* Alternative, the Project would not be approved (all components of the Project would be denied), no ROW grant would be issued to the Applicant, and the CDCA *Plan* would be amended to identify the Project area as suitable for future large-scale solar energy development.

**Features Common to all Action Alternatives**

Features common to all action alternatives, regardless of the particular layout or route selected, are summarized below.

The DSSF, where the power would be generated, would encompass up to 3,912 acres, consisting of the following components:

- Main generation area, which includes PV arrays, combining switchgear, overhead lines, and access corridors;
- Operations and Maintenance (O&M) Facility;
- Solar Energy Visitors Center;
- On-site substation (where the voltage of the DSSF-generated electricity would be stepped up to 220 kV, which is the voltage of the Gen-Tie Line); and
- Site security and fencing.

The Gen-Tie Line would transmit the electricity generated at the DSSF to the regional transmission system, through the Red Bluff Substation where the power from the DSSF would feed into the SCE's existing Devers Palo Verde 1 (DPV1) 500-kV transmission line. The Gen-Tie Line would be up to 12.1 miles long, encompassing up to 256 acres. For the Gen-Tie Line, the Applicant plans to use steel monopoles 135 feet high and approximately 900 to 1,100 feet apart.

The 500/220-kV Red Bluff Substation would be on approximately 76 acres, with up to an additional 96 acres of permanent disturbance needed for related features, access roads, and drainage control. It would interconnect the power from the DSSF (through the Gen-Tie Line) to SCE's DPV1 transmission line, which passes next to the two substation sites evaluated in this EIS. Substation features are as follows:

- Transmission lines to connect the substation to the DPV1 line;
- Connection of the PV Project's Gen-Tie Line into the substation;
- Modification of some DPV1 towers near the substation;
- Construction of an electric distribution line for substation light and power;

- Installation of telecommunications facilities associated with the Project and the substation;
- Construction of drainage control features outside (but next to) the substation footprint; and
- Construction of new or improvements to existing access roads.

### **Project Implementation for Action Alternatives**

#### ***Project Construction***

The construction of the Project would begin once all applicable approvals and permits have been obtained. Project construction is expected to take approximately 26 months from the beginning of the construction process to completion of construction of the DSSF, the Gen-Tie Line, and Red Bluff Substation. The substation would be constructed on a schedule that allows interconnection and partial energization of the DSSF before Project construction is complete.

#### ***Operation and Facility Maintenance***

The DSSF is designed to have essentially no moving parts, no thermal cycle, and no water use for electricity generation or PV module cleaning. After completion of the construction phase of the Project, the only water used would be for domestic purposes (drinking, washing, flushing toilets) in the on-site facilities, including the O&M Facility and the Visitors Center. This simple Project design would require only limited maintenance throughout its lifetime.

Operation and maintenance of the proposed Project Gen-Tie Line would involve periodic inspection via helicopter or truck. The interconnection lines would be maintained on an as-needed basis and would include maintenance of access roads and erosion/drainage control structures.

The Red Bluff Substation would be unstaffed, and electrical equipment would be remotely monitored. SCE personnel would visit the substation three to four times per month for routine maintenance, which would include equipment testing, monitoring, and repair.

#### ***Project Decommissioning***

The DSSF has a minimum expected lifetime of 30 years, with an opportunity for a lifetime of 50 years or more with equipment replacement and repowering. When the Project concludes operations, much of the wire, steel, and modules that make up the system would be recycled to the extent feasible. The Project components would be deconstructed and recycled or disposed of safely, and the DSSF site could be converted to other uses, in accordance with applicable land use regulations in effect at the time of closure. Consistent with BLM and NEPA requirements, a detailed Decommissioning and Reclamation Plan would be developed to protect public health and safety and to be environmentally acceptable.

#### ***Project Modifications Since Publication of the Draft EIS***

*Since the Project's Draft EIS was published, the Applicant has made various minor changes in the Project design that are included in this Final EIS. These changes have been made for such reasons as improving efficiency; reducing costs; avoiding and minimizing environmental impacts; and incorporating input from regulatory agencies, community members, and other stakeholders. The BLM has concluded that these revisions to the Project would not significantly increase, and in some situations would decrease, impacts compared with the impacts described in the Draft EIS.*

The Project modifications include:

Solar Farm Site and Gen-Tie Line

- A revised layout of Solar Farm facilities that reduces the footprint for Solar Farm Layout B from approximately 4,245 acres to approximately 3,912 acres while achieving the same 550-MW generating capacity. Figure ES-1 shows the change in the footprint.
- A revised construction approach involving the use of innovative site preparation techniques that reduce the required volume of earth movement, including: (1) a “disc and roll” technique that uses farm tractors to till the soil over much of the Solar Farm site and then roll it level, and (2) “micrograding” or “isolated cut and fill and roll” of other areas of the site to trim off high spots and use the material to fill in low spots. These techniques minimize the area of the Solar Farm site where conventional cut and fill grading will occur.
- A modified approach to supplying water during construction for dust control and soil preparation throughout the Solar Farm site. The modified approach involves use of several temporary construction ponds for water storage at various locations around the site.
- Modification of the Gen-Tie Line poles from a delta to a vertical configuration to provide the opportunity to co-locate transmission lines for possible additional projects in the area.

Red Bluff Substation

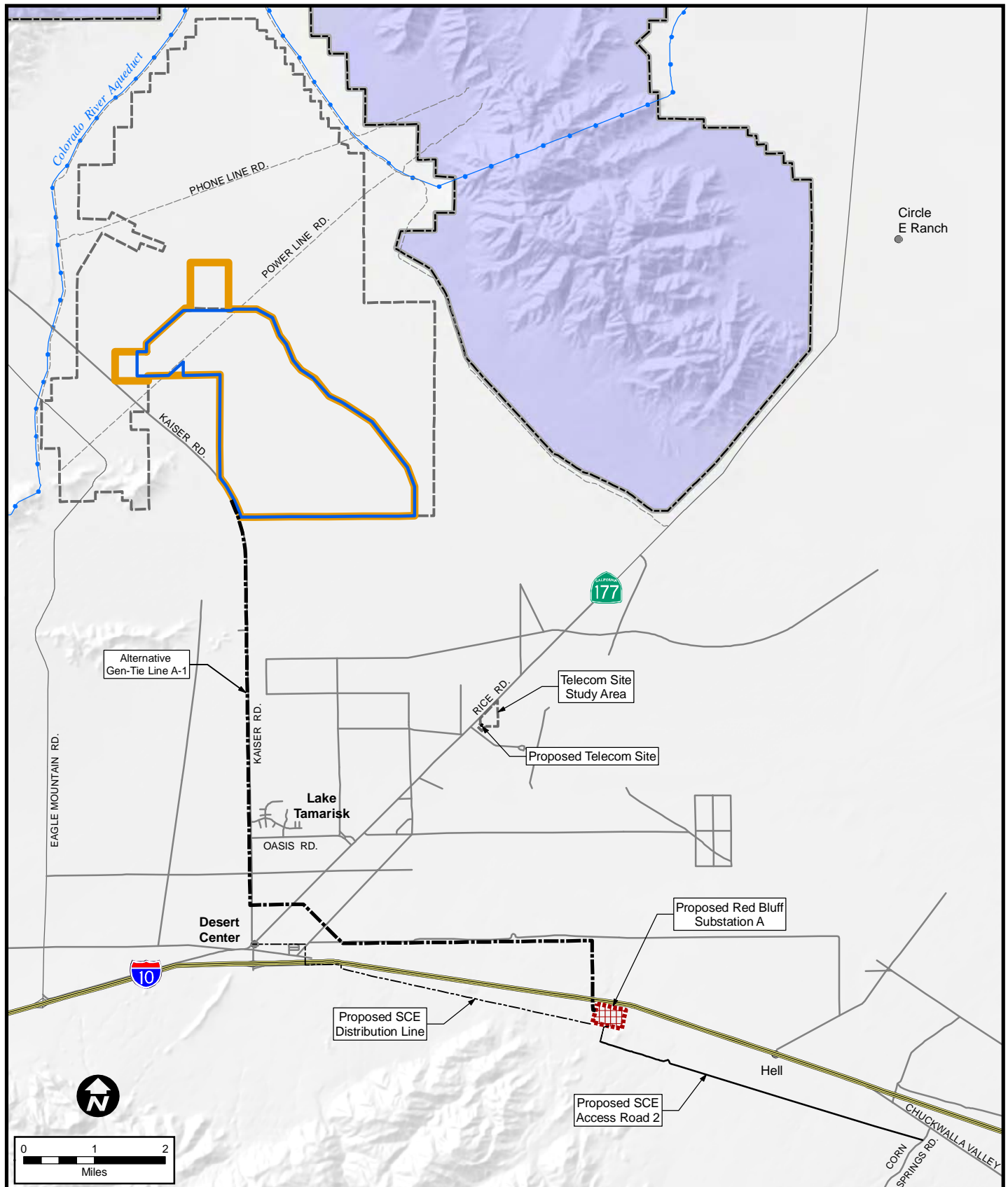
- An emergency diesel powered generator for a back-up power source.
- A well to provide dust control during construction and to serve a septic system for periodic operational visits by employees.
- A septic system and restroom for employees during operational activities.
- A material yard/staging area adjacent to the substation footprint.

The Project modifications, noted above, are incorporated into the action alternatives and reflected in the text, tables, and figures in Chapters 2, 3 and 4, unless otherwise indicated.

**Alternatives Considered but Eliminated from Further Analysis**

Alternatives not carried forward did not meet Project purpose and need or Project objectives, were deemed to be technically disadvantageous, or had greater environmental impacts than the currently proposed Project alternatives. These alternatives were considered but eliminated from further analysis:

- Larger Project within the Project Study Area;
- Direct Desert Tortoise Avoidance Alternative within the Project Study Area;
- Private Land in the Chuckwalla Valley;
- Contaminated Sites Near the Devers-Palo Verde Corridor;
- Alternative BLM Land;
- Alternate Nonrenewable Power Generating Technologies;
- Concentrating Solar Power Technologies;



**LEGEND**

-  Proposed Gen-Tie Line A-1
-  SCE Access Road
-  SCE Distribution Line
-  Study Area Boundary for Solar Farm
-  Solar Farm B Footprint in DEIS
-  Solar Farm B Footprint in FEIS
-  Red Bluff Substation (Alternative A)
-  Joshua Tree National Park Boundary
-  Aqueduct

Source: First Solar.



DESERT SUNLIGHT SOLAR FARM

**Figure ES-1**  
**Modification of**  
**Solar Farm Layout B**

- Wind Energy;
- Alternative Transmission and Interconnection Locations;
- Distributed and Rooftop Photovoltaics; *and*
- *Underground installation of Gen-Tie Lines.*

#### **ES.4 PUBLIC AND AGENCY COORDINATION**

The BLM, DOE, and California Public Utilities Commission rely on the public to help identify key issues, to suggest a range of alternatives and appropriate mitigation, and to comment on the environmental analysis.

##### ***Public Scoping Process and Summary***

The BLM published a Notice of Intent (NOI) to prepare an EIS on January 13, 2010, in the *Federal Register*, Volume 75, Number 8. Publication of the NOI began a 30-day comment period that ended February 12, 2010. The BLM established a Web site, with Project information describing the various methods for providing public comment on the Project and including an e-mail address where comments could be sent electronically. (Refer to Section 5.3.2 for the Web site and e-mail addresses.)

Notification for a public scoping meeting, held on January 28, 2010, was posted on the BLM's Web site and was e-mailed to the local newspaper, *The Desert Sun*, on January 13, 2010. In addition, notices were sent by certified mail to responsible and trustee agencies under CEQA, to all landowners within 300 feet of the Project boundary, and to other interested parties.

A public scoping meeting was held on January 28, 2010, at the University of Riverside Palm Desert Graduate Center, 75-080 Frank Sinatra Drive, Palm Desert, California. Sunlight made a presentation describing the Project, and the BLM made presentations describing the environmental review process. Twenty-two people wrote their names on a voluntary sign-in sheet.

Fourteen comment letters were received during the scoping comment period that ended on February 12, 2010. Comments were received on the following categories: purpose and need, alternatives development, air resources (air sheds), water resources (surface and groundwater), biological resources (vegetation and wildlife), cultural resources, visual resources, land use and special designations, public health and safety, noise and vibration, recreation, socioeconomics, environmental justice, and cumulative impacts. Comments received during scoping are addressed in the analysis of impacts in this EIS.

##### ***Public Outreach Activities***

First Solar has engaged in additional public outreach for the Desert Sunlight Project in order to further promote public participation in the development plans for the Project. These activities include meetings held with individuals and groups commenting on the Project, additional workshops held in the local community providing direct access for the community to ask questions and comment on the Project, and discussions with local, state, and federal government officials and meetings with individual groups. Based on these discussions, First Solar conducted additional environmental studies to help further assess potential environmental effects of the Project, considered additional alternatives to provide a greater range of reasonable alternatives for the

Project, and adjusted the Project alternative boundaries to lessen the potential environmental impacts of the Project. Information collected or developed as a result of these meetings was provided to the BLM and has been incorporated into this document.

### **Agency Coordination**

Federal, state, and local permits and approvals would be required before construction and operation of the Project, or any action alternative, could proceed. A list of the major permits, approvals, and consultations required is presented in the EIS. The Applicants (Sunlight and SCE) would be responsible for obtaining all permits and approvals required to implement any authorized activities.

Federal agencies requiring permits for one or more Project components are the following:

- BLM;
- DOE; and
- US Fish and Wildlife Service.

State agencies requiring permits for one or more Project components are as follows:

- California Department of Fish and Game;
- Regional Water Quality Control Board;
- California Independent System Operator;
- California Public Utilities Commission;
- California Department of Transportation;
- South Coast Air Quality Management District; and
- Native American Heritage Commission.

Local agencies requiring permits for one or more Project components are as follows:

- Riverside County; and
- Metropolitan Water District of Southern California.

## **ES.5 SUMMARY OF ENVIRONMENTAL CONSEQUENCES**

The analysis contained in this EIS indicates that the potential environmental effects from implementation of the proposed Project (or one of the other action alternatives) would result in adverse effects, although most can be reduced with mitigation. However, the impacts on air resources, cultural resources, and visual resources cannot be reduced to less than significant and are unavoidable.

Table ES-2 provides a summary of impacts by alternative; Table ES-3 provides a summary of all measures identified by Sunlight or SCE, measures required by law, regulation, or policy, and additional measures identified by the BLM.



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**Table ES-2  
Summary of Project Impacts by Alternative**

<b>Resource</b>	<b>Alternative 1 Proposed Action Alternative</b>	<b>Alternative 2 Alternate Action Alternative</b>	<b>Alternative 3 Reduced Footprint Alternative</b>	<b>Alternative 4 No Action (No ROW Grant, No PA)</b>	<b>Alternative 5 No Action: ROW Grant, PA to Exclude Solar</b>	<b>Alternative 6 No Action: No ROW Grant, PA to Allow Solar</b>
<b>3.2/4.2 Air Resources</b>						
	<i>Construction:</i> Construction activities and associated vehicle traffic would generate emissions of criteria pollutants and hazardous air pollutants. Daily construction-related emissions for SF-B would exceed SCAQMD regional emissions significance thresholds for reactive organic compounds, nitrogen oxides, carbon monoxide, PM10, and PM2.5.	Similar to Proposed Action	Similar to Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Operations:</i> Operational emissions would involve vehicle travel by Solar Farm employees or other employees conducting periodic inspections or maintenance activity along the Gen-Tie Line or at the Red Bluff Substation. Emissions would be minor.	Same as Proposed Action	Similar to Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Decommissioning:</i> Emissions would be comparable in type and magnitude, but likely lower than, the construction emissions.	Same as Proposed Action	Similar to Proposed Action	No Impact	No Impact	Similar to Proposed Action
<b>3.3/4.3 Vegetation</b>						
	<i>Construction:</i> Permanent removal of 4,066 acres of creosote bush scrub, 96 acres of desert dry wash woodland, 6 special status plant species, and 297 acres of jurisdictional resources (includes desert dry wash woodland).	Permanent removal of 4,005 acres of creosote bush scrub, 93 acres of desert dry wash woodland, 5 special status plant species, and 290 acres of jurisdictional resources (includes desert dry wash woodland).	Permanent removal of 3,174 acres of creosote bush scrub, 97 acres of desert dry wash woodland, 6 special status plant species, and 197 acres of jurisdictional resources (includes desert dry wash woodland).	No Impact	No Impact	Similar to Proposed Action
	<i>Operations:</i> Changes in the site's geomorphic conditions and site hydrology could adversely affect hydrology and water quality of desert dry wash woodland and jurisdictional resources located downstream of site. Maintenance of access roads has potential to introduce dust and invasive species into areas immediately adjacent to the site.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Decommissioning:</i> Decommissioning activities have potential to introduce dust and invasive species into areas immediately adjacent to the site.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
<b>3.4/4.4 Wildlife</b>						
	<i>Construction:</i> Construction would result in permanent habitat loss for wildlife, including special status wildlife and breeding and foraging habitat for non-special status species. Construction would also result in the permanent disturbance of 190 acres of the Chuckwalla DWMA and 187 acres of the Chuckwalla desert tortoise CHU. Trash and debris generated by construction activities could attract predators of desert tortoise, common ravens, to the site.	Similar to Proposed Action. Fewer acres of Chuckwalla DWMA (56 acres) and Chuckwalla CHU (139 acres) would be affected.	Similar to Proposed Action. Similar acres of Chuckwalla DWMA (162 acres) and Chuckwalla CHU (166 acres) would be affected.	No Impact	No Impact	Similar to Proposed Action
	<i>Operations:</i> Permanent occupation of the site by employees could also introduce trash into the area which could attract common ravens. Transmission line towers provide artificial perches and nest sites for raptors and ravens and, therefore, could also attract common raven to the area.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Decommissioning:</i> Trash and debris generated by decommissioning activities could attract predators of desert tortoise, common ravens, to the site.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
<b>3.5/4.5 Climate Change</b>						
	<i>Construction:</i> Construction activities and associated vehicle traffic would generate emissions of GHG pollutants.	Similar to Proposed Action	Similar to Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Operations:</i> O&M activities for the Project would be small sources of on-going GHG emissions. Only the solar farm facility would have on-site employees. However, the annual GHG emissions generated by O&M activities at Project facilities would be more than off-set by the avoided greenhouse gas emissions that result from solar-based electrical power generation that effectively displaces other sources of power generation.	Same as Proposed Action	Similar to Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Decommissioning:</i> Greenhouse gas emissions from facility decommissioning would be generally similar in nature to those of facility construction, but emission quantities would likely be less than those generated by construction activities.	Same as Proposed Action	Similar to Proposed Action	No Impact	No Impact	Similar to Proposed Action

**Table ES-2 (continued)  
Summary of Project Impacts by Alternative**

<b>Resource</b>	<b>Alternative 1 Proposed Action Alternative</b>	<b>Alternative 2 Alternate Action Alternative</b>	<b>Alternative 3 Reduced Footprint Alternative</b>	<b>Alternative 4 No Action (No ROW Grant, No PA)</b>	<b>Alternative 5 No Action: ROW Grant, PA to Exclude Solar</b>	<b>Alternative 6 No Action: No ROW Grant, PA to Allow Solar</b>
<b>3.6/4.6 Cultural Resources</b>	<p><i>Construction:</i> Construction would directly impact at least 57 sites within the footprint of alternative components. Twenty of the sites are potentially CRHR-eligible. In addition, construction would directly impact the potential DTC-CAMA Historic District and the North Chuckwalla Petroglyph District (CA-RIV-1383, NRHP-listed). Construction would indirectly impact the historic landscapes of the Colorado River Aqueduct (NRHP-eligible), the North Chuckwalla Mountains Quarry District (CA-RIV-1814, NRHP-listed), and prehistoric site CA-RIV-330 (NRHP-eligible) by constructing modern elements that would disturb the historic setting of these resources.</p> <p>Native American consultation is on-going at this time and may find that sacred sites, TCPs, or traditional use areas are present within or near the Alternative 1 construction area. Construction may directly disturb Native American resources, impede access to these areas, or otherwise disrupt traditional practices.</p>	<p><i>Construction:</i> Construction would directly impact 42 sites within the footprint of alternative components. Twenty-one of the sites are potentially CRHR-eligible and assumed to be NRHP-eligible. Thirteen are believed to be associated with the DTC-CAMA Historic District. All Project components would have indirect audible and visual impacts on the historic landscapes of the Colorado River Aqueduct (NRHP-eligible), North Chuckwalla Petroglyph District (CA-RIV-1383, NRHP-listed), North Chuckwalla Mountains Quarry District (CA-RIV-1814, NRHP-listed), and prehistoric site CA-RIV-330 (NRHP-eligible) by constructing modern elements that would disturb the historic setting of these resources.</p> <p>Native American impacts would be the same as for the Proposed Action.</p>	<p><i>Construction:</i> Construction would directly impact 41 sites within the footprint of alternative components, as well as the potential DTC-CAMA Historic district and the North Chuckwalla Petroglyph District (CA-RIV-1383, NRHP-listed). Fourteen are potentially CRHR-eligible, nine of these are believed to be associated with the DTC, and one is a contributing, NRHP-listed site in the North Chuckwalla Petroglyph District. All Project components would indirectly impact the historic landscapes of the Colorado River Aqueduct (NRHP-eligible), the North Chuckwalla Mountains Quarry District (CA-RIV-1814, NRHP-listed), and prehistoric site CA-RIV-330 (NRHP-eligible) by constructing modern elements that would disturb the historic setting of these resources.</p> <p>Native American impacts would be the same as for the Proposed Action.</p>	No Impact	No Impact	Similar to Proposed Action
	<p><i>Operations:</i> O&amp;M would primarily have indirect impacts on the historic landscapes of five resources and possibly an unknown number of Native American resources, stemming from new construction within these landscapes that would not be in keeping with the historic nature and setting of the resources. The presence of Project components may exclude Native American access to resources of traditional significance or detract from the viewshed of a sacred site, traditional use area, or TCP.</p>	Similar to Proposed Action	Similar to Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<p><i>Decommissioning:</i> Decommissioning would restore the historic landscapes of three other NRHP-eligible or -listed cultural resources. Additionally, the viewshed of possible sacred sites, TCPs, and traditional use areas would be restored, as would access by Native Americans to use such areas within the Project area. However, direct impacts on one potential historic district and another NRHP- and CRHR-listed district would remain since construction of Alternative 1 would permanently impact sites that contribute to these districts.</p>	Similar to Proposed Action	Similar to Proposed Action	No Impact	No Impact	Similar to Proposed Action

**Table ES-2 (continued)  
Summary of Project Impacts by Alternative**

<b>Resource</b>	<b>Alternative 1 Proposed Action Alternative</b>	<b>Alternative 2 Alternate Action Alternative</b>	<b>Alternative 3 Reduced Footprint Alternative</b>	<b>Alternative 4 No Action (No ROW Grant, No PA)</b>	<b>Alternative 5 No Action: ROW Grant, PA to Exclude Solar</b>	<b>Alternative 6 No Action: No ROW Grant, PA to Allow Solar</b>
<b>3.7/4.7 Paleontological Resources</b>						
	<i>Construction:</i> Construction would have low potential for direct impacts on vertebrate fossils and other scientifically valuable paleontological resources.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Operations:</i> Same as for construction.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Decommissioning:</i> Same as for construction.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
<b>3.8/4.8 Geology and Soil Resources</b>						
	<i>Construction:</i> Construction would increase exposure of people and/or property to seismic hazards and increase erosion of soils from wind and water.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Operations:</i> O&M would increase exposure of people and/or property to seismic hazards.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Decommissioning:</i> Same as for construction.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
<b>3.9/4.9 Lands and Realty</b>						
	<i>Construction:</i> Construction would develop 4,165 acres, primarily consisting of generally undeveloped BLM-administered land, including 0.0003 percent of the Chuckwalla DWMA and CHU, and a small amount of MWD and private land, precluding other uses of these lands. Additional acreage would temporarily be disturbed during construction for access roads, staging areas, and similar purposes necessary for construction to take place. All portions of the development that would be on BLM-administered land would be compatible with the CDCA Plan.	Similar to Proposed Action (4,100 acres vs 4,165 acres)	Fewer acres developed than Proposed Action (3,292 acres vs 4,165)	No Impact	No Impact	Similar to Proposed Action
	<i>Operations:</i> O&M would continue use of land for the proposed Project, thereby precluding other potential uses of the area.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Decommissioning:</i> Decommissioning would make the land available for other uses.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
<b>3.10/4.10 Noise and Vibration</b>						
	<i>Construction:</i> Construction activities for all Project components would generate temporary increases in local noise levels. On-site noise levels would diminish rapidly with increasing distance from the active construction operations. Noise levels from on-site construction activity and construction-related traffic would not exceed Riverside County land use compatibility standards at existing residences. Temporary noise impacts to wildlife would be limited to the construction sites and immediately adjacent locations. Ground vibrations from construction equipment would not be perceptible at existing residences near the construction sites.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Operations:</i> Operational noise levels at the Solar Farm would be limited to occasional vehicle use within the site, minor maintenance activities, and low equipment noise from PCS stations and the on-site substation. Daytime and nighttime operational noise levels from the Solar Farm would be comparable to existing background noise levels at the property line. GT-A-1 would have no operational noise levels. Red Bluff Substation A would generate an operational CNEL level of about 60 dBA outside the Substation property line, but there are no noise-sensitive land uses near the Substation site.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Decommissioning:</i> Noise and vibration impacts of facility decommissioning would be similar to those of facility construction, but noise and vibration levels would likely be less than those generated by construction activities.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action

**Table ES-2 (continued)  
Summary of Project Impacts by Alternative**

<b>Resource</b>	<b>Alternative 1 Proposed Action Alternative</b>	<b>Alternative 2 Alternate Action Alternative</b>	<b>Alternative 3 Reduced Footprint Alternative</b>	<b>Alternative 4 No Action (No ROW Grant, No PA)</b>	<b>Alternative 5 No Action: ROW Grant, PA to Exclude Solar</b>	<b>Alternative 6 No Action: No ROW Grant, PA to Allow Solar</b>
<b>3.11/4.11 Public Health and Safety/Hazardous Materials</b>						
	<p><i>Construction:</i> Construction would increase the exposure of people and the environment to hazards related to:</p> <ul style="list-style-type: none"> <li>• Hazardous Materials/Hazardous Waste;</li> <li>• Emergency Evacuation and Emergency Response Plans;</li> <li>• Wildfire; and</li> <li>• Intentionally Destructive Acts.</li> </ul> <p>The 185-foot tower at the telecom site (associated with the Red Bluff Substation) has the potential to increase hazards because of the nearby private airstrip.</p>	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<p><i>Operations:</i> Potential increase in hazards associated with the O&amp;M of the 185-foot telecommunication site tower.</p>	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<p><i>Decommissioning:</i> Decommissioning of Red Bluff Substation would decrease hazards associated with the 185-foot microwave tower at the telecom site.</p>	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
<b>3.12/4.12 Recreation</b>						
	<p><i>Construction:</i> Construction of SF-B would close a portion of one OHV route; however, other travel options exist in the area. There are no OHV or travel routes within GT-A-1 and Red Bluff Substation A. Construction of the visitor's center could have beneficial impacts to the area.</p>	Same as Proposed Action	Same as Proposed Action except that there would be no impact to OHV or recreational activities as construction of SF-C would not require that the three OHV routes in the vicinity be closed or rerouted.	No Impact	No Impact	Similar to Proposed Action
	<p><i>Operations:</i> Similar to construction.</p>	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<p><i>Decommissioning:</i> Similar to construction.</p>	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
<b>3.13/4.13 Socioeconomic and Environmental Justice</b>						
	<p><i>Construction:</i> SF-B and the Red Bluff Substation A are situated on BLM land and, as such, the construction of these facilities would not displace either local or regional businesses or residents, nor would it result in a substantial reduction in employment or income in the regional and local economy. They would result in short-term increases in regional employment and income if the construction crew hired to work on the Project were not previously employed. It could indirectly generate increased expenditures, income, and employment in the local economies in which the construction workforce spends its earnings and would generate direct expenditures in the regional economy for equipment, supplies, and services.</p> <p>No impacts that could occur to environmental justice populations would be disproportionate to these populations.</p>	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<p><i>Operations:</i> O&amp;M for the Project would not result in measurable impacts on socioeconomics of the region or local communities. Likewise, no impacts that could result from O&amp;M on environmental justice populations would be disproportionate to these populations. Operations would not displace either businesses or residents, nor would it substantially reduce the employment or income in the regional economy.</p>	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<p><i>Decommissioning:</i> The decommissioning of Project components would result in short-term impacts on the regional economy in Riverside County through an increase in employment required to decommission the DSSF. Once completely removed, potential long-term impacts include a reduction of property tax revenue because the land would no longer be developed and improved, thereby eliminating the requisite property tax.</p>	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action

**Table ES-2 (continued)  
Summary of Project Impacts by Alternative**

<b>Resource</b>	<b>Alternative 1 Proposed Action Alternative</b>	<b>Alternative 2 Alternate Action Alternative</b>	<b>Alternative 3 Reduced Footprint Alternative</b>	<b>Alternative 4 No Action (No ROW Grant, No PA)</b>	<b>Alternative 5 No Action: ROW Grant, PA to Exclude Solar</b>	<b>Alternative 6 No Action: No ROW Grant, PA to Allow Solar</b>
<b>3.14/4.14 Special Designations</b>						
	<i>Construction:</i> Construction of SF-B and Red Bluff Substation A would cause temporary indirect impacts on the Joshua Tree Wilderness Area and Chuckwalla Mountains Wilderness. Indirect impacts would be associated with fugitive dust, noise, and nighttime lighting. Construction would not cause impacts on cultural resources within Alligator Rock ACEC.	Same as Proposed Action	Similar to Proposed Action, slightly reduced impacts for SF-C	No Impact	No Impact	Similar to Proposed Action
	<i>Operations:</i> O&M of SF-B would cause permanent indirect impacts on users of the Joshua Tree Wilderness Area.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Decommissioning:</i> Similar to construction and O&M.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
<b>3.15/4.15 Transportation and Public Access</b>						
	<i>Construction:</i> Delay at intersections would increase slightly; however, the LOS of intersections would remain at "A". Portions of the Project would overlap low-level military flight paths. The Telecom Site would be approximately 5,500 feet from the runway of the former Desert Center Airport. Project-generated traffic would contribute to deterioration of local roads. Road or lane closures, traffic rerouting, and other traffic controls (such as flaggers) would be required for short durations during construction of GT-A-1 for certain activities such as wire stringing across roads.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Operations:</i> Minimal traffic impacts. No impacts for other issues.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Decommissioning:</i> Similar to construction.	Same as Proposed Action	Same as Proposed Action	No Impact	No Impact	Similar to Proposed Action
<b>3.16/4.16 Visual Resources</b>						
	<i>Construction:</i> Construction would result in the permanent disturbance of approximately 4,165 acres. Impacts from construction activities, equipment, and vehicles would be visible and changes to the characteristic landscape from construction would alter visual resources. For KOPs 1, 2, and 5, the degree of contrast would comply with interim visual management Class II and III objectives. For KOPs 3, 4, and 6, the strong degree of contrast would not comply with interim visual management Class II and III objectives.	Similar to Proposed Action	Similar to Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Operations:</i> Impacts from O&M would be visible and changes to the characteristic landscape would alter visual resources. For KOPs 1, 2, and 5, the degree of contrast would comply with interim visual management Class II and III objectives. Due to the proximity of KOPs 3, 4, and 6 to Project components, the degree of contrast would not comply with interim visual management Class II and III objectives.	Similar to Proposed Action	Similar to Proposed Action	No Impact	No Impact	Similar to Proposed Action
	<i>Decommissioning:</i> Decommissioning would result in rehabilitating approximately 4,165 acres. Impacts from decommissioning would be visible. Changes to the characteristic landscape from decommissioning would restore the natural visual resources to the landscape. This would not occur until the end of the Project lifespan, which could be greater than 50 years. Due to the slow pace of natural desert ecology, however, it would likely take decades after decommissioning for the landscape to resemble the existing conditions. The level of change to the characteristic landscape would comply with interim visual management Class II and III objectives. Decommissioning activities would be expected to leave the landscape in a condition that does not attract attention.	Similar to Proposed Action	Similar to Proposed Action	No Impact	No Impact	Similar to Proposed Action

**Table ES-2 (continued)  
Summary of Project Impacts by Alternative**

<b>Resource</b>	<b>Alternative 1 Proposed Action Alternative</b>	<b>Alternative 2 Alternate Action Alternative</b>	<b>Alternative 3 Reduced Footprint Alternative</b>	<b>Alternative 4 No Action (No ROW Grant, No PA)</b>	<b>Alternative 5 No Action: ROW Grant, PA to Exclude Solar</b>	<b>Alternative 6 No Action: No ROW Grant, PA to Allow Solar</b>
<b>3.17/4.17 Water Resources</b>	<p><i>Construction:</i> Proposed Project water demand would be approximately 703 AFY for the 26-month construction period, or approximately 25 percent of the available surplus inflow to the groundwater basin (estimated to be 2,600 to 3,300 AFY).</p> <p>Decompaction of the soil over 36 percent of SF-B footprint would minimize any reduction in groundwater recharge caused by compacting the surface soil during construction.</p> <p>Drawdown in the aquifer in the vicinity of the well used to provide water for construction would be a maximum of approximately 18 feet, with minor drawdown extending more than one mile from the pumping well. Impacts would be temporary since they would occur only during construction.</p> <p>Construction would alter surface drainage patterns, but hydrologic modeling indicated that construction would result in minor changes in the 100-year storm characteristics.</p> <p>Runoff from storms could transport spilled substances off site into intermittent stream channels. Potential for flooding would not significantly increase during construction of SF-B. GT-A-1 would not increase flooding potential. Red Bluff Substation A would be constructed over the site of several intermittent stream channels. Design of the Substation incorporates diversion channels to divert runoff around the footprint of the Substation. Once constructed, the diversion channels would reduce the potential for flooding the construction site. A retention basin would also capture runoff and slow and reduce peak flows.</p>	Similar to Proposed Action	Similar to Proposed Action, although slightly reduced impacts	No Impact	No Impact	Similar to Proposed Action
	<p><i>Operations:</i> Impacts would be much less than during construction.</p>	Similar to Proposed Action	Similar to Proposed Action, although slightly reduced impacts	No Impact	No Impact	Similar to Proposed Action
	<p><i>Decommissioning:</i> Effects of decommissioning on water resources would be similar to those described for construction. The effects would primarily be from erosion of altered and unprotected land surfaces.</p>	Similar to Proposed Action	Similar to Proposed Action, although slightly reduced impacts	No Impact	No Impact	Similar to Proposed Action

- Notes:**
- ACEC = Area of Critical Environmental Concern
  - AFY = acre-feet per year
  - CHU = Critical Habitat Unit
  - CNEL = community noise exposure level
  - CRHR = California Register of Historic Resources
  - dba = A-weighted decibel
  - DTC-CAMA = Desert Training Center California-Arizona Maneuver Area
  - DWMA = Desert Wildlife Management Area
  - GHG = greenhouse gas
  - KOP = key observation point
  - NRHP = National Register of Historic Places
  - O&M = Operation and Maintenance
  - OHV = off-highway vehicle
  - PM10 = inhalable particulate matter
  - PM2.5 = fine particulate matter
  - SCAQMD = South Coast Air Quality Management District
  - TCP = traditional cultural properties

**Table ES-3  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Air Resources</b>	<p>Sunlight has designed the Project to incorporate various measures that will reduce on-site construction-related emissions and emissions from construction-related traffic.</p> <p><i>AM-AIR-1:</i> Sunlight shall develop and implement a dust control plan that includes the use of dust palliatives to ensure compliance with SCAQMD Rule 403. The dust control plan is expected to focus on reducing fugitive dust from construction activities.</p> <p><i>AM-AIR-2:</i> Construction activity shall be phased across the Solar Farm site in a manner that would minimize the area disturbed on any single day.</p> <p><i>AM-AIR-3:</i> Cut and fill quantities shall be balanced across the Solar Farm site to minimize emissions from grading activities and to avoid the need to import fill materials or to remove excess spoil.</p> <p><i>AM-AIR-4:</i> Sunlight shall use power screeners to obtain sand and gravel requirements on-site, rather than having construction sand and gravel delivered to the Solar Farm site by truck.</p> <p><i>AM-AIR-5:</i> Sunlight shall arrange a shuttle bus program for construction workers, with assembly points in the Palm Springs and Blythe areas. Sunlight expects this shuttle bus system to be heavily used by construction workers, with an average of 89.5 percent of construction workers accessing the Solar Farm site by shuttle bus.</p> <p>SCE has identified two applicant measures that will be implemented during construction of the Red Bluff Substation:</p> <p><i>AM-AIR-6:</i> SCE shall develop and implement a dust control plan to ensure compliance with SCAQMD Rule 403 during substation construction.</p> <p><i>AM-AIR-7:</i> SCE would require bidders for the construction contract to submit a transportation plan describing how workers would travel to the Project site.</p>	<p>MM-AIR-1: Sunlight and SCE shall <u>require all on-site construction equipment to meet EPA Tier 2 or higher emissions standards according to the following:</u></p> <ul style="list-style-type: none"> <li>• <u>April 1, 2010, to December 31, 2011: All off-road diesel-powered construction equipment greater than 50 horsepower (hp) shall meet Tier 2 off-road emissions standards. In addition, all construction equipment shall be outfitted with the BACT devices certified by the California Air Resources Board (CARB). Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 2 or Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.</u></li> <li>• <u>January 1, 2012, to December 31, 2014: All off-road diesel-powered construction equipment greater than 50 hp shall meet Tier 3 off-road emissions standards. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.</u></li> <li>• <u>Post-January 1, 2015: All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.</u></li> <li>• <u>A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided when each applicable unit of equipment is mobilized.</u></li> </ul>



**Table ES-3 (continued)  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Air Resources (cont.)</b>		<p><i>MM-AIR-2.</i> Sunlight shall temporarily stockpile chipped or shredded vegetation debris from the Solar Farm site, then spread it on open areas of the site once construction activity has been completed on a subarea.</p> <p><i>MM-AIR-3.</i> Sunlight shall provide <i>up to four</i> re-application of dust palliatives <i>per year</i> at the Solar Farm site to unpaved roads and parking areas and to the open areas between the rows of solar arrays. <i>Re-application</i> of dust palliatives would reduce fugitive dust from on-site vehicle travel and would reduce the net increase in wind erosion from the Solar Farm site.</p> <p><i>MM-AIR-4: The Project construction contractor(s) shall:</i></p> <ul style="list-style-type: none"> <li>• <i>Submit a transportation plan that describes how adherence to AM-AIR-5 will be achieved, thus minimizing daily construction worker trips to the maximum extent feasible;</i></li> <li>• <i>Appoint a construction relations officer to act as a community liason concerning on-site construction activity including resolution of any issues related to PM10 generation;</i></li> <li>• <i>Where available, use electricity from existing power poles rather than temporary diesel or gasoline power generators; and</i></li> <li>• <i>Restrict construction delivery trucks to model year 2001 or newer.</i></li> </ul>
<b>Vegetation</b>	<p><i>AM-BIO-1.</i> A <i>Habitat Compensation Plan</i> is being prepared and will be implemented by the Applicant to compensate for the loss of creosote desert scrub, desert dry wash woodland, and jurisdictional resources. Compensation will be accomplished by acquisition of mitigation land or conservation easements or by providing funding for specific land acquisition, endowment, restoration, and management actions under one of several programs including the recently approved mitigation program created by SB 34 <i>and as required under MM-BIO-2, Off-site Compensation.</i> The <i>Habitat</i></p>	<p><i>MM-BIO-1. Construction Monitoring.</i> A BLM-approved biologist shall conduct construction monitoring during all construction activities to ensure that construction activities are contained within the staked and flagged construction areas at all times. The construction monitor shall also be present during all ground disturbing activities to either actively or passively relocate special status wildlife species, other than the desert tortoise, nesting bird species, and burrowing owl (e.g., rosy boa, chuckwalla, Palm Springs round-tailed squirrel, American badger, and Colorado Valley woodrat [and burro deer,</p>

**Table ES-3 (continued)  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Vegetation (cont.)</b>	<p><i>Compensation Plan</i> will be reviewed and approved by BLM, the USFWS, and CDFG. The precise details of the mitigation, including mitigation ratios, will be established in the BLM ROW grant, USFWS Biological Opinion, and CDFG 2080.1 Consistency Determination. The draft plan is provided in Appendix H.</p> <p>At a minimum, mitigation ratios required in the NECO Plan/EIS are 1:1 for <i>permanent impacts</i> to creosote bush scrub, 3:1 for <i>permanent impacts</i> to desert dry wash woodland, and 5:1 for <i>permanent impacts</i> to the Chuckwalla DWMA and Chuckwalla CHU). Mitigation ratios may be greater based upon the requirements of the USFWS and CDFG. Finally, areas occupied by the burrowing owl will be mitigated at 6.5 acres per occupied burrow (which will be covered by mitigation of creosote bush scrub habitat) and creation or enhancement of two burrows will be implemented for every active burrow.</p> <p><i>AM-BIO-2.</i> A Draft <i>Integrated Weed Management Plan</i> (IWMP) has been prepared pursuant to BLM’s <i>Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States</i> (BLM 2007) and the <i>National Invasive Species Management Plan</i> (The National Invasive Species Council 2008), and will be implemented by the Applicant to reduce the potential for the introduction of invasive species during construction, operation and maintenance, and decommissioning of the Project. The draft plan is in Appendix H of this document and will be reviewed and approved by the BLM.</p> <p>The following measures are required in the Plan and will be implemented by the Applicant to monitor and control invasive species (details associated with these measures are provided in Section 4.3):</p> <ul style="list-style-type: none"> <li>• Preventative Measures During Construction</li> <li>• Containment and Control Measures</li> <li>• Monitoring</li> </ul>	<p>Nelson’s bighorn sheep, and mountain lion if need be), found within the construction zones to a suitable location outside of the Project footprint. <i>The construction monitor shall also inspect fencing and netting at all construction ponds to ensure that the ponds are not accessible to potential avian or canid desert tortoise predators or to wildlife that could drown or become entrapped within the enclosures. Netting and fencing must prevent the ponds from becoming water source “subsides” to predators or from becoming hazards to native wildlife.</i> The construction monitor shall have the authority to stop work and report directly to the Applicant’s Environmental Manager (EM) to ensure compliance with the Project Description, applicant-proposed measures, and mitigation measures. The construction monitor shall provide the Applicant’s EM with weekly updates and quarterly monitoring reports. After construction has been completed, the construction monitor shall provide the Applicant’s EM with a final monitoring report. The Applicant’s EM shall provide BLM with weekly status updates on the status of construction and monitoring efforts and shall provide BLM with copies of the quarterly monitoring reports and the final monitoring report. BLM shall be responsible for ensuring that construction monitoring is conducted during all construction activities.</p> <p><i>MM-BIO-2. Off-site Compensation: This Mitigation Measure provides further detail and specificity to the habitat compensation land requirements described in Applicant Measure AM-BIO-1. The draft Habitat Compensation Plan shall be revised to reflect acreages and habitat types as described herein. The revised habitat Compensation Plan shall be submitted for approval to BLM, USFWS, CDFG, and CPUC before its finalization and implementation. The Applicant (Sunlight or SCE) shall acquire and protect, in perpetuity, compensation habitat to mitigate impacts to biological resources listed below. The compensation lands shall be placed under conservation management to be funded through the terms described herein. The acreages and ratios shall be based upon final calculation of impacted acreage for each resource and on ratios set forth in Applicant Measure AM-BIO-1 and in the draft Habitat Compensation Plan dated 17 Dec 2010. Acreages of anticipated compensation requirements as summarized throughout</i></p>

**Table ES-3 (continued)  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<p><b>Vegetation (cont.)</b></p>	<ul style="list-style-type: none"> <li>• Reporting</li> <li>• Success Criteria</li> </ul> <p><i>AM-BIO-3. Pre-Construction Surveys for Special Status Plant Species and Cacti.</i> Prior to construction, the Applicant will stake and flag the construction area boundaries, including the construction areas for the Solar Farm site, Gen-Tie Lines, and Red Bluff Substation; construction laydown, parking, and work areas; and the boundaries of all temporary and permanent access roads. A BLM-approved biologist will then survey all areas of proposed ground disturbance for special status plant species and cacti during the appropriate blooming period for those species having the potential to occur in the construction areas. All special status plant species and cacti observed will be flagged for transplantation. <u>All cacti observed will be flagged for transplantation and special status plant species observed will be flagged for salvage.</u></p> <p><i>AM-BIO-4. Worker Environmental Awareness Program (WEAP).</i> The Applicant will implement a WEAP to educate on-site workers about sensitive environmental issues associated with the Project. The program will be administered to all on-site personnel including surveyors, construction engineers, employees, contractors, contractor’s employees, supervisors, inspectors, subcontractors, and delivery personnel. The program will be implemented during site mobilization, ground disturbance, grading, construction, operation, and closure. Details of the program are provided in Section 4.3.</p> <p>The training will place special emphasis on the special status species that have been observed in the Project locations or have a high likelihood to occur, including special status plant species, desert tortoise and other special status reptile species, Palm Springs round-tailed ground squirrel, burrowing owl, golden eagle, nesting bird species and bat species, and the American badger.</p>	<p><i>this measure are based on impacts analysis of Alternative 1 in Sections 4.3 and 4.4 and ratios described in Applicant Measure AM-BIO-1. Acreages shall be adjusted as appropriate for other alternatives.</i></p> <ul style="list-style-type: none"> <li>• <u>Desert dry wash woodland (101 acres at 3:1 ratio).</u></li> <li>• <u>Occupied desert tortoise habitat (2,757 acres at 1:1 ratio; 1,214 acres at 2:1 ratio; 191 acres at 5:1 ratio).</u></li> <li>• <u>occupied or suitable habitat for breeding or wintering burrowing owls (13 acres for each occupied burrow, estimated as two burrows).</u></li> <li>• <u>state-jurisdictional streambeds (302 acres, including the desert dry wash woodland, above, at 3:1 ratio).</u></li> <li>• <u>creosote bush scrub (4,072 acres at 1:1 ratio).</u></li> <li>• <u>occupied foxtail cactus habitat (estimated as two acres, at 1:1 ratio).</u></li> <li>• <u>undisturbed habitat for most wildlife species including desert kit fox and American badger (i.e., away from sources of noise or other disturbance such as highways, wind farms, etc.) (4,173 acres, at 1:1 ratio).</u></li> <li>• <u>occupied chuckwalla and rosy boa habitat (Red Bluff Substation A site, 149 acres, at 1:1 ratio).</u></li> <li>• <u>suitable/occupied upland shrubland nesting habitat for migratory birds (4,173 acres, at 1:1 ratio).</u></li> <li>• <u>suitable foraging habitat for golden eagles, and within foraging range of a known nesting site (4,173 acres, at 1:1 ratio).</u></li> <li>• <u>suitable or occupied roosting habitat for special status bats (101 acres desert dry wash woodland at Solar Farm B and 149 acres rocky slopes at Red Bluff Substation A), and</u></li> <li>• <u>suitable or occupied habitat for Palm Springs round-tailed ground squirrel (estimated as 92 acres, based on Gen-Tie Line A-1 disturbance), Colorado Valley woodrat (estimated as 149 acres at Red Bluff Substation A location).</u></li> </ul> <p><i>Of the resources listed above, BLM’s focus would be on desert dry wash woodland, occupied desert tortoise habitat, occupied or suitable habitat for breeding or wintering burrowing owls, and state-jurisdictional streambeds. Additional detail is provided in Section 4.3.</i></p>

**Table ES-3 (continued)  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Vegetation (cont.)</b>	<p>BLM will be responsible for ensuring that each construction worker at the site, throughout the duration of construction activities, receives the above training.</p> <p><i>AM-BIO-5.</i> The Applicant will prepare and implement a <i>Vegetation Resources Management Plan</i> that contains the following components (additional detail is provided in Section 4.3):</p> <ul style="list-style-type: none"> <li>• A <i>Vegetation Salvage Plan</i> which discusses the methods that will be used to transplant cacti present within the Project locations following BLM’s standard operating procedures, as well as methods that will be used to transplant special status plant species that occur in the Project locations if feasible.</li> <li>• A <i>Restoration Plan</i> which discusses the methods that will be used to restore creosote bush scrub and desert dry wash woodland habitat that is temporarily disturbed by construction activities.</li> </ul> <p><u>The <i>Vegetation Salvage Plan</i> and <i>Restoration Plan</i> will specify success criteria and performance standards as required per MM BIO-4, <i>Salvage and Restoration Plan Performance Standards</i>.</u> BLM will be responsible for reviewing and approving the Plan and for ensuring that the Applicant implements the Plan including maintenance and monitoring required in the Plan.</p>	<p><u><i>MM-BIO-3. Implement Transplantation. Cacti flagged for transplantation per AM-BIO-3 shall be transplanted per the <i>Vegetation Salvage Plan</i> described in AM-BIO-5 and special status plant species shall be salvaged per the <i>Vegetation Salvage Plan</i> described in AM-BIO-5. The Applicant and SCE shall be responsible for ensuring that all workers at the site, throughout the duration of construction, operation, and decommissioning activities, receives the training described in AM-BIO-4, above. Specific language in Mitigation Measure BIO-3 will take precedence over any discrepancy with the Applicant Measures cited herein.</i></u></p> <p><u><i>MM-BIO-4. Salvage and Restoration Plan Performance Standards. Salvage will occur prior to construction in any area of the proposed Project as described in the approved <i>Vegetation Salvage Plan</i> (described in AM-BIO-5). Post-Project seeding and planting (revegetation) will occur at the decommissioning phase of the Project as described under an approved <i>Restoration Plan</i> (AM-BIO-5). Both salvage and revegetation efforts shall be monitored yearly and shall continue for a period of no less than 10 years or until the defined performance standards are achieved (whichever is sooner).</i></u></p> <p><u><i>The following performance standards must be met by the end of the monitoring period: (a) at least 80% of the species and vegetative cover observed within the temporarily disturbed areas shall be native species that naturally occur in desert scrub habitats; (b) absolute cover and density of native plant species within the revegetated areas shall equal at least 60% of the pre-disturbance or reference vegetation cover; and (c) the site shall have gone without irrigation or remedial planting for a minimum of three years prior to completion of monitoring.</i></u></p> <p><u><i>Remediation activities (e.g., whether additional planting, removal of non-native invasive species, or erosion control) shall be taken during the 10-year period if necessary to ensure the success of the revegetation effort. If the mitigation fails to meet the established performance standards after the 10-year maintenance and monitoring period, monitoring and remedial activities shall extend beyond the 10-year period until the performance standards are met, unless otherwise specified by the BLM and CPUC.</i></u></p>

**Table ES-3 (continued)**  
**Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Vegetation (cont.)</b>		<p><i>As needed to achieve performance standards, the project owner shall be responsible for replacement planting or other remedial action as agreed to by BLM and CPUC. Replacement plants shall be monitored with the same survival and growth requirements as required for original revegetation plantings.</i></p> <p><i>If a fire or flood damages a revegetation area within the 10-year monitoring period, the owner shall be responsible for a one-time replacement. If a second fire or flood occurs, no replanting is required, unless the event is caused by the owner's activity (as determined by BLM or other firefighting agency investigation).</i></p> <p><i>MM-BIO-5. Desert Dry Wash Woodland Monitoring and Reporting Plan. In addition to complying with MM-WAT-3 (Groundwater Level Monitoring Mitigation, and Reporting), the Project owner shall prepare and submit a Desert Dry Wash Woodland Monitoring and Reporting Plan to BLM and CPUC for review and approval prior to commencing project-related pumping activities. Upon approval, the Project owner shall finalize and implement the Plan. Additional details are provided in Section 4.3.</i></p> <p><i>Monthly Desert Dry Wash Woodland Monitoring summary memos shall be submitted to BLM, CDFG, and CPUC during the construction period of the Project. In addition, annual Desert Dry Wash Woodland Monitoring reports shall be submitted for at least the first three years following completion of construction of the Project, if found necessary. The summary memos shall contain the monitoring data required as part of the monitoring program requirements under MM-WAT-3. In addition, each Desert Dry Wash Woodland Monitoring Report shall provide maps and text discussion of each study site, changes in plant health and vigor, changes in groundwater levels in the production wells, and the year's monitoring data.</i></p> <p><i>If results of the groundwater monitoring program under MM-WAT-3 indicate that the project pumping has resulted in water level decline of one foot or more below the baseline trend, and vegetation monitoring for plant stress, mortality, and water potential have documented one or more of the sampling sites for the four groundwater dependent plant species as reaching the threshold (above), the Project owner shall reduce groundwater pumping until water levels stabilize or recover, provide for temporary supplemental watering, or compensate for</i></p>

**Table ES-3 (continued)  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Vegetation (cont.)</b>		<p><i>additional impacts to desert dry wash woodland at the ratio of 3:1, consistent with Mitigation Measure MM-BIO-2. Estimated acreage of additional dry wash woodland impacts shall be submitted to BLM and CPUC for approval. Upon approval, the Project owner shall initiate compensation according to the requirements and conditions for habitat compensation as described in Mitigation Measure MM-BIO-2.</i></p> <p><i>At the conclusion of the three-year monitoring period for Desert Dry Wash Woodland following completion of Project construction, the Project owner, CPUC, and BLM shall jointly evaluate the effectiveness of the Desert Dry Wash Woodland Monitoring and Reporting Plan and determine if monitoring frequencies or procedures should be revised, extended to the operation and decommissioning periods, or eliminated. Should additional data be forthcoming to demonstrate that this potential impact is not verifiable or attributable to this specific project or found inconsistent with state or federal statute, it may be modified or eliminated.</i></p>
<b>Wildlife</b>	<p>Implementation of Applicant Measures BIO-1, BIO-2, BIO-4, and BIO-5 discussed in Section 4.3, Vegetation, would reduce impacts on wildlife as well.</p> <p><i>AM-WIL-1. A Draft Desert Tortoise Translocation Plan has been prepared for the Project and will be implemented by the Applicant to ensure that construction monitoring will be conducted by a BLM-, USFWS-, and CDFG-approved biologists during all construction activities and that any desert tortoise found with the construction zone will be translocated to a suitable location outside of the Project footprint. The draft plan is in Appendix H and will be reviewed and approved by BLM. <u>The final plan will conform to the 2010 USFWS desert tortoise relocation guidelines entitled Translocation of Desert Tortoises (Mojave Population) From Project Sites: Plan Development Guidance. Unpublished Report dated August 2010.</u></i></p> <p>The Desert Tortoise Translocation Plan contains an analysis of several recipient sites for desert tortoises to be translocated from the Solar Farm site and Red Bluff Substation. The final selected recipient site will be determined by BLM, the USFWS, and CDFG.</p>	<p>Implementation of Mitigation Measures BIO-1 through BIO-4 discussed in Section 4.3, Vegetation, would reduce impacts on wildlife as well.</p> <p><i>MM-WIL-1. American Badger and Desert Kit Fox Protection Plan. To avoid direct impacts to American badgers or desert kit foxes, pre-construction surveys shall be conducted for these species concurrent with the desert tortoise surveys. Surveys shall be conducted as described below:</i></p> <p><i>Biological Monitors shall perform pre-construction surveys for badger and kit fox dens in the Project area, including areas within 90 feet of all Project facilities, utility corridors, and access roads. Surveys may be concurrent with desert tortoise surveys. If dens are detected, each den shall be classified as inactive, potentially active, or definitely active.</i></p> <p><i>Inactive dens that would be directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse by badgers or kit foxes. Potentially and definitely active dens that would be directly impacted by construction activities shall be monitored by the Biological Monitor for three consecutive nights using a tracking medium (such as diatomaceous earth or fire</i></p>

**Table ES-3 (continued)  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Wildlife (cont.)</b>	<p>Desert tortoises found along the linear components of the Project, including the Gen-Tie Line, Telecommunications site, and access roads will be relocated out of harm’s way pursuant to USFWS guidance (<i>U.S. Fish and Wildlife Service. 2009. Desert Tortoise Field Manual. Ventura Fish and Wildlife Office. Ventura, California.</i>) Specifically, biological monitors will be present during all construction activities to ensure that active burrows are avoided. If a desert tortoise is found, the tortoise will be allowed to passively traverse the site while construction in the immediate area is halted. If the tortoise does not move out of harm’s way after approximately 20 minutes, a biologist authorized to handle desert tortoise, will actively move the animal out of harm’s way. Vehicles parked in desert tortoise habitat will be inspected immediately prior to being moved. If a tortoise is found beneath a vehicle, a biologist authorized to handle desert tortoise will be contacted to move the animal out of harm’s way, or the vehicle will not be moved until the desert tortoise leaves of its own accord.</p> <p>For desert tortoises in the Solar Farm site and Red Bluff Substation, they will be relocated using the following phased translocation process (additional details are provided in Section 4.4):</p> <ul style="list-style-type: none"> <li>• Installation of Perimeter Fencing</li> <li>• Clearance Surveys and Translocation</li> <li>• Long-term Monitoring</li> <li>• Reporting</li> </ul> <p>During the construction and operations and maintenance phases of the Project, additional BMPs will also be implemented by the Applicant, as described in Section 4.4.</p> <p><i>AM-WIL-2. Contribute to a USFWS Regional Raven Management Plan. The Applicant shall contribute to the U.S. Fish and Wildlife Service (USFWS) Regional Raven Management Program by making a one-time payment of \$105 per acre of Project disturbance to the national Fish and Wildlife Federation Renewable Energy Action Team raven control account.</i></p>	<p><i>clay) and/or infrared camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand. If tracks are observed, and especially if high or low ambient temperatures could potentially result in harm to badger or kit fox from burrow exclusion, various passive hazing methods may be used to discourage occupants from continued use. After verification that the den is unoccupied it shall then be excavated and backfilled by hand to ensure that no badgers or kit foxes are trapped in the den. In the event that passive relocation techniques fail, the Applicant will contact the California Department of Fish and Game to explore other relocation options, which may include trapping.</i></p> <p><i>MM-WIL-2. Nelson’s Bighorn Sheep Protection Plan. If effects to Nelson’s Bighorn Sheep cannot be avoided, the Applicant shall consult with the California Department of Fish and Game (CDFG) to determine the appropriate level of restoration and mitigation for effects to essential habitat and/or travel corridors for Nelson’s bighorn sheep by implementing the following measures:</i></p> <ol style="list-style-type: none"> <li>(a) <i>The Project owner shall compensate or replace the permanent loss of Nelson’s bighorn sheep habitat at a 1:1 ratio as approved by the CDFG. This may include monetary contributions or donations as mitigation which are tied to programs or activities designed to offset potential resource losses or for mitigation banking for habitat restoration, enhancement, or acquisition projects provided that an appropriate and cooperatively developed mitigation agreement has been finalized between the Applicant and CDFG.</i></li> <li>(b) <i>Compensation or replacement mitigation should be oriented within or adjacent to the Project area and designed to rectify the same functions, habitat types and species being impacted wherever possible. Off-site compensation should be considered when mitigation measures cannot be applied to adjacent areas or to benefit the same species that are impacted.</i></li> <li>(c) <i>All final actions associated with compensation mitigation will be approved by CDFG to insure that agreements are consistent with the CDFG’s Sonoran Desert Mountain Sheep Meta-Population Plan.</i></li> </ol>

**Table ES-3 (continued)  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Wildlife (cont.)</b>	<p>A <i>Raven Management Plan</i> has been prepared and will be implemented by the Applicant to minimize the potential for the Project to attract ravens to the Project site. The draft plan is in Appendix H and will be reviewed and approved by BLM. Additional details are provided in Section 4.4.</p> <p><i>AM-WIL-3.</i> A Draft <i>Avian and Bat Protection Plan</i> has been prepared and will be implemented by the Applicant to specify necessary actions to be taken to protect nesting bird and bat species, including burrowing owls, nesting birds, and roosting bats. The draft plan is in Appendix H and will be reviewed and approved by BLM. <u>The final plan will conform to the 2010 USFWS avian and bat guidelines entitled Considerations for Avian and Bat Protection Plans U.S. Fish and Wildlife Service White Paper.</u> Additional details are provided in Section 4.4.</p> <p><u><i>AM-WIL-4. Construction Water Storage Pond Design. The temporary construction water ponds shall be designed, constructed, and operated in compliance with all applicable regulatory requirements with respect to design, operation, and maintenance, protection of migratory waterfowl, and raven management. Additional details are provided in Section 4.4.</i></u></p>	<p>(d) <u>Any roads or permanent structures built in Nelson's bighorn sheep habitat or movement corridors must be constructed in such a way as to allow continued bighorn movement, except in the case of the Solar Farm and Substation facilities which will be fenced. Some strategies could include under- or over passes, ramps cut into steep side slopes, alternatives to continuous guard rails or fence specifications along roads that allow sheep movement. Plans for these structures will be developed in coordination with CDFG.</u></p> <p><u><i>MM-WIL-3. Palm Springs Round Tailed Ground Squirrel Protection Plan. If effects to Palm Springs round tailed ground squirrel cannot be avoided, the Applicant shall consult with the CDFG to determine the appropriate level of restoration or mitigation for effects to essential habitat for Palm Springs round tailed ground squirrel. Additional details are provided in Section 4.4.</i></u></p> <p><u><i>MM-WIL-4. Mojave Fringed-toed Lizard Protection Plan. If effects to Mojave Fringed-toed Lizard cannot be avoided, the Applicant shall mitigate for direct and indirect impacts to stabilized and partially stabilized sand dunes and other Mojave fringe-toed lizard habitat by compensating for lost habitat at ratios ranging from 1:1 to 5:1 depending upon (as detailed in MM-BIO-2):</i></u></p> <ul style="list-style-type: none"> <li><u><i>A. Species known to be present on site</i></u></li> <li><u><i>B. Habitat condition</i></u></li> <li><u><i>C. Proximity of known disturbances</i></u></li> <li><u><i>D. Vegetation type</i></u></li> </ul> <p><u>The Applicant shall provide funding for the acquisition, initial habitat improvements and long-term management of the compensation lands. The habitat compensation requirement, and associated funding requirements based on that acreage, will be adjusted if there are changes in the final footprint of the Project. In lieu of acquiring lands itself, the Applicant may ensure funding to complete the land acquisition by providing CDFG or USWFS, as appropriate, before ground- or vegetation- disturbing activities an irrevocable letter of credit or another form of security begins, as approved by CDFG's Office of General Counsel before ground- or revegetation-disturbing activities begin.</u></p>



**Table ES-3 (continued)**  
**Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Wildlife (cont.)</b>		<p data-bbox="1203 363 1591 393"><i>Additional detail is provided in Section 4.4.</i></p> <p data-bbox="1203 409 1871 586"><i>MM-WIL-5. Prepare and Implement a Bird Monitoring and Avoidance Plan. Before a ROW grant is issued, the Applicant shall retain a BLM-approved, qualified biologist to prepare a Bird Monitoring and Avoidance Plan in consultation with CDFG and USFWS. This plan shall follow the Avian Protection Plan guidelines outlined by USFWS and Avian Power Line Interaction Committee (APLIC).</i></p> <p data-bbox="1203 602 1877 751"><i>The plan will require monitoring of (1) the death and injury of birds from collisions with facility features such feeder/distribution lines and solar panels, and (2) impacts to aquatic insects from polarized light from solar panels that may affect insectivorous (insect-eating) birds. The study design shall be approved by BLM in consultation with CDFG and USFWS.</i></p> <p data-bbox="1203 756 1591 786"><i>Additional detail is provided in Section 4.4.</i></p> <p data-bbox="1203 802 1885 919"><i>MM-WIL-6. Prepare and Implement Golden Eagle Nesting Surveys, Nest Site Monitoring, and Adaptive Management. Additional details are provided in Section 4.4. Where details of this Mitigation Measure may conflict with Applicant Measure AM-WIL-3, this measure shall take precedence.</i></p> <p data-bbox="1203 935 1885 1382"><i>MM-WIL-7. Alternate to long-distance (greater than 500 meters) desert tortoise translocation. The draft Desert Tortoise Translocation Plan defined under Applicant Measure AM-WIL-1 shall be updated to identify and describe, as an alternative to translocation, a strategy to remove desert tortoises on the project site from the wild and place them permanently in facilities approved by USFWS and CDFG, to be fully funded by the applicants. All suitable care or holding facilities for desert tortoises shall be listed and described in the draft plan, and capacity of each facility to accommodate desert tortoises from the project site shall be provided. The updated draft plan shall be submitted to BLM, CPUC, USFWS and CDFG for review and approval. Upon approval of a final Desert Tortoise Translocation Plan and issuance of state and federal approvals, the applicant (Sunlight and/or SCE), shall either translocate tortoises into the wild or shall permanently place them in approved facilities, consistent with the Final Desert Tortoise Translocation Plan.</i></p>

**Table ES-3 (continued)  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Wildlife (cont.)</b>		<p><i>MM-WIL-8. Plans required under Applicant Measures AM WIL-1, AM WIL-2, and AM WIL-3 shall be submitted for review and approval by USFWS, CDFG, BLM and CPUC.</i></p> <p><i>MM-WIL-9. This measure applies only to Alternative 2, below. Re-orient Substation Alternative B to reduce movement corridor blockage. The substation shall be either moved to the east, or rotated 90 degrees and moved east (without moving into the Alligator Rock ACEC) so its longer side is parallel to Interstate 10. It shall remain as close as possible to Interstate 10, while avoiding existing utilities, and shall allow a corridor for wildlife movement south of the substation. If this alternative is selected, the design and location of the substation shall be developed with input from BLM's biologists to ensure that the ability of wildlife to move from east to west south of the freeway is retained, and the freeway underpass and stream channel crossings are still accessible to wildlife moving from north to south.</i></p>
<b>Climate Change</b>	<p>Three of the five applicant measures adopted by Sunlight for Air Resources would help reduce greenhouse gas emissions in addition to reducing criteria pollutant emissions (AM-AIR-3, AM-AIR-4, and AM-AIR-5).</p>	<p>Two of the three mitigation measures for Air Resources would also be expected to provide some reductions in construction-related greenhouse gas emissions (MM-AIR-1 AND MM-AIR-2).</p>
<b>Cultural Resources</b>	<p><i>AM-CUL-1:</i> A cultural resources monitoring and mitigation plan has been included as a Project design feature to minimize impacts. The plan will include a description of areas to be monitored during construction, a discovery plan that will address unanticipated cultural resources, and provisions for the education of construction workers. Responsible parties for mitigation measures will be identified.</p>	<p><i>MM-CUL-1.</i> The <i>Memorandum of Agreement</i> shall detail the process for activities to proceed in areas where historic properties are now known not to exist; the process for phased completion of field investigations for the evaluation of cultural resources and assessment of effects; a historic property treatment plan (HPTP); procedures to resolve adverse effects under Section 106; coordination between the CEQA process and Section 106 compliance; procedures for <i>treatment of inadvertent discoveries</i>; <i>procedures for determining treatment and disposition of human remains</i>; the process for treating human remains; compliance monitoring; dispute resolution; and tribal participation. Resolution of effects to cultural resources eligible for or listed on the NRHP may include research and documentation, data recovery excavations, curation, public interpretation, use or creation of historic contexts</p>

**Table ES-3 (continued)  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Cultural Resources (cont.)</b>		<p>(especially for historic landscapes and the potential DTC-CAMA historic district), and/or report distribution.</p> <p><i>MM-CUL-2.</i> On the basis of preliminary CRHR eligibility assessments, NRHP eligibility assessments made under the <i>Memorandum of Agreement</i>, or existing NRHP eligibility determinations, the BLM and CPUC may require the relocation of Project components to avoid or reduce damage to cultural resource values. Where operationally feasible, potentially NRHP-eligible resources shall be protected from direct Project impacts by Project redesign within previously surveyed and analyzed areas.</p> <p><i>MM-CUL-3.</i> Where the BLM and CPUC decide that CRHR or NRHP-eligible or -listed cultural resources cannot be protected from direct impacts by Project redesign, the Applicant shall comply with appropriate mitigative treatment(s) that will be detailed in the <i>Memorandum of Agreement</i> and cultural resources mitigation and monitoring plan.</p> <p><i>MM-CUL-4.</i> All CRHR-listed or eligible cultural resources (as determined by the CPUC) and all NRHP-listed or eligible cultural resources (as determined by the BLM) that will not be affected by direct impacts, but are within 50 feet of Project locations will be monitored by a qualified archaeologist. Protective fencing, or other markers, at the BLM’s discretion, shall be erected and maintained to protect these resources from inadvertent trespass for the duration of construction in the vicinity.</p> <p><i>MM-CUL-5.</i> The historic property treatment plan that will be included in the <i>Memorandum of Agreement</i> will, at a minimum, employ avoidance, mitigation and data recovery as mitigation alternatives. As part of the historic property treatment plan, the Applicant shall prepare a research design and a scope of work for evaluation of cultural resources and for data recovery or additional treatment of NRHP-<i>listed or</i> eligible sites that cannot be avoided. Additional content of the treatment plan will be dictated by the consultations associated with the <i>Memorandum of Agreement</i>.</p>

**Table ES-3 (continued)**  
**Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Cultural Resources (cont.)</b>		<p data-bbox="1205 367 1885 448"><i>MM-CUL-6.</i> Construction work within 100 feet of cultural resources that require data-recovery fieldwork shall not begin until authorized by the BLM.</p> <p data-bbox="1205 472 1885 854"><i>MM-CUL-7.</i> Archaeological monitoring shall be conducted by a qualified archaeologist familiar with the types of historical and prehistoric resources that could be encountered within the Project area, and under direct supervision of a principal archaeologist. All cultural resources personnel will be approved by the BLM through the agency’s Cultural Resource Use Permitting process. A Native American monitor may be required at culturally sensitive locations specified by the BLM following government-to-government consultation with <i>Indian</i> tribes. The monitoring plan shall indicate the locations where Native American monitors will be required and shall specify the tribal affiliation of the required Native American monitor for each location. The Applicant shall retain and schedule any required Native American monitors.</p> <p data-bbox="1205 878 1885 1114"><i>MM-CUL-8.</i> In the event of inadvertent discoveries during construction, operation and maintenance, or decommissioning, procedures outlined in the <i>Memorandum of Agreement</i> and the monitoring and mitigation plan will be adhered to. At a minimum, this will include stop work orders in the vicinity of the find, recordation and evaluation of the find by a qualified archaeologist, notification of the find to BLM, and appropriate treatment measures, possibly including data recovery or avoidance.</p> <p data-bbox="1205 1122 1885 1227"><i>MM-CUL-9.</i> <u>The BLM will continue to consult with Indian tribes to identify sacred sites, TCPs and traditional use areas that might be affected by the Project. If such places are identified, the BLM will consult further with tribes to resolve access impediments or other identified impacts.</u></p>

**Table ES-3 (continued)**  
**Applicant Measures (AMs) and Mitigation Measures (MMs)**

<b>Resource</b>	<b>Applicant Measures</b>	<b>Mitigation Measures</b>
<b>Paleontological Resources</b>		
	<p><i>AM- PR-1.</i> The Applicant shall be responsible for the following mitigation (more details are provided in Section 4.7):</p> <ul style="list-style-type: none"><li>• A qualified paleontologist will conduct a study to characterize the paleontological sensitivity of the Project Study Area. Should the site characterization and or the site reconnaissance identify areas of high potential for paleontological resources, an additional mitigations could be implemented, as determined by the BLM.</li><li>• A qualified paleontologist will develop a monitoring and mitigation plan prior to construction to mitigate adverse impacts on paleontological resources if excavation is to occur in an area of high paleontological sensitivity. The plan will include measures to be followed in the event that fossil materials are encountered during construction.</li></ul>	
<b>Geology and Soil Resources</b>		
	<p><i>AM-GEO-1.</i> The Applicant shall include, as part of the construction design plans for the Solar Farm and Gen-Tie Line, the mitigation measures provided in the Earth Systems Southwest (2010) geotechnical survey. These mitigations are summarized in Section 4.8 and in Appendix F, and are subject to BLM approval. The Applicant shall be responsible for implementing these mitigations.</p> <p><i>AM-GEO-2.</i> The Applicant shall implement the following mitigation measures to reduce impacts from wind and water erosion to soils (additional details are in Section 4.8):</p> <ul style="list-style-type: none"><li>• <u><i>Implement Mitigation Measures MM-WAT-6 and MM-WAT-7 discussed in Chapter 4.17, Water Resources.</i></u></li><li>• Obtain coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activity (General Permit) Water Quality Order 2009-0009 DWQ;</li></ul>	

**Table ES-3 (continued)  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Geology and Soil Resources (cont.)</b>		
	<ul style="list-style-type: none"> <li>• Use nonhazardous dust suppressants approved by the BLM and water on an as-needed basis to suppress wind-blown dust generated at the site during construction. Dust palliatives also would be applied between rows of solar panels for dust suppression during operation;</li> <li>• Implement erosion control measures during construction; and</li> <li>• Use silt fences for erosion control in the event of a storm event along neighboring properties, Power Line Road and along the main drainage to the east of the Solar Farm site.</li> </ul>	
	<p><i>AM-GEO-3.</i> SCE shall undertake the following mitigation measures as part of the Substation Project:</p> <ul style="list-style-type: none"> <li>• Prior to final design of the Substation, a combined geotechnical engineering and engineering geology study shall be conducted by SCE to identify site-specific geologic conditions and potential geologic hazards in sufficient detail to support sound engineering. Appropriate mitigations for identified geological hazards will be identified in the geotechnical study.</li> <li>• For new substation construction, specific requirements for seismic design will be followed based on the Institute of Electrical and Electronic Engineers' 693 "Recommended Practices for Seismic Design of Substations".</li> <li>• New access roads, where required, will be designed to minimize ground disturbance during grading.</li> <li>• Cut and fill slopes will be minimized by a combination of benching and following natural topography where feasible.</li> <li>• Any disturbed areas associated with temporary construction will be returned to preconstruction conditions (to the extent feasible) after the completion of Project construction.</li> </ul>	

**Table ES-3 (continued)  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Geology and Soil Resources (cont.)</b>		
	<p><i>AM-GEO-4.</i> SCE shall implement the following mitigation measures to reduce impacts from wind and water erosion to soils (additional details are in Section 4.8):</p> <ul style="list-style-type: none"> <li>• Obtain coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activity (General Permit) 2009-0009 DWQ.</li> <li>• Use nonhazardous dust suppressants approved by the BLM to suppress wind-blown dust generated at the site during construction.</li> <li>• Implement erosion control measures during construction.</li> </ul>	
<b>Lands and Realty</b>		
	<p><i>AM-LAND-1.</i> Property owners within 300 feet of the Project shall be notified of all major Project construction milestones, such as start of Project construction. Said property owners shall be provided with a detailed construction schedule at least 30 days before construction so that they are informed as to the time and location of disturbance. Updates shall be provided as necessary.</p> <p><i>AM-LAND-2.</i> The Project shall be designed to minimize disturbance or modification of existing uses such as transmission lines, pipelines, and underground cables. If disturbance or modification of existing uses were necessary, Sunlight shall coordinate with the owners to determine an acceptable solution. Sunlight shall fund any necessary avoidance measures or modifications.</p>	
<b>Noise and Vibration</b>		
	<p><i>AM-NZ-1:</i> Sunlight and SCE shall limit most construction activity to daytime hours consistent with Riverside County noise ordinance limitations. Certain electrical connection activities at the Solar Farm site would occur at night for safety reasons, but would not require any heavy equipment operations.</p> <p><i>AM-NZ-2:</i> SCE shall construct a masonry security wall around the perimeter of the Red Bluff Substation. This wall would also provide localized noise shielding for adjacent areas.</p>	<p><i>MM-NOI-1: Sunlight and SCE shall limit construction activity within a quarter mile of an inhabited dwelling to 6:00 a.m. to 6:00 p.m. during June through September and 7:00 a.m. to 6:00 p.m. during October through May. Certain electrical connection activities at the Solar Farm site would occur at night for safety reasons, but would not require any heavy equipment operations.</i></p>

**Table ES-3 (continued)**  
**Applicant Measures (AMs) and Mitigation Measures (MMs)**

<b>Resource</b>	<b>Applicant Measures</b>	<b>Mitigation Measures</b>
<b>Public Health and Safety/Hazardous Materials</b>	<b>Sunlight shall be responsible for these mitigations:</b>	
	<i>AM-HAZ-1a:</i> Appropriate spill containment and clean-up kits shall be kept on site during construction and maintained during the operation of <i>the Solar Farm and Gen-Tie Line</i> .	
	<i>AM-HAZ-1b:</i> In accordance with the Emergency Planning & Community Right to Know Act, the Applicant shall supply the local emergency response agencies with a Hazardous Materials Management Plan and an associated emergency response plan and inventory specific to the site. The Applicant shall prepare the plan for approval by the BLM and <i>review and comment by</i> the County of Riverside. The Applicant shall be responsible for implementing the approved plan (additional details are in Section 4.11).	
	<i>AM-HAZ-1c:</i> During construction of the Solar Farm and Gen-Tie Line, BMPs for handling, storing, and disposing of hazardous materials and waste shall be followed (additional details are in Section 4.11).	
	<i>AM-HAZ-1d:</i> An SPCC Plan shall be developed and implemented that would identify primary and secondary containment for oil products stored on site as well as training in spill management in the event of an unexpected release. The Applicant shall prepare the plan for approval by the BLM and <i>review and comment by</i> the County of Riverside. The Applicant shall be responsible for implementing the approved plan (additional details are in Section 4.11).	
	<i>AM-HAZ-1e:</i> The Applicant shall develop an Environmental Health and Safety Plan for the construction and operation of the Project to ensure it includes all activities and compliance to all local, state and federal regulatory requirements. Illness and Injury Prevention Programs will be developed for construction and operation. The Applicant shall prepare the plan for approval by the BLM. The Applicant shall be responsible for implementing the approved plan (additional details are in Section 4.11).	



**Table ES-3 (continued)**  
**Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Public Health and Safety</b>	<b>Hazardous Materials (cont.)</b>	
	<p><i>AM-HAZ-2:</i> Based on the preliminary information provided in the Phase I ESA and the Class I cultural inventory of the Project Site, the Applicant proposes to take the following steps to better determine the nature and extent of potential MEC issues and then take appropriate corrective action measures. <u>The first step is to better determine the history of military activities within the proposed Project footprint.</u> This would include further research regarding prior MEC removals that may have been issued in the past for certain areas by military or other investigating entities, and may include consultations with DOD personnel and archival research. <u>As a result of the historical occurrence of military training activities throughout the DTC-CAMA, potentially including the Project area, this MEC consultation and archival research will address the entire Project footprint, including the specific areas of concern identified by the Phase I ESA and cultural resource surveys.</u> With that more comprehensive understanding, the Applicant will propose, as necessary, further appropriate above and below-ground assessments, under the direction of an expert consultant team, to delineate areas for further investigation and then removal. The Applicant, under direction from the BLM, will determine which site-specific in-field investigative techniques and methodologies will be utilized to investigate and resolve potential MEC issues prior to Project construction. Finally, all construction workers will receive appropriate MEC health and safety awareness training to ensure that they know what actions to take if unanticipated MEC or other suspicious articles are encountered during construction.</p> <p><i>AM-HAZ-3:</i> The Applicant shall provide the County of Riverside with a project-specific Emergency Response and Inventory Plan prior to initiating construction. The Applicant shall prepare the plan for approval by the BLM and <u>review and comment by</u> the County of Riverside. The Applicant shall be responsible for implementing the approved plan (additional details are in Section 4.11).</p>	

**Table ES-3 (continued)  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Public Health and Safety</b>	<b>Hazardous Materials (cont.)</b>	
	<p><i>AM-HAZ-4:</i> Project facilities shall be designed, constructed, and operated in accordance with applicable fire protection and other environmental, health and safety requirements. In compliance with County of Riverside requirements, a project-specific fire prevention plan for both construction and operation of the Solar Farm <u>and Gen-Tie Line</u> will be completed prior to initiation of construction. <u>The fire protection plan shall be approved by the BLM and provided to Riverside County for review and comment.</u></p> <p>Sunlight shall have a Project-specific fire prevention plan in place during construction, operation and decommissioning of the Project. This plan shall comply with applicable County of Riverside regulations and would be coordinated with <u>the BLM Fire Management Officer and</u> the local Fire Department in the Chuckwalla Valley at Tamarisk Park.</p> <p><i>AM-HAZ-5:</i> An emergency response plan and site security plan shall be completed for the Project facilities <u>by qualified professionals. These plans shall be developed in accordance with the BLM and DOE requirements (additional details are in Section 4.11).</u></p> <p><b>SCE shall be responsible for these mitigations:</b></p> <p><i>AM-HAZ-2:</i> Same as above for Sunlight.</p> <p><i>AM-HAZ-6a:</i> SCE shall implement standard fire prevention and response practices for the construction activities where hazardous materials are in use. SCE shall be responsible for implementing the approved plan (additional details are in Section 4.11).</p> <p><i>AM-HAZ-6b:</i> As applicable, SCE shall follow fire codes per California Department of Forestry and Fire Protection (2008) requirements for vegetation clearance during construction of the Project to reduce the fire hazard potential.</p>	

**Table ES-3 (continued)**  
**Applicant Measures (AMs) and Mitigation Measures (MMs)**

<b>Resource</b>	<b>Applicant Measures</b>	<b>Mitigation Measures</b>
<b>Public Health and Safety/Hazardous Materials (cont.)</b>	<p><i>AM-HAZ-6c:</i> Hazardous materials and waste handling shall be managed in accordance with the following plans and programs that SCE shall be responsible for implementing:</p> <ul style="list-style-type: none"><li>• <i>Spill Prevention, Control and Countermeasures Plan (SPCC Plan)</i></li><li>• <i>Hazardous Materials Business Plans (HMBPs)</i></li><li>• <i>Storm Water Pollution Prevention Plan (SWPPP)</i></li><li>• <i>Health and Safety Program</i></li><li>• <i>Hazardous Materials and Hazardous Waste Handling</i></li><li>• <i>Emergency Release Response Procedures</i></li></ul> <p><i>AM-HAZ-6d:</i> Hazardous materials shall be used or stored and disposed of in accordance with Federal, State, and local regulations.</p> <p><i>AM-HAZ-6e:</i> The Substation shall be grounded to limit electric shock and surges that could ignite fires.</p> <p><i>AM-HAZ-6f:</i> All construction and demolition waste shall be removed and transported to an appropriately permitted disposal facility.</p> <p><i>AM-HAZ-7:</i> SCE shall <u>submit FAA Form 7460-1 and receive a Determination of No Hazard to Navigable Airspace and comply with any AC 70/7460-1K (Obstruction Marking and Lighting) requirements from the FAA</u> for construction of the 185-foot microwave tower associated with the Desert Center Communications Site.</p> <p><i>AM-HAZ-8:</i> SCE shall provide <u>the BLM and</u> the County of Riverside with a project-specific Emergency Response and Inventory Plan prior to initiating construction. SCE shall be responsible for implementing the approved plan (additional details are in Section 4.11).</p> <p><i>AM-HAZ-9:</i> Project facilities shall be designed, constructed, and operated in accordance with applicable fire protection and other environmental, health and safety requirements. In compliance with</p>	

**Table ES-3 (continued)  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Public Health and Safety/Hazardous Materials (cont.)</b>	<p>County of Riverside requirements, a project-specific fire prevention plan for both construction and operation of the substation shall be completed by SCE prior to initiation of construction. <i>Additional detail is provided in Section 4.11.</i></p> <p><i>AM-HAZ-10: Develop and implement a fire prevention plan. Before the construction permit is issued, the Applicant shall develop and implement a fire protection plan for use during construction and operation. The Applicant shall submit the fire plan, along with maps of the Project site and access roads, to CAL FIRE/Riverside County Fire Department for review and approval before construction begins. Additional detail is provided in Section 4.11.</i></p>	
<b>Recreation</b>	<p>No mitigation proposed.</p>	
<b>Socioeconomic and Environmental Justice</b>	<p><i>AM-SOCIO-1:</i> The public shall be notified of Project activities and scheduling to inform the public of projected impacts on the surrounding area. This notification shall provide the public with the opportunity to plan their personal and business activities appropriately.</p> <p><i>AM-SOCIO-2:</i> Sunlight shall align Gen-Tie lines along existing linear features (such as Kaiser Road) to minimize the social effects of potential visual impacts.</p>	
<b>Special Designations</b>	<p><i>AM-SD-1:</i> During operation and maintenance of Red Bluff Substation, lights shall normally be off. Where needed during emergency and scheduled work during the night, lights shall be shielded, <i>shall</i> be directed downward, and shall be motion sensitive to minimize glare in surrounding areas.</p> <p>Mitigation measures described for Cultural Resources, would be implemented to reduce impacts on cultural resources within the Alligator Rock ACEC.</p>	<p><i>MM-SD-1. The NPS shall be afforded the opportunity to review and comment on the following pre-construction plans required for the Project prior to approval of the plans by the BLM and CPUC: the Vegetation Resources Management Plan, the Lighting Mitigation Plan, the Dust Control Plan, the Integrated Weed Management Plan, and the Construction Traffic Control Plan. Review and comment by the NPS must be within time frames specified by the BLM.</i></p> <p><i>MM-SD-2. The Applicant shall enter into a funding agreement or other financial mechanism, as may be specified in the Record of Decision or Right-of-</i></p>

**Table ES-3 (continued)  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Special Designations (cont.)</b>		
		<p><i>Way Grant, to reimburse the NPS for reasonable costs incurred in the monitoring of the following measures (whether applicant-proposed or BLM-recommended) to address temporary indirect impacts on the Joshua Tree National Park:</i></p> <ul style="list-style-type: none"> <li>• <i>Fugitive dust: AM AIR 1, AM-AIR 6 and MM-VR-3, concerning the development and implementation of a dust control plan that includes the use of dust palliatives to ensure compliance with SCAQMD Rule 403; MM-AIR 3, requiring annual re-application of dust palliatives at the Solar Farm site; and AM-GEO-2 and AM-GEO-4, as they relate to the suppression of fugitive dust during construction and operation.</i></li> <li>• <i>Noise: AM-NZ-1, limiting most construction activity to daytime hours.</i></li> <li>• <i>Nighttime lighting: MM-VR-4, requiring the design and installation of a lighting mitigation plan concerning temporary and permanent exterior lighting.</i></li> </ul> <p><i>MM-SD-03. A Signage and Guidance Plan shall be developed for JTNP by the Applicant and reviewed and approved by both the NPS and the BLM prior to the start of construction of the Project. The intent of this plan is to address the potential indirect effects on NPS land as a result of the influx of workers associated with the mobilization, construction, and demobilization of the Project. Additional details are in Section 4.14.</i></p>
<b>Transportation and Public Access</b>		
	<p><i>AM-TRANS-1:</i> Sunlight shall prepare a Construction Traffic Control Plan in conjunction with Riverside County and/or Caltrans in accordance with Caltrans Manual on Uniform Traffic Control Devices and the California Joint Utility Traffic Control Manual (2010). Details are provided in Section 4.15.</p> <p><i>AM-TRANS-2:</i> Sunlight shall document road conditions at the beginning and end of Project construction and decommissioning and contribute fair share cost for pavement maintenance and other needed repairs.</p>	

**Table ES-3 (continued)  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Transportation and Public Access (cont.)</b>		
	<p><i>AM-TRANS-3:</i> Sunlight shall share Project information with the airport owners if a transmission line alternative that runs near the former Desert Center Airport’s runway is selected to assure that no special precautions are needed.</p> <p><i>AM-TRANS-4:</i> BLM shall coordinate with the DOD R-2508 Complex Sustainability Office, Region IX, based in San Diego, California, and with local regional military installations regarding low-level flight operations relative to the Project to assure that no special precautions are needed.</p>	
<b>Visual Resources</b>		
		<p><i>MM-VR-1: Revegetation.</i> The Applicant and SCE shall minimize the amount of ground surface to be disturbed and revegetate disturbed soil areas (additional details provided in Section 4.16).</p> <p>No less than 30 days following the publication of the BLM’s Record of Decision/ROW Issuance, whichever comes first, the Applicant and SCE shall submit to the BLM a final agency-approved revegetation plan that has been reviewed and approved by the BLM.</p> <p>Within 30 days after completion of Project construction, the Applicant and SCE each shall provide to the BLM for review and approval a written report identifying which items of the revegetation plan have been completed, a summary of all modifications to mitigation measures made during the Project’s construction phase, and which items are still outstanding. It shall also include a plan for revegetation monitoring.</p> <p><i>MM-VR-2: Litter and Trash Control.</i> During construction, all trash and food-related waste shall be placed in self-closing containers and removed weekly, as needed, from the site.</p> <p><i>MM-VR-3: Fugitive Dust Control.</i> <u>To minimize fugitive dust on the Project site, a dust control plan shall be developed that will impose limits on the speed of travel for construction vehicles, and will require that dust palliatives be applied to the site, as described in AM-AIR-1 and AM-AIR6, and in compliance with SCAQMD Rule 403.</u></p>

**Table ES-3 (continued)**  
**Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Visual Resources (cont.)</b>		<p data-bbox="1203 367 1896 841"><i>MM-VR-4: Lighting Control.</i> Consistent with safety and security considerations, the Applicant and SCE shall design and install all permanent exterior lighting and all temporary construction lighting such that a) lamps and reflectors are not visible from beyond the Solar Farm site, including any off-site security buffer areas; b) lighting shall not cause excessive reflected glare; c) direct lighting shall not illuminate the nighttime sky, except for required FAA aircraft safety lighting (which shall be an on-demand, audio-visual warning system that is triggered by radar technology); d) illumination of the Project and its immediate vicinity shall be minimized; and e) <u>skyglow caused by Project lighting will be avoided, and f) the plan shall comply with local policies and ordinances. All permanent light sources shall be below 2,500 Kelvin color temperature (warm white) and shall have cutoff angles not to exceed 45 degrees of nadir.</u> The Applicant and SCE each shall submit to the BLM <u>and CPUC</u> for review and approval a <u>Lighting Mitigation Plan</u> (details provided in Section 4.16).</p> <p data-bbox="1203 862 1881 1187"><i>MM-VR-5: Surface Treatment of Project Structures/Buildings.</i> The Applicant and SCE shall treat the surfaces of all Project structures and buildings visible to the public such that a) their colors minimize visual contrast by blending with the characteristic landscape colors; b) their colors and finishes do not create excessive glare; and c) their colors and finishes are consistent with local policies and ordinances. The transmission line conductors shall be non-specular and nonreflective, and the insulators shall be nonreflective and nonrefractive. The Applicant and SCE shall comply with BLM requirements regarding appropriate surface treatments for Project elements.</p> <p data-bbox="1203 1208 1881 1409"><i>MM-VR-6: Project Design.</i> The Applicant and SCE shall use proper design fundamentals to reduce the visual contrast to the characteristic landscape. These include proper siting and location; reduction of visibility; repetition of form, line, color (see Mitigation MM-VR-5) and texture of the landscape; and reduction of unnecessary disturbance. Additional details on design strategies are provided in Section 4.16.</p>

**Table ES-3 (continued)  
Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Water Resources</b>	<p><u>AM-WAT-1 training construction staff in the management of hazardous materials and use of spill control and cleanup equipment; AM-WAT-2 having a clear chain of command within the organizational structure with responsibility for implementing, monitoring, and correcting BMPs; AM-WAT-3 covering and containing hazardous materials so that they are not in contact with precipitation or runoff; AM-WAT-4 storing hazardous materials in one or more central areas, and instituting rules requiring all hazardous materials to be secured at the end of the day; AM-WAT-5 maintaining good inventory records; storing hazardous liquids and dispensing equipment in secondary containment; AM-WAT-6 maintaining adequate quantities of spill containment and response equipment at readily accessible points throughout the site; AM-WAT-7 identifying the worst case and most likely spill scenarios, and providing spill response equipment adequate to respond to these scenarios; AM-WAT-8 using chemicals presenting the least environmental hazard wherever possible; AM-WAT-9 storing the smallest quantities of hazardous materials possible on the site; AM-WAT-10 maintaining site security to reduce vandalism; AM-WAT-11 requiring all contractors to abide by the program BMPs and to identify any hazardous materials and specific BMPs pertaining to their trade or activity.</u></p> <p><u>The SPCC Plan for the site would address storage of mineral oil contained in transformers. A SPCC Plan is required when 10,000 gallons or more of mineral oil in electrical equipment is contained on site, or when 1,320 gallons of petroleum is stored on the site, although an SPCC Plan can be voluntarily implemented for lesser quantities. The SPCC Plan would address methods and procedures for managing these products, lighting, security, containment requirements, training requirements, staff responsibilities for inspecting storage and dispensing equipment; and equipment and procedures for responding to a spill or release of stored petroleum products.</u></p> <p><u>Among the features that are incorporated into the Project design to address potential impacts on water resources are the measures identified in the Storm Water Hydrology Report for Alternative B (AECOM, 2010b; Appendix G) to reduce flooding and erosion effects associated with the 100-year design runoff event. The modeling results indicate that the most effective measure to reduce</u></p>	<p><u>MM-WAT-1 Groundwater Wells, Installation. The Applicant proposes to construct new groundwater wells in support of the Project, that would produce water from the Chuckwalla Valley Groundwater Basin (CVGB). The Project owner shall ensure that the wells are completed in accordance with all applicable state and local water well construction permits and requirements. Prior to initiation of well construction activities, the Project owner shall submit for review and comment a well construction packet to the County of Riverside and fees normally required for the County's well permit, with copies to the Compliance Project Manager (CPM). The Project shall not construct a well or extract and use groundwater until approval has been issued by the county and the CPM to construct and operate the well. Wells permitted and installed as part of pre-construction field investigations that subsequently are planned for use as Project water supply wells require CPM approval prior to their use to supply water to the Project.</u></p> <p><u>Post-Well Installation. The Project owner shall provide documentation as required under County permit conditions to the CPM that the well has been properly completed. In accordance with California's Water Code Section 13754, the driller of the well shall submit to the Department of Water Resources (DWR) a Well Completion Report for each well installed. The Project owner shall ensure the Well Completion reports are submitted. The Project owner shall ensure compliance with all County water well standards and the County requirements for the life of the wells, and shall provide the CPM with two copies each of all monitoring or other reports required for compliance with the County of Riverside water well standards and operation requirements, as well as any changes made to the operation of the well.</u></p> <p><u>MM-WAT-2 Construction Water Use. The proposed Project's use of groundwater during construction shall not exceed a total of 1,400 af during the 26 month construction period. Before groundwater can be used for construction, the Applicant shall install and maintain metering devices as part of the water supply and distribution system to document Project water use and to monitor and record in gallons per day the total volume of water supplied to the Project from this water source. The metering devices shall be operational for the life of the Project.</u></p>



**Table ES-3 (continued)**  
**Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Water Resources (cont.)</b>	<p><i>runoff depth and velocity would be AM-WAT-12 decompacting the soil between solar panels to increase infiltration potential.</i></p> <p><i>AM-WAT-13 Riprap increases surface roughness and slows runoff velocities, decreasing sediment transport, and increasing flow depth. Riprap would be used in conjunction with decompaction, as riprap would not mitigate flow or volume.</i></p> <p><i>AM-WAT-14 Retention basins could be located along the upstream western boundary of the Project site to intercept run on storm water flows. The intent of this measure is to reduce overall flow depths, velocities and outflow volume by retaining run-on storm water volume. They would also reduce sediment transport within the Project site.</i></p> <p><i>AM-WAT-15 Check dams can be constructed to address specific post-development hydraulic characteristics that remain after implementation of the decompaction measure. Check dams could be located near the downstream southern boundary of the Project site to intercept run off. Check dams would have an effect on the storm water upstream of each dam because the storm water would back up behind each dam. Check dams would also reduce flow velocities and would retain sediment.</i></p> <p><i>AM-WAT-16 Strip detention basins would be approximately six inches deep and 70 feet wide, and would be designed to follow the topographic contours of the site, so their lengths would be dependent on the locations of the basins on the site. These detention basins could be located near the downstream southern boundary of the Project site to intercept run off storm water flows. The intent of this measure is to reduce outflow volume by detaining run-off storm water volume, similar to the check dam measures. Strip detention basins would not have an effect on the storm water upstream of each basin but would reduce flow velocities and sediment transport leaving the Project site.</i></p>	<p><i>MM-WAT-3 Groundwater Level Monitoring, Mitigation, and Reporting. The Applicant shall submit a Groundwater Level Monitoring, Mitigation, and Reporting Plan to CPM for review and approval in advance of construction activities and before onsite groundwater supply wells are operated. The Groundwater Level Monitoring, Mitigation, and Reporting Plan shall provide detailed methodology for monitoring background and site groundwater levels. Monitoring shall include pre-construction, construction, and Project operation water use. The plan shall establish pre-construction and Project related groundwater level and water quality trends that can be quantitatively compared against observed and simulated trends near the Project pumping wells and near potentially impacted existing wells. Additional details are provided in Section 4.17.</i></p> <p><i>MM-WAT-4 Mitigation for the Use of Fencing. Desert tortoise exclusion fencing and security fencing shall be installed around the entire perimeter of the Project site as described in AM-WIL-1. During construction the desert tortoise exclusion fence will be inspected on a daily basis to ensure the integrity of the fence is maintained. During operation of the Project, fence inspections shall occur at least once per month throughout the life of the Project, and within 24 hours after storms or other events that might affect the integrity and function of desert tortoise exclusion fences. Fence repairs shall be completed within two days (48 hours) of detecting problems that affect the functioning of the desert tortoise exclusion fencing. If fence damage occurs during any time of year when tortoises may be active, the Project owner shall be responsible for monitoring the site of the damaged fence until it is fully repaired, to prevent a desert tortoise from entering the Project area. All incidents of damaged tortoise exclusion fence, including dates of damage and repair, extent of damage, and monitoring summaries (methods and results), shall be reported to the BLM, CPM, CDFG, and USFWS. All wildlife found entrapped or dead in the fence shall be reported to the BLM, CPM, CDFG, and USFWS. Fencing shall be installed with breakaway design features so as not to interfere with or impede storm water or flood flows, or associated sediment loads.</i></p>

**Table ES-3 (continued)**  
**Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Water Resources (cont.)</b>		<p><i>MM-WAT-5 Construction Period Storm Water Quality. As discussed previously, the waterways that would be affected as a result of Project implementation would not be considered jurisdictional waters under the federal Clean Water Act. As a result, no NPDES permits would be required within the Project area during construction or operation. Therefore, a comprehensive construction-period water quality control plan shall be generated, and recommendations of the plan shall be adhered to. The plan shall be completed by the Applicant before Project construction begins and shall include an evaluation of potential for construction-related storm water pollutant loading that could result from Project construction. The plan shall address and implement all of the issues and recommendations of the Storm Water Pollution Prevention Plan (SWPPP). This mitigation measure requires that a SWPPP for Project construction and decommissioning is prepared prior to commencing with either action.</i></p> <p><i>The plan shall evaluate potential for erosion and sedimentation to occur on site and downstream as a result of construction, as well as potential for construction-related releases of fuels, oils, solvents, concrete wash-out, greases, paints, and other potential water quality pollutants to become entrained in storm water, or otherwise result in the degradation of surface water or groundwater quality. The evaluation shall implement specific measures to minimize potential effects on water quality. These measures may include, but would not be limited to, installation of temporary settling basins, stabilization of disturbed soils, replanting vegetation after disturbance, limitations on construction during wet periods, installation of temporary erosion control devices (fiber rolls, staked straw bales, detention basins, check dams, geofabric, dikes, and temporary revegetation), covering stockpiled loose material during rain events, equipment maintenance to prevent leaks, application of erosion protection to cut and fill slopes, and other BMPs. Sediment shall be retained on site by sediment basins, traps, or other measures. No disturbed surfaces shall be left without erosion control measures in place during the rainy season. Recommendations from the plan shall be applied during construction of all Project-related components.</i></p>

**Table ES-3 (continued)**  
**Applicant Measures (AMs) and Mitigation Measures (MMs)**

Resource	Applicant Measures	Mitigation Measures
<b>Water Resources (cont.)</b>		<p data-bbox="1205 367 1881 607"><u>MM-WAT-6 Operation Period Storm Water Flows and Quality. As discussed previously, the waterways that would be affected as a result of Project implementation would not be considered jurisdictional waters under the federal Clean Water Act. As a result, no NPDES permits would be required within the Project area during Project construction or operation. Therefore, the following mitigation measure provides for the explicit implementation of an operations period water quality control program to minimize storm water-related discharges of sediment and other pollutants from the Project site during Project operations.</u></p> <p data-bbox="1205 626 1881 1019"><u>A comprehensive operation-period storm water and flood drainage and water quality control plan shall be completed, and the recommendations of the plan shall be implemented by the Applicant. The plan shall evaluate potential for the Project to exceed storm water discharges during 10-year and 100-year storm events, and shall ensure that the volume of discharge emanating from the Project site during these events is limited to an increase of no more than one percent, in comparison to existing conditions. To meet this condition, storm water shall be retained in on-site storm water retention ponds, infiltration basins, or other storm water control facilities. Channel design for flood control along the Project perimeter shall be sized and designed to minimize scour and disruption to upstream and downstream hydrology, including measures to prevent headcutting, migration of channels, erosion, and downstream sedimentation, under conditions equivalent to a 100-year flood.</u></p> <p data-bbox="1205 1039 1881 1403"><u>The plan shall also evaluate and mitigate relevant potential sources of water quality pollution associated with Project operation. These sources include, but are not limited to, release of sediment, oils, greases, transformer fluid, fuels, paint, trash, pollutants from impervious surfaces (asphalt oils, greases, and brake dust) and other water quality pollutants arising during operation. The plan shall identify operation-period BMPs, including but not limited to implementation of operation period settlement basins, swales, infiltration basins, regularly scheduled maintenance of proposed drainage and flood control facilities to prevent erosion and sedimentation, and storm water quality control BMPs including, but not limited to, regular sweeping of impervious surfaces, equipment maintenance to prevent leaks, replanting native vegetation, and other measures as applicable to minimize potential impacts to storm water quality.</u></p>

**Table ES-3 (continued)**  
**Applicant Measures (AMs) and Mitigation Measures (MMs)**

Note 1: Additional detail on some mitigation measures is provided in Chapter 4.

Notes:

- ACEC = Area of Critical Environmental Concern
- APLIC = Avian Power Line Interaction Committee
- BACT = best available control technology
- BMPs = best management practices
- CARB = California Air Resources Board
- CDFG = California Department of Fish and Game
- CHU = critical habitat unit
- CPM = compliance project manager
- CRHR = California Register of Historic Resources
- CVGB = Chuckwalla Valley Groundwater Basin
- DOD = Department of Defense
- DOE = Department of Energy
- DTC-CAMA = Desert Training Center California-Arizona Maneuver Area
- DWMA = Desert Wildlife Management Area
- DWQ = Division of Water Quality
- DWR = Department of Water Resources
- EM = Environmental Manager
- EPA = US Environmental Protection Agency

- ESA = Environmental Site Assessment
- FAA = Federal Aviation Administration
- HMBP = Hazardous Materials Business Plan
- HPTP = historic property treatment plan
- IWMP = Integrated Weed Management Plan
- MEC = Munitions of Environmental Concern
- NECO Plan = Northern and Eastern Colorado Desert Plan
- NPDES = National Pollutant Discharge Elimination System
- NRHP = National Register of Historic Places
- PM10 = inhalable particulate matter
- ROD = Record of Decision
- ROW = right-of-way
- SB = Senate Bill
- SCAQMD = South Coast Air Quality Management District
- SPCC = Spill Prevention, Control, and Countermeasures Plan
- SWPPP = Stormwater Pollution Prevention Plan
- TCP = traditional cultural property
- USFWS = US Fish and Wildlife Service
- WEAP = Worker Environmental Awareness Program

## CHAPTER 1 – INTRODUCTION

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Desert Sunlight Holdings, LLC (Sunlight or Applicant), a wholly owned subsidiary of First Solar Development, Inc. (First Solar), proposes to construct and operate a 550-megawatt (MW), nominal capacity, alternating current (AC), solar photovoltaic (PV), energy-generating project known as the Desert Sunlight Solar Farm (DSSF). The Project consists of the PV generating facility (Solar Farm), most of the corridor for the associated 220-kilovolt (kV) generation interconnection line (Gen-Tie Line), and one of two potential sites being considered for a new substation. The Project would be located on lands administered by the US Department of the Interior (DOI), Bureau of Land Management (BLM), Palm Springs-South Coast Field Office.

The Project would develop a new 500- to 220- (500/220-) kV substation (referred to herein as the Red Bluff Substation), where the PV generating facility would interconnect with the Southern California Edison (SCE) regional transmission system. While the Red Bluff Substation is included as part of the Project for planning and environmental considerations, it would be constructed, owned, and operated by SCE, not the Applicant. In addition to approvals sought by Sunlight from federal, state, and local agencies for implementing the DSSF, SCE will seek approvals from the California Public Utilities Commission (CPUC) and other state agencies to develop the Red Bluff Substation. Under California Environmental Quality Act (CEQA) Guidelines, Section 15221, this environmental impact statement (EIS) will satisfy the CEQA requirements for those Project components that require entitlements from state and local agencies.

Because the Project would be located primarily on lands administered by the BLM, the Applicant filed a right-of-way (ROW) application with the BLM to construct, operate, and decommission the Project (Case File Number CACA #48649). The decision regarding the issuance of the ROW grant will be based in part on an evaluation of the Project's potential environmental effects through the environmental review process under the National Environmental Policy Act of 1969 (NEPA) and the requirements of the Federal Land Policy and Management Act of 1976 (FLPMA). As part of the ROW grant application process, the Applicant submitted a Plan of Development (POD) for the Project to the BLM on December 22, 2009. Since then, the Applicant has modified the configuration of the Project's solar arrays and developed two additional Gen-Tie Line alternatives for consideration to improve design and incorporate feedback from public agencies and other stakeholders to minimize adverse environmental impacts. A Revised Project Description (a Supplement to the POD) was submitted to the BLM on March 19, 2010 and will be resubmitted to the BLM prior to issuance of a Notice to Proceed (NTP).

In compliance with NEPA, the BLM prepared this Final EIS to inform the public about the proposed Project and to meet the needs of federal, state, and local permitting agencies in considering the Project. BLM authorization of a ROW grant for the Project would require an amendment to the California Desert Conservation Area (CDCA) Plan (BLM 1980), as amended. The US Department of Energy (DOE) is a cooperating agency on the EIS pursuant to a Memorandum of Understanding (MOU) between DOE and BLM. DOE will consider Sunlight's application for a loan guarantee under Title XVII of the Energy Policy Act of 2005 (EPA 2005), as amended by Section 406 of the American Recovery and Reinvestment Act of 2009, Public Law (PL) 111-5 (the "Recovery Act").

In order to construct the Red Bluff Substation, SCE first must obtain regulatory authorization from the CPUC., which has discretionary authority to issue a Permit to Construct (PTC) for the Red Bluff

Substation, evaluated herein as a portion of the Project. As allowed by CEQA Guidelines Section 15221, the CPUC intends to use this EIS to provide the environmental review required for its consideration of SCE's PTC application under CEQA once that application is filed. The CPUC and BLM have signed an MOU that defines the relationship of the two agencies, and identifies CPUC as a cooperating agency with the BLM for preparation of this EIS. Following preparation of the EIS by BLM, the CPUC will determine whether the EIS adequately accommodates the requirements of CEQA and can be used to support its decision on the substation.

The Applicant is coordinating with other federal agencies, including the US Fish and Wildlife Service (USFWS) and the US Army Corps of Engineers (USACE), regarding potential Project approvals and any associated NEPA compliance requirements. The Applicant is also coordinating with California state and local agencies, including the California Department of Fish and Game (CDFG), California Department of Transportation (Caltrans), Metropolitan Water District of Southern California (MWD), California Regional Water Quality Control Board (RWQCB), South Coast Air Quality Management District (SCAQMD), and Riverside County, regarding potential Project approvals and any associated CEQA compliance requirements.

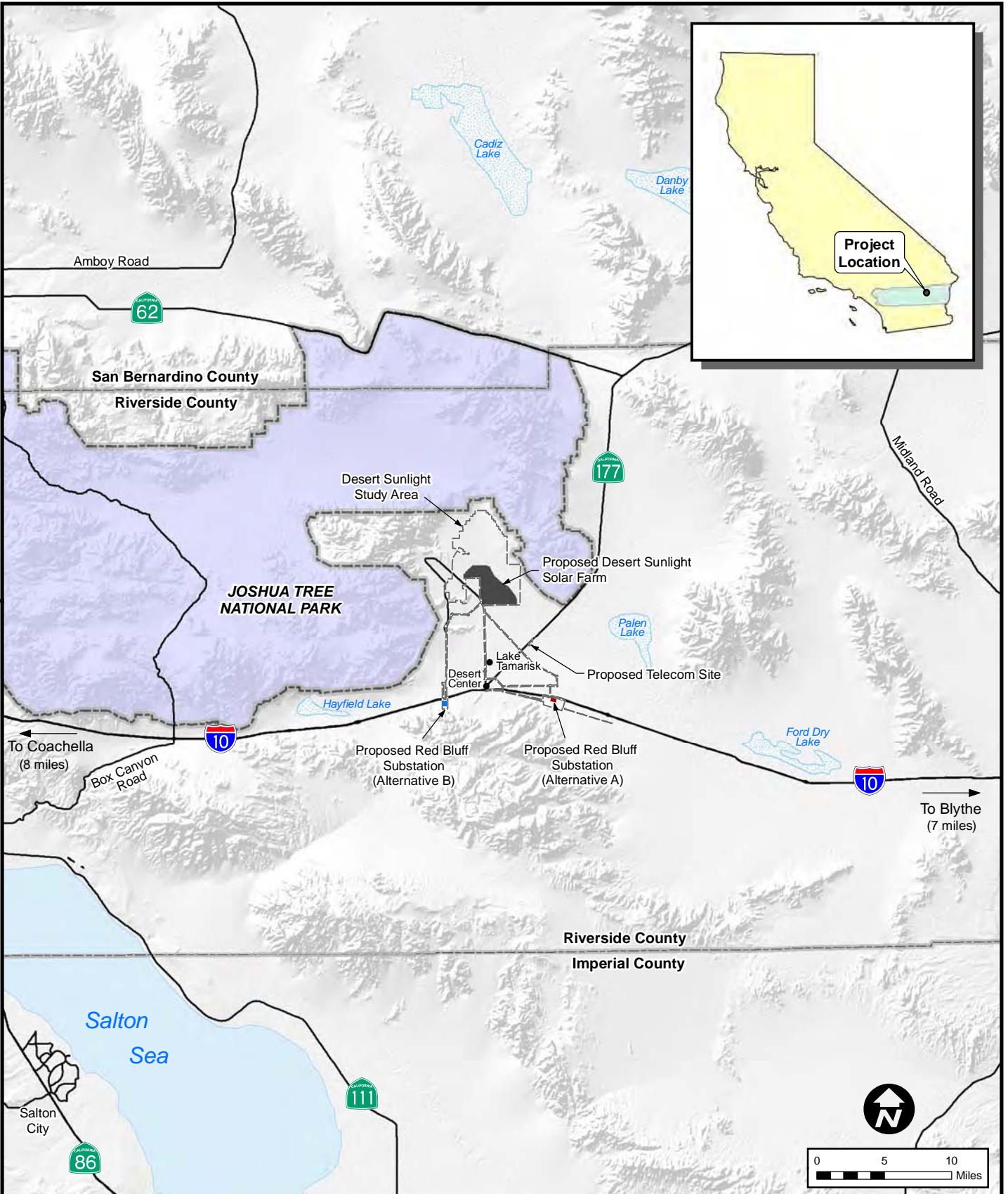
This EIS describes and evaluates the environmental impacts that are expected to result from construction, operation, maintenance, and decommissioning of the Project and presents recommended mitigation measures that, if adopted, would avoid, minimize, or mitigate the environmental impacts identified. In accordance with NEPA *and* CEQA requirements, this EIS also identifies alternatives that respond to the stated purpose and need for the proposed Project (including *one No Action and two No Project* Alternatives) that could avoid or minimize significant environmental impacts associated with the Project as proposed by the Applicant and SCE, and evaluates the environmental impacts associated with these alternatives. Specifically, the information contained in this EIS will be considered by the BLM in its deliberations regarding approval of the ROW grant and may also be considered by the other, applicable agencies with regard to their respective permits, including DOE, CPUC, and other federal, state, and local agencies.

## 1.1 PROJECT LOCATION AND OVERVIEW

The Project area is a largely vacant, undeveloped, and relatively flat land area located in the Chuckwalla Valley of the Sonora Desert in eastern Riverside County. The area proposed for the Solar Farm (Figure 1-1) is approximately six miles north of Interstate 10 (I-10) and the rural community of Desert Center and four miles north of Lake Tamarisk, between the cities of Coachella (to the west) and Blythe (to the east). The Project Area contains existing transmission lines, telephone lines, and pipelines, as well as dirt roads. Joshua Tree National Park is north, east, and west of the area; at its closest point, the Solar Farm site is approximately 1.4 miles southwest of the national park boundary. The Eagle Mountain Mine is approximately one mile west of the Project Study Area.

The Project consists of three main components associated with generating and delivering electricity and one provision that would determine the suitability of the Project application area for solar development:

- Solar Farm site (the main PV generating facility);
- 220-kV Gen-Tie (*interconnection*) Line; and
- 500/220-kV substation (the Red Bluff Substation).



**LEGEND**

- Desert Sunlight Study Area Boundary
- Proposed Desert Sunlight Solar Farm
- Joshua Tree National Park
- Intermittent Water Feature
- Perennial Water Feature



DESERT SUNLIGHT SOLAR FARM

**Figure 1-1**  
**Regional Map**

The determination of the suitability of the project application area for solar development would be made as part of the plan amendment process, as described in Section 1.6.

The Solar Farm site, where the power would be generated, would encompass up to 3,912 acres. The Solar Farm would consist of several components:

- Main generation area, which includes PV arrays, combining switchgear, overhead lines, and access corridors;
- Operations and Maintenance (O&M) Facility;
- Solar Energy Visitor Center;
- On-site substation (where the voltage of the Solar Farm-generated electricity would be stepped up to 220 kV, which is the voltage of the Gen-Tie Line); and
- Site security and fencing.

The Gen-Tie Line would transmit the electricity generated at the Solar Farm to the regional transmission system, through the Red Bluff Substation where the power from the Solar Farm would feed into the SCE's existing Devers Palo Verde 1 (DPV1) 500-kV *interconnection* line. The Gen-Tie Line would be up to 12.2 miles long, encompassing up to 256 acres. *The 256 acres would be utilized for the entire 160-foot-wide transmission ROW; however, permanent disturbance would be up to 92 acres.* The Applicant plans to use steel monopoles for the Gen-Tie Line. Poles are expected to be 135 feet high and approximately 900 to 1,100 feet apart.

The Red Bluff Substation would consist of a 500/220-kV substation on approximately 76 acres, with up to 20 acres needed for related drainage control, up to 31 acres for access roads, up to 33 acres for *interconnection* line connections, up to 8 acres for an electric distribution line, and *up to* an acre for telecommunications facilities. It would interconnect the power from the Solar Farm (through the Gen-Tie Line) to SCE's DPV1 *interconnection* line, which passes next to the two alternative substation sites evaluated in this EIS. Red Bluff Substation features include:

- Interconnection lines to connect the substation to the DPV1 line;
- Connection of the Project's Gen-Tie Line into the substation;
- Modification of some existing Florida Power & Light (FPL) structures (towers) near the substation;
- Construction of an electric distribution line for substation light and power;
- Installation of telecommunications facilities associated with the DSSF and substation;
- Construction of drainage control features outside (but next to) the substation footprint; and
- Construction of or improvements to existing access roads.

For each of the three Project components, the Applicant has provided the following alternative configurations:

- Two Solar Farm configurations, SF-B and SF-C;
- Three Gen-Tie Line configurations, GT-A-1, A-2, and B-2; and



- Two Red Bluff Substation configurations, Alternatives A and B.

One additional Solar Farm layout (SF-A) and one additional Gen-Tie Line configuration (GT-B-1) were eliminated from further consideration because of biological and cultural resources constraints.

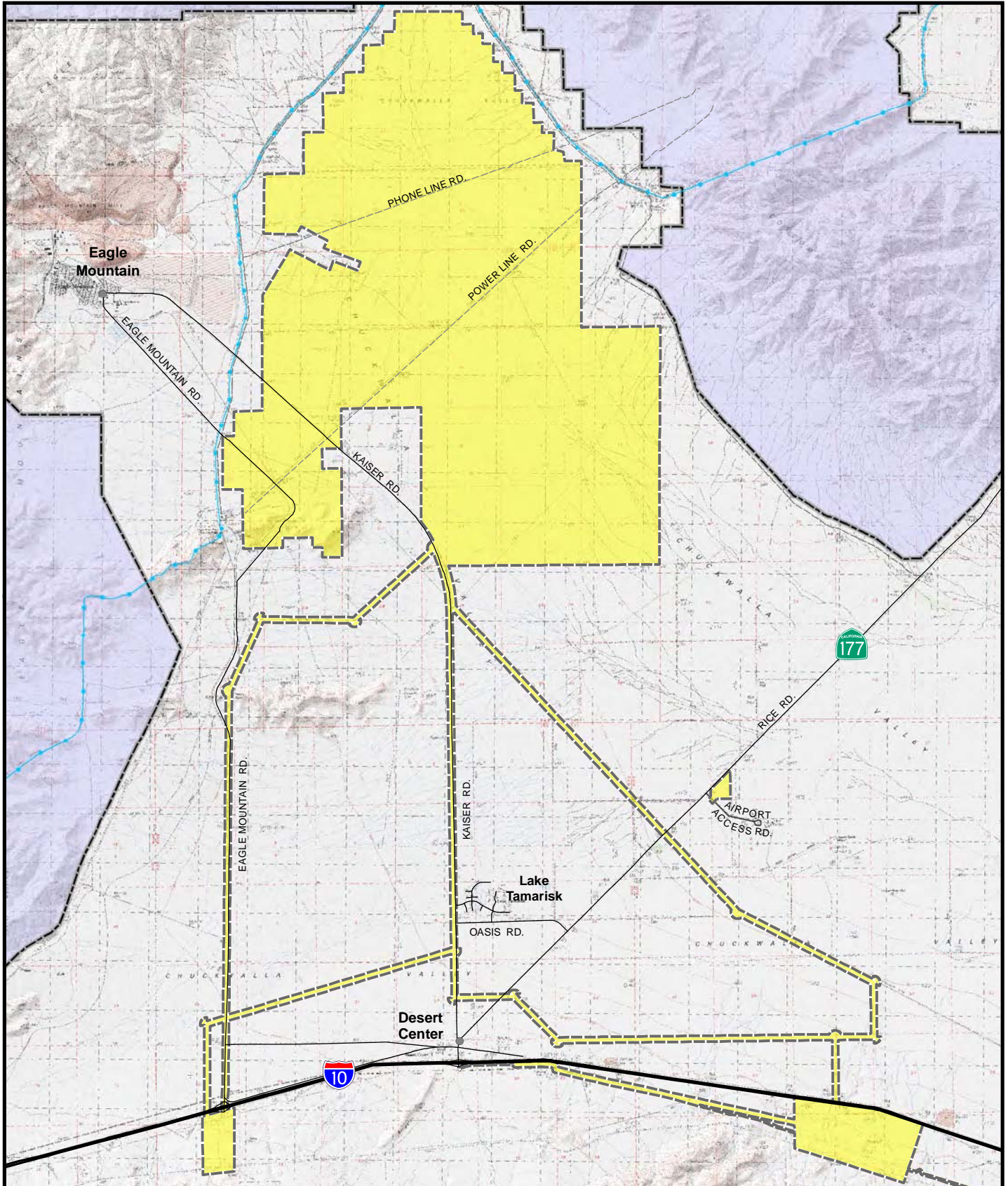
In addition, two access road alternatives (Access Roads 1 and 2) have been identified for Red Bluff Substation Alternative A.

To provide a sufficiently large area to evaluate a reasonable range of alternatives for the Solar Farm site, the Gen-Tie Line route, and the Red Bluff Substation, including ancillary facilities, the Applicant established a Project Study Area of over 19,000 acres (Figure 1-2). The Project Study Area includes over 16,000 acres studied for siting of the Solar Farm site, over 2,000 acres studied for siting of the Gen-Tie Line, over 650 acres studied for siting of the Red Bluff Substation, approximately 140 acres considered for access roads to the Red Bluff Substation, 40 acres for telecommunications facilities, and approximately 230 acres for the distribution line for substation light and power.



The Applicant's process for evaluating and selecting from among various areas considered for the Project Study Area was undertaken in consultation with the BLM and was based on a number of criteria, including:

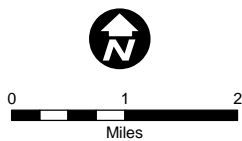
- A contiguous site with flat topography (grade of less than three percent) large enough for siting a 550-MW solar PV facility with minimal cut and fill;
- Avoidance of areas that are highly pristine or biologically sensitive, such as designated Wilderness Areas, Areas of Critical Environmental Concern, Desert Wildlife Management Areas, etc.;
- Avoidance of high-quality habitat for listed species (e.g., choosing Project locations in Category III [lowest quality] desert tortoise habitat);
- Avoidance of known cultural or historic sites and recreational resource areas;
- Proximity to existing transmission facilities with sufficient capacity for Project output and suitable locations for interconnection;
- Proximity to established highway and road access;
- Availability of land for sale or lease at a reasonable cost; and
- Location within an area that has been identified as a Competitive Renewable Energy Zone (CREZ) under California's Renewable Energy Transmission Initiative (RETI), and a Solar Energy Study Area in the BLM/DOE Programmatic Solar Energy Development EIS.

Once the Project Study Area was chosen, the Applicant conducted preliminary biological, cultural, hydrological, and geological reviews of the entire Project Study Area in order to evaluate site conditions and eliminate portions of the Project Study Area considered unsuitable for development of the Project facilities. Based on the preliminary study, more thorough and detailed biological, cultural, hydrological, and geological studies were conducted on the portions of the Project Study Area considered suitable for development, including all areas considered for the three Project components. These detailed studies were done in order to determine the optimal configurations for



**LEGEND**

-  Project Study Area
-  Joshua Tree National Park



Source: First Solar, 2010.



DESERT SUNLIGHT SOLAR FARM

**Figure 1-2**  
**Project Study Area**

alternatives to be considered for the Project components. The alternative configurations were sited to avoid and then minimize impacts to sensitive environmental resources to the extent possible. Further biological, cultural, hydrological, and geological reviews were conducted for areas added to the Project Study Area since the Applicant's December 2009 submittal of the POD.

## 1.2 PURPOSE OF AND NEED FOR ACTION

Sunlight applied to the BLM for a ROW grant on federal public land, pursuant to FLPMA, to develop the Solar Farm, the Gen-Tie Line route, and the Red Bluff Substation. The Applicant also applied to the DOE for a loan guarantee under Title XVII of the Energy Policy Act of 2005 (EPAct 2005), as amended by Section 406 of the American Recovery and Reinvestment Act of 2009, PL 111-5 ("Recovery Act"). This section discusses the purpose and need for the Proposed Action, as required by NEPA, the Applicant's objectives for the Project, and CEQA project objectives for the Red Bluff Substation.

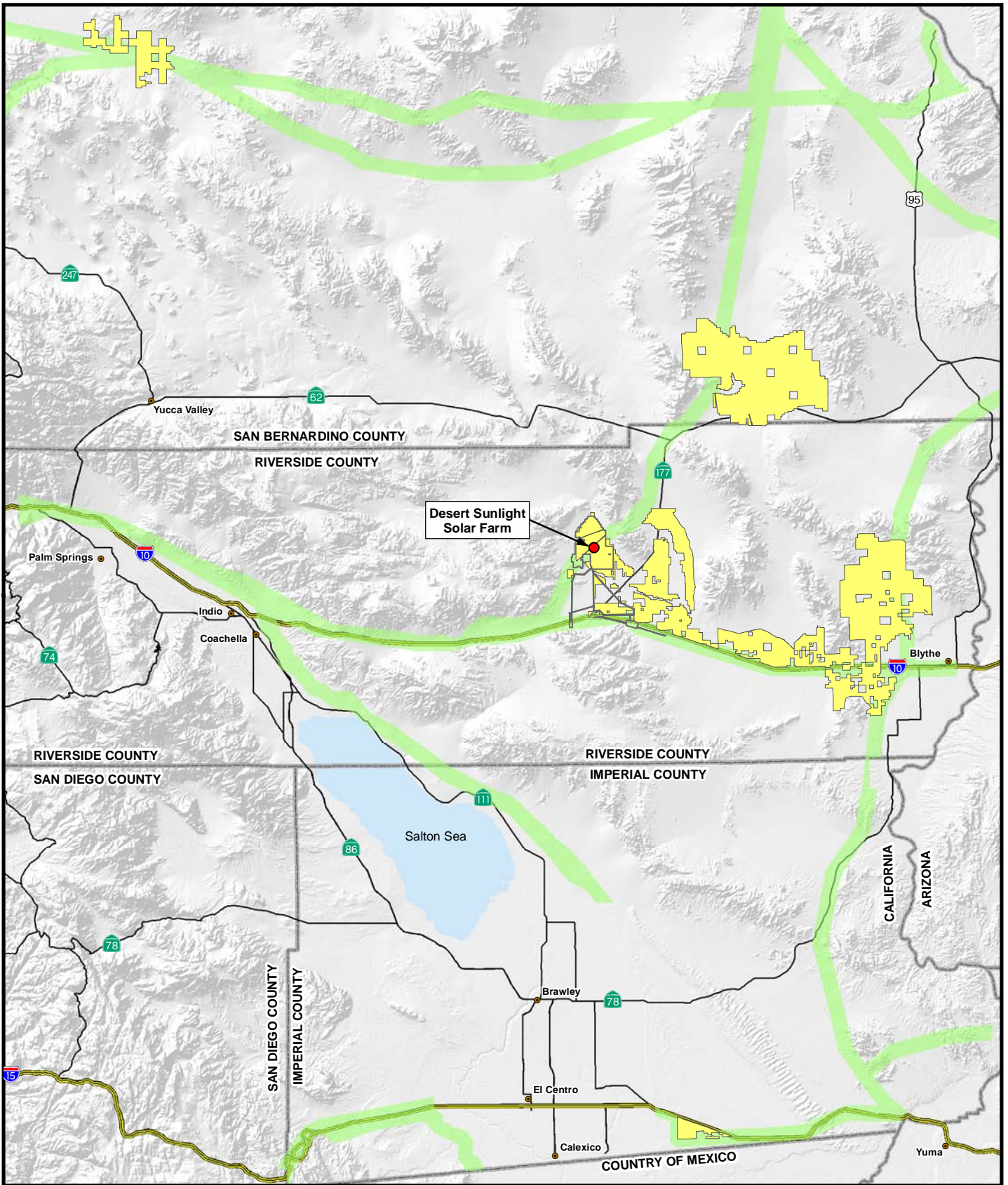
### 1.2.1 BLM Purpose and Need

In accordance with FLPMA (Section 103(c)), public lands are to be managed for multiple uses that take into account the long-term needs of future generations for renewable and non-renewable resources. The Secretary of the Interior is authorized to grant ROW on public lands for systems of generation, transmission, and distribution of electric energy (Section 501(a)(4)). Taking into account the BLM's multiple use mandate, the purpose and need for the proposed action is to respond to a FLPMA ROW application submitted by Desert Sunlight Holdings, LLC to construct, operate, maintain, and decommission a solar PV energy-generating facility and associated infrastructure on public lands administered by the BLM in compliance with FLPMA, BLM ROW regulations, and other applicable federal laws and policies.

In conjunction with FLPMA, the BLM's applicable authorities include the following:

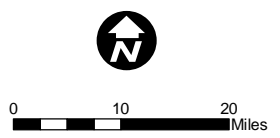
- Executive Order 13212, dated May 18, 2001, which mandates that agencies act expeditiously and in a manner consistent with applicable laws to increase the production and transmission of energy in a safe and environmentally sound manner.
- *Section 211* of the Energy Policy Act of 2005 (EPAct 2005), which *states that "the Secretary of the Interior should . . . seek to have approved non-hydropower renewable energy projects located on the public lands with a generation capacity of at least 10,000 megawatts of electricity."*
- Secretarial Order 3285A1, Renewable Energy Development by the DOI, dated February 22, 2010. This Secretarial Order establishes the development of renewable energy as a priority for the DOI and creates a Departmental Task Force on Energy and Climate Change. It also announced a policy goal of identifying and prioritizing specific locations (study areas) best suited for large-scale production of solar energy. The Project Study Area is within one of the study areas identified by the BLM under this order, as shown on Figure 1-3.

The BLM will decide whether to deny the proposed ROW, grant the ROW, or grant the ROW with modifications. Modifications may include modifying the proposed use or changing the route or location of the proposed facilities (43 CFR 2805.10(a)(1)).



**LEGEND**

- Solar Energy Study Areas
- Designated Utility Corridor



Source:  
Department of Energy, 2010.  
Department of Interior, 2010.



DESERT SUNLIGHT SOLAR FARM

**Figure 1-3**

**BLM Solar Energy Study Areas in Project Area**

### **1.2.2 DOE Purpose and Need**

The DOE is a cooperating agency on this EIS, in accordance with an MOU the BLM signed in January 2010. The DOE's purpose and need for agency action is to comply with its mandate under EPAct 2005 by selecting eligible projects that meet the goals of the act. The DOE's proposed action is issuance of a loan guarantee for this Project under Title XVII of the EPAct 2005, as amended by Section 406 of the Recovery Act. The Recovery Act requires that construction for the Project commence by September 30, 2011.

The DOE's purpose and need for the agency action is based on federal laws addressing the financing and promotion of renewable energy projects and need for immediate economic stimulus. The EPAct 2005 established a federal loan guarantee program within DOE for eligible energy projects. Title XVII of EPAct 2005 authorizes the Secretary of Energy to make loan guarantees for a variety of types of projects including those that "avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases; and employ new or significantly improved technologies as compared to commercial technologies in service in the U.S. at the time the guarantee is issued." The two principal goals of the loan guarantee program are to encourage commercial use in the US of new or significantly improved energy-related technologies and to achieve substantial environmental benefits. The EPAct 2005 was amended by the Recovery Act to create Section 1705, authorizing a new program for rapid deployment of renewable energy projects and related manufacturing facilities, electric power transmission projects, and leading edge biofuels projects that commence construction before September 30, 2011. The primary purposes of the Recovery Act are job preservation and creation, infrastructure investment, energy efficiency and science, assistance to the unemployed, and state and local fiscal stabilization. The Section 1705 program is designed to address the current economic conditions of the nation, in part, through renewable energy, transmission and leading edge biofuels projects.

On December 16, 2009, Sunlight submitted an application to the DOE Loan Guarantee Program for a federal loan guarantee for the Desert Sunlight Solar Farm at Desert Center, California, in response to DOE's October 7, 2009 solicitation, "Federal Loan Guarantees for Commercial Technology Renewable Energy Generation Projects under the Financial Institution Partnership Program." For this solicitation, DOE is implementing the application process by directly working with certain qualified financial institutions through a set of procedures established by DOE as its Financial Institution Partnership Program (FIPP). In general, the FIPP is intended to expedite the loan guarantee process and expand senior credit capacity for the efficient and prudent financing of eligible projects under Section 1705 of Title XVII that use commercial technologies. This objective will be primarily accomplished by additional roles defined for certain financial institutions satisfying applicable qualifications set forth by DOE. Under the FIPP program, proposed borrowers and project sponsors may not apply directly to DOE but must instead work with a financial institution that meets DOE qualification as a Lead Lender.

### **1.2.3 Desert Sunlight Holdings LLC Objectives for the Project**

Sunlight's fundamental objective for the DSSF Project is to construct, operate, maintain and eventually decommission a 550-MW PV energy facility and associated interconnection transmission infrastructure, and to facilitate SCE's construction and operation of a substation in order to provide renewable electric power to California's existing transmission grid to help meet federal and state renewable energy supply and greenhouse gas (GHG) emissions reduction requirements. Sunlight is

committed to constructing and operating the Project in an environmentally responsible manner and to providing a sustainable source of renewable energy to the state's investor-owned utilities and the public. Sunlight's specific objectives for the DSSF Project are:

- To construct and operate a cost competitive 550-MW solar PV energy facility using First Solar's proven thin-film PV technology to provide a renewable and reliable source of power to California's investor-owned utilities;
- To locate the Project on contiguous lands with high solar insolation and relatively flat terrain at sufficient scale to maximize operational efficiency while minimizing environmental impacts and water use;
- To minimize environmental impacts and land disturbance by locating the Project near existing transmission infrastructure and roads and by avoiding sensitive environmental areas, recreational resources and wildlife habitats (e.g., Desert Wildlife Management Areas, Areas of Critical Environmental Concern);
- To assist California and its investor-owned utilities in meeting the State's Renewables Portfolio Standard (RPS) and GHG emissions reduction requirements, including the requirements set forth in Senate Bill (SB) 1078 (California Renewables Portfolio Standard Program), Assembly Bill (AB) 32 (California Global Warming Solutions Act of 2006), and the Governor's Executive Order S-14-08 to increase the state's Renewable Energy Standard to 33 percent renewable power by 2020. In particular:
  - California's RPS mandate that requires the state's investor-owned utilities (IOUs) to supply 20 percent of California's total electricity through renewable energy generation by 2010, as set forth in SB 1078 (2001-2002 Reg. Sess.) (establishing the California RPS Program) and SB 107 (2005-2006 Reg. Sess.) (accelerating the 20 percent requirement to 2010). As of the first quarter of 2010, California's IOUs were obtaining only 15 percent of their electricity from renewable energy generation against the end-of-year 20 percent target. The CPUC reported that the IOUs were expected to meet the 2010 target only in 2012 or 2013, two to three years behind schedule, and that half of new RPS projects approved by the CPUC since 2002 and under development are delayed due to lack of transmission or generation permitting at the county, state, or federal level.<sup>1</sup>
  - Governor Schwarzenegger's issued Executive Order S-14-08 to streamline California's renewable energy project approval process and increase the state's renewable energy standard to 33 percent renewable energy by 2020. *The IOUs will have to almost quadruple their annual renewable energy procurement, from 27 terawatt-hours (TWh) in 2007 to 102 TWh by 2020 to meet this requirement.*<sup>2</sup>
  - California's GHG emission reduction goals set forth in AB 32 that require the state's GHG emissions be reduced to 1990 levels by 2020.
- To develop a source of renewable electric power that can be placed into service in an expeditious manner by interconnecting to SCE's existing transmission grid at DPV1 at a

<sup>1</sup> Renewables Portfolio Standard Quarterly Report Q4 2009, California Public Utilities Commission, pp. 4, 7-8.

<sup>2</sup> 33 percent Renewables Portfolio Standard Implementation Analysis Preliminary Results, June 2009, California Public Utilities Commission, p. 8.

substation location reviewed by SCE and interconnecting to the California Independent System Operator (CAISO) grid through serial interconnection queue positions as part of the Large Generator Interconnection Process (LGIP).

To assist in meeting these objectives, and after evaluating numerous potential locations and alternative Project configurations in consultation with BLM, the Applicant applied for a ROW grant to construct and operate a 550-MW solar PV energy facility on BLM-administered land at the Desert Sunlight location using its proven thin film PV technology, entered into power purchase agreements (PPAs) to supply renewable power, and obtained priority access to transmit 550 MW of renewable power on SCE's existing DPV1 *interconnection* line at the Red Bluff Substation. Sunlight also applied to DOE for a loan guarantee under Title XVII of EAct 2005, as amended by Section 406 of the Recovery Act of 2009, to assist in financing the Project (refer to Section 1.2.2 for more information). Through this application the Applicant will assist the BLM and DOE in meeting their respective Purposes and Needs of contributing toward fulfillment of the economic stimulus and renewable energy development objectives of EAct 2005, the Recovery Act, Presidential and Secretarial orders, and federal laws, regulations, and mandates.

#### 1.2.4 CEQA Project Objectives

SCE proposes to construct the Red Bluff Substation in response to interconnection requests from Desert Sunlight Holdings LLC as part of the LGIP. CEQA Guidelines Section 15124(b) requires a statement of project objectives. The project objectives for the Red Bluff Substation are to:

- Respond to interconnection requests as part of the LGIP from generators in the Desert Center area by constructing a substation to interconnect with the DPV 500-kV interconnection line;
- Provide safe and reliable electrical service consistent with the North American Electric Reliability Corporation (NERC), Federal Energy Regulatory Commission (FERC), CAISO, and SCE's planning design guidelines and criteria;
- Meet project need while minimizing environmental impacts; and
- Meet project need in accordance with the Large Generation Interconnection Agreement.

### 1.3 AUTHORIZING ACTIONS

#### 1.3.1 Major Authorizing Laws and Regulations

The BLM is preparing this EIS in compliance with NEPA, FLPMA and applicable regulations to inform the public about the proposed Project and to meet the needs of federal, state, and local permitting agencies in considering the Project. BLM authorization of a ROW grant for the Project would require a resource management plan amendment to the CDCA Plan (BLM 1980), as amended. DOE will also consider Sunlight's application for a loan guarantee under Title XVII of the EAct 2005, as amended by Section 406 of the Recovery Act.

In addition, the CPUC has discretionary authority to issue a *Permit to Construct (PTC)* for the Red Bluff Substation, evaluated herein as a portion of the Project. *Because portions of the Project's alternative Gen-Tie Line routes would cross unincorporated privately owned land, MWD owned land, and/or Riverside County owned land within the jurisdiction of Riverside County, the County has authority to issue a Public Use Permit for the*

*Project. Additionally, Riverside County has the authority to issue an Encroachment Permit for access to the County road ROW. As allowed by the CEQA Guidelines, the CPUC and Riverside County intend to use this EIS to provide the environmental review required for their respective approvals of the relevant portions of the Project.*

The Applicant is also coordinating with other federal, state, and local agencies regarding potential Project permits and approvals and any associated NEPA or CEQA compliance requirements. Other federal as well as state and local permitting authorities may also intend to rely upon the analysis presented in this EIS for fulfillment of their respective regulatory obligations.

The following sections provide an overview of the major federal (BLM and non-BLM), state, and local policies, plans, programs, and laws that apply to the Project. Additional requirements are discussed for each environmental resource in Chapter 3.

### **1.3.2 Relationship to BLM Policies, Plans, Programs, and Laws**

#### ***Federal Land Policy and Management Act of 1976***

FLPMA provides the BLM's overarching mandate to manage the lands and resources under its stewardship based on the principles of multiple use and sustained yield. Multiple use is a concept that directs management of lands and resource values in a way that best meets the present and future needs of Americans. It is defined as "a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources" (FLPMA §103[c]). In processing a land use plan amendment, BLM must also comply with the BLM Planning Regulations (43 CFR Part 1600) and the BLM Land Use Planning Handbook (H-1601-1).

#### ***California Desert Conservation Area Plan***

The CDCA encompasses 25 million acres in Southern California designated by Congress in 1976 through FLPMA. The BLM manages about 10 million of those acres. Congress directed the BLM to prepare and implement a comprehensive long-range plan for the management, use, development, and protection of public lands within the CDCA. The 1980 CDCA Plan, as amended, is based on the concepts of multiple use, sustained yield, and maintenance of environmental quality. The CDCA Plan provides overall regional guidance for BLM-administered lands in the CDCA and establishes long-term goals for protection and use of the California desert.

The CDCA Plan establishes four multiple use classes, multiple use class guidelines, and plan elements for specific resources or activities, such as motorized vehicle access, recreation, and vegetation. *Project compliance with the multiple use classes is discussed in Section 4.9, Lands and Realty.* The multiple use classes are:

- Class C (Controlled Use)—About four million acres are Class C. These include 69 wilderness areas (3,667,020 acres) created by Congress with the October 1994 passage of the California Desert Protection Act. These lands are to be preserved in a natural state; access generally is limited to nonmotorized, nonmechanized means—on foot or horseback.
- Class L (Limited Use)—About four million acres are Class L. These lands are managed to protect sensitive, natural, scenic, ecological, and cultural resource values. They provide for generally lower-intensity, carefully controlled multiple uses that do not significantly diminish resource values.



- Class M (Moderate Use)—About 1.5 million acres are Class M. These lands are managed in a controlled balance between higher-intensity use and protection. A wide variety of uses such as mining, livestock grazing, recreation, energy, and utility development are allowed. Any damage that permitted uses cause must be mitigated.
- Class I (Intensive Use)—About 500,000 acres are Class I. These lands are managed for concentrated use to meet human needs. Reasonable protection is provided for sensitive natural values and mitigation of impacts, and impacted areas are rehabilitated when possible.

### ***Northern and Eastern Colorado Desert Coordinated Management Plan***

The Northern and Eastern Colorado Desert Coordinated Management Plan (NECO Plan) is a Habitat Conservation Plan and amendment to the 1980 CDCA Plan that provides:

- A comprehensive framework for ecosystem management, including recovery of three populations of the desert tortoise;
- A single landscape basis for ecosystem management for three federal land administering agencies within the planning area: BLM, Joshua Tree National Park (eastern half only), and all of Chocolate Mountains Gunnery Range managed by the U.S. Navy; and
- A structure that integrates ecosystem management into a broader context of agencies' mandates, including BLM's multiple use management mission.

The NECO planning area consists of 5.5 million acres, covering portions of BLM field offices in Needles, El Centro, and Palm Springs. The plan amendment is also cooperatively joined by the California Department of Fish and Game through the statewide Sikes Act Memorandum of Agreement. *Project compliance with the NECO Plan is discussed in Section 4.9, Lands and Realty.*

### **1.3.3 Relationship to Other Federal Plans, Policies, Programs, and Laws**

This section summarizes the other major federal plans, policies, programs, and laws that apply to the Proposed Action.

#### ***National Environmental Policy Act***

NEPA (42 USC. 4321 et seq.) declares a continuing federal policy that directs “a systematic, interdisciplinary approach” to planning and decision-making and requires the preparation of environmental statements for “major Federal actions significantly affecting the quality of the human environment.” The President’s Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR Parts 1500-1508) require federal agencies to identify and assess reasonable alternatives to proposed actions that will restore and enhance the quality of the human environment and avoid or minimize adverse environmental impacts. (See also Department of Energy Regulations, 10 CFR Part 1021.) Federal agencies are further directed to emphasize significant environmental issues in project planning and to integrate impact studies required by other environmental laws and Executive Orders into the NEPA process. The NEPA process should therefore be seen as an overall framework for the environmental evaluation of federal actions. In processing ROW applications, BLM must also comply with the Department of the Interior’s regulations applicable to implementing the procedural requirements of NEPA (43 CFR Part 46), as well as BLM’s NEPA Handbook (H-1790-1).

**Clean Air Act**

The Clean Air Act (42 USC 7401-7661), as amended, regulates air pollution to improve air quality. It regulates air emissions from area, stationary, and mobile sources. This law also authorizes the US Environmental Protection Agency to establish National Ambient Air Quality Standards to protect public health and the environment.

**Clean Water Act**

The Clean Water Act (CWA) (33 USC 1251-1376) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the US must obtain a state certification that the discharge complies with other provisions of the CWA. The RWQCBs administer the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredge or fill material) from a point source into waters of the US. Section 404 establishes a permit program administered by the USACE regulating the discharge of dredged or fill material into waters of the US, including wetlands. The CWA also contains the requirements under which the RWQCBs set water quality standards for all contaminants in surface waters.

**Endangered Species Act of 1973**

The Endangered Species Act (ESA) (16 USC 1531-1543) and subsequent amendments provide guidance for the conservation of endangered and threatened species and the ecosystems upon which they depend. The USFWS administers the ESA. The major components of the ESA are:

- Provisions for the listing of threatened and endangered species;
- The requirement for consultation with the USFWS on federal projects that may affect listed species or their habitat;
- Prohibitions against "take" of listed species. Under the ESA, the definition of "take" is to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct"; and
- Provisions for permits to allow the incidental taking of threatened and endangered species.

**National Historic Preservation Act of 1966, as Amended**

The National Historic Preservation Act (NHPA) (16 USC 470) requires federal agencies with jurisdiction over a proposed federal project to take into account the effect of the undertaking on cultural resources that are listed or eligible for listing on the National Register of Historic Places (NRHP). The act requires that the agencies afford the State Historic Preservation Office, any potentially affected Indian tribe, and the Advisory Council on Historic Preservation with an opportunity to comment on the undertaking.

**1916 Organic Act, as Amended**

The Secretary of the Interior is responsible for protecting units of the National Park System pursuant to the National Park Service 1916 Organic Act (16 U.S.C. 1, 2, 3 and 4) which consists of the Act of August 25, 1916 (39 Stat. 535) and amendments thereto.

### **1.3.4 Relationship to State and Local Laws, Plans, Policies, and Programs**

This section summarizes the major state and local laws, plans, policies, and programs that apply to the Proposed Action.

#### ***Air Quality Management District***

The proposed Project locations are within the jurisdiction of the South Coast Air Quality Management District (SCAQMD), which reviews the plans and specifications for construction in the proposed Project area. SCAQMD would assess emissions and possible air contamination resulting from construction and operational activities (e.g., road dust, windblown contaminants, and emissions from construction activities).

#### ***California Endangered Species Act***

The California Endangered Species Act (CESA) (Fish and Game Code 2050 et seq.) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no state agency consultation procedures under CESA. For projects that affect a species that is both state and federally listed, compliance with the federal ESA will satisfy CESA if the CDFG determines that the federal incidental take authorization is “consistent” with CESA under Fish and Game Code Section 2080.1 and issues a Consistency Determination to that effect. For projects that will result in a take of a state-only listed species, the applicant must apply for a take permit under Section 2081(b).

#### ***California Fish and Game Code, Streambed Alteration Agreements***

Sections 1601 to 1603 of the California Fish and Game Code require notifying CDFG prior to constructing any project that would divert, obstruct or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occur during the environmental review process. When an existing fish or wildlife resource may be substantially adversely affected, CDFG is required to propose reasonable project changes and/or mitigation to protect the resource. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project.

#### ***State Historic Preservation Office***

The California State Historic Preservation Office (SHPO) reviews state programs and projects that may impact historic resources that are located on state-owned land pursuant to California Public Resources Code § 5024 and 5024.5.

#### ***California’s Renewables Portfolio Standard***

California’s RPS requires each of the state’s IOUs to supply 20 percent of its total electricity through renewable energy generation by the year 2010, as set forth in SB 1078 (2001-2002 Reg. Sess.) (establishing the California RPS Program) and SB 107 (2005-2006 Reg. Sess.) (accelerating the 20 percent requirement to the year 2010). Additionally, Governor Schwarzenegger’s Executive Order S-14-08 streamlined California’s renewable energy project approval process and increased the state’s renewable energy standard to 33 percent renewable energy by 2020. The California Energy

Commission will certify that electricity produced by the Project is eligible for the IOUs' RPS compliance after the Project achieves commercial operation.

### **California Renewable Energy Transmission Initiative**

The California RETI is a statewide planning process that has been underway for over two years to identify the transmission projects needed to accommodate California's renewable energy goals. Stakeholders have actively participated in the planning process. Phases 1 and 2 of the RETI project resulted in the identification and refinement of Competitive Renewable Energy Zones (CREZs), areas determined to hold the greatest potential for cost-effective and environmentally responsible renewable energy development.<sup>3</sup> The Project Study Area is located in an area that has been included by the RETI within the Riverside East CREZ.

### **California Large Generator Interconnection Process**

Electricity from the Project would be delivered to customers by the CAISO, acting as a transmission provider, through the transmission system owned by SCE and Pacific Gas and Electric (PG&E). In order to obtain the right to connect to the CAISO grid, a proposed electric generating facility with more than a 20-MW capacity must first apply for a queue position with CAISO through the LGIP. Applications for the Project's queue positions were submitted in 2006, obtaining positions 146 and 147. Next, the proposed generator must obtain a Feasibility Study, a System Impact Study, and a Facility Study from CAISO, a process that often takes several years. The final Facility Study for the Project *was completed* in 2010. Finally, the proposed generator must obtain a Large Generator Interconnection Agreement (LGIA) from CAISO. *This was received in August 2010*, more than three years after obtaining the queue positions.

### **Riverside County General Plan**

*Portions of the proposed interconnection lines are* within Riverside County's Desert Center Planning Area. The Riverside General Plan aims to preserve the natural character of the unincorporated areas of Riverside County and the Desert Center. The plan encourages clustering of development for the preservation of contiguous open space, aims to limit off-road vehicle use, and requires new development to comply with desert tortoise critical habitat designation requirements.

## **1.4 REQUIRED FEDERAL, STATE, AND LOCAL PERMITS, APPROVALS AND LICENSES**

Federal, state, and local permits and approvals would be required before construction and operation of the Project could proceed. A list of the major permits, approvals, and consultations required is presented in the following sections. The Applicant would be responsible for obtaining all permits and approvals required to implement any authorized activities.

### **1.4.1 Federal Permits and Status**

<sup>3</sup> Renewable Energy Transmission Initiative Phase 2B Draft Report, April, 2010, p. 1-1.

Table 1.4-1 provides a list of the federal permits, approvals, or authorizations anticipated to be required for the Project, and the status of relevant permit applications.

**Table 1.4-1  
Status of Project Federal Permits, Approvals, and Authorizations**

Permit or Approval	Lead Agency	Agency Action or Status
FLPMA ROW Grant	BLM	<p>The ROW Grant is subject to NEPA review and terms and conditions as set forth under FLPMA and BLM's implementing regulations. If the Project is approved, BLM will issue a ROW Grant at the end of the NEPA process.</p> <p>The original FLPMA Standard Form 299 (SF 299) ROW application for the Project was submitted to the BLM in November 2006; updates were submitted in February 2007, June 2009, October 2009, <i>February 2010</i>, April 2010, and August 2010. The original POD was submitted in April 2007 with an update, based on revised BLM POD guidelines, submitted in October 2008. Because of Project technology changes, another revision was submitted in December 2009, with amendments submitted in March 2010.</p>
CDCA Plan Amendment	BLM	BLM authorization of a ROW Grant for the Project will require a CDCA Plan Amendment. The amendment will be addressed as part of the FLPMA and NEPA processes as provided for in BLM Planning Regulations (43 CFR Part 1600), and BLM Land Use Planning Handbook (H-1601-1).
Review of Sunlight's Application for a Loan Guarantee under Title XVIII of EPA Act 2005	DOE	DOE is a cooperating agency in the preparation of this EIS. DOE will use the EIS as part of its review process for the loan guarantee.
Section 404 Clean Water Act (CWA) Permit	USACE	Sunlight <i>submitted</i> a jurisdictional delineation report to assess whether the Project locations contain waters or wetlands subject to federal CWA jurisdiction <i>on September 1, 2010. Sunlight obtained written concurrence from USACE on December 28, 2010, that the Project footprint contains no waters of the US subject to USACE/EPA jurisdiction under Section 404 of the CWA.</i>
Endangered/Threatened Species Consultation and Incidental Take Statement under the Federal ESA	USFWS	<i>The BLM submitted the Biological Assessment to the USFWS initiating the ESA Section 7 consultation process on October 15, 2010.</i> Biological surveys for federally listed species were conducted for the proposed Project locations, including the proposed transmission corridors and substation locations.
National Historic Preservation Act Section 106 Compliance	BLM	Identification and evaluation of cultural resources within the Project's Area of Potential Effects (APE) is ongoing. The BLM has initiated consultation with the State Historic Preservation Office and notified them of its intent to prepare a <i>Memorandum of Agreement (MOA)</i> for the Project. The <i>MOA</i> will specify the procedures to follow for the phased conclusion of additional field investigations and evaluation of cultural resources within the APE. The <i>MOA</i> will also specify the process for the assessment of effects to resources within the APE that are determined to be eligible for inclusion in the NRHP. The <i>MOA</i> will stipulate the requirement for the Historic Property Treatment Plan/Mitigation Plan to be prepared that will outline measures to avoid, minimize, or mitigate adverse effects to NRHP-eligible resources. The <i>MOA</i> will be signed prior to completion of the Record of Decision (ROD) for the Project and will ensure compliance with Section 106 of the NHPA.

**Table 1.4-1 (continued)**  
**Status of Project Federal Permits, Approvals, and Authorizations**

<b>Permit or Approval</b>	<b>Lead Agency</b>	<b>Agency Action or Status</b>
Archaeological Resources Protection Act, Cultural Resource Use Permit	BLM, State Office	A BLM Cultural Resource Use Permit will be obtained for the purposes of testing to determine the NRHP significance of identified sites and to conduct data recovery on sites adversely affected by Project construction and operation.
Fieldwork Authorization	BLM, Palm Springs-South Coast Field Office	A BLM Fieldwork Authorization was obtained prior to conducting Class III cultural resource inventories for the Project.
Native American Consultation	BLM	Sunlight is coordinating with the BLM to support the BLM's consultation with Native American tribes for the purpose of identifying sacred sites and other places of traditional religious and cultural importance, and to incorporate appropriate mitigation measures in the event such sites are located during construction. Consultation with tribes has been initiated and will continue throughout the NEPA and Section 106 compliance processes.
Department of Defense (DOD) Review	DOD	<i>The BLM requested further review of the Project by the DOD for its potential impact on military overflights and operations.</i>

#### 1.4.2 State Permits and Status

Table 1.4- provides a list of the state permits, approvals, or authorizations anticipated to be required for the Project, as well as the status of relevant permit applications.

**Table 1.4-2**  
**Status of Project State Permits, Approvals, and Authorizations**

<b>Permit or Approval</b>	<b>Lead Agency</b>	<b>Agency Action or Status</b>
Endangered/Threatened Species Take Authorization under CESA and Sections 2050 (general provision for endangered species) and 2080 (take of endangered species) of the California Fish and Game Code	CDFG	CESA review and approval will be required for impacts to state listed species. Focused biological surveys for sensitive species were done for all potential Project areas. CDFG is expected to complete a Consistency Determination for the Project, concurring with the USFWS's Biological Opinion for those species listed under both the ESA and CESA.
Section 1600-1602 Streambed Alteration Agreement process under the California Fish and Game Code	CDFG	Sunlight is coordinating with the CDFG on the scope of potential jurisdictional streambeds under the Fish and Game Code Sections 1600–1602. <i>Sunlight submitted a Streambed Alteration Agreement Notification to CDFG on November 5, 2010.</i> Sunlight will work with the CDFG to prepare and implement appropriate mitigation associated with any necessary Streambed Alteration Agreement.
Storm Water requirements under California Water Code and the CWA	RWQCB	Sunlight is coordinating with the Colorado River Basin RWQCB to determine the potential scope of storm water coverage for the construction and operation of the PV facility and related infrastructure. Sunlight will incorporate best management practices for storm water management and control.
Section 401 Certification under CWA	RWQCB	CWA Section 401 certification would be required in the event that the Project requires a federal permit or license that may result in a discharge to navigable waters. If certification is required, Sunlight will apply to the RWQCB to obtain certification.

**Table 1.4-2 (continued)**  
**Status of Project State Permits, Approvals, and Authorizations**

<b>Permit or Approval</b>	<b>Lead Agency</b>	<b>Agency Action or Status</b>
Interconnection Agreement	CAISO	<i>On August 9, 2010, Sunlight received SCE's and CAISO's signature pages to the Large Generation Interconnection Agreement, which is dated August 4, 2010.</i>
Permit to Construct (PTC)	CPUC	CPUC is a cooperating agency in the preparation of this EIS. The EIS will provide environmental review coverage pursuant to CPUC's CEQA requirements, as described in the CPUC-BLM MOU. SCE will need to obtain a PTC for Red Bluff Substation. SCE submitted the PTC application to the CPUC <i>on November 17, 2010.</i>
Encroachment Permit	Caltrans	An encroachment permit will be needed where the transmission corridor alternatives cross the I-10 and SR-177 corridors in order to reach the SCE Red Bluff Substation Site alternatives located south of I-10.
Fugitive Dust Control Plan	SCAQMD	A fugitive dust control plan will be developed in accordance with SCAQMD requirements prior to construction. Sunlight will obtain any additional permits or registrations required by the SCAQMD for the Project, as applicable.
Consultation on Sacred Areas to comply with state requirements	Native American Heritage Commission (NAHC)	The NAHC has been contacted. Follow-up contacts with Native Americans are in progress. Fourteen local tribes have been contacted and invited to participate in the Programmatic Agreement ( <i>now a Memorandum of Agreement</i> ) development process, and were invited to the Programmatic Agreement Development Kick-Off meeting held April 23, 2010. The BLM met with individual tribes, on request, to present information and answer questions.

### 1.4.3 Local Permits and Status

Table 1.4-3 provides a list and status of the local permits, approvals, and authorizations anticipated to be required for the Project, as well as the status of these permit applications.

**Table 1.4-3**  
**Status of Project Local Permits, Approvals, and Authorizations**

<b>Permit or Approval</b>	<b>Lead Agency</b>	<b>Agency Action or Status</b>
Public Use Permit	Riverside County	Sunlight is in discussions with Riverside County to determine whether any land use permit would be required for the Project alternatives that may incorporate private land. <i>The County has indicated that a Public Use Permit will be required for the Project's Gen-Tie Line crossings of privately held land.</i>
<i>Land License Agreement</i>	<i>MWD</i>	<i>Sunlight will work with MWD to obtain a Land License Agreement with MWD to cross MWD land owned in fee.</i>
Encroachment or other Permits	Riverside County and MWD	Permission for crossings of Kaiser Road or MWD easements will be secured before construction begins, as necessary.

## 1.5 DOCUMENT ORGANIZATION AND ISSUES TO BE ADDRESSED

### 1.5.1 Document Organization

This document follows regulations promulgated by the Council on Environmental Quality (CEQ) for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508); the Department of the Interior's NEPA regulations, 43 C.F.R. Part 46; the BLM NEPA Handbook, H-1790-1; Sections 201, 202, and 206 of FLPMA (43 CFR 1600); the BLM Land Use Planning Handbook, H1601-1; and DOE's NEPA implementing procedures (10 CFR 1021). This EIS describes the components of and reasonable alternatives to the Proposed Action and environmental consequences of the Proposed Action and the alternatives. In addition, the document incorporates provisions of CEQA to allow the CPUC to use this EIS in its environmental review and approval process for the Red Bluff Substation. This document also addresses DOE's Floodplain and Wetland Environmental Review Requirements (10 CFR 1022).

The EIS organization is as follows:

**Chapter 1** provides general background on the Project; identifies the purpose and need for action; describes the roles of the BLM, other agencies, and authorities regulating various aspects of the Project; and summarizes the public involvement process for the Project.

**Chapter 2** describes the Proposed Action and draft land use plan amendment decisions to be made and the alternatives development and screening process conducted for the Project. It also presents a range of reasonable Project alternatives that address the stated purpose and need for the Project, and identifies and explains why some alternatives were considered but not analyzed in detail.

**Chapter 3** describes the affected environment (existing conditions) for 16 environmental components in the Proposed Action area and identifies potential projects contributing to cumulative impacts.

**Chapter 4** provides a comprehensive analysis and assessment of impacts (direct, indirect, and cumulative) and mitigation measures (by environmental component) for the Proposed Action and other alternatives (including *a No Action and two No Project Alternatives*). It also describes other aspects of BLM compliance with NEPA procedures, including a description of unavoidable adverse impacts, the relationship between short-term use and long-term productivity, and any irreversible or irretrievable commitments of resources (40 CFR 1502.16), as well as addressing CEQA requirements.

**Chapter 5** identifies the persons, groups, agencies and other governmental bodies that were consulted or that contributed to the preparation of the EIS; describes Native American consultations and public participation during scoping; describes the public comment process; provides a list of EIS preparers; and lists agencies, organizations, and persons to whom the EIS will be sent or has been sent.

**Chapter 6** provides the references used in preparing the EIS.

**Chapter 7** includes a glossary and list of acronyms and abbreviations used in the EIS.

**Chapter 8** provides an index for key words in the EIS.



Appendices contain information that supplements or supports the analyses in the body of the EIS.

### 1.5.2 Issues to be Addressed

The issues evaluated in this EIS include the physical, biological, cultural, socioeconomic, and other resources that have the potential to be affected by activities related to the Proposed Action and alternatives. The issues are:

- Air Resources;
- Biological Resources – Vegetation;
- Biological Resources – Wildlife;
- Climate Change;
- Cultural Resources;
- Paleontological Resources;
- Geology and Soil Resources;
- Lands and Realty;
- Noise and Vibration;
- Public Health and Safety and Hazardous Materials;
- Recreation;
- Socioeconomics and Environmental Justice;
- Special Designation Areas;
- Traffic, Transportation, and Public Access;
- Visual Resources; and
- Water Resources (Surface and Groundwater).

Resources that do not exist in the Project area and, therefore, do not warrant analysis in the EIS include:

- Grazing;
- Wild Horses and Burros; and
- Mineral Resources.

## 1.6 BLM LAND USE PLAN AMENDMENT PROCESS

The principal resource management plan covering the proposed Project is the BLM's California Desert Conservation Area (CDCA) Plan of 1980, as amended. The Project Study Area is within the planning area designated under a 2002 amendment to the CDCA Plan—the Northern and Eastern Colorado Desert Coordinated Management Plan (NECO Plan). In the CDCA and NECO Plans, the location of the proposed Project includes land that is mostly classified as Multiple Use Class M (Moderate Use) and some as Multiple Use Class L (Limited Use). *Chapter 3 (Energy Production and Utility Corridors Element) of the CDCA Plan, as amended, also requires that newly proposed power generation sites*

that are not already identified in the Plan be considered through the plan amendment process. The application area is not identified within the Plan and, therefore, a plan amendment is required to include the area as a recognized element within the Plan and to determine the suitability of the application area for solar development. This EIS acts as the mechanism for complying with NEPA for the required plan amendment and to comply with the CDCA requirements.

**DEPARTMENT OF THE INTERIOR**

**Bureau of Land Management**

**[CACA-48649, LLCAD06000 L51010000 ER0000 LVRWB09B2490]**

**Notice of Availability of the Record of Decision for the Desert Sunlight Holdings, LLC, Desert Sunlight Solar Farm (DSSF) and California Desert Conservation Area Plan Amendment, California.**

**AGENCY:** Bureau of Land Management, Interior.

**ACTION:** Notice of Availability.

**SUMMARY:** The Bureau of Land Management (BLM) announces the availability of the Record of Decision (ROD)/Approved Amendment to the California Desert Conservation Area (CDCA) Plan, the applicable Resource Management Plan (RMP) for the project site and the surrounding areas, located in the California Desert District. The Secretary of the Interior approved the ROD on August XX, 2011, which constitutes the final decision of the Department.

**ADDRESSES:** Copies of the ROD/Approved Amendment to the CDCA Plan are available upon request from the Field Manager, Palm Springs-South Coast Field Office, Bureau of Land Management, 1201 Bird Center Drive, Palm Springs, California, 92262, or via the Internet at the following Web site:

<http://www.blm.gov/ca/st/en/fo/palmsprings.html>.

**FOR FURTHER INFORMATION CONTACT:** Allison Shaffer, BLM Project Manager; telephone (760) 833-7100; through mail at the address above; or e-mail [Allison\\_Shaffer@blm.gov](mailto:Allison_Shaffer@blm.gov).

**SUPPLEMENTARY INFORMATION:** Desert Sunlight Holdings, LLC, a wholly owned subsidiary of First Solar, Inc., filed right-of-way (ROW) application CACA-48649 for the Desert Sunlight Solar Farm Project (DSSF). The DSSF is a solar photovoltaic (PV) facility, capable of producing 550 MW of electrical output. Southern California Edison (SCE) filed a ROW application to construct the 500-to-220 kiloVolt (kV) RedBluff substation (CACA-052682) where the project would interconnect with the SCE regional transmission system. The DSSF, along with the RedBluff Substation and other facilities, will be on 4,144 acres of BLM-managed lands approximately 6 miles north of Interstate-10 and the rural community of Desert Center in Riverside County, California. The project area is within 2 miles of Joshua Tree National Park. In addition to the project site, the project includes a distribution line, a 220-kV electrical gen-tie transmission line, fiber optic lines, and an access road. The RedBluff substation includes an access road and two offsite microwave telecommunication facilities. The gen-tie line will feed power into SCE's existing Devers-Palo Verde 1 500-kV transmission line.

The project site is in the California Desert District within the planning boundary of the CDCA Plan, which is the applicable RMP for the project site and the surrounding areas. The CDCA Plan, while recognizing the potential compatibility of solar generation facilities on public lands, requires that all sites associated with power generation or transmission not already identified in the Plan be considered through the BLM's land use plan amendment process. As a result, prior to approval of a ROW grant to the DSSF, the BLM must amend the CDCA Plan to allow the solar generating project on that site. The

approved Amendment to the CDCA Plan specifically revises the CDCA Plan to allow for the development of the DSSF and ancillary facilities on land managed by the BLM.

The BLM preferred Alternative would result in construction of the solar farm, capable of generating approximately 550 MW of electricity, the RedBluff Substation, and associated ancillary facilities. This 550-MW alternative and substation were evaluated in the Final Environmental Impact Statement (EIS). The Notice of Availability of the Final EIS for the DSSF, RedBluff Substation, and the proposed CDCA Plan amendment was published in the Federal Register on April 15, 2011 (76 FR 21402).

Publication of the Notice of Availability for the Final EIS initiated a 30-day protest period for the proposed amendment to the CDCA Plan. At the close of the 30-day period on May 16, 2011, seven timely and complete written protests were received and resolved. Their resolution is summarized in the Director's Protest Summary Report attached to the ROD. The proposed amendment to the CDCA Plan was not modified as a result of the protest resolution. Simultaneously with the protest period, the Governor of California conducted a 30-day consistency review of the proposed CDCA Plan amendment to identify any inconsistencies with State or local plan, policies or programs; no inconsistencies were identified.



Because this decision is approved by the Secretary of the Interior, it is not subject to administrative appeal (43 CFR, 4.410(a) (3)).

**Authority:**

40 CFR 1506.6

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Robert V. Abbey,  
Director, Bureau of Land Management,

# RECORD OF DECISION

Desert Sunlight Solar Farm Project

and

Amendment to the California Desert Conservation Area

Land Use Management Plan

**Riverside County, California**

Lead Agency:

*United States Department of the Interior  
Bureau of Land Management*

Environmental Impact Statement FES 11-07

Case File Number: CACA 48649

**Desert Sunlight Solar Farm Project**

**Decision to Amend the CDCA Plan and Grant Right-of-Way**

*United States Department of the Interior  
Bureau of Land Management  
Palm Springs South Coast Field Office  
1201 Bird Center Drive  
Palm Springs, CA 92262*

August 2011



Cooperating Federal Agencies:

*Department of Energy*

*and*

*Joshua Tree National Park*



DOI Control Number: FES-11-07

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## List of Abbreviations

AM	applicant measure
AFC	application for certification
AO	authorized officer
ARRA	American Recovery and Reinvestment Act
BA	biological assessment
BLM	Bureau of Land Management
BO	biological opinion
BRSA	biological resources survey area
CDCA	California Desert Conservation Area
CDFG	California Department of Fish and Game
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CPUC	California Public Utilities Commission
CTTM	Comprehensive Travel and Transportation Management
DNA	Determination of NEPA Adequacy
DOE	U.S. Department of Energy
DOI	U.S. Department of the Interior
DSSF	Desert Sunlight Solar Farm Project
ECCMP	Environmental Construction and Compliance Monitoring Program
EO	Executive Order
EPA	Environmental Protection Agency
EPAct	Energy Policy Act
ESA	Endangered Species Act
EIS	environmental impact statement
FEIS	final environmental impact statement
FLPMA	Federal Land Policy Management Act of 1976
I-10	Interstate 10
kV	kilovolt
LLC	limited liability company
MDAPMD	Mojave Desert Air Pollution Management District

MM	mitigation measure
MOA	memorandum of agreement
MOU	memorandum of understanding
MUC	multiple use class
MW	megawatt
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
NOA	notice of availability
NOI	notice of intent
NPS	national park service
NTP	notice to proceed
PA/FEIS	plan amendment and final environmental impact statement
PEIS	programmatic environmental impact statement
POD	plan of development
PPA	power purchase agreement
ROD	record of decision
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SCE	Southern California Edison
SF	Standard Form
SHPO	California State Historic Preservation Office
U.S.	United States
USACE	U.S. Army Corps of Engineers
USC	United States Code
USFWS	U.S. Fish and Wildlife Service



# Executive Summary

This document constitutes the Record of Decision (ROD) of the United States Department of Interior (DOI) and Bureau of Land Management (BLM) for the Desert Sunlight Solar Farm Project (DSSF or Project) and Amendment to the *California Desert Conservation Area Plan* (1980, as amended) (CDCA Plan).

This ROD has three types of decisions: 1) CDCA Plan Amendment decisions, 2) right-of-way (ROW) grant decisions under Title V of the Federal Land Policy and Management Act (FLPMA), and 3) an off-highway vehicle (OHV) route closure decision. These decisions were analyzed in the *Desert Sunlight Solar Farm Project California Desert Conservation Area Plan Amendment and Final Environmental Impact Statement (PA/FEIS)*, which became available on April 15, 2011 upon publication in the *Federal Register* of the Environmental Protection Agency's Notice of Availability.

Amendment of the CDCA Plan is required to permit a solar energy generation project site not identified as a site for power generation in the current Plan. The proposed CDCA Plan Amendment was reviewed by the Governor's Office of Planning and Research and was found to be consistent with state and local plans. The ROD amends the CDCA Plan to identify the DSSF as a recognized power generation facility and identifies 3,761 acres as available for a solar energy generation site. The ROD also amends the CDCA to identify approximately 14,500 acres in the project study area as unavailable for solar generation sites.

The BLM will issue: 1) a new ROW grant to Desert Sunlight Holdings, LLC (Desert Sunlight) for the PV generating facility, access roads, and gen-tie line; 2) a new ROW grant to Southern California Edison (SCE) for the Red Bluff substation; 3) a new ROW grant to SCE for a new telecommunications site; and 4) an amendment to an existing SCE ROW grant for the Chuckwalla Mountains communication site.

The ROW grant decision authorizes the construction, operation and maintenance, and termination of the DSSF on approximately 4,144 acres of public land in Riverside County, California. This total acreage includes the solar site (3,761 acres), gen-tie A-1 option (210 acres), and the substation (172 acres), which represents the maximum amount of area that will be authorized for the DSSF. The ROW grant includes the solar site and both gen-tie options, for which Sunlight will pay rent until it relinquishes its right to one of the two gen-tie options prior to construction.

This ROD applies only to BLM administered lands and to the BLM's decisions on the DSSF. Other agencies, including but not limited to, the California Public Utilities Commission (CPUC), the U.S. Department of Energy (DOE), and Riverside County are responsible for issuing their own decisions and any applicable authorizations for the DSSF.

## Decision Rationale

These decisions fulfill legal requirements for managing public lands. Granting the ROW contributes to the public interest in developing renewable power to meet state and federal renewable energy goals. The stipulations in the grant ensure that authorization of the DSSF will protect environmental resources and comply with environmental standards. These decisions reflect careful balancing of many competing public interests in managing public lands. These decisions are based on comprehensive environmental analysis and full public involvement. The BLM engaged highly qualified technical experts to analyze the environmental effects of the DSSF. During the scoping process and following the publication of the Plan Amendment/Draft Environmental Impact Statement (PA/DEIS), members of the public submitted comments that enhanced the BLM's consideration of many environmental issues relevant to this project. The BLM, CPUC, DOE, U.S. Fish and Wildlife Service (USFWS), National Park Service (NPS) and other consulted agencies used their expertise and existing technology to address the important issues of environmental resource protection. The BLM and DOI have determined that all practicable mitigation measures contained in the PA/FEIS and the Biological Opinion (BO) which avoid or minimize environmental harm have been adopted.

# 1.0 Decisions

## 1.1 Background

This Record of Decision (ROD) for the Desert Sunlight Solar Farm Project (DSSF or Project) and associated Amendment to the *California Desert Conservation Area Plan* (CDCA Plan) approves the construction, operation and maintenance, and termination (which includes decommissioning) of the proposed 550-megawatt (MW) DSSF on approximately 4,144 acres of Bureau of Land Management (BLM)-administered public land in Riverside County, California, as analyzed in the *Desert Sunlight Solar Farm Project California Desert Conservation Area Plan Amendment and Final Environmental Impact Statement* (PA/FEIS) and as noticed in the April 15, 2011, Federal Register. This decision approves the DSSF Agency Preferred Alternative as analyzed in the PA/FEIS. The Agency Preferred Alternative is also referred to as the Selected Alternative in the ROD.

This approval will take the form of Federal Land Policy and Management Act (FLPMA) right-of-way (ROW) grants, issued in conformance with Title V of FLPMA and implementing regulations found at 43 Code of Federal Regulations (CFR) Part 2800. In order to approve the site location for the solar photovoltaic (PV) generating facility and portions of the access roads and gen-tie line, the BLM also approves a land use plan amendment to the CDCA Plan identifying the site as available for solar energy development and approving the location. BLM also approves part of FEIS Alternative 5 and makes the remainder of the Project Study Area unavailable for large-scale solar energy development. Finally, in accordance with 43 CFR 8342.3 and BLM's Land Use Planning Handbook 1601-1 Appendix C, Section D, Comprehensive Trails and Travel Management - Implementation Decisions, the ROD implements closure of a designated off-highway vehicle (OHV) route (number 660260) that runs north-south along the western boundary of the approved project site. These decisions apply only to BLM-administered public lands.

The BLM will issue: 1) a new ROW grant to Desert Sunlight Holdings, LLC (Desert Sunlight) for the PV generating facility, access roads, and gen-tie line; 2) a new ROW grant to Southern California Edison (SCE) for the Red Bluff substation; 3) a new ROW grant to SCE for a new Desert Center telecommunications site; and 4) an amendment to an existing SCE ROW grant for the Chuckwalla Mountains communication site. Unless otherwise specified, when this ROD refers to the "ROW grant", it refers to the three individual ROW grants and the ROW amendment described in the preceding sentence. "DSSF" refers to all components of the Project, including the PV generating facility, access roads, gen-tie line and associated SCE facilities.

The ROW grants issued to Desert Sunlight and SCE will be for a term of 30 years with a right of renewal so long as the lands are being used for the purposes specified in the grants, and it will allow Desert Sunlight and SCE the right to use, occupy, and develop the described public lands to construct, operate and maintain, and terminate a PV generating facility and associated facilities with a nominal capacity of 550 MW, access roads, and gen-tie line in eastern Riverside County, as the BLM identified and evaluated in the PA/FEIS. The PV energy generating facility is located approximately six miles north of Interstate 10 (I-10) and the rural community of Desert Center, and four miles north of Lake Tamarisk; between the cities of Coachella to the west and



Blythe to the east; within Township 4 South, Ranges 15 and 16 East. It is approximately 1.4 miles from the nearest boundary of Joshua Tree National Park/Wilderness Areas which is located to the west, east and north of the proposed solar field. Figure 2, provided in Appendix 6, *Location Maps*, shows the location of the project PV generating facility and gen-tie line.

The two new ROW leases/grants issued to SCE will be for a term of 30 years with a right of renewal so long as the lands are being used for the purposes specified in the grant. The ROW leases/grants will allow SCE the right to use, occupy, and develop the described public lands to construct, operate and maintain, and terminate: (1) a 1,120 mega-volt ampere, 500/220-kV substation and associated components located approximately seven to eight miles southeast of the approved solar PV energy generating facility, south of I-10, and (2) a telecommunications site located approximately six miles northeast of Desert Center, near Highway 177. Figure 2, provided in Appendix 6, *Location Maps*, shows the location of the Red Bluff Substation A and telecom site.

The BLM will also issue an amendment to an existing ROW lease/grant issued to SCE at the Chuckwalla Mountains Communication Site for microwave equipment and dish, to facilitate wireless communication between the telecommunications site located northeast of Desert Center and the Chuckwalla Mountains Communications Site.

Desert Sunlight and SCE may, on approval from the BLM, assign the ROW lease/grant to another party in conformance with the Part 2800 ROW regulations. Construction of the project may be phased; however, the BLM typically requires the initiation of project construction within two years of the issuance of a ROW lease/grant. In addition, initiation of construction for each phase will be conditioned on final approval by the BLM. This approval will take the form of an official Notice to Proceed (NTP) for each phase or partial phase of construction. If the approved project does not progress to construction, operation, or is proposed to be changed to the extent that it appears to the BLM to be a new project proposal on the approved project site, that proposal will be subject to additional NEPA review and BLM approval (40 CFR 1502.9(c)).

The ROW is conditioned on implementation of mitigation measures, monitoring programs and agreements/protest resolutions as identified in this ROD (Appendixes 1-5), PA/FEIS, the Biological Opinion (BO) issued and as may be amended by the U.S. Fish and Wildlife Service (USFWS), and the National Historic Preservation Act (NHPA) Section 106 Memorandum of Agreement (MOA), and issuance of all other necessary local, state, and federal approvals, authorizations, and permits.

In addition to the PV generating facility, other main features of the project include an operations and maintenance building, visitors center, parking areas, access roads, distribution line, fiber optic lines, water wells, wastewater treatment facilities, telecommunications facilities, transmission line, the 1,120 mega-volt ampere, 500/220-kV Red Bluff Substation, and 220-kV gen-tie line that would connect into the power grid at the proposed Red Bluff Substation.

Project construction is expected to begin August 2011 and will be constructed in three phases as described in the proposed action in order to coordinate the construction schedule around desert

tortoise translocation activities. The phasing of the project is outlined in the BO and in the Plan of Development (POD).

### **1.1.1 Application/Applicant**

SCE is jointly developing the project with the applicant, Desert Sunlight (Applicant, or collectively, Applicants). Desert Sunlight submitted a Standard Form 299 – “Applications for Transportation and Utility Systems and Facilities on Federal Lands” with the BLM Palm Springs/South Coast Field Office for a ROW lease/grant covering all components of the PV generating facility, access roads and gen-tie line. In addition, SCE submitted a Standard Form 299 for the portion of the project that includes the Red Bluff Substation, telecommunications site and related components. Desert Sunlight will construct, own, and operate the PV generating facility, access roads and gen-tie line. SCE will construct, own, and operate the Red Bluff substation and telecommunications facility. The BLM will issue three ROW leases/grants: one to Desert Sunlight for the PV generating facility, access roads, and gen-tie line; and two to SCE for the Red Bluff Substation site and telecommunications site. The BLM will also issue an amendment to an existing SCE ROW lease/grant at the Chuckwalla Mountains Communication Site for a microwave system.

Desert Sunlight is a subsidiary of First Solar, an international company in the renewable energy sector and a global leader in the field of PV energy generating facilities. Together with the company’s other subsidiaries and associates, the company covers all important business sectors along the value chain for solar PV power plants, including: financing, project development, technology development, and the turnkey construction and operation of power plants. Desert Sunlight is seeking approval to construct, operate, and decommission the PV generating facility and related facilities and infrastructure. The Applicant has demonstrated technical and financial capabilities as part of the ROW application process.

Parallel to the federal ROW application process, SCE filed a Permit To Construct (PTC) Application for the Red Bluff Substation and related facilities on November 17, 2010 with the California Public Utilities Commission (CPUC). SCE Authorization from the CPUC is anticipated to occur in July 2011.

Desert Sunlight received approval of a Large Generator Interconnection Agreement from the California Independent System Operator and SCE on August 9, 2010. Desert Sunlight and SCE have entered into a 20-year, 250 MW, Power Purchase Agreement (PPA) for the provision of renewable electricity. The CPUC approved the PPA on September 2, 2010. Additionally, Desert Sunlight and Pacific Gas and Electric Company have entered into a 25-year, 300 MW PPA. The CPUC approved the PPA on September 23, 2010.

### **1.1.2 Purpose and Need**

#### **1.1.2.1 BLM Purpose and Need**

The BLM’s purpose and need for the DSSF is to respond to the Applicants’ application under Title V of FLPMA for a ROW grant to construct, operate and maintain, and terminate a PV generating facility on public lands in compliance with FLPMA, BLM ROW regulations, and

other applicable federal laws. The proposed action would, if approved, assist the BLM in addressing the management objectives in the Energy Policy Act of 2005 (EPA) (Title II, Section 211) which establish a goal for the Secretary of the Interior to approve 10,000 MWs of electricity from non-hydropower renewable energy projects located on public lands. This proposed action, if approved, would also further the development of environmentally responsible renewable energy as a priority for the Department of the Interior.

The BLM is deciding whether to approve, approve with modification, or deny issuance of a ROW grant to the Applicants for the DSSF. Modifications may include modifying the proposed use or changing the route or location of the proposed facilities (43 C.F.R. 2805.10(a)(1)). In connection with its decision on the DSSF, the BLM's action will also include consideration of potential amendments to the CDCA, as discussed in the FEIS alternatives. The CDCA, while recognizing the potential compatibility of solar energy facilities on public lands, requires that all sites associated with power generation or transmission not identified in that plan be considered through the land use plan amendment process.

### **1.1.3 BLM Authority**

#### **1.1.3.1 Federal Land Policy and Management Act of 1976**

FLPMA establishes policies and procedures for the management of public lands. In Section 102(a)(8), Congress declared that it is the policy of the United States that:

“ . . . the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use (43 U.S.C.1701(a)(8)).”

Section 202 of FLPMA and the regulations implementing FLPMA's land use planning provisions (43 CFR subparts 1601 and 1610) provide a process and direction to guide the development, amendment, and revision of land use plans for the use of the public lands.

Title V of FLPMA (43 United States Code (USC) 1761-1771) authorizes the BLM, acting on behalf of the Secretary of the Interior, to authorize a ROW grant on, over, under, and through the public lands for systems for generation, transmission, and distribution of electric energy. The BLM's implementation of its statutory direction for ROW authorizations is detailed in 43 CFR Part 2800. The BLM Authorized Officer (AO) administers the ROW authorization and ensures compliance with the terms and conditions of the ROW lease. The AO is any employee of the Department of the Interior to whom the authority to perform the duties described in 43 CFR Part 2800 has been delegated. This authority is derived from the authority of the Secretary of the Interior, and may be revoked at any time. The authority to approve all actions pertaining to the granting and management of Title V ROWs on public lands is delegated to the respective BLM State Directors (BLM Manual 1203, Appendix 1, p.33). In California, the authority of the BLM State Director to approve actions pertaining to the granting and management of Title V ROWs has been further delegated to the Field Managers.

With respect to this specific ROW grant, this authority has been delegated to the Field Manager of the Palm Springs South Coast Field Office, who will be responsible for managing the ROW grant for the DSSF.

### **1.1.3.2 National Environmental Policy Act**

Section 102(c) of the National Environmental Policy Act (NEPA) (42 USC 4321 et seq.) and the Council on Environmental Quality (CEQ) and DOI implementing regulations (40 CFR Parts 1500–1508 and 43 CFR Part 46) provide for the integration of NEPA directives into agency planning to ensure appropriate consideration of NEPA’s policies and to eliminate delay.

When taking actions such as approving CDCA Plan Amendments and ROW grants, the BLM must comply with the applicable requirements of NEPA, including applicable NEPA regulations. Compliance with the NEPA process is intended to assist Federal officials in making decisions about a project that are based on an understanding of the environmental consequences of the decision, and identifying actions that protect, restore, and enhance the environment. The PA/FEIS and this ROD document the BLM’s compliance with the requirements of NEPA.

### **1.1.3.3 California Desert Conservation Area Plan**

In furtherance of its authority under FLPMA, the BLM manages public lands in the California Desert District pursuant to the CDCA Plan and its amendments. The Plan, while recognizing the potential compatibility of solar generation facilities on public lands, requires that all sites associated with power generation or transmission not specifically identified in the CDCA Plan for a specific project site be considered through the Plan amendment process. Because the CDCA Plan has not previously identified the DSSF site for power generation, the Plan must be further amended to allow a solar energy generation project on that site. The planning criteria for considering an amendment to the CDCA Plan are discussed in CDCA Plan Chapter 4.10, *Land Use and Corridor Analysis*.

In addition, certain lands within the CDCA Plan area may not be suitable for large scale energy development. The BLM has addressed the availability/unavailability of certain of these lands in the PA/FEIS.

### **1.1.3.4 Other Guidance and Regulations**

The BLM processes ROW grant applications for solar development in accordance with 43 CFR 2804.25 and the BLM’s 2008 “Guidance for Processing Applications for Solar Power Generation Facilities on BLM Administered Public Lands in the California Desert District,” which states:

When all or part of a proposed renewable energy project is located in a designated utility corridor, the impacts of occupying the utility corridor must be analyzed, along with alternatives that would help mitigate the impacts to the utility corridor. The EIS prepared for a proposed solar energy project should analyze the impact that the project would have on the ability of the utility corridor to serve its intended purpose, i.e., would the corridor continue to retain the capacity to site additional utilities in the corridor or would the project so constrain the available land within the corridor that it would limit the corridor’s ability to locate additional linear facilities, e.g. transmission lines, pipelines, etc.

The DSSF helps minimize the number of separate ROWs by being proposed largely within existing utility corridors. The project would overlap two designated two-mile-wide utility corridors. The northern portion of the solar farm would overlap utility corridor “E,” a utility corridor that follows Power Line Road; and the substation and portions of the Gen-Tie line would overlap utility corridor “K,” a utility corridor that follows the I-10 corridor. The discussion of project impacts to these existing utility corridors is in the PA/FEIS, Section 3.9, *Lands and Realty*.

### 1.1.3.5 Other Authorities and Policies

In conjunction with the FLPMA, NEPA, and the CDCA Plan, relevant BLM authorities and policies also include:

- Energy Policy Act (119 Statutes 594, 600), Section 211, which states “It is the sense of the Congress that the Secretary of the Interior should, before the end of the 10-year period beginning on the date of enactment of this Act, seek to have approved non-hydropower renewable energy projects located on public lands with a generation capacity of at least 10,000 megawatts of electricity.”
- BLM’s Solar Energy Development Policy (Instruction Memorandum No. 2011-003) (BLM, 2010). Pursuant to this policy, applications for commercial solar energy facilities are processed as ROW authorizations under Title V of FLPMA and its implementing regulations (43 CFR Part 2800); they also must comply with the BLM’s environmental and planning requirements. Among other things, BLM’s Solar Energy Development Policy provides policy guidance on early coordination with Federal land managers and stakeholders, the term of solar energy right-of-way authorizations, diligent development requirements, bond coverage, Best Management Practices, and BLM access to records. Further, the BLM’s Solar Energy Development Policy states, “Secretarial Order 3285A1, signed on March 11, 2009, and amended on February 22, 2010, established the development of renewable energy as a priority of the Department of the Interior.... The BLM has identified some 23 million acres of the public lands with utility-scale solar energy potential, and over 200 right-of-way applications have been submitted to the BLM for processing. As the cost of producing solar energy declines in future years, and as additional transmission capacity is developed, there will be an even greater interest in locating utility-scale solar energy projects on the public lands. This policy IM helps ensure environmentally-responsible development of solar projects on public lands and provides for effective processing of the right-of-way applications.”
- Executive Order 13212 (May 18, 2001), which mandates that agencies act expediently and in a manner consistent with applicable laws to increase the “production and transmission of energy in a safe and environmentally sound manner.”
- Secretarial Order 3285A1, *Renewable Energy Development by the DOI* (February 22, 2010), which establishes the development of renewable energy as a priority for the DOI and creates a Departmental Task Force on Energy and Climate Change. It also announced a policy goal of identifying and prioritizing specific locations (study areas) best suited for large-scale production of solar energy.

- Instruction Memorandum 2011-59, *National Environmental Policy Act Compliance for Utility-Scale Renewable Energy Right-of-Way Authorizations* (February 7, 2011), which reiterates and clarifies existing BLM NEPA policy to assist offices that are analyzing externally-generated, utility-scale renewable energy ROW applications. It includes examples and guidance applicable to such applications that supplement information in the BLM's NEPA Handbook (H-1790-1) that reflect that utility-scale renewable energy projects are distinct from many other types of land and realty actions due to their size and potential for significant resource conflicts, as well as the priority that has been placed on them by the DOI.

## 1.2 Information Developed Since the FEIS and Adequacy of NEPA Analysis

### 1.2.1 Biological Opinion

The PA/FEIS concludes that the proposed project footprint is not within a priority linkage area for desert tortoise and other species. FEIS at 3.4-28. The BLM's conclusion was based upon, primarily: (1) results of a recent state-wide evaluation of habitat connectivity (Spencer *et al.* 2010); (2) preliminary results of a BLM-commissioned regional and local scale connectivity analysis for multiple species in the Mojave and Sonoran Deserts; (3) USGS desert tortoise habitat model (Nussear *et al.* 2009); (4) desert tortoise landscape genetics analysis (Hagerty 2008, Hagerty and Tracy 2010, Hagerty *et al.* 2010); and (5) The Nature Conservancy's Mojave Desert Ecoregional Assessment (Randall *et al.* 2010). The BLM was aware of, reviewed, and incorporated these studies into its analysis and effects determination.

Since publication of the PA/FEIS, the FWS completed a BO for the DSSF. The BO concluded that the proposed project is not likely to jeopardize the continued existence of the desert tortoise or destroy or adversely modify designated critical habitat (BO at 109). However, the BO also concluded, on the basis of the studies identified in the paragraph above, that the loss of suitable desert tortoise habitat on the proposed project site could significantly impair habitat and population connectivity and long-term recovery potential of the species (BO at 96-102). Measures included in the BO (pp. 12-44 and 88-91) would reduce any anticipated adverse impacts (BO at 110). These measures are mandatory and are conditions of approval of this ROD.

Moreover, the applicant has agreed to three changes that will further reduce the impact to connectivity. First, the applicant will adjust the western boundary of Phase III, removing approximately 136 acres (37%) from the western portion of Phase III. By removing this portion of Phase III, the project avoids the highest quality tortoise habitat. Second, the applicant will submit a plan to the FWS and the BLM for fencing that does not include any fencing along the west side of Kaiser Road and the Sunlight project. Third, all traffic related to the construction of the project will enter the side below where the fencing ends on Kaiser Road.

The BLM considered the conclusions of the BO and has determined that, despite differences in the BLM and FWS's conclusions regarding the importance of the DSSF site for connectivity, it is not necessary to supplement the PA/FEIS based upon the BO's conclusions because the information presented in the BO was already incorporated in BLM's decision process, including the various studies listed above.

In analyzing potential impacts from the DSSF, all data indicate that the critical area for connectivity is primary to the west of the DSSF area. Further, it is unknown how important the low quality habitat with low densities of tortoise within the DSSF footprint is to the species. In consultation with FWS Desert Tortoise Recovery Office and USGS, the BLM has been informed that it would take approximately 15 years of study to determine how connectivity works in this area and to determine if the low densities tortoise areas are important for support connectivity. A study requiring this time scale makes it infeasible to collect data in a reasonable time frame. Since all of the studies thus far highlight the significance of the area west of the project as being better quality habitat and with higher densities of tortoise, BLM recognizes and agrees it is important to preserve the area to the west of the project adjacent to the Kaiser Mountains. BLM will continue to monitor this area and correct impacts to connectivity should our assessment indicate that there is an adverse effect to desert tortoise connectivity. Additionally, the applicant will fund a Desert Tortoise Habitat Linkage Management and Monitoring Plan and a Desert Tortoise Population Connectivity Effectiveness Monitoring Plan. With these two programs, if during the life of the project, an effect to tortoise connectivity is identified, the BLM has the ability to require the applicant to mitigate the impact. Therefore, while the value of the low quality habitat with low densities of tortoises is unknown, the BLM is able to make a decision based on the “safety net” of the required conservation measures. Based upon this information and analysis, the PA/FEIS fully analyzes potential impacts and proposes and analyzes mitigation to reduce or avoid impacts.

The BO concluded that the proposed action is not likely to jeopardize the continued existence of the desert tortoise or destroy or adversely modify designated critical habitat. However, the loss of suitable desert tortoise habitat on the proposed project site could significantly impair habitat and population connectivity and long-term recovery potential of the species. Measures included in the BO would reduce any anticipated adverse impacts. These measures are mandatory and are conditions of approval of this ROD.

Based on the conditions in the BO and the ongoing consultation with the USFWS during project construction and operations, many biological resources in the area are avoided by the Selected Alternative or the impacts are substantially mitigated. As a result, the Selected Alternative would result in impacts less than or similar to the other build alternatives related to biological resources.

### **1.2.2 Wildlife Habitat Management Area**

During the protest resolution process, environmental groups first voiced a concern that a Northern and Eastern Colorado Desert Coordinated Management Plan (NECO)-designated wildlife habitat management area (WHMA) was within the project area, but that the requirements of NECO and BLM’s compliance therewith were not clearly set forth in the PA/FEIS. As discussed at pages 3.4-4 to 3.4-5 of the PA/FEIS, NECO is a landscape-scale, multi-agency planning effort that seeks to protect and conserve natural resources while simultaneously balancing human uses of the California portion of the Sonoran Desert ecosystem. The NECO planning area encompasses over 5 million acres and hosts 60 sensitive plant and animal species. NECO also takes into account other uses of the desert, such as hiking, hunting, rock hounding, off-highway recreation, commercial mining, livestock grazing, and utility transmission.

NECO provides reserve management for the desert tortoise, integrated ecosystem management for special status species and natural communities for all public lands, and regional standards for public land health for BLM lands. NECO focuses on the conservation of species and habitats through the use of a system of large Desert Wildlife Management Areas (DWMAs) for the desert tortoise and WHMAs for other special status species and natural communities. The focus of WHMAs is on mitigation, habitat improvements, and federal ownership. Within WHMAs, NECO requires that surface disturbance to four sensitive natural communities be compensated at a 3:1 ratio; disturbance to other areas is mitigated at a 1:1 ratio. The four sensitive natural communities are desert dry wash woodland, desert chenopod scrub, sand dunes and playas.

A portion of the southeastern corner of the Selected Alternative overlaps with a 713-acre portion of a WHMA. See Appendix 6, Maps. The PA/FEIS fully analyzed impacts to resource values within the WHMA. Map 3-3 of NECO indicates that desert dry wash woodland occurs in the Selected Alternative area. In 2009 and 2010, Desert Sunlight conducted detailed ground-truthing surveys to map the exact areas where desert dry wash woodland occurs within the footprint of the proposed project and alternatives analyzed in the PA/FEIS. See PA/FEIS Figures 3.3-1 and 3.3-2. Page 3.3-17 of the PA/FEIS discusses the occurrence of desert dry wash woodland within the WHMA and notes the 3:1 mitigation required for any disturbance within that habitat. Of the 713 acres of the WHMA within the Selected Alternative footprint, 260 acres constitute desert dry wash woodland (also referred to as state jurisdictional desert dry wash in the PA/FEIS).

In addition to mapping the occurrence of desert dry wash woodland within the footprint of the proposed project and alternatives, project surveys conducted between 2008 and 2010 recorded the individual species actually found within the entire 713-acre area. Of the 11 special-status plant species identified in the NECO Plan for this area, none were found on the WHMA portion of the Selected Alternative during focused plant surveys conducted in spring and fall 2010. Of the 29 wildlife species identified in the NECO Plan in this area, evidence of two special status birds was found in the WHMA portion of the site, with no nests recorded throughout all surveys between 2008 and 2010. One potential desert tortoise burrow was recorded in this area in 2008 and has been re-visited numerous times since 2008 with no evidence of a desert tortoise at this location. The impacts to these species are being mitigated and compensated as required pursuant to the CDCA Plan, including requiring mitigation at a 3:1 ratio for disturbance to the 260 acres of desert dry wash woodland habitat. PA/FEIS at 4.3-23 and Table 4.3-10 at 4.3-24. With respect to the 453 acres of non-sensitive habitat within the WHMA, the PA/FEIS analyzed impacts to the WHMA species of concern and proposed the NECO-mandated 1:1 mitigation ratio for impacts to those areas. For those WHMA species that would be potentially impacted by the proposed Action, the PA/FEIS fully analyzes potential impacts and proposes and analyzes mitigation at levels equal to or in excess of NECO requirements.

### **1.2.3 Additional Project Conditions**

The Applicant has agreed to additional project conditions that have been included in the ROD (Section 5.3 and Appendix 1). The BLM has analyzed these project conditions and has determined that they do not require BLM to supplement the FEIS prior to issuance of the ROD. The BLM has determined that the project conditions fall within the alternatives analyzed in FEIS,



has accepted these terms as part of the amended plan of development, and has incorporated into and will administer these terms as part of the right-of-way grant in accordance with 43 CFR 2805.12(i)(5), 2807.16, and 2807.17.

## **1.3 Decisions Being Made**

### **1.3.1 Right-of-Way**

Under Federal law, the BLM is responsible for processing ROW applications to determine whether and to what extent to authorize proposed projects, such as renewable energy projects and other appurtenant facilities, on land it manages. Because the project is a privately-initiated venture that would be sited on lands managed by the BLM, the Applicants applied for a ROW lease/grant from the BLM pursuant to federal law and regulations.

The BLM has limited the ROW grants to those lands necessary for constructing, operating and maintaining, and decommissioning the authorized facilities on public lands. In addition, the ROW lease/grant includes conditions based on the PA/FEIS, the BO, the MOA, and other applicable federal rules and regulations to protect public health and safety, and to ensure the project will not result in unnecessary or undue degradation of the public lands. On approval of the ROW grants, the Applicants will be authorized to construct and operate the 4,144-acre, 550-MW solar project and related facilities if they meet the requirements specified in the ROD. The ROD requires the Applicants to secure all necessary local, state, and federal permits, authorizations, and approvals as required for each phase of the project before the BLM will issue a Notice to Proceed (NTP). On receipt of the NTP, and by remaining consistent with it, the Applicants will be able to construct and operate the DSSF on the proposed site.

### **1.3.2 Land Use Plan Amendment**

Under the CDCA Plan, the portion of the DSSF containing the PV generating facility and portions of the access roads and gen-tie line is currently classified as Multiple-Use Class M (Moderate Use) and L (Limited Use). The CDCA Plan provides guidance concerning the management and use of BLM lands in the California Desert while balancing other public needs and protecting resources. The CDCA Plan contemplates industrial uses analogous to the solar use analyzed by the proposed plan amendment, including utility rights-of-way outside of existing corridors, power plants, and solar energy development and transmission (CDCA Plan, p.95). The CDCA Plan provides in its guidelines that solar development in Class M and L areas “may be allowed after NEPA requirements are met” (CDCA Plan, p. 15). The CDCA Plan ROD discussed the allowance of wind, solar, and geothermal power plants within designated Class M and L lands (CDCA ROD, p. 15). That ROD recognized that:

These facilities are different from conventional power plants and must be located where the energy resource conditions are available. An EIS will be prepared for individual projects.

The recommended decision, which was ultimately approved, noted:

Keep guidelines as they are to allow these power plants if environmentally acceptable. Appropriate environmental safeguards can be applied to individual project proposals which clearly must be situated where the particular energy resources are favorable.

The ROD's recognition that wind, solar, and geothermal power plants are consistent with designated Class M and L lands in the CDCA, was approved by the Assistant Secretary for Land and Water Resources, and concurred in by the Secretary of the Interior on December 19, 1980. According to its terms, the BLM must amend the CDCA Plan to allow siting of a solar power generating facility within the CDCA on Multiple-Use Class M and L lands if the site is not already identified in the plan.

Based on the Multiple-Use Class Guidelines provided in Table 1 in the CDCA Plan, solar uses are conditionally allowed in the Multiple-Use Class M and L designations contingent on NEPA requirements being met for the proposed use. The PA/FEIS and ROD for the DSSF meet NEPA requirements for consideration of the project and for consideration of the project site as suitable for development. The CDCA Plan is specifically amended by this ROD to identify this site as suitable for the proposed type of solar energy development and to allow the Selected Alternative to be located on public lands as identified in the ROW lease/grant.

### **1.3.2.2 Land Use Plan Amendment to Identify the Undeveloped Solar Study Area as Unavailable for Solar Power Generation**

BLM is also amending the CDCA Plan to identify the undeveloped portion of the Project Study Area associated with the current DSSF ROW application CA-48649 as unavailable for solar power generation. An approximately 14,500-acre portion of the Project Study Area is delineated in Figure 2-1 of the PA/FEIS as the non-transmission portion of the "Desert Sunlight Study Area Boundary" and is currently classified as Multiple-Use Class M (Moderate Use) and L (Limited Use).

As discussed in Section 1.3.2.1, sites associated with power generation that are not identified in the CDCA Plan are considered through the plan amendment process. Preliminary biological, cultural, hydrological, and geological reviews were conducted for the entire Project Study Area for the purpose of evaluating site conditions and eliminating portions of the Project Study Area considered unsuitable for developing the Project. These studies demonstrated that approximately 14,500 acres in the northern, western and eastern areas of the Project Study Area contained high resource values rendering the areas unsuitable for solar power generation. As a result, Desert Sunlight consolidated the footprint of its proposed project to a 3,761-acre, 550 MW footprint (this acreage does not include the gen-tie line and substation acreage) analyzed in Alternative 1 in the PA/FEIS. The portion of the Project Study Area that will be identified as unavailable for solar power generation is all acreage currently applied for (including the 136.58 acres eliminated from Phase III as a result of the protest resolution process) less the amount of acreage actually reflected in the BLM right-of-way grant.

The Notice of Availability of the Draft EIS for public comment noted that the BLM was analyzing, among various alternatives, a possible amendment to the CDCA Plan that could make the project area applied for by the project applicant, unavailable for solar energy development. 75 Fed. Reg. 52,776 (Aug. 27, 2010). The EIS analyzed six alternatives: three of which would approve the pending right-of-way application and plan amendment, two of which would deny the pending right-of-way application but approve a plan amendment, and a “no action” alternative, which would approve neither the right-of-way application nor the plan amendment. Under Alternative 5, the BLM would deny the pending right-of-way application and amend the CDCA Plan to make the project application area, or the Project Study Area unavailable for large-scale solar energy development. PA/FEIS at 2-62. In the environmental effects section of the FEIS, the BLM noted that Alternative 5 would preclude solar energy development but not other forms of development within the Project Study Area. PA/FEIS at 4.9-25. During protest resolution, BLM reassessed whether sufficient information had been gathered, made public and analyzed to permit BLM to amend the CDCA Plan to identify the undeveloped Project Study Area as unavailable for solar power generation. For the reasons discussed below, BLM concludes that Alternative 5, approved in part, provides the analysis to reach that conclusion.

BLM identified the boundaries of the Project Study Area during scoping and throughout the NEPA process. See e.g., PA/FEIS Appendix A at A-5 (Location Map identifying Project Study Area boundary attached to NOI); PA/FEIS Figure 2-1 (Project Overview Map identifying Project Study Area boundary). Desert Sunlight Holdings, LLC provided a summary of the results of its preliminary studies to BLM, which BLM considered and incorporated into the PA/FEIS. See e.g., PA/FEIS Figures 3.4-1 to 3.4-4. The PA/FEIS explained that preliminary studies indicated that the undeveloped Project Study Area was not suitable for solar power generation (PA/FEIS at 2-4). The PA/FEIS further concluded that a “Larger Project” alternative (1,000-MW project encompassing 8,000 acres) would have greater environmental impact without technological advantage and would not be an appropriate location for siting a large-scale solar energy development project (PA/FEIS at 2-128). In its discussion of Alternative 5, the BLM explained:

With this No Project Alternative, the Desert Sunlight Solar Project would not be approved (all components of the Project denied), no ROW grant would be issued to the Applicant, and the CDCA Plan would be amended to make the Project Study Area unavailable for large-scale solar energy development. This No Project Alternative has impacts similar to those described for the first No Action Alternative [Alternative 4] (described above). However, for this alternative, the CDCA Plan would be amended so that the Project locations would not be available for any future use for solar energy development. Additionally, this No Action Alternative would cause land identified as a CREZ and a Solar Energy Study Area to be unavailable for solar energy production.

As a result of this No Action Alternative, the Project locations would be available for other types of uses allowable on BLM land. This may include mining, recreation, utilities, and other energy development allowed on lands classified as Multiple Use Class M (Moderate Use), which constitutes most of the Project

locations, and lower-intensity uses in the areas designated as Multiple Use Class L (Limited Use). PA/FEIS at 2-62.

In the environmental effects section discussing Lands and Realty, the PA/FEIS states with regard to Alternative 5:

Under this alternative, the proposed Project would not be approved by the BLM. The BLM would amend the CDCA Plan to make the proposed site unavailable for future solar energy development. As a result, none of the components of the Project would be constructed. BLM would continue to manage the site consistent with the existing land use designation in the CDCA Plan of 1980, as amended.

Because the CDCA Plan would be amended to make the area unavailable for future solar energy development, it is expected that the site would continue to remain in its existing condition, with no new structures or facilities constructed or operated on the site and no land disturbance. As a result, the land use impacts of the Project would not occur at the proposed site, including any resulting impacts to existing uses. Existing uses such as roads, transmission facilities, and pipelines would continue; however, these uses have a minimal impact on the Project Study Area. As a result, the use of the site is not expected to change noticeably from existing conditions. However, in the absence of the proposed Project, the site could be developed for other uses at a future date (e.g., mining, grazing, recreation, utilities, and other non-solar energy development), and those projects could have impacts in this and other locations. Current pending applications within the Solar Farm Study Area include a geothermal project (CACA 050946) and a wind energy project (CACA 051664).

No impacts would occur from this alternative as it pertains to the approval of the Applicant's proposed Project. However, this alternative does not prohibit nor preclude other types of future development, other than solar energy development, within the Project Study Area. PA/FEIS at 4.9-25.

For all of these reasons, an amendment to the CDCA Plan identifying the undeveloped portion of the Project Study Area as unavailable for solar power generation is qualitatively within the spectrum of alternatives that were discussed PA/FEIS. In addition, public participation in the planning process was afforded through the availability of the DEIS and FEIS, both of which clearly indicated the potential to choose Alternative 5. While the BLM did not specifically indicate that it would approve the preferred alternative and a portion of Alternative 5 (the undeveloped Project Study Area), approving a land use plan amendment to retain the on the ground status quo is not the type of plan decision that requires additional NEPA review.

Further, the BLM decision to approve the preferred alternative and to make a portion of Alternative 5 unavailable for solar energy development is not a significant change to the proposed planning decision described in the PA/FEIS. The scope of the planning decision described in Alternative 5 is narrow because it only restricts future solar development; it does not affect other activities. It is also narrow since, as discussed above, the CDCA Plan requires plan amendments

for solar generation projects on sites not already identified in the Plan. For these reasons, the BLM has determined, consistent with 43 CFR 1510-1(b), that the Selected Alternative described in this ROD is not a significant change to the proposed planning decision described in the PA/FEIS. Moreover, until the BLM makes a decision on the issues under consideration, all alternatives presented in an EIS remain available for choice. In this manner then, the BLM retained its discretion to pick and choose among the alternatives of the PA/FEIS, deciding to choose the preferred alternative and a portion of Alternative 5. In addition, in accordance with 43 CFR 1610.3-2(e), the BLM has confirmed with the California Governor's Office that the decision to identify the undeveloped Project Study Area as unavailable from future solar development is consistent with State and local plans, policies and programs.

If, for some reason, the project is not built, all of the public land within the original DSSF ROW application (e.g., the whole of the Project Study Area) could further be considered unavailable for solar energy development. This potential decision would be considered at a later date, potentially through the Solar PEIS or a DRECP/CDCA Plan amendment process.

The PA/FEIS and ROD meet NEPA and FLPMA requirements for consideration of the undeveloped Project Study Area as unavailable for solar energy development. The CDCA Plan is specifically amended by this ROD to identify a portion of the undeveloped Project Study Area as unavailable for solar energy development as described and discussed above.

### 1.3.3 Route Designations

In 2002, the BLM updated access plans and routes in the eastern Colorado Desert through the Northern & Eastern Colorado Desert Coordinated Management Plan (NECO) Amendment to the CDCA Plan. The NECO Amendment assigned access for OHV routes in the eastern Colorado Desert. Currently, there are two open routes traversing the project site.

The two open routes on the site are shown on Figure 4.12-1 in the PA/FEIS. In order to accommodate the Selected Alternative, one open route identified in the PA/FEIS (Route 660260) will be closed. This route runs north-south between Kaiser Road and Kaiser Steel Road and is comprised of approximately 1.3 miles of public access. With the approval of the ROW lease/grant, the BLM will designate this open route as closed. The other open route (Route 660334 – Power Line Road) would remain open to public use. The perimeter of the project site will be fenced, which will prevent public access within the project site. All other open routes in the vicinity of the project will remain open to public use and enjoyment, and, as a result, extensive connectivity to public lands to the north and south of this project will be maintained.

The administrative process for revising designated routes, given the evolving and changing priorities for public lands, is described in the CDCA Plan Motorized Vehicle Access Element and in BLM guidance, *Clarification of Guidance and Integration of Comprehensive Travel and Transportation Management Planning into the Land Use Planning Process* (CTTM) (Instruction Memorandum 2008-014, Oct. 27, 2007). These revision processes recognize the changing contexts and need for flexibility in allowing OHV public access on BLM-managed lands. The Motorized Vehicle Access Element of the CDCA Plan (page 82) describes the process for changing the designations of vehicle access routes as:

“Decisions affecting vehicle access, such as area designations and specific route limitations, are intended to meet present access needs and protect sensitive resources. Future access needs or protection requirements may require changes in these designations or limitations, or the construction of new routes... Access needs for other uses, such as roads to private lands, grazing developments, competitive events, or communication sites, will be reviewed on an individual basis under the authority outlined in Title V of FLPMA and other appropriate regulations. Each proposal would be evaluated for environmental effects and subjected to public review and comment. As present access needs become obsolete or as considerable adverse impacts are identified through the monitoring program, area designations or route limitations will be revised. In all instances, new routes for permanent or temporary use would be selected to minimize resource damage and use conflicts, in keeping with the criteria of 43 CFR 8342.1.”

The BLM processes for revising route designations are further provided for in the CTTM policy. According to that policy, changes to a travel network in a limited area may be made through activity-level planning or with site-specific NEPA analysis. While changes to area designations (e.g., limited to open) require a plan amendment, changes to route designation (e.g., open to closed, closed to open) do not require a plan amendment. This administrative process, along with the administrative process described in the CDCA Plan, is implemented to change the affected open route on the project site to a closed route. The closure of this route was described and analyzed in the PA/FEIS for the DSSF, consistent with the CTTM policy.

## **1.4 ROW Requirements**

The BLM uses SF 2800-14 (ROW Lease/Grant) as the instrument to authorize the ROW grants for the project; they include the POD and all other terms, conditions, stipulations, and measures required as part of the grant authorizations. Consistent with BLM policy, the DSSF ROW grants will include a diligence development and performance bonding requirement for installation of facilities consistent with the approved POD. Construction of the initial phase of development must commence within 12 months after issuance of the NTP but no later than 24 months after the effective date of the issuance of the ROW grants. The holders shall complete construction within the timeframes approved by the BLM for phased construction.

## **1.5 Future Changes to the Approved Project**

At various times throughout the life of the project, the need for extra workspace or additional access roads may be identified. Similarly, changes to the project requirements (e.g., mitigation measures, specifications, etc.) may be needed to facilitate construction or provide more effective protection of resources. The BLM and grant holder will work together, in consultation with NPS, to find solutions when adjustments are necessary for specific field situations to avoid conflicts with adopted mitigation measures or specifications.

The BLM Compliance Project Manager and Compliance Monitors will ensure that any deviation from the procedures identified under the monitoring program is consistent with NEPA requirements. No project adjustment will be approved if it creates new significant impacts. Adjustments will be limited to minor project changes that will not trigger other permit requirements or create new or greater impacts and that clearly and strictly comply with the intent of the mitigation measures. A proposed project change that has the potential for creating significant environmental effects will be evaluated to determine whether supplemental NEPA analysis is required. In some cases, an adjustment may also require approval by jurisdictional agencies. In general, an adjustment request must include the following information:

- Detailed description of the location, including maps, photos, and/or other supporting documents
- How the adjustment request deviates from a project requirement
- Biological surveys or verification that no biological resources would be significantly impacted
- Cultural resource surveys or verification that no cultural resources would be significantly impacted
- Landowner approval if the location is not within the ROW
- Agency approval (if necessary)

## 2.0 Mitigation and Monitoring

### 2.1 Required Mitigation

The DSSF includes the following measures, terms, and conditions:

- Avoidance, Minimization, and Mitigation Measures provided in PA/FEIS Chapter 4, *Environmental Consequences*, as amended by this ROD (Appendix 2, *Adopted Mitigation Measures*);
- Terms and Conditions in the BO, as may be amended. The BO is provided in Appendix 3, *Biological Opinion*, of this ROD; and
- Terms and Conditions in the MOA provided in Appendix 4, *Memorandum of Agreement*, of this ROD. In cases where the MOA conflicts with mitigation measures AM-CUL-1 and MM-CUL-1 through MM-CUL-9 (Appendix 2 of this ROD) the MOA will take precedence.

The complete language of these measures, terms, and conditions is provided in the POD for the DSSF as stipulated in the ROW grant for compliance purposes. These measures, terms, and conditions are determined to be in the public interest pursuant to 43 CFR 2805.10(a)(1).

### 2.2 Monitoring and Enforcement

A monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation (40 CFR 1505.2(c)). Agencies may provide for monitoring to assure that their decisions are carried out and should do so in important cases. Mitigation (40 Code of Federal

Regulations [CFR] 1505.2(c)) and other conditions established in the Final EIS or during its review and committed as part of the decision shall be implemented by the lead agency or other appropriate consenting agency. The lead agency shall:

- a. Include appropriate conditions in grants, permits or other approvals;
- b. Condition funding of actions on mitigation;
- c. Upon request, inform cooperating or commenting agencies on the progress in carrying out mitigation measures that have been proposed and that were adopted by the agency making the decision; and
- d. Upon request, make available to the public the results of relevant monitoring (40 CFR 1505.3).

The Environmental and Construction Compliance Monitoring Program (ECCMP) for the DSSF is provided in Appendix 5 of this ROD.

As the federal lead agency for the DSSF under NEPA, the BLM is responsible for ensuring compliance with all adopted mitigation measures for the DSSF in the PA/FEIS. The complete language of all the measures is required by the ROW grant to be in the final POD. The BLM also has incorporated this mitigation into the ROW grant as terms and conditions. Failure on the part of Desert Sunlight and SCE, as the grant holders, to adhere to these terms and conditions could result in various administrative actions up to and including a termination of the ROW grant and requirement to remove the facilities and rehabilitate disturbances.

## **2.3 Mitigation Measures Not Adopted**

Consistent with 40 CFR 1505.2(c), all practicable means to avoid or minimize environmental harm from the DSSF have been adopted as discussed above. Also as discussed, an ECCMP for the project has been adopted and is provided in Appendix 5 of this ROD. There are no BLM-identified mitigation measures that have not been adopted in this ROD.

## **2.4 Statement of All Practicable Mitigation Adopted**

As required in the BLM *NEPA Handbook H-1790-1* and 40 CFR 1505.2(c), all practicable mitigation measures to avoid or minimize environmental harm from the selected alternatives have been adopted according to federal laws, rules, policies and regulations. The complete language of those measures is provided in Appendix 2 of this ROD.

## **2.5 Coordination with Other BLM Monitoring Activities**

In 2010, the BLM and the CPUC formalized a Memorandum of Understanding (MOU) for the joint preparation of the environmental analysis and document for the DSSF that is in compliance with NEPA and CEQA, and all applicable laws, executive orders, regulations, direction, and guidelines. The MOU specifically states that upon the authorization of the DSSF by the BLM, the BLM will delegate to the CPUC field inspection responsibility for ensuring implementation of



the mitigation and monitoring activities adopted in the ROD for the substation and transmission line interconnection (loop-in) portion of the project; and provide the CPUC and its representatives access to the subject land (without further authorization), as requested by the CPUC, for this purpose. The MOU is an attachment to the ECCMP provided in Appendix 5.

The BLM will have primary compliance oversight for the ROW terms and conditions that are required by the BLM. In addition, the BLM recognizes that the CPUC will have primary compliance oversight for those terms and conditions applicable to the substation and transmission line interconnection. Effort will be made to share in construction compliance, environmental compliance, design review, plan check, and construction, maintenance, operation and termination inspection (collectively 'compliance oversight') of the DSSF on public lands, to avoid duplication of staff efforts, to share staff expertise and information, to promote intergovernmental coordination at the state and federal levels, to develop a more efficient compliance review process, and to meet state and federal requirements. Appendix 5, *ECCMP* contains a list of the mitigation measures and denotes those measures that will be monitored and managed by the BLM, those that will be monitored and managed by the CPUC and those that will be subject to joint administration between the BLM and CPUC.

The BLM also is developing a protocol for long-term monitoring of solar energy development with Argonne National Laboratories, and the DOE. The draft protocol recommends the development of a comprehensive monitoring program covering a broad list of resources. The draft protocol also recommends the involvement of other federal and state agencies with a likely interest in long-term monitoring, as well as stakeholder engagement. As the protocols are finalized for this monitoring program, the BLM expects to participate fully in these endeavors and to engage solar energy applicants. As long-term monitoring plans evolve, the BLM and its assigns may exercise the United States' retained right to access the lands covered by the grant, and conduct long-term monitoring activities.

## 2.6 Summary of Conclusions

The Selected Alternative for the DSSF is the action alternative that provides the most public benefits and avoids the most cultural, biological and hydrological resources for the following reasons:

- As a result of consultation with Tribal governments and representatives and the MOA, many cultural resources in the area are avoided by the Selected Alternative or the impacts are substantially mitigated.
- Based on the conditions in the BO and the ongoing consultation with the USFWS during project construction and operations, many biological resources in the area are avoided by the Selected Alternative or the impacts are substantially mitigated.
- In addition to the mitigation provided for in this ROD, the Applicant through the protest negotiation process has agreed to certain project conditions for inclusion in the ROD (Section 5.3 and Appendix 1) and modification to the Plan of the Development.

Overall, there are no adverse impacts associated with these changes that were not addressed in the PA/FEIS; therefore further analysis is not warranted. CEQ regulations at 40 CFR 1502.9(c) and BLM's NEPA Handbook H-1790-1 at Section 5.3 require supplementation when changes are substantial (or significant new circumstances or information exist) and their effects are no longer within the range of effects analyzed in the EIS. The changes described above do not meet the standards requiring additional analysis.

Additionally, the DSSF is expected to provide climate, employment, and energy security benefits to California and the nation. The project takes a major step toward meeting state and federal climate change goals. It will provide clean electricity for homes and businesses, and bring badly needed jobs to the area. Eastern Riverside County has a high unemployment rate: 13.5 percent (PA/FEIS, Appendix N, Section N.4.11, Table 5-6). The project is expected to create 655 jobs during peak construction.

## 3.0 Management Considerations

### 3.1 Decision Rationale

This decision approves four right-of-way grants for the DSSF and related facilities in accordance with the Agency Preferred Alternative (Selected Alternative) as analyzed in the Final EIS. This decision also approves the closure of an OHV route and amendments to the CDCA Plan to identify the project site as suitable for solar power generation and to identify the undeveloped portion of the Project Study Area (approximately 14,500 acres) as unavailable for solar power generation. The BLM's decision to authorize this activity is based on the rationale described throughout the ROD and as detailed in the following sections.

#### 3.1.1 Respond to Purpose and Need

The BLM's purpose and need for the DSSF is to respond to the Applicants' application under Title V of FLPMA for a ROW lease/grant to construct, operate, maintain and decommission a solar PV energy generation facility on public lands in compliance with FLPMA, BLM ROW regulations, and other applicable federal laws. Specifically, the BLM has decided to approve a ROW lease/grant to the Applicants for the Selected Alternative. The BLM will also amend the CDCA Plan. The CDCA Plan, while recognizing the potential compatibility of solar generation facilities on public lands, requires that all sites associated with power generation or transmission not already identified in that plan be considered through the plan amendment process. Therefore, prior to issuance of a ROW grant for the DSSF, the BLM will amend the CDCA Plan as required to allow for that solar use on the project site. In addition, and as previously discussed, the BLM has also determined to amend the CDCA Plan to make the remainder of the Project Study Area unavailable for solar energy development.

Under the Energy Policy Act of 2005, federal agencies are directed to encourage the development of renewable energy. By entering into an MOU with the DOE and CPUC, the BLM has committed to work with state and federal agencies to achieve California's Renewable Portfolio Standards (RPS) energy goals and greenhouse gas emission reduction standards in a manner that is both timely and in compliance with federal and state environmental laws. The purpose of the

MOUs is to assist with the implementation of applicable state and federal laws, regulations, and policies.

The construction, operation, maintenance, and termination activities associated with the Selected Alternative, either singularly or with mitigation, are in conformance with the following land use plans and policies:

- BLM policy and guidance for issuing ROW grants, including BLM Manual 2801.11
- California Desert Conservation Area Plan of 1980, as amended
- Northern & Eastern Colorado Desert Coordinated Management Plan, 2002

The Selected Alternative meets the BLM purpose and need for the DSSF.

### **3.1.2 Achieve Goals and Objectives**

Selection of the Selected Alternative would accomplish the objectives of the purpose and need, including meeting power demand, as well as federal and state objectives for renewable energy development. The project complies with CDCA Plan objectives for the Multiple Use Class M (Moderate) and L (Limited), land use designations. Additionally, the BLM consulted extensively with several parties to identify project modifications that would minimize impacts to natural and cultural resources. The Selected Alternative provides the best balance between maximizing renewable energy capacity while reducing adverse impacts as compared to other action alternatives. In addition, minimization of impacts to natural resources is achieved by making the remainder of the Project Study Area off-limits to solar energy development.

### **3.1.3 Required Actions**

The following federal statutes require that specific actions be completed prior to issuance of a ROD and project approval. Documentation of compliance with these laws is detailed in this ROD, sections 3.2.1, 3.2.4, and 3.2.2.

#### **Endangered Species Act of 1973**

Under Section 7 of the Endangered Species Act, as amended (ESA, 16 U.S.C. 1531 et seq.) a federal agency that authorizes, funds, or carries out a project that “may affect” a listed species or its critical habitat must consult with the USFWS. The BLM initiated consultation in October 2010 in accordance with Section 7 of the ESA for potential effects to Desert tortoise (*Gopherus agassizii*). The USFWS issued a BO for the DSSF on July 6, 2011 which is provided in Appendix 3. The BO concluded that the proposed action is not likely to jeopardize the continued existence of the desert tortoise or destroy or adversely modify designated critical habitat. See also section 3.2.1.

#### **Bald and Golden Eagle Protection Act**

The Bald and Golden Eagle Protection Act of 1940 (16 USC, 668, enacted by 54 Stat. 250) protects bald and golden eagles by prohibiting the taking, possession, and commerce of such birds and establishes civil penalties for violation of this act. Under the Bald and Golden Eagle

Protection Act, take includes “disturb,” which means “to agitate or bother a bald eagle or a golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.” Desert Sunlight has developed an Avian and Bat Protection Plan (ABPP) and will conduct golden eagle surveys and monitoring. See also section 3.2.4.

### **National Historic Preservation Act of 1966**

Section 106 of the National Historic Preservation Act (NHPA) (16 U.S.C. 470) requires federal agencies to take into account the effects that their approvals and federally funded activities and programs have on significant historic properties. “Significant historic properties” are those properties that are included in, or eligible for, the National Register of Historic Places. The BLM initiated consultation for the DSSF under Section 106 of the NHPA, and the requisite process has been completed. An MOA for this project pursuant to 36 CFR 800.14(b) is provided in Appendix 4, *Memorandum of Agreement*. The terms and conditions of the MOA supersede the applicant measure (AM) and mitigation measures (MM) identified in the Final EIS as AM-CUL-1 and MM-CUL-1 through and including MM-CUL-9. See also section 3.2.2.

### **Clean Air Act, as Amended in 1990**

Title 40 CFR Section 51 (Subpart W - Determining Conformity of General Federal Actions to State or Federal Implementation Plans), Title 40 CFR Section 93 (Subpart B - Determining Conformity of General Federal Actions to State or Federal Implementation Plans) and 42 U.S.C. Section 7606(c) require Federal actions to comply with the requirements of the 1990 amendments to the Clean Air Act (CAA, 42 U.S.C 7401Ch. 85). The DSSF is expected to meet the requirements of the CAA based on compliance with the project mitigation, terms, conditions, and stipulations related to emission controls and reductions during project construction, maintenance, operation, and termination.

### **Clean Water Act**

The Clean Water Act (CWA) (33 USC 1251-1376) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation’s waters. Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the US U.S. must obtain a state certification that the discharge complies with other provisions of the CWA. The RWQCBs administer the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredge or fill material) from a point source into waters of the U.S. Section 404 establishes a permit program administered by the USACE, regulating the discharge of dredged or fill material into waters of the U.S., including wetlands. The CWA also contains the requirements under which the RWQCBs set water quality standards for all contaminants in the waters of the U.S.

### 3.1.4 Incorporate CDCA Plan Management Considerations

The CDCA Plan Amendment is warranted. The record indicates that the Selected Alternative for the DSSF can be constructed on BLM-administered lands, and that project construction will result in fewer significant, unmitigable impacts to air, cultural, and visual resources than would occur with the other build alternatives with comparable energy production considered or analyzed in the PA/FEIS. The CDCA Plan amendment applies to the public lands within the boundary of the project site for the Selected Alternative, as shown in Appendix 6, *Location Maps*. The approval of the site location based upon NEPA analysis satisfies the requirements of the CDCA Plan. In addition, making the remainder of the Project Study Area unavailable for solar projects will result in no impact to public land resources (air, cultural, and visual resources) from solar energy development.

### 3.1.5 Statement of No Unnecessary or Undue Degradation

Congress declared that the public lands be managed for multiple use and sustained yield, in a manner to protect certain land values, to provide food and habitat for species, and to provide for outdoor recreation and human occupancy and use (43 USC 1701 (a)(7), (8)). Multiple use management means that public land resources are to be managed to best meet the present and future needs of the American public, balanced to take into consideration the long term needs of future generations without permanent impairment of the lands (43 USC 1702(c)). BLM manages public land through land use planning, acquisition, and disposition, and through regulation of use, occupancy, and development of the public lands (Subchapters II and III, respectively, 43 USC 1711 to 1722, and 1731 to 1748).

The FLPMA specifically provides that in managing the use, occupancy, and development of the public lands, the Secretary shall take any action necessary to prevent unnecessary or undue degradation of the lands (43 USC 1732(b)). The process for siting and evaluating the DSSF has included extensive efforts on the part of BLM, the applicant, CPUC, public commenters, and other agencies in order to identify a project that accomplishes the purpose and need and other project objectives, while preventing, to the extent possible, any unnecessary or undue degradation of the lands. These efforts have included:

- Siting of the proposed facility in a location in which solar power development can be authorized (following NEPA review).
- Modification of the proposed boundaries of the facility to minimize impacts to mineral, biological, and other resources.
- Evaluation of project location alternatives which could meet the purpose and need for the proposed project, but result in the avoidance and/or minimization of impacts. These alternatives were not analyzed in detail.
- The development of mitigation measures, including compensation requirements for the displacement of desert tortoise habitat, to further avoid or minimize impacts.

In addition, BLM ROW regulations at 2805.11(a)(1) to (5) require determinations for the following: BLM will limit grant to those lands which BLM determines:

- (1) The ROW applicant will occupy with authorized facilities;
- (2) Are necessary for constructing, operating, maintaining, and terminating the authorized facilities;
- (3) Are necessary to protect the public health and safety;
- (4) Will not unnecessarily damage the environment; and
- (5) Will not result in unnecessary or undue degradation.

The lands described in Section 3.1.4 of this ROD are the minimum necessary to accommodate the 4,144-acre project. All areas under the Selected Alternative that were not necessary for construction, operation, and maintenance of the facilities were removed from the project description, and are made unavailable for solar development along with the remainder of the Project Study Area. The applicant has consolidated activities within the construction staging area to minimize the amount of additional temporary workspace needed to construct and assemble facility components. All temporary disturbances associated with underground utilities will be immediately restored to minimize erosion in accordance with approved restoration plans. Public health and safety will not be compromised by the project as construction work areas will be posted and public access to those areas controlled to prevent possible injury to the public. During operations, site security will be maintained with perimeter control fencing and security personnel.

The Selected Alternative will achieve beneficial impacts, including socioeconomic benefits of increases in employment and fiscal resources, and displacement of greenhouse gas and air pollutant emissions associated with fossil-fueled power plants. Based on the comparative analysis of the ability of each alternative to meet the purpose and need, and the environmental impacts that would be associated with each alternative as discussed in the Final EIS and as summarized above, the Selected Alternative was identified by the BLM as the alternative that does not create unnecessary or undue degradation of the lands.

As noted above, Congress specifically recognized multiple use and sustained yield management for the CDCA, through the CDCA Plan, providing for present and future use and enjoyment of the public lands. The CDCA Plan identifies allowable uses of the public lands in the CDCA. In particular, it authorizes the location of solar power generating facilities in MUC M and MUC L and other land classifications upon NEPA review. The BLM has conducted that review, and as indicated in the Final EIS and portions of this ROD, has adjusted the project to meet public land management needs and concerns. In particular, the BLM has determined that the Selected Alternative meets national renewable energy policy goals and objectives and falls within the guidelines of the CDCA Plan.

In addition, the project meets the requirements of applicable ROW regulations inasmuch as it includes terms, conditions and stipulations that are in the public interest; prevents surface

disturbance unless and until an NTP is secured; is issued for a period of 30 years, subject to renewal and periodic review; and contains diligence and bonding requirements to further protect public land resources. This approval provides that public land will be occupied only with authorized facilities and only to the extent necessary to construct, operate, maintain and terminate the project. BLM conditions of approval provide for public health and safety and protect the environment and public lands at issue. These conditions of approval include compliance with this ROD, the Final EIS, the BO, NHPA Section 106 requirements and the MOA. All of these federal requirements provide the basis for BLM's determination that the project will not unnecessarily and unduly degrade these public lands.

### **3.1.6 Statement of Technical and Financial Capability**

The FLPMA and its implementing regulations provide the BLM the authority to require a project application to include information on an applicant's technical capability to construct, operate, and maintain the solar energy facilities applied for (43 CFR 2804.12(a)(5)). This technical capability can be demonstrated by international or domestic experience with solar energy projects or other types of electric energy-related projects on either federal or non-federal lands. The Applicant has provided information on the availability of sufficient capitalization to carry out development, including the preliminary study phase of the project, as well as site testing and monitoring activities.

Desert Sunlight's statement of technical and financial capability is provided in the POD and the application for a ROW. Desert Sunlight is a private enterprise that is a wholly owned subsidiary of First Solar Development, Inc. Based upon the information provided by the Applicant in its POD, the BLM has determined that it has the technical and financial capability required to construct, operate and maintain, and terminate the approved facility.

### **3.1.7 Adequacy of NEPA Analysis**

Section 1.2 above addresses the more detailed NECO plan WHMA discussion. NECO requirements have been analyzed and it has been determined that impacts and proposed mitigation relevant to the WHMA were fully analyzed by the PA/FEIS. Since the preparation and publication of the PA/FEIS, there have been no modifications to the project features, and there have been no new project features or components that might require additional analysis through preparation of a supplemental EIS. This conclusion is in accordance with agency guidance set forth in the BLM NEPA Handbook (H-1790-1) at section 5.3. The Handbook addresses regulations issued by the Council on Environmental Quality at 40 CFR 1502.9(c), which call for agencies to prepare supplements to either a draft or final EIS if: (1) the agency makes substantial changes in the proposed action that are relevant to environmental concerns or (2) there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts. BLM has determined that a supplemental analysis is not required because: (1) there have been no substantial changes to the DSSF Agency Preferred Alternative or the impacts from it; (2) there have been no additional alternatives proposed or actions that are outside the alternatives analyzed in the PA/FEIS; (3) the PA/FEIS discussion of the Selected Alternative analyzes all effects to listed and special status species; (4) mitigation has been identified that meets or exceeds the required mitigation in the NECO plan; and (5) there is

no new information or circumstances presented through protest resolution that have not already been addressed in the EIS.

## **3.2 Relationship to BLM and Other Plans, Programs, and Policies Including Consultation**

### **3.2.1 Endangered Species Act**

The BLM permit, consultation, and coordination with the USFWS required for the Desert Sunlight Solar Farm Project complies with the Federal Endangered Species Act (ESA) (16 U.S.C. 1531 et seq.) regarding potential take of the Desert tortoise.

The USFWS has jurisdiction over threatened and endangered species listed under the ESA. Formal consultation with the USFWS under Section 7 of the ESA is required for any federal action that may adversely affect a federally-listed species. This consultation was initiated through the preparation and submittal of a BA, which described the proposed action to the USFWS. Following review of the BA, the USFWS issued a BO, which is attached as Appendix 3 of this ROD, specifying the measures that must be implemented for any protected species.

### **3.2.2 National Historic Preservation Act Section 106**

Under Section 106 of the NHPA, the BLM consults with Indian tribes as part of its responsibilities to identify, evaluate, and resolve adverse effects on cultural resources affected by BLM undertakings. Adverse effects that the Selected Alternative could have on cultural resources will be resolved through compliance with the terms of a MOA under NHPA Section 106 (16 USC 470; 36 CFR 800.14). A Historic Property Treatment Plan (HPTP) will be implemented prior to the issuance of any NTP by the BLM for the project.

The BLM prepared a MOA for the DSSF in consultation with the Advisory Council on Historic Preservation (ACHP), the California State Historic Preservation Officer (SHPO), CPUC, interested Native American Tribes (including tribal governments as part of government-to-government consultation described below), and other interested parties. The executed Final MOA is provided in Appendix 4 of this ROD, will govern the continued identification and evaluation of historic properties (eligible for the National Register) and historical resources (eligible for the California Register of Historic Places), as well as the resolution of any effects that may result from the DSSF. Historic properties and historical resources are significant prehistoric and historic cultural resources as determined by the BLM.

### **3.2.3 Tribal Consultation**

The BLM conducted government-to-government consultation with a number of Tribal governments. The consultation and discussions revealed concerns about the importance and sensitivity of cultural resources on and near the DSSF site, concerns about cumulative effects to cultural resources, and, further, that they attach significance to the broader cultural landscape. As a result of the government-to-government consultation process, many important cultural



resources were identified in the project study area, and subsequently avoided in the Selected Alternative.

As described in Section 3.2.2 above, the BLM also consulted with Native American Tribes and interested tribal members on the development and execution of a MOA for the DSSF, in accordance with 36 CFR Part 800.14(b), memorandum of agreements are used for the resolution of adverse effects on sites eligible for listing in the National Register of Historic Places.6(c). The executed MOA requires that a HPTP be implemented before issuing a NTP for the project. The results of implementing the HPTP will be distributed concurrently to SHPO, the ACHP, and the Tribes for their review and comment. The MOA also addresses the discovery of any previously unidentified property that may be eligible for the NRHP, or affect a known historic property in an unanticipated manner. As a result, the Selected Alternative would result in impacts less than or similar to the other build alternatives related to cultural resources. The MOA is attached as Appendix 4.

### **3.2.4 Bald and Golden Eagle Protection Act**

The Bald and Golden Eagle Protection Act (16 U.S.C. 668a-d) provides for the protection of bald and golden eagles by prohibiting, except under certain specified conditions, disturbance or harm of these species. To comply with the Act and based on the USFWS's recommendation (memo dated September 15, 2010, available as part of the project record), and in accordance with BLM's Instruction Memorandum (IM) 2010-156, Desert Sunlight has developed an ABPP and will be required to conduct golden eagle nesting surveys, nest site monitoring, and adaptive management. The ABPP identifies steps the Applicant will take to ensure eagle impacts are mitigated to the extent possible including but not limited to on-going surveys, impact monitoring, and facility design.

### **3.2.5 Solar Programmatic EIS**

The U.S. Department of the Interior (DOI) Bureau of Land Management (BLM) and the U.S. Department of Energy (DOE) are each considering actions to facilitate solar energy development in compliance with various orders, mandates, and agency policies. For the BLM, these actions include the evaluation of a new BLM Solar Energy Program applicable to utility scale solar energy development on BLM-administered lands in six southwestern states (Arizona, California, Colorado, Nevada, New Mexico, and Utah). For DOE, they include the evaluation of developing new program guidance relevant to DOE-supported solar projects.

The BLM and DOE are working jointly as lead agencies to prepare the "Programmatic Environmental Impact Statement for Solar Energy Development in Six Southwestern States," (PEIS) to evaluate the proposed BLM program and whether to develop DOE guidance. The PEIS evaluates the potential environmental, social, and economic effects of the agencies' proposed actions and alternatives in accordance with the NEPA, the Council on Environmental Quality's regulations for implementing NEPA (Title 40, Parts 1500–1508 of the Code of Federal Regulations [40 CFR 21 Parts 1500–1508]), and applicable BLM and DOE authorities.

### **3.2.6 United States Department of Energy**

As discussed earlier, the DOE is the agency responsible for implementing key parts of the EPAct including the federal loan guarantee program for eligible energy projects that employ innovative technologies. Title XVII of the Energy Policy Act authorizes the Secretary of Energy to make loan guarantees for a variety of types of energy-related projects. The two purposes of the loan guarantee program are to encourage commercial use in the United States of new or significantly improved energy-related technologies and to achieve substantial environmental benefits.

The DOE was a cooperating agency with the BLM on the Final EIS. The purpose and need for action by the DOE is to comply with its mandate under the Energy Policy Act by selecting eligible projects that meet the goals of that Act. As such, the BLM provided the DOE with copies of the preliminary Draft EIS, the Draft EIS, the preliminary Final EIS, and the Final EIS for review. Except to define its purpose and need for the action, the DOE did not provide any comments to the BLM on the NEPA documents for the DSSF.

### **3.2.7 United States Army Corps of Engineers**

Section 404 establishes a permit program administered by the US Army Corps of Engineers (USACE) regulating the discharge of dredged or fill material into waters of the United States, including wetlands. Implementing regulations by the USACE are found at 33 CFR Parts 320-330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines and were developed by the EPA in conjunction with the USACE (40 CFR Parts 230). The Guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts. The DSSF footprint contains no waters of the U.S. subject to USACE/EPA jurisdiction under Section 404 of the CWA.

### **3.2.8 United States Environmental Protection Agency**

The EPA provided written comments on the proposed project and the EIS preparation during the scoping process, and written comments during the review period for the Draft EIS as documented in Final EIS Section 5.4, *Public Comment Process*. These comments addressed the project location, identification of the impacts to resources and the impacts to the physical environment. All the issues identified by the EPA have been fully analyzed in the PA/FEIS.

### **3.2.9 United States Department of Defense**

The Project would overlap several low-level military flight paths. All of the Project components for Alternatives 1, 2, and 3 would overlap a Department of Defense area where consultation with the military is required to ensure that construction does not interfere with low level flight operations. Therefore, BLM requested further review of the Project by the DOD for its potential impact on military over flights and operations. The DOD provided a letter (PA/FEIS, Appendix M, Letter 147) that states that the DSSF will not impact military testing or training.

### **3.2.10 National Park Service**

The Secretary of the Interior is responsible for protecting units of the National Park System pursuant to the National Park Service 1916 Organic Act (16 U.S.C. 1, 2, 3 and 4) which consists of the Act of August 25, 1916 (39 Stat. 535) and amendments thereto. The DSSF is located near National Park Service (NPS) properties, including approximately 1.4 miles from the nearest boundary of Joshua Tree National Park/Wilderness Areas. Wilderness Areas are designated by Congress, under the authority of the Wilderness Act of 1964 as part of the National Wilderness Preservation System. The NPS is a cooperating agency and has met with both the BLM and Desert Sunlight and provided written comments during the review period for the Draft EIS as documented in PA/FEIS Section 5.4, *Public Comment Process*. The Park's comments focused on visibility of the project to Park visitors and the indirect impacts of the project on park resources including wildlife, air quality, and visual resources e.g., dust and night sky/light pollution. All of these comments have been addressed in the PA/FEIS along with the addition of a specific section in the PA/FEIS dedicated to summarizing the NPS concerns and how the document addressed them. The NPS has agreed to enter into an MOA with Desert Sunlight regarding the funding of mitigation measures related to Joshua Tree National Park. The agreement includes funding for park monitoring and a signage and guidance plan.

### **3.2.11 Consultation with State, Regional, and Local Agencies**

Section 5.5, below, lists other Federal, State, regional and local agencies with which the BLM and/or the Applicants have consulted, as part of one or more of the following project phases: planning, scoping, public review of the Draft EIS, and public review of the Final EIS. In addition to the NEPA coordination process, the Applicants may need to obtain permits and other approvals from other agencies or comply with requirements of other agencies that did not provide written input on the project and/or the EIS. Those agencies include, but may not be limited to:

#### **Governor's Consistency Review**

Pursuant to 43 C.F.R. § 1610.3-2, BLM must provide an opportunity for a Governor to review a proposed resource management plan, revised plan or plan amendment. The BLM State Director is required to submit a proposed plan or amendment to the State Governor for a 60-day review period, which commences with the issuance of the proposed plan amendment and EIS to the public. Although by regulation the Governor has 60 days to identify any inconsistencies with State or local plans, policies or programs and provide written recommendations to the BLM State Director as to how to address the identified inconsistencies, BLM and the California Governor's Office have agreed to a 30 day time period for review of renewable energy based plan amendments. The proposed CDCA Plan Amendment for the project site and the undeveloped Project Study Area acreage was reviewed by the Governor's Office of Planning and Research following the issuance of the PA/FEIS. As to each of these components of the CDCA Plan Amendment, the Governor's Office found no inconsistencies between the Plan Amendment and state or local plans, policies, or programs.

## **California Department of Fish and Game**

The CDFG has the authority to protect water resources through regulation of modifications to streambeds, under Section 1602 of the Fish and Game Code. The BLM, CPUC, and the Applicants have provided information to the CDFG to assist in their determination of the impacts to streambeds, and identification of permit and mitigation requirements. The CDFG also has the authority to regulate potential impacts to species that are protected under the California Endangered Species Act. The desert tortoise is listed under the California Endangered Species Act. The DSSF would impact CDFG jurisdictional resources (PA/FEIS, Table 4.3-19). In November 2010, Desert Sunlight submitted a Streambed Alteration Agreement for the DSSF to the CDFG.

## **Other**

### ***State Water Resources Board/Regional Water Quality Control Board***

The State Water Board works in coordination with the nine Regional Water Quality Control Boards (RWQCBs) to preserve, protect, enhance and restore water quality. The RWQCBs have authority to protect surface water and groundwater. Throughout the NEPA process, the BLM and the Applicants have invited the RWQCBs to participate in public scoping and workshops and have provided information to assist them in evaluating the potential impacts and permitting requirements of the proposed project. The USACE determined that the project site does not support water resources meeting the definition of Waters of the U.S. and that a CWA permit will not be required. In the absence of Waters of the U.S., a CWA Section 401 Certification from the Colorado Basin Water Quality Control Board (RWQCB) will not be required.

### ***California Public Utilities Commission***

The CPUC was a cooperating agency during the preparation of the EIS and will use the EIS to comply with the environmental review requirements per CEQA, as established and described in a MOU between the CPUC and BLM (see Section 2.5, above). SCE (SCE) will require a Permit to Construct (PTC) from the CPUC in order to build the Red Bluff Substation. SCE submitted the PTC application to the CPUC on November 17, 2010.

### ***Riverside County***

Approximately one mile of the gen-tie line will be on land under the jurisdiction of Riverside County. In addition, all portions of the gen-tie line that will be constructed within the ROW of Kaiser Road are subject to the County's land use and planning authority. The Applicant must, therefore, obtain a public use permit (PUP), a Franchise Agreement, and an encroachment permit in order to construct, operate, and maintain the gen-tie line. Once the CPUC has adopted the Final EIS as a Final EIR under CEQA, the County, acting as a Responsible Agency under CEQA, will adopt Findings of Fact, Mitigation and Monitoring Plan, and Statement of Overriding Considerations, for the portions of the Gen-Tie Line that fall under their purview.

### 3.3 LUP Conformance and Consistency

#### 3.3.1 Conformance with the CDCA Plan

FLPMA (43 USC 1761; 43 CFR 1600, Section 501) establishes public land policy; guidelines for administration; and provides for the management, protection, development, and enhancement of public lands. FLPMA specifically establishes BLM's authority to grant rights-of-way for the generation, transmission, and distribution of electrical energy as follows:

- (a) The Secretary, with respect to the public lands ... are authorized to grant, issue, or renew rights-of-way over, upon, under, or through such lands for:
  - (4) systems for generation, transmission, and distribution of electric energy

FLPMA is relevant to the DSSF because it establishes BLM's authority to grant a ROW on public lands for the generation, transmission, and distribution of electrical energy. Because FLPMA authorizes the issuance of a ROW lease/grant for electrical generation facilities and transmission lines, the DSSF would be consistent with FLPMA.

The CDCA Plan was developed as mandated by FLPMA. Specifically, the CDCA Plan is the Resource Management Plan (RMP) for the DSSF site and the surrounding Project Study Area (and other public land areas) as required under FLPMA. The CDCA Plan is a comprehensive, long-range plan that was adopted in 1980; it since has been amended many times. The CDCA is a 25-million-acre area that contains over 12 million acres of BLM-administered public lands in the California Desert, which includes the Mojave Desert, the Sonoran Desert, and a small part of the Great Basin Desert. Those 12 million acres of public lands are approximately half of the total land area in the CDCA. The site proposed for the DSSF (minus the gen-tie line and substation) includes approximately 3,761 acres, and the undeveloped Project Study Area includes approximately 14,500 acres of BLM-administered land in the CDCA.

Goals and actions for each resource managed by the BLM are established in the 12 Elements in the CDCA Plan. Each Plan Element provides a Desert-wide perspective of the planning decisions for one major resource or issue of public concern as well as more specific interpretation of multiple-use class guidelines for a given resource and its associated activities.

The DSSF site is mostly classified in the CDCA Plan as MUC M (Moderate Use) with some of the land classified as MUC L (Limited Use). The Class M classification is managed to conserve desert resources and to mitigate damage to those resources which permitted uses may cause. Public lands classified as Moderate Use are managed to provide a controlled balance between higher-intensity use and protection of public lands. MUC L "...protects sensitive, natural, scenic, ecological, and cultural resource values." Public lands designated Class L are managed to provide for generally lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished. Energy and utility development uses are allowed in both classes. Specifically, wind and solar electrical generating facilities "... may be allowed after NEPA requirements are met." Electrical generating facilities using nuclear and/or fossil fuels are not allowed within the Limited Use designation. Approval of the Selected Alternative amends the CDCA Plan following the process anticipated in the CDCA Plan to identify the site as

suitable for the proposed solar energy use. As stated in the Final EIS, the CDCA Plan Amendment would only apply to the BLM-administered land being evaluated for the DSSF project facility and the decision making a portion of the undeveloped Project Study Area unavailable for solar development. Accordingly, the CDCA Plan Amendment and the overall amendment process are consistent with the CDCA Plan.

### 3.3.2 Need for a CDCA Plan Amendment

To accommodate the DSSF, the CDCA Plan is being amended because “[s]ites associated with power generation of transmission not identified in the Plan will be considered through the Plan Amendment process.” As specified in CDCA Plan Chapter 7, *Plan Amendment Process*, there are three categories of Plan Amendments. Approval of the DSSF would require a Category 3 amendment to the CDCA Plan to accommodate a request for a specific use or activity that will require analysis beyond the Plan Amendment Decision.

The CDCA Plan Amendment to designate (identify) the site of the Selected Alternative for solar energy generation is provided in the ROD through the following Land Use Plan amendment analysis.

### 3.3.3 Required CDCA Plan Determinations

As discussed in CDCA Plan, Chapter 7, the BLM must make certain required determinations in amendments to the CDCA Plan. The required determinations and how they were made for the CDCA Plan Amendment for the DSSF are provided below.

**Required Determination:** Determine if the request has been properly submitted and if any law or regulation prohibits granting the requested amendment.

The Applicants’ request for a ROW grant was properly submitted; the PA/FEIS was the mechanism for evaluating and disclosing environmental impacts associated with that application. No law or regulation prohibits granting the CDCA Plan Amendment.

**Required Determination:** Determine if alternative locations within the CDCA are available which would meet the applicants’ needs without requiring a change in the Plan’s classification, or an amendment to any Plan element.

The CDCA Plan does not currently identify any sites as solar generating facilities. Therefore, there is no other location within the CDCA which could serve as an alternative location without requiring an amendment similar to the one required for the Selected Alternative on the Desert Sunlight Solar Farm Project site. The Selected Alternative does not require a change in the Multiple-Use Class classification for any area within the CDCA.

**Required Determination:** Determine the environmental effects of granting and/or implementing the applicant’s request.

The PA/FEIS evaluated the environmental effects of approving the CDCA Plan Amendment and the ROW grant application for the DSSF.

**Required Determination:** Consider the economic and social impacts of granting and/or implementing the applicant's request.

The PA/FEIS evaluated the economic and social impacts of the Plan Amendment and the ROW grant.

**Required Determination:** Provide opportunities for and consideration of public comment on the proposed amendment, including input from the public and from federal, state, and local government agencies.

See ROD section 5.0 for details on public scoping and EIS comment periods.

**Required Determination:** Evaluate the effect of the proposed amendment on BLM management's desert-wide obligation to achieve and maintain a balance between resource use and resource protection.

The balance between resource use and resource protection is evaluated in the PA/FEIS. FLPMA Title VI, as addressed in the CDCA Plan, provides for the immediate and future protection and administration of the public lands in the California Desert within the framework of a program of multiple use and sustained yield, and maintenance of environmental quality. Multiple use includes the use of renewable energy resources, and, through Title V of FLPMA, the BLM is authorized to grant rights-of-way for the generation and transmission of electric energy. The acceptability of use of public lands within the CDCA for this purpose is recognized through the CDCA Plan's approval of solar generating facilities within MUC M and L. The PA/FEIS identifies resources that may be adversely impacted by approval of the DSSF, evaluates alternative actions which may accomplish the purpose and need with a lesser degree of resource impacts, and identifies mitigation measures that, when implemented, would reduce the extent and magnitude of the impacts and provide a greater degree of resource protection.

### 3.3.4 MUC Guidelines

The proposed Land Use Plan Amendment to be made by the BLM is a site identification decision and a decision to make certain other lands unavailable for solar development. Because the proposed solar project and its alternatives are located within MUC M and L, the classification designations govern the type and degree of land use action allowed within each classified area. All land use actions and resource management activities on public lands within an MUC designation must meet the guidelines for that class. MUC M and L allow electric generation plants for solar facilities after NEPA requirements are met. These guidelines are listed in Table 1, Multiple Use Class Guidelines, in the CDCA Plan. The specific application of the MUC designations and resource management guidelines for a specific resource or activity are further discussed in the plan elements section of the CDCA Plan. In Class M and L designations, the BLM Authorized Officer (AO) is directed to use his/her judgment in allowing for consumptive uses by taking into consideration the sensitive natural and cultural values that might be degraded.

The site for the DSSF meets the MUC Guidelines (as applicable to this project and site) for the following reasons:

**Air Quality:** Class M and L lands, including the project site, are to be managed to protect their air quality and visibility in accordance with Class II objectives of the Federal CAA. The worst-case emissions that would be associated with the DSSF are provided in PA/FEIS Section 4.2, *Air Resources*. Those values were compared to emissions objectives for air quality and visibility associated with Class II areas in 40 CFR 52.51, and are well below the limitations required for Class II areas. Therefore, the Selected Alternative conforms to the Class II objectives referenced in the CDCA Plan guidelines. NPS and Desert Sunlight have agreed to an air quality monitoring program in their MOA to address NPS air quality concerns.

**Water Quality:** Class M and L designations will be managed to provide for the protection and enhancement of surface and groundwater resources, and best management practices (BMPs) will be used to avoid degradation and to comply with Executive Order (EO) 12088. PA/FEIS Section 4.17, *Water Resources*, evaluated the alternatives for the potential to impact groundwater and surface water resources. Development and operation of the DSSF raised concerns of water consumption during construction, reduction in groundwater recharge due to soil compaction, alteration of drainage patterns, and runoff from storms transporting spilled substances into intermittent stream channels. The incorporation of applicant measures and mitigation measures per Section 2.1, above, will reduce these potential impacts. Although the BLM has not established BMPs for solar projects, it has incorporated project-specific BMPs for the DSSF which are available as part of the project record. Those BMPs were derived from a variety of sources. Implementation of these BMPs, and BLM's standard terms and conditions requiring compliance with other federal, state, and local regulations, would constitute compliance with EO 12088. Those measures are applicable to all project alternatives, and would therefore conform to the Guidelines in Table 1 of the CDCA Plan.

**Cultural and Paleontological Resources:** Archaeological and paleontological values will be preserved and protected as described in PA/FEIS Section 4.6, *Cultural Resources*, and Section 4.7, *Paleontological Resources*. Procedures described in 36 CFR 800 will be observed where applicable. The MOA provided in Appendix 4 of this ROD specifically addresses compliance with 36 CFR 800 in project construction, operation, maintenance, and decommissioning, including identification of properties listed or eligible for listing on the National Register of Historic Properties. The identification of the project site was subject to the MUC Guidelines for cultural and paleontological resource protection as is evidenced by the applicability of the Guidelines to the specific facility proposal. As such, the project and the project site are within the MUC Guidelines for cultural and paleontological resource protection established by the CDCA Plan based on implementation of the MOA.

**Native American Values:** Native American cultural and religious values will be protected and preserved on MUC M and L lands with appropriate Native American groups consulted. Repeated efforts and opportunities were provided to allow tribal entities to raise concerns regarding the project and, as a result, the cultural guidelines with respect to requirements for consultation were met. The concerns raised are addressed in the MOA in Appendix 4 of this ROD. The protection of cultural resources, as addressed in the MOA, ensures that preservation and protection of cultural and religious values is accomplished in accordance with the CDCA Plan MUC Guidelines.



**Electrical Generation Facilities:** Solar generation may be allowed on the project site after NEPA requirements are met. The analysis in the PA/FEIS, which each of the project alternatives, comprises the NEPA compliance required for this MUC guideline.

**Transmission Facilities:** Class M and L guidelines allow electric transmission to occur in designated ROW corridors. The DSSF meets this guideline by locating new transmission facilities in existing ROW corridors to the extent feasible.

**Fire Management:** Fire suppression measures in Class M and L areas will be taken in accordance with specific fire management plans, subject to such conditions as the BLM AO deems necessary. The project site is within the area covered by the BLM California Desert District and the Palm Springs South Coast Field Office and their relevant fire management and suppression policies as well as by the Riverside County Fire Department.

**Vegetation:** Table 1 of the CDCA Plan includes a variety of guidelines associated with vegetation. These are addressed in the PA/FEIS as follows:

- *Native Plants:* Removal of native plants in Class M and L areas is only allowed by permit after NEPA requirements are met, and after development of necessary stipulations. Approval of the ROW grant for the Selected Alternative would constitute the permit for such removal. The applicant measures and mitigation measures in the PA/FEIS, the BO, and Appendix 2 of this ROD constitute the stipulations to avoid or minimize impacts from the removal.
- *Harvesting of Plants by Mechanical Means:* Harvesting by mechanical means is also allowed by permit only. Although the project alternatives would include the collection of succulents and seeds to assist with reclamation, the removal of these items would not be done for distribution to the public. Also, the guidelines for vegetation harvesting include encouragement of such harvesting in areas where the vegetation would be destroyed by other actions, which would be the case with the Selected Alternative. Because plants would not be distributed to the public, and harvesting would conform to the guidelines, the Selected Alternative conforms to this MUC guideline.
- *Rare, Threatened, and Endangered Species, State and Federal:* In all MUC areas, all state and federally listed species will be fully protected. In addition, actions which may jeopardize the continued existence of federally listed species will require consultation with the USFWS. As evaluated in PA/FEIS Section 4.3, *Vegetation*, no federally or state listed plants would be impacted by the Selected Alternative.
- *Sensitive Plant Species:* Identified sensitive plant species would be given protection in management decisions consistent with BLM's policy for sensitive species management (BLM Manual 6840). The objective of that policy is to conserve and/or recover listed species, and to initiate conservation measures to reduce or eliminate threats to BLM sensitive species to minimize the likelihood of and need for listing. As described in PA/FEIS Section 4.3, *Vegetation*, the Selected Alternative would impact land supporting California Native Plant Society-identified sensitive plants, including foxtail cactus, Emory's crucifixion thorn, California ditaxis, desert unicorn plant, and slender-spined althorn. Fourteen sensitive plants

have been identified that would be impacted by the Selected Alternative. The BLM has consulted with the CDFG and USFWS in adopting measures to minimize or compensate for these impacts (Section 2.1, above) to provide protection for these sensitive plant species through appropriate management decisions consistent with BLM policies. This action would be in conformance with the guidelines.

- *Unusual Plant Assemblages (UPAs)*: No UPAs were identified on the project site.
- *Vegetation Manipulation*: Manipulation of vegetation in Class M and L areas by aerial broadcasting is not permitted. Manipulation of vegetation in Class L areas by mechanical control is not permitted, but is permitted in Class M areas after consideration of possible impacts. Vegetation manipulation is defined in the CDCA Plan as removing noxious or poisonous plants from rangelands; increasing forage production; creating open areas within dense brush communities to favor certain wildlife species; or eliminating introduced plant species. None of these actions would be conducted as part of the Selected Alternative. Therefore, the action would conform to the guidelines.

**Motorized Vehicle Access/Transportation:** Pursuant to the CDCA Plan guidelines in Class M areas, motorized-vehicle use will be allowed on “existing” routes of travel unless closed or limited by the AO. New routes may be allowed upon approval of the AO. For Class L areas, new roads may be developed under ROW grants or approved plans of operations. In areas designated as limited use area for OHV use, such as the site locations under consideration for the project, changes to the transportation network (new routes, re-routes, or closures) in Limited and Moderate Use areas may be made through activity-level planning or with site-specific NEPA analysis (BLM Instructional Memorandum 2008-014). One of two existing open OHV routes on the DSSF site will be closed. These changes are made with the site-specific NEPA analysis provided in Section 4.12, *Recreation*, in the PA/FEIS.

**Wildlife Species and Habitat:** Table 1 of the CDCA Plan includes a variety of guidelines associated with wildlife. These are addressed PA/FEIS Section 4.4, *Wildlife*, as follows:

- *Rare, Threatened, and Endangered Species, State and Federal*: In all MUC areas, the CDCA Plan guidelines for wildlife require that state and federally listed species and their critical habitat be fully protected. Actions that may jeopardize the continued existence of federally listed species will require consultation with the USFWS. As discussed in Section 4.4, *Wildlife*, the Desert tortoise is federally listed. As specified in the guidelines, BLM conducted formal consultation with the USFWS in accordance with Section 7 of the Endangered Species Act. As a term and condition of the ROW lease/grant and consistent with the CDCA Plan guidelines, the Applicants are required to conform to all measures outlined in the BO to minimize and mitigate impacts to Desert tortoise.
- *Sensitive Species*: Identified species would be given protection in management decisions consistent with BLM’s policy for sensitive species management (BLM Manual 6840). The objective of this policy is to conserve and/or recover listed species, and to initiate conservation measures to reduce or eliminate threats to BLM sensitive species to minimize the likelihood of and need for listing. Sensitive wildlife species, including special-status

wildlife, evaluated in PA/FEIS Section 4.4, *Wildlife*, and in PA/FEIS Appendix H, *Biological Resources*, include Desert tortoise, Nelson's bighorn sheep, Rosy boa, Chuckwalla, golden eagle, American badger, desert kit fox, Western burrowing owl, short-eared owl, long-eared owl, Ferruginous hawk, Prairie falcon, Swainson's hawk, Northern harrier, Loggerhead shrike, Le Conte's thrasher, burro deer, Palm Springs round-tailed ground squirrel, Pallid bat, Western mastiff bat, California leaf-nosed bat, Pocketed free-tailed bat, mountain lion, and Colorado valley woodrat. Impacts to these species were described in the PA/FEIS and all necessary consultation with the USFWS was completed. Specific mitigation measures are included to prevent impacts to these species and therefore the selected alternative conforms to the MUC M and L guidelines.

- The Selected Alternative includes extensive mitigation to avoid and reduce adverse impacts to wildlife species. Introduction of native species is permitted in Class M and L areas, and habitat manipulation is allowed subject to environmental assessment, as is done within the PA/FEIS for the DSSF. Therefore, the Selected Alternative conforms to these guidelines.
- The implementation of mitigation measures, including Applicant Measures AM-WIL-1 through AM-WIL-4 and MM-WIL-1 through MM-WIL-9. Furthermore, where the project overlaps with the NECO-identified Wildlife Habitat Management Area (WHMA), impacts to those species will be mitigated at a 1:1 (non-sensitive species habitat) or 3:1 (sensitive species habitat).

The project and the site location do not impact the following public land resources or uses: Livestock Grazing, Minerals, Recreation (other than route closure), or Wild Horses and Burros. Therefore, these guidelines are inapplicable to the land use plan decision being made in this ROD. The decision to make the remainder of the Project Study Area unavailable for solar development has no effect on public land resources since the status quo is retained.

### 3.3.5 CDCA Plan Elements

#### CDCA Plan Decision Criteria

The CDCA Plan defines specific Decision Criteria to be used by the BLM in evaluating applications in the Energy Production and Utility Corridors Element of Chapter 3. The consideration of these Decision Criteria for the DSSF is described below.

**Decision Criterion:** Minimize the number of separate rights-of-way by utilizing existing rights-of-way as a basis for planning corridors.

The DSSF helps minimize the number of separate ROWs by being proposed largely within existing utility corridors as described in Section and Section 1.1.3.4, above. Electrical transmission associated with the project around Kaiser Road and I-10 will occur within these existing corridors.

**Decision Criterion:** Encourage joint-use of corridors for transmission lines, canals, pipelines, and cables.

The northern portion of the PV generating facility, the substation, and a portion of the gen-tie line would be within designated utility corridors, thereby maximizing the joint-use of these corridors for electrical transmission.

**Decision Criterion:** Provide alternative corridors to be considered during processing of applications.

This decision criterion is not applicable to the DSSF. Placement of the proposed facility adjacent to existing corridors does not require designation of alternative corridors to support the project.

**Decision Criterion:** Avoid sensitive resources wherever possible.

The extent to which the DSSF has been located and designed to avoid sensitive resources is addressed throughout the PA/FEIS. BLM and other federal regulations that restrict the placement of proposed facilities, such as the presence of designated Wilderness Areas or Desert Wildlife Management Areas, were considered in the original siting process used by the Applicants to identify potential sites for the project locations. The alternatives analysis considered whether the purpose and need of the project could be achieved with a different build alternative, but with a lesser effect on sensitive resources. That analysis indicated that the alternatives would likely result in generally similar impacts as the project. In areas where the project overlaps with a WHMA, mitigation will be implemented on a 1:1 ratio for non-sensitive species habitat and a 3:1 ratio for sensitive species habitat. The decision to make the remainder of the Project Study Area unavailable for solar energy development was made on the basis of resource conflict identified in the area. The decision was made to avoid identified sensitive resources.

**Decision Criterion:** Conform to local plans whenever possible.

The extent to which the DSSF conforms to local plans is addressed in Section 4.9, *Lands and Realty* of the PA/FEIS. The majority of the DSSF is on BLM-administered lands and is in conformance with BLM land use plans, policies and regulations. A large portion of the Gen-Tie line is located within existing Riverside County ROW. According to Riverside County Code Section 17.284.020 excavation in, construction in and installation of improvements or structures in the Riverside County ROW is permitted upon issuance of an encroachment permit. Desert Sunlight is in the process of applying for this encroachment permit. In addition, a small portion of the Gen-Tie line associated with the DSSF is located on private land. The Riverside County Code permits public utility uses within any zoning classification subject to the issuance of a public use permit. Desert Sunlight is in the process of obtaining a public use permit for this portion of the project.

**Decision Criterion:** Consider wilderness values and be consistent with final wilderness recommendations.

The Chuckwalla Mountains Wilderness is to the south of the DSSF and the Joshua Tree Wilderness Area is to the west, north, and east of the DSSF. These two wilderness areas are closest to the DSSF. Also, the Palen/McCoy Wilderness Area is located approximately 10 miles to the east. The extent to which the DSSF affects these wilderness areas is addressed in detail in

Section 4.14, *Special Designations*, and Section 4.16, *Visual Resources*. The DSSF is not located within any of these Wilderness Areas.

**Decision Criterion:** Complete the delivery systems network.

This decision criterion is not applicable to the DSSF.

**Decision Criterion:** Consider ongoing projects for which decisions have been made.

This decision criterion is not applicable to the DSSF. Approval of the project would not affect any other projects for which decisions have been made.

**Decision Criterion:** Consider corridor networks which take into account power needs and alternative fuel resources.

This decision criterion is not applicable to the DSSF. The project does not involve the consideration of an addition to or modification of the corridor network.

### 3.3.6 Conformance with Applicable Plan Amendments

#### BLM's Northern and Eastern Colorado Desert Coordinated Management Plan Amendment to the CDCA Plan

Various federal regulations, Executive Orders, and the CDCA Plan require the BLM to designate routes of travel as Open, Limited, or Closed to vehicular travel and to assure that resources are properly managed in a multiple use context.

In 2002, in an amendment to the CDCA Plan, the BLM identified and designated many routes of travel in the Northern & Eastern Colorado Desert Coordinated Management Plan (NECO) amendment. This amendment to the CDCA Plan clarified, updated, and assigned designations (Open, Closed, or Limited) to all travel routes within the NECO amendment area.

The project site is within the NECO amendment area. There are two open routes within the ROW grant boundary of the project site. The two open routes on the project site follow established dirt roads/trails on the site and are described in PA/FEIS Section 4.12, *Recreation*, and identified in Figure 4.12-1, *OHV Travel Route Closures*.

One open route (Route 660260) will be affected by the project. This route will be closed to public access. The closure of this route is an administrative action by the BLM taken in conformance with current BLM policy.

Under the policy provisions of the BLM Washington Office Instruction Memorandum No. 2008-014 (Clarification of Guidance and Integration of Comprehensive Travel and Transportation Management Planning into the Land Use Planning), selection and designation of individual routes within a Moderate and Limited area is an implementation decision but is not a land use plan decision. This route is being closed upon the approval of the ROW authorization for the project.

## 4.0 Alternatives

The Selected Alternative was chosen from among a total of 18 alternatives considered by the BLM, six of which were carried forward, including the Proposed Action/Agency Preferred/Selected Alternative, for more detailed review; the remaining 12 alternatives were considered but eliminated from detailed analysis.

### 4.1 Alternatives Fully Analyzed

The six alternatives were fully analyzed in the PA/FEIS. Three project alternatives (Alternatives 1, 2, and 3), one No Action Alternative (Alternative 4), and two No Project Alternatives (Alternatives 5 and 6) are fully analyzed in the PA/FEIS. Each of the action alternatives would require an amendment to the CDCA Plan, as would the two No Project Alternatives. Each is described in detail in the PA/FEIS and summarized below.

#### 4.1.1 The Proposed Action

The Proposed Action Alternative includes the following configurations of the three Project components and encompasses approximately 4,144 acres:

- Solar Farm Layout B (SF-B);
- Gen-Tie Line A-1 (GT-A-1); and
- Red Bluff Substation A, with Access Road 2

Solar Farm Layout B is six miles north of the Desert Center and four miles north of Lake Tamarisk, northeast of and next to Kaiser Road, and southwest of Pinto Wash. SF-B encompasses approximately 3,761 acres entirely on BLM-administered land. Access would be provided by Kaiser Road. Once fully operational, it would produce 550 MW of power.

GT-A-1 exits the southwest of the PV generating facility, runs south along the west side of Kaiser Road, turns east just north of Desert Center, and then runs south across I-10 to the eastern location being considered for the Red Bluff Substation (Red Bluff Substation A). The 160-foot-wide gen-tie corridor and additional fan-shaped areas at corners used for wire stringing for GT-A-1 would encompass approximately 210 acres. The total length of GT-A-1 is approximately 12.1 miles. Of the 12-mile ROW, approximately 11.4 miles would be on BLM land, and approximately 0.6 mile would be on land owned in fee by the Metropolitan Water District of Southern California and .5 mile would be on land owned by Riverside County. For the Gen-Tie Line, Desert Sunlight proposes to use steel monopoles, which are expected to be approximately 135 feet tall. Typical spacing between structures would be approximately 900 to 1,100 feet.

Red Bluff Substation A and ancillary facilities (drainage features, access road, electrical distribution line, transmission system loop-in, material yard/staging area, and a telecommunications site) would be on approximately 172 acres of BLM-administered land, approximately four miles southeast of California State Route 177, just south of I-10. The substation would be constructed within the central portion of the parcel.

### **4.1.2 Different Gen-Tie and Substation Location with Land Use Plan Amendment**

With the Alternate Action Alternative, the following configurations of the three Project components are proposed, encompassing approximately 4,110 acres:

- Solar Farm Layout B (SF-B);
- Gen-Tie Line B-2 (GT-B-2); and
- Red Bluff Substation B

Solar Farm B is as described for Alternative 1.

GT-B-2 would exit the southwest corner of the PV generating facility, would run south along the west side of Kaiser Road, then would turn southwest, approximately 1.2 miles north of Desert Center. Then it would travel across Eagle Mountain Road, finally turning south across I-10 to the western location that is being considered for the Red Bluff Substation (Red Bluff Substation B). The 160-foot-wide Gen-Tie corridor and additional fan-shaped areas at corners used for wire stringing would encompass approximately 203 acres. The total length of GT-B-2 would be approximately 10 miles. Of the 10-mile ROW, approximately 9.4 miles would be on BLM land and approximately 0.6 mile would be on land owned in fee by the Metropolitan Water District of Southern California. The poles used for the Gen-Tie Line would be the same as those described for Alternative 1.

Red Bluff Substation B would be within a 160-acre parcel of private land south of I-10 at Eagle Mountain Road. This substation and related facilities is expected to require approximately 130 acres and would be generally located in the center of the parcel. Because this substation site is on a parcel of privately owned land, it would be need to be acquired and subsequently owned by SCE.

### **4.1.3 Reduced Solar Farm Footprint Alternative with Land Use Plan Amendment**

With the Reduced Solar Farm Footprint Alternative, the following configurations of the three Project components are proposed, encompassing approximately 3,303:

- Solar Farm Layout C (SF-C);
- Gen-Tie Line A-2 (GT-A-2); and
- Red Bluff Substation A, with Access Road 2

SF-C would be in the same general location as SF-B but would be smaller to reduce overall environmental impacts, particularly on the desert tortoise. The acreage required for this layout would be 3,045 acres, and the power output would be 413 MW. The construction schedule would be 26 months, the same as for SF-B.

GT-A-2 would exit the southwest corner of the PV generating facility and would run for approximately 4,400 feet along the east side of Kaiser Road, until it intersects with the ROW of an existing SCE transmission line. Then it would run to the southeast, along the existing transmission ROW, for approximately 7.2 miles then would turn south for approximately 0.6 mile. Then it would continue due west for approximately 0.5 mile, finally turning south cross I-10 and would continue approximately 1,000 feet (not along any existing feature) to Red Bluff Substation A. The GT-A-2 160-foot-wide Gen-Tie corridor and additional fan-shaped areas at corners used for wire stringing would encompass approximately 226 acres. The total length of GT-A-2 is approximately 10.5 miles. Of the 10.5-mile ROW, 6.5 miles would be on BLM land and 4.0 miles would be on private land. For the portions on private land, 21 separate parcels would be crossed.

Red Bluff Substation A is as described for Alternative 1.

#### **4.1.4 No Issuance of a Right-of-Way Grant and No Land Use Plan Amendment (No Action)**

With this No Action Alternative, the Project would not be approved (all components of the Project would be denied), no ROW grant would be issued to the Applicants, and no CDCA Plan amendment would be approved that would make the land available for large-scale solar development.

#### **4.1.5 No Issuance of a Right-of-Way Grant with Land Use Plan Amendment to Identify the Area as Unsuitable for Solar Development (No Project with Plan Amendment)**

With this No Project Alternative, the Project would not be approved (all components of the Project would be denied), no ROW grant would be issued to the Applicants, and the CDCA Plan would be amended to identify the Project Study Area as unsuitable for future large-scale solar energy development. This No Project Alternative was chosen in part along with the Proposed Action alternative.

#### **4.1.6 No Issuance of a Right-of-Way Grant with Land Use Plan Amendment to Identify the Area as Suitable for Solar Development (No Project with Plan Amendment)**

Under this No Project Alternative, the Project would not be approved (all components of the Project would be denied), no ROW grant would be issued to the Applicants, and the CDCA Plan would be amended to identify the Project area as suitable for future large-scale solar energy development.

### **4.2 Alternatives Not Fully Analyzed**

An integral part of the search for a suitable site included an evaluation of the availability of electric transmission capacity throughout SCE's service territory. California's transmission grid



system poses a number of challenges to the interconnection of a power plant. Many potential locations for the interconnection of a power plant would require lengthy and expensive system upgrades in order to integrate the new capacity into the transmission system. By contrast, SCE's Devers-Palo Verde transmission line provides a unique opportunity to interconnect the DSSF at a point on the system with available electric transmission capacity. The Devers-Palo Verde line runs from the Devers Substation located near Desert Hot Springs in Riverside County, through the Coachella Valley and along the I-10 corridor through the Chuckwalla Basin, and eventually into the Palo Verde Substation in La Paz County, Arizona.

Several factors, including incompatible uses on public land and highly subdivided private land, eliminated the western end of the Devers-Palo Verde line from consideration for the DSSF. Much of the area near the Devers end of the transmission line has already been developed with wind farms. The land along Devers-Palo Verde line between Desert Hot Springs and Coachella is composed of multiple, densely populated cities and productive agricultural land, and is divided into relatively small parcels. Land in that region is thus more expensive and poses challenges for assembling a contiguous site large enough for a cost-effective interconnection to the transmission line. Within the Coachella Valley itself, many of the properties are subject to agricultural conservation contracts under the Williamson Act, preventing solar development on those parcels. Together, these factors eliminated the Devers-Coachella Valley portion of the transmission line.

From the Coachella Valley east along the Devers-Palo Verde line to the Chuckwalla Valley, the I-10 corridor is characterized by steep terrain unsuitable for solar development and interrupted by scattered private parcels. As a result, the Coachella Valley to Chuckwalla Valley portion of the Devers-Palo Verde line was not considered appropriate for the DSSF.

From the Chuckwalla Valley east toward Blythe along the I-10 corridor, most of the unencumbered BLM land is subject to first-in-time applications by other solar projects for rights of way, which would take priority over the DSSF. There is very little private land available, with the exception of the private parcels excluded from further consideration because they are contained within the Palen Dry Lake, which is a unique environmental feature that is unsuitable for development, in part due to flood hazard. The agricultural community around Blythe is almost entirely active farming land, highly subdivided and largely subject to conservation contracts under the Williamson Act, rendering much of it unavailable for renewable energy development. Much of the remainder of the land area between the Chuckwalla Valley and Blythe is within Desert Tortoise Critical Habitat or Areas of Critical Environmental Concern. One alternative near Blythe on BLM-administered land was eliminated from further consideration, for reasons described below.

Alternatives not carried forward did not meet one or more of the criteria identified in Section 2.2.1, *Alternatives Development and Screening* of the PA/FEIS. They include alternative solar field layouts at the proposed site, other locations on private land, other locations on BLM-administered land, alternative generating technologies, alternative transmission and interconnection locations, and underground gen-tie lines.

## 4.2.1 Alternative Layouts in the Solar Farm Study Area

Several additional alternatives were considered for siting of the DSSF within the Solar Farm Study Area. The alternatives described below were not carried forward for analysis.

### Alternative Layout within Project Study Area (Solar Farm Layout A)

An additional solar farm layout was considered within the Project Study Area (SF-A). SF-A is in the same general location as SF-B, though the boundaries of the site are slightly different. SF-A encompasses approximately 4,186 acres, located entirely on BLM land. Elevation at SF-A varies from approximately 619 to 880 feet above mean sea level. The primary difference is in the site's northwest boundary, which pushes farther into occupied desert tortoise habitat and areas of higher concentrations of foxtail cactus. The northwestern portion of the site also contains higher concentrations of burrowing owl. Whereas the footprint of SF-B is estimated to contain approximately 10 to 14 live tortoises, the footprint of SF-A is estimated to contain approximately 24 to 32 live tortoises. Within the footprint of SF-A, 18 individual foxtail cacti were found, whereas within SF-B, 3 were found, and for SF-C, only 1 was found.

**Conclusion.** Since this layout did not provide any advantage over SF-B and would result in greater impacts to the desert tortoise and foxtail cactus, it was eliminated from consideration.

### Larger Project (1,000 MW Project)

Initially, Sunlight applied to the California Independent System Operator (CAISO) to interconnect 1,000 MWs. This includes the current 550 MW proposed for the Project along with additional application for a 450 MW project. A 1,000 MW project in the Project Study Area would have required an 8,000-acre footprint and would require land on the east side of Pinto Wash and to the north of the existing Solar Farm alternatives, SF-B and SF-C.

The area to the north of the solar farm site supports habitats and features that have been demonstrated to support higher densities of desert tortoise in the Project region. Surveys of this area conducted in 2008 determined that the area north of SF-B and SF-C supports higher numbers of desert tortoises and burrowing owls than SF-B and SF-C, and at least one large population of foxtail cactus. The area north of the Solar Farm site supports a number of deep washes with steep banks that support dry desert wash woodlands and may provide movement corridors for large mammal species.

**Conclusion.** Based on the environmental constraints identified above, the siting of a solar farm in the area to the east and north of proposed SF-B and SF-C would have greater environmental impacts than the proposed action alternatives without any technological advantages other than increased output and is therefore not an appropriate location for siting a large-scale solar energy development project. For this reason, this alternative was not considered for further analysis.

### Direct Desert Tortoise Avoidance Alternative

The Applicant considered a 550 MW alternative that avoided all active tortoise sign, including live tortoise and active burrows found within the area of the Solar Farm Study Area. This

alternative also avoided Pinto Wash, the area east of Pinto Wash and the possible Bighorn Sheep Corridor located north of the aqueduct in the northern portion of the Solar Farm Study Area. This alternative required a portion of the Project arrays to be located in the southwestern portion of the Solar Farm Study Area.

During the biological surveys conducted for the Project Study Area, no active tortoise sign was found in the southwestern portion of the Solar Farm Study Area; however, just above this southwestern area the Applicant found the highest concentration of desert tortoise within the Solar Farm Study Area. The southwestern portion of the Solar Farm Study Area is located just to the north of the Chuckwalla DWMA. Siting of Project arrays within this area would effectively eliminate the majority of the wildlife corridor between the DWMA and the area of the highest concentration of desert tortoise within the Solar Farm Study Area.

**Conclusion.** This alternative was determined to have greater environmental impact than the currently proposed project alternatives without any technological advantages due to the effective elimination of the wildlife corridor. In coordination with BLM's partner agencies, CDFG and USFWS, the impacts to the wildlife corridor were considered to be detrimental. Therefore, this alternative was not carried forward.

## 4.2.2 Privately Owned Land

Private lands were considered for siting the solar farm as well as BLM-administered lands (see below). The BLM does not typically analyze a non-federal application on private lands because such an alternative does not respond to the BLM's purpose and need to consider an application for the authorized use of public lands for renewable energy development. However, the use of private lands was identified during scoping. The BLM, to inform the analysis, considered them but did not analyze them in detail for the additional reasons described below.

### Private Land within the Chuckwalla Valley

Within the Chuckwalla Valley, three potential sites on private land were eliminated from further consideration. The first site, Desert Center West, is approximately 4 miles west of the town of Desert Center. This site consists of approximately 44 semi-contiguous parcels totaling approximately 4,000 acres and owned by approximately 36 separate owners. The average size of the parcels is approximately 160 acres. The Desert Center West site is not under cultivation and is designated as Desert Tortoise Critical Habitat, so would likely have environmental impacts similar to or greater than those of the Project Study Area. While the Desert Center West site is near the western Red Bluff Substation alternative, existing transmission lines that cross the site further decrease the acreage available for solar development. The total site area available would be less than half of the area necessary for the proposed Project. Developing a portion of the Project here and a portion at another site would not reduce environmental impacts and would decrease the Project's feasibility by duplicating transmission lines and interconnection facilities.

The second private site eliminated from further consideration, Desert Center Central, lies southeast of the Project Study Area, 3.5 miles northeast from the town of Desert Center, and is composed of mostly disturbed agricultural land. This site is transected by an existing SCE 161kV

transmission line. Some of the land is subject to conservation contract under the Williamson Act, preventing current solar development on those parcels. The site is also part of a sand transport corridor, making it less suitable for development. Additionally, the site contains approximately 464 different parcels, owned by approximately 228 owners. The average parcel size is approximately 25 acres. Due to the small parcels and scattered ownership, it would be difficult and expensive, if not impossible, to acquire sufficient contiguous acreage at Desert Center Central for the Project, so it was eliminated from consideration.

The third private site eliminated from further consideration is Desert Center East, located 7.5 miles east of the town of Desert Center. This site consists of 14 parcels totaling approximately 1,800 acres. The average parcel size is approximately 160 acres. Although largely consisting of disturbed land, the total area available would be less than half of the area necessary for the Project. Developing a portion of the Project here and a portion at another site would not reduce environmental impacts and would reduce Project feasibility by duplicating transmission lines and interconnection facilities. Accordingly, this site was eliminated from further consideration.

**Conclusion.** All three private sites were eliminated from detailed consideration because they do not meet Project objectives, the purpose and need for the Project, or are otherwise not reasonable alternatives (as described above). Therefore, they are not analyzed in further detail.

### **Contaminated Sites near the Devers-Palo Verde Corridor**

In response to EPA's scoping comments for the proposed Project, sites were considered as identified by the EPA in its Renewable Energy Interactive Mapping Tool as contaminated and potentially contaminated Renewable Energy Sites for PV Utility Solar facilities. There were only two sites in the general region of the Devers-Palo Verde line. A 43-acre site identified as "Square D Company" is located in Beaumont, CA approximately 20 miles west of the Devers Substation. A second 35-acre site, "Woten Aviation Services Inc.," is located seven miles southwest of Blythe, CA, and 5 to 10 miles from the proposed Midpoint Substation. Both sites are part of the Resource Conservation and Recovery Act (RCRA) program. However, due to their small size, they would not come close to meeting the energy production of the Proposed Action and would require multiple additional projects to be constructed in order to achieve an amount of renewable energy generation equivalent to the proposed Project, multiplying the impacts of developing interconnection facilities for the equivalent generating capacity.

**Conclusion.** The use of contaminated sites for the proposed Project was eliminated from consideration because it does not meet Project objectives, the purpose and need for the Project, or is otherwise not a reasonable alternative (as described above). Therefore, it is not analyzed in further detail.

### **4.2.3 Alternative BLM-Administered Land**

Much of the BLM-administered land in the areas with the highest solar energy production potential is precluded from development by special designations such as ACEC, DWMA, wilderness, etc. Many potentially suitable areas outside these designated areas are precluded because they are in use or are proposed for other energy projects (primarily solar).

As described above, most BLM-administered land along the I-10 corridor was eliminated from consideration. An alternative site was considered on BLM-administered land to the southwest of Blythe, known as the Quartzite site. However, the cost of interconnecting a project the size of Desert Sunlight to the Devers-Palo Verde line from Quartzite would have been almost \$75 million more than the cost of interconnecting from the Project Study Area. A smaller project is being considered in that area. As a result, the Quartzite site (as previously proposed) was eliminated from further consideration as an alternative to the DSSF.

Moving the interconnection point to a different location would also require a new interconnection application, which would re-start the CAISO interconnection process and would delay the project for several years.

**Conclusion.** The use of alternative BLM-administered land was eliminated from consideration because it does not meet Project objectives, the purpose and need for the Project, or is otherwise not a reasonable alternative (as described above). Therefore, it is not analyzed in further detail.

#### **4.2.4 Alternate Non-Renewable Power Generating Technologies**

Nonrenewable generation technologies that require use of natural gas, coal, or nuclear energy were considered as potential alternatives to the proposed Project. BLM typically does not analyze an alternative for a different technology when a ROW application is submitted for a specific technology because such an application does not respond to the BLM's purpose and need to consider an application for the authorized use of public lands for a specific renewable energy technology. In addition, these projects would not achieve a key objective: to construct and operate a generation facility that would contribute approximately 1,000,000 megawatt hours (MWh) of clean, renewable solar energy per year to the State of California's renewable energy goals.

**Conclusion.** Alternative methods of generating or conserving electricity are eliminated from detailed discussion because they would be too great a departure from the application to be considered a modification of the Applicants' proposal, and so do not meet the purpose and need for the Project under NEPA. These alternative methods would not respond to the BLM's purpose and need for the Proposed Action, which is to respond to the Applicants' application for a ROW grant to construct, operate, and decommission a solar photovoltaic facility on public lands in compliance with FLPMA, BLM ROW regulations, and other applicable federal laws. Additionally, none of these alternative methods of generating electricity is within Desert Sunlight's area of expertise; therefore, it would not likely be technically or economically feasible for Desert Sunlight to implement them. Moreover, the permitting of new nuclear facilities in California is currently illegal, so this technology also is eliminated as infeasible.

#### **4.2.5 Concentrating Solar Power Technologies**

The use of alternative concentrating solar generation technologies was evaluated as potential alternatives to the proposed Project. Although the alternative solar generation technologies would achieve most of the project objectives, each would have different environmental or feasibility concerns. In particular, these technologies would require similar amounts of land as the Project, resulting in similar impacts on biological and cultural resources, and land use, and potentially

greater impacts on water use and visual impacts because of towers or other structural features that would be much more visible than those for a PV project.

**Conclusion.** Alternative renewable technologies, including concentrating solar power technologies, were eliminated from detailed discussion because they do not meet the purpose and need for the Project under NEPA., which is to respond to the Applicants' application for a ROW grant to construct, operate, and decommission a solar photovoltaic facility on public lands in compliance with FLPMA, BLM ROW regulations, and other applicable federal laws. In addition, this technology is not within the Desert Sunlight's area of expertise, and so may not be technically or economically feasible for it to implement.

## 4.2.6 Wind Energy

Wind carries kinetic energy that can be utilized to spin the blades of a wind turbine rotor and an electrical generator, which then feed alternating current (AC) into the utility grid. Most state-of-the-art wind turbines operating today convert 35 to 40% of the wind's kinetic energy into electricity. A single 1.5-MW turbine operating at a 40% capacity factor generates 2,100 MWh annually. Wind turbines currently being manufactured have power ratings ranging from 250 watts to 5 MW, and units larger than 7 MW in capacity are now under development (AWEA 2008). The average capacity of wind turbines installed in the United States in 2007 was 1.65 MW (EERE 2008). The technology is well developed and can be used to generate significant amounts of power. There are now approximately 2,490 MW of wind being generated in California (AWEA 2008).

The use of wind energy at the Project locations may be feasible at the scale of the proposed Project but it would not eliminate significant impacts caused by the Project; specifically, there would still be impacts on biological and cultural resources, and visual effects would be greater than with the proposed Project.

**Conclusion.** Alternative renewable technologies, including wind energy, were eliminated from detailed discussion because they would not respond to the BLM's purpose and need for the Proposed Action, which is to respond to Desert Sunlight's application for a ROW grant to construct, operate, and decommission a PV facility on public lands in compliance with FLPMA, BLM ROW regulations, and other applicable federal laws. In addition, this technology is not within Desert Sunlight's area of expertise, and so may not be technically or economically feasible for them to implement.

## 4.2.7 Alternative Transmission and Interconnection Locations

An additional Gen-Tie Line, GT-B-1, was considered for the proposed Project. GT-B-1 exits the southwest corner of the PV generating facility across Kaiser Road, then turns west and southwest until it intersects with Eagle Mountain Road, then runs south along the east side of Eagle Mountain Road across I-10 to the western location considered for the Red Bluff Substation (Red Bluff Substation B). The transmission corridor encompasses approximately 177 acres. The total length of GT-B-1 is approximately 9.3 miles within a 160-foot-wide corridor. The elevation of GT-B varies from approximately 690 to 1,185 feet above mean sea level. With the exception of

one MWD parcel, the entire length of GT-B-1 is within the Chuckwalla DWMA (7.7 miles), and 6.1 miles of it is within Desert Tortoise Critical Habitat (versus 3.5 miles in the DWMA and 3.8 miles in Critical Habitat for GT-B-2). It would also require removal of approximately 1,475 foxtail cactus (versus 575 for GT-B-2, 1 for GT-A-1, and none for GT-A-2), and could disturb more potentially significant cultural resource sites than the other Gen-Tie Lines. Since this layout did not provide any advantage over the other Gen-Tie Line that would provide a connection to Red Bluff Substation B and would result in greater impacts to the DWMA, Desert Tortoise Critical Habitat, foxtail cactus, and cultural resources, it was eliminated from consideration.

The BLM also considered alternative locations where the Project would interconnect with the regional grid. The BLM considered the possibility of interconnecting with the existing MWD 230 kV line at the MWD Eagle Mountain Substation that is near the Project Study Area and then interconnecting with the SCE system farther west (for example, at the Julian Hinds Substation). However, investigation revealed limited capacity at this location that rendered this alternative infeasible. Instead, SCE indicated a plan to develop a substation in the general area of Desert Center (the Red Bluff Substation). This approach, and then identifying potential transmission corridors from the Solar Farm Study Area to interconnect with the SCE system at the Red Bluff Substation with the fewest possible impacts, became the approach that the Applicant has pursued.

**Conclusion.** Since the alternative transmission line (GT-B-1) did not provide any technological advantage over GT-B-2 and would result in greater impacts to the DWMA, Desert Tortoise Critical Habitat, foxtail cactus, and cultural resources, it was eliminated from consideration.

The alternative interconnection with the regional grid was eliminated because it is technologically and economically infeasible.

## 4.2.8 Distributed and Rooftop Photovoltaics

A distributed solar alternative would consist of PV panels that would absorb solar radiation and convert it directly to electricity (similar to all PV technologies). The PV panels could be installed on private or publicly owned residential, commercial, or industrial building rooftops or in other disturbed areas such as parking lots or disturbed areas adjacent to existing structures such as substations. To be a viable alternative to the proposed DSSF, there would have needed to be sufficient newly installed panels to generate 550 MW of capacity.

California currently has over 500 MW of distributed PV systems which cover over 40 million square feet (CPUC 2009). During 2008, 158 MW of distributed PV was installed in California, doubling the amount installed in 2007 (78 MW), and with 78 MW installed through May 2009, installation data suggests that at least the same amount of MW could be installed in 2009 as in 2008 (CPUC 2009).

Yet at this rate of installation, achievement of the California Renewables Portfolio Standard (RPS) would be delayed well beyond the 2010 and 2020 deadlines. Even if distributed installation of 550 MW per year could be achieved, adding over 1 TWh of electricity generation capacity per year (equivalent to the size of the proposed Project), it would take over 50 years to obtain the level of electricity generation from renewable sources that will be required to meet California's

33 percent RPS deadline in 2020. There would have to be a significant acceleration of installation of both distributed and non-distributed generation to meet the goals defined in California's RPS. Large-scale projects play an important role in meeting these goals.

**Conclusion.** A distributed solar alternative was eliminated from detailed discussion because it does not respond to the BLM's purpose and need for the Proposed Action, which is to respond to Desert Sunlight's application for a ROW grant to construct, operate, and decommission a sPV facility on public lands in compliance with FLPMA, BLM ROW regulations, and other federal applicable laws. Additionally, the Energy Policy Act of 2005 established a goal for the Secretary of the Interior to approve 10,000 MW of non-hydropower renewable energy projects located on public lands. The Act reflects Congress's conclusion that installation of renewable energy technologies on public lands capable of producing at least 10,000 MW is appropriate. Given the current state of the technology, only utility-scale renewable energy generation projects are reasonable alternatives to achieve this level of renewable energy generation on public lands. Furthermore, the BLM has no authority or influence over the installation of distributed generation systems, other than on its own lands.

## 4.2.9 Underground Installation of Gen-Tie Lines

Underground transmission lines at 230 kV have been installed or are planned to be installed in California by Pacific Gas & Electric Company (its Northeast San Jose, Tri-Valley, and Jefferson-Martin Projects) and by San Diego Gas & Electric Company (its approved Otay Mesa and Sunrise Powerlink Projects). These lines, or portions of them, have been installed underground either due to congested urban areas where there is inadequate space for overhead high voltage lines, or (in the case of Tri-Valley and Jefferson-Martin) to reduce visual impacts in scenic areas.

While underground lines would reduce the visual effects of the transmission lines, they have several disadvantages with respect to their environmental impacts. The impacts are driven mostly by construction disturbance. The construction of underground transmission lines requires substantial ground disturbance to install the trench and cables. The least amount of disturbance would occur when installing the gen-tie line within a paved roadway. However, when adding the lengths of all three gen-tie line alternatives, there are only approximately 6 miles out of a total of approximately 30 miles that would fall within a paved roadway. The remaining 24 miles would be within a dirt road or undisturbed desert.

The trench for a 230-kV line could vary from about 3 feet to 6 feet wide depending on the configuration of the cables within the trench. A construction work area from 25 to 50 feet wide is required parallel to the trench for construction equipment, resulting in temporary disturbance to habitat. In unpaved areas, the area above the trench (generally a 20 or 25-foot-wide road) would have to remain clear and accessible for the life of the project, a permanent loss of habitat.

In addition, First Solar provided a report entitled "Gen-Tie Undergrounding Report; Desert Sunlight Solar Farm Project" (First Solar, 2011), which summarized underground installations in the U.S. and presented potential design for the underground gen-tie. The report also listed additional concerns, including the potential for third-party construction damage to the buried facilities, concerns about additional time required to repair the line in the event of an outage, and



limitations on expansion for future additional lines. Cost is also a major concern to the developer, since construction of underground transmission lines costs up to 8.5 times more than overhead lines. These increased costs negatively affect the Project's financial viability, especially when coupled with the considerable technical and environmental risks involved with underground transmission line design.

The First Solar report presents a concern about underground lines: that expansion of the capacity of a transmission line, or addition of future circuits, would be more difficult. The report also explains that the addition of future circuits could be accommodated by increasing cable spacing or constructing a larger duct bank (leaving empty spaces for future cables), or by construction of a parallel duct bank separated by an adequate distance to allow heat dissipation. These approaches would also increase construction cost.

Underground transmission lines are less accessible than overhead lines, so line maintenance is more challenging. It is more difficult to know where an outage has occurred, so outages of an underground line can be more time-consuming both to find the problem and to repair it.

**Conclusion.** BLM and the CPUC have evaluated the information included in First Solar's report and have determined that, based on the Agencies' own experience, expertise and research, undergrounding DSSF's Gen-Tie Lines would be infeasible. Although the technology for underground transmission lines is available and has been used to reduce visual impacts and to avoid overhead construction through congested areas by major utilities in California, the increased environmental impacts that would result in other resource areas does not justify the use of undergrounding in this case. Specifically, the lack of adequate paved roadways for installation of the Gen-Tie Lines serving the DSSF would result in substantially greater impacts in biological resources, cultural resources, air quality, and noise than for the overhead gen-ties. The additional costs and technical risks associated with undergrounding also make it undesirable under these conditions. As a result, the underground gen-tie alternative has been eliminated from detailed consideration.

### **4.3 Environmentally Preferred Alternative**

The environmentally preferred alternative would be the No Project Alternative with Plan Amendment to Identify the Area as Unsuitable for Solar Development (Alternative 5). This alternative would not allow development of the proposed project or other solar energy generating projects and would have no impacts on the ground within the Project Study Area. However, this alternative would not allow the development of renewable energy, which is a national priority. As such, this alternative was not chosen in full by the BLM, rather, a portion of the alternative was approved which made the remainder of the Project Study Area unavailable to solar development due to resource conflict.

### **4.4 Agency Preferred Alternative / Selected Alternative**

The BLM's preferred alternative is the Proposed Action Alternative with Land Use Plan Amendment (Alternative 1) – SF-B, GT-A-1, and Substation A with Access Road 2; or

Alternative 1 with Gen-Tie Line A-2 instead of Gen-Tie Line A-1, in the event that Desert Sunlight is able to acquire necessary interests in privately held lands to allow construction of Gen-Tie Line A-2; and a portion of Alternative 5. The preferred alternative that includes Gen-Tie Line A-2 has the potential for less effect on visual, and desert tortoise individuals and habitat than Gen-Tie Line A-1.

## 5.0 Agency and Public Involvement

### 5.1 Scoping

In compliance with NEPA, the BLM published an NOI to prepare an EIS on January 13, 2010, in the Federal Register (75 FR 1801). Publication of the NOI began a 30-day scoping period that ended February 12, 2010. The BLM established a website with Project information describing the various methods for providing public comment on the Project, including an e-mail address where comments could be sent electronically.

Notification for a public scoping meeting, to be held on January 28, 2010, was posted on BLM's website and sent via email to the local newspaper, the Desert Sun, on January 13, 2010. In addition, notices were sent via certified mail to Responsible and Trustee Agencies under CEQA, all landowners within 300 feet of the project boundary, and other interested parties.

The public scoping meeting was held on January 28, 2010, at the University of California, Riverside's Palm Desert Graduate Center located at 75-080 Frank Sinatra Drive in Palm Desert, California. First Solar Development, Inc. delivered a presentation describing the project. Presentations describing the environmental review process were delivered by members of the BLM. Twenty-two attendees were documented by signing in on a voluntary sign-in sheet.

Fourteen comment letters were received during the scoping comment period that ended on February 12, 2010. Comments were received on the following categories: purpose and need, alternatives development, air resources (air sheds), water resources (surface and groundwater), biological resources (vegetation and wildlife), cultural resources, visual resources, land use and special designations, public health and safety, noise and vibration, recreation, socioeconomics, environmental justice, and cumulative impacts. A summary of these comments is provided in the Scoping Summary Report (Appendix A of the PA/FEIS). Comments received during the scoping process were addressed in the analysis of impacts in the DEIS.

### 5.2 Draft EIS Comment Period

The BLM published a Notice of Availability (NOA) for public and agency review and comment of the DSSF Draft EIS on August 27, 2010 in the Federal Register (75 FR 52776). The 90-day comment period ended November 26, 2010. During the comment period, three public meetings were held to solicit input from members of the communities and others in the vicinity of the project. The meetings were held as follows: 1) October 20, 2010 at the University of California-Riverside, Palm Desert Campus, Palm Desert, CA; 2) October 21, 2010 at the Lake Tamarisk Community Center, Desert Center, CA; and 3) November 4, 2010 at the Joshua Tree Community

Center, Joshua Tree, CA. In addition, the public were invited to submit their comments through BLM's web site, by mail, e mail, or facsimile.

One hundred forty-seven comment letters were received. A number of the comments received on the Draft EIS discussed the same issues or environmental concerns, including, among others, the adequacy of the data relied upon by the BLM, the purpose and need for the project, alternatives, and biological resources. All public comments on the Draft EIS were considered and addressed in the Final PA/EIS and responses to comments are provided in Appendix N of the PA/FEIS.

### **5.3 Protest Period**

The FEIS/proposed plan amendment was available for a 30 day protest period that closed on May 16, 2011. The protests have been resolved by the Director or, as noted below, have been withdrawn by the protesting party. At the request of various interested organizations, the BLM, in accordance with its policy (BLM Land Use Planning Handbook, Appendix E, p.6), met with these groups in an effort to resolve their protest issues.

As a result of the protest resolution meetings, Citizens for the Chuckwalla Valley/ Larry and Donna Charpied and the project applicant agreed to certain project conditions which were presented to the BLM (Appendix 1-A) for inclusion in the ROD and required modifications to the Plan of the Development. These terms and conditions generally address: placing solar farm transmission lines underground, limiting night lighting, siting weather and air monitoring stations, erecting desert tortoise perimeter fencing, planting vegetation screening, implementing shuttling programs and low emission vehicle use, transplantation and revegetation, providing support for County fire and law enforcement services, monitoring of jojoba farm groundwater well and impact mitigation, not asserting water rights, establishing project decommissioning standards, establishing a First Solar application preclusion area, and funding contributions to Citizens for the Chuckwalla Valley.

As a result of the protest resolution meetings, the Natural Resources Defense Council, Defenders of Wildlife, Sierra Club, and Center of Biological Diversity and the project applicant agreed to certain project conditions which were presented to the BLM (Appendix 1-B) for inclusion in the ROD and required modifications to the Plan of the Development. These terms and conditions generally address: reporting of natural resource monitoring data; establishing and maintaining a project status and contact information website; BLM's amendment to the CDCA plan to identify as unavailable for solar power generation that portion of the Project Study Area associated with the current DSSF ROW application CA-48649, including the 136.58 acres eliminated from Phase III in this Agreement that is not to be used for the Sunlight Project; assertion of water rights; agreeing that washing PV Panels is not authorized without additional approvals; funding the Joshua Tree National Park Mitigation Monitoring programs; conducting air quality monitoring, acquiring 713 acres of additional compensatory lands for a portion of the DSSF in a WHMA; modifying fencing along the Kaiser road and reducing the configuration of Phase III by 136.58 acres from the FEIS boundary; and Revising the Plan of Development to include these agreements.

Western Watersheds Project and the project applicant agreed to certain project conditions which were presented to the BLM (Appendix 1-C) for inclusion in the ROD and required modifications to the Plan of the Development. These terms and conditions generally address BLM's amendment to the CDCA plan to identify as unavailable for solar power generation that portion of the Project Study Area associated with the current DSSF ROW application CA-48649, including the 136.58 acres eliminated from Phase III in this Agreement, that is not to be used for the Sunlight Project, and Revising the Plan of Development to include these agreements.

The BLM has analyzed these modifications and has determined that they do not require BLM to supplement the FEIS prior to issuance of the ROD. The BLM has determined that the revised terms and conditions fall within the alternatives analyzed in FEIS, has accepted these agreed upon terms as part of the amended plan of development, and has incorporated into and will administer these terms as part of the right-of-way grant in accordance with 43 CFR 2805.12(i)(5), 2807.16, and 2807.17. The agreed upon conditions are not subject to amendment without the agreement of the applicant and the organizations and only if approved by the BLM in accordance with 43 CFR 2807.20. The organizations listed above have withdrawn their protests.

## 6.0 Errata

The purpose of these errata is to correct factual inaccuracies or typographical errors in the PA/FEIS for the DSSF. The revised POD will govern in the event of any factual discrepancies between it and the PA/FEIS. To the extent that the clarifications below affect the project description, the POD will incorporate these clarifications. To the extent that such clarifications affect a mitigation measure, Appendix 2, *Adopted Mitigation Measures*, contains the final language.

- In the Table of Contents, Appendix L, CPUC Mitigation Monitoring and Reporting was inadvertently omitted from the list of Appendices.
- In the Executive Summary, Table ES-3 (at ES-34), the summary description of AM-GEO-2 incorrectly states that the Applicant must "Obtain coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activity (General Permit) Water Quality Order 2009-0009 DWQ". This summary reference is inconsistent with the actual text of AM-GEO-2 as described in the FEIS on page 4.8-8 to 9. As discussed in the FEIS, the waterways that would be affected by the Project are not jurisdictional waters under the federal Clean Water Act, and as a result, no NPDES permit would be required for the Project during construction or operation. See FEIS at 4.17-8, 4.17-27 (MM-WAT-4) and 4.17-28 (MM-WAT-6). The summary description of AM-GEO-2 in the Executive Summary is therefore incorrect and should be superseded by the text of AM-GEO-2 in the FEIS.
- In the Executive Summary, Table ES-3 (at ES-45), the summary description of MM-WAT-2 incorrectly states that the Project's use of groundwater during construction "shall not exceed a total of 1,400 [acre feet (AF)]." This summary reference is inconsistent with the actual text

of MM-WAT-2 as described in the FEIS at 4.17-24. As provided by MM-WAT-2, the “Project’s use of groundwater during construction shall not exceed a total of 1,400 AF during the 26-month construction period for the solar farm, 360 AF for the Red Bluff Substation, and 7 AF for the Gen-Tie Line,” thereby resulting in total maximum water use of 1,767 AF for the Project as a whole. The summary description of MM-WAT-2 in the Executive Summary is therefore incorrect and should be superseded by the text of MM-WAT-2 in the FEIS.

- In Section 1.4.3 (at 1-19), the reference to the approval required by the Metropolitan Water District of Southern California (MWD) at a “Land License Agreement” has been updated by MWD to constitute a “Permanent Easement.” This change in the description of the approval required by MWD does not alter any substantive approval requirements.
- In Section 2.2.3, Features Common to All Action Alternatives, under Site Security, Fencing, and Lighting (at 2-20, 4<sup>th</sup> paragraph), the description of lighting technology for security lighting and service lighting only references motion sensor technology, however, other acceptable lighting technology may be used. The text clarifying lighting technology options is revised to read: “Security lighting may use photocell controlled equipment to come on at dusk and turn off at dawn, motion sensor technology or other night sky sensitive lighting.”
- In Section 2.2.4, Alternatives Analyzed, the description of Gen-Tie Line A-1 (at 2-39) fails to mention that there are two portions of the Gen-Tie right-of-way that cross private land (owned by MWD and Riverside County).
- In Section 2.2.4, Alternatives Analyzed, the figures showing the Gen-Tie Line alternatives (i.e., Figures 2-21, 2-25, and 2-29) incorrectly show the stringing areas as temporary disturbance areas. Although these areas will only be used temporarily, they were considered permanent disturbance areas for purposes of impact analysis.
- In Section 2.2.4, Alternatives Analyzed, in the tables presenting dimensions for the Gen-Tie Line alternatives (Tables 2.2-4, 2.2-8, and 2.2-13) the dimensions (acreage, etc.) for temporary access roads are, in reality, the dimensions for all access roads combined (i.e., the description double counts the values provided under Permanent access roads). Since all disturbance areas are being considered permanent impacts (see above), the values indicated for temporary access roads should instead be described as showing the dimensions for permanent disturbance from all access roads, and the row for temporary access roads should be ignored.
- In Section 2.5, Best Management Practices and Built-In Mitigation (Table 2.5-1), the descriptions of AM-WAT-12, AM-WAT-13, and AM-WAT-15 discuss decompaction between rows of solar panels at the end of Project construction. The Applicant’s construction plan for the Solar Farm no longer includes decompaction between rows; instead, decompaction has been replaced by use of disc and roll and micrograding techniques and the additional storm water mitigation measures set forth in AM-WAT-13 through AM-WAT-16. Similar incorrect statements regarding decompaction between rows appear in Table ES-46 and at pages 4.2-4, 4.3-13, 4.17-7, 4.17-16, 4.17-23, and 4.17-24.

- Section 2.5, Best Management Practices and Built-In Mitigation, under Integrated Weed Management Plan (at 2-123), indicates that the Plan will include several different options for revegetating the site after construction. The Weed Management Plan does not call for site revegetation. Restoration of areas to be temporarily used during construction is to be addressed in the Restoration Plan required under AM-BIO-5.
- In Section 2.5, Best Management Practices and Built-In Mitigation, the description of Fire Protection during Construction (at 2-125) states that transformers located on site would be equipped with mineral-oil-based coolant. While some of the larger Solar Farm on-site substation transformers will use mineral oil, the transformers within the solar arrays will use vegetable-based oil. Similar factually inaccurate statements regarding mineral-oil in transformers appear on pages 2-109 and 4.11-4.
- Section 3.3.7, Vegetation: Jurisdictional Resources, and the discussion of Jurisdictional Resources in Section 4.3.3, Vegetation: Alternative 1- Proposed Action, inadvertently omitted discussion of the status of Regional Water Quality Control Board (RWQCB) jurisdiction over ephemeral washes in the Project area. The RWQCB does not have Clean Water Act (CWA) Section 401 jurisdiction over ephemeral washes within the Project footprint because the U.S. Army Corps of Engineers determined that no wetlands or other jurisdictional waters of the U.S. are present and, therefore no permit is required under the CWA. The RWQCB also has indicated that it will not take jurisdiction under the Porter-Cologne Act over the ephemeral drainages that are on non-federal lands impacted by the Project.
- In Section 3.4, Wildlife (at 3.4-30) and Section 4.4, Wildlife (at 4.4-14) it incorrectly states that the Red Bluff Substation B is not within the Chuckwalla CHU.
- In Section 3.6.2, Cultural Resources: Existing Conditions, the discussion of Native American Consultations (at 3.6-21) inadvertently omitted the following information: “Consultation also occurred with the Soboba Band of Mission Indians, the Fernandeno Tataviam Band of Mission Indians, and the Rincon Band of Luiseno Mission Indians.”
- In Section 3.6.2, Cultural Resources: Existing Conditions, Table 3.6.1 and Table 3.6.2, the wrong name was inadvertently given to the transmission line listed in the first entry of each table. In both tables, the Blythe-Eagle Mountain Transmission Line and Power Line Road should be changed to read the “Colorado River Aqueduct (MWD 230-kV) Transmission Line and Power Line Road.”
- In Section 3.6.2, Cultural Resources: Existing Conditions, the discussion of cultural resources within the Gen-Tie Line corridors (at 3.6-27 to 3.6-29) omitted one cultural site that is affected by all three Gen-Tie Line Alternatives: the Blythe-Eagle Mountain Transmission Line. With the addition of this site, the number of cultural sites directly impacted by the Gen-Tie Line alternatives is as follows: Gen-Tie Line A-1: 15 sites (13 historic, 2 prehistoric); Gen-Tie Line A-2: 5 sites (all historic); Gen-Tie Line B-2: 18 sites (all historic). Also, the total number of sites directly impacted by Alternative 2 should be 43 sites (36 historic, 5 prehistoric, and 2 unknown era). The total of sites impacted by Alternatives 1 and 3 remains

the same because the increase caused by addition of the Blythe-Eagle Mountain Transmission Line site is offset by a reduction by one site due to double counting of site CA-RIV-9478/P33-18343 (these numbers represent the same site).

- In Section 3.6.2, Cultural Resources: Existing Conditions, in Table 3.6-3 the descriptions for the third and eighth entries are reversed – the description for P33-15095 should be “46-acre refuse deposit”, and the description for P33-18253 should be “Refuse deposit of cans”. In addition, the fifth entry should be “P33-18244”, rather than “P33-81244”; the 1 and 8 were inadvertently reversed.
- In Section 3.6.2, Cultural Resources: Existing Conditions, a new row should be added to Tables 3.6.3, 3.6.4, and 3.6.5 to add a new first entry as follows:

Site No.	Prehistoric/Historic	Description	NRHP Eligibility*	CRHR Eligibility Recommendation
Blythe-Eagle Mountain Transmission Line	Historic	Transmission Line	TBD	Potentially Eligible

- In Section 3.6.2, Cultural Resources: Existing Conditions, Table 3.6-6 lists Site Number CA-RIV-9486 and Table 3.6-7 lists Site Number P33-018413. These are both the same site, rather than two different sites. Similarly, Table 3.6-10 includes CA-RIV-9478 and P33-18343 as two different sites, when they are, in fact, two numerical identifiers for the same site. Accordingly, the number of sites directly impacted by Red Bluff Substation A is 23 sites (including 21 historic sites), rather than 25 sites (23 historic) as stated in Section 4.6.3 (at 4.6-5). This includes 19 sites (including 17 historic sites) directly impacted by the distribution line, rather than 20 sites (18 historic) as stated in Section 3.6.2 (at 3.6-31).
- In Section 3.17.2, Water Resources (at 3.17-14), the reference to 2 groundwater wells owned by Kaiser Steel is incorrect. Kaiser Steel owns 4 groundwater wells within a two-mile radius.
- The reference to a Programmatic Agreement in Section 4.18.1 is incorrect. A MOA is being prepared for the Project instead of a PA.
- In Section 4.4.3 (at 4.3-32 and 4.3-34), the text states that MM-BIO 4 requires that compensation lands be monitored for a period of no less than 10 years or until the defined performance standards are met. This is incorrect – MM-BIO-4 does not require monitoring of compensation lands, rather it specifies that salvage and revegetation efforts shall be monitored for no less than 10 years or until the defined performance standards are met.

- In Section 4.4, Wildlife (at 4.4-45) the last sentence of the first paragraph should be revised to include the Palm Springs round-tailed ground squirrel as a specie where direct project impacts are reduced to less than significant with the implementation of the referenced mitigation measures.
- In Section 4.9.3, Lands & Realty: Alternative 1 – Proposed Action, the description of Agriculture for Solar Farm B (at 4.9-3) incorrectly states that the nearest agricultural lands are approximately 2 miles from Solar Farm B. In fact, there is a jojoba farm located approximately 1,000 feet to the west of Solar Farm B. The PA/FEIS recognizes the existence of jojoba farming in the vicinity of the project site (at 3.6-17 and 3.17-14).
- In Section 4.11.3, Public Health and Safety/Hazardous Materials (at 4.11-17), AM-HAZ-1d it could be interpreted that the applicant is required to provide secondary containment for all oil products stored at the Solar Farm site. The applicant intends to implement an Oil Spill Contingency Plan as an alternative means of spill protection for on-site transformers as permitted under USEPA's Oil Pollution Prevention regulations at 40 C.F.R. Part 112. The USEPA rules provide for the use of an Oil Spill Contingency Plan alternative to secondary containment for qualified "oil-filled operational equipment," which is defined as equipment that includes an oil storage container (or multiple containers) in which the oil is present solely to support the function of the apparatus or the device. *See* 40 C.F.R. 112.2, 112.7. This definition specifically identifies transformers as an example of oil-filled operational equipment.
- In Section 4.11.3, (at 4.11-13) under the heading Intentionally Destructive Acts, the reference to Mitigation AM-HAZ-4 is incorrect. It should be AM-HAZ-5.
- In Section 4.16.3, Visual Resources: Alternative 1 – Proposed Action, the description under the subheading Visual Contrast Analysis (at 4.16-15) states that the Project work schedule would not involve nighttime work. As described Section 4.4.3 (at 4.4-3, 4.4-10 and several other places in this section); and per conditions of MM-NOI-1, certain limited electrical connection activities at the Solar Farm site would occur at night for safety reasons. Lighting for these activities would comply with conditions of the Lighting Mitigation Plan to be prepared by the Applicant per MM-VR-4: Lighting Control.
- In Section 4.17.3, Water Resources: Alternative 1 – Proposed Action, the description of Potential for Withdrawal of Water from the Colorado River (at 4.17-10) incorrectly states that the operational water use over the 30-year life of the Project would be 60 AF. The correct number is 6 AF (0.2 AF per year x 30 years).
- In Section 4.17.3, Water Resources: Alternative 1 – Proposed Action, under Summary of Construction Impacts: Groundwater Supply, it states that "The proposed Project water demand for all components of Alternative 1 would be on the order of 778 to 828 AFY for the 26-month construction period (total of 1,656 AF over the entire construction period), or approximately 24 to 32 percent of the available surplus inflow to the groundwater basin." These values are inconsistent with the correct estimates provided elsewhere in the document - 1,506 to 1,606 AF total for construction of all Alternative 1 components (as stated in Table



2.2-2 in Chapter 2), or roughly 695 to 740 AFY or 21 to 28 percent of available surplus inflow. This also applies to the discussion at 4.17-21, where the incorrect estimates are repeated under Summary for Combined Impacts for Alternative 1.

- In Section 4.17.9, Water Resources: Cumulative Impact Analysis, Table 4.17-3 (at 4.17-41), it incorrectly states the total construction water use estimate for the Desert Sunlight Project as 1,400AF and the estimated annual average use as 650 AFY. The correct estimates, as given elsewhere in the FEIS, are 1,506 to 1,606 AF (total) and 696 to 740 AFY (annual average).
- In Section 4.17, Water Resources (at 4.17-23), Applicant Measure AM-WAT-12 refers to the action of decompacting the soil between solar panels. Decompacting of the soil has been replaced with a “disc and roll” method as a more effective way to minimize ground disturbance and maintain similar pre-construction infiltration rates, as detailed in Section 2.1, *Project Modifications Since Publication of the Draft EIS*, and Section 2.3, *Project Construction* (at 2-77).

Corrections, additions or deletions to certain individual letter Response to Comments are noted below. These changes are for purposes of correcting a misplaced response, adding a response that was inadvertently omitted from the FEIS, or clarifying a response.

- The Responses to Comments 104-A and 104-B were inadvertently omitted. The responses should have read as follows:
  - 104-A The commenter suggests that the DEIS fails to adequately identify and analyze significant impacts of the proposed Project on biological resources, fails to address significant cumulative impacts, and lacks a reasonable range of alternatives. In particular, the commenter states that there is a lack of analysis of the impacts of the proposed plan amendment to the CDCA Plan (and ROW grants) in combination with other similar CDCA Plan amendments (and ROW grants) as a result of other projects, and that BLM’s approach constitutes piece-mealing and will result in habitat fragmentation. The DEIS provided a detailed analysis of impacts to biological resources in Chapters 4.3, *Vegetation*, and 4.4, *Wildlife*, and the FEIS presents numerous clarifications and enhancements of the description and analysis of impacts to biological resources in these chapters. The FEIS’s analysis of biological resources is adequate and complete, as further described in the responses that follow. Similarly, the cumulative analyses in each resource area have been clarified and enhanced for the FEIS to present a thorough and adequate cumulative analysis for each resource area. Finally, BLM considered the environmental impacts of multiple CDCA plan amendments (and ROW grants) insofar as each cumulative project is located on BLM land and would require a CDCA plan amendment (and ROW grant) to implement. Cumulative impacts of habitat fragmentation is specifically addressed in FEIS Section 4.4.9; the contribution of the project to cumulative habitat fragmentation impacts is determined to be less than cumulatively considerable under CEQA for Alternatives 1 and 3. Alternative 2, due to the location or Red Bluff Substation B, would have a considerable contribution to the cumulative

impacts to regional wildlife movement. However, with the addition of Mitigation Measure BIO-9 this impact would be reduced to less than significant under CEQA.

- 104-B The commenter states that alternative siting and alternative technologies (including distributed generation) should have been fully considered in the DEIS, and that the ongoing Solar PEIS work makes it difficult to know whether the proposed Project siting will be compatible with that planning effort. The EIS evaluates an alternative in which rooftop (or “distributed”) solar would be developed rather than the large scale solar project included in the proposed action, but for reasons discussed in the FEIS this alternative was not carried forward for further analysis (see Section 2.6.8 and Common Response N.4.7, *Alternatives Analyzed*). With regard to the Solar PEIS, the BLM will not consider the proposed Project within the draft framework of the Solar PEIS. The process of drafting, reviewing and considering the Solar PEIS is not yet final. In this light, it is not possible to evaluate the proposed Project’s compatibility with the Solar PEIS planning effort. This does not constitute a deficiency in the EIS.
- Responses to Comments 104-12, 104-13, and 104-14 were either misplaced or inadvertently omitted. These responses should have read as follows:
  - 104-12 The commenter states that the DEIS fails to analyze the significance of the impacts of the proposed project on the desert tortoise. See Responses to Comments 76-1 through 76-3. The commenter states that the DEIS fails to consider impacts to the sand transport system in the Chuckwalla Valley. Additional discussion about this issue has been added to PA/FEIS Chapter 4.8. As discussed therein, the Project would interfere with sand transport across the site. However, the Project is not directly situated within the Chuckwalla Valley sand transport corridor. Therefore, although sand transport across the site would be blocked, overall reductions in sand transport within the Chuckwalla Valley would be minor, because primary sand transportation corridors would be avoided.
  - 104-13 The commenter states that the DEIS fails to consider impacts to the sand transport system in the Chuckwalla Valley. Additional discussion about this issue has been added to PA/FEIS Chapter 4.8. As discussed therein, the Project would interfere with sand transport across the site. However, the Project is not directly situated within the Chuckwalla Valley sand transport corridor. Therefore, although sand transport across the site would be blocked, overall reductions in sand transport within the Chuckwalla Valley would be minor, because primary sand transportation corridors would be avoided. The commenter states that no fall botanical surveys were conducted prior to the DEIS and that this triggers a need to recirculate the DEIS. The DEIS has been revised in the FEIS to reflect the results of plant surveys conducted in November 2010 to supplement those surveys conducted in the spring. See text revisions in FEIS Sections 3.3.3 through 3.3.5. In consideration of the November surveys, plant surveys have been completed of all Project components during both the spring and fall blooming periods. These surveys provide sufficient information to complete the Project’s environmental impact assessment and permitting process. No additional special status plant species were found in the fall survey, and the Project’s potential impacts to special status plant species are therefore

unchanged from those discussed in the DEIS, which was based on results of previous surveys, including those completed in Spring 2010.

- 104-14 The commenter states that no fall botanical surveys were conducted prior to the DEIS and that this triggers a need to recirculate the DEIS. The DEIS has been revised in the FEIS to reflect the results of plant surveys conducted in November 2010 to supplement those surveys conducted in the spring. See text revisions in FEIS Sections 3.3.3 through 3.3.5. In consideration of the November surveys, plant surveys have been completed of all Project components during both the spring and fall blooming periods. These surveys provide sufficient information to complete the Project's environmental impact assessment and permitting process. No additional special-status plant species were found in the fall survey, and the Project's potential impacts to special status plant species are therefore unchanged from those discussed in the DEIS, which was based on results of previous surveys, including those completed in Spring 2010. The commenter states that the DEIS fails to adequately address impacts to migratory birds. The study cited by the commenter addressed a solar thermal project, wherein bird mortality resulted from (1) birds striking the erect reflective surfaces and central tower, and (2) suffering burns by flying near the focal point of multiple reflective "heliostats." As a photovoltaic project, the proposed Project would not have erect reflective surfaces and would not focus solar energy in a central point. DEIS Section 3.4.4 discusses special-status and common bird species, including migratory species, and Section 4.4 discusses potential impacts to nests, movement patterns and behavior of birds. The Avian and Bat Protection Plan (per Applicant Measure WIL-3) must conform to USFWS guidelines and will be subject to review and approval by the USFWS prior to its finalization and implementation. Applicant Measure WIL-3 includes these performance standards to ensure that mitigation will be feasible and effective.
- The Responses to Comments 105-A and 105-B were inadvertently omitted. The responses should have read as follows:
  - 105-A The commenter states that the EIS is both an EIS and an EIR under CEQA, and that the document falls short of minimum requirements under both NEPA and CEQA, particularly with regard to noticing requirements. The commenter states that the public has not been notified as to which agency is serving as the Lead Agency under CEQA nor has the public received a notice of scoping meetings or hearings from the CEQA Lead Agency. To clarify, this document is an EIS. It is neither an EIR nor a joint EIS/EIR. As described in the EIS Chapter 1, under CEQA Guidelines, Section 15221, this EIS will satisfy the CEQA requirements for those Project components that require entitlements from state and local agencies. The CPUC and BLM have signed a memorandum of understanding (MOU) that defines the relationship of the two agencies, and identifies CPUC as a cooperating agency with the BLM for preparation of this EIS. Following preparation of the EIS by BLM, the CPUC will determine whether the EIS adequately accommodates the requirements of CEQA and can be used to support its decision on the substation. Therefore, because NEPA requires similar noticing requirements for an EIS as does CEQA for an EIR, the Notice of Intent to prepare an EIS served in lieu of a Notice of Preparation of an EIR.

- 105-B The commenter states that the EIS is inadequate for excluding 1) adequate end-of-life project planning; 2) thorough analysis of anticipated costs of decommissioning and restoration; 3) impacts to property values and quality of life; and 4) analysis of future expansion of the solar project. The commenter also states that “fast tracking” is unwise. In response, see Responses to Comments 105-1, -2, -3, and -4, respectively.
- The following text should be added to Response to Comment 105-3 for clarification purposes. The response should read as follows:
  - 105-3 Potential project-related effects on local land uses and property values are discussed in Common Response N.4.8, *Property Value*. The EIS complies with NEPA’s requirements for evaluating impacts to the human environment. Note that under CEQA, economic or social effects of a project shall not be treated as significant effects on the environment, and these effects only need to be considered in a chain of cause and effect if they would result in a physical change to the environment that was caused in turn by the economic or social changes (CEQA Guidelines § 15131(a)).
- Responses to Comments 105-27 and 105-28 were inadvertently omitted. The responses should have read as follows:
  - 105-27 Commenter also suggests a number of mitigation measures to reduce project impacts: 1) undergrounding the gen-tie line; 2) night lighting only for repairs and not for security; 3) installation of a nearby weather station; 4) raised fencing for tortoise movement; 5) visual screening with ironwoods, palo verdes, mesquites, and jojobas; 6) tours should be conducted with electric tour vehicles to reduce fossil fuel use and noise; 7) employees should be shuttled to reduce traffic on Kaiser Road; and 8) cacti and trees removed from the project site should be salvaged. With regard to item 1, see Section 2.6.9 of the FEIS, which evaluates the feasibility of an underground Gen-Tie alternative. With regard to item 2, see Common Response 5.4.4.3, which presents strengthened mitigation for night lighting. With regard to item 3, it is unclear what impact installation of a weather station would help to mitigate. A lead agency is not required to consider mitigation measures that would not have any practical mitigating effect. With regard to item 4, all feasible mitigation measures for desert tortoise protection will require approval by the USFWS prior to implementation. Please see strengthened mitigation for tortoise protection in Section 4.4. With regard to item 5, Mitigation Measure MM-VR-6 requires the use of vegetation screening where appropriate, but the goal of protection of visual resources is retaining as much natural vegetation as possible. With regard to item 6, operational traffic-related noise from the proposed Project and alternatives would not be substantial, and only marginal benefits to noise would be achieved with the use of electric vehicles; similarly operational greenhouse gas impacts of the project would not be substantial, and do not warrant additional mitigation. With regard to item 7, traffic impacts are not substantial and do not warrant additional mitigation. Similarly, with regard to item 8, operational traffic impacts from the proposed Project and alternatives would not be substantial and do not warrant additional mitigation.

- 105-28 The commenter incorporates by reference the comments submitted by Basin and Range Watch. In response, BLM did not receive a comment letter from Basin and Range Watch.
- The following text is added to Response to Comment 106-2 for clarification purposes. The response should read as follows:
  - 106-2 The commenter urges the BLM to adopt Reduced Acreage Alternative 3 to protect desert tortoise. See Common Response N.4.7, *Alternatives Analyzed*. Note also that the Applicant has proposed certain Project modifications, one of which is to reduce the footprint of the Solar Farm Layout B by approximately 330 acres. This and other proposed modifications are described in PA/FEIS Chapter 2. Impacts associated with the modifications are analyzed in PA/FEIS Chapter 4, *Environmental Consequences*. The ultimate decision on the project will be made by the relevant agency's decision makers, taking into account each agency's statutory mission and responsibilities, and giving consideration to economic, environmental, legal, social, technical and other factors. The recommendations in this comment will be provided to the decision makers for consideration prior to making a final determination on the project.
- Response to Comment 110-42 is amended for clarification purposes. The response should read as follows:
  - 110-42 Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response. The commenter states that prehistoric sites near Desert Center may represent a complex archaeological district and that BLM should consult with tribal groups to address concerns related to this complex. The Project's potential effect on cultural and natural resources with the Project area are identified and evaluated in DEIS Section 4.6, *Cultural Resources*. The site's cultural resources (including Native American values, history and culture) are analyzed in Section 4.6. The regulations implementing the NHPA (36 CFR Part 800) provide for the use of phased identification of historic properties (including Traditional Cultural Properties) and resolution of adverse effects under a Memorandum of Agreement (MOA) on complex projects with multiple alternatives when effects on historic properties cannot be fully determined prior to approval of an undertaking. MOAs commonly are used to comply with NHPA Section 106 on large projects like DSSF. The MOA for the DSSF will govern a process for completing identification and evaluation of historic properties that will be affected, and for resolving adverse effects using measures consistent with their values, prior to construction or other activities that could affect them. The MOA will be signed prior to approval of the ROD. Consulting parties and stakeholders, including the State Historic Preservation Officer and Indian tribes, will continue to have an opportunity to participate in consultations on the terms and provisions of the MOA before the Project is approved and to consult and provide input during all phases of implementation of the MOA.

Native American consultations were initiated in mid-April 2010 and are ongoing. Chapters 3.6 and 4.6 state that Indian tribes, during ongoing government-to-government consultation with the BLM have identified no sacred sites that would be impacted by the Project. The FEIS acknowledges the possibility that such sites may be identified as consultations with tribes continue during the NEPA and Section 106 compliance processes. Because no sacred sites have been identified, the analysis of impacts does not differ among the alternatives with respect to such sites. See Response to Comment 66-11 with regard to the continuing consultation with tribes and resolution of adverse effects through development and implementation of a MOA for the Project.

- The following text is added to Response to Comment 112-2 for clarification purposes. The response should read as follows:
  - 112-2 The commenter states that biological soil crusts are found on site, and that chollas cannot be salvaged unless they are less than three feet in height. Biological soil crusts are evaluated in Section 4.2 (Air) and cholla salvage is discussed in Section 4.3 (Vegetation). Mitigation Measure MM-BIO-4 presents performance standards for salvage and restoration. The project developer will be required to adhere to these strict performance standards for salvage of cacti, including chollas. The commenter also states that the Desert Center Area Plan (DCAP) open space policy encourages clustering of development to preserve open space, and states that the proposed Project is not consistent with this policy. Chapter 3 of the PA/FEIS describes the affected environment. Chapter 4 of the PA/FEIS discusses the environmental consequences of the Project. As discussed in Section 4.3, Project components were sited in consideration of DCAP 10.1 and all three alternatives are consistent with the County of Riverside's General Plan, which includes the DCAP.
- The Responses to Comments 114-A, 114-B, 114-C, 114-D, 114-E were inadvertently omitted. The responses should have read as follows:
  - 114-A Commenter suggests that the EIS fails to adequately analyze the foreseeable environmental consequences and cumulative impacts of the proposed Project on Joshua Tree National Park. See generally, Common Responses 5.4.4.2, *Wilderness*, N.4.4.3, *Dark Skies*, and N.4.4.4, *Adequacy of Key Observation Points (KOPs) and Simulations*. See also, FEIS Section 4.14.9.
  - 114-B Commenter suggests that the EIS fails to adequately analyze the foreseeable environmental consequences and cumulative impacts of the proposed Project on Joshua Tree National Park. See generally, Common Responses 5.4.4.2, *Wilderness*, N.4.4.3, *Dark Skies*, and N.4.4.4, *Adequacy of Key Observation Points (KOPs) and Simulations*. See also, FEIS Section 4.14.9.
  - 114-C Commenter suggests that the DEIS downplays adverse impacts to the park, such as the discussion of low visitor use. The descriptions of low visitor use have been clarified and corrected in the FEIS. See also Common Responses 5.4.4.2, *Wilderness*, N.4.4.3, *Dark Skies*, and N.4.4.4, *Adequacy of Key Observation Points (KOPs) and Simulations*.

- 114-D Commenter endorses the objectives to preserve habitat linkages, but suggests that such analysis is lacking in the EIS. Please refer to the updated discussion of habitat linkage in FEIS Section 4.4, *Wildlife*.
- 114-E Commenter requests more thorough analysis of impacts to park resources and more robust mitigation measures to ensure park resources are protected. See Common Responses 5.4.4.2, *Wilderness*, N.4.4.3, *Dark Skies*, and N.4.4.4, *Adequacy of Key Observation Points (KOPs) and Simulations*.
- Response to Comment 118-5A was inadvertently omitted. The response should have read as follows:
  - 118-5A The commenter notes that the Desert Renewable Energy Conservation Plan (DRECP) Independent Science Advisors' report warns against species extinction from siting projects on natural areas and recommends siting renewable energy development on disturbed land. Please refer to the analysis of a disturbed private lands alternative in FEIS Section 2.6.2. The section concludes that due to the size of available disturbed sites near the Devers-Palo Verde transmission line, these sites would not achieve the purpose and need of the Project. Multiple additional projects would have to be constructed in order to achieve an amount of renewable energy generation equivalent to the proposed Project, multiplying the impacts of developing interconnection facilities for the equivalent generating capacity. See also, the analysis on biological resources presented in FEIS Sections 4.3 and 4.4, which conclude that impacts to biological resources would not be substantial (less than significant, per the CEQA significance criteria) with implementation of mitigation measures.
- Response to Comment 129-8 is modified to reference the appropriate mitigation measure and clarify the response. The response should read as follows:
  - 129-8 An Accounting Surface Technical Memorandum was prepared to assess the static water level associated with Project-related wells and to determine the potential Project-related impacts to Colorado River water. This analysis is presented in FEIS Appendix O. The technical memorandum concluded that the static water level beneath the Project site is nearly 200 feet above the Accounting Surface and that Project-related construction and operation activities would not utilize Colorado River water. However, FEIS Section 4.17, Water Resources, concludes that Project-related groundwater use, when combined with groundwater use associated with current and reasonably-foreseeable future projects, would lead to both short-term and long-term cumulatively considerable impacts to groundwater levels near the Project site. In order to reduce the impacts to groundwater levels near the Project site, MM-WAT-3 requires implementation of a Groundwater Level Monitoring, Mitigation, and Reporting Plan. MM-WAT-3 has been revised in the PA/FEIS to include greater detail regarding actions to be taken prior to project construction and during construction. ~~To reduce the potential impacts to groundwater levels near the Project site, MM-WAT-7 would require implementation of a Groundwater Level Monitoring, Mitigation, and Reporting Plan.~~ This mitigation measure would

establish existing and operational water levels in nearby wells and would provide compensation to any affected well owner.

- The following text is added to Response to Comment 129-9 for clarification purposes. The response should read as follows:
  - Groundwater monitoring data and reports can be made available to MWD upon written request. Regarding the effects of the proposed septic system on water quality, as discussed in updated text in PA/FEIS Section 4.17, the proposed septic system would comply with applicable State and local regulations regarding construction and operation of the proposed septic system. The applicant would coordinate with the Riverside County Department of Environmental Health to determine whether a Report of Waste Discharge for the septic system would need to be filed with the RWQCB. Additionally, prior to construction, the applicant would apply for a septic system operating permit, as required by Riverside Code Section 8.124 (Ordinance 650.5). Prior to approval of a septic system operating permit, the Riverside County Department of Environmental Health would require an Onsite Water Treatment System (OWTS) Report for Land Divisions. The Report would detail the location, depth and design of the septic system, and require a percolation test. The Report also shall conclude that the proposed septic system would not violate any Department of Environmental Health or RWQCB standards. Additionally, the system would treat sanitary wastewater of the Project, and would not be used to treat any process wastewater. Therefore, potential impacts to water quality arising from the use of a septic system are anticipated to be minimal.
- The following text is added to Response to Comment 144-1 for clarification purposes. The response should read as follows:
  - 144-1 This is the same letter, with spelling and grammar errors corrected, as Comment Letter 124. See Responses to Comment Letter 124.

The commenter notes that the Desert Renewable Energy Conservation Plan (DRECP) science panel recommends that the golden eagle be added to the DRECP protected list as they are susceptible to disturbance by humans and collisions with power lines. The commenter further notes that eagles will compete with introduced ravens for food sources as a result of the proposed Project. Please see the updated and enhanced discussion of Project impacts to golden eagles in Section 4.4 of the FEIS. The commenter notes that the DRECP report also noted wildlife impacts of transmission lines. Impacts to wildlife of the Gen-Tie line and alternatives are described in detail in Section 4.4 (Wildlife) of the Final EIS.

- Responses to Comments 144-2 and 144-3 were inadvertently omitted. The responses should have read:
  - 144-2 The commenter notes the poor air quality of Joshua Tree National Park, and states that the proposed Project would exacerbate air quality issues in the park. In response, the EIS discloses that air quality impacts (ozone precursor and particulate matter emissions)



would be substantial despite mitigation (significant and unavoidable per the CEQA significance criteria presented in Section 4.2) during the construction phase of the proposed Project. Long-term air quality impacts would not be substantial (less than significant under CEQA).

- 144-3 The commenter states that the proposed Project would affect the dark night sky in Joshua Tree National Park. Please see Common Response N.4.3, *Dark Skies*.
- Response to Comment 146-1 is amended for clarification purposes. The response should read as follows:
  - 146-1 BLM acknowledges that the Project, which is located within the CVGB, is in an area that is considered to be within the Accounting Surface area. However, ~~the supposition~~ there is no evidence that the Project would result in an effect or impact on the Colorado River. ~~has not been substantiated.~~ An additional evaluation of the potential for the Project to interfere with Colorado River water, based on the proposed Accounting Surface, was completed by AECOM (2011). See FEIS Appendix O for this evaluation memorandum and Responses to Comments 129-5 and 129-8. As discussed therein, Project related withdrawals/drawdown would occur well above the upper elevation of the accounting surface. Drawdown would not occur at or below the level of the accounting surface. Therefore, as discussed in updated text in FEIS Section 4.17, Water Resources, the Project would not interfere with or impact flows of the Colorado River. Therefore, acquisition of contracts or other water sources, as indicated by MWD, would not be warranted.

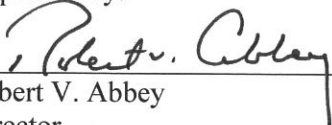
## 7.0 Final Agency Action

### 7.1 Land Use Plan Amendment Decisions

It is the decision of the Bureau of Land Management (BLM) to approve the Proposed Plan Amendment to the California Desert Conservation Area Land Use Management Plan (CDCA Plan, 1980, as amended) to identify the Desert Sunlight Solar Farm site as available for solar energy development. It is also the decision of the BLM to approve a Plan Amendment to the CDCA Plan to make the remainder of the Project Study Area unavailable for solar energy development. The Proposed Plan Amendment and related Environmental Impact Statement (EIS) were published on April 15, 2011 in the Federal Register (76 FR 21402). I have resolved all protests (or they have been withdrawn) and, in accordance with BLM regulations, 43 CFR 1610.5-2, my decision on the protests is the final decision of the Department of the Interior.

Based on the recommendation of the State Director, California, I hereby approve the above-described plan amendments. This approval is effective on the date this Record of Decision is signed.

Approved by:

  
 Robert V. Abbey  
 Director  
 Bureau of Land Management

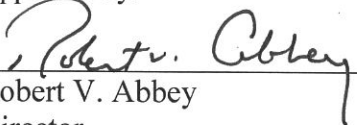
8-8-11

Date

### 7.2 Right-of-Way Authorization and Route Designation Decision

It is my decision to approve, subject to the terms, conditions, stipulations, Plan of Development, and environmental protection measures developed by the Department of the Interior and reflected in this Record of Decision: 1) a new ROW grant to Desert Sunlight Holdings, LLC for the PV generating facility, access roads, and gen-tie line; 2) a new ROW grant to Southern California Edison (SCE) for the Red Bluff substation; 3) a new ROW grant to SCE for a new telecommunications site; and 4) an amendment to an existing SCE ROW grant for the Chuckwalla Mountains communication site. (43 CFR Part 2800). It is my further decision to close a designated open route (Route 660260) as described in this Record of Decision and Final EIS (Instruction Memorandum 2008-014). These decisions are effective on the date this Record of Decision is signed.

Approved by:

  
 Robert V. Abbey  
 Director  
 Bureau of Land Management

8-8-11

Date

### 7.3 Secretarial Approval

I hereby approve these decisions. My approval of these decisions constitutes the final decision of the Department of the Interior and, in accordance with the regulations at 43 CFR 4.410(a)(3), is not subject to appeal under Departmental regulations at 43 CFR Part 4. Any challenge to these decisions, including the BLM Authorized Officer's issuance of the right-of-way as approved by this decision, must be brought in the federal district court.

Approved by: Ken Salazar

AUG 09 2011

Ken Salazar  
Secretary  
Department of the Interior

Date



# United States Department of the Interior



BUREAU OF LAND MANAGEMENT  
California State Office  
2800 Cottage Way, Suite W1623  
Sacramento, CA 95825  
www.ca.blm.gov

**JUL 29 2011**

In Reply Refer To:  
2800 (300)  
CACA-048649

## Memorandum

To: Office of the Deputy Secretary

Through: Robert V. Abbey  
Director

From: James W. Abbott  
Acting State Director

Subject: Recommendation for final Departmental approval of the right-of-way application for a solar energy generation facility in California from First Solar for the Blythe Desert Sunlight Solar Farm.

The attached file contains the decision document allowing the authorized officer to offer the right-of-way grant associated with an application filed by First Solar for the development of a solar energy generating facility in Riverside County, California.

The Bureau of Land Management is recommending approval of the decision as the final decision of the Department. The applicant has indicated they are working toward qualifying this project for a federal loan guarantee under Title XVII of the Energy Policy Act of 2005. In order to qualify for such funding the decision on the project is time sensitive.

The land use plan amendment associated with siting of the renewable energy project within the California Desert District has been approved, allowing for the right-of-way decision to be issued. The file also contains for signature a Federal Register Notice of Availability associated with approval of the project and land use plan amendment.

The file contains supporting materials on the project including maps, a briefing paper, and a copy of the right-of-way grant to be issued.

Attachments