UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

AND

UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

RECORD OF DECISION
FOR
DEVERS-PALO VERDE NO. 2 TRANSMISSION LINE PROJECT

Prepared by

Department of the Interior
Bureau of Land Management
California Desert District
Palm Springs-South Coast Field Office

In Cooperation with

Department of Agriculture
Forest Service
Pacific Southwest Region
San Bernardino National Forest

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TABLE OF CONTENTS

FIGURES

LIST OF ABBREVIATIONS

AC	alternating current
ACC	Arizona Corporation Commission
ACEC	Area of Critical Environmental Concern
ACOE	U.S. Army Corps of Engineers
APMs	Applicant Proposed Measures
BLM	Bureau of Land Management
BO	Biological Opinion
BSPP	Blythe Solar Power Project
CAISO	California Independent System Operator
CDCA Plan	California Desert Conservation Area Plan of 1980, as amended
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CPCN	Certificate of Public Convenience and Necessity
CPUC	California Public Utilities Commission
CRS	Colorado River Substation
CWA	Clean Water Act
DG	Distributed Generation
DNA	Determination of NEPA Adequacy
DOI	Department of the Interior
DPV1	Devers-Palo Verde No. 1 500kV Transmission Line (Built)
DPV2	Devers-Palo Verde No. 2 500kV Transmission Line Project (As Proposed by SCE)
DSW	Desert Southwest
DSWTP	Desert Southwest Transmission Line Project
D-V Alternative	Devers-Valley No. 2 Project Alternative Segment (Devers Substation to Valley Substation)
D-V1	Devers-Valley No. 1 (Existing Segment for the Devers-Palo Verde No.1 Line from Devers Substation to Valley Substation)
EIR/EIS	Environmental Impact Report/Environmental Impact Statement
EMF	electromagnetic field
FERC	Federal Energy Regulatory Commission
FLPMA	Federal Land Policy and Management Act

FS	Forest Service
GSEP	Genesis Solar Energy Project
HGC	Harquahala Generating Company
HPTP	Historic Properties Treatment Plan
HVDC	high-voltage direct-current
I-10	Interstate 10
kV	kilovolt
LGIA	Large Generator Interconnection Agreement
LMP	Land Management Plan
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
MFTL	Mojave fringe-toed lizard
MMCRP	Mitigation Monitoring, Compliance, and Reporting Program
MSHCP	Multiple Species Habitat Conservation Plan
MUC	Multiple Use Classes
MW	megawatt
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOA	Notice of Availability
NOx	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NTP	Notice to Proceed
OPGW	Optical Ground Wire
PA	Programmatic Agreement
PEA	Proponent's Environmental Assessment
PFM	Petition for Modification
PM_{10}	particulate matter, less than 10 micrometers in diameter
Project	The Selected Alternative of the Devers-Palo Verde No. 2 Transmission Line Project (A combination of the Proposed Project and other Alternatives, not inclusive of the Arizona portion of the Proposed Project)
PV	photovoltaic
PVNGS	Palo Verde Nuclear Generating Station

ROD	Record of Decision
ROW	right-of-way
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SPS	special protection scheme
SSAB	Salton Sea Air Basin
SVC	Static VAR Compensator
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
VOC	volatile organic compound
VRM	Visual Resource Management

EXECUTIVE SUMMARY

This document constitutes the joint Record of Decision (ROD) of the Department of the Interior (DOI) Bureau of Land Management (BLM) and the United States Department of Agriculture (USDA) Forest Service (FS) for the Devers-Palo Verde No. 2 Transmission Line Project (DPV2) as analyzed in the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS), released October 24, 2006. This ROD is prepared in accordance with the National Environmental Policy Act (NEPA) and the Federal Land Policy and Management Act (FLPMA). The BLM decision, under Title 43 CFR Part 2800, applies only to BLM-administered lands; and the FS decision, under Title 36 CFR Part 251, applies only to National Forest System lands. For the purposes of this ROD, the project as proposed by the Applicant, Southern California Edison (SCE) shall be referred to as the Devers-Palo Verde No. 2 500 kV Transmission Line Project, or"DPV2." The project as the Selected Alternative and as authorized in this ROD shall be referred to as the "Project," which consists of a combination of the proposed project and alternatives analyzed in the Final EIR/EIS. The Project as authorized in this ROD only contains portions of the DPV2 project in California; those portions in Arizona have been eliminated.

The Final EIR/EIS is a joint document prepared by the State of California Public Utilities Commission and the BLM. The Final EIR/EIS is available online at: http://www.cpuc.ca.gov/Environment/info/aspen/Devers-Valley No. 2 /Devers-Valley No. 2 .htm. The California Public Utilities Commission (CPUC) granted an application for a Certificate of Public Convenience and Necessity (CPCN) in proceedings related to the DPV2 transmission line in Decision #D.07-01-040, dated January 25, 2007, for two major transmission lines:

- The first transmission line was a 500 kilovolt (kV) transmission line from the existing Harquahala Generating Station switchyard in southern Arizona, near the Palo Verde nuclear generating plant, to SCE's existing Devers substation located in North Palm Springs in Riverside County, California. This transmission line was referred to as the "Devers-Harquahala" transmission line in the Final EIR/EIS. Approximately 102 miles of this line was proposed in Arizona, and 128 miles in California, totaling approximately 230 miles.

- The second transmission line was a 500 kV transmission line between the Devers substation and SCE's existing Valley substation located in the unincorporated community of Romoland in Riverside County. This transmission line was referred to as the Devers-Valley No. 2 [D-V Alternative] transmission line in the Final EIR/EIS. This line was proposed to allow power to reach SCE's load centers. This line spanned approximately 48.2 miles. [This varies from the proposed action in the Final EIR/EIS]

The Commission granted the CPCN on the basis that the DPV2 transmission line would generate significant economic benefits to California ratepayers, and preconditioned construction of the California portion of the Project upon approval for construction of the Arizona portion of the originally proposed project. The Arizona Corporation Commission (ACC) denied SCE's request for a Certificate of Environmental Compatibility for the Arizona portion of the transmission line on June 6, 2007. SCE appealed the ACC's Devers-Valley No. 2 decision and began pursuing

action under the authority Congress granted the Federal Energy Regulatory Commission (FERC) to site transmission facilities under the siting provisions of the Energy Policy Act of 2005. However, in May 2009, SCE ceased its pre-filing activities for the transmission line at FERC because SCE did not pursue a re-filing with the ACC for the authorization of the Arizona-only portion of the transmission line at the time.

Instead, SCE filed a Petition for Modification (PFM) with the CPUC on May 14, 2008. SCE requested that the CPUC authorize SCE to construct DPV2 facilities in only the California portion of the originally proposed DPV2 project. The CPUC approved SCE's PFM on November 20, 2009, in Decision D.09 11 007 and authorized construction of the California-only portion of the originally proposed project.

After the CPUC's 2009 Decision regarding the PFM, several large solar power projects were proposed in the Blythe area. Two of these projects, the Blythe Solar Power Project and the Genesis Solar Energy Project, requested interconnection to the electricity grid at the Desert Southwest–Midpoint Substation (its location is detailed under the Desert Southwest Transmission Project Alternative in the Final EIR/EIS). As a result, the solar developers and SCE developed a plan to expand the Midpoint Substation, now known as the Colorado River Substation (CRS), to allow the required space for generation tie lines to be interconnected with the SCE 500 kV transmission system. SCE will file a Permit to Construct application addressing the substation expansion. This expansion was not covered in the original EIR/EIS because the solar power projects had not yet been proposed.

During 2009 to 2010, the Blythe Solar Power Project and the Genesis Solar Energy Project have been evaluated under CEQA and NEPA by the BLM and the California Energy Commission. The environmental review documents addressed the CRS expansion but they did not adequately cover all issues that the CPUC requires to be addressed in accordance with CEQA. Therefore, the CPUC prepared Focused Supplemental EIR to address only the specific issues not yet covered for its purposes by the previous environmental review.

A Notice of Preparation (NOP) was sent to interested agencies and members of the public in October 2010. The CPUC held a 30-day scoping period soliciting information regarding the topics that should be included in the Focused Supplemental EIR for the Colorado River Substation expansion. The Draft Focused Supplemental EIR was released on February 22, 2011, with a comment period ending on April 8, 2011. The Final Focused Supplemental EIR was released on April 29, 2011. The new information is discussed in further detail in Section 1.2.2.11 of this ROD.

The Project

The selected alternative in this ROD, herein known as the "Project," is a combination of the Agency Preferred Alternative, the project as proposed by the applicant, and other transmission line segments of other alternatives analyzed in the Final EIR/EIS. The Project consists of three main transmission line segments:

Segment 1: Colorado River Substation (CRS) to Cactus City Rest Area

- The Project will start at the CRS and will extend west to the Cactus City Rest Area. (see Map 1).

Segment 2: Cactus City to Devers Substation

- The Project will extend west from the Cactus City Rest Area to the Devers Substation in Palm Springs. This segment incorporates the alignment through Alligator Rock ACEC, paralleling the existing DPV1 500 kV transmission line. (See Map 2).

Segment 3: Devers to Valley (D-V)

- The Project will extend south and west from the Devers Substation to the Valley Substation in unincorporated Romoland, California. (see Map 3)

Additionally, the Project includes the following components:

- Installation of a 500 kV Static VAR Compensator (SVC) at the existing Valley Substation.

- Modifications to the existing Devers Substation.

- Other transmission line structures.

- Hardware (conductors, insulators, overhead ground-wires, and other associated hardware).

- Private ROW acquisitions within the Palo Verde Valley by SCE.

- Spur roads between existing access roads and new tower sites.

- Installation of series capacitor banks at MP E163.7 in California.

- Installation of special protection scheme (SPS) at Devers, Padua, Walnut, San Bernardino, Villa Park, Viejo, Johanna, Ellis and Vista Substations in California.

- Telecommunications system: Blythe optical repeater site; installation of SONET and channel equipment within the existing Devers Substation and the California series capacitor bank; installation of new Alcatel MDR-8000 microwave terminals and two new 10-foot microwave antennas on the existing microwave towers at the Blythe Service Center.

- The CRS

Section 4 of this ROD, and Appendix D, detail the various alternatives analyzed in the Final EIR/EIS and decision rationale for selection or non-selection of alternatives.

Summary of Decision Rationale

Granting a right-of-way (ROW) contributes to the public interest by providing significant upgrades (in the form of redundancy and new capacity) to the existing transmission infrastructure which will promote a reliable electricity supply, including the transmission of renewable energy from Riverside County meant to meet state and federal renewable energy goals. The stipulations of this ROW grant and special use easement ensure that authorization of the Project will protect environmental resources and comply with environmental standards. These decisions reflect careful balancing of many competing interests on public lands. These decisions are based on comprehensive environmental analysis and full public involvement.

After extensive environmental analysis, consideration of public comments, and application of pertinent federal laws and policies, it is the decision of the BLM and FS to authorize an amended ROW grant and FS special use easement for the construction, operation, maintenance and decommissioning of a transmission line on an alignment which begins at the CRS located near Blythe, California, and extends to the Devers Substation in Palm Springs, California, spanning 115 miles; and a portion of which continues from the Devers Substation to the Valley Substation, located in unincorporated Romoland in Riverside County, spanning 41.6 miles. The final project selected includes a substation and various alternative segments in order to reduce environmental impacts inclusive of biological resources, visual resources, and environmental justice concerns, as well as engineering feasibility and constraints. The Project will cross 57 miles of public land managed by BLM, and approximately 2 miles of National Forest System lands managed by the San Bernardino National Forest.

1. DECISIONS AND AUTHORITY

1.1 Background

This Record of Decision (ROD) approves the construction, operation, maintenance, and decommissioning of the California-only portion of the project analyzed in the DPV2 Transmission Line Project Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS), released October 24, 2006, and as noticed in the November 3, 2006, Federal Register (71 Fed. Reg. 213) on Bureau of Land Management (BLM)- and United States Forest Service (FS)-administered lands in Riverside County, California. This decision approves a combination of the Agency Preferred Alternative, the project as proposed by the applicant, and other segments of other alternatives analyzed in the Final EIR/EIS (see Figures 1 through 3 in this ROD).

BLM's approval will take the form of a Federal Land Policy and Management Act (FLPMA) amended right-of-way (ROW) grant issued in conformance with Title V of FLPMA and implementing regulations found at 43 Code of Federal Regulations (CFR) Part 2800. The FS approval will take the form of a special use easement, issued in conformance with Title V of FLPMA and 36 CFR Part 251. The decisions contained herein apply only to the BLM- and FS-administered lands within the selected alternative.

An amended ROW grant will be issued to Southern California Edison (SCE) by BLM for a term of 30 years with a right of renewal so long as the holder is complying with the lease/grant and applicable laws and regulations. The ROW grant will allow SCE the right to use, occupy, and develop the described public lands to construct, operate, maintain, and decommission a 500 kV transmission line, substation, telecommunications system, and associated facilities. The special use easement will be issued to SCE by the FS for a term of 50 years. The special use easement does not provide for renewal; however a new easement may be issued at the end of the term at the discretion of the authorized officer. The special use easement will authorize SCE to occupy and use National Forest System lands for electric transmission lines and associated facilities.

The ROW grant is conditioned on implementation of mitigation measures and monitoring programs as identified in the Final EIR/EIS, the Biological Opinion (BO) issued by the United States Fish and Wildlife Service (USFWS) on January 11, 2011, the National Historic Preservation Act (NHPA) Section 106 Programmatic Agreement (PA), the California Public Utilities Commission (CPUC) Conditions of Certification, and the issuance of all necessary local, state, and federal approvals, authorizations, and permits.

Once federal, state, and local approvals, permits, and authorizations are obtained by SCE, a Notice To Proceed (NTP) may be issued by BLM and FS.

1.1.1 Application/Applicant

The original ROW grant for the DPV2 project was issued in 1989, but was never constructed. (See Section 1.2 *Project Description* and Section 1.2.1 *History of Project Permitting/Project Description* for further clarification). In May of 2005, SCE filed an application with the BLM to

amend the existing ROW grant for the DPV2 project (CACA-17905a) to include only the California portion of the DPV2 project. In 2010, SCE filed an application with the BLM to also amend the existing ROW grant for the D-V segment of the DPV2 project (CACA- 4909).

1.1.2 Purpose and Need for the Proposed Action

BLM's and FS's purpose and need for the original proposed DPV2 project was to respond to SCE's application under Title V of the Federal Land Policy Management Act (FLPMA) for a ROW grant amendment and special use easement, respectively, to construct, operate, maintain, and decommission a 500 kV transmission line and associated facilities on public lands in compliance with FLPMA, BLM ROW regulations, FS regulations, and other applicable federal laws.

As described in Section 1.2 *Project Description* of this ROD, the DPV2 project description has changed since the issuance of the Final EIR/EIS in 2006; however, the purpose and need for the Project are still applicable. While the Project will no longer transport electricity produced at generation sites in western Arizona to the SCE service area, the Project will transport energy from the Blythe area to population centers in southern California as originally envisioned.

Since the issuance of the DPV2 Final EIR/EIS in 2006, several large solar power projects have been proposed in the Blythe area. Two of these projects, the Blythe Solar Power Project (BSPP) and the Genesis Solar Energy Project (GSEP), requested interconnection to the California Independent System Operator (CAISO) grid through the Large Generation Interconnection Procedure at the CRS. The Project would transport approximately 250 megawatts (MW) from GSEP and up to 1,000 MW from BSPP.

1.1.3 EIS Availability, 30 Day Review, Protests

1.1.3.1 Environmental Review Process

BLM must comply with the planning provisions of FLPMA. The DPV2 transmission line was analyzed in a jointly prepared EIR/EIS in compliance with the California Environmental Quality Act (CEQA) and NEPA requirements, respectively. The CPUC served as the lead state agency pursuant to CEQA. While BLM acted as the lead federal agency responsible for compliance with the requirements of NEPA, the Bureau of Indian Affairs and FS were cooperating federal agencies, providing information, analysis, and comment. The NEPA process included public scoping, a Draft EIR/EIS and a Final EIR/EIS; and these procedural and documentary steps were the basis of the environmental review that informed the decisions contained within this ROD.

1.1.3.2 Public Involvement

Public review and comment on the Project were extensive. Public scoping, including eight

public meetings and numerous agency meetings, initiated the public review process. The combined comment periods on the Draft EIR/EIS totaled over three months. BLM and CPUC held six public meetings and received approximately 65 comments on the Draft EIR/EIS. All public comments received were carefully analyzed and agency responses are included in the Final EIR/EIS.

1.1.3.3 Consultation with Other Agencies

Over 40 federal, State, and local agencies were contacted by phone to provide information on the Project and to determine interest in face-to-face meetings to discuss the Project. Of those agencies, BLM and CPUC coordinated and consulted in person with the USFWS; California Department of Fish and Game; Cities of Banning, Cathedral City and Blythe; and both the Morongo Band of Mission Indians and Agua Caliente Band of Cahuilla Indians.

1.1.4 Authority under FLPMA and NEPA

1.1.4.1 Federal Land Policy and Management Act (FLPMA)

FLPMA establishes policies and procedures for 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)).

FLPMA Section 501(a)(4) also establishes the BLM and FS authority to issue ROW grants or permits for transmission lines crossing their respective jurisdictions.

1.1.4.2 National Environmental Policy Act (NEPA)

Section 102(C) of the NEPA (42 USC 4321 et seq.), the Council on Environmental Quality (CEQ) regulations that provide basic NEPA implementation provisions (40 CFR Parts 1500 – 1508), DOI-specific NEPA implementing regulations (43 CFR Part 46), and U.S. Department of Agriculture (USDA) FS-specific NEPA implementing regulations (36 CFR Part 220) provide for the integration of NEPA into agency planning to ensure appropriate consideration of NEPA's policies and to eliminate delay.

When taking actions such as approving ROW lease/grants, the BLM and FS must comply with NEPA and the CEQ regulations implementing NEPA. Compliance with NEPA assists federal officials in making decisions about projects and planning that are based on an understanding of the environmental consequences of the decision, and identifying actions that protect, restore, and enhance the environment. The Draft EIR/EIS, Final EIR/EIS and this ROD demonstrate BLM and FS's compliance with the requirements of NEPA for the Project.

1.2 Project Description

Numerous changes to the project description have occurred over the history of the Project, which was originally granted in 1989. This section describes the history of the permitting of the DPV2 project followed by a history of the changes to the project description and a discussion of the Project.

1.2.1 History of Project Permitting/Project Description

This section is organized chronologically from the initial ROW grant by the BLM for the DPV2 500 kV Transmission Line project through the present.

1.2.1.1 DPV2 1989 Right-of-Way Grant

In 1989, BLM issued a ROW grant to SCE for the construction, operation, and maintenance of the DPV2 500 kV transmission line and appurtenances (Grant CA 17905 and AZ 23805 [one document]). This ROW was 130 feet wide from the center line and contained 57.2 miles of public land in California and 92.7 miles of public land in Arizona. The purpose of the transmission line was designed to carry power from the Palo Verde Nuclear Generating Station in Arizona (starting at the Harquahala Substation in Arizona) to Southern California (going though Devers Substation in Palm Springs and ending at the Valley Substation in Romoland, California). The transmission line was never constructed.

1.2.1.2 Desert Southwest Transmission Line Project

The Desert Southwest Transmission Line Project (DSWTP) Final EIS/EIR, published by the Imperial Irrigation District and BLM in October 2005, analyzed a proposed new 118-mile 500 kV line that would be constructed parallel to SCE's DPV1 and Devers-Harquahala 500 kV lines from Blythe, California, to Devers Substation. The BLM issued a Record of Decision for the DSWTP on September 15, 2006. Additional details for the DSW Midpoint Substation site are provided in the 2005 Final EIS/EIR for the DSWTP (Imperial Irrigation District, 2005). This line has not been constructed.

1.2.1.3 Amendment of the 1989 Right-of-Way Grant

SCE filed an application for a Certificate of Public Convenience and Necessity (CPCN) with the CPUC for the proposed DPV2 500 kV Transmission Line Project in April 2005. The application was determined to be complete and in compliance with CPUC requirements on September 30, 2005.

SCE filed an application with the BLM to amend the existing 1989 ROW grant for the DPV2 transmission line in May 2005, which would commence a new environmental review by BLM, USFS and CPUC. The amendment was to include five revisions:

1. Construction of a new series capacitor site in Arizona (ultimately denied);
2. Construction of a new series capacitor site in California;
3. Construction of a 500 kV switchyard called the Midpoint Substation;
4. Addition of a land parcel upon which SCE would construct the 500 kV transmission line in Arizona to a new termination point at the Harquahala Generating Station switchyard (subsequently denied);
5. Revision to one of the mitigation measures (Visual Mitigation Measure 2) to allow DPV2 tower heights and spacing to be different than the existing Devers-Palo Verde No. 1 (DPV1) tower heights and spacing.

As described in the Proposed DPV2 Transmission Project Proponent's Environmental Assessment (PEA) (CPUC, 2005), although the CPUC granted a CPCN for the 1989 project, SCE advised the CPUC in October 1989 that SCE was unable to comply with some of the CPUC's conditions. Although the CPUC granted SCE additional time to comply with the conditions, SCE again advised the CPUC in 1991 that it was unable to do so and that SCE considered the DPV2 project essentially inactive. In 1996, great uncertainty surrounding SCE's ability to recover costs in a new, unproven market, and uncertainty in SCE's consumer base led SCE to request that the CPUC allow SCE to abandon the 1989 project. In 1997, the CPUC allowed SCE to abandon construction of the 1989 Project due to electrical industry restructuring.

According to the PEA (CPUC, 2005), in 2005 SCE requested that the CPUC approve the DPV2 project for four reasons:

1. DPV2 is cost-effective for California electricity customers;
2. DPV2 will enhance competition among the generating companies that supply energy to California;
3. DPV2 will provide additional transmission infrastructure to support and induce the development of future energy suppliers selling energy into the California market;
4. DPV2 will provide resource reliability benefits, flexibility in operating California's transmission grid, and additional import capacity that may be urgently needed during a major outage or emergency event or during periods of unanticipated high energy demand.

The following revisions to the original 1989 project were proposed in the 2005 PEA (CPUC, 2005):

Construction of the Midpoint Substation

SCE received an interconnection request from Desert Southwest Power, LLC, the proponent of the DSWTP. SCE and Desert Southwest Power, LLC agreed to integrate the proposed DSWTP and the DPV2 transmission line projects. The joint project would include the construction of a 500 kV switchyard called the Midpoint Substation that would provide connections for the DPV1 and Devers-Harquahala 500 kV lines, and the DSWTP. The DSWTP has not been constructed to date.

Revision to Visual Mitigation Measure 2 to Allow DPV2 Tower Heights and Spacing to be Different than the Existing DPV1 Tower Heights and Spacing

As stated in the 2005 PEA (CPUC, 2005), the CAISO specified that the capacity of the line be 2700 amps under normal conditions and 3600 amps under emergency conditions. This capacity rating was an increase from the 1988 DPV2 capacity rating. This capacity rating necessitated that the heights of some of the proposed Devers-Harquahala towers be slightly taller than originally engineered, and in some locations tower spacing may not correspond to the adjacent DPV1 structures, to provide adequate ground clearance.

The following Arizona revisions in the 2005 PEA are omitted from this ROD:

Construction of the 500 kV Transmission Line in Arizona to a New Termination Point at the Harquahala Generating Station Switchyard;

Construction of New Series Capacitor Sites in Arizona.

1.2.1.4 DPV2 NEPA and CEQA Requirements

SCE's 2005 filing of the application for a CPCN and amendment to the existing ROW grant triggered the need for the CPUC, BLM, and USFS to conduct their respective environmental analysis for the transmission line. The CPUC and BLM prepared a joint Draft EIR/EIS in May 2006 and a Final EIR/EIS in October 2006. The Project originally proposed and described in the Draft and Final EIR/EIS was a 230-mile, 500 kV electric transmission line between SCE's existing Devers Substation in California and Harquahala Generating Substation in Arizona (referred to as "Devers-Harquahala" or D-H) and included the replacement of an approximately 48-mile 230 kV transmission line in California (referred to as "West of Devers" upgrades). The proposed project included the two transmission line elements, a new Midpoint Substation (now called Colorado River Substation [CRS]), several substation upgrades, other ancillary facilities, and a telecommunications system.

The Selected Alternative, the "Project," is described in the Section below. However, additional environmental analysis has occurred since the 2006 Final EIR/EIS for the Project, as discussed in the Executive Summary of this ROD. Please see Section 1.2.2.11 and Appendix D for a discussion of new environmental analysis since the Final EIR/EIS.

1.2.2 Selected Alternative (the "Project")

Segment 1: CRS to the Cactus City Rest Area (DSWTP Alternative in the 2006 Final EIR/EIS for the Devers-Palo Verde II project)

- The Project will start at the CRS and will extend west to the Cactus City Rest Area. (see Map 1)

Segment 2: Cactus City Rest Area to Devers Substation (Action as proposed by the Applicant)

- The Project will extend west from the Cactus City Rest Area to the Devers Substation in Palm Springs. This segment incorporates the alignment through Alligator Rock ACEC, paralleling the existing DPV1 500kV transmission line. (See Map 2)

Segment 3: Devers to Valley (D-V) (Devers-Valley No. 2 in Final EIR/EIS)

- The Project will extend south and west from the Devers Substation to the Valley Substation in Romoland, California. (see Map 3)

Additionally, the Project includes the following components:

- Installation of a 500 kV Static VAR Compensator (SVC) at the existing Valley Substation.
- Modifications to the existing Devers Substation.
- Other transmission line structures.
- Hardware (conductors, insulators, overhead ground-wires, and other associated hardware).
- Private ROW acquisitions within the Palo Verde Valley by SCE.
- Spur roads between existing access roads and new tower sites.
- Installation of series capacitor banks at MP E163.7 in California.
- Installation of special protection scheme (SPS) at Devers, Padua, Walnut, San Bernardino, Villa Park, Viejo, Johanna, Ellis and Vista Substations in California.
- Telecommunications system: Blythe optical repeater site; installation of SONET and channel equipment within the existing Devers Substation and the California series capacitor bank; installation of new Alcatel MDR-8000 microwave terminals and two new 10-foot microwave antennas on the existing microwave towers at the Blythe Service Center.

The subsequent sections of this ROD (Sections 1.2.2.1- 1.2.2.11) summarize the components of the selected alternative presented in the Final EIR/EIS.

1.2.2.1 Proposed Project **– Midpoint Substation (CRS) to Cactus City Rest Area and Cactus City Rest Area to Devers Substation transmission line segments**

The Proposed Project – Midpoint Substation to Cactus City Rest Area and Cactus City Rest Area to Devers Substation transmission line segments are described in the DPV2 Final EIR/EIS in Section C.4.4.1 Desert Southwest Transmission Project Alternative.

The DSWTP Alternative would parallel the authorized (not yet constructed) DSW Transmission Line, and is a 118-mile 500 kV line from the Keim Substation/Switching Station in Blythe to Devers Substation. The DSWTP alternative in the DPV Final EIR/EIR, however, omits the route that connects Keim to (CRS).

1.2.2.2 Colorado River Substation

The CRS was named the Midpoint Substation/Switching Station in the DSW Transmission Line Final EIR/EIS (BLM, 2005), was approved through the DSW Transmission Line ROD on September 15, 2006, and by CPUC as part of SCE's Petition for Modification (Decision 09-11-007; CPUC, 2009).

The CRS Midpoint Substation was identified in the DPV2 Final EIR/EIS as part of the DSW Transmission Project Alternative, and will now serve as the eastern-most terminus of the Project.

1.2.2.3 Devers -Valley No. 2 Alternative Transmission Line Segment

The D-V Alternative 500 kV transmission line segment is described in the DPV2 Final EIR/EIS in Section C.4.3.1 Devers-Valley No. 2 Alternative.

Under the D-V alternative, BLM will approve the Option 2 routing, which, as described in Section C.4.3.1 Devers-Valley No. 2 Alternative, will require SCE to move the existing Devers-Valley No. 1 (D-V1) tower (Tower DV-59, located at the southern end of Orange Street) approximately 500 feet to the north in the Cabazon Area segment.

The change within the Cabazon Segment was analyzed by the CPUC in the Supplemental EIR for the minor relocation to route D-V1 through land owned by SCE in the Cabazon area.

1.2.2.4 Modifications to Devers Substation

Modifications to the Devers Substation are described in Section B.3.4.1 Devers Substation of the DPV2 Final EIR/EIS and will be authorized with the exception of the electrical equipment associated with the new 500 kV Devers-Harquahala transmission line, which will not be constructed.

1.2.2.5 Structures

The transmission line structures are described in Section B.3.1 Structures of the DPV2 Final EIR/EIS.

The structures as proposed and analyzed in the Final EIR/EIS will be authorized, with the exception of the following:

- The Proposed Project paralleling the existing Harquahala-Hassayampa 500 kV line,
- The proposed 230 kV transmission system modifications west of Devers Substation, or
- The heights of the Devers-Harquahala towers as described in the Final EIR/EIS,

which are no longer parts of the Project.

Additionally, the CPUC Supplemental EIR included an analysis of modifications to tower heights to accommodate terrain and meet current conductor clearance requirements.

1.2.2.6 Hardware

The conductors, insulators, and overhead ground wires are described in the subsections of Section B.3.2 Hardware of the DPV2 Final EIR/EIS.

The ROW requirements are described in Sections B.3.3.1 ROW of the DPV2 Final EIR/EIS.

The hardware as proposed and analyzed in the Final EIR/EIS will be authorized, with the exception of the following:

- Five miles of the Harquahala-Hassayampa 500 kV ROW,
- Additional ROW needed for existing series capacitor banks at MP E52.9 in Arizona and MP E163.7 in California,
- Additional ROW needed for the Devers-Harquahala segment of the DPV2 Transmission Line, or

- The 230 kV double-circuit line between Devers Substation and San Bernardino Junction as described in the Final EIR/EIS,

which are no longer parts of the Project.

1.2.2.7 Access Roads

The access roads are described in Section B.3.3.2 Access and Spur Roads of the DPV2 Final EIR/EIS.

The access roads as proposed and analyzed in the Final EIR/EIS will be authorized, with the exception of the following:

- Access road proposed to be constructed north of and adjacent to the part of the existing Harquahala-Hassayampa 500 kV transmission line, or

- The West of Devers transmission line segment spur roads,

which are no longer parts of the Project.

1.2.2.8 Series Capacitor Banks

The series capacitor banks are described in Section B.3.4.6 Series Capacitor Banks of the DPV2 Final EIR/EIS.

The series capacitor banks as proposed and analyzed in the Final EIR/EIS will be authorized with the exception of the proposed Arizona series capacitor site, which is no longer part of the Project.

1.2.2.9 Special Protection Scheme (SPS)

The SPS is described in Section B.3.5 Special Protection Scheme of the DPV2 Final EIR/EIS.

The SPS as proposed and analyzed in the Final EIR/EIS will be authorized with the exception of the SPSs in the Arizona switchyards (PVNGS, Hassayampa, and Harquahala Switchyards), which are no longer part of the Project.

1.2.2.10 Telecommunications System

The telecommunications system is described in Section B.3.6 Telecommunications System of the DPV2 Final EIR/EIS.

The telecommunication systems as proposed and analyzed in the Final EIR/EIS will be authorized with the exception of the following:

- Harquahala Mountain telecommunications facility,
- SONET and channel equipment to be installed within the existing Mirage and Harquahala Substations and the Arizona Series Capacitor Banks and the 5-inch conduits to be installed from the telecommunications rooms of these facilities to the Optical Ground Wire (OPGW) termination point on the Devers-Harquahala 500 kV transmission tower; new telecommunications facility to be constructed within the Midpoint Substation,
- Upgrades to APS' existing microwave equipment and antennas at the Black Peak and Smith Peak Communication Sites,
- Replacement of SCE's existing analog microwave system at Smith Peak with a new digital microwave system between the Smith Peak and Harquahala Mountain Communications Site,
- Installation of new Alcatel MDR-8000 microwave terminals and two new 10-foot microwave antennas on the existing microwave towers at the Chuckwalla Communications Site, or the
- West of Devers 230 kV upgrade,

which are no longer parts of the Project.

1.2.2.11 New Information since the Issuance of the DPV2 Final EIR/EIS

As previously described in Section 1.2.1 *History of Project Permitting/Project Description* of this ROD, in addition to the removal of the Arizona portion of the proposed project, prioritization of renewable energy generation resulted in minor project refinements to the proposed project since the publication in October 2006 of the DPV2 Final EIR/EIS, the main change being transmission interconnection needs for solar projects.

A few minor refinements were driven by final engineering designs, recent changes from newly approved solar energy projects along the I-10 Corridor, and compliance with mitigation measures requiring resource avoidance to minimize or avoid environmental impacts. The refinements include minor changes to substation locations/size, finalized construction yard locations, helicopter assembly yards, and telecommunication and transmission line locations. These refinements were reviewed by BLM for consistency with the standards set forth in

regulations of the Council on Environmental Quality (CEQ) at 40 CFR 1502.9(c) and BLM's National Environmental Policy Handbook H-1790-1 at sections 5.1 and 5.3.

In accordance with 40 CFR 1502.9(c), BLM has reviewed all relevant information on the minor refinements and the previous analysis provided in the DPV 2 Draft and Final EIS/EIR. This information was further reviewed along with the information provided in the Supplemental EIR produced by the CPUC specifically for the minor refinements. Specific background information on previous relevant analysis and BLM's findings of the adequacy of that analysis follows.

From 2009 to 2010, the Solar Millennium Blythe Solar Power Project (BSPP) and the NextEra Genesis Solar Energy Project (GSEP) were evaluated under NEPA and CEQA by the BLM and the California Energy Commission. A joint Staff Assessment/Draft EIS was released for each of these projects in March 2010. BLM issued its Final EISs on the BSPP and the GSEP in August 2010, and the RODs for the BSPP and the GSEP were released in October 2010 and November 2010, respectively. These environmental documents identified a need to expand the proposed (but as yet unbuilt) Colorado River Substation (CRS) to facilitate solar energy interconnection to the larger transmission grid. The impacts of expanding the proposed CRS were assessed in the GSEP FEIS in the Executive Summary (ES-5), Proposed Action (pp. 2-2 and 2-10) and Environmental Impacts (pp. 4.1-17, 4.17-11 through 4.17-16, and section 4.21.4).

In response to the need to expand the proposed CRS, SCE proposed to CPUC several modifications to the CRS and other temporary construction disturbances associated with the Project, within the study area of the utility corridor. CPUC, with BLM as a participating agency, developed a focused Supplemental EIR (SEIR) for these proposed minor refinements (see bullet list, below). BLM participated in the scoping/screening process, alternatives development, impact analysis, and review of public comments (CPUC, Final SEIR, App. 1-3, April 2011).

The Final SEIR was published on April 29, 2011. Five alternative locations for the CRS were identified in an effort to reduce impacts associated with Mojave fringe-toed lizard habitat and the sand transport corridor. The new data included in the SEIR yielded recommendations favoring two locations: a substation immediately to the south of the originally proposed CRS substation, located on public lands; and a substation to the immediate south and east of the originally proposed CRS substation, located on private lands. The CPUC determined that if the construction of the private parcel alternative was infeasible due to timing issues associated with securing private surface rights, the public land alternative would be equally environmentally superior under CEQA. Both alternatives would avoid the sand transport corridor and avoid impacts to sand dune-dependent species, eliminating over 90 acres of direct impact and 1,365 acres of indirect impact to habitat than in the originally proposed CRS location. BLM concurred with this analysis.

The BLM has reviewed the data in the SEIR for DPV2 addressing refinements to the CRS and the temporary construction disturbances. It has also reviewed the analysis in the BSPP Final EIS, the GSEP Final EIS, and compared these sources of information to the 2006 DPV2 Final EIR/EIS.

In addition to the CRS expansion, after the DPV2 project was approved by CPUC in November

2009, SCE began the process of completing final project design and engineering. As is common, some project components were refined as engineering was completed due to engineering requirements, changes resulting from nearby approved projects, and compliance with mitigation measures. Information regarding final project design was provided by SCE to the CPUC and BLM in two Project Refinements Reports, dated August 2010 and October 2010. In addition to the refinements outlined in the reports, SCE proposed two additional construction yards in April 2011 (see bullet list, below) which were addressed in the CPUC's May 2011 Mitigation Consistency Determination.

The DPV2 Final EIR/EIS Project Description (Section B.3, *Project Construction*, pp. B-23-24 and B-40-42) acknowledged the potential for the refinements listed below to be revised prior to construction. As proposed, the refinements (slight changes in acreage disturbance or location, tower height, etc.) are relatively minor and are consistent with the EIR/EIS Project Description (DPV2 Final EIR/EIS at section B). In addition to the BLM's review, the refinements have been reviewed in the CEQA context by the CPUC to ensure they would not result in a new significant impact or a substantial increase in the severity of an existing impact. A CEQA Mitigation Consistency Determination on SCE's proposed project refinements was published in May 2011.

The Project Refinements Reports also included information relevant to the DPV2 Transmission Line Project Colorado River Substation (CRS) Expansion and Telecommunication System Details, which were analyzed in the focused SEIR prepared for the CRS expansion.

Each of these refinements was reviewed by the CPUC in its Mitigation Consistency Determination (May 2011) or in its SEIR. Through these documents the CPUC has determined that the changes would not increase the level of environmental impact or create new significant impacts. In addition, the refinements are consistent with and/or validate the existing environmental analysis. BLM has reached similar conclusions independently. BLM finds that the resources and effects thereto caused by the refinements identified in this section are within the range of effects analyzed in the DPV2 Draft and Final EIR/EIS. As a result, no need exists for the agency to prepare 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.

The most notable difference in impacts would be the complete elimination of approximately 90 acres of direct adverse impact and over 1,300 acres of indirect adverse impact to the Mojave fringe-toed lizard as a result of relocation of the CRS. This reduction of impacts is considered to be within the scope of analysis provided in the DPV 2 Draft and Final EIS/EIR as well as the analysis provided in the Blythe and Genesis Draft and Final EIS's. In summary, considering that the project refinements seek to provide additional protection to public land resources and further reduce project impacts, and do not propose any additional adverse impacts not already analyzed in the DPV2 EIR/EIS, the GSEP Final EIS, and the BSPP Final EIS, the BLM has determined that no further environmental analysis under NEPA is required. As mentioned just above,

Council on Environmental Quality regulations at 40 CFR 1502.9 (c) require an agency to prepare a supplemental EIS if there are "substantial changes in the proposed action that are relevant to environmental concerns" or there are "significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." The project refinements described in this section of the ROD represent the results of final engineering adjustments, are not substantial changes, and do not represent significant new circumstances or information, and in many cases, represent no new impacts or *reduced* impacts over those identified in the DPV2 Final EIS, GSEP Final EIS, and BSPP Final EIS.

The refinements were addressed by the CPUC through its Final SEIR and/or its CEQA Mitigation Consistency Determination and were succinctly listed as follows:

- Valley Substation upgrades (addressed in the CEQA Mitigation Consistency Determination);
- Construction yards (anticipated in the EIS/EIR, p. B-41, and addressed in the CEQA Mitigation Consistency Determination);
- Helicopter Assembly Yards (addressed in the CEQA Mitigation Consistency Determination);
- Telecommunication system details (included in the Final SEIR);
- Tower heights (addressed in the CEQA Mitigation Consistency Determination);
- Minor D-V1 relocation in the Cabazon area (addressed in the CEQA Mitigation Consistency Determination); and
- CRS Expansion (included in the Final SEIR)

These refinements are described in detail below, including the rationale for how BLM reviewed the refinements resulting in the finding that no further NEPA analysis is needed.

Valley Substation

The DPV2 DEIS (section B.3.3.4) described the Valley Substation upgrades. The Valley Substation was analyzed in the FEIS (section C.4.3.1) as part of the Devers-Valley No. 2 Alternative. Through this analysis, BLM assessed the environmental impacts associated with use of this substation, including the impacts to the area around the substation location (e.g., visual (pp. D.3-105-111), cultural (pp. D.7-114-126), and biological (pp. D.2-253-269)).

The CPUC provided a helpful description in its Mitigation Consistency Determination of a change in the substation's western boundary:

> *The Draft EIR/EIS included a fence and western property line relocation, which would no longer be required for the upgrades. This is because the western boundary of the substation*

was previously expanded to the west within the existing SCE–owned property line between 2006 and 2007 as part of an upgrade to install two new 500–kV shunt capacitor banks not required for the DPV2 project. Because the fence would not be relocated, the upgrades would occur entirely on existing disturbed Valley Substation land.

Overall, there are no adverse impacts associated with the Valley Substation or its western boundary that were not addressed in the BLM's original EIS analysis; therefore further analysis of these upgrades 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.

Construction Yards

As a result of the final engineering, all construction yard locations have been identified.

- Palm Springs (Devers) Yard. An approximately 11.5-acre area on the east side of Devers Substation on existing SCE property. The site is currently undeveloped.

- Desert Center Yard 1. An approximately 5.5-acre site located northwest of the intersection of Rice Road and Ragsdale Road. This site is currently vacant, fenced, and has been previously covered with gravel and used for storage.

- Desert Center Yard 2. An approximately 11.5-acre site located east of the intersection of Rice Road and Ragsdale Road (between Ragsdale Road and the I-10 freeway) which could be used for material storage and to accommodate a batch plant. This is described as Desert Center Yard in Section B.3.7.2 Siting and Construction Yards of the DPV2 Final EIR/EIS, but the total acreage of this yard described in the Final EIR/EIS is less than the acreage identified here. The site is currently undeveloped.

- Chiriaco Summit Yard. An approximately 11.4-acre yard located on the south side of the Chiriaco Summit Airport and north of I-10 in central Riverside County, California (see Figure 3c of the Project Refinements Report; August, 2010). The site is currently undeveloped. The Chiriaco Summit Yard will replace the approved Indio Yard, which consisted of 3.2 acres on the east side of Dillon Road north of Fargo Canyon Road.

- Blythe Yard. An approximately 10-acre yard located north of Hobson Way and south of Blythe Airport. This is described as Blythe Yard in Section B.3.7.2 *Siting and Construction Yards* of the DPV2 Final EIR/EIS, but the total acreage of this yard described in the Final EIR/EIS is less than the acreage described here. However, the site is vacant and has been previously disturbed/graveled.

- Highland Springs Yard. An approximately 6-acre yard located along Highland Springs Avenue. The site is currently used for cattle grazing. Road base would be applied to the existing access road, which is outside of the yard.

- Beaumont Yard. An approximately 3.8-acre privately-owned property located at the northeast corner of North California Avenue and East 3rd Street, immediately south of railroad tracks and I-10, in the City of Beaumont, California. The eastern portion of the site is fenced and paved, and is currently being used as a storage area for transportation maintenance equipment and materials. The western portion of the site consists of fill materials with gravel. The Assessor Parcel Numbers are 418-200-003, 418-200-004, and 418-200-005. See Figure 4 in Attachment A of SCE's draft Notice to Proceed Request for Material Yards (submitted April 28, 2011).

- Menifee Yard. An approximately 4.7-acre yard located on vacant, graded privately-owned land with existing partial fencing, electrical distribution, and light fixtures. The site is located on Antelope Road just south of Ethanac Road in the City of Menifee, California, approximately one mile west of the existing Valley substation. The Assessor Parcel Number is 331-150-039. See Figure 7 in Attachment A of SCE's draft Notice to Proceed Request for Material Yards (submitted April 28, 2011).

- Perris Construction Yard. Perris Construction Yard is approximately 4.2 acres and is located north of Case Road and west of South G Street, in Perris, California (see Perris Yard Figure; November 2010).

In summary, construction yards (approximately 60 acres) were described in the Final EIR/EIS (section B.3.7.2) with an understanding that size would range from 3 to 10 acres and final location would be determined during final engineering and any new sites would be on previously disturbed lands. These locations have been finalized and no new impacts have been identified that have not been addressed in the previous NEPA analysis.

No additional resource related impacts have been identified associated with the use of existing disturbed areas, and additional analysis is not required. 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.

Helicopter Assembly Yards

Helicopter use for construction was addressed in the Project Description of the Final EIR/EIS and included in the transmission line equipment requirements (see Table B-6, page B-38) and as part of Applicant Proposed Measure (APM) G-7 (see Table B-15, page B-55). APM G-7 stated that SCE would provide a list of sites where helicopter construction is recommended. APM G-7 further stated that the Authorized Officer may require, on a site-specific basis, helicopter assisted construction in sensitive areas (CEQA Mitigation Consistency Determination, p. 19).

Approximately seven yards are currently planned to support helicopter assembly of towers where tower sites have no road access and are restricted by terrain. These landing zones have been reviewed by the CPUC (through their May 2011 Mitigation Consistency Determination), including biological and cultural surveys, and BLM concurs with CPUC's determination that the

locations would not result in new significant impacts or in a substantial increase in severity of previously identified impacts for the following reasons: the landing zones were chosen specifically to reduce impacts resulting from erosion and/or slope instability because these impacts could not be successfully mitigated through implementation of accepted engineering practices. Implementation of mitigation measures identified in the Final EIR/EIS as a result of ground disturbance and noise would be required for the landing zones and would reduce the impacts to the extent feasible. BLM would review all such final proposals to determine if any additional site specific NEPA would be warranted.

No additional resource related impacts have been identified associated with the helicopter yards, and additional analysis is not required. 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.

Telecommunication System Details

Two telecommunication lines would extend from the CRS, one to the southeast and the second to the north and east. Although consistent with the DPV2 Final EIR/EIS, the refinements described in this section provide more detailed information than was included in the DPV2 Final EIR/EIS. These routes are preliminary and may change as field surveys occur and the design of the telecommunication system progresses. When these locations are finalized, BLM will determine if additional NEPA analysis is indicated or if the location and impacts are within the range of effects described in the DPV2 EIS/EIR.

The southeast telecommunication line would extend from the CRS for about 5.5 miles along the existing DPV1 transmission line towers to approximately Tower M123-T1 where it would transition to new and existing poles located along an existing east-west patrol road. It would then be routed to the bottom of the mesa and along existing streets in the Palo Verde Valley to the Blythe Service Center (approximately 14 miles).

The portion of the southeast telecommunication line along the existing DPV1 towers would be OPGW, and the remaining line to be installed on wood poles (new and existing) would be fiber optic cable. The OPGW would be installed utilizing pulling/splicing sites along the DPV1 ROW. For the portion of the southeast telecommunication line east of the DPV1 ROW, wood poles would be installed from the DPV1 ROW (about five miles southeast of the CRS) to the point where existing poles can be utilized. The detailed alignment of the southeastern telecommunication line will be defined during more detailed engineering. The total disturbance area is not expected to exceed about 0.06 acre (approximately 100 poles at 25 square feet each).

The northern telecommunication line from the CRS would connect with the Buck Substation located to the northeast of the CRS. Two options are available for this telecommunication line. Under Option 1, the fiber optic line would be installed on the same poles as the 33 kV line extension (distribution power line extension) that would be extended to the CRS from the north. The telecommunication line would then be installed on existing poles (along an existing access

road, Blythe Way, north across I-10 to Hobson Way) to the Buck Substation. Several locations would be installed in underground conduit along the existing roadways. This option would not require new poles or additional ground disturbances to undisturbed areas. This is the preferred option for the northern telecommunication line from the CRS.

Under Option 2, the telecommunication line would extend from the CRS as OPGW along the existing DPV1 towers to Wiley Wells Road, as fiber optic line on existing poles along Wiley Wells Road to the north, and eastward on existing poles along the existing east-west access road (Blythe Way extended). The fiber optic line would then follow the same route east and north to the Buck Substation, as described for Option 1. For installation of the OPGW, approximately two pulling/splicing sites would be required along the existing ROW between CRS and Wiley Wells Road. A minor underground conduit would be installed between the OPGW tower and the existing wood poles along Wiley Wells Road.

Overall, the installation of OPGW and fiber optics on existing or new structures would result in no new impacts or surface disturbance that has not been previously considered in the EIR/EIS (sections B.2.2.2, 2.3.2, 3.4.2, 3.6, 3.6.3, and 3.6.5), and further NEPA 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.

Tower Heights

Tower height was addressed in the DPV2 FEIS (pp. B-4-7, B-23). This assessment was further supported in the CPUC's Decision Granting a Certificate of Public Convenience and Necessity for the DPV2 project (CPUC 2007), where the CPUC addressed the use of slightly taller towers to reduce the electromagnetic field (EMF) near the ROW where residences are located nearby. Specifically, the CPUC examined increasing tower and conductor heights by an estimated 20 feet to reduce magnetic fields (consistent with the CPUC's guidance in D.06-01-042 for low-cost EMF mitigation). The CPUC determined that the increase in tower and conductor heights (by approximately 20 feet on a 150-foot tower) would be unnoticeable to most observers (CPUC 2007, page 88).

The new towers would generally be aligned horizontally with the existing towers where feasible. SCE has made changes to the tower heights to reflect current GO95 conductor clearance requirements at the higher ISO conductor temperature (275 degrees instead of the former 215 degrees). As a consequence, the heights of some towers will be slightly taller than the adjacent DPV1 towers (some will also be lower than existing DPV1 towers due to terrain or other considerations). Also, the tower spacing may not correspond to the DPV1 structures to provide adequate conductor ground clearance. The minimum conductor height would be at least 35 feet above the ground for the 500 kV lines.

Based on in-field tower walks (for detailed tower siting) and recent engineering design of the towers (including conductor clearance based on higher ISO conductor temperature), the new DSWTP Alternative transmission line segment towers are projected at an average height of 152

feet, and range from 89 feet to 236 feet tall. For comparison, the existing DPV1 towers are an average of 136 feet tall and range from 84 feet to 236 feet tall.

The new D-V Alternative transmission line segment towers are projected to average approximately 148 feet tall, and range in height from 85 feet to 278 feet, as compared to the existing D-V1 towers, which average 132 feet tall, and range in height from 79 feet to 278 feet. While there is an overall increase in average tower height, each tower height differs from existing tower heights based on engineering requirements, tower site constraints, terrain/topography, and current clearance requirements based on higher ISO conductor temperature requirements.

Overall, an average increase of approximately 20 feet in tower height is considered a minor change, not a change substantially noticeable compared with the tower heights addressed in the analysis in the Final EIS/EIR (Section D.3 *Visual Resources*). These towers on average would still be shorter than other immediately adjacent power lines and would not alter previous analysis as depicted in the DPV2 Draft EIS/EIR or the DPV2 Final EIS/EIR. The CPUC's Mitigation Consistency Determination (p. 5) found that "The tower refinements do not substantially increase the severity of this impact and are consistent with the conclusions of the Final EIR/EIS."

No additional resource related impacts have been identified associated with changed tower heights, and additional analysis is not required. 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.

Minor D-V1 Relocation in the Cabazon Area

The D-V Alternative transmission line segment will be routed to the north of the NW ¼ of NE ¼ of Section 20 to land owned by SCE, consistent with Option 2 described in Section C.4.3.1 *Devers-Valley No. 2 Alternative* of the DPV2 Final EIR/EIS. Because the D-V Alternative transmission line segment is located to the south of the existing D-V1 transmission line, the routing of the D-V Alternative transmission line segment north of and around this property would require crossing the existing D-V1 line. Due to clearance requirements, the existing D-V1 line will therefore also be rerouted north around this property to other property owned by SCE.

The rerouting of D-V1 in this area would require the removal of three existing towers along the D-V1 line (instead of the one tower described in Section C.4.3.1 *Devers-Valley No. 2 Alternative* of the DPV2 Final EIR/EIS) and installation of four new dead-end structures. Associated pulling stations would also be required.

This action was analyzed in the DPV2 Final EIR/EIS (Section C.4.3.1) but was not inclusive of the engineering restraints associated with the crossing of the D-V1 line. The overall effect is the addition of one pole that was not previously recognized. The removal of three poles would be mitigated by reclamation actions while the four dead-end structures would be placed on previously disturbed land owned by SCE. This action is within the range of impacts previously

analyzed in part because the new dead-end structures would be placed on privately owned, previously disturbed land. No additional sensitive resources would be impacted, and additional environmental analysis is not warranted.

The CPUC's Mitigation Consistency Determination (May 2011) found that "Impacts in these issue areas would not result in new significant effects not discussed in the Final EIR/EIS, and they would not result in a substantial increase in the severity of a significant impact previously examined in the Final EIR/EIS."

No additional resource related impacts have been identified as associated with the slight change in alignment of D-V1, and additional analysis is not required. CEQ regulations at 40 CFR 1502.9(c) and BLM's NEPA Handbook 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.

CRS Expansion

The location of the CRS substation would be shifted approximately 900' south of the location described in the DPV2 Final EIR/EIS (Desert Southwest Alternative, Midpoint Substation, section C.4.4.1, p. C-21). The size of the substation would be increased from approximately 45 acres (approved but not yet built) to approximately 90 acres of land, which includes approximately 77 acres of new, permanent disturbance within the substation perimeter wall and approximately 13 acres of enhancements (e.g., flood protection berm and stormwater detention basin) outside of the perimeter wall.

Although the CPUC decided that changes to the CRS required additional analysis under the CEQA, BLM evaluated the need for a supplement to its EIS based upon the standards for supplementation provided under NEPA. After reviewing the CRS relocation and expansion proposal pursuant to Council on Environmental Quality (CEQ) regulatory standards, BLM determined that no supplementation was required. Supplementation is required if the agency makes substantial changes to the proposed action that are relevant to environmental concerns, or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts (CEQ regulations at 40 CFR 1502.9 (c)). The BLM NEPA Handbook, Section 5.3, is similar in effect. This relocation proposal will result in an overall reduction of impact to the Mojave fringe-toed lizard due to the relocation of CRS construction outside of sand flow habitat: 90 fewer acres of direct impact and 1,365 fewer acres of indirect impact to habitat than in the originally proposed CRS location. The expanded size of the substation will result in approximately 45 acres of minor additional ground disturbance but no measurable increase in impacts to species analyzed in the Final EIR/EIS (section D.2.7.4, p. D.2-202). These changes would not substantially increase the level of overall environmental impact or create new significant impacts that have not already been considered in the DPV 2 Draft and Final EIS/EIRs, the GSEP Draft and Final EISs, and the BSPP Draft and Final EISs. Therefore further NEPA analysis is not required.

No additional resource related impacts have been identified associated with the shift and expansion of the CRS, and additional analysis is not required. CEQ regulations at 40 CFR 1502.9 (c) and BLM's NEPA Handbook 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.

Upon submission of the final POD for the DPV 2 project, BLM will review all final modifications described above to determine if any of the above changes result in modifications that result in a departure from previously analyzed impacts or actions. Any such departure would be reviewed to determine if additional site specific NEPA would be required.

2. Mitigation and Monitoring

2.1 Required Mitigation

The Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) for this Project is located in Appendix C. The BLM is a lead agency, along with the CPUC, in ensuring compliance with all adopted mitigation measures. The BLM and FS will incorporate this mitigation into the amended ROW grant and easement as terms and conditions. Failure on the part of the grant holder to adhere to these terms and conditions could result in various administrative actions up to and including a termination of the grant. Additionally, the holder will be required to remove any installed facilities and restore any disturbances to preconstruction condition. In accordance with 40 CFR 1505.2(c), all practicable means to avoid or minimize environmental harm have been adopted under this decision. Appendix C contains the full list of Mitigation Measures and Terms and Conditions applicable to the construction, operation, maintenance, and decommissioning of the Project. All of which will be included in the amended ROW grant and Plan of Development (POD) for construction. The Measures included in the BO (Appendix B) and PA (Appendix A) will also be incorporated in the Grant and the POD.

2.2 Monitoring, Mitigation and Enforcement

Federal regulations (40 CFR 1505.3) require the BLM, FS, or other appropriate consenting agency to implement mitigation (40 CFR 1505.2 (c)) and other conditions established in the Final EIR/EIS or during its review and committed as part of the decision. The agency may also provide for monitoring to assure that its decisions are carried out and should do so in important cases. The BLM and FS must adopt a monitoring and enforcement program where applicable for any identified mitigation (40 CFR 1505.2 (c)). The BLM and FS shall:

- Include appropriate conditions in lease/grants, permits, or other approvals;
- Condition funding of actions on mitigation;
- Upon request, inform cooperating or commenting agencies on progress in carrying out

mitigation measures they have proposed and that were adopted by the agency making the decision; and

- Upon request, make publicly available the results of the relevant monitoring (40 CFR 1505.3).

At various times throughout 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, FS, and SCE should work together to find solutions when adjustments are necessary for specific field situations to avoid conflicts with adopted mitigation measures or specifications.

The BLM or FS Compliance Project Manager and Compliance Monitors will ensure that any deviation from the procedures identified under the monitoring program is consistent with right of way grant requirements. No project adjustment or modifications will be approved if the action results in new significant impacts. Adjustments will be limited to minor project changes, that do not increase the severity of an impact or create a new impact, and that clearly and strictly complies with the intent of the mitigation measure.

A proposed project change that has the potential for creating significant environmental effects will be evaluated to determine whether supplemental NEPA reviews are required. Any proposed deviation from the approved project, adopted mitigation measures, APMs, and correction of such deviation will be reported immediately to the BLM or FS for their review. The BLM or FS will review the request to ensure that all of the information required to process the adjustment has been included. The BLM or FS Compliance Project Manager may request a site visit or need additional information to process the request. 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 resource 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 SCE's ROW or property;

- Agency approval (if necessary).

2.3 Statement of All Practicable Mitigation Adopted

In accordance with the BLM NEPA Handbook H-1790-1 and 40 CFR 1505.2 (c), all practicable mitigation measures that are necessary to fully mitigate the effects of the Project according to laws, rules, policies, and regulations have been adopted by this ROD.

3. Management Considerations

3.1 Decisions Being Made

The decision to authorize a BLM ROW grant and issue a FS special use easement fulfills legal requirements for managing public lands. Granting the ROW and special use easement to SCE for construction, operation, maintenance, and decommissioning of the selected alternative contributes to the public interest by providing significant upgrades (in the form of redundancy and new capacity) to the existing transmission infrastructure that will be able to deliver a reliable electricity supply, including the transmission of renewable energy from Riverside County to meet state and federal renewable energy goals. The stipulations in the BLM grant and FS permit ensure that authorization of the selected alternative will protect environmental resources and comply with environmental standards to the maximum extent practical. These decisions reflect the careful balancing of the many competing public interests in managing the public and forest lands for public benefit. 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 Project. In addition, BLM sought out numerous other agencies with jurisdictional expertise. During the scoping process and following the publication of the Draft EIR/EIS, members of the public have submitted comments that have enhanced consideration by the BLM and FS of many environmental issues germane to the authorization of the Project. The BLM, FS, CPUC, and other consulted agencies used their expertise and existing technology to address the important issues of environmental resource protection. The BLM and FS have determined that the mitigation measures contained in the Final EIR/EIS, the PA regarding the management of cultural resources, and the BO integrate all practicable means to avoid or minimize environmental harm.

3.2 Decision Rationale

As analyzed in the Final EIR/EIS, this decision authorizes SCE to use certain described public lands to construct, operate, maintain, and decommission a 500 kV electrical transmission line, beginning at CRS located near Blythe, California, extending to the Devers Substation in Palm Springs, California (this segment spans 115 miles), and having a final segment extending from the Devers Substation to the Valley Substation, located in unincorporated Romoland in Riverside County (this segment spans 41.6 miles).

All activities within the selected alternative (the Project), either on their own or with the inclusion of mitigation, are in conformance with the following land use factors:

- BLM policy and guidance for issuing Rights of Way including BLM Manual 2801.11;
- California Desert Conservation Area Plan of 1980, as amended ("CDCA Plan");
- Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP) and Natural Community Conservation Plan (NCCP), 2004;
- Northern and Eastern Colorado Desert Coordinated Management Plan (2002);
- South Coast Resource Management Plan (1994);
- Santa Rosa and San Jacinto Mountains National Monument Proposed Management Plan, Final Environmental Impact Statement, and Record of Decision, October 2003;
- Forest Service, San Bernardino Land Management Plan: Part 1, Southern California National Forests Vision;
- Forest Service, San Bernardino Land Management Plan: Part 2, San Bernardino National Forest Strategy;
- Forest Service, San Bernardino Land Management Plan: Part 3, Design Criteria for the Southern California National Forests.

The BLM and FS decisions to authorize these activities are based on the following NEPA considerations:

3.2.1 Respond to Purpose and Need

Approval of the ROW grant and special use easement for the Project responds to BLM's and USFS's purpose and need for the DPV2 Transmission Line Project which was to address SCE's application under Title V of FLPMA for a ROW grant to construct, operate, maintain, and decommission a 500 kV transmission line on public lands in compliance with FLPMA, BLM ROW regulations, USFS regulations, and other applicable federal laws.

3.2.2 Achieve Goals and Objectives

The Project accomplishes the objectives of the purpose and need, including meeting power demand, providing additional transmission infrastructure, providing increased reliability, as well as federal and state objectives for renewable energy development. The Project provides for the best balance between providing transmission capacity while reducing adverse impacts as compared to the other action alternatives. This Project complies with objectives of applicable land use factors as listed in Section 3.2 Decision Rationale of this ROD.

3.3 Required Actions

The following federal statutes require that specific actions be completed prior to issuance of a ROD:

3.3.1 Endangered Species Act of 1973

Under Section 7 of the Endangered Species Act, a federal agency that authorizes, funds, or carries out a project that "may affect" a listed species or its critical habitat must formally consult with USFWS, unless the provisions of 50 CFR 402.14 are satisfied. The BLM has prepared a Biological Assessment for the USFWS in accordance with Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). USFWS has issued a BO determining that the proposed action is not likely to jeopardize the continued existence of the species identified in the Biological Assessment, and is not likely to destroy or adversely modify designated critical habitat for the Mojave fringe-toed lizard or desert tortoise and has established mitigation measures to reduce any anticipated impacts (Appendix B).

Southern California Edison prepared a Biological Assessment/Biological Evaluation (BA/BE), wildlife and botany reports, and Management Indicator Species Evaluation for the approximately 2 mile D-V 2 alternative on National Forest System lands. The Forest Service approved the document on June 3, 2009. Based on the BA/BE, the project with design criteria and mitigation measures (Appendix G) on National Forest System lands will not affect threatened, endangered, or proposed species or designated or proposed critical habitat. No formal consultation with the FWS is required for the portion of the D-V 2 alternative on National Forest System lands.

3.3.2 National Historic Preservation Act

In accordance with regulations at 36 CFR §800.14(b)(3) implementing Section 106 of the NHPA, BLM has consulted with the California State Historic Preservation Officers according to 36 CFR §800.6(a), and notified and invited the Advisory Council on Historic Preservation per 36 CFR §800.6(a)(1)(C). As a result, a PA for the Project has been developed (Appendix A). The *Programmatic Agreement among the Bureau of Land Management, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers regarding the Manner in which BLM will meet its Responsibilities under the National Historic Preservation Act* (BLM et al 2010) was developed to facilitate participation in consultation to resolve the potential effects of the Undertaking, as that term is defined in 36 CFR 800.16(y) of the Advisory Council on Historic Preservation regulations (August 5, 2004). The PA for the Project establishes a process for further consultation, review, and compliance with historic preservation mandates. It also describes the actions that will be taken by the parties in order to meet their compliance responsibilities.

The Forest Service submitted a report entitled *Final Cultural Resource Inventory of the Proposed SCE Devers to Valley Substation Project, Riverside County, California* prepared by ICF Jones and Stokes (September 2009) to the California State Historic Preservation Officer (SHPO) on September 29, 2009. Based on the analysis summarized in the report, the Forest

Service made a "No Historic Properties Affected" finding for the project on National Forest System lands. The SHPO concurred with this finding by letter on October 30, 2009. The Section 106 process is complete for the portion of the D-V 2 project on National Forest System lands.

3.3.3 Clean Air Act, as Amended in 1990

The Project is subject to the General Conformity regulation (40 CFR Part 93 Subpart B). This regulation, which implements Section 176(c) of the Clean Air Act Amendments (CAAA) of 1990, ensures that federal actions conform to State and local plans for attainment of air quality standards. The BLM and FS must complete a State Implementation Plan (SIP) conformity determination for the selected alternative within their respective jurisdictions prior to issuance of this ROD. The General Conformity rule prohibits federal agency approval of activities that conflict with an applicable implementation plan.

The General Conformity rule applies to project-related activities in the South Coast Air Basin (SCAB) and Salton Sea Air Basin (SSAB) areas, but not to project-related activity in the Mojave Desert Air Basin (MDAB). The applicable pollutants are ozone precursors (volatile organic compounds [VOC] and nitrogen oxide [NOx]) and particulate matter, less than 10 micrometers in diameter (PM_{10}) in both the SCAB and SSAB areas, plus carbon monoxide (CO) and Particulate Matter less than 2.5 microns in diameter ($PM_{2.5}$) in the SCAB only. See Table D.11-10 (page D.11-22) in the Final EIR/EIS.

The CAAA de minimis threshold for the SCAB has changed due to the change in ozone nonattainment classification from severe to extreme. The classification change occurred after the Final EIS/EIR was approved in 2006. With the reclassification of the SCAB, the current ozone precursor de minimis thresholds are reduced to 10 tons per year for each ozone precursor category (VOC and NOx). SCE is responsible for obtaining compensatory offset for these impacts.

The EIR/EIS emissions analysis can be found in Appendix 9 of the Final EIR/EIS. See Table D.11-19 (page D.11-33) in the Final EIR/EIS for annual construction emissions by air basin and Table D.11-15 (page D.11-27) for annual operational emissions by air basin.

Conformity Determination for the Mojave Desert Air Quality Management District (MDAQMD)

Annual construction emissions would be potentially significant for NO_x and PM_{10} within the MDAQMD jurisdiction. Implementation of Mitigation Measures AQ-1a through AQ-1g would reduce construction impacts to air quality to the extent feasible. Applicant Proposed Measures (APMs) A-1 and A-5 through A-7 will be implemented, and APMs A-2 through A-4 have been replaced with more specific and enforceable requirements in Mitigation Measure AQ-1a. Mitigation Measures AQ-1b through AQ-1g are necessary to mitigate equipment exhaust emissions to the extent feasible. Although the construction emissions from the selected alternative would remain above the MDAQMD annual significance threshold values, the

MDAQMD states that the construction impact will be less than significant after mitigation, and therefore is in conformance with the SIP.

With the implementation, to the extent feasible, of all mitigation measures in accordance with MDAQMD guidance, the regional construction impact for the MDAQMD would be reduced to a less than significant level after mitigation (Class II - significant, can be mitigated to a level that is less than significant, as identified in Section 11.3.3 of the DPV2 Final EIR/EIS). While construction impacts are significant, they are of short-term duration. Long-term operations impacts are less than significant and are in conformance with the SIP.

Conformity Determination for the South Coast Air Quality Management District (SCAQMD)

The maximum annual emissions of ozone precursors and PM_{10} would be less than the general conformity de minimis threshold for the SCAB for all construction years and for all operational years. The maximum annual emissions of VOC, CO, PM_{10}, and $PM_{2.5}$ would be less than the general conformity de minimis threshold for the SCAB for all construction years and for all operational years. The maximum annual emissions of NOx would be less than the general conformity de minimis threshold for the SCAB for all operational years. The maximum annual emissions of NOx would be above the general conformity de minimis threshold for the SCAB in both construction years.

Implementation of Mitigation Measures AQ-1a through AQ-1i would reduce construction impacts to air quality in the SCAQMD to the extent feasible but would not eliminate all potentially significant impacts. The selected alternative's NOx and PM_{10} emissions, even after implementation of these mitigation measures, would remain above the SCAQMD annual significance threshold values. Therefore, the annual NOx emissions from the selected alternative during construction would result in significant and unavoidable impacts in the SCAQMD (Class I – significant, cannot be mitigated to a level that is less than significant, as identified in Section 11.3.3 of the DPV2 Final EIR/EIS).

Mitigation Measure AQ-1i is a partial offset of construction-related NO_x emissions. SCE will acquire NOx offsets in the SCAB to achieve the "no net emission increase" requirement for each construction year, which the BLM will include as a condition of the ROW grant.

3.3.4 Clean Water Act

The Project is expected to meet the requirements of the Clean Water Act (CWA). The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point source discharges to surface water. Point source discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process, outlined in CWA Section 402. NPDES permitting authority is delegated to, and administered by, California's nine Regional Water Quality Control Boards. California's State Water Resources Control Board regulates the NPDES storm water program. In addition, Section 404 of the CWA authorizes the U.S. Army Corps of Engineers (ACOE) to regulate the discharge

of dredged or fill materials into navigable waters of the U.S., including certain wetlands and other waters of the United States. The ACOE issues individual site-specific or general (nationwide) permits for such discharges.

Under Section 401 of the CWA, States and Tribes can review and approve, condition, or deny all Federal permits or licenses that might result in a discharge to State or Tribal waters, including wetlands. As discussed in the various sections of Chapter D.12 of the Final EIR/EIS, construction of the selected alternative may result in discharges to surface water and may require the construction of new access roads through streambeds that would require filling for access purposes. These and other potential impacts will require SCE to obtain approvals from the ACOE and the State Water Resources Control Board under the CWA, including certification (or a waiver) under Section 401 from the State that the proposed discharge complies with water quality standards. Construction cannot be authorized until a Section 401 certificate is issued or waived by the State.

3.3.5 Environmental Justice (Executive Order 12898)

On February 11, 1994, President Clinton issued an "Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (Executive Order 12898). It requires each Federal agency to the greatest extent practicable and permitted by law to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs on minority populations and low-income populations. The Order is further intended to promote nondiscrimination in Federal Programs substantially affecting human health and the environment and to provide for information access and public participation relating to such matters.

The approach in the Draft EIR/EIS was to achieve compliance with the letter and spirit of the President's Executive Order by addressing the question of whether and how the impacts of the Proposed Project and alternatives may disproportionately affect minority populations and low-income populations.

The Draft EIR/EIS, as well as the Final EIR/EIS, did analyze the distributional patterns of minority populations and low-income populations on a regional basis and characterized the distribution of such populations adjacent to the proposed and alternative corridors. No specific environmental justice issues were raised by any member of the public or Tribes during the environmental impact assessment process. However, in the Final EIR/EIS at Section C.4.3.1., BLM, at the request of the Morongo Band of Mission Indians, analyzed an alternative transmission route (D-V Alternative) that avoided lands within the Reservation, and was ultimately selected in coordination with the Tribe.

Despite avoiding Reservation lands, the D-V Alternative segment on public lands would have a disproportionately high, albeit short-term, adverse human health impact on low income populations. This D-V Alternative would be constructed almost exclusively within a previously disturbed 330-foot- wide transmission corridor where an existing 500 kV line has been constructed.

The screening analysis as described in Section G.1.2 Environmental Justice Analysis of the Final EIR/EIS identified the Morongo Indian Reservation and Romoland for environmental justice analysis for the D-V Alternative. The D-V Alternative has a total of two census block groups that lie within one-half mile of the alternative route in Romoland. One of the block groups is classified as a medium-minority block group and the other is a low-minority block group. One is classified as a high income block group and the other is a medium-income block group. As no low-income or high-minority block groups would be affected by this alternative, no environmental justice impacts would occur in Romoland as a result of the D-V Alternative.

The D-V Alternative has a total of three census block groups that lie within one-half mile of the route within the Morongo Indian Reservation. Of the three total block groups, one is classified as a high minority block group, one is classified as medium minority block group, and one is classified as a low minority block group. As there would be as many medium and low minority block groups affected as high minority block groups, no disproportionate impacts would occur to high minority populations within the Morongo Indian Reservation. No environmental justice impacts would occur to minority populations as a result of the D-V Alternative.

Of the three Morongo Indian Reservation census block groups identified that lie within one-half mile of the D-V Alternative route, two are classified as low-income block groups. None of the three block groups are classified as medium-income block groups, and one is classified as a high-income block group. Because more low-income block groups would be affected by the D-V Alternative than medium or high-income block groups, low-income populations within the Morongo Indian Reservation would be disproportionately impacted by this alternative.

While other impacts to the population in this area could be mitigated to be less than significant, one significant and unmitigable impact (Class I) would occur within the Morongo Indian Reservation. Section D.1 (Air Quality) of the Final EIR/EIS identified a significant and unmitigable impact (Class I) associated with the generation of dust and exhaust emissions that could be a nuisance and hazard to populations on the Morongo Indian Reservation during construction of the selected alternative (Impact AQ-1). Although only two low-income block groups would be affected by the Project, because there is only one medium-income block group and no high-income block groups affected, this would constitute a significant and unmitigable environmental justice impact (Class I) in this location.

Air quality impacts associated with the D-V Alternative are described in Section D.11.6.1 Devers-Valley No. 2 Alternative of the Final EIR/EIS. Air quality impacts would occur during the construction period of approximately 24 to 28 months as described in Section B.3.7 Construction Activities of the Final EIR/EIS. Table 10 of the MMCRP (Appendix C) contains mitigation measures regarding fugitive dust that will be followed during construction.

As described in Section G.1.2 of the Final EIR/EIS, no adverse environmental effects, or effects on human health as they pertain to environmental justice were identified with the selected alternative on National Forest System lands. As described in Section G.1.2.3 Alternatives of the Final EIR/EIS, no environmental justice impacts would occur to minority or low-income populations as a result of the DSWTP Alternative segments of the selected alternative.

The CEQ published Environmental Justice Guidance Under the NEPA (CEQ, 1997) that states "Under NEPA, the identification of a disproportionately high and adverse human health or environmental effect on a low income population, minority population, or Indian tribe does not preclude a proposed agency action from going forward, nor does it necessarily compel a conclusion that a proposed action is environmentally unsatisfactory. Rather, the identification of such an effect should heighten agency attention to alternatives (including alternative sites), mitigation strategies, monitoring needs, and preferences expressed by the affected community or population."

3.4 Relationship to BLM and other Agency Plans, Programs, and Policies

3.4.1 Government to Tribal Government Consultation under Section 106

BLM consulted with 60 representatives of 27 Tribal Governments potentially affected by the proposed project and the representatives of 26 Tribal Governments potentially affected by the D-V Alternative, a portion of which passed through Reservation Lands (ultimately not selected). Appendix 8 of Volume 3 of the Draft EIR/EIS describes this consultation as well as the responses received.

BLM invited the Agua Caliente Band of Cahuilla Indians, Ak-Chin Indian Community, Augustine Band of Cahuilla Indians, Cabazon Band of Mission Indians, Cahuilla Band of Mission Indians, Campo Band of Kumeyaay Indians, Chemehuevi Indian Tribe, Cocopah Indian Tribe, Colorado River Indian Tribes, Fort Mc Dowell Yavapai Nation, Fort Mojave Indian Tribe, Fort Yuma Quechan Tribe, Gila River Indian Community, Havasupai Tribe, Hopi Indian Tribe, Hualapai Tribe, Kaibab Paiute Tribe, Manzanita Band of Mission Indians, Morongo Band of Mission Indians, Pechanga Band of Mission Indians, Pauma-Yuima Band of Mission Indians, Ramona Band of Mission Indians, Rincon Band of Mission Indians, Salt River Pima-Maricopa Indian Community, San Manuel Band of Mission Indians, Santa Rosa Band of Cahuilla Indians, Soboba Band of Luiseno Indians, Tohono O'odham Nation, Torres-Martinez Desert Cahuilla Indians, Twenty-Nine Palms Band of Mission Indians, Yavapai-Apache Nation, and the Yavapai-Prescott Indian Tribe (Tribes) to consult on this Undertaking, and has invited those Tribes expressing an interest in the Undertaking to concur in the PA (Appendix A), with the further understanding that, notwithstanding any decision by these Tribes to decline concurrence, BLM will continue to consult with these Tribes throughout the implementation of this PA. The Pechanga Band of Mission Indians, the San Manuel Band of Mission Indians, and the Soboba Band of Luiseno Indians are concurring parties to the PA.

3.4.2 U.S. Fish and Wildlife Service

Consultation under Section 7 of the Endangered Species Act

The Endangered Species Act (16 U.S.C. 1531-1543) and subsequent amendments set forth requirements for the conservation of endangered and threatened species and the ecosystems upon which they depend. Section 7 requires federal agencies, in consultation with and with the

assistance of the Secretary of the Interior or the Secretary of Commerce, as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. The USFWS and National Marine Fisheries Service share responsibilities for administering the Act. Regulations governing interagency cooperation under Section 7 are found at 50 CFR Part 402.

The BO was issued at the conclusion of consultation (January 11, 2011) and included a statement authorizing a take that may occur incidental to an otherwise legal activity, with the exception of the milk-vetch, and that the levels of anticipated take are not likely to result in jeopardy or adversely affect the recovery of the Stephens' kangaroo rat, Coachella Valley fringe-toed lizard, flat-tailed horned lizard, or desert tortoise (Appendix B).

Right-of-Way Grant – Crossing Coachella Valley NWR

The 3,709-acre Coachella Valley National Wildlife Refuge was established by the USFWS in 1985 to protect the threatened Coachella Valley fringe-toed lizard.

In 1989, the BLM granted a ROW to SCE for the DPV2 transmission line proposed at that time. This ROW includes land managed by the BLM and USFWS. The USFWS recognized that SCE acquired a ROW through the Coachella Valley National Wildlife Refuge in1979, which pre-dated the creation of the Refuge, which occurred in 1985.

Habitat Conservation Plans – Riverside County

Several of the applicant proposed measures for biological resources listed in the Final EIR/EIS (see Table D.2-6. Applicant Proposed Measures – Biological Resources) state that SCE should participate in habitat banking programs and provide funding for monitoring programs that may be undertaken through the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Implementation of Mitigation Measures B-13a (Demonstrate compliance with the Western Riverside County MSHCP) and B-13b (Implement the Best Management Practices required by the Western Riverside County MSHCP) would result in compliance with the provisions of the Western Riverside County MSHCP (see Appendix C).

3.4.3 National Historic Preservation Act Section 106 Consultation

In the context of a federally permitted undertaking, such as the Project, the "significance" of cultural resources must be determined by the Federal Lead Agency in consultation with the State Historic Preservation Office (SHPO) and other interested parties. Any action, as part of an undertaking, that could affect a "significant" cultural resource is subject to review and comment under Section 106 of the NHPA (36 CFR 60.6). Cultural resources that retain integrity and meet one or more of the criteria of significance (36 CFR 60.4) qualify as significant and are eligible for listing on the National Register of Historic Places (NRHP); such resources must be managed in compliance with the Advisory Council on Historic Preservation's regulations (36 CFR Part 800).

The BLM has coordinated studies and documents prepared under Section 106 of the NHPA with those completed under NEPA.

In accordance with Mitigation Measure C-1c (Appendix C), SCE will prepare a Historic Properties Treatment Plan (HPTP) for NRHP-eligible cultural resources to mitigate or avoid identified impacts. Treatment of cultural resources shall follow the procedures established by the Advisory Council on Historic Preservation for compliance with Section 106 of the NHPA and other appropriate State and local regulations. Avoidance, recordation, and data recovery will be used as mitigation alternatives (BLM B-9.4). The HPTP shall be submitted to the BLM for review and approval as identified in the Programmatic Agreement.

In accordance with Mitigation Measure C-3a (Appendix C), BLM, in coordination with SCE, has completed consultation with Native American and other Traditional Groups. SCE shall provide assistance to the BLM, as requested by the BLM, to complete required government-to-government consultation with interested Native American tribes and coordination with interested Tribal individuals (Executive Memorandum of April 29, 1994, and Section 106 of the NHPA) and other Traditional Groups to assess the impact of the Project on Traditional Cultural Properties or other resources of Native American concern.

3.5 U.S. Army Corps of Engineers Section 401/404 Permit

Section 404 of the CWA (CWA, 33 U.S.C. Section 1344) authorizes the ACOE to regulate the discharge of dredged or fill material to the waters of the U.S. and adjacent wetlands. It is likely that construction of transmission towers would occur under Nationwide Permit 12 (Utility Line Activities), issued by ACOE for categories of activities resulting in minimal adverse effects on the aquatic ecosystem on an individual and cumulative basis (see Section D.12.4 Applicable Regulations, Plans, and Standards of the Final EIR/EIS).

3.6 Consultation with other Agencies

Several other State and federal agencies will rely on information in the DPV2 Final EIR/EIS to inform their decisions to issue (or not) specific permits related to construction or operation of the selected alternative. The permits or other actions required prior to construction are included in Table A.4, Section A.3.5 Permits Required for the DPV2 Project of the DPV2 Final EIR/EIS. The consultation required for the selected alternative is described in the subsequent sections of this document.

3.6.1 Consultation with other Federal Agencies

Additional federal agencies with potential reviewing and/or permitting authority include the U.S. Environmental Protection Agency, U.S. Department of Defense – Army, Federal Aviation Administration, U.S. Bureau of Reclamation, Federal Communications Commission, and Federal Energy Regulatory Commission. Table A-4 of the DPV2 Final EIR/EIS describes these permitting requirements.

3.6.2 Consultation with State, Regional, and Local Agencies

In addition to the CPUC, State agencies such as the CAISO, Department of Transportation, Department of Fish and Game, Department of Water Resources, Regional Water Quality Control Board, State Lands Commission, Department of Toxic Substances Control, Air Resources Board, and SHPO would be involved in reviewing and/or approving the Project. Table A-4 of the Final EIR/EIS describes these permitting requirements.

Within the State of California there are also provisions in CEQA, State CEQA Guidelines, and the California Public Resources Code for the protection and preservation of significant cultural resources (i.e., "historical resources" and "unique archaeological resources"). California guidelines for assessing significant cultural resources parallel the federal criteria (Section 15064.5(a)(3) of the CEQA Guidelines (as amended)). The State CEQA Guidelines also require consideration of unique archaeological sites (Section 15064.5) (see also Public Resources Code Section 21083.2[h]).

Section 401 of the CWA requires that any activity, including river or stream crossings during transmission line construction that may result in a discharge into a State waterbody, must be certified by the applicable Regional Water Quality Control Board in California. This certification ensures that the proposed activity does not violate State and/or federal water quality standards.

No local discretionary (e.g., use) permits are required, since the CPUC has preemptive jurisdiction over the construction, maintenance, and operation of SCE facilities in California. SCE would still have to obtain all ministerial building and encroachment permits from local jurisdictions, and the CPUC's General Order 131-D requires SCE to comply with local building, design, and safety standards to the greatest degree feasible to minimize Project conflicts with local conditions. The CPUC's authority does not preempt special districts, such as the SCAQMD, or other State agencies or the federal government.

3.7 Land Use Plan Conformance and Consistency

The selected alternative of the Project would traverse federal, State, and local agency jurisdictions that have adopted land use plans and regulations that guide the type and intensity of land use. To determine the Project's consistency with these government plans and policies, a thorough review of all applicable policies was conducted. The Policy Screening Report (Appendix 2 of the Final EIR/EIS) lists all applicable federal, State, and local government policies that were identified for the Project. The applicable land use regulations, plans, and policies that apply to the approval of the Project's selected alternative include:

- BLM California Desert Conservation Area Plan as Amended;
- Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan, Public Draft, Volumes 1–4, October 15, 2004;

- BLM Northern and Eastern Colorado Desert Coordinated Management Plan, 2002;

- Santa Rosa and San Jacinto Mountains National Monument Proposed Management Plan, Final Environmental Impact Statement, and Record of Decision, October 2003;
- Riverside County, California:
    - Riverside County Comprehensive General Plan, 2003;
    - Pass Area Plan, 2003;
    - Western Coachella Valley Area Plan, 2003;
    - Eastern Coachella Valley Area Plan, 2003;
    - Desert Center Area Plan, 2003;
    - Lakeview/Nuevo Area Plan, 2003;
    - San Jacinto Valley Area Plan, 2003;
    - Harvest Valley/Winchester Area Plan, 2003.
- Western Riverside County Multiple Species Habitat Conservation Plan, 2003;
- City of Banning Draft General Plan, 2005;
- City of Beaumont General Plan, November 2000;
- City of Cathedral City Comprehensive General Plan, 2002;
- City of Coachella General Plan, 2002;
- City of Desert Hot Springs Comprehensive General Plan, 2000;
- Forest Service, Pacific Southwest Region:
    - Land Management Plan: Part 1 Southern California National Forests Vision, September 2005;
    - Land Management Plan: Part 2 San Bernardino National Forest Strategy, September 2005;
    - Land Management Plan: Part 3 Design Criteria for the Southern California National Forests, September 2005.
- City of Palm Springs General Plan, March 1993;

- City of San Jacinto Draft General Plan, 2000.

These policies are discussed in detail in Appendix 2 of the Final EIR/EIS.

3.7.1 Utility Corridors

The Project is located almost entirely within an existing utility corridor, Corridor K in the CDCA Land Use Plan, 1980, as amended, on federally managed lands and a de facto utility corridor on private lands. The D-V Segment of the Project would be constructed within an existing 330-foot-wide transmission corridor where an existing 500 kV line has been constructed and within a utility corridor designated by the San Bernardino National Forest Land Management Plan. The D-V Alternative would result in minimal temporary and permanent ground disturbance in the Santa Rosa San Jacinto Mountains National Monument and the San Bernardino National Forest areas.

The CRS to Cactus City and Cactus City to Devers Segment would be adjacent to the existing DPV1 transmission line, within Corridor K.

The location of the selected alternative in close proximity to other proposed and existing electrical transmission lines within existing utility corridors allows the BLM and FS to most effectively manage existing and future utility usage within the corridor and to minimize conflicts with other existing and proposed utility facilities. In addition, placement of the selected alternative within existing utility corridors minimizes surface disturbances by allowing for sharing of access and spur roads between facilities. Although all of the other alternatives would generally follow existing utility corridors, many would diverge from existing utility corridors and would be inconsistent with current land use plans.

3.8 Resources Specific Rationale

3.8.1 Visual Resource Management Considerations

Guidance for management of visual resources is typically included in land use plans through designation of visual resource management (VRM) classes. The CDCA Plan does not include VRM classifications but does include Multiple Use Classes (MUCs), which determine the level of use and development for lands managed under the CDCA Plan. In addition, the Recreation Element of the CDCA Plan specifies that VRM objectives and the contrast rating procedure be used to manage visual resources. The Recreation Element of the CDCA Plan states that since most management activities involve alteration of the natural character of the landscape to some degree, the BLM would take the following actions in order to effectively manage for these activities:

1. identify the appropriate levels of management, protection, and rehabilitation on all public lands in the CDCA, commensurate with VRM objectives in the multiple-use class

guidelines; and
2. evaluate proposed activities to determine the extent of change created in any given landscape and to specify appropriate design or mitigation measures using the BLM's contrast rating process.

The contrast rating process is a tool used to determine the extent of visual impact that proposed resource management activities would create in a landscape. It serves as a guide for reducing visual impacts to acceptable levels as defined by the visual management objectives and multiple use class guidelines.

Lands along the selected alternative were inventoried and assigned Interim VRM Classes for the purpose of contrast analysis in the EIR/EIS. The designation and adoption of Interim VRM classes conducted in support of a specific project is a BLM Field Office Manager decision. The Interim VRM Classes, in conjunction with the management objectives for MUC L and MUC M lands were used in this analysis to assess both the visual values, as well as the management objectives for the overall Project, including the selected alternative.

The selected alternative best meets resource management objectives for MUC L and M lands and interim VRM classes II and III. That portion of the Project within the South Coast Planning area does conform to VRM III Class Management Objectives.

All BLM lands covered by the CDCA Plan have been designated geographically into four MUCs based on the sensitivity of resources and types of uses for each geographic area (BLM 1980, as amended). The selected alternative is located on land in both the MUC Category L and M. These are defined as follows:

- Multiple-Use Class L (Limited Use) protects sensitive, natural, scenic, ecological, and cultural resource values. Public lands designated as 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.

- Multiple-Use Class M (Moderate Use) is based upon a controlled balance between higher intensity use and protection of public lands. This class provides for a wide variety of present and future uses such as mining, livestock grazing, recreation, energy, and utility development. Class M management is also designed to conserve desert resources and to mitigate damage to those resources which permitted uses may cause.

The CDCA Plan specifies that new gas, electric, and water transmission facilities and cables for interstate communication be allowed only within designated corridors. The Project falls within the Designated Utility Corridor K up to the Devers Substation in Palm Springs.

The San Bernardino Land Management Plan (LMP) was corrected on September 8, 2006, to include the Devers-Valley utility corridor and to remap the Scenic Integrity Objective as High. Based on this correction, implementation of the D-V Alternative transmission line with mitigation (Final EIR/EIS Mitigation measure V-40b and V-40c) would not conflict with the LMP standards for aesthetics management (Final EIR/EIS Table D.3-10).

3.8.2 Threatened and Endangered Species

All adverse impacts to federally listed, threatened, or endangered plant or animal species as identified in the Final EIR/EIS will be mitigated to the extent practical in order to avoid or minimize impacts. In addition, an approved BO was issued by the USFWS on January 11, 2011 (Appendix B). The provisions of the BO will be implemented as part of the Terms and Conditions of the amended ROW Grant. The BO concluded:

> *After reviewing the current status, environmental baseline for the action area, effects of the proposed action, and cumulative effects of the proposed project on the kangaroo rat, milk-vetch, fringe-toed and horned lizards, and tortoise, it is the Service's biological/conference opinion that the proposed action is not likely to jeopardize the continued existence of these species, and is not likely to destroy or adversely modify designated critical habitat for fringe-toed lizard or tortoise.*
>
> *We base this decision on the following reasons:*
>
> *1. The direct and indirect effects of the proposed project would be effectively minimized through implementation of the proposed Conservation Measures.*
>
> *2. The action area constitutes a small portion of each species' range, and permanent and temporary habitat losses would be offset by the permanent conservation of a like or greater amount of equivalent or better quality habitat.*
>
> *3. Most adult kangaroo rats and tortoise, some adult fringe-toed and horned lizards, and most milk-vetch plants within the disturbance area would be captured/salvaged and relocated to suitable habitat outside of the disturbance area. Given that no fringe-toed lizards, two horned lizards, and small numbers of kangaroo rats and tortoises were detected in the project footprint, we anticipate that small numbers of these species may need to be moved out of harm's way during construction and O&M activities. In addition, since these individuals would be moved relatively short distances from where they are found, we do not anticipate additional significant impacts to other resident individuals or populations of these species in the project footprint.*
>
> *4. With implementation of the Conservation Measures, the impacts of the proposed action are expected to be effectively minimized and offset, and are not likely to appreciably diminish the conservation role and function of designated critical habitat for fringe-toed lizard or tortoise in the action area or these species' ranges.*

3.8.3 Cultural Resources

All adverse impacts to cultural resources as identified in the Final EIR/EIS will be mitigated to the extent practical in order to avoid or minimize impacts. Prior to issuance of a NTP on this Project, the BLM will require preparation, review, BLM approval, and implementation of a comprehensive HPTP for avoiding and mitigating direct adverse effects on resources eligible for

listing in the NRHP. In addition, a PA between BLM, the Agua Caliente Tribal Historic Preservation Officer, the California SHPO, and SCE was effective as of July 6, 2010 (Appendix A). The PA contains stipulations to be implemented by BLM to take into account the effects of the undertaking on Historic Properties (defined as the Colorado River Switchyard [Midpoint Substation] to Devers Substation Component and the Devers Substation to Valley Substation Component; see Appendix A for additional details). The mitigation monitoring table for Cultural and Paleontological Resources is included in the MMCRP (Appendix C).

The Project route avoids impacts to cultural resources with the exception of the segment that traverses Alligator Rock, which includes one National Register District and several other potentially NRHP-eligible sites. The construction of this route may also result in indirect impacts to cultural resources, but it would avoid the specific effects on the N. Chuckwalla Mountains NRHP Quarry District.

The D-V segment of the Project would avoid crossing the more highly developed area of the Morongo Reservation north of I-10, reducing impacts to tribal values and associated cultural resources.

3.9 Summary of Conclusions

The selected alternative for the DPV2 Transmission Line Project is the action alternative that provides the most public benefits while reducing impacts to biological, visual, and cultural resources and the human environment for the following reasons:

- The project provides significant conformance with existing land use plans from a variety of agencies. Placement of large transmission lines within existing corridors, and in close proximity to existing lines, further diminishes impacts associated with indiscriminate proliferation of lines and associated construction throughout the desert and mountain environments.

- The Project (D-V segment, specifically) would avoid impacts associated with traversing high-density residential areas and tribal lands, thereby reducing Environmental Justice concerns to the extent possible. The Project incorporates the maximum mitigation possible to eliminate short-term adverse dust-related impacts during construction activities.

- Throughout the EIR/EIS process, the BLM consulted with the USFWS and CDFG in order to develop the maximum mitigation for biological resources in order to minimize impacts to the extent practical, including, but not limited to Habitat Restoration and Compensation Plans, Monitoring Programs, Best Management Practices, Worker Training and Environmental Awareness Plans, Translocation Plans for Desert Tortoise, Weed Management Plans, Avian and Bat Protection Plans, and Preconstruction Surveys. Development of the mitigation measures above resulted in the issuance of a BO on January 11, 2011, mandating implementation of these measures and plans.

- Throughout the EIR/EIS process, the BLM sought to involve tribes and SHPO in the development of mitigation measures that would minimize or avoid cultural resources to the extent possible. Over 30 mitigating measures were developed including but not limited to extensive inventory, monitoring, site evaluation, development of a PA and HPTP, worker and environmental awareness programs, further consultation with Native Americans and other Traditional Groups, and development of long term plans to protect NRHP eligible sites from direct impacts of project operation and maintenance.

- Amending the ROW Grant and issuing a special use easement to SCE for construction, operation, maintenance, and decommissioning of the Project contributes to the public interest by providing significant upgrades (in the form of redundancy and new capacity) to the existing transmission infrastructure that will be able to deliver a reliable electricity supply including the transmission of renewable energy from Riverside County to meet state and federal renewable energy goals.

4. Alternatives

4.1 Alternatives Fully Analyzed

The DPV2 500 kV Transmission Line Project Final EIR/EIS Appendix 1, Tables Ap. 1-2 and Ap. 1-3, contain the alternatives fully analyzed in the EIR/EIS and the alternatives eliminated from EIR/EIS consideration after detailed screening, respectively. The following sections contain a summary of the proposed action, the selected alternative, the no action alternative, the environmentally preferred alternative, and the alternatives not fully analyzed. For a complete description of the alternative evaluation process, the full range of alternatives considered in the Final EIR/EIS, and the alternatives eliminated from Final EIR/EIS consideration, see Appendix 1 of the Final EIR/EIS.

4.1.1 Proposed Action

As part of the 2006 DPV2 EIR/EIS, SCE proposed to construct a new 230-mile, 500 kilovolt (kV) electric transmission line between Devers Substation in California and Harquahala Generating Substation in Arizona and to upgrade 48.2 miles of 230 kV transmission line in California. The upgraded lines would connect directly to the new line. The entire project would span 278 miles, with approximately 176 miles in California and 102 miles in Arizona.

The proposed transmission line and facility upgrades are known collectively as the Devers–Palo Verde 500 kV No. 2 Transmission Project, or DPV2. The location of the proposed project was illustrated in Figures B-1 and B-2 (Devers-Harquahala portion) and Figure B-3 (West of Devers portion) in the Draft EIR/EIS. The Proposed Project had two major components: a new 500 kV line between Devers Substation and the Harquahala Generating Station (referred to as "Devers-Harquahala" or D-H), and the upgrade of a 230 kV line west of the Devers Substation (referred to as "West of Devers" or WOD).

Other system upgrades would occur in certain locations along the route, ultimately terminating at Vista Substation in San Bernardino.

4.1.2 Selected Alternative (The "Project")

The selected alternative is described in Section 1.2.2 *Selected Alternative* of this ROD.

4.1.3 No Action Alternative

The No Action Alternative required under NEPA (40 C.F.R. 1502.14(c)) primarily serves as a basis for comparison. The definition of the No Action Alternative depends on the nature of the project and in the case of the proposed DPV2 Project the No Action Alternative describes what would occur without the federal agencies' (BLM and FS) approval. The Final EIR/EIS uses the CEQA term No Project Alternative to describe the No Action Alternative required by NEPA.

The No Project Alternative has been studied by SCE and the CAISO as part of the economic evaluation of DPV2 (CAISO, 2005). The economic studies demonstrated that there were sufficient economic and transmission system reliability benefits to pursue the Project over the No Project Alternative. In choosing the Project over the No Project Alternative, the CAISO showed that in addition to some reliability benefits as well as substantial economic benefits could occur for California ratepayers with DPV2.

The economic studies done by CAISO for DPV2 show that by generally improving the efficiency of the transmission grid, the power supplied to California customers would come from different generators as a result of the Project (CAISO, 2005). Reducing generation from older and less efficient power plants in California and increasing generation from renewable energy facilities in California would provide an air emissions decrease in California. This shift in energy production will result in a net annual reduction of NOx emissions. Under the No Project Alternative, these power supply changes and emission benefits would not occur.

Under the No Project Alternative, construction and operation of DPV2 would not occur. The baseline environmental conditions for the No Project Alternatives are the same as for the Project. These conditions are described in the Final EIR/EIS for each environmental discipline as the "environmental baseline" or "setting" in Section D. The baseline conditions would continue to occur into the future, undisturbed, in the absence of Project-related construction activities.

The objectives and purpose and need of the Project would remain unfulfilled under the No Project Alternative. This means that the projected economic benefits of the Project would not occur, which could result in additional demand-side and supply-side actions becoming more viable. Additional demand response and energy conservation may occur, and supply-side actions could include accelerated development of low- cost generation or other new transmission projects. For example, additional transmission import capability would not be added, and the additional market competition and improved system reliability and operating flexibility associated with the Project would not occur.

Demand-side management (e.g., conservation) and small-scale, localized generation (i.e., distributed generation or DG) could play an increased role in the SCE service territory under the No Project Alternative. Normally, demand-side management is fully pursued where technically and economically feasible. Under the No Project Alternative, the costs of developing the Project could be diverted to subsidize or improve the economic feasibility of some demand-side projects, although 1,200 MW of peak load reduction would not be achievable for the cost of the Project. Because reductions in the cost of energy supplies enabled by the Project would not occur, the access to low-cost energy provided by the Project would not occur and the enhanced competition among generating companies would not occur. This means that under the No Project Alternative, a greater level of demand-side control could become economically feasible.

Providing new power supply to meet California's growing demand occasionally involves development of generation, such as conventional, renewable, and DG, or other major transmission projects. The No Project Alternative could, however, accelerate development of alternate facilities. The specific configuration of alternate facilities would vary depending on a number of uncontrollable factors (e.g., energy cost, need, market forces). Since the primary objectives of the Project are economic, new alternate facilities under any scenario would need to be economically competitive for developers to pursue. Such new facilities would probably be installed in locations with convenient and economical access to fuel supplies, existing transmission facilities, and load centers. Construction and operation of new generation and transmission projects would be subject to separate permitting processes that would need to be completed in the future. Because the Project has been a subject of the planning and permitting processes for many years, it is doubtful that any major new generation or transmission projects would be able to come online any earlier than the expected DPV2 500 kV Transmission Line Project in service date.

4.1.3.1 Environmentally Preferred Alternative

The conclusions in Sections E.2.1 and E.2.2 of the Final EIR/EIS for various alternatives result in the following environmentally superior alternatives and the BLM agency preferred alternatives:

- Harquahala Junction Switchyard (no longer part of the project);
- Proposed Project route from Harquahala Switchyard to east of Alligator Rock (no longer part of the project);
- Alligator Rock–North of Desert Center Alternative to west of Alligator Rock (not selected);
- Route from west of Alligator Rock to Devers Substation (selected);
- The SCE Midpoint Substation and the DSW-Midpoint Substation (CRS) are equally environmentally superior/preferred (CRS selected, subject to the focused Final Supplemental EIR, CPUC, April 29, 2011);

- Proposed West of Devers upgrades unless determined to be infeasible, in which case the D-V Alternative would be constructed. (D-V segment selected).

The Environmentally Superior/Preferred transmission line route is illustrated in Figures ES-4a and ES-4b in the Executive Summary of the Final EIR/EIS.

4.2 Alternatives Not Fully Analyzed

4.2.1 Other Project Alternatives

4.2.1.1 Convert DPV1 from Alternating Current to High-Voltage Direct-Current Transmission Line

This alternative would modify the existing DPV1 500 kV transmission line to convert DPV1 from an alternating current (AC) line to a high-voltage direct-current (HVDC) line. Converting DPV1 from AC to HVDC would increase California's transmission import capability from the Southwest and would enhance and support the competitive energy market in the Southwest. The conversion to HVDC would add sufficient transmission capability to satisfy Project objectives, but the cost of this alternative would exceed the cost of the Project. Combining the capacity of DPV1 and DPV2 into a single HVDC line, as would occur under this alternative, would decrease the reliability and flexibility of the transmission network.

4.2.1.2 Underground Alternative

In order to construct an underground 500 kV transmission line, insulated power cables would be placed underground along specific high-impact segments or the entire transmission line alignment from Harquahala Substation (now not applicable) to Devers Substation. Undergrounding a 230 kV line for the West of Devers segment would be feasible and has been completed by SCE and Pacific Gas and Electric; however, each circuit would require a 3-foot continuous trench creating much greater construction and habitat disturbance impacts than with the overhead selected alternative.

There are four underground technologies for 500 kV that are commercially available: High-Pressure Fluid Cables; Self-Contained Fluid-Filled; Solid Dielectric Transmission Cables; and Compressed Gas Insulated Transmission Lines. All of the four potential undergrounding technologies would be legal and feasible under regulations. However, none of the technologies have been implemented at 500 kV in the United States close to the length of even a portion of the selected alternative and there has only been limited implementation in other countries. Therefore, as discussed in more detail in Section 4.4.3 of Appendix 1 of the Final EIR/EIS, the reliability of underground 500 kV technologies for use in the Underground Alternative has not been fully demonstrated.

4.2.1.3 Conservation and Demand-Side Management

As presented in the Final EIR/EIS, for the past 30 years, while per capita electricity consumption in the United States has increased by nearly 50 percent, California electricity use per capita has been relatively flat. This achievement is the result of continued progress in cost-effective building and appliance standards and ongoing enhancements to efficiency programs implemented by investor-owned utilities, customer-owned utilities, and other entities. Since the mid-1970s, California has regularly increased the energy efficiency requirements for new appliances sold and new buildings constructed here. In addition, in a creative and precedent-setting move, the CPUC in the 1980s de-coupled the utilities' financial results from their direct energy sales, facilitating utility support for efficiency programs. These efforts have reduced peak capacity needs by more than 12,000 MW and continue to save about 40,000 gigawatt hours per year of electricity (CPUC & CEC, 2005). SCE's 2005 Energy Efficiency Annual Report states that the 2004 results from all of SCE's 2004-2005 energy efficiency programs provided nearly 950 million kilowatt hours of net annualized energy savings, 175 MW of net peak demand reduction, and over $570 million of resource benefits (SCE, 2005).

Rationale for Elimination

As presented in the Final EIR/EIS, the Conservation and Demand-Side Management Alternative would not increase California's transmission import capability from the Southwest; nor would it enhance and support the competitive energy market in the Southwest. Therefore, this alternative would not meet most of the stated objectives of the Project.

Demand response programs are the most promising and cost-effective options for reducing peak demand on California's electricity system. Although the CPUC adopted demand reduction targets for investor-owned utilities in 2003, such as SCE, demand response programs have failed to deliver their savings targets for each of the last three years and appear unlikely to meet their targets for next year (CEC, 2006).

4.2.1.4 Distributed Generation

As presented in the Final EIR/EIS, DG is generally considered to be generation, storage, or demand-side management devices, measures, and/or technologies connected to the distribution level of the transportation and distribution grid, usually located at or near the intended place of use. There are many DG technologies, including microturbines, internal combustion engines, combined heat and power applications, fuel cells, PVs and other solar energy systems, wind, landfill gas, digester gas and geothermal power generation technologies. Distributed power units may be owned by electric or gas utilities, by industrial, commercial, institutional or residential energy consumers, or by independent energy producers. DG is the generation of electricity from facilities that are smaller than 50 MW in net generating capacity. Local jurisdictions — cities, counties and air districts — conduct all environmental reviews and issue all required approvals or permits for these facilities. Most DG facilities are very small; for example, a fuel cell can provide power in peak demand periods for a single hotel building.

While DG technologies are recognized as important resources to the region's ability to meet its long-term energy needs, DG does not provide a means for SCE to meet its objectives for the Project because of the comparatively small capacity of DG systems and the relatively high cost.

As presented in the Final EIR/EIS, in addition, since it is usually located at or near the intended place of use, the DG Alternative would not increase California's transmission import capability from the Southwest and nor would it enhance and support the competitive energy market in the Southwest. Therefore, this alternative would not meet most of the stated objectives of the Project.

5. Agency and Public Involvement

5.1 Scoping

A Notice of Intent was published in the Federal Register, December 7, 2005, announcing the preparation of a joint EIR/EIS for the DPV2 Transmission Line Project. Public scoping meetings were held on:

- November 1, 2005, at 6:00 p.m. in Blythe, California;
- November 2, 2005, at 3:00 p.m. and 7:00 p.m. in Beaumont, California;
- November 3, 2005, at 3:00 p.m. and 7:00 p.m. in Palm Desert, California;
- January 18, 2006, at 2:00 p.m. in Avondale, Arizona;
- January 18, 2006, at 6:30 p.m. in Tonopah, Arizona; and
- January 18, 2006, at 2:00 p.m. in Quartzsite, Arizona.

The scoping process for the Project was designed to solicit input from the public, from federal, State, and local agencies, and from other interested parties on the range of issues that should be addressed in the Draft EIR/EIS. The scoping process was also intended to identify significant issues related to the Project. The Project and alternatives were revised to address comments and concerns raised during the scoping process.

5.2 Draft EIS Public Comment Period

A Notice of Availability (NOA) of the Draft EIR/EIS was published in the Federal Register on July 28, 2006. This initiated a 90-day public comment period. The NOA was mailed to over 4,347 interested parties, agencies, county and city departments, special districts, property owners, and occupants on or adjacent to the proposed DPV2 Transmission Line Project and alternative routes. A second NOA was mailed to 5,191 people to correct a mailing error, to announce that the D-V Alternative had become SCE's preferred route, and to announce an

additional Informational Workshop and Public Participation Hearing on July 24, 2006. Informational Workshops on the Draft EIR/EIS were held on:

- June 6, 2006, at 2:00 p.m. and 7:00 p.m. in Tonopah, Arizona;
- June 7, 2006, at 2:00 p.m. and 5:00 p.m. in Beaumont, California;
- June 8, 2006, at 3:00 p.m. in Palm Desert, California; and
- July 24, 2006, at 4:00 p.m. in Beaumont California.

Public Participation Hearings on the Draft EIR/EIS were conducted on:

- June 6, 2006, at 7:00 p.m. in Beaumont, California;
- June 7, 2006, at 7:00 p.m. in Palm Desert, California; and
- July 24, 2006, at 7:00 p.m. in Beaumont, California.

5.3 Final EIS Public Comment Period

The Final EIR/EIS was distributed to a variety of federal, State, and local government agencies, elected officials, environmental organizations, Native American tribes, and other interested parties for review. A NOA for the Final EIR/EIS was published in the Federal Register on October 24, 2006. This started a 30-day public review period for the Final EIR/EIS. The BLM has considered all comments received on the Final EIR/EIS in the development of this ROD. In addition, the BLM and FS will:

1. distribute a news release about the ROD in the local and regional media;
2. send the ROD to all those on the distribution list; and
3. make the ROD available on the BLM website and to all who request a copy.

5.4 Summary of Consultation with Other Agencies

The Final EIR/EIS contains all comments on the Draft EIR/EIS and responses thereto. Responses to comments focused on significant environmental issues as raised in the comments, as specified by Section 15088(b) of the State CEQA Guidelines and 40 CFR 1503.4 under CEQ regulations.

Comments were received from 18 public agencies or their representatives, one Native American Tribe, 10 organizations, nonprofits, and private companies, 29 private citizens, three speakers at

public meetings, and from the applicant.

Many comments alleged either a deficiency in analysis or wrongful methodology, but did not provide any specific data or information that would cause BLM to reach alternative conclusions outlined in the Final EIR/EIS, or would mandate supplemental analysis.

The comments in their entirety and the BLM and CPUC's responses to comments can be found in the Scoping Report at the following address:

http://www.cpuc.ca.gov/Environment/info/aspen/dpv2/dpv2.htm

6. Final Agency Action

6.1 BLM Decision

6.1.1 ROW Authorization

The BLM uses SF-2800-14 BLM (ROW Grant) to authorize a ROW for the selected alternative for the DPV2 Transmission Line Project. The grant includes the POD and all terms, conditions, stipulations, and measures required as part of the grant authorization. Consistent with BLM policy, the DPV2 Transmission Line Project ROW grant will include a diligent development and performance bonding requirement for installation of facilities consistent with the approved POD. Construction of the 500 kV transmission line and facilities must commence within two years of the effective date of the ROW grant. SCE must obtain a NTP from BLM and FS before it can commence construction.

In accordance with section 102(c) of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), the regulations of the Council on Environmental Quality that implement NEPA (40 CFR parts 1500-1508), it is my decision to approve issuance of:

> **a right-of-way grant to SCE for construction, operation, maintenance, and decommissioning of a transmission line, ancillary facilities, and access roads for the selected alternative (the "Project") for the Devers-Palo Verde No. 2 Transmission Line Project, as described in the selected alternative herein, across public lands administered by the BLM.**

The originally proposed DPV2 transmission line ran from Arizona through California and was analyzed in the DPV2 Transmission Line Project Final EIR/EIS, issued October 24, 2006. This decision approves as the Project only those transmission line segments within California and described as the selected alternative, and such decision will take the form of a BLM ROW Grant amendment to the 1989 ROW (CACA-17905/A) issued under 43 CFR Part 2800 regulations. This decision approves issuance of a 130-foot wide ROW to accommodate a 500 kV single-circuit transmission line, helicopter pads, and access roads where the transmission line would be adjacent to DPV1. In some locations, the presence of utility or canal structures may require that the new 500 kV ROW be separated from the DPV1 ROW. In these locations where a separate ROW will be required, the grant is for a 160-foot-wide ROW on BLM lands. Use of the ROW will be subject to the terms and conditions contained in the ROW grant and POD; MMCRP Tables (Appendix C); BO (Appendix B); and PA (Appendix A). The grant will expire 30 years from issuance, unless, prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of the grant or of any applicable federal law or regulation. The grant is renewable in accordance with 43 CFR 2807.22(a). If renewed, the ROW grant shall be subject to the laws and regulations existing at the time of renewal and any other terms and conditions that the federal authorized officer deems necessary to protect the public interest. Additionally, SCE may, in accordance with BLM's ROW grant regulations, assign the ROW grant to another party with BLM's approval. Construction may be phased, and the BLM requires the initiation of construction within two years of the effective date of the ROW grant. In addition, initiation of construction will be conditioned upon final BLM approval of the

construction plans. This approval will take the form of an official NTP.

This amendment will authorize SCE to use public lands described in Section 1.2.2 Selected Alternative to construct, operate, maintain, and decommission a 500 kV electrical transmission line from the CRS located near Blythe, California, to the Devers Substation in Palm Springs, California, a distance of approximately 115 miles; and from Devers Substation to the Valley Substation located in Romoland, Riverside County, a distance of 41.6 miles. The selected alternative is shown in Figures 1 through 3. This decision is conditioned, however, upon implementation of mitigation measures and monitoring programs as identified in the Final EIR/EIS and attached as Appendix C of this ROD. All mitigation measures, listed in Appendix C of this ROD, shall be incorporated into the ROW grant as terms and conditions. SCE shall comply with:

- all terms, conditions, and stipulations set forth in the ROW grant;
- the POD;
- the BO issued by the FWS; and
- the PA regarding the management of the cultural resources.

Any party to the case who is adversely affected by this decision has the right of appeal to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations at Title 43, Code of Federal Regulations, sec. 4.411 (see Appendix E). If a decision is published in the Federal Register, a person not served with the decision must transmit a notice of appeal in time for it to be received in the appropriate office no later than 30 days after the date of publication.

It is my decision to approve a 500 kV transmission line right-of-way grant to Southern California Edison 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. This decision is effective on the date this Record of Decision is signed.

Approved by:

J L R Kalish — 7/13/2011

John R. Kalish — Date
Palm Springs-South Coast Field Manager
Bureau of Land Management

6.2 Forest Service Decision

6.2.1 Decision to Authorize Devers-Valley No. 2

Based on my review of the analysis as documented in the Final EIR/EIS, and a subsequent evaluation of the biological and archeological/heritage resources on National Forest System lands, I have decided to authorize the construction, operation, and maintenance of the Devers-Valley No. 2 (D-V 2) project on National Forest System lands under my jurisdiction.

The approved route as described in the Final EIR/EIS crosses approximately 2 miles of National Forest System lands. Authorization of this project will be implemented by issuing a 50 year special use easement that incorporates the existing D-V 1 transmission line, while authorizing the construction, operation, and maintenance of project facilities associated with the D-V 2 transmission line, including any necessary fiber optic lines. This decision does not change the location or dimensions of the existing D-V 1 easement, and all authorized activities are limited to the existing 330 foot wide easement area. No roads are authorized by this decision. Although the D-V Alternative corridor crosses through a designated wilderness area, the corridor itself was specifically excluded from wilderness by Congress (see Section 2.2.2 Transmission Line Route Alternatives: West of Devers of the Final EIR/EIS). No activities within designated wilderness are authorized by this decision.

The FS uses FS-2700-31 (easement) to authorize the special use easement for the Project; it includes the Project description and all other terms, conditions, stipulations, and measures required as part of the special use easement authorization. FS approval of location, design and plans (or standards, if appropriate) of all developments within the authorized area will be required prior to construction. SCE must obtain a NTP from the FS before it can commence construction on National Forest System lands.

The Forest Service cannot issue a special use authorization to SCE without ensuring its consistency with the San Bernardino National Forest Land Management Plan (LMP) and the Santa Rosa and San Jacinto National Monument Management Plan (Monument Plan). I have determined that issuance of a special use authorization for the Devers-Valley No. 2 Transmission Line is consistent with the LMP (2006) and the FS portion of the Monument Plan.

The Biological Assessment /Biological Evaluation (BA/BE) for the project on National Forest System lands determined that with mitigation, there would be no effect on any Threatened, Endangered, Proposed or Candidate plant or wildlife species or designated or proposed critical habitat on the National Forest.

Implementation of the proposed action as described may affect individual plants and animals, but is not likely to result in a trend toward federal listing or loss of viability for any species.

The analysis of effects on MIS species does not indicate a significant concern for any MIS potentially affected by the DPV2 project. The conservation measures incorporated into project design will effectively reduce potential impacts to the MIS present in the Project Area. The scope of this project is too small relative to the landscape setting across the San Bernardino

National Forest to have a measureable effect on MIS populations or their habitats at the Forest or Province level.

This decision applies only to National Forest System lands. This decision is conditioned on the terms of the Special Use Easement and implementation of mitigation measures and monitoring programs as identified in the Final EIR/EIS and the FS BE/BA, Wildlife and Botany Reports, and Management Indicator Species Evaluations (2009) as described this ROD. Mitigation Measures and Monitoring requirements for the Forest Service Portion of the project that are in addition to the general monitoring and mitigation measures in the Final EIR/EIS are included in Appendix G.

Construction of the Project may be phased. As required by the standard terms of the Special Use Easement, initiation of construction is conditioned upon final FS approval of the construction plans. This approval will take the form of a NTP for each phase of construction.

The Forest Service participated as a cooperating agency for the NEPA process for the selected alternative for the DPV2 Transmission Line Project. The regulations promulgated to implement NEPA (40 CFR 1506.3) provide that a cooperating agency may adopt, without recirculating, the environmental impact statement of a lead agency when, after an independent review of the statement, the cooperating agency concludes that its comments and suggestions have been satisfied. Based on my independent review of the statement, I have concluded that the Forest Service comments, suggestions, and requirements have been satisfied and I am adopting the Final EIR/EIS and associated record to support my decision.

In accordance with Forest Service regulations for processing special use applications (36 CFR 251.54(g)(2)(iii)), I am deferring to the CPUC and BLM determination of the overall purpose and need for the Project as described in the Project record, including CPUC Decision D.07-01-040, as modified by D.09-11-007. Based on their findings, I have concluded occupancy of National Forest System lands is appropriate and the Project is in the public interest.

6.2.2 Administrative Review (Appeal) Opportunities

This decision is subject to administrative review (appeal) pursuant to 36 CFR Part 215. In accordance with 36 CFR 215.11, for decisions made in conjunction with other Federal agencies, only that portion of the decision made by the Forest Service affecting National Forest System lands is subject to appeal under this part. The appeal must be filed (regular mail, fax, email, hand-delivery, or express delivery) with the Appeal Deciding Officer at:

Regular Mail:
Appeal Deciding Officer
Tom Tidwell, Chief
USDA Forest Service
Attn: EMC Appeals
Mailstop: 1104
1400 Independence Ave., SW
Washington, D.C. 20250-1104

Private Carrier or Hand Delivery*:
Appeal Deciding Officer
Tom Tidwell, Chief
USDA Forest Service
Ecosystem Management Coordination
Attn: Appeals
Yates BLDG., 3CEN
201 14th Street, SW
Washington, DC 20250

*Appeals may be hand delivered to this address between the hours of 8:00 a.m. to 5:00 p.m. Monday through Friday, excluding federal holidays. The main phone line which can be used for carrier deliveries is 202-205-0895. That number is staffed during regular business hours. Forest Service Headquarters Contacts for Appeals is on the web at:

http://www.fs.fed.us/emc/applit/wo_contacts.htm.

Electronic appeals must be submitted in a format such as an email message, plain text (.txt), rich text format (.rtf), portable document format (.pdf) or Word (.doc) to appeals-chief@fs.fed.us or fax to (202) 205-1012. In cases where no identifiable name is attached to an electronic message, a verification of identity will be required. A scanned signature is one way to provide verification.

Appeals, including attachments, must be filed within 45 days from the publication date of the legal notice for the ROD in the Sacramento Bee, the newspaper of record. Appeals and attachments received after the 45 day appeal filing period will not be considered. The publication date in the Sacramento Bee is the exclusive means for calculating the close of the appeal filing period. Those wishing to appeal this decision should not rely upon dates or timeframe information provided by any other source.

Individuals or organizations who submitted comments or other expression of interest during the 45-day comment period for the draft environmental impact statement may appeal this decision as described in 36 CFR 215.11(a). The notice of appeal must meet the appeal content requirements at 36 CFR 215.14.

6.2.3 Implementation Date

If no appeals are filed within the 45-day time period, implementation of the decision may occur on, but not before, 5 business days from the close of the appeal filing period. When appeals are filed, implementation may occur on, but not before, the 15th business day following the date of the appeal decision (if the Forest Service is affirmed).

Approved by:

FOR _____ 7/13/11

Randy Moore, Regional Forester — Date
Pacific Southwest Region
Forest Service

7. References

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8. Appendices

APPENDIX A
PROGRAMMATIC AGREEMENT

APPENDIX B
BIOLOGICAL OPINION

APPENDIX C
MITIGATION MEASURES

APPENDIX D
ALTERNATIVES

APPENDIX E
COLORADO RIVER ALTERNATIVES AS IDENTIFIED IN THE FINAL SUPPLEMENTAL EIR, CPUC, APRIL 2011

APPENDIX F
INFORMATION ON FILING APPEALS

APPENDIX G
FOREST SERVICE ADDITIONAL MITIGATION MEASURES

PROGRAMMATIC AGREEMENT
AMONG THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT-PALM SPRINGS/SOUTH COAST FIELD OFFICE, THE AGUA-CALIENTE TRIBAL HISTORIC PRESERVATION OFFICER, THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER, AND THE SOUTHERN CALIFORNIA EDISON COMPANY REGARDING THE PROPOSED SOUTHERN CALIFORNIA EDISON'S DEVERS-PALO VERDE 2 500 KV TRANSMISSION LINE PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WHEREAS, the United States Department of the Interior through the Bureau of Land Management (BLM) manages the public lands in the California desert in accordance with the 1980 California Desert Conservation Area Plan (CDCAP), as amended; the CDCAP designates Energy Production and Utility Corridors (CDCA Map 16) appropriate for the development and installation of electrical transmission and other utility lines across public lands; and

WHEREAS, Southern California Edison Company (Applicant) proposes to construct, operate and maintain an electric transmission system, communication facilities, and associated access roads within a designated utility corridor for its Devers-Palo Verde 2 Transmission Line Project (DPV2); and BLM has determined amending the right-of-way (ROW) for DPV2 across most of the BLM lands in accordance with the Federal Land Management and Policy Act (P.L. 940-579) constitutes an Undertaking as defined in 36 CFR § 800.16(y) of the Advisory Council on Historic Preservation Procedures (August 5, 2004); and

WHEREAS, in accordance with regulations at 36 CFR §800.14(b)(3) implementing Section 106 of the NHPA, BLM has consulted with the California State Historic Preservation Officers (hereinafter "the SHPO") according to 36 CFR §800.6(a), and notified and invited the Advisory Council on Historic Preservation (hereinafter "the Council") per 36 CFR §800.6(a)(1)(C) and the *Programmatic Agreement among the Bureau of Land Management, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers regarding the Manner in which BLM will meet its Responsibilities under the National Historic Preservation Act* to participate in consultation to resolve the potential effects of the Undertaking on Historic Properties; and

WHEREAS, as per their letter dated November 18, 2009 the Council has elected to not participate, at this time, in the consultation to resolve adverse effects of the Project; and,

WHEREAS, the Applicant, as grantee of the ROW, has participated in consultation per 36 CFR §800.2(c)(4), is willing to carry out certain stipulations of this PA under the oversight of BLM, and is an Invited Signatory to this PA; and

WHEREAS, a portion of the project is located on Agua Caliente Band of Cahuilla Indians Tribal Land, and in accordance with regulations at 36 CFR §800.14(b)(3) implementing §106 of the NHPA, BLM has consulted with the Agua Caliente Tribal Historic Preservation Officer (hereinafter "the Agua Caliente THPO") per 36 CFR §800.6(a), and notified and invited the

Agua Caliente THPO pursuant to 36 CFR §800.6(a)(1)(C) to participate in consultation to resolve any adverse effects of the Undertaking on Historic Properties, and the Agua Caliente THPO is a Signatory to the PA; and

WHEREAS, pursuant to section 101(d)(6)(B) of the NHPA, 36 CFR 800.2(c)(2)(ii), the American Indian Religious Freedom Act (42 U.S.C. 1996; AIRFA), Executive Order 13175, and section 3(c) of the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001-13; NAGPRA), and the Executive Memorandum of April 29, 1994 (59FR22951) BLM has invited the Agua Caliente Band of Cahuilla Indians, Ak-Chin Indian Community, Augustine Band of Cahuilla Indians, Cabazon Band of Mission Indians, Cahuilla Band of Mission Indians, Campo Band of Kumeyaay Indians, Chemehuevi Indian Tribe, Cocopah Indian Tribe, Colorado River Indian Tribes, Fort Mc Dowell Yavapai Nation, Fort Mojave Indian Tribe, Fort Yuma Quechan Tribe, Gila River Indian Community, Havasupai Tribe, Hopi Indian Tribe, Hualapai Tribe, Kaibab Paiute Tribe, Manzanita Band of Mission Indians, Morongo Band of Mission Indians, Pechanga Band of Mission Indians, Pauma-Yuima Band of Mission Indians, Ramona Band of Mission Indians, Rincon Band of Mission Indians, Salt River Pima-Maricopa Indian Community, San Manuel Band of Mission Indians, Santa Rosa Band of Cahuilla Indians, Soboba Band of Luiseno Indians, Tohono O'odham Nation, Torres-Martinez Desert Cahuilla Indians , Twenty-Nine Palms Band of Mission Indians, Yavapai-Apache Nation, and the Yavapai-Prescott Indian Tribe (Tribes) to consult on this Undertaking, and has invited those Tribes expressing an interest in the Undertaking to concur in this PA, with the further understanding that, notwithstanding any decision by these Tribes to decline concurrence, BLM shall continue to consult with these Tribes throughout the implementation of this PA, and the Pechanga Band of Mission Indians, the San Manuel Band of Mission Indians, and the Soboba Band of Luiseno Indians are concurring parties to the PA; and,

NOW, THEREFORE, BLM, the SHPO, and the Agua Caliente THPO agree that BLM, to the extent of its legal authority, shall ensure that the following stipulations of this PA are implemented to take into account the effects of the Undertaking on Historic Properties.

COMPONENTS OF THE UNDERTAKING

The Undertaking includes the following two components:

A. COLORADO RIVER SWITCHYARD (MIDPOINT SUBSTATION) TO DEVERS SUBSTATION COMPONENT

1. Installation of approximately 110 miles of new 500-kV transmission line between the Colorado River Switchyard (Midpoint Substation) and Devers Substation located north of Palm Springs;

2. Construction of approximately 385 towers in this segment of the proposed project would be four-legged, single-circuit, lattice steel towers;

3. The proposed Colorado River Switchyard (Midpoint Substation) to Devers Substation component would be parallel and adjacent to the existing Devers-Palo Verde No. 1 transmission line (DPV1) and pass through the Alligator Rock Area of Critical Environmental Concern (ACEC) located south of I-10 and Desert Center. A North of Desert Center Alternative route has been proposed by the BLM to avoid crossing this ACEC. If this option were selected by the BLM, the DPV2 transmission line corridor would depart from the DPV1 corridor approximately 6 miles east of Desert Center and travel in a northwest direction for about 3 miles, crossing I-10. It would turn west-northwest for about 2 miles, then west for about 0.5 mile, where it would then turn southwest for about 1 mile to the Southern California Gas Pipeline ROW, which it would parallel for about 3 miles. The line would then head west-southwest for approximately 2 miles crossing the Southern California Gas Pipeline and I-10 until it rejoins with the DVP1 transmission line corridor. The North of Desert Center Alternative would require the construction of new access roads, spur roads and seven new deep ground rods (up to 330 feet deep). The ground rods would be installed adjacent to the gas pipelines by Southern California Gas Company to mitigate induced AC effects caused by the North of Desert Center Alternative route.

4. Construction of the Colorado River Switchyard (Midpoint Substation) and associated access roads located approximately 10 miles southwest of Blythe, California. The substation would provide interconnections with DPV1 transmission line. Two sites are being considered approximately 10 miles southwest of Blythe near Wiley Well Road. The substation would be constructed within a rectangular area measuring approximately 1,000 feet by 1,900 feet, resulting in approximately 44 acres of permanent disturbance. The 500 kV switching station would include busses, circuit breakers, and disconnect switches.

5. Construction of one series capacitor bank approximately 64 miles east of Devers Substation;

6. Construction of a new optical repeater facility 3 miles west of Blythe, California, within the DPV2 ROW;

7. Installation of a 500 kV line shunt reactor bank, static VAR compensator, dead-end structure, circuit breakers, and disconnect switches at Devers Substation;

8. Access roads, spur road construction, improvements, and other ancillary facilities (construction staging/laydown areas) associated with the construction of this transmission line.

B. DEVERS SUBSTATION TO VALLEY SUBSTATION COMPONENT

1. Installation of 42 miles of new 500-kV transmission line between the Devers Substation and Valley Substation in western Riverside County located adjacent to the existing Devers-Valley No. 1 500 kV line;

2. Construction of approximately 160 lattice steel single-circuit transmission line structures;

3. The existing Devers-Valley No. 1 Tower DV-59 and corresponding tower on DVP2 would be moved approximately 500 feet to the north.

4. Installation of a 500 kV dead-end structure, circuit breakers, and disconnect switches at Valley Substation;

5. Access roads, spur road construction, improvements, and other ancillary facilities (construction staging/laydown areas) associated with the construction of this transmission line.

STIPULATIONS

BLM shall ensure that the following stipulations are carried out:

I. DEFINITIONS

The definitions provided at 36 CFR § 800.16 and in these stipulations are applicable throughout this PA.

"Area of Potential Effects (APE)" means the following:

1. Refers to the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of Historic Properties, if any such properties exist. Both vertical (depth) and horizontal (width) disturbances are considered in developing the APE.

2. The APE shall include the entire area of spatially discrete Historic Properties (e.g., archaeological sites), if any part of such a property extends into the ROW and are subject to direct, quantifiable or foreseeable indirect project effects; except that management of linear cultural resources (e.g., NRHP-eligible roads and trails) or other resource types of extensive dimension shall not cause the APE to be extended beyond the ROW boundary.

3. The APE shall also include contributing elements of NRHP-eligible Historic Districts that are within the ROW and subject to direct, quantifiable or foreseeable indirect effects; the APE shall not include contributing elements of districts that lie outside the ROW or are not subject to direct, quantifiable or foreseeable indirect project effects.

"Cultural Resources" refers to any archaeological materials and sites dating to the Prehistoric, Historic or Ethnohistoric periods that are currently located on, or are buried beneath the ground surface; standing structures that are over 50 years old; and cultural and natural places that have importance for Native Americans.

"Concurring Parties" refers to invited parties, Tribes (excluding THPOs), and interested members of the public, who concur, through their signature, in this PA. Concurring parties may propose amendments to this PA.

"Day," singular or plural, refers to a calendar, rather than a business, day.

"Indian Tribe or Tribe" as defined in Section 301 of the National Historic Preservation Act, refers to an Indian tribe, band, nation, or other organized group or community, including a Native village, Regional Corporation or Village Corporation, as those terms are defined in section 3 of the Alaska Native Claims Settlement Act [43 U.S.C. 1602], which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

"Invited Signatory" refers to the Applicant, Southern California Edison. Invited Signatories have responsibilities within the consultation process described in this agreement and NHPA implementing regulations. Invited Signatories may propose amendments to this PA.

"Notice to Proceed" refers to a written authorization by the authorized officer which allows the holder to initiate surface disturbing activities. A notice to proceed applies only if specifically stipulated in the grant. A notice to proceed is usually used to allow a grant to be issued, while preventing the holder from starting surface disturbing activities before a plan of development is approved. The authorized officer can issue separate notices to proceed if the project involves distinct work phases and/or locations. Each notice to proceed will specify the nature of work, location, and dates to be authorized.

"Reviewing Signatories" refers to concurring parties and invited signatories of this PA. Reviewing signatories have responsibilities within the consultation process described in this agreement. In general, reviewing signatories will review documents and provide written comments as stipulated in this agreement, prior to those documents being reviewed and commented on by Signatories. Reviewing signatories may propose amendments to this PA.

"Right-of-Way" refers to public or Federal land authorized to be used or occupied pursuant to a right-of-way-grant.

"Right-of-Way-Grant" refers to a document authorizing the use of public or Federal lands for the construction, operation, maintenance, and termination of a project.

"Signatories" refers to the BLM, Agua Caliente THPO, and the California SHPO. Signatories have responsiblities within the consultation process described in this agreement. Signatories may propose amendments to this PA and have the exclusive authority to terminate the PA.

Tribal Land" as defined in Section 301 of the National Historic Preservation Act (see Appendix 5) refers to "(A) all lands within the exterior boundaries of any Indian reservation; and (B) all dependent Indian communities."

II. STANDARDS

A. PROFESSIONAL QUALIFICATIONS. All actions prescribed by this PA that involve the identification, evaluation, analysis, recordation, treatment, monitoring, and disposition of Historic Properties and that involve the reporting and documentation of such actions in the form of reports, forms or other records, shall be carried out by or under the direct supervision of a person or persons meeting, at a minimum, the *Secretary of the Interior's Professional Qualifications Standards* (PQS) for archaeology, history, or architectural history, as appropriate (48 FR. 44739). However, nothing in this stipulation may be interpreted to preclude any party qualified under the terms of this paragraph from using the services of properly supervised persons who do not meet the PQS.

B. DOCUMENTATION STANDARDS. Reporting on and documenting the actions cited in paragraph A. of this stipulation shall conform to every reasonable extent with the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (48 FR. 44716-44740), as well as, the California Office of Historic Preservation's Preservation Planning Bulletin Number 4(a) December 1989, *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format (ARMR Guidelines) for the Preparation and Review of Archaeological Reports*, and any specific county or local requirements or report formats as necessary.

C. CURATION STANDARDS. To the extent permitted under §§ 5097.98 and 5097.991 of the California Public Resources Code, the materials and records resulting from the actions cited in paragraph A of this stipulation shall be curated in accordance with 36 CFR Part 79. Where Federal lands are involved, all records and materials resulting from the actions cited in paragraph A of this stipulation shall be curated in accordance with 36 CFR Part 79 and the provisions of the NAGPRA, 43 CFR Part 10, as applicable. In California, curation and disposition of cultural materials obtained from state-owned lands and records pertaining to cultural resources on state-owned lands will be curated with materials obtained from federal lands. If cultural materials are recovered from private lands, BLM will seek to have the materials donated through a written donation agreement to be curated with other cultural materials. BLM will attempt to have all collections curated at one location.

III. AREA OF POTENTIAL EFFECTS

The Area of Potential Effects (APE) for the Undertaking is defined as follows:

A. APE DESCRIPTION. For the Colorado River Switchyard (Midpoint Substation) to Devers Substation, and Devers Substation to Valley Substation transmission lines, the APE will be a 150-foot wide corridor (see stipulation II.A and B, and attached map). The width of this corridor will not always be centered on the transmission

line; in all cases, it will have at least 50 feet on one side, but may be up to 100 feet on the other side in order to incorporate areas for new or existing access roads. For all transmission line access roads that are located outside the transmission line APE, the APE will include an additional 50-foot wide corridor around the access road. For all project components including, but not limited to, substations, pulling and splicing locations, and staging areas, the APE will be the footprint of each area as well as a 200-foot buffer in all directions from the perimeter of the footprint. For indirect effects on location, setting or cultural landscapes, the APE will be no more than 1/4 mile on either side of the transmission line, and potentially the same as the transmission line ROW unless Native American or public consultation produces credible evidence of a need to expand the APE.

B. AMENDING THE APE.

1. The APE of stipulation IV.A above encompasses an area sufficient to accommodate all of the proposed and alternative project components under consideration as of the date of the execution of this PA. If BLM determines in the future that unforeseen changes to the Undertaking may cause alterations in the character or use of Historic Properties, if any such properties exist, in a geographic area or areas beyond the extent of the original APE above, then BLM shall increase the size of that APE using the process set forth in stipulation IV.B2 below. BLM may choose, conversely, to decrease the size of the subject APE to accommodate the engineering design locations of transmission line structures, access roads, substations, and other components of the Undertaking.

2. Any signatory to this PA may propose that the APE established hereunder be modified. BLM shall notify the other signatories of the proposal and consult with the proposing signatory and the other signatories for no more than 7 days to reach agreement on the proposal. If the signatories agree to the proposal, then BLM will prepare a description and a map of the modification to which the signatories agree. BLM will keep copies of the description and the map on file for its administrative record and distribute copies of each to the other signatories, reviewing signatories and consulting parties within 30 days of the day upon which agreement was reached. Upon agreement hereunder to a modification to the APE that adds a new area, BLM shall follow the processes set forth in stipulations V–IX below to identify and evaluate Historic Properties in the new APE area, assess the effects of the Undertaking on any Historic Properties in the new area, and provide for the resolution of any adverse effects to such properties, known or subsequently discovered. If the signatories cannot agree to a proposal for the modification of the APE, then they will resolve the dispute in accordance with stipulation XIII below.

IV. IDENTIFICATION OF HISTORIC PROPERTIES

BLM, in consultation with the SHPO, Agua Caliente THPO, the Tribes, the Applicant, and the public, shall make a reasonable and good faith effort to identify Historic Properties in the Undertaking's APE.

A. A literature search (Class I Survey, as defined in BLM Manual 8100 Guidance) has been completed for the present APE as defined in stipulation IV.A, and will be completed for any revisions thereof. All information on the location of cultural resources are treated as confidential and not released to the public or other unauthorized entity, consistent with Section 304 of the NHPA (16 U.S.C. 470w-3(a)-(c)), and Section 9 of the Archaeological Resources Protection Act of 1979 (16 U.S.C 470aa-mm), as amended.

B. In order to locate Historic Properties that may be affected by the Undertaking, BLM shall ensure that a recent (within the past 10 years) intensive pedestrian cultural resource survey (Class III Survey, as defined in BLM Manual 8100 Guidance) is completed within the APE, where physically reasonable. The pedestrian survey transect interval shall not exceed 15 meters.

Portions of the Devers-Valley segment are composed of hazardous steep slopes. These areas (totaling 293 acres) are not accessible by foot, and therefore, where not subjected to intensive pedestrian surveys. Due to the steep slope and inaccessibility by foot, the likelihood of encountering cultural or historical resources in these areas is extremely low.

1) All prehistoric and historic sites identified during Class III inventories in California were/will be recorded on new or updated California Department of Parks and Recreation Form DPR 523 (Series 1/95), using the "Instructions for Recording Historical Resources" (Office of Historic Preservation, March 1995). The cultural resources contractor shall obtain permanent site numbers from the California Historical Resources Information System (CHRIS) Eastern Information Center (EIC) at UC Riverside, CA. Final approved site forms shall be submitted to the CHRIS EIC. Permanent site numbers shall then be used in all final reports prepared pursuant to the requirements of this PA.

2) Previously unknown traditional cultural properties identified during Class III inventories and/or through consultations with Tribes may be recorded on the DPR Form 523 for resources in California, unless a Tribe or an individual from a Tribe objects. If such objection arises, the properties may be recorded on a form and in a manner that is in accordance with the recommendations of the Tribe or of the individual. If the traditional cultural property is also a historic or archaeological site, those components of site will be recorded on the appropriate DPR form and filed with CHRIS EIC.

3) Over the past 30 years, seven cultural overview and survey reports have been conducted within the APE on behalf of the proposed DPV2 project:

- Bean, Lowell John, Henry F. Dobyns, M. Kay Martin, Richard W. Stoffle, Sylvia Brakke Vane, and David R. M. White (1978). *Persistence and Power: A Study of Native American Peoples in the Sonoran Desert and the Devers Palo Verde High Voltage Line.*
- Eckhardt, William T., Kristen E Walker, Richard L. Carrico (2005). *Cultural Resources Inventory of the Proposed Devers to Palo Verde II 500kV Transmission Line, Riverside County, California.*
- Eckhardt, William T., and Stacie Wilson (2009). *Cultural Resources Inventory of the Proposed DPV2 Colorado River Switchyard, Riverside County, California.*
- Eckhardt, William T., and Stacie Wilson (2009). *Cultural Resources Inventory of the Proposed Devers to Valley Substation Project, Riverside County, California.*
- Eckhardt, William T., Stacie Wilson and Richard Carrico (2005). *Cultural Resources Inventory for Proposed Series Capacitor Bank Improvements, Devers to Palo Verde I 500 kV Transmission Line Corridor and Proposed Conductor Ground Clearance Improvements, Devers to Palo Verde I 500 kV Transmission Line, Riverside County, California.*
- McDougall, Dennis P., Joan George and Susan Goldberg (2006). *Cultural Resources Surveys of Alternative Routes within California for the Proposed Devers Palo Verde 2 Transmission Project.*
- Williams, Audry (2007). *Archaeological Survey Report for a Portion of the Devers Palo Verde 2 Project, North of Alligator Rock Alternative, Riverside County, California.*

4) Because seven cultural overview and survey reports have been conducted within the APE on behalf of the proposed DPV2 project, and because additional survey of the APE is anticipated, the BLM will ensure that a Summary Class III Cultural Resource Inventory Report (Summary Class III Report) is prepared to document the actions prescribed by paragraphs B.1-2 of this stipulation. The Summary Class III Report shall include the cumulative results of all records searches and field surveys, all DPR site records for the entire APE, and adequate references and access to associated reports. BLM will ensure that the draft Summary Class III Report is submitted concurrently by the BLM to the reviewing signatories for a 30 day review period, subject to the confidentiality requirements stipulated in this PA. Absent comments within this time frame, BLM may assume the reviewing signatories' concurrence that the draft Summary Class III Report is satisfactory. BLM will provide the reviewing signatories with written documentation indicating whether and how the draft Summary Class III Report will be modified in response to any timely comments received. Unless the reviewing signatories object to this

documentation in writing to BLM within 30 days following receipt, BLM may finalize the Summary Class III Report, as it deems appropriate. BLM will then send this version to the THPO and SHPO for a 30 day review period. Absent comments within this time frame, BLM may assume the THPO's and/or SHPO's concurrence that the draft Summary Class III Report is satisfactory. The draft Summary Class III Report will be modified based on THPO and SHPO comments and BLM will provide the reviewing signatories, THPO and SHPO with written documentation indicating whether and how the draft Class III Report will be modified in response to any comments received. The CHRIS EIC will be provided with copies of the final Summary Class III Report, subject to the confidentiality requirements stipulated in this PA.

C. BLM shall consult with the signatories, concurring parties, consulting parties and other interested parties to identify sites or areas of historic or cultural value to Native American and/or other ethnic groups, and to develop mechanisms to ensure that the views of these groups are considered in planning for the Undertaking, following the provisions of sections 101(d)(6)(A) and (B) of the NHPA.

V. DETERMINATIONS OF ELIGIBILITY

A. BLM will initially assume, for the purpose of the consultation that is the subject of this PA, that resources previously determined as National Register of Historic Places (NRHP) eligible by consensus or through formal determination by the Keeper of the Register and located within the APE continue to be NRHP eligible unless evidence is presented that would change that determination. For other potentially eligible resources within the APE that have not had a consensus or formal determination of NRHP eligibility, NRHP eligibility may be assumed if effects to the resources can be avoided by engineering design of the Undertaking.

B. Where the implementation of the Undertaking may adversely affect a cultural resource, BLM, in consultation with the other signatories and concurring parties, shall evaluate and develop a determination of eligibility, pursuant to 36 CFR § 800.4(c)(1), for each such resource. BLM shall submit said determinations to the other signatories and concurring parties to this PA and, upon request, to other interested parties concurrently with and under the same review schedule for the draft Class III Report of stipulation V.B.3 above. Should a dispute arise over the subject determinations, BLM shall provide the Agua Caliente THPO and/or SHPO with a summary of the dispute in conjunction with BLM's consultations with the concurring parties, Agua Caliente THPO and/or SHPO below on the determinations. After the initial comment and response periods in stipulation V.B.3 above, BLM will forward determinations of eligibility, and any of the above dispute summaries, to the Agua Caliente THPO and/or SHPO as a part of the Agua Caliente THPO and/or SHPO 30 day review period under stipulation

V.B.3. Absent comments within this time frame, BLM may assume, and formally document for the record, that the Agua Caliente THPO and/or SHPO has elected not to comment and assume the Agua Caliente THPO and/or SHPO's concurrence that the recommendations for eligibility are satisfactory. If the Agua Caliente THPO and/or SHPO provide comment, BLM will discuss that comment with the Agua Caliente THPO and/or SHPO and modify the determinations of eligibility accordingly or resolve any dispute that may arise in accordance with 36 CFR § 800.4(c)(2). For portions of the project located on Tribal Lands, the Agua Caliente THPO will assume functions of the SHPO, following the provisions of sections 101(d)(2) of the NHPA.

C. BLM shall consult with the Agua Caliente THPO as a signatory, with Native American tribes as concurring parties to this PA, and with Native American Tribes as consulting parties for this undertaking regarding places of traditional value in order to ascertain the significance of these places relative to NRHP eligibility criteria (36 CFR § 60.4 and National Park Service National Register Bulletin 38).

D. BLM shall evaluate properties identified subsequent to the conclusion of the inventory process in stipulation V.B.3 above but prior to the implementation of the Undertaking in accordance with 36 CFR § 800.4(c).

VI. EFFECTS ASSESSMENT

A. BLM shall assess, in consultation with the other signatories and concurring parties, and in accordance with 36 CFR § 800.5(a), the effects of the Undertaking on specific Historic Properties, assumed or determined NRHP eligible, in the Undertaking's APE. This will be done concurrently with the distribution of the Summary Class III Report and the above determinations of eligibility (see stipulations V.B.3 and VI.C). These assessments will serve as the basis for the development of the Historic Properties Management Plan (HPMP) (see stipulation VIII).

B. BLM shall assess, in consultation with the other signatories and concurring parties, and in accordance with 36 CFR § 800.5(a), the specific effects of the Undertaking on Historic Properties that are identified subsequent to the conclusion of the effects assessment process in stipulation VII.A above but prior to the implementation of the Undertaking in the area of the Historic Property. BLM shall consult with the other signatories and concurring parties in each such instance, and incorporate and account for the results of each such consultation in the HPMP.

VII. HISTORIC PROPERTIES MANAGEMENT PLAN

A. Upon the completion of the impacts assessments of stipulation VII above and prior to the onset of any activity related to the implementation of the Undertaking, with the exception of the activities listed in stipulation XII.A.1 below, the Applicant shall develop, in consultation with the BLM, other signatories, and concurring parties, an HPMP that will:

5) list the Historic Properties, assumed or determined, in the Undertaking's APE that the construction of the Project will unconditionally avoid;

6) specify the conditions that the Applicant will fulfill to ensure that the construction of the Project will not adversely affect Historic Properties in the Undertaking's APE;

7) individually specify how the Applicant will avoid, minimize, or mitigate any adverse effects that the agency finds that the construction of the Project may have on particular Historic Properties, determined and/or assumed;

8) provide for the disposition of all properties that are found subsequent to the preparation of the HPMP as a result of BLM's efforts under stipulations IV.B, V, VI.D, and VII.B above and stipulation X below.

The HPMP will be implemented subsequent to the issuance of the BLM ROW and prior to the issuance of a Notice to Proceed for construction in those portions of the Project addressed by the HPMP. The HPMP shall be submitted for review and comment in accordance with stipulation VIII D.

B. The HPMP shall state that the BLM, SHPO, Agua Caliente THPO, concurring parties and Applicant agree, that the HPMP shall contain a plan to further manage or prescribe additional treatment to Historic Properties (assumed and determined) within the APE during the future operation and maintenance of the transmission line where it traverses public lands through a ROW grant and consider effects to cultural resources in relation to those actions, operation and maintenance.

C. The HPMP shall reflect the guidance provided in the *Council's Treatment of Archaeological Properties* (1980), *Council's Recommended Approach for Consultation on Recovery of Significant Information from Archeological Sites* (1999), and the Secretary of the Interior's *Standards for the Treatment of Historic Properties* and will be focused on the determination of the Project effects. In addition to the standard minimum requirements outlined in the above documents, the HPMP shall include:

1. The methodology to be used to record any historic structures to sufficient architectural standards consistent with the National Park Service's requirements and recommendations;

2. The methodology to be used to record information on any properties identified as Traditional Cultural Properties;

3. The proposed disposition of recovered materials and records which shall include a discussion of curation;

4. The procedures for treatment and disposition of any human remains, funerary objects, sacred objects, and objects of cultural patrimony;

5. A description of avoidance measures for Historic Properties assumed or determined eligible, which will ensure that the construction of the Project results in no adverse effects to the qualities and values that would qualify the property for inclusion on the NRHP. Avoidance measures for such properties may include, but not be limited to, temporary fencing, flagging, staking, or monitoring. This section of the HPMP will describe a *Plan for Monitoring and Discovery of Cultural Resources* for cultural resources encountered by the Applicant during the construction of the Project (see stipulation X) and provide a related schedule for completion and distribution;

6. The methods for testing and excavation in support of either NRHP assessments for properties that may be affected by the Undertaking and have not previously been evaluated, and/or data-recovery mitigation for NRHP eligible properties that will be affected by the Undertaking. These methods should describe excavation techniques, sample design and data requirements, and include a discussion of analysis methodology for all artifact types, chronometric, macrobotanical analysis, pollen analysis and faunal analysis and how those analyses can provide information relative to the associated research domains and questions;

7. Contain a culture history section, which addresses themes for the types of sites to receive treatment, and a research design section that develops appropriate research questions to apply to excavations and testing. For historic standing structures, it will include how to address architectural history and landscape;

8. A schedule for completing data recovery, including analysis, reporting and disposition of materials and records, as well as a schedule for completing the draft and final data recovery report(s);

9. A description of using the guidance in the HPMP to develop a treatment plan for Historic Properties that would be adversely affected by a modification to the Project (see stipulation XII B. 2);

10. A description of alternative mitigation measures to resolve adverse effects that do not entail data recovery.

D. BLM shall submit the HPMP for a 30 day review to all reviewing signatories and those consulting parties that request to review cultural reports, for a 30 day review period. Absent comments within this time frame, BLM may assume the reviewing signatories' and consulting parties' concurrence. BLM will provide the reviewing signatories and consulting parties with written documentation indicating whether and how the draft HPMP will be modified in response to any timely comments received. BLM will then send this version to the Agua Caliente THPO and SHPO for a 30 day review and comment period. Absent comments within this time frame, BLM may assume the concurrence of the Agua Caliente THPO and SHPO that the draft HPMP is satisfactory. The draft HPMP will be modified based on any comments of the Agua Caliente THPO and SHPO. BLM will provide the reviewing signatories and other signatories with written documentation indicating whether and how the draft HPMP will be modified in response to any timely comments received by the Agua Caliente THPO and SHPO. BLM will provide the reviewing signatories and other signatories a copy of the final HPMP. Any disputes that may arise between BLM, another signatory, or concurring parties over the content of the HPMP shall be resolved in accordance with stipulation XV below.

VIII. REPORTING REQUIREMENTS

A. BLM shall submit a Summary Class III Report (per Stipulation V B.4), HPMP (per Stipulation VIII), Discovery Report (per Stipulation X) and Monitoring Report (per Stipulation VIII C.5) to reviewing signatories in complete but draft form for review. The reviewing signatories shall submit comments to BLM within 30 days of receipt unless the reviewing signatories and BLM mutually agree upon a different time period. Comments shall be incorporated into the final report(s). BLM shall distribute the final version of the report(s) to the reviewing signatories. Should any reviewing signatory fail to respond to a request to comment within the specified review timeframe, BLM shall assume they concur with the report(s) and any recommendations therein. A modified report will subsequently be submitted to the Agua Caliente THPO and SHPO for the same review time frames. Should the report(s) deal with sensitive information regarding sacred areas or other similar resources, BLM shall withhold specific information as confidential from any signatory or reviewing signatory who lacks interest in eligibility or management concerns based upon the negotiations with the Tribes and/or any other interested person(s) concerning confidentiality and the treatment for these resources.

IX. DISCOVERIES AND UNANTICIPATED EFFECTS

A. BLM will implement a Plan for Discovery of Cultural Resources, which will be part of the HPMP (see stipulation VIII), should the Applicant encounter a previously unknown cultural resource during the implementation of the

Undertaking, or should the Applicant affect, directly or indirectly, a known Historic Property in an unanticipated manner. Where the implementation of the Undertaking may adversely affect a found component of a cultural resource which may be a Historic Property, all work within 200 feet of that find shall cease until BLM, in consultation with the SHPO or Agua Caliente THPO, as applicable, can evaluate the NRHP eligibility of the find, assess the probable character of the Undertaking's effects on it, and develop a resolution to any adverse effect. BLM shall consult with the other signatories and concurring parties throughout this process. If a previously unknown cultural resource has been determined to be damaged by the Undertaking, the resource will be evaluated for National Register eligibility. If eligible, a site damage assessment will be completed by an approved archaeologist. This report will be reviewed by the other signatories and concurring parties following the review procedures in stipulation IX. Appropriate mitigation measures will be recommended in the site damage assessment.

B. The design and execution of data recovery or other mitigation measures (treatment) would be done in consultation with the other signatories and concurring parties. Mitigation measures would be agreed upon among all signatories and concurring parties. If treatment becomes necessary, the development of a treatment plan would reflect the structure described in the HPMP as described in stipulation VIII. In the event a dispute arises during consultation on appropriate mitigation measures, BLM shall proceed in accordance with stipulation XV to resolve the issue.

X. NATIVE AMERICAN CONSULTATION, TREATMENT OF NATIVE AMERICAN HUMAN REMAINS AND ASSOCIATED FUNERARY OBJECTS

A. BLM shall continue to facilitate consultation with the Tribes as the lead Federal agency for Section 106 compliance, and serve as the liaison and the coordinator for affairs with the Tribes.

B. Work shall cease in a 200 ft. radius around human remains or funerary objects found in association with human remains that are encountered during inventory, evaluation, treatment phase fieldwork, or during the implementation of the Undertaking. Upon the discovery and recognition of identifiable human remains, BLM shall comply with the applicable and appropriate Federal, State, County or local laws and regulations, including notifying the County Coroner or other designated official as required in California, as well as the SHPO. In the event that human remains are encountered on Federally-managed lands and are determined to be Native American as defined by NAGPRA (Public Law 101-601), the BLM will take responsibility for developing and executing treatment of those remains and the objects found in association with them by implementing BLM's procedures for complying with NAGPRA.

C. In the event that Native American human remains or funerary objects found in association with such human remains are encountered on private or state lands in California, the Applicant shall treat the remains and objects in accordance with California Public Resources Code 5097.98. The Native American Heritage Commission, most likely descendent, the Applicant and the landowner will develop and execute a treatment plan for those remains as pursuant to Public Resource Code 5097.98.

D. In the event that human remains, and associated funerary items, are found advertently or inadvertently, on Indian Lands, the County Coroner will be called upon to make a determination if the remains are human in nature, and will determine whether there is a forensic requirement. If the County Coroner, in consultation with the Agua Caliente THPO, determines that there is no forensic requirement, then the archaeological remains shall be subject to Tribal Policies, which are contained in Tribal Historic Preservation Organization and Policies (June 8, 2004) particularly in Chapter 4 titled Treatment of Disturbed Human Remains Policy. The THPO shall monitor compliance with these guidelines.

E. All Parties to this agreement are aware that Tribes may request that Native American human remains and associated funerary items be reburied/reinterred on or near the site of discovery, in an area that shall not be the subject to future subsurface disturbance. The BLM will consult with signatories and/or involved parties in an attempt to accommodate the reburial onto Federally-managed public lands any human remains or funerary items identified on public lands, taking into consideration applicable BLM procedures, Federal laws, and ordinances. However, the BLM's jurisdiction is limited only to Federally-managed public lands and does not extend to private and state lands. If necessary, the specifics and development of any treatment/reburial plan on public, private and/or state land will be more fully developed within the HPTP and/or a separate confidential document.

F. All Parties to this agreement agree that, unless required by law, the locations of reburied human remains shall not be disclosed and shall not be governed by public disclosure requirement of the California Public Records Act. The County Coroner, signatories, and the BLM shall be asked to withhold public disclosure information relative to such reburial/burials, pursuant to the specific exemption set forth in California Government code §6254(r).

XI. IMPLEMENTATION OF THE UNDERTAKING

A. INITIATION OF CONSTRUCTION. After BLM has agreement from the other signatories and concurring parties on the Summary Class III Report, on eligibility evaluations done under stipulations VI.B and C, and on the effects assessments done under stipulation VII.A, some construction-related activities, those listed in stipulation XII.A.1 below, would be allowed to proceed in those portions of the

Undertaking's APE where cultural studies have been completed and where no adverse effect to Historic Properties has been found pursuant to the following:

1. The construction-related activities that the signatories and reviewing signatories to this PA agree may occur subsequent to the completion of the effects assessments of stipulation VII.A include only
   a. the demarcation, set up, and use of staging areas for the Project's construction, and
   b. the conduct of geotechnical boring investigations.

2. The ultimate location of construction staging areas, geotechnical boring sites, and routes related to the access of each would be determined by BLM in consultation with the Applicant and the Tribes, and would be located exclusively in areas
   a. where no Historic Properties, assumed or determined, exist, and
   b. 25 meters beyond the known boundaries of such properties.

3. Initiation of these activities on federal or tribal lands would not occur until ROWs have been issued by the respective federal or tribal land managers.

4. These construction activities would be subject to the requirements in stipulation X regarding discoveries and stipulation XI regarding human remains and funerary objects.

B. POST-REVIEW MODIFICATIONS TO THE UNDERTAKING

1. It is anticipated that once the HPMP is finalized, certain minor modifications to the project may become necessary. Some of these modifications could include rerouting to avoid other environmental impacts, the establishment of construction camps, minor changes in access routes, and other construction contractor-dependent actions. BLM shall determine whether such modification require revisions of the Undertaking's APE, and, if so, BLM shall proceed in accordance with stipulation IV.B.2.

2. If a proposed modification to the Undertaking is found to adversely affect Historic Properties as a result of BLM's efforts under stipulation XII.B.1 above, then BLM shall attempt to move the activity that would cause the adverse effect, modify that activity in a manner that would avoid the adverse effect, or, if prudent and feasible, cancel the subject activity. If BLM cannot ultimately avoid the adverse effect, the agency shall prepare a treatment plan that follows the structure described in the HPMP for such modifications (see stipulation VIII A. 4). Review of the plan shall be in accordance with stipulation IX above.

XII. AMENDMENTS TO THE AGREEMENT

A. Any party to this PA may at any time propose amendments, whereupon all Parties to this PA shall consult to consider such amendments pursuant to 36 CFR §800.6(c)(7) and §800.6(c)(8). This PA may be amended only upon written agreement of the signatories and concurring parties.

B. Each attachment to the PA may be individually amended through consultation of the parties without requiring amendment of the PA, unless the signatories and concurring parties through such consultation decide otherwise.

C. Amendments to this PA shall take effect on the dates that they are fully executed by the signatories and concurring parties.

D. If the PA is not amended through the above process, signatories to this PA may terminate the agreement in accordance with stipulation XV below.

XIII. WITHDRAWAL OR ADDITION OF PARTIES FROM/TO THE AGREEMENT

A. The BLM will respond to any written request for consulting party, Invited Signatory or Concurring Party status pursuant to 36 CFR 800.2 and 36 CFR 800.3(f).

B. Should an Invited Signatory or Concurring Party determine that its participation in the undertaking and this Agreement is no longer warranted, the party may withdraw from participation by informing the BLM of its intention to withdraw as soon as is practicable. The BLM shall inform the other parties to this Agreement of the withdrawal.

C. Should conditions of the undertaking change such that other state, federal, or tribal entities not already party to this agreement request to participate, the BLM will invite the new party to sign the Agreement and notify the other consulting parties

XIV. DISPUTE RESOLUTION

A. Should the SHPO, Agua Caliente THPO, concurring parties or the BLM object at any time to the manner in which the terms of this PA are implemented, the BLM will immediately notify the objecting concurring or signatory party and request their comments on the objection within 30 days, and then proceed to consult with the other concurring and/or signatory parties for no more than 30 days to resolve the objection. The BLM will take any comments provided into account.

B. If the BLM determines that the objection can be resolved within the consultation period, the BLM may authorize the disputed action to proceed in accordance with the terms of such resolution.

C. If at the end of the 30 day consultation period, the BLM determines that the objection cannot be resolved through such consultation or through the stipulations of this PA, the BLM will forward all documentation relevant to the objection to the Council per 36 CFR §800.2(b)(2). Any comments provided by the Council within 30 days after its receipt of all relevant documentation will be taken into account by the BLM in reaching a final decision regarding the objection. The BLM will notify the SHPO, THPO, the Council, the Applicant and concurring parties in writing of its final decision within 14 days after it is rendered. The BLM shall have the authority to make the final decision resolving the objection.

D. The BLM's responsibility to carry out all other actions under this PA that are not the subject of the objection will remain unchanged.

1. If at any time during implementation of the terms of this PA, should an objection pertaining to the PA or HPMP be raised by a member of the public, the BLM shall immediately notify the SHPO and THPO about the objection and take the objection into account. The other signatories and concurring parties may comment on the objection to the BLM. The BLM shall consult with the objecting party(ies) for no more than 30 days. Within 14 days following closure of consultation, the BLM will render a decision regarding the objection and notify all parties of its decision in writing. In reaching its final decision, the BLM will take into account all comments from the parties regarding the objection. The BLM shall have the authority to make the final decision resolving the objection. Any dispute pertaining to the NRHP eligibility of Historic Properties or cultural resources covered by this PA will be addressed by the BLM per 36 CFR §800.4(c)(2).

XV. TERMINATION

A. Only signatories may terminate this PA. If this PA is not amended as provided for in Stipulation XIV A and B, or if the signatories propose termination of this PA for other reasons, the signatory proposing termination shall notify the other signatories in writing, explain the reasons for proposing termination, and consult for no more than 30 days to seek alternatives to termination.

B. Should such consultation result in an agreement on an alternative to termination, the signatories shall proceed in accordance with that agreement.

C. Should such consultation fail, the signatory proposing termination may terminate this Agreement by promptly notifying the other signatories in writing.

D. Should this PA be terminated, then the BLM, as lead for the other federal land managing agencies, shall either consult in accordance with 36 CFR §800.14(b) to

develop a new Agreement or request the comments of the Council pursuant to 36 CFR §800.4-800.6.

E. Beginning with the date of termination, the BLM shall ensure that until and unless a new PA is executed for the actions covered by this PA, such undertakings shall be reviewed individually in accordance with 36 CFR §800.4-800.6.

XVI. DURATION OF THIS AGREEMENT

A. Unless the PA is terminated pursuant to stipulation XV above, another agreement executed for the Undertaking supersedes it, or the Undertaking itself has been terminated, this PA will remain in full force and effect for the life of the ROW granted by the BLM or fifty (50) years from its effective date unless extended. All parties to this PA shall consult to reconsider the terms of this PA before it expires and, if acceptable, extend the term of this PA for the subsequent duration of a renewed ROW or less, and continue such reconsideration within ten (10) years after each date of execution of a renewal of this PA. Reconsideration may include continuation of the PA as originally executed or amended, or termination. Extensions are treated as amendments to the PA under Stipulation XIII.

B. The terms of this PA shall be satisfactorily fulfilled within five (5) years following the date of execution by the signatories. If BLM determines that this requirement cannot be met, all parties to this PA will consult to reconsider its terms. Reconsideration may include continuation of the PA as originally executed, amendment, or termination. In the event of termination, BLM will comply with stipulation XV.C if it determines that the Undertaking will proceed notwithstanding termination of this PA.

C. If the Undertaking has not been implemented within 5 years following execution of this PA by the signatories, this PA shall automatically terminate and have no further force or effect. In such event, BLM shall notify the other signatories and concurring parties to this PA, in writing, and, if it chooses to continue with the Undertaking, shall reinitiate review of the Undertaking in accordance with 36 CFR Part 800.

XVII. EFFECTIVE DATE

This PA shall take effect on the date that it has been fully executed by the Bureau of Land Management, the California State Historic Preservation Officer and the Agua Caliente Tribal Historic Preservation Officer. Attachments to this PA shall take effect on the dates they are fully executed by the signatories and concurring parties, or such other self-executing dates as may be described in those attachments.

XVIII. ANNUAL MEETING

Until such time as the HPMP has been accepted, the Parties to this PA agree to meet annually, beginning one year from the date of the execution of this PA to discuss implementation of this PA and other items of mutual interest if such a request is made by one of the Parties.

EXECUTION AND IMPLEMENTATION OF THIS PA is evidence that BLM has afforded the Council a reasonable opportunity to comment on the Undertaking and its effects on Historic Properties. The signatories to this PA represent that they have the authority to sign for and bind the entities on behalf of whom they sign.

SIGNATORY PARTIES:

U.S. BUREAU OF LAND MANAGEMENT
John R. Kalish

BY: _____ DATE 6/4/2010

TITLE: Bureau of Land Management Palm Spring/South Coast Field Manager

CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
Milford Wayne Donaldson

BY: _____ DATE 6/9/2010

TITLE: FAIA, State Historic Preservation Officer

AGUA-CALIENTE TRIBAL HISTORIC PRESERVATION OFFICER
Patricia Tuck

BY: _____ DATE 6/7/10

TITLE: Agua Caliente Tribal Historic Preservation Officer

INVITED SIGNATORY

SOUTHERN CALIFORNIA EDISON COMPANY

BY: P. Mn [signature] DATE 7-6-2010

TITLE: DIRECTOR, PROJECT MANAGEMENT

CONCURRING PARTIES

PECHANGA BAND OF MISSION INDIANS

BY: _____ DATE June 15, 2010

TITLE: Mark Macarro, Tribal Chairman

_____

TITLE: _____

BY: _____ DATE

TITLE: _____

Attachment A
Cultural Resources Potentially within DPV2 APE

Ver 01-6-2010

Table 1
Cultural Resources within the APE on the Devers to Valley Segment

Record No.	Site Type	Record No.	Site Type
CA-RIV-1395	Rock Circle	CA-RIV-9120	Bedrock milling feature
CA-RIV-1404	Bedrock milling feature	CA-RIV-9121	Bedrock milling feature
CA-RIV-2830	Bedrock milling feature	CA-RIV-9122	2 Bedrock milling features
CA-RIV-4715	Historic Road	CA-RIV-9190	Bedrock milling features, projectile point; historic granite quarry area, trash scatter
CA-RIV-5066T	Trail segment	CA-RIV-9192	Bedrock milling feature
CA-RIV-5069H	2 Foundations and cistern	CA-RIV-9192	Bedrock milling features, mine, historic trash scatter, foundation, explosives shack
CA-RIV-5072H	Foundation, walls, trash scatter	CA-RIV-9193	Bedrock milling feature
CA-RIV-5073H	Catch basin and drain	P33-15103	Historic Roads
CA-RIV-9498H	Southern Pacific Railroad (SPRR) and Union Pacific Railroad (UPRR)	P33-171578	Fence, steel plate trough, and ornamental palm tree
CA-RIV-11265H	Colorado River Aqueduct	P33-17580	Wall and dam
CA-RIV-11280H	Old Banning-Idyllwild Road	P33-17582	Lithic scatter
CA-RIV-7009	Bedrock milling features and lithic scatter	P33-17583	Rock Ring
CA-RIV-9112	Bedrock milling feature	P33-17587	Historic Trash Scatter
CA-RIV-9113	Bedrock milling feature	P33-17591	Historic Trash Scatter
CA-RIV-9114	3 Bedrock milling features	P33-17595	1939 cement/cobble levee
CA-RIV-9115	Historic Trash Scatter	P33-12310	Isolate, ceramic figurine fragment
CA-RIV-9116	3 Bedrock milling features	P33-13499	Isolate, millingstone or cogstone
CA-RIV-9117	Historic Trash Scatter	P33-17586	Isolate, potsherd
CA-RIV-9118	Bedrock milling feature	P33-17638	Isolate, potsherd
CA-RIV-9119	Bedrock milling feature		

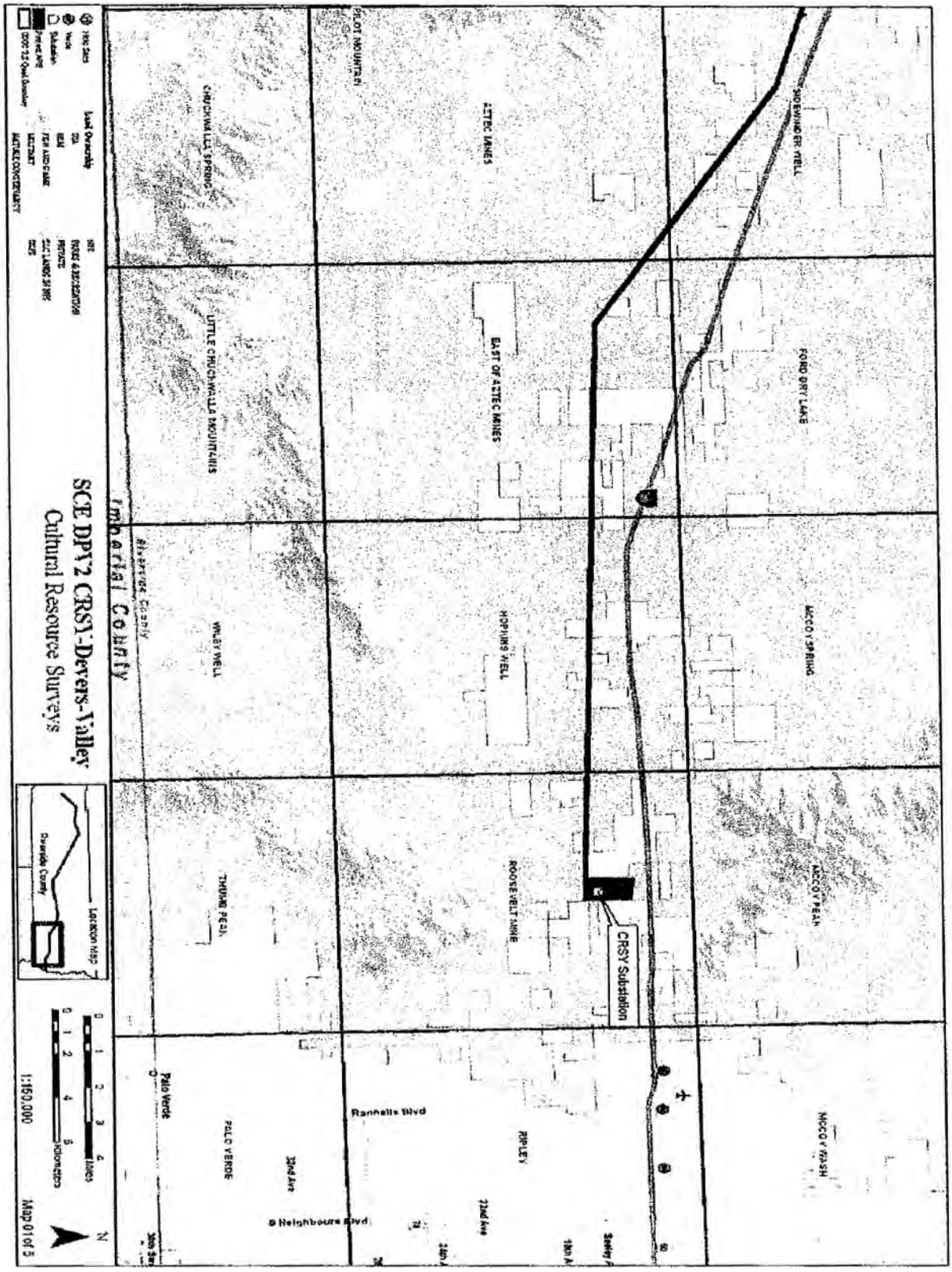
Table 2
Cultural Resources within the APE on the Devers to Colorado River Switchyard Segment

Record No.	Type	Record No.	Type
CA-RIV-1635H	Historic pet cemetery	CA-RIV-9006	Trash scatter
CA-RIV-164T	Trail segment/rock cairns (2)	CA-RIV-9007	Lithic scatter
CA-RIV-183T	Trail segment	CA-RIV-9008	Lithic scatter
CA-RIV-250T	Trail Segments/ junction	CA-RIV-9009	Trash scatter
CA-RIV-343T(b)	Trail segment	CA-RIV-9010	Lithic scatter
CA-RIV-343T(c)	Trail Segment	CA-RIV-9011	Trash scatter
CA-RIV-53T(b)/ CA- RIV-3669T	Trail segment	CA-RIV-9012	Hearth features
CA-RIV-53T(c)	Trail segment	CLS-1	Trash scatter
CA-RIV-53T(d)	Trail segment	CLS-2	Trash scatter
CA-RIV-650T	Trail Segment	CLS-4	Trash scatter
CA-RIV-673T	Trail Segments (2)/DTC/C-AMA trash scatter	CLS-5	Historic road
CA-RIV-772T	Trail Segment	P33-013561	Historic adobe ruin
CA-RIV-775T	Trail Segment	P33-013562	Isolate flake
CA-RIV-893T	Trail segment	P33-013563	Float quarry/assay lithic scatter
CA-RIV-1018	Bedrock milling feature, lithic & ceramic sherd scatter	P33-013564	Isolate ceramic sherd

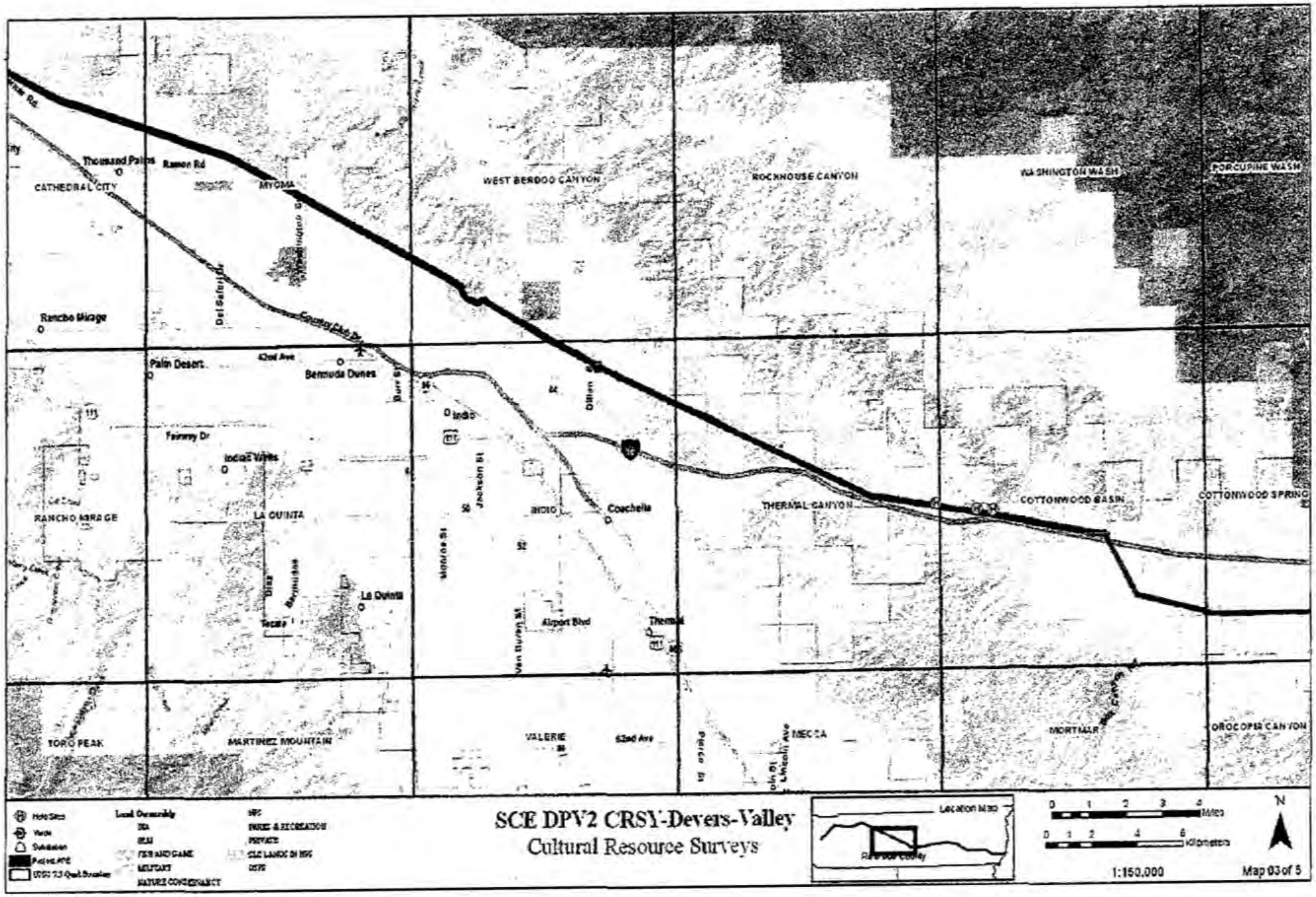
CA-RIV-1115	Trail segments (2)	P33-013565	Isolate ceramic sherds (2)
CA-RIV-1117H(a)	DTC/C-AMA Munitions Magazine Area	P33-013566	Isolate ceramic sherd
CA-RIV-1117H(b)	DTC/C-AMA Camp Young Firing Range Area	P33-013567	Historic refuse deposit
CA-RIV-1119	ceramic scatter including 20+; lithic scatter; metate fragment; fire-affected rock; discolored soil deposits	P33-013568	Isolate ceramic sherd
CA-RIV-1383	N Chuckwalla Mtns NRHP Petroglyph District	P33-013569	Historic retaining wall, compound, trash scatter
CA-RIV-1808	Ceramic sherd scatter	P33-013571	Lithic reduction locus
CA-RIV-1809H	DTC/C-AMA remains	P33-013572	Isolate tool
CA-RIV-1810H	DTC/C-AMA remains	P33-013573	Rock cairn
CA-RIV-1811	Sparse lithic scatter	P33-013575	Isolate historic milk bottle
CA-RIV-1812	Rock ring (½)	P33-013576	Trail segment
CA-RIV-1813	Rock rings (2), lithic reduction locus	P33-013578	Float quarry assay/assay locus
CA-RIV-1814 ‡	N Chuckwalla Mtn NRHP Quarry District	P33-013579	Lithic scatter and rock cairns (3)
CA-RIV-1815	Rock ring (1)	P33-013586	Rock ring (1)
CA-RIV-1816	Rock rings (4)	P33-013587	Float assay locus
CA-RIV-1817	Ceramic sherd scatter	P33-013588	DTC/C-AMA rock cairn
CA-RIV-1818	Ceramic sherd scatter	P33-013590	Rock cairn (1)
CA-RIV-1819	Cobble quarry locus & ceramic sherd scatter	P33-013591	Isolate biface
CA-RIV-1820	Lithic scatter	P33-013592	Historic refuse deposit
CA-RIV-1821	large, shallow deposit; lithic scatter; ceramic scatter; fire hearth features	P33-013593	Sub-modern refuse deposit
CA-RIV-1822	lithic scatter, ceramic scatter; hearth features	P33-013594	Historic refuse deposit
CA-RIV-1823	Ceramic sherd and lithic scatter	P33-013595	Isolate ceramic sherd
CA-RIV-2793	Lithic quarry	P33-013596	DTC/C-AMA refuse scatter
CA-RIV-2794	Lithic quarry	P33-013597	Historic refuse deposit
CA-RIV-2795	Lithic quarry	P33-013598	DTC/C-AMA refuse scatter
CA-RIV-2796	Lithic quarry	P33-013599	Sparse lithic scatter
CA-RIV-5545/H	Roadway	P33-013600	DTC/C-AMA refuse deposit
CA-RIV-7127H	Transmission line	P33-013601	DTC/C-AMA foxhole features
CA-RIV-7488	Lithic scatter	P33-013602	DTC/C-AMA refuse deposit
CA-RIV-7489	Historic foundation, refuse scatter and industrial activity locus	P33-013603	DTC/C-AMA refuse deposit
CA-RIV-7490	DTC/C-AMA refuse deposit	P33-013604	Rock ring (1)
CA-RIV-9005	DTC/C-AMA		

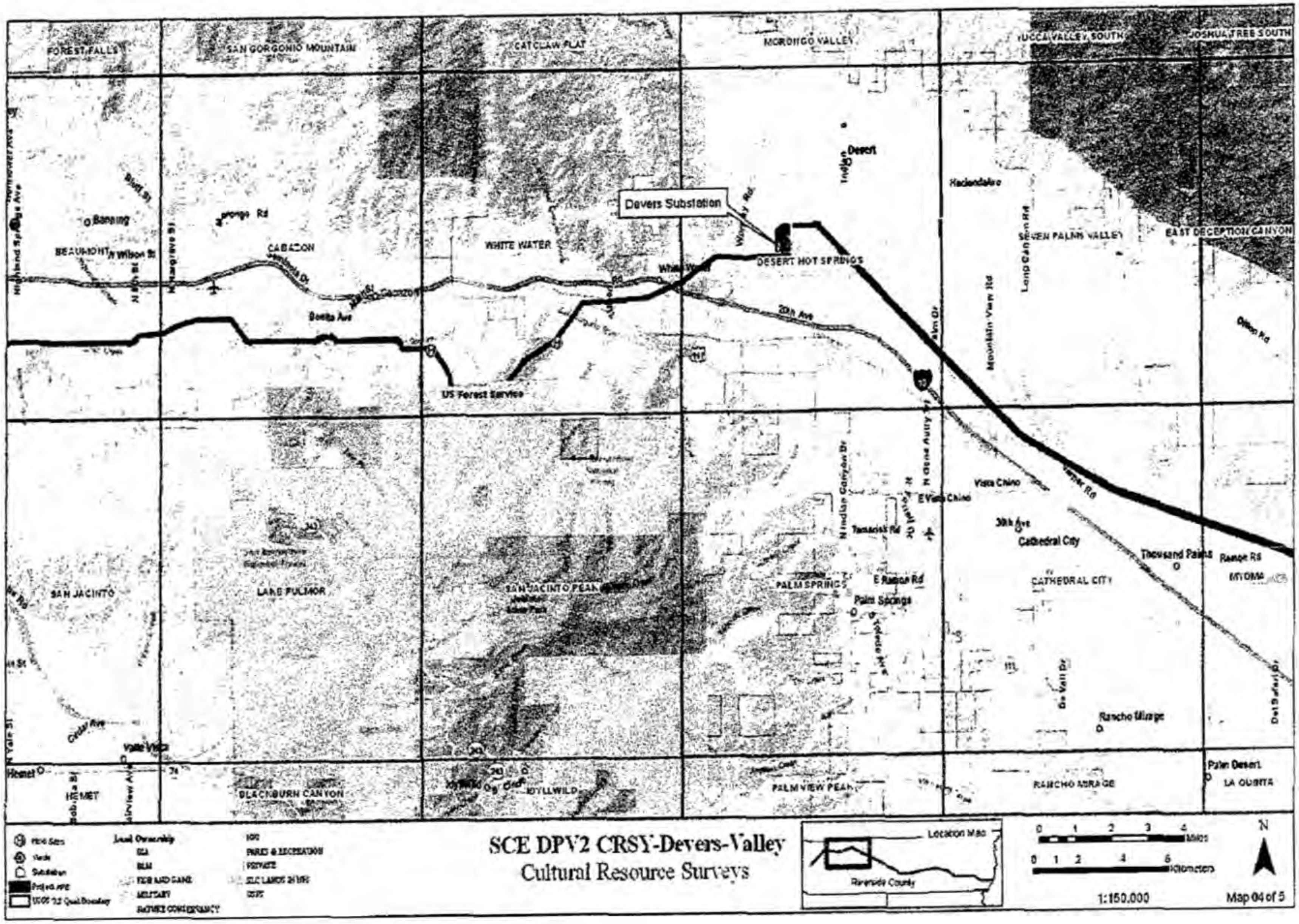
Table 3
Cultural Resources within the APE on the North of Alligator Rock Alternative

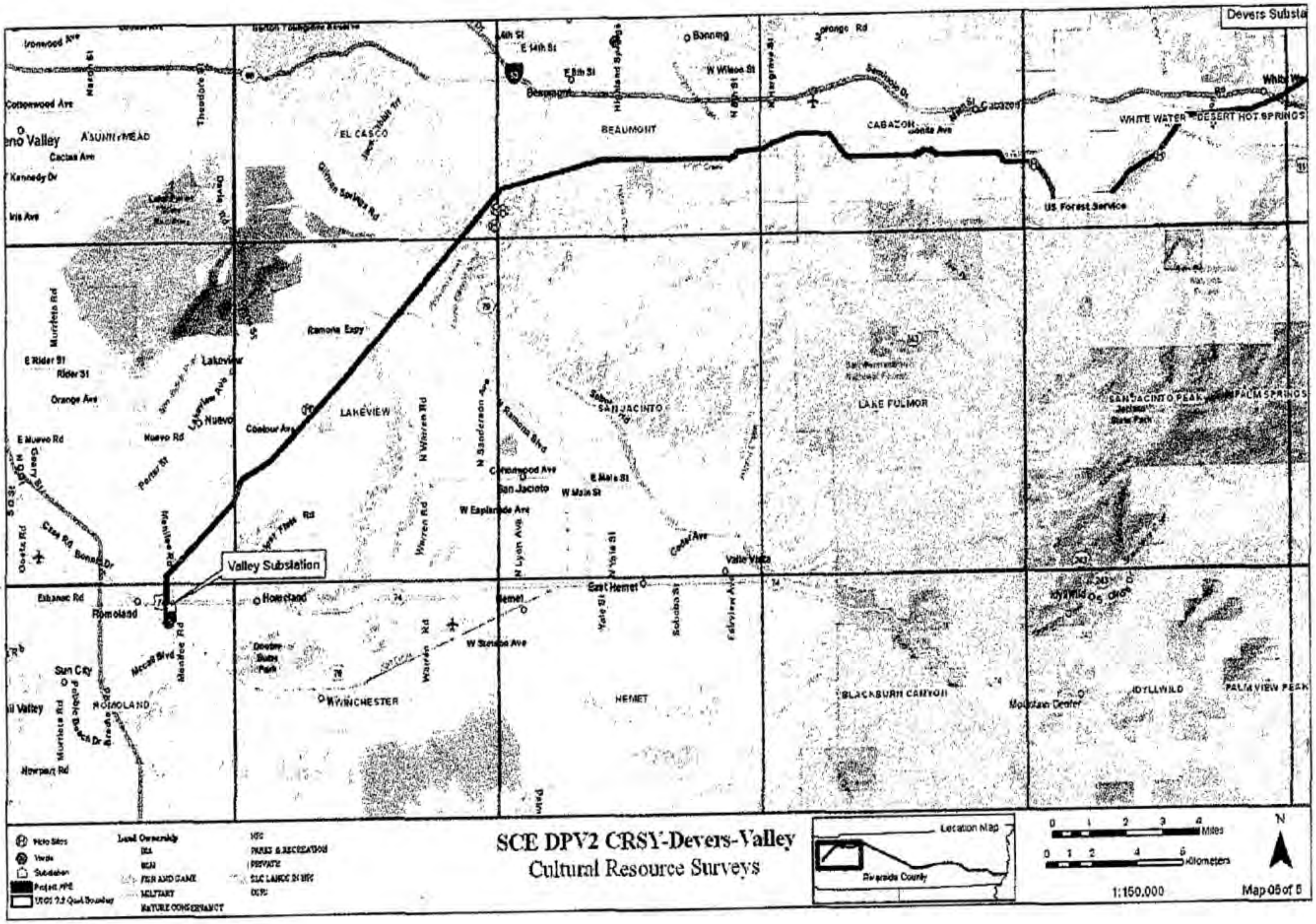
Record No.	Site Type
CA-RIV-7019H	Historic refuse deposit
CA-RIV-7020H	Historic refuse deposit
P33-8706	Southern California Telephone Pole Line
P33-13648	Lithic scatter and rock cairns
P33-13587	Lithic reduction locus
P33-14192	Historic refuse deposit
P33-15088	Historic refuse deposit
P33-15089	Historic refuse deposit
P33-15090	Historic refuse deposit
P33-15091	Sleeping circle and lithic scatter
P33-15092	Sleeping circle
P33-15093	Lithic reduction locus
P33-15094	Historic refuse deposit
P33-15095	Trash scatter
P33-15096	Historic refuse deposit
P33-15097	DTC/C-AMA
P33-15098	Rock ring
P-33-15101	Lithic reduction locus
P33-15106	Isolate- ceramic sherd
P-33-15108	Isolate-quartzite hammerstone
P-33-15970	Rock ring
P-33-15971	DTC/C-AMA
P-33-15972	Historic road
P-33-15973	Trash scatter


SCE DPV2 CRSY-Devers-Valley
Cultural Resource Surveys
Imperial County
CRSY Substation
SIDEWINDER WELL
FORD DRY LAKE
AZTEC MINES
EAST OF AZTEC MINES
HOPKINS WELL
ROOSEVELT ARMY
MCCOY SPRING
MCCOY PEAK
MCCOY WASH
RIPLEY
PALO VERDE
THUMB PEAK
WILEY WELL
LITTLE CHUCKWALLA MOUNTAINS
CHUCKWALLA SPRING
PILOT MOUNTAIN
Riverside County
Palo Verde
Rannells Blvd
Neighbours Blvd
32nd Ave
22nd Ave
18th Ave
1:150,000
Map 01of 5

PORCUPINE WASH
CONEJO WELL
BUZZARD SPRING
VICTORY PASS
EAST OF VICTORY PASS
PALEN LAKE
COTTONWOOD SPRING
HAYFIELD
HAYFIELD SPRING
DESERT CENTER
CORN SPRING
SIDEWINDER WELL
OROCOPIA CANYON
RED CANYON
EAST OF RED CANYON
RED CLOUD CANYON
PILOT MOUNTAIN
AZTEC MINES
SCE DPV2 CRSY-Devers-Valley
Cultural Resource Surveys
Location Map
Miles
Kilometers
1:150,000
Map 02 of 5
N


Thousand Palms
Ramon Rd
CATHEDRAL CITY
MYOMA
Rancho Mirage
Del Safari Dr
Country Club Dr
Palm Desert
42nd Ave
Bermuda Dunes
Indio
Fairway Dr
Indian Wells
RANCHO MIRAGE
LA QUINTA
La Quinta
Tecate
Jackson St
Monroe St
Dillon
WEST BERDOO CANYON
ROCKHOUSE CANYON
WASHINGTON WASH
PORCUPINE WASH
INDIO
Coachella
THERMAL CANYON
COTTONWOOD BASIN
COTTONWOOD SPRING
Airport Blvd
Van Buren St
Thermal
TORO PEAK
MARTINEZ MOUNTAIN
VALERIE
62nd Ave
Pierce St
Lincoln Ave
MECCA
MORTMAR
OROCOPIA CANYON
SCE DPV2 CRSY-Devers-Valley
Cultural Resource Surveys
Location Map
Miles
Kilometers
1:150,000
Map 03 of 5
N


SCE DPV2 CRSY-Devers-Valley
Cultural Resource Surveys
Devers Substation
FOREST FALLS
SAN GORGONIO MOUNTAIN
CATCLAW FLAT
MORONGO VALLEY
YUCCA VALLEY SOUTH
JOSHUA TREE SOUTH
SEVEN PALMS VALLEY
EAST DECEPTION CANYON
WHITE WATER
CABAZON
BEAUMONT
Banning
DESERT HOT SPRINGS
US Forest Service
SAN JACINTO
LAKE FULMOR
SAN JACINTO PEAK
PALM SPRINGS
Palm Springs
CATHEDRAL CITY
Cathedral City
Thousand Palms
MYOMA
Rancho Mirage
RANCHO MIRAGE
Palm Desert
LA QUINTA
HEMET
Hemet
BLACKBURN CANYON
IDYLLWILD
PALM VIEW PEAK
Location Map
Riverside County
Miles
Kilometers
1:150,000
Map 04 of 5
N


Devers Substa
Valley Substation
Beaumont
Banning
Cabazon
White Water
Desert Hot Springs
US Forest Service
El Casco
Lakeview
Nuevo
Romoland
Homeland
Hemet
East Hemet
San Jacinto
Valle Vista
Winchester
Sun City
Lake Fulmor
Blackburn Canyon
Idyllwild
Mountain Center
San Jacinto Peak
Palm Springs
Palm View Peak
SCE DPV2 CRSY-Devers-Valley
Cultural Resource Surveys
Location Map
Riverside County
Miles
Kilometers
1:150,000
Map 05 of 5
N

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road, Suite 101
Carlsbad, California 92011

In Reply Refer To:
FWS-ERIV-07B0060-10F0884

JAN 11 2011

Memorandum

To: Field Manager, Palm Springs South Coast Field Office, Bureau of Land Management, Palm Springs, California

From: Field Supervisor, Carlsbad Fish and Wildlife Office
Carlsbad, California

Subject: Section 7 Biological and Conference Opinion on the Devers to Palo Verde No. 2 Transmission Line Project, Riverside County, California

This memorandum transmits the U.S. Fish and Wildlife Service's (Service) biological/ conference opinion on the subject project, located in Riverside County, California, and its effects on the endangered Stephens' kangaroo rat (*Dipodomys stephensi*, "kangaroo rat"), endangered Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*, "milk-vetch"), threatened Coachella Valley fringe-toed lizard (*Uma inornata*, "fringe-toed lizard") and its designated critical habitat, threatened desert tortoise (*Gopherus agassizii*, "tortoise") and its designated critical habitat, and proposed threatened flat-tailed horned lizard (*Phrynosoma mcallii*, "horned lizard") in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*).

This biological/conference opinion is based on information provided in the following documents and communications: (1) *Southern California Edison's Devers–Palo Verde 500 kV No. 2 Project Final Environmental Impact Report/Environmental Impact Statement*, dated October 2006 (final EIR/EIS), (2) *Amended Biological Assessment, Devers-Palo Verde No. 2 500 kV Transmission Line Project, Riverside County, California*, dated February 24, 2010 (SCE 2010), (3) final and draft revised recovery plans for the tortoise (Service 1994a, 2008a), (4) final recovery plan for the fringe-toed lizard (Service 1985), (5) project-specific survey reports for the kangaroo rat, milk-vetch, fringe-toed and horned lizards, and tortoise, (6) supplemental materials provided during the consultation process, (7) electronic transmissions from your agency, the Bureau of Land Management (BLM), and Southern California Edison (SCE), and (8) pertinent literature contained in our files. The complete project file for this consultation is on file at the Carlsbad Fish and Wildlife Office (CFWO).

CONSULTATION HISTORY

The Service initially issued a biological opinion (1-6-87-F-57) addressing the potential impacts of this transmission line project on federally listed species on November 13, 1987. At that time, the proposed project extended from the Palo Verde Nuclear Generating Station in Arizona to the Devers Substation near Palm Springs, California. A final supplemental EIS was completed in 1988 and BLM issued a record of decision in 1989. The Service provided comments on the final supplemental EIS for the portion of proposed project in California on January 11, 1989. However, in 1997, due to intervening events, including industry restructuring, SCE requested and received approval from the California Public Utilities Commission (CPUC) to abandon construction of the project.

After an independent review of the purpose of the proposed project in 2005, the California Independent System Operator directed SCE to proceed with permitting and construction of the Devers to Palo Verde No. 2 Transmission Line Project, herein referred to as the DPV2 project. A draft EIR/EIS was issued in May 2006 and the final EIR/EIS was issued in October 2006.

On February 23, 2007, the Service received BLM's request to initiate formal consultation on the DPV2 project under section 7 of the Act. The BLM's request was based on information in the final EIR/EIS that addressed the construction of a new 438-kilometer (km) [272-mile (mi)] 500-kV transmission line installed parallel to the existing Devers-Palo Verde No. 1 transmission line (referred to herein as DPV1, which was constructed in 1982) and extending from the Harquahala Substation in Arizona to the existing Devers Substation in Palm Springs, California, and then to the existing Valley Substation near Perris, California.

On June 6, 2007, the Arizona Corporations Commission denied SCE's Certificate of Environmental Compatibility application to construct the part of the DPV2 project within Arizona. In May 2009, SCE decided to suspend pursuit of the Arizona portion of the DPV2 project. As a result, SCE submitted a revised project description and impact analysis for federally listed species to the BLM and Service on June 26, 2009.

On November 24, 2009, the BLM informed the Service that the North of Alligator Rock alternative was no longer the superior project alternative and, therefore, proposed that the project parallel the existing DPV1 transmission line through the BLM's Alligator Rock Area of Critical Environmental Concern (ACEC). Based on this change to the project description, the consultation was extended by mutual agreement among the BLM, Service, and SCE, and BLM submitted an amended initiation request and amended biological assessment updating the project description for the DPV2 project to the Service on February 24, 2010.

Between February 2007 and November 2010, the Service, BLM, SCE, and California Department of Fish and Game (CDFG) participated in numerous meetings and several site visits to ensure that the project description was accurate and complete. A draft project description, including revised conservation measures, was provided to the BLM, SCE, and the CDFG on June 25, 2010, and a draft biological/conference opinion was provided to the BLM on

September 10, 2010. All comments received from the BLM, SCE, and CDFG were incorporated into this biological/conference opinion as appropriate. Refer to SCE (2010) for additional details on the consultation history of this project.

BIOLOGICAL/CONFERENCE OPINION

DESCRIPTION OF THE PROPOSED ACTION

Refer to the biological assessment for this project (SCE 2010) for a more detailed description of the project.

The proposed action is the BLM's issuance of a right-of-way (ROW) grant that will authorize SCE to construct, operate, and maintain a new 246-km (153-mi), 500-kV DPV2 transmission line project. The DPV2 project will be composed of two lines in Riverside County, California: the Devers-Valley line extending 67 km (42 mi) from SCE's existing Devers Substation near Palm Springs, west to SCE's existing Valley Substation near Hemet, and the Colorado River Switchyard (CRS)-Devers line extending 177 km (110 mi) from a new substation, the Colorado River Switchyard (CRS), located 16 km (10 mi) southwest of Blythe, east to SCE's existing Devers Substation (Figure 1). The Devers-Valley segment crosses approximately 7 km (4.5 mi) of Federal lands and 60 km (37 mi) of private lands, while the CRS-Devers segment crosses approximately 84 km (52 mi) of Federal lands, 0.8 km (0.5 mi) of State lands, and 92 km (57 mi) of private lands.

Construction

The DPV2 project will include a number of permanent and temporary features necessary to construct and support the proposed transmission line including a new substation, upgrades to an existing substation, construction yards, helicopter assembly sites/landing pads, tower pads and structures, spur roads to access the towers, wire installation, and slicing and pulling sites. Ground-disturbance acreage estimates for these features are provided in Table 1. These estimates are based on current engineering designs. Changes to structures may occur based on final engineering, and result in changes to ground disturbance acreage estimates.

The majority of the DPV2 alignment will be within an existing 40-meter (m) [330-foot (ft)] BLM ROW crossing Federal, State, and private lands that now contains SCE's DPV1 line. The DPV2 transmission line will be constructed approximately 40 m (130 ft) from the existing DPV1 transmission line, and the placement of the DPV2 towers will match the DPV1 towers to the extent possible. Access to the DPV2 transmission line ROW will occur via the existing access road associated with DPV1 transmission line. No new roads to access the DPV2 transmission line ROW will be constructed as part of the DPV2 project.

Approximately 543 four-legged, single-circuit, lattice steel towers will be constructed along the 246-km (153-mi) DPV2 alignment. Each tower pad will be approximately 0.4 ha (0.9 ac) and require construction of a spur road from the existing ROW access road to the newly constructed

tower site. The majority of the spur roads will be up to 40 m (130 ft) long and 4 m (14 ft) wide, and impact up to 0.02 ha (0.04 ac) each. However, approximately 25 percent of the spur roads will be required to be up to 61 m (200 ft) in length depending on site conditions. In such areas, the ROW width will be a minimum of 49 m (160 ft) on Federal or State lands, and a minimum of 61 m (200 ft) on private lands. SCE anticipates that some spur roads will be less than 40 m (130 ft). These spur roads will provide access to each tower site for construction crews, materials, and equipment, and after project construction, these spur roads will be used by maintenance crews and repair vehicles to access individual towers for inspection and maintenance activities.

Construction of each tower will require four augured, cast-in-place, concrete piles or footings. Concrete will be hauled to tower sites in standard concrete trucks. Approximately 8 to 16 concrete trucks, will be working simultaneously at peak construction along the Devers-Valley line and CRS-Devers line, respectively, each making one round trip per day. At any given tower site, eight concrete trucks will be working to support the installation of the needed four footings. Tower section subassemblies will be built at the tower site or construction yards and will be lifted into place with a crane and erected on their foundations.

Prior to stringing activities, temporary wood pole guard structures will be erected at crossings for roads, streets, railroads, highways, or other transmission, distribution, or communication facilities, as required. Guard structures may not be necessary on roads where traffic is light, though the use of barriers, flagmen, and/or temporary stopping of traffic will be required. The stringing of conductor and overhead groundwire on new transmission lines typically commences once a number of structures have been erected and inspected. Stringing equipment locations will be temporarily setup between towers. A helicopter will pull small and lightweight pilot lines through the stringing travelers. These lightweight lines will be used to subsequently pull larger steel cable. The conductor or groundwire will then be pulled from the established setup points by wire stringing equipment. Stringing will require construction of a 0.4-ha (0.9-ac) pulling station and a 0.1-ha (0.2-ac) splicing station approximately every 3 km (2 mi) along the transmission route. Five helicopter assembly sites will be constructed in the Devers-Valley line and three will be constructed in the CRS-Devers line (Table 1). Two temporary wash stations will also be located in two of the eight helicopter assembly sites (H1A/X-DV and H2-DV) on either side of the San Bernardino National Forest towers.

Construction equipment and materials will be stored in up to seven construction yards (Table 1) that are in the process of being acquired for the project. Two of the seven proposed yards [Blythe (B-1) and Desert Center (DC-1)] were previously used for the construction of the Blythe Energy transmission line and are therefore in previously disturbed areas. To the extent possible, the remaining five yards will be constructed in previously disturbed areas. Each yard will have temporary office trailers for supervisory and clerical personnel, serve as a reporting location for workers, and provide vehicle and equipment parking and material storage. A permanent wash station for noxious weeds will be located within the fenced Devers (D-1) construction yard.

Proposed construction along the Devers-Valley line will also include modifications within the existing Valley Substation and installation of telecommunications systems on the transmission

line towers. However, neither of these activities will result in new ground disturbance. Along the CRS-Devers line, proposed construction will also include construction of one series capacitor bank located adjacent to a DPV1 series capacitor bank approximately 103 km (64 mi) east of Devers Substation and modifications within the existing Devers Substation. Some of the modifications at the Devers Substation will occur within the existing fenced area; however, approximately 4 ha (10 ac) will be disturbed as a result of the expansion of the Devers Substation (Table 1).

Construction along the CRS-Devers line will also include construction of the new switchyard (CRS) adjacent to the DPV2 ROW, approximately 16 km (10 mi) southwest of Blythe. The new CRS will accommodate the required dead-end structures, switching facilities, telecommunications facility, loop-in structures, transformer banks, equipment room, and an expansion area to accommodate additional switchracks for generation tie (gen-tie) transmission lines for the Blythe Solar Power and Genesis Solar Energy projects to interconnect with the DPV2 transmission system. Construction of the CRS will include the following components: the substation, a substation expansion area, a temporary construction staging area and access road, temporary work zone/perimeter buffer, two permanent driveways to the CRS, permanent concrete perimeter wall, improved access road from Wiley Wells Road to CRS, drainage and sideslope grading along the substation perimeter, and a storm water detention basin (Table 1). Construction of the CRS will also include two new telecommunications transmission lines, one extending from the CRS on the proposed CRS distribution/power line and temporary access road north to an existing power pole transmission line. The other telecommunication line will extend from the CRS on the existing DPV1 towers south until a point just before the agricultural area in Blythe where it will be attached to new wood pole along an existing transmission access road. The proposed location of the CRS is identified in the final EIR/EIS and in BioResource Consultants (2008) where it is referred to as the Midpoint Substation. While the exact location of the CRS has not yet been finalized, we anticipate it to be located within an approximately 1.61-km (1-mi) radius of its proposed location. This 1.61-km (1-mi) area around the proposed location was surveyed for tortoise and other sensitive plant and animal species in 2010 (see AECOM 2010a).

Construction of the DPV2 project will occur in several phases over a period of approximately 2 years, beginning in 2011, and is anticipated to be complete in 2013.

Operations and Maintenance

Following completion of project construction, operation and maintenance (O&M) of the new transmission line and associated facilities will commence and is anticipated to continue for the 30-year life of the project. O&M activities covered under this biological/conference opinion include (a) routine maintenance activities (Class 1), (b) repairs of existing facilities (Class 2), and (c) emergency repairs (Class 4). Class 3 activities, defined by SCE as “installation of new facilities” are not covered under this biological/conference opinion. Frequency of O&M activities varies in relation to the level of dirt, dust, bird droppings, etc. present on the structures in a particular geographic area, the level of vandalism of facilities (e.g., gunshot insulators), the

severity of storms (e.g., Santa Ana winds) and other natural disasters (fires, floods, and earthquakes), and accidents.

O&M will include the following activities**:**

Class 1 - Routine Maintenance Activities: activities that will not result in ground or vegetation disturbance outside of areas disturbed during initial construction. These activities include routine inspection and maintenance of the transmission line and substations and their associated components.

Routine Transmission Line Inspection and Maintenance

The transmission line will be inspected using helicopters and vehicles to identify corrosion, equipment misalignment, loose fittings, and other mechanical problems, and the need for vegetation management.

The frequency of inspection and maintenance will depend on various conditions, including length of the line and weather effects. These patrols are conducted on an as-needed basis to ensure continued public safety and system reliability. Inspection and maintenance activities typically include senior patrolman, foreman, lead lineman, journeyman lineman, apprentices, groundmen, helicopter pilots, equipment operators, and laborers. If the magnitude of repairs identified by routine patrols is substantial, other specialized employees (i.e., surveyors, engineers, clerical personnel, technicians) will be attached to maintenance crews, as required, to address any unique problem that may arise due to such variables as substantial storm damage or vandalism.

During a typical patrol, a helicopter will fly above the top of the towers. In populated areas, patrols will fly at higher elevations or away from the centerline of the transmission lines to avoid flying close to houses or penned animals. In cases where flying near a home cannot be avoided, the patrolman will use gyro-binoculars to increase the inspection distance between the structures and helicopter to the greatest extent possible. In rural areas, unless designated otherwise, proximity to the ground is not restricted with the exception of safety and environmental concerns.

Yearly patrols during operation of the proposed project will be combined with the yearly patrols of the existing DPV1 line. The entire DPV1 and DPV2 transmission line corridor will be patrolled every year. The yearly patrol alternates between helicopter and truck. Annually the patrol will be performed by helicopters and will take approximately a full day (8 hours) to accomplish. SCE anticipates a total of 12 hours of helicopter patrol time per year. The next year, the patrol will be performed by truck and will take up to 4 weeks per year. A yearly patrol is the minimum patrol requirement. For additional patrols, either helicopters or trucks will be used based on the availability of resources and criticality of time.

Starting approximately 15 years after the operational date, maintenance on the DPV2 line will be expected to increase. Initial additional corridor maintenance will be due principally to weather and vandalism to the DPV2 line. As insulators and steel age on the DPV2 line, the frequency of lattice steel tower hardware maintenance activities will increase. However, no significant increase in annual patrols or grading will be required.

Maintenance activities performed during routine inspections of transmission line components include replacement of defective or broken materials (e.g., conductors, switches, transformers), restringing of conductors, and routine washing of insulators to prevent arcing. Insulator washing will be performed using a water truck with a high pressure hose(s) and will occur about two times per year. These maintenance activities will be conducted from a vehicle that remains on the existing access roads in designated work areas and will not result in ground disturbance in areas outside of those disturbed during initial project construction. Any routine transmission line maintenance activities (e.g., re-stringing conductors) that result in ground disturbance outside of the areas disturbed during initial construction will be considered Class 2 activities (see "Class 2 - Repairs of Existing Facilities" section below).

Routine Substation Inspection and Maintenance

Substation maintenance includes scheduled equipment repairs, cleaning, and testing to prevent service interruptions. These maintenance activities will be conducted from a vehicle that remains on the existing access roads or on foot or on lift trucks within the existing fenced substation area and will not result in ground disturbance in areas outside of those disturbed during initial project construction.

Class 2 - Repairs of Existing Facilities: activities that may result in ground or vegetation disturbance outside of areas disturbed during construction activities. These activities include tower maintenance (e.g., repairing or replacing existing towers), wire maintenance (e.g., re-stringing conductors), ROW road maintenance and routine vegetation management. Road maintenance and routine vegetation management will be conducted at a frequency that precludes establishment of suitable habitat for federally listed species; otherwise consultation with the Service may be needed.

Tower and Wire Maintenance

In cases where towers do not have existing access roads, the tower are accessed on foot by climbing the structure, by helicopter, or by creating temporary helicopter landing pads. Types of vehicles utilized for repairs will range from light duty vehicles to heavy construction equipment.

Existing conductors may require re-stringing to accommodate higher voltages or repair damages. Although re-stringing conductors is typically accomplished from trucks parked on existing access roads (Class 1), some pulling site locations may be in previously undisturbed areas and at times, conductors may be passed through existing vegetation on route to their destination.

Routine ROW Road Maintenance

Routine access road maintenance will be conducted on an as-needed basis. Road conditions vary based on seasonal impacts from weather and road usage. Road grading will be conducted using heavy equipment to create a smooth drivable surface and will be accomplished using road graders, bulldozers, loaders, and backhoes. Road widths can vary depending on the voltage of the line and the type of vehicles that need to access the structures. The standard road width is typically 4 m (14 ft). If berms are present they typically extend 0.3 to 0.6 m (1 to 2 ft) on either side of the bladed road. Road maintenance will include maintaining a vegetation-free corridor (to facilitate access and prevent fire) and blading to smooth over washouts, eroded areas, and washboard surfaces as needed.

Access road maintenance may include brushing (i.e., trimming or removal of shrubs) approximately 0.6 to 1.5 m (2 to 5 ft) beyond the berm or road edge when necessary to keep vegetation from intruding into the roadway. Generally, a companion vehicle accompanies the construction equipment in order to assist the equipment operator in brushing and clearing on an as-needed basis. Road grading will also include cleaning ditches, moving and establishing berms, clearing and making functional drain inlets to culverts, culvert repair, clearing and establishing water bars, and cleaning and repairing over-side drains. Culverts may require inlet cleaning, with limited disturbance of surrounding soils.

Brush and weed control activities will be conducted within the ROW from vehicles that remain on the existing access roads and in designated work areas to the extent possible. However, activities may result in ground disturbance outside of the areas disturbed during initial project construction. Embankments on the uphill side of access roads generally are not maintained. Fill slopes will be restored and stabilized if washed out. Local material will be used to the extent possible.

As safety permits, stream crossings and washes with low flows or no flows are crossed but not graded. Equipment operators will generally lift the blade 8 m (25 ft) before the crossing and drop the blade 8 m (25 ft) after it. Visual references may be established in conjunction with the BLM and CDFG to determine what defines a stream crossing or wash. Where extensive ground disturbance or vegetation removal are required in stream crossings, the site will be evaluated by SCE environmental staff to determine if regulatory approval is required to conduct work activities.

Routine ROW Vegetation Management

Regular tree/shrub trimming and pruning is crucial for maintaining reliable service, especially during severe weather or disasters, and will be performed to maintain compliance with existing State and Federal laws, rules, and regulations. Tree limb and branch contact with energized lines is a potential cause of power outages and a possible ignition source for fires. Tree pruning standards for distances from overhead lines have been set by the CPUC (General Order-95, Rule 35), Public Resource Code 4293, California Code of Regulations Title 14, Article 4, and other

government and regulatory agencies. However, the standards required by these government and regulatory agencies may vary based on field conditions. SCE's standard approach to tree pruning is to remove at least the minimum required by law plus one years' growth (species-dependent). The minimum clearance for 500kV transmission circuits is 12.19 m (40 ft), plus one years' growth. The minimum distances are required at the time the vegetation is pruned; that is, pruning must be done before limbs and branches grow to within these distances and will result in greater than the minimum distances to allow for new growth. In addition, the clearances between lines and vegetation must be visible from the ground sufficient for personnel working around lines to keep themselves and their tools away from danger. The CPUC, CAL FIRE (California Department of Forestry and Fire Protection), and other agencies or groups monitor compliance with the clearance standards and take prompt enforcement action when clearances are not maintained.

Tree/shrub pruning will be done with power and hand tools, including chainsaws, pole pruners, and hand saws. Debris will be mulched or removed to a landfill or disposed of at SCE facility. Debris will not be placed on sensitive resources, such as sensitive plant populations or streams. All use of internal combustion engines will be operated in compliance with Federal and State requirements. To the extent possible, tree/shrub trimming and pruning activities will be conducted from a vehicle that remains on the existing access roads in designated work areas. However, these activities may result in some additional ground disturbance outside of those areas disturbed during initial construction.

Class 4 - Emergency Repairs: SCE conducts a wide variety of emergency repairs in response to emergency situations such as high winds, storms, wildfires, and other natural disasters (e.g., slumps, slides, surface fault ruptures, erosion, major subsidence) and accidents. Such repairs may include replacement of transmission towers, lines or re-stringing conductors, repair of access or stub road wash-outs, and other features/structures associated with the DPV2 project. While Class 1 and 2 activities can be scheduled reasonably well in advance of the activity, emergency repairs may be needed at any time.

Re-evaluation of Project Description

As stated above, construction of the proposed project is anticipated to take approximately 2 years, though O&M activities will be conducted over the 30-year life of the project. To ensure that the effects analysis in this biological/conference opinion accurately reflects the O&M activities as outlined in the "Project Description" section above, SCE, the BLM, Service, and CDFG will re-evaluate the project description and effects analysis in this biological/conference opinion every 10 years starting from the date the biological/conference opinion is issued. If at the time of the re-evaluation, the BLM, Service, and CDFG agree that the O&M activities outlined in the project description of this biological/conference opinion are still relevant and that no additional impacts outside those considered in the effects analysis have or will occur as a result of ongoing O&M activities, the BLM, Service and CDFG will provide written concurrence to SCE stating so. However, if the BLM, Service, or CDFG determine that O&M activities have been implemented inconsistent with the effects analysis of this biological/conference opinion, the

BLM will reinitiate formal consultation on the DPV2 project consistent with 50 CFR § 402.16 (see "Reinitiation Notice" section below for additional details). Also, if after re-evaluation, the BLM, Service, and CDFG agree that certain O&M measures are no longer relevant or impacts are less than anticipated, the conservation measures can be revised accordingly, and the agencies will provide written concurrence to SCE of any such revisions.

CONSERVATION MEASURES

The proposed project includes the following conservation measures and/or design features that will be implemented to avoid, minimize, and offset potential adverse effects to all life stages of the kangaroo rat, milk-vetch, fringe-toed and horned lizard, and tortoise. These measures were developed and coordinated with SCE, the BLM, and the CDFG, and based on information in the project's BA, final EIR/EIS, and supplemental material provided during the consultation process. Conservation measures will be implemented during the project construction phase and during long-term O&M of the project. The final EIR/EIS includes additional measures to offset proposed project impacts on rare and sensitive species, which will be implemented to further reduce impacts to biological resources in the proposed project footprint.

Construction

The following general and species-specific Conservation Measures, identified individually by number (e.g., CM 14) or grouped (e.g., CMs 22, 26, 30, 31, and 43), will be implemented during the construction phase of the project.

General Conservation Measures – Construction Phase

1. At least 60 days prior to the initiation of ground-disturbing activities, SCE will designate a field contact representative (FCR) who will be responsible for overseeing compliance with project specifications and all conservation measures outlined in this biological/conference opinion. The Authorized[1] or Qualified[2] Biologist may serve as the FCR. The FCR will retain a copy of all conservation measures readily available at the project field office while conducting work on site and oversee coordination between workers and the Authorized and Qualified Biologists.

2. The FCR will be on site for all ground-disturbing activities within kangaroo rat, milk-vetch, fringe-toed and horned lizard, and tortoise habitat, and will have the authority to halt all work activities that are not in compliance with the project's conservation measures and incidental take statement requirements. The FCR will be responsible for ensuring that any activities found to be out of compliance with the conservation measures are corrected

[1] An Authorized Biologist is defined as a wildlife biologist who has been authorized by the BLM, Service and CDFG to conduct surveys, monitoring, and handling for tortoise.

[2] A Qualified Biologist is defined as a wildlife biologist who has been authorized by the BLM, Service, and CDFG to conduct surveys**,** monitoring, and/or relocation/salvage activities for kangaroo rats, milk-vetch, fringe-toed and horned lizards.

immediately and the corrective action documented. The following incidents will require immediate cessation of non-compliant construction activities causing the incident, including (1) imminent threat of injury or death to kangaroo rats, milk-vetch, fringe-toed lizard and horned lizards, and tortoises; (2) unauthorized handling of a kangaroo rat, milk-vetch, fringe-toed and horned lizard, or tortoise, regardless of intent; (3) operation of construction equipment or vehicles outside the project footprint cleared of kangaroo rats, milk-vetch, fringe-toed or horned lizards, and tortoises, except on designated roads, and (4) construction activity without a Authorized or Qualified Biologist where one is required. If the Authorized or Qualified Biologist and FCR do not agree on an issue, the BLM's compliance officer will be contacted for resolution. All parties may refer the resolution to the BLM's authorized officer.

3. The FCR will coordinate with the Authorized or Qualified Biologist to provide a monthly written report to the BLM, Service, and CDFG, detailing completed and ongoing construction-related compliance activities, any non-compliance issues pertaining to the kangaroo rat, milk-vetch, fringe-toed or horned lizard, and tortoise, and any incidental observations of healthy, injured, or dead individuals of these species. The Authorized or Qualified Biologist will coordinate his/her activities with the FCR as frequently as needed to effectively implement the project's conservation measures.

4. All final contract documents involving project construction activities that relate to the project's conservation measures will ensure (a) the FCR is vested with oversight authority for all activities of contractors and subcontractors in the action area, including the halting of any project-related activities; (b) all contractors and subcontractors are obligated to adhere to any orders issued by the FCR addressing compliance issues with the project's conservation measures; (c) adherence of all project-related activities and designs to the requirements of the conservation measures; and (d) the obligation of all workers in the action area to complete the WEAP (see CM 14) and immediately report the observation of any healthy, injured, or dead kangaroo rats, milk-vetch, fringe-toed or horned lizards, or tortoises or crushed milk-vetch to the FCR or Authorized or Qualified Biologist, whoever is first available.

5. Should any kangaroo rats, milk-vetch, fringe-toed or horned lizards, or tortoises be injured or killed, or milk-vetch crushed during ground-disturbing activities, all activities in the immediate area will be halted, and the FCR and/or Authorized or Qualified Biologist will be immediately contacted. The FCR, Authorized or Qualified Biologist will be responsible for reporting the incident (via fax or email) to the BLM, Service, and CDFG within 24 hours of the incident.

6. Prior to the initiation of ground-disturbing activities, all work area boundaries associated with temporary and permanent disturbances will be conspicuously staked, flagged, or marked to minimize surface disturbance activities. All workers will strictly limit activities and vehicles to the designated work areas.

7. Removal of perennial, native vegetation in work areas will be avoided to the maximum extent practicable, particularly while accessing pulling and splicing stations and during pulling and splicing activities. Access to work areas in undisturbed habitat will be achieved by crushing, instead of removal, to the maximum extent practicable.

8. To minimize harassment or killing of wildlife and to prevent the introduction of destructive animal diseases to native wildlife populations, project personnel will not be allowed to bring pets into the action area.

9. During construction-related activities, motor vehicles will be limited to maintained roads, designated routes, and areas identified as permanently or temporarily impacted by construction of the project.

10. Motor vehicle speed along project routes and existing access roads within modeled[3], critical, and/or occupied[4] habitat for the kangaroo rat, fringe-toed or horned lizard, or tortoise will not exceed 25 miles per hour (mph). Speed limits will be clearly marked and all workers will be made aware of these limits.

11. All project components (e.g., towers, spur roads, pulling/splicing stations, construction yards/staging areas) will be located as to avoid sensitive plants and plant communities, or sensitive animals (e.g., burrows) to the maximum extent practicable.

12. Construction yards and helicopter assembly sites will be located outside of kangaroo rat, fringe-toed lizard, and horned lizard habitat (modeled, critical, or occupied habitat).

13. All auger holes, trenches, pits, or other steep-sided excavations that pose a hazard to kangaroo rats, fringe-toed or horned lizards, or tortoises will be securely fenced or covered when unattended to prevent accidental death or injury. At the start and end of each workday, and just before backfilling, all excavations will be inspected for trapped animals. If found, trapped animals will be removed by the Authorized or Qualified Biologist.

14. SCE will prepare a Worker Education and Awareness Program (WEAP) that will be presented by the FCR or Authorized or Qualified Biologist to all existing and new employees/contractors prior to their involvement in any onsite project activities. The WEAP, at a minimum, will consist of the following elements for kangaroo rat, milk-vetch, fringe-toed lizard, horned lizard, and tortoise: (a) distribution, general behavior, and ecology, (b) species sensitivity to human activities, (c) legal protection, (d) penalties for

[3] Modeled habitat refers to areas modeled as habitat for the milk-vetch, fringe-toed and horned lizards, and tortoise by the Coachella Valley Association of Governments (CVAG) for the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). See "Status of the Species" sections for the milk-vetch, fringe-toed and horned lizards, and tortoise below for additional discussion of CVAG modeled habitat.

[4] For tortoise, occupied habitat refers to areas outside of modeled and critical habitat in which live tortoise and/or sign was found during project-specific surveys. For the kangaroo rat, occupied habitat refers to areas in which kangaroo rats were found during project-specific surveys.

violation of State and Federal laws, (e) worker responsibilities for trash disposal and safe/humane treatment of species found in the action area and associated reporting requirements, (f) handout materials summarizing all the contractual obligations and protective requirements specified in the biological/conference opinion, and (g) requirements and penalties regarding adherence to speed limits in the project footprint. The outline of the WEAP will be submitted to the BLM, Service, and CDFG for review and approval at least 60 days prior to the initiation of surface-disturbing activities. The names of all employees, contractors, etc., who have participated in the WEAP will be kept on file at the project field construction office.

15. To prevent the spread of invasive nonnative plant species (as designated by BLM or the California Department of Food and Agriculture) into previously uninfested areas, a Qualified Botanist or Range Ecologist[5] will survey all proposed work areas prior to construction within the transmission line corridor. Any areas that contain BLM- and/or State-listed invasive plant species will be clearly demarcated in the field. All construction activities, vehicle operation, material and equipment storage, and any other surface disturbing activities will be prohibited in the demarcated area. If avoidance is not possible in the demarcated zone, the invasive plant species will be removed via acceptable mechanical, cultural, or herbicidal methods approved by the BLM, Service, and CDFG. Prior to entering the action area for the first time, all ground-disturbing equipment will be thoroughly cleaned at one of the wash stations at a construction yard to ensure against the introduction of invasive nonnative plants. The wash stations will be located outside of suitable habitat for kangaroo rat, milk-vetch, fringe-toed lizard, horned lizard, and tortoise.

16. Immediately after completion of construction-related activities, the FCR or designated representative will record the perimeter of the post-construction project footprint, including all tower pads, spur roads, pulling and splicing stations and access routes, substation components, and other project-related infrastructure in a GIS-compatible format to verify the extent of project disturbance. The GIS coverage layer will be provided to the BLM, Service, and CDFG within 90 days of completing construction; the coverage will be compared to impact acreages estimated in this biological/conference opinion to determine final ground-disturbance associated with project construction. If final impact acreages are less than those estimated in Table 1 of this biological/conference opinion, SCE will receive a mitigation credit that could be applied to mitigation for future activities along the DPV1/DVP2 ROW.

Stephens' Kangaroo Rat Conservation Measures – Construction Phase

17. During construction-related activities in occupied habitat, a Qualified Biologist will install exclusion fencing around work areas where impacts will occur, trap animals from inside impact areas, and relocate trapped animals out of harm's way outside of exclusion fencing until construction is completed. The Qualified Biologist will be present during

[5] The Qualified Botanist or Range Ecologist will be approved by the BLM.

construction to ensure that animals are not harmed. Following completion of construction, SCE will remove all exclusion fencing and recontour the soils to the preconstruction condition. The name and qualifications of the Qualified Biologist will be submitted to the Service and CDFG for approval at least 30 days prior to project construction in occupied kangaroo rat habitat.

18. During construction in suitable habitat, work will only occur during daylight hours and no night lighting will be used in kangaroo rat habitat.

19. During construction in suitable habitat, a load spreading device (e.g., plywood) will be used to reduce impacts to burrow systems. Load spreading devices must be removed each night.

20. To reduce the potential for kangaroo rats to utilize access roads, and therefore be subject to impact, along the DPV2 alignment, earthen berm heights will not exceed 13 centimeter (cm) [5 inches (in)] in height in suitable habitat.

21. No fuel modification will be conducted in suitable habitat.

22. To partially offset the impacts of permanent and temporary/long-term losses of kangaroo rat habitat associated with the proposed project, SCE will acquire at least 0.08 ha (0.20 ac) and restore/enhance at least 1.13 ha (2.80 ac) of kangaroo rat habitat. The compensation ratio will be 1:1 for permanent and temporary/long-term impacts to kangaroo rat habitat [0.08 ha (0.20 ac) of permanent impacts ×1 = 0.08 ha (0.20 ac); and 1.13 ha (2.80 ac) of temporary/long term impacts ×1 = 1.13 ha (2.80 ac)]. Permanent impacts will be offset through the purchase of 0.08 ha (0.20 ac) of occupied kangaroo rat habitat within the Southwestern Riverside County Multiple Species Reserve. Payment of $2,800 (at $14,000/ac) will be made to the Metropolitan Water District of Southern California for acquisition of kangaroo rat habitat prior to any project work within kangaroo rat habitat. Temporary impacts will be offset by the restoration or enhancement of 1.13 ha (2.80 ac) of kangaroo rat habitat within the Lake Perris State Recreation Area portion of the San Jacinto Lake Perris Stephens' Kangaroo Rat Reserve as designated within the Habitat Conservation Plan for the Stephens' Kangaroo Rat in Riverside County. The habitat enhancement will consist of nonnative grass suppression by mowing, hand clearing and/or fusillade application in kangaroo rat habitat. The enhancement will be funded by SCE (at $1,050/ac) and be carried out under the direction of the California Department of Parks and Recreation. SCE will provide payment of $2,940 to the California Department of Parks and Recreation prior to the initiation of construction in kangaroo rat habitat.

Coachella Valley Milk-vetch Conservation Measures – Construction Phase

23. To the extent possible, all construction activities in modeled habitat will be conducted outside of the seed germination and growing season, generally January to May.

24. A Qualified Biologist will conduct preconstruction focused surveys in areas of the project in modeled habitat in the winter (generally January and February) preceding initiation of ground disturbing activities and be present throughout construction activities in modeled habitat. The name and qualifications of the Qualified Biologist will be submitted to the BLM and Service for approval at least 30 days prior to project construction in modeled habitat.

25. Milk-vetch locations identified during the preconstruction surveys will be delineated on aerial photography, incorporated into the construction management plans, and avoided to the maximum extent possible. Where avoidance is not possible, SCE will develop a Plant Salvage Plan to be submitted to the BLM and Service for approval 30 days prior to the initiation of ground disturbing activities where milk-vetch will be impacted. The Salvage plan will include, but is not limited to, seed collection and storage at an appropriate facility (e.g., Rancho Santa Ana Botanical Garden), reseeding in appropriate existing or restored habitat, or other similar activities. Salvage will be conducted by a Qualified Biologist.

26. To partially offset the impacts of permanent and temporary/long-term losses of milk-vetch modeled habitat associated with the proposed project, SCE will acquire at least 50.99 ha (126 ac) of milk-vetch habitat. The compensation ratio will be 2:1 for permanent and temporary/long-term impacts to milk-vetch modeled habitat [25.50 ha (63 ac) of impact ×2 = a total of 50.99 ha (126 ac)]. The lands will be purchased either by SCE or SCE can deposit funds with the National Fish and Wildlife Foundation (NFWF) account governed by the Renewable Energy Action Team/NFWF Memorandum of Agreement (REAT/NFWF MOA 2010); if funds are deposited with NFWF, a compensation fee will be assessed based on current fair market appraised value for the specific geographic area in which the acquisition occurs. The acquired lands will occur in milk-vetch habitat with equivalent function and value. The replacement habitat is intended to benefit the population of milk-vetch adversely affected by the project, and will be located within or adjacent to priority conservation areas in the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) with comparable or better habitat value. The BLM and Service will coordinate to reach mutual agreement on the selection and ownership/management of acquired lands.

    If funds are provided to NFWF, the compensation (1) funds will be provided prior to project construction, (2) lands will be acquired prior to completion of project construction, and (3) lands will be conserved in perpetuity by a legal mechanism agreed to by the three agencies. If the conservation lands are acquired directly by SCE, steps #2 and #3 will apply.

    Regardless of the acquisition method (by SCE or NFWF), SCE will establish a management fund for the agency that owns and manages the acquired lands. The management fund will consist of an interest-bearing account (as described in the REAT/NFWF MOA), with the amount of capital commensurate to generate sufficient interest to fund all monitoring, management, and protection of the acquired lands, including

reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and other actions designed to protect or improve the habitat values of the acquired lands. A Property Analysis Record, as described at: http://cnlm.org/cms/index.php?option=com_content&task=view&id=21&Itemid=155or comparable method, will be conducted by SCE and reviewed by the BLM and Service to determine the management needs and costs described above, which then will be used to calculate the amount of capital needed for the management fund. This management fund will be held and managed by NFWF or another entity approved by the BLM and Service.

Coachella Valley Fringe-toed and Flat-tailed Horned Lizard Conservation Measures – Construction Phase

27. To the extent possible, all construction activities within modeled/blow sand habitat will be conducted during the active season, between April and October (inclusive of both months). Construction activities in modeled/blow sand habitat may be extended beyond the active season if exclusionary fencing is installed during the active season.

28. A Qualified Biologist will conduct preconstruction clearance surveys immediately prior to the initiation of ground disturbing activities during the active season, between April and October (inclusive of both months), in modeled/blow sand habitat and be present during all construction activities in these areas. The name and qualifications of the Qualified Biologist will be submitted to the BLM, Service, and CDFG for approval at least 30 days prior to project construction in modeled/blow sand habitat.

29. If fringe-toed or horned lizards are found, the Qualified Biologist will capture and relocate any individuals to the nearest suitable habitat in modeled/blow sand habitat outside of the DPV1/DPV2 ROW.

30. To partially offset the impacts of permanent and temporary/long-term losses of fringe-toed lizard habitat, SCE will acquire at least 35.61 ha (88 ac) of fringe-toed lizard habitat. The compensation ratio will be 2:1 for permanent and temporary/long-term impacts to fringe-toed lizard modeled habitat [7.28 ha (18 ac) of impact ×2 = a total of 14.57 ha (36 ac)] and critical habitat [10.52 ha (26 ac) of impact ×2 = a total of 21.04 ha (52 ac)]. The lands will be purchased either by SCE or SCE can deposit funds with the NFWF under the account governed by the REAT/NFWF MOA (REAT/NFWF MOA 2010); if funds are deposited with NFWF, a compensation fee will be assessed based on current fair market appraised value for the specific geographic area in which the acquisition occurs. The acquired lands will occur in fringe-toed lizard habitat with equivalent function and value. The replacement habitat is intended to benefit the population of fringe-toed lizard adversely affected by the project; therefore, replacement habitat to offset impacts to fringe-toed lizard modeled habitat will be located within or adjacent to priority conservation areas in the CVMSHCP with comparable or better habitat value and habitat acquired for impacts to fringe-toed lizard critical habitat will be located within designated critical habitat with comparable or better habitat value. The BLM, Service, and CDFG will coordinate to reach

mutual agreement on the selection and ownership/management of acquired lands. If critical habitat for fringe-toed lizard is not available from willing sellers, alternative compensation lands of equivalent or better habitat function and value in modeled habitat will be considered.

If funds are provided to NFWF, the compensation (1) funds will be provided no later than 30 days prior to ground disturbance, (2) lands will be acquired no later than 18 months after ground-disturbing activity, and (3) lands will be conserved in perpetuity by a legal mechanism agreed to by the three agencies. SCE will establish a management fund for the agency that owns and manages the acquired lands. The management fund will consist of an interest-bearing account (as described in the REAT/NFWF MOA), with the amount of capital commensurate to generate sufficient interest to fund all monitoring, management, and protection of the acquired lands, including reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and other actions designed to protect or improve the habitat values of the acquired lands. A Property Analysis Record, as described at: http://cnlm.org/cms/index.php?option=com_content&task=view&id=21&Itemid=155 or comparable method, will be conducted by SCE and reviewed by the BLM, Service, and CDFG, to determine the management needs and costs described above, which then will be used to calculate the amount of capital needed for the management fund. This management fund will be held and managed by NFWF or another entity approved by the BLM, Service, and CDFG.

If conservation lands are acquired directly by SCE they must meet the CDFG's fully mitigated standard. Lands purchased will be transferred in fee title to CDFG, a CDFG-approved non-profit organization qualified pursuant to California Government Code section 65965, or other government entity with either a conservation easement , deed restriction, or other protective measures (as approved by BLM and CDFG) over those lands. If lands are transferred to CDFG, SCE will reimburse CDFG for reasonable expenses incurred during title and documentation review, expenses incurred from other state agency reviews, and overhead related to transfer of the lands. CDFG estimates that this project will create an additional cost to CDFG of no more than $3,000 for every fee title deed or easement processed. If lands are transferred via donation to BLM, similar transfer fees may be incurred.

SCE may proceed with ground-disturbing activities before completing all of the required mitigation (including acquisition of lands), monitoring, and reporting activities by ensuring funding to complete those activities. SCE will provide to CDFG, no later than 30 days prior to commencing ground-disturbing activities, an irrevocable letter of credit or another form of security (security) approved by CDFG's Office of the General Counsel. The security will allow CDFG to draw on the principal sum if CDFG, at its sole discretion, determines that SCE has failed to comply with the Conditions of Approval.

The security will be in the amount of $413,600 based on the following estimated costs of implementing the mitigation, monitoring and reporting requirements: land acquisition costs for impacts to habitat, calculated at $3,000.00/ac for 35.61 ha (88 ac): $264,000; costs of enhancing mitigation lands, calculated at $250.00/ac: $22,000; long term maintenance and management, calculated at $1,450.00/ac: $127,600. Even if the security is provided, SCE must complete the required acquisition, protection and transfer of all lands and record the required conservation easements, deed restriction, or other protection measures no later than 18 months after the start of ground disturbing activities.

31. To partially offset the impacts of permanent and temporary/long-term losses of horned lizard habitat, SCE will acquire at least 12.95 ha (32 ac) of horned lizard habitat. The compensation ratio will be 2:1 for permanent and temporary/long-term impacts to horned lizard modeled habitat [6.47 ha (16 ac) of impact ×2 = a total of 12.95 ha (32 ac)]. The lands will be purchased either by SCE or SCE can deposit funds with the NFWF under the account governed by the REAT/NFWF MOA (REAT/NFWF MOA 2010); if funds are deposited with NFWF, a compensation fee will be assessed based on current fair market appraised value for the specific geographic area in which the acquisition occurs. The acquired lands will occur in horned lizard habitat with equivalent function and value. The replacement habitat is intended to benefit the population of horned lizard adversely affected by the project, and will be located within or adjacent to priority conservation areas in the CVMSHCP with comparable or better habitat value. The BLM and Service will coordinate to reach mutual agreement on the selection and ownership/management of acquired lands.

    If funds are provided to NFWF, the compensation (1) funds will be provided prior to project construction, (2) lands will be acquired prior to completion of project construction, and (3) lands will be conserved in perpetuity by a legal mechanism agreed to by the three agencies. If the conservation lands are acquired directly by SCE, steps #2 and #3 will apply.

    Regardless of the acquisition method (by SCE or NFWF), SCE will establish a management fund for the agency that owns and manages the acquired lands. The management fund will consist of an interest-bearing account (as described in the REAT/NFWF MOA), with the amount of capital commensurate to generate sufficient interest to fund all monitoring, management, and protection of the acquired lands, including reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and other actions designed to protect or improve the habitat values of the acquired lands. A Property Analysis Record, as described at: http://cnlm.org/cms/index.php?option=com_content&task=view&id=21&Itemid=155 or comparable method, will be conducted by SCE and reviewed by the BLM and Service to determine the management needs and costs described above, which then will be used to calculate the amount of capital needed for the management fund. This management fund will be held and managed by NFWF or another entity approved by the BLM and Service.

Desert Tortoise Conservation Measures – Construction Phase

32. To the extent possible, all construction activities in modeled, critical, and occupied habitat will be conducted when tortoises are less active, generally November to March.

33. An Authorized Biologist will be present during all construction activities in tortoise habitat (modeled, critical habitat, and/or occupied habitat) during the tortoise's more active season (April thru May and September thru October). The name and qualifications of the Authorized Biologist will be submitted on the Service's *Desert Tortoise Authorized Biologist Request Form* (September 2009) or most current version to the BLM, Service, and CDFG for approval at least 30 days prior to initiation of ground-disturbing activities in tortoise habitat.

34. The Authorized Biologist will conduct clearance surveys and tortoise handling following procedures outlined in the Service's *Desert Tortoise Field Manual* (December 2009) or more current Service guidance.

35. The Authorized Biologist will conduct preconstruction clearance surveys immediately prior to initiation of ground disturbing activities in tortoise habitat regardless of the time of year. The goal of a clearance survey is to find all tortoises on the surface and in burrows that could be harmed by construction activities. Surveys will cover 100 percent of the acreage to be disturbed. All potential burrows within 30.5 m (100 ft) of construction activity will be marked and avoided to the extent practicable. Those that cannot be avoided will be excavated by the Authorized Biologist.

36. Tortoises found on the surface during preconstruction clearance surveys or during construction activities will be moved out of harm's way and released within 500 m (1,640 ft) from point of collection.

37. Tortoises found in burrows during preconstruction clearance surveys or during construction activities during the species' less active period (November to March) will be avoided to the extent practicable. Those that cannot be avoided will be excavated and the tortoise removed, blocked into an artificial or empty natural burrow within 500 m (1,640 ft) from the construction area, and monitored until construction activities in the area are complete. Excavation, creation of artificial burrows, and handling of eggs, juveniles and adults will be conducted in accordance with the Service's *Desert Tortoise Field Manual* (December 2009) or more current Service guidance.

38. During construction, parked vehicles will be inspected prior to being moved. If a tortoise is found beneath a vehicle, the Authorized Biologist will be contacted to move the animal out of harm's way, or the vehicle will not be moved until the tortoise leaves on its own accord. The Authorized Biologist will be responsible for taking appropriate measures to ensure that any tortoises moved in this manner is not exposed to temperature extremes which could be harmful to the animal.

39. Constructed road berms in modeled, critical, and occupied habitat will be less than 30.48 cm (12 in) in height and have slopes less than 30 degrees.

40. A trash collection system will be established to ensure that all food and other trash that could attract tortoise predators is properly disposed of in self-closing, sealable containers with lids that latch to prevent wind, common ravens, and mammals from opening containers. All trash receptacles will be regularly inspected and emptied to prevent spillage and maintain sanitary conditions, and removed from the project footprint when construction activities are complete.

41. Road-killed animals or other carcasses detected in the DPV2 ROW access road during DPV2-related construction activities will be picked up and disposed of immediately (e.g., removal to a landfill or disposal at SCE facility). For special-status species road-kill, the Qualified Biologist or FCR will contact CDFG and Service within 1 working day of receipt of the carcass for guidance on disposal or storage of the carcass.

42. Raven Control Plan: SCE will implement a Raven Control Plan (RCP) to minimize avian predation on tortoise for the 30-year life of the proposed project. The goal of the RCP will be to utilize methods to deter raven depredation of juvenile tortoises, as well as other wildlife species that may be listed or may be considered sensitive, in order to ensure that overall numbers of tortoises along DPV2 do not decrease. The plan will incorporate an adaptive management strategy that will be implemented immediately following construction and evaluated after 5 years of monitoring. The following activities will be implemented as part of the RCP: (1) Common Raven Nest Monitoring and (2) Contribution to the Raven Management Plan.

    Common Raven Nest Monitoring: A Qualified Biologist(s) or Service-approved SCE designee with expertise identifying common raven nests and tortoise remains (e.g., carcass, shell and bone fragments) will conduct surveys for the presence of common raven nests on DPV2 tower structures and for the presence of tortoise remains within a 15-m (49-ft) radius of each tower in tortoise modeled, critical, and occupied habitat. The name and qualifications of the Qualified Biologist will be submitted to the BLM, Service, and CDFG for approval 30 days before the commencement of monitoring each year. Nest surveys will be conducted at least once per month, between the 15th and last day of each month, during the primary common raven nest building period (February to May) and will begin the first common raven nesting season following the completion of tower construction in tortoise habitat. Nest surveys methods may include vehicular windshield surveys or pedestrian surveys, as appropriate. In the event that a common raven is documented initiating a new nesting attempt during the May surveys, follow up visits to that nest will be made in the subsequent months to establish whether or not the pair is bringing tortoises back to the nest. Throughout the survey period, if tortoise remains are found below an active nest, SCE will document the remains and verify the nesting status of the common ravens (e.g., incubating, feeding nestlings), herein referred to as offending ravens, and notify the BLM, Service, and CDFG verbally (via phone call) and in writing (via email or fax) within 24 hours of

documenting the remains. Upon being notified, the Service will contact the Common Raven Management Working Group which will coordinate immediate removal of the offending common raven(s). SCE will establish a Cooperative Service agreement with USDA/APHIS allowing for Wildlife Services to conduct the removal efforts of offending common raven(s) within the DPV2 ROW. SCE will be responsible for expenses attributed to removal of offending ravens nesting on DPV2 towers.

Also, at least once per year outside of the avian breeding season and the tortoise's more active season (April thru May and September thru October), SCE will remove all previously documented offending raven nests from all DPV2 tower structures along the surveyed transmission line and completely dispose of the nesting material so that it is no longer available for use for nest building (e.g., removal to a landfill or disposal at SCE facility). Raven nest removal will be scheduled in a manner that does not impact personnel safety or system reliability.

The Qualified Biologist(s) or Service-approved SCE designee will also conduct nest surveys at the Devers and Colorado River substations. Surveys will begin in February and will continue through May, occurring between the 15th and last day of each month. If an active common raven nest is located, searches for the presence of tortoise remains within a 15-m (49-ft) radius of the nest will be conducted. If tortoise remains are found, SCE will follow the same procedure outlined above. Similarly, offending ravens nesting on the substation facilities will be removed in accordance with the aforementioned procedures. Raven nest removal will be scheduled in a manner that does not impact personnel safety or system reliability.

SCE will submit a report on the survey effort and a GIS layer to the Service of all the nests recorded during the year within 90 days of the last survey effort. The Service will be responsible for sharing the nest information with the Common Raven Management Work Group.

An evaluation of the effectiveness of this conservation measure will be reviewed by SCE, the BLM, Service, and CDFG on an annual basis in order to develop appropriate adaptive measures for DPV2 for the next breeding season. The frequency and type of surveys implemented may increase or decrease depending on survey results and the effectiveness of the monitoring and removal. SCE will implement adaptive management measures after consultation with the Service based on the effectiveness of conservation measures. Nest monitoring and removal, searches for desert tortoise remains, and common raven removal will be conducted for the life of the project or until SCE demonstrates, and the BLM, Service, and CDFG agree, that any or all of these actions are no longer necessary based on the results of the nest monitoring surveys.

Contribution to the Raven Management Plan: SCE will provide funds to the NFWF to contribute to a region-wide raven control plan to help address raven predation on the tortoise. This contribution will be used to address raven predation on a regional basis and

will be calculated as the linear extent of DPV2 line in tortoise habitat [152.05 km (94.48 mi)] multiplied by tower pad width [61 m (200 ft)] plus acres of tortoise habitat impacted by construction of the CRS[6] [32.37 ha (80ac)] multiplied by $105 per acre[7]. Based on this calculation (94.48 mi × 200 ft + 80 ac = 2,499 ac × $105/ac], SCE will provide a one-time payment of $262,416 to NFWF's Raven Management Plan fund. If the NFWF is not prepared to accept funds at the time of project authorization, the payment will be provided directly to BLM for raven management within tortoise habitat on BLM lands. SCE will provide these funds to NFWF or the BLM (if NFWF is not ready to accept funds), prior to the initiation of construction activities in tortoise habitat.

43. To partially offset the impacts of permanent and temporary/long-term losses of tortoise habitat, SCE will acquire at least 670.16 ha (1,656 ac) of tortoise habitat. For impacts to habitat in the Chuckwalla Critical Habitat Unit (CHU) or Chuckwalla Desert Wildlife Management Area (DWMA) but outside of modeled habitat, the compensation ratio will be 5:1 for permanent and temporary/long-term impacts to tortoise habitat [63.54 ha (157 ac) of impact × 5 for a total of 1,939.78 ha (785 ac)]. For habitat in the Chuckwalla CHU or DWMA also identified as modeled habitat, the compensation ratio also will be 5:1 [43.71 ha (108 ac) of impact × 5 for a total of 218.53 ha (540 ac)].

    For impacts to modeled habitat outside the Chuckwalla CHU or DWMA, the compensation ratio will be 1:1 for permanent and temporary/long-term impacts to tortoise habitat [72.84 ha (180 ac) of impact × 1 for a total of 72.84 ha (180 ac)]. For impacts to occupied habitat outside the Chuckwalla CHU, DWMA, or modeled habitat, the compensation ratio will also be 1:1 [61.11 ha (151 ac) of impact × 1 for a total of 61.11 ha (151 ac)].

    The lands will be purchased either by SCE or SCE can deposit funds with the NFWF under the REAT account governed by the REAT/NFWF MOA (REAT/NFWF MOA 2010); if funds are deposited with the NFWF, a compensation fee will be assessed based on current fair market appraised value for the specific geographic area in which the acquisition occurs. The acquired lands will occur in tortoise habitat with equivalent function and value. The replacement habitat is intended to benefit the population of tortoises adversely affected by the project. Therefore, replacement habitat will be acquired to offset impacts as follows: (a) habitat intended to replace modeled habitat in the CVMSHCP area will be located within or adjacent to priority conservation areas in the CVMSHCP area, (b) habitat intended to compensate for impacts to critical habitat in the CVMSHCP area will be located within critical habitat in the CVMSHCP area, (c) habitat intended to compensate for impacts to critical habitat outside of the CVMSHCP area will be located within critical habitat in the NECO plan area, and (d) habitat intended to replace occupied habitat outside of the CVMSHCP area and outside of critical habitat will be located within the NECO plan

[6] Acreage includes the station footprint, expansion area, water detention basin, and distribution line (see Table 1).
[7] See *Renewable Energy Development and Common Raven Predation on the Desert Tortoise* (May 2010) and *Cost Allocation Methodology for Implementation of the Regional Raven Management Plan* (July 9, 2010) for additional details on how the cost per acre was derived.

area. The BLM, Service, and CDFG will coordinate to reach mutual agreement on the selection and ownership/management of acquired lands.

If funds are provided to NFWF, the compensation (1) funds will be provided no later than 30 days prior to ground disturbance, (2) lands will be acquired no later than 18 months after ground-disturbing activity, and (3) lands will be conserved in perpetuity by a legal mechanism agreed to by the three agencies. SCE will establish a management fund for the agency that owns and manages the acquired lands. The management fund will consist of an interest-bearing account (as described in the REAT/NFWF MOA), with the amount of capital commensurate to generate sufficient interest to fund all monitoring, management, and protection of the acquired lands, including reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and other actions designed to protect or improve the habitat values of the acquired lands. A Property Analysis Record, as described at: http://cnlm.org/cms/index.php?option=com_content&task=view&id=21&Itemid=155 or comparable method, will be conducted by the SCE and reviewed by the BLM, Service, and CDFG, to determine the management needs and costs described above, which then will be used to calculate the amount of capital needed for the management fund. This management fund will be held and managed by NFWF or another entity approved by the BLM, Service, and CDFG.

If conservation lands are acquired directly by SCE they must meet the CDFG's fully mitigated standard. Lands purchased outside of the CVMSHCP area will be transferred in fee title to CDFG, a CDFG-approved non-profit organization qualified pursuant to California Government Code section 65965, or other government entity with either a conservation easement , deed restriction, or other protective measures (as approved by the BLM and CDFG) over those lands. If lands are transferred to CDFG, SCE will reimburse CDFG for reasonable expenses incurred during title and documentation review, expenses incurred from other state agency reviews, and overhead related to transfer of the lands. The CDFG estimates that this project will create an additional cost to CDFG of no more than $3,000 for every fee title deed or easement processed. If lands are transferred via donation to BLM, similar transfer fees may be incurred.

SCE may proceed with ground-disturbing activities before completing all of the required mitigation (including acquisition of lands), monitoring, and reporting activities by ensuring funding to complete those activities. SCE will provide to CDFG, no later than 30 days prior to commencing ground-disturbing activities, an irrevocable letter of credit or another form of security (security) approved by CDFG's Office of the General Counsel. The security will allow CDFG to draw on the principal sum if CDFG, at its sole discretion, determines that SCE has failed to comply with the Conditions of Approval.

The security will be in the amount of $4,471,200 based on the following estimated costs of implementing the mitigation, monitoring and reporting requirements: land acquisition costs for impacts to habitat, calculated at $1,000.00/ac for of 1,656 ac: $1,656,000; costs of

enhancing mitigation lands, calculated at $250.00/ac: $414,000; long term maintenance and management, calculated at $1,450.00/ac: $2,401,200. Even if the security is provided, SCE must complete the required acquisition, protection and transfer of all lands and record the required conservation easements, deed restriction, or other protection measures no later than 18 months after the start of ground disturbing activities.

Operations and Maintenance

The following general and species-specific Operations and Maintenance (O&M) Conservation Measures will be implemented during the O&M phase over the life of the project.

General Conservation Measures – O&M Phase

44. General O&M Plan. SCE will submit an O&M Plan for the DPV2 project to the BLM, Service, and CDFG within 90 days following the completion of construction activities. The project-specific O&M Plan will specify the location of maintained facilities, patrol and inspection procedures, detailed description of routine O&M activities, location of suitable habitat for listed plant and wildlife species covered in this biological/conference opinion, measures to avoid and minimize impacts to listed plants and wildlife, and procedures for action and reporting during non-routine maintenance activities. The O&M plan will include biological resource maps compiled during the DPV2 project's construction phase to be used to determine location of suitable habitat for listed species covered by this biological/conference opinion. The worker education program for sensitive biological resource prepared for project construction will be adapted for O&M activities and be provided to O&M crews when working in suitable habitat for listed species.

45. Annual O&M Work Plan. SCE will submit an annual O&M work plan to the BLM, CDFG, and Service at least 3 months prior to the initiation of Class 1 and Class 2 O&M activities planned each calendar year. The annual O&M work plan will specify all routine O&M activities anticipated to occur in the given year and include maps depicting the location of anticipated O&M activities relative to the location of modeled, critical, and/or occupied habitat for the kangaroo rat, milk-vetch, fringe-toed and horned lizards, and tortoise, and list the conservation measures from this biological/conference opinion that will be implemented to avoid, minimize, and offset impacts to these species.

46. Annual Reporting. SCE will report on the status of all O&M activities identified in the annual O&M work plan as part of the annual report [required as a Term and Condition of this biological/conference opinion (see "Terms and Conditions" section below)]. Annual reporting will include a description of the O&M activities initiated, in progress, and completed, the location of these activities, the amount of new ground disturbance in kangaroo rat, milk-vetch, fringe-toed and horned lizard, and tortoise modeled, critical and/or occupied habitat requiring additional habitat compensation.

47. Class 4 (Emergency Repair) O&M Activities. During emergency repairs, all Conservation Measures will be followed to the extent practicable. Within 2 business days of the start of emergency repairs, SCE will notify the BLM, Service, and CDFG verbally (via telephone) of the type of repairs anticipated, the location of the repairs relative to sensitive species habitat, and whether or not an Authorized or Qualified Biologist will be on site during repairs. Once the emergency has been abated, any unavoidable environmental damage will be reported to the project FCR or Qualified Biologist, who will submit a written report of such impacts to the BLM, Service, and CDFG and any other government agencies having jurisdiction over the emergency actions within 14 days of completion of emergency repair activities. If required by the BLM, Service, CDFG, or government agencies, the FCR or Qualified Biologist will develop a reasonable and feasible mitigation plan consistent with the Conservation Measures and any permits previously issued for the project by the governmental agencies.

48. SCE will offset additional impacts to kangaroo rat, milk-vetch, fringe-toed or horned lizard, and tortoise modeled, critical, occupied, or suitable habitat associated with Class 2 and Class 4 O&M activities following the process and compensation ratios identified in CMs 22, 26, 30, 31, and 43 above.

49. Routine Maintenance Limits. The area limits of project maintenance activities will be limited to the permanent disturbance areas noted on the final design engineering drawings and the vegetation-free buffers [typically 0.61 to 1.52 m (2 to 5 ft) beyond berm's or road's edge] for access and fire prevention along roads as described in the Routine ROW road maintenance (Class 2) description. Routine maintenance activity will be restricted to and confined within those limits. In addition, maintenance personnel will keep vehicles on existing roads. No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate limits of maintenance activity where any sensitive biological resources or wildlife habitats occur. Temporary demarcation methods such as flagging tape, pin flags, or wooden stakes will be used when necessary to ensure that all workers strictly limit activities and vehicles to the designated work areas.

50. All existing and new employees/contractors will undergo the WEAP (see CM 14) prior to their involvement in all Class 1 and Class 2 O&M activities.

Stephens' Kangaroo Rat Conservation Measures – O&M Phase

In addition to construction-related CMs 7, 8, 9, 11, 12, 13, 15, 18, 19, and 20 outlined above, the following species-specific O&M Conservation Measures will be implemented during the O&M phase.

51. During Class 2, ground-disturbing O&M activities in occupied habitat, a Qualified Biologist will determine if trapping is necessary to reduce harm to kangaroo rats. If kangaroo rats are found in the disturbance area, and the work will take less than 2 days to complete the Qualified Biologist will trap the area and hold kangaroo rats until the project

is complete. If the Class 2 O&M activity will take more than 2 days, an exclusionary fence will be installed around the work areas where impacts will occur. The area will then be trapped and animals from inside the impact area will be relocated out of harm's way, outside of exclusion fencing until construction is completed. Following completion of O&M activities in the area occupied by kangaroo rats, SCE will remove all exclusion fencing and recontour the soils to the preconstruction condition. The name and qualifications of the Qualified Biologist will be submitted to the BLM, Service and CDFG for approval at least 30 days prior to O&M activities in occupied kangaroo rat habitat.

Coachella Valley Milk-vetch Conservation Measures – O&M Phase

In addition to construction-related CMs 7, 9, 11, 15, and 23 outlined above, the following species-specific O&M Conservation Measures will be implemented during the O&M phase.

52. A Qualified Biologist will be present during Class 2, ground-disturbing O&M activities conducted in modeled habitat during the species' seed germination and growing season, generally January to May. The name and qualifications of the Qualified Biologist will be submitted to the BLM and Service for approval at least 30 days prior to project construction in modeled habitat. Milk-vetch locations identified during the preconstruction surveys will be surveyed to determine if additional germination has occurred. Any milk-vetch locations found during O&M activities will be marked (e.g., flagging tape, pin flags, wooden stakes) and avoided to the maximum extent possible. Where avoidance is not possible, milk-vetch plants will be salvaged following the Plant Salvage Plan (see CM 25). The name and qualifications of the Qualified Biologist will be submitted to the BLM, Service, and CDFG for approval at least 30 days prior to O&M activities in modeled habitat.

Coachella Valley Fringe-toed and Flat-tailed Horned Lizard Conservation Measures – O&M Phase

In addition to construction-related CMs 7, 8, 9, 11, 12, 13, 15, and 27 outlined above, the following species-specific O&M Conservation Measures will be implemented during the O&M phase.

53. Class 2, ground-disturbing O&M activities within modeled/blow sand habitat, defined in the post-construction O&M Plan Maps, will be conducted between April and October (inclusive of both months) when air temperature is above 75 degrees Fahrenheit to minimize potential impacts to fringe-toed and horned lizards.

54. To reduce direct impacts to fringe-toed and horned lizards during O&M activities, a Qualified Biologist will monitor all Class 2 ground-disturbing activities within modeled/blow sand habitat. The Qualified Biologist(s) will be present throughout ground disturbing O&M activities in modeled/blow sand habitat to identify, capture, and relocate any individuals to the nearest suitable habitat outside of the DPV1/DPV2 ROW. The name

and qualifications of the Qualified Biologist will be submitted to the BLM, Service, and CDFG for approval at least 30 days prior to O&M activities in modeled/blow sand habitat.

Desert Tortoise Conservation Measures – O&M Phase

In addition to construction-related CMs 7, 8, 9, 11, 13, 15, 32, 39, and 42 outlined above, the following species-specific O&M Conservation Measures will be implemented during the O&M phase.

55. During the tortoise's most active season (April thru May and September thru October), operators of heavy equipment (such as road graders) will be accompanied by an Authorized Biologist during Class 2 ground-disturbing O&M activities in tortoise modeled, critical habitat, and/or occupied habitat. The Authorized Biologist will have the responsibility and authority to halt all project activity should danger to a tortoise arise. Work will proceed only after hazards to the tortoise are removed, the tortoise is no longer at risk, or the tortoise has been moved from harm's way of its own will or by the Authorized Biologist. The name and qualifications of the Authorized Biologist will be submitted on the Service's *Desert Tortoise Authorized Biologist Request Form* (September 2009) or most current version to the BLM, Service, and CDFG for approval at least 30 days prior to initiation of ground disturbing O&M activities in tortoise habitat.

56. During Class 2 ground-disturbing O&M activities conducted during the tortoise's less active period (generally November thru March) in modeled, critical habitat, and/or occupied habitat, an Authorized Biologist will conduct burrow searches prior to initiation of ground-disturbing activities that take place beyond existing permanent disturbance areas, such as existing access roads in modeled, critical, and occupied habitat. Tortoises found in burrows during the less active period during O&M activities will be avoided to the extent practicable. Burrows that cannot be avoided will be excavated and the tortoise removed, blocked into an artificial or empty natural burrow within 500 m (1,600 ft) from the construction area, and monitored until O&M activities in the area are complete. Excavation, creation of artificial burrows, and handling of eggs, juveniles and adults will be conducted in accordance with the Service's *Desert Tortoise Field Manual* (December 2009) or more current Service guidance.

57. During O&M activities, all workers in the action area will be required and reminded at least annually in writing to inspect underneath parked vehicles every time before starting and driving the vehicle. The written instruction will require that if a tortoise is found beneath vehicle, the vehicle will not be moved until the animal is no longer at risk of being run over, or the Authorized Biologist will be contacted to move the animal out of harm's way.

58. Debris from tree trimming and brush clearing done in modeled, critical, or occupied habitat will be completely disposed so that it is no longer available for use for raven nest building (i.e., removal to a landfill or disposal at SCE facility).

Construction & O&M - Reporting

59. SCE will prepare an annual report by December 31 of each year of the project detailing construction and O&M activities and effects to milk-vetch, along with kangaroo rats, fringe-toed and horned lizards, and tortoises, as described in the "Terms and Conditions" section of this biological/conference opinion.

Action Area

The implementing regulations to section 7(a)(2) of the Act describe the action area to be all areas affected directly or indirectly by the Federal action and not merely the immediate area affected by the proposed project (50 CFR § 402.02). The action area is the area of potential direct or indirect effects of the proposed action and any interrelated or interdependent human activities; the direct and indirect effects of these activities include associated physical, chemical, and/or biological effects of considerable likelihood (Service and NMFS 1998). Indirect effects are those that are caused by the proposed action and are later in time but are still reasonably certain to occur (Service and NMFS 1986). Analyses of the environmental baseline, effects of the action on the species and designated critical habitat, cumulative effects, and the impacts of the incidental taking, are based upon the action area as determined by the Service (Service and NMFS 1998).

The action area associated with the proposed project includes the combined 100-m (330-ft) DPV1 and DPV2 ROW and includes all components of the DPV2 project. The ROW for the DPV1 project is included in the action area because access to the DPV2 project footprint will occur from the existing DPV1 access road. The action area includes a distance of up to 500 m (1,640 ft) from the project footprint where any kangaroo rats, fringe-toed or horned lizards, or tortoises found in the project footprint will be moved to avoid injury from construction or O&M-related activities. The action area also includes the area approximately 1.6 km (1 mi) around the currently proposed location of the CRS and an additional distance of up to 500 m (1,640 ft) from the final location of the CRS and it's components where any tortoises found in the project footprint will be moved to avoid injury from construction or O&M-related activities. Finally, the action area encompasses conservation areas that will be acquired or restored to offset impacts to the kangaroo rat, milk-vetch, fringe-toed and horned lizards, and tortoise resulting from construction and O&M of the proposed project. The acquisition and management of these conservation areas are expected to have only beneficial effects to the five species addressed in this consultation. For kangaroo rat, the action area includes habitat that will be acquired within the Southwestern Riverside County Multiple Species Reserve and habitat within the Lake Perris State Recreation Area portion of the San Jacinto Lake Perris Stephens' Kangaroo rat Reserve that will be restored or enhanced. For milk-vetch, fringe-toed and horned lizards, and tortoises, the exact locations of these conservation areas have not yet been identified. However, as discussed in the "Conservation Measures" section above, we anticipate their locations will be within or adjacent to other lands with a conservation management priority in the appropriate plan areas (CVMSHCP or NECO), with the extent of acquisition proportionate with the impacts within the respective plan areas, as described above under the "Conservation Measures" section.

STATUS OF THE SPECIES/CRITICAL HABITAT

Stephens' Kangaroo Rat

The following section summarizes information about Stephens' kangaroo rat on the legal/listing status, distribution and population trends, and current threats as discussed in the Service's biological opinion on the Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP; Service 2004a). Please refer to that document as well as the final listing rule (Service 1988) for additional detailed information about these topics and the species' description, life history, and habitat affinities.

Legal/Listing Status: The kangaroo rat was listed as threatened by the State of California in 1971 and as endangered under the Act on September 30, 1988 (Service 1988). Critical habitat rat has not been designated for the kangaroo rat because the Service found designation was not prudent (Service 1988). A draft recovery plan for the species was developed in 1997 (Service 1997), but has yet to be finalized.

Distribution and Population Trends: Stephens' kangaroo rats occur in areas characterized by low perennial and annual cover interspersed with large areas of bare ground in inland valleys of cismontane San Bernardino, Riverside, and San Diego counties of southern California. Populations of kangaroo rat fluctuate markedly from year to year, with population declines or increases up to five-fold or more, apparently driven by variability in survival and reproduction that are in turn affected by precipitation, natural and anthropogenic habitat disturbances, and successional habitat changes. Specific population estimates for Stephens' kangaroo rat (i.e., the number of kangaroo rat present within a given area) would be misleading due to naturally high fluctuations within populations. Populations have traditionally been characterized by estimating the extent of occupied habitat and providing a range of densities of kangaroo rat within occupied habitat. At the time of listing, the kangaroo rat is historically believed to have occupied about 7,162 ha (17,698 ac) in San Diego County and 15,059 ha (37,211 ac) in Riverside County (Service 2010d). Within the 22,221 ha (54,909 ac) of historical habitat, only 3,936 ha (9,725 ac) have been lost to development (Service 2010d). Within occupied habitat, the density of kangaroo rats range from less than 2.5 to greater than 50 individuals per ha (less than 1 to greater than 20 individuals per ac).

Current Threats: At the time of listing, the Service determined that the Stephens' kangaroo rat was threatened by the following factors: habitat loss resulting from widespread, rapid urbanization and agricultural development; fragmented and isolated populations; reduction of habitat suitability (from anthropogenic activities including grazing, off-highway vehicle (OHV) use, disking, plowing, introduction of nonnative vegetation, and rodent control programs); predation by domestic cats; and the lack of existing regulatory protections. Today these threats either have been removed or their imminence, intensity, or magnitude reduced to the extent that the species is no longer in danger of extinction throughout all or a significant portion of it range. Despite this significant reduction in threats, non-conserved Stephens' kangaroo rat habitat continues to be impacted by urban and agricultural development, while nonnative species,

OHVs, and the potential impacts associated with climate change continue to pose a threat to the species over the long term.

Coachella Valley Milk-vetch

The following section summarizes information about Coachella Valley milk-vetch on the legal/listing status, distribution and population trends, and current threats to the species and its habitat as discussed in the Service's biological opinion on the California Desert Conservation Area Plan Amendment for the Coachella Valley (Service 2010a). Please refer to that document as well as the final listing and critical habitat rules (Service 1998, 2005) for additional detailed information about these topics and the species' description, life history, and habitat affinities.

Legal/Listing Status: The milk-vetch was listed as federally endangered on October 6, 1998 (Service 1998). Though critical habitat for milk-vetch was proposed on December 14, 2004 (Service 2004b), the Service excluded all of the proposed lands in the final rule published on December 14, 2005 (Service 2005). A recovery plan has not been developed for this species.

Distribution and Population Trends: The Coachella Valley milk vetch is found on loose sands within the Coachella Valley of Riverside County and populations are strongly affiliated with active, stabilized, and shielded sandy substrates. The milk-vetch historically and currently has a limited distribution and is endemic to the Coachella Valley. The majority of historic and existing occurrences are found in the northern Coachella Valley, generally from just east of Cabazon to the dunes off Washington Avenue, north and west of Indio. The taxon currently is found mostly in and around Snow Creek, Whitewater River floodplain, Mission Creek, Morongo Wash, Willow Hole, the Big Dune, and the Thousand Palms Reserve.

Current Threats: The primary threat to the milk-vetch is the continuing loss of habitat to the direct and indirect effects of urban development in the Coachella Valley. Urban development, without the appropriate design considerations when in sand source/transport corridors, typically have adverse effects on the local aeolian and flooding regimes by reducing the wind movement of sands and modifying (often narrowing/concentrating) the flooding and drainage patterns. Occupied and suitable habitat areas that are downstream or downwind of these developments (habitat that depends on a periodic supply of loose unconsolidated sands for its long-term existence), are generally degraded by the alteration, blockage, and reduction in the supply of sand. The species is also threatened by habitat degradation and loss by the spread of invasive plants, OHV use, and the construction and operation of sand and gravel mines, debris dams, and percolation ponds.

Coachella Valley Fringe-toed Lizard

The following section summarizes information about Coachella Valley fringe-toed lizard on the legal/listing status, distribution and population trends, current threats, and status of critical habitat as discussed in the Service's biological opinion on the California Desert Conservation Area Plan Amendment for the Coachella Valley (Service 2010a). Please refer to that document

as well as the final listing and critical habitat rule and recovery plan (Service 1980, 1985) for additional detailed information about these topics and the species' description, life history, and habitat affinities.

Legal/Listing Status: The Coachella Valley fringe-toed lizard was listed as endangered by the State of California in 1980 and as threatened by the Service on September 25, 1980 (Service 1980). Using the 1978 regulatory definition of critical habitat, the Service proposed critical habitat for the fringe-toed lizard in late 1978. However, because of the changes to critical habitat process made with the 1978 Amendments to the Act, the Service withdrew the proposal in 1979. In keeping with the amendments, critical habitat was reproposed on May 28, 1980, and designated concurrent with the listing of the species (Service 1980). A recovery plan was developed for this species in 1985 (Service 1985).

Distribution and Population Trends: Coachella Valley fringe-toed lizards are restricted to aeolian (blow) sand deposits including sandy plains, sand hummocks, and dune systems and is endemic to the Coachella Valley of Riverside County. Little is known about Coachella Valley fringe-toed lizard populations outside the reserve system established by the Coachella Valley Fringe-toed Lizard Habitat Conservation Plan (HCP) and the CVMSHCP, other than wind-blown sand habitats suitable for the lizard continue to decline in association with conversion to agricultural and development uses. Population studies indicate that population densities of Coachella Valley fringe-toed lizards can vary widely, and densities are likely to be influenced by important habitat features, such as sand compaction and patch size, as well as depth and width blow sand available at the ground surface in a given area and time. Coachella Valley fringe-toed lizard densities have been estimated to range from 4.4 to 148 lizards per ha (1.8 to 60 lizards per acre). Despite almost 20 years of monitoring by various parties, the population trends and status of the species remain largely unknown. We do not have reliable estimates of what the population size is in any of the reserves, nor do we know how those population sizes have fluctuated (or how close various populations may have come to extirpation). A linear relationship does exist between the amount of habitat that is extant at any time and the ultimate number (and status) of lizards, and that habitat continues to be directly and permanently lost. However, most or all of the habitat loss has been in sand transport zones with ephemeral lizard populations and in areas with compromised sand transport processes that do not provide viable habitat conditions over the long term.

Current Threats: This species exists as relatively small, disconnected subpopulations in a small remaining area of the Coachella Valley. The vast majority of the blow sand habitat for the species has been lost or highly degraded by urbanization and associated development. Some of the remaining habitat (and the ecological processes that support it) is partially protected in reserves and a national wildlife refuge, but significant direct or indirect threats to all remaining habitat continue. The species' small historical range is now much reduced due to agricultural and urban development, with reports of 76 to 95 percent of its habitat having been lost. Much of the remaining habitat has been degraded and lost by stabilization of dunes by planted windbreaks, other barriers to sand transport, OHV use, and invasive species.

During drought periods fringe-toed lizard population density declines are natural, but the small and isolated habitat fragments that still remain support populations that become vulnerable to extirpation all during droughts, compared to the larger absolute population sizes in the larger and connected habitat patches that occurred historically.

Status of Critical Habitat: All of the approximately 4,771 ha (11,789 ac) of designated critical habitat occurs within the CVMSHCP area, of which approximately 953 ha (2,356 ac) is controlled by BLM, 901 ha (2,227 ac) of which is in an Area of Critical Environmental Concern (ACEC), and the remaining approximately 3,818 ha (9,433 ac) is in CVMSHCP conservation areas. Lands designated as critical habitat contain suitable habitat as well as areas important to continuing the geological processes necessary for blow sand ecosystem functioning, including the formation and maintenance of sand dunes and related blow sand habitats required by the species. The DPV2 project crosses approximately 10 km (6 mi) of Coachella Valley fringe-toed lizard critical habitat (Table 1), primarily on non-Federal lands. We are not aware of any threats or conflicts on the BLM fraction of critical habitat, in part because most the intermixed and adjoining land ownerships in the conservation areas also are in a conservation status. As such, the designation on BLM lands continues to fulfill the sand source/transport role and function for which it was intended. Within the primary sand transport corridor along the base of the Indio Hills, residential and commercial development pressures threaten to obstruct ecological processes in a several square mile area, and a proposed flood control facility to protect existing urban development threatens to reduce the amount of conservation committed to in the CVMSHCP. Though the CVMSHCP helped address the residential and commercial threats, threats from the proposed flood control project have yet to be resolved.

Flat-tailed Horned Lizard

The following section summarizes information about flat-tailed horned lizard on the legal/listing status, distribution and population trends, and current threats as discussed in the Flat-tailed Horned Lizard Rangewide Management Strategy (Rangewide Management Strategy; FTHL ICC 2003). Please refer to that document as well as the proposed listing rule (Service 1993) for additional detailed information about these topics and the species' description, life history, and habitat affinities.

Legal/Listing Status: The flat-tailed horned lizard is designated as a State Species of Special Concern by the CDFG and is listed as a threatened species in Mexico. The horned lizard was initially proposed as a federally threatened species in 1993 (Service 1993). Since that time, it has been withdrawn from listing consideration three times and reinstated three times, most recently in 2010 (Service 2010b). Accordingly, the species is currently proposed for listing as a threatened species.

Distribution and Population Trends: The flat-tailed horned lizard is most commonly found in sandy flats and valleys in creosote (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*) plant associations. In California, the species ranges from the Coachella Valley, the northernmost extent of its range, south along both sides of the Salton Sea and Imperial Valley. In Arizona, the

flat-tailed horned lizard is found in the Yuma Desert south of the Gila River and west of the Gila and Butler Mountains. The range of the flat-tailed horned lizard extends into Mexico from the international border in the Yuha Desert in California, south to Laguna Salada in Baja California, and from the international border in the Yuma Desert in Arizona, south and east through the Pinacate Region to the sandy plains around Puerto Penasco and Bahia de San Jorge, Sonora.

Information concerning size and dynamics of flat-tailed horned lizard populations has increased greatly in recent years. From 1979 to 2001, population trends were monitored using scat counts and lizards observed along transects (Wright 2002). Different methods of transect selection, numbers and experience of observers, numbers of repetitions, and lengths and shapes of transects have been used from year to year (Wright 2002).

Methodologies that rely on scat counts to assess the relative abundance of flat-tailed horned lizards are confounded by several potential limitations (Wright 2002). Wright (2002) states that while differences in scat abundance could indicate differences in lizard abundance, the observed decline in the rate at which scat is found could also be a result of an increase in OHV activity resulting in crushed or buried scat, lower deposition rates, greater wind eradication, different observers, or additional factors. Furthermore, the use of scat counts does not account for variations in lizard activity, misidentification of scat from other species, variability in scat production due to fluctuating food resources, weather conditions that affect scat production or longevity in the field, observer differences, and small sample sizes (Muth and Fisher 1992, Rorabaugh 1994). Consequently, scat abundance may not be closely correlated with lizard abundance under varying conditions (Rorabaugh 1994, Beauchamp et al. 1998). In addition, the use of a relative index, such as scat counts, to indicate population trends are not reliable due to uncorrected bias that exists (discussed further below). Relative index techniques assume that any changes or differences in survey results are proportional to true changes or differences in the populations of interest (Thompson et al. 1998). Thus, due to the significant limitations of scat count data, we consider the use of scat count information useful primarily in determining the presence and distribution of flat-tailed horned lizards in areas where desert horned lizards do not occur.

Two measures of abundance trends (i.e., lizards detected per 10 hours and lizards per transect) used between 1979 and 2001 for the East Mesa, West Mesa, and Yuha Desert, did not include scat data (Wright 2002). No statistically significant trends were found in the rate at which lizards were detected or the number of lizards per transect on any of the areas from 1979 to 2001 (Wright 2002). The measure of lizards per transect has inherent error due to differences in transect lengths surveyed among years. More importantly, the methodologies used between 1979 and 2001 have varied and the data have not incorporated detection probabilities (Thompson et al. 1998). Because flat-tailed horned lizards are very difficult to find in the field due to their cryptic coloration and behavioral characteristics, incorporating the probability of detecting them should be included in survey results.

Detectability is a common source of bias that is ignored for relative index techniques, such as the techniques used to collect the data between 1979 and 2001. Numerous factors may affect the

detectability of animals within selected sampling plots. These include physical structure and cover, weather, individual behavior, and survey methodology. However, differences in relative abundance found using uncorrected data may result from only a difference in detectability of animals between areas or within the same area across time (Thompson et al. 1998). Uncorrected bias could seriously affect the validity and usefulness of data in indicating abundance trends (Thompson et al. 1998).

The BLM recently estimated the population size on three MAs by using capture-mark-recapture (CMR) techniques incorporating detection probabilities (see Thompson et al. 1998, Williams et al. 2002). Grant (2005) analyzed the BLM flat-tailed horned lizard mark-recapture data from four summer monitoring surveys of three Management Areas (MAs): the Yuha Desert MA in 2002, the East Mesa MA in 2003, the West Mesa MA in 2003, and the Yuha Desert MA again in 2004. The East Mesa MA was estimated to have 42,619 (95 percent CI = 19,704 to 67,639) adult lizards (over 65 mm snout-to-vent length) in 2003 and the Yuha Desert MA in 2002 was estimated to have 25,514 adult lizards (95 percent confidence interval = 12,761 to 38,970). The West Mesa MA was estimated to have 10,849 adult lizards (95 percent confidence interval = 3,213 to 23,486). The Yuha Desert MA in 2004 was estimated to have 73,017 adult lizards (95 percent confidence interval = 4,837 to 163,635). The West Mesa MA survey and the Yuha Desert MA survey of 2004 were based on sparse data, hence the large confidence intervals. No trend can be inferred from the two years of data in the Yuha Desert MA because the confidence intervals overlap.

Young et al. (2004) surveyed the Yuma Desert MA using CMR and estimated a population of 25,855 (95 percent confidence interval = 16,390 to 43,951). A concurrent survey using distance sampling with a trapping web estimated a population of 16,328 adult lizards (95 percent CI 8,378 to 31,794); however, the data were ill-conditioned. The trapping web methodology is probably unsuitable because daily movements of flat-tailed horned lizards are too large relative to practical trapping web sizes.

Hollenbeck (2004) surveyed the Ocotillo Wells Research Area in 2003. The Ocotillo Wells Research Area is the Ocotillo Wells State Vehicular Recreation Area, an area open to OHV recreation. He estimated 19,222 lizards (95 percent confidence interval 18,870 to 26,752) in 2003. A similar survey completed in 2005 (Eric Hollenbeck, pers. comm.) estimated 24,345 adult lizards (95 percent confidence interval 14,328 – 69,922) and 37,085 young-of-the-year (95 percent confidence interval 22,165 – 74,811).

The Rangewide Management Strategy was revised in 2003 and CMR methodology was adopted as the standard for abundance and trend monitoring (FTHL ICC 2003). Presence/absence surveys in the framework of occupancy estimation (Mackenzie et al. 2003) were adopted for distribution monitoring (FTHL ICC 2003). A new monitoring plan using CMR and occupancy has been circulated for comments and is meant to form the basis of future flat-tailed horned lizard monitoring.

Based on track monitoring in the Coachella Valley from 2002 to 2005 (CCB 2005), which may not be reliable due to an uncorrected bias that exists (Service 2008b), flat-tailed horned lizard numbers apparently declined for several years but mostly recovered in 2006. The abundance index for flat-tailed horned lizards is the mean number of trackways (a set of tracks made by one lizard) per transect. This index dropped each year from nearly 1 in 2002 to approximately 0.1 in 2005 (CCB 2005). Anecdotally, Dr. Cameron Barrows could find 10 flat-tailed horned lizards on the Coachella Valley Preserve in an hour in 2002 but in 2005 was lucky to find one per hour (C. Barrows, pers. comm. 2006). In 2006, the index had returned to nearly 0.7. Such wide fluctuations make it difficult to determine the status of the species. The critical time period is at the low ebb of population size, when the population could fluctuate too low to recover. It is unknown how close the Coachella Valley population came to reaching this point in 2005.

Current Threats: Potential threats to the flat-tailed horned lizard include: urban development, agricultural development, OHV activity, energy developments, military activities, introduction of nonnative plants, pesticide use, and habitat degradation due to Border Patrol and illegal drive-through traffic along the United States–Mexico border.

Desert Tortoise

The following section summarizes information about desert tortoise on the legal/listing status, distribution and population trends, current threats, and status of critical habitat as discussed in the Service's biological opinion on the California Desert Conservation Area Plan Amendment for the Coachella Valley (Service 2010a). Please refer to that document as well as the draft revised recovery plan (Service 2008a) for additional detailed information about these topics and the species' description, life history, and habitat affinities.

Legal/Listing Status: The Mojave population of the desert tortoise was emergency listed as endangered by the Service on August 4, 1989, and thereafter listed as a threatened species on April 2, 1990 (Service 1990). The tortoise is also listed as a threatened species under the California Endangered Species Act. The Service designated about 2.6 million ha (6.5 million ac) of critical habitat for the tortoise in portions of California, Nevada, Arizona, and Utah on February 8, 1994 (Service 1994b). A recovery plan was developed for this species in 1994 (Service 1994a). A draft revision to the recovery plan was developed in 2008 (Service 2008a), but has not yet been finalized.

Distribution and Population Trends: Typical habitat for the desert tortoise in the Mojave Desert has been characterized as creosote bush scrub below 2,225 m (5,500 ft) in which precipitation ranges from 5 to 20 cm (2 to 8 in), where a diversity of perennial plants is relatively high, and production of ephemerals is high. The Mojave population of the desert tortoise includes those animals living north and west of the Colorado River in the Mojave Desert of California, Nevada, Arizona, and southwestern Utah, and in the Sonoran (Colorado) Desert in California.

The best available information indicates the Mojave population of desert tortoise is declining in abundance in most areas throughout its range. Line distance sampling is being used as part of a

long-term monitoring strategy to detect population trends. This program was put into place in 2001, but detecting population trends is expected to be a gradual process and surveys conducted over short periods of time (e.g., 2001 to 2007) would only reveal catastrophic declines or significant increases. These data do, however, provide some information on variability in annual and regional densities between recovery units. In general, over the first 6 years of range-wide monitoring (2001-2005, 2007), tortoises were least abundant in the Northeast Mojave Recovery Unit, the highest reported densities occurred in the Upper Virgin River Recovery Unit, and considerable decreases in density were reported in 2003 in the Eastern Colorado and Western Mojave recovery units (Service 2008a). The proposed project occurs in the Eastern Colorado recovery unit.

Current Threats: The majority of threats to the desert tortoise and its habitat are associated with human land uses including urbanization, upper respiratory tract disease and possibly other diseases, predation by common ravens and domestic and feral dogs, unauthorized OHV activity, authorized vehicular activity, illegal collecting, mortality on paved roads, vandalism, drought, livestock grazing, feral burros, nonnative plants, changes to natural fire regimes, and environmental contaminants.

Status of Critical Habitat: The Service designated approximately 2.6 million ha (6.5 million ac) of critical habitat for the desert tortoise in portions of California, Nevada, Arizona, and Utah. The primary constituent elements of tortoise critical habitat were identified as sufficient space to support viable populations within each of the six recovery units and to provide for movement, dispersal, and gene flow; sufficient quality and quantity of forage species and the proper soil conditions to provide for the growth of these species; suitable substrates for burrowing, nesting, and overwintering; burrows, caliche caves, and other shelter sites; sufficient vegetation for shelter from temperature extremes and predators; and habitat protected from disturbance and human-caused mortality.

The DPV2 project crosses approximately 105 km (65 mi) of tortoise critical habitat (Table 1), the majority of which is on BLM lands. The vast majority of critical habitat areas are relatively unaffected by human uses and continue to provide a habitat base to support viable populations into the future. However, threats from long-term climate trends, such as recurrent and prolonged drought, and biological processes, such as invasive nonnative plant infestations and consequent wildfire risk, appear to be more widespread and influential on the primary constituent elements of desert tortoise critical habitat than proposed development projects.

ENVIRONMENTAL BASELINE

Regulations implementing the Act (50 CFR § 402.02) define the environmental baseline as the past and present impacts of all Federal, State, or private actions and other human activities in the action area. Also included in the environmental baseline are the anticipated impacts of all proposed Federal projects in the action area that have undergone section 7 consultation, and the impacts of State and private actions which are contemporaneous with the consultation in progress.

As discussed in the "Action Area" section above, the action area for this project includes (1) the project area {defined as the project footprint/site [the combined 100-m (330-ft)] transmission line ROW for the existing DPV1 and all components of the DPV2 project} and a distance of up to 500 m (1,640 ft) from the project footprint/site where any kangaroo rats, fringe-toed or horned lizards, or tortoise found in the project footprint will be moved to avoid injury from construction or O&M-related activities, (2) the area approximately 1.61 km (1 mi) surrounding the currently proposed location of the CRS, (3) kangaroo rat habitat that will be acquired within the Southwestern Riverside County Multiple Species Reserve and kangaroo rat habitat within the Lake Perris State Recreation Area portion of the San Jacinto Lake Perris Stephens' Kangaroo Rat Reserve that will be restored or enhanced, and (4) conservation areas that will be acquired to offset impacts to milk-vetch, fringe-toed lizard, horned lizard, and tortoise resulting from construction and O&M of the proposed project. The environmental baseline of these components of the action area is described below.

Species Abundance in the Action Area

Project Area

The following description of the project area is primarily based on information provided in the BA for the DPV2 project (SCE 2010) and the BA for the CRS (BioResource Consultants 2008).

Devers-Valley Line

Elevations within this segment range from a low point of 329 m (1,080 ft) at the Devers Substation to a high point of approximately 843 m (2,765 ft) in the northwest foothills of the San Jacinto Mountains between Banning and Beaumont. The Valley Substation sits at an elevation of approximately 446 m (1,465 ft).

From the Devers Substation west to where the combined DPV1/DPV2 ROW crosses Interstate 10 (I-10), the vegetation communities consist of creosote bush scrub interspersed with patches of white bursage and disturbed creosote bush scrub (primarily within the wind farm areas). Just south of the I-10, the segment crosses the Whitewater River, which consists of a broad sandy and cobbled desert wash that is mostly devoid of native vegetation. The periodic high flows in the wash tend to scour the vegetation and allow for invasion of nonnative weedy species of plants. Between the Whitewater River and State Route (SR) 111, the combined DPV1/DPV2 ROW is dominated by disturbed creosote bush scrub. Between SR 111 and the foothills of the San Jacinto Mountains the combined DPV1/DPV2 ROW crosses the broad expanse of the San Gorgonio River and Snow Creek. The San Gorgonio River is a broad desert wash characterized by braided channels interspersed with patches of creosote bush scrub and coarse sand dunes.

Where the combined DPV1/DPV2 ROW crosses the foothills, the vegetation communities change to areas dominated by brittlebush (*Encelia farinose*) scrub and cheesebush (*Ambrosia salsola* var. *salsola*) on the lower slopes to semi-desert chaparral on the higher slopes. Repeated fires in 1994, 1995, 1996, and 2004 have occurred in the portions of this segment that traverse

through the San Bernardino National Forest (SBNF), and the Santa Rosa and San Jacinto Mountains National Monument.

Other plant communities crossed by this segment between the SBNF and the Valley Substation include buckwheat scrub, mixed buckwheat-chamise chaparral, saltbush scrub, and scattered patches of sage scrub. These communities are most common on the lower slopes of the hills located south of Banning and Beaumont, in the hills adjacent to SR 79, and in the Lakeview Mountains located between San Jacinto and Romoland. Nonnative grasslands are also present as just grasslands and as mixed scrub/grassland communities through the Badlands between Beaumont and the San Jacinto Valley.

Scattered desert washes occur along the portion of the combined DPV1/DPV2 ROW from Devers Substation west to the areas south of Banning. These washes are either vegetated with creosote bush scrub or small patches of desert willow woodland. In addition to the desert washes, this segment also traverses through Smith Creek, south of Banning, which is vegetated with a sparse riparian community and crosses the San Jacinto River in the San Jacinto Valley. Numerous smaller ephemeral drainages are present in the foothills of the San Jacinto Mountains, in the Badlands area, and in the Lakeview Mountains.

The combined DPV1/DPV2 ROW in this segment crosses through developed areas at the base of the foothills southwest of Cabazon, east of Old Banning Idyllwild Road, south of Banning, and north of the Valley Substation. Scattered rural development also occurs in the areas south of Banning and Beaumont and in portions of San Jacinto and Romoland. Agricultural areas are crossed in the San Jacinto Valley between Gilman Springs Road and just south of Ramona Expressway and in portions of Romoland, located north of the Valley Substation.

CRS-Devers Line

Elevations in this segment vary from a low of approximately 27 m (90 ft) at the east end of the Indio Hills to a high of approximately 666 m (2,185 ft) in the foothills of the Orocopia Mountains near Chiriaco Summit. The vegetation communities in the combined DPV1/DPV2 ROW in this segment occur as a mosaic of undisturbed habitats, agricultural lands, and developed areas. Much of the Coachella Valley, between the Devers Substation and the City of Indio, has been developed or is in the process of being developed. This development has removed native plant communities and altered the transport of blow sands across portions of the valley. Along the base of the Indio Hills, the combined DPV1/DPV2 ROW traverses patches of stabilized desert sand fields, mesquite hummocks, stabilized sand fields, stabilized desert dunes, ephemeral sand fields, and Sonoran mixed woody and succulent scrub that are interspersed with areas of creosote bush scrub. Most of the combined DPV1/DPV2 ROW between the City of Indio and Devers Substation is considered important sand source and transport areas. Plant communities within the eastern part of the segment primarily consist of creosote bush scrub habitat and desert dry washes dominated by the Sonoran desert scrub community. The spacing of the desert scrub is sparse, but the density of shrubs increases as the combined DPV1/DPV2 ROW approaches the base of the hills and mountains. This segment is also marked by numerous

desert washes that support desert scrub plant species and larger shrubs, such as honey mesquite, blue Palo Verde, and ironwood. The area of the proposed CRS is generally flat characterized by both desert scrub and locally extensive expanses of sand dunes and low sandy hummocks containing occasional woody shrubs and a variety of annual and perennial herbs.

Kangaroo rats, milk-vetch, fringe-toed and horned lizards, and tortoises in the combined DVP1/DPV2 ROW are impacted by habitat loss, fragmentation, edge effects associated with roads and urban development, invasive plant species, and/or avian predation. The majority of the combined DVP1/DPV2 ROW generally parallels I-10 and is within a utility corridor containing several existing transmission lines, including SCE's existing DPV1 transmission line. In addition to DPV1, two other transmission lines (Blythe and Desert Southwest), extending from or near the Devers Substation to the City of Blythe and traversing milk-vetch, fringe-toed lizard, horned lizard, and tortoise habitat, have been authorized for construction in the segment of the utility corridor where the CRS-Devers line would be constructed. The Blythe transmission line was recently completed but construction on the Desert Southwest line has not yet been initiated. The DPV1 line is currently the only existing transmission line in the section of the utility corridor where the Devers-Valley line would be constructed through kangaroo rat habitat. Ongoing O&M activities associated with these existing transmission lines likely affect kangaroo rat, milk-vetch, fringe-toed lizard, horned lizard, and tortoise in the combined DVP1/DPV2 ROW.

As a result of the existing transmission lines and associated O&M activities, habitat in the combined DVP1/DPV2 ROW is considered degraded and of low quality. While degraded, habitat in this area is currently occupied by the kangaroo rat, milk-vetch, and tortoise, and therefore currently provides habitat for feeding, breeding, and/or sheltering, by these species to some extent. While not detected during project surveys, habitat in the combined DVP1/DPV2 ROW likely also currently provides habitat for feeding, breeding, and/or sheltering by fringe-toed and horned lizards, or may in the future. Also, given that areas under and around the towers will likely remain accessible by these species following construction of the DPV2 project, some areas within the combined DVP1/DPV2 ROW will continue to be available for long-term movement of kangaroo rats, fringe-toed and horned lizards, and tortoises between habitat patches on either side of the combined DVP1/DPV2 ROW, which may be important for long-term recovery of these species.

Despite the presence of lower-quality habitat in the project footprint, any portion of the project footprint may be used by tortoises for dispersal from surrounding habitat. Desert tortoises are known to use lower-quality intermountain habitat as dispersal routes, providing passage between high-quality habitat areas in the surrounding mountains (Averill-Murray and Averill-Murray 2005). Historically, tortoise populations in the Sonoran Desert have exchanged individuals at a rate of one migrant per generation (Averill-Murray and Averill-Murray 2005).

Stephens' Kangaroo Rat

The Devers-Valley segment crosses approximately 0.5 km (0.3 mi) of suitable habitat for the kangaroo rat (Table 1). Six areas along this segment were trapped during focused surveys for this species in the spring of 2009 (Dudek 2009). Of these, three tower locations were determined to be within suitable habitat. One kangaroo rat was captured just north of Gilman Springs Road near proposed Tower M30-T1 (DV-110). Potentially suitable habitat was found at proposed Towers M26-T1 and M35-T3. In accordance with the Service's survey guidelines, after one individual is found, suitable habitat in the project footprint is determined to be occupied and trapping can be discontinued. Consequently, the results of the 2009 surveys likely do not reflect the abundance, or allow us to estimate the density, of kangaroo rat in the project footprint. Therefore, to estimate density of kangaroo rat in the project footprint, we applied density estimates from the nearby Potrero Creek population. The Potrero Creek area is within 16 km (10 mi) of the project site and a series of surveys were conducted before a 2007 fire burned more than 1,007 ha (2,488 ac) of suitable habitat. Habitat in the project footprint is similar to habitat in the Potrero Creek area before the 2007 fire. Using these data, we estimated that 77 percent of the occupied habitat at Potrero Creek, on average, had a density of less than four kangaroo rat per 0.4 ha (1.0 acre), and that kangaroo rat density rarely exceeded 14 to 16 individuals per acre. Applying this density, we estimate that up to 12 juvenile and adult kangaroo rat may occur in the 1.21 ha (3 ac) of kangaroo rat habitat that occurs in the project footprint. We acknowledge that the estimate of 12 kangaroo rats likely is an overestimate since it is based on densities from an area considered better quality habitat than the project site, which is somewhat degraded. However, we determined that applying the estimate of 12 kangaroo rats in the project footprint would provide a biologically conservative approach based on the best data available to establish a baseline for analysis of the potential impacts of the proposed project.

Coachella Valley Milk-vetch

Population estimates within the action area are not available because insufficient comprehensive monitoring data are available for this species endemic to the Coachella Valley. The CVMSHCP modeled 16,065 ha (36,398 ac) of milk-vetch habitat within the plan area, roughly extending from just east of Banning to the vicinity of Bermuda Dunes north of I-10. The Devers-Valley and CRS-Devers segments will cross approximately 20.12 km (12.5 mi) of modeled habitat (Table 1).

Surveys and habitat assessments were conducted for this species in areas of potential and suitable habitat in the DPV2 ROW in 1985 (Karl and Uptain 1985), 1993 (Dames and Moore 1994), 2002 (EPG 2002, Karl 2002), 2003 (EPG 2003), 2005 (Greystone 2005), 2007 (EPG 2009), and 2008 (Dudek 2008). However, surveys for milk-vetch in the Devers-Valley segment were only conducted around 17 specific tower sites (Dudek 2008) during which no milk-vetch were found.

Surveys in the CRS-Devers segment yielded the following results: a population of "several" plants in 1985 (Karl and Uptain 1985), 129 plants in 1987 (E. Linwood Smith and Associates 1987 cited in Dames and Moore 1994), 12 plants in 1994 (Dames and Moore 1994), zero plants

in 2002 (EPG 2002) and 4 plants in 2003 (EPG 2003). Greystone (2005) conducted a focused survey in the ROWs for the DPV2 and Desert Southwest Transmission project since the ROWs for these two projects are directly adjacent. A total of 38 locations containing 96 plants were found within the combined ROW (Greystone 2005), with 79 plants occurring within the DPV2 ROW at 27 locations (based on interpretation of GIS data associated with Greystone 2005). No milk-vetch were located during surveys conducted in 2007 (EPG 2009) or during surveys conducted in Devers-Valley segment in 2008 (Dudek 2008).

Based on the species' presence in the CRS-Devers segment, the annual variability of this species, and the presence of modeled habitat patches in both the CRS-Devers and Devers-Valley segments, we presume that milk-vetch will be present in modeled habitat in both the Devers-Valley and CRS-Devers segments over the life of the project.

Coachella Valley Fringe-toed Lizard

Population levels within the action area are not known because insufficient monitoring data are available to support calculation of population estimates for this species largely restricted to the Coachella Valley. The CVMSHCP modeled 10,963 ha (27,070 ac) of fringe-toed lizard habitat within the plan area, roughly extending from east of Cabazon to the vicinity of Indio north of I-10. The Devers-Valley and CRS-Devers segments will cross approximately 6 km (4 mi) of modeled habitat and 10 km (6 mi) of critical habitat (Table 1).

Surveys and habitat assessments were conducted for this species in areas of potential and suitable blow sand habitat along the Devers-Valley and CRS-Valley segments in 1985 (Karl and Uptain 1985), 1993 (Dames and Moore 1994), 2002 (EPG 2002, Karl 2002), 2003 (EPG 2003), 2005 (Greystone 2005), 2007 (EPG 2009), and 2008 (Dudek 2008). However, surveys for fringe-toed lizards in the Devers-Valley segment were only conducted around 17 specific tower sites (Dudek 2008) during which no fringe-toed lizards were found. Greystone (2005) conducted a habitat assessment to identify the extent and location of blow sand habitat within the CRS to Devers segment in eastern Coachella Valley (from near the Devers Substation to east of the City of Indio). During this assessment, four patches of blow sand were identified, two crossing the ROW and two near the ROW.

No fringe-toed lizards were observed during surveys or habitat assessments within the ROW; however, surveyors indicated the presence of suitable habitat at several proposed tower locations (see survey data sheets in Appendix B of Dudek 2008) and speculated that the species could be present where suitable habitat occurs in the DPV2 ROW (EPG 2009). While no individuals were found within the DPV2 ROW, based on the presence of modeled habitat and mapped habitat in both the ROW, the cryptic nature of this species, and the dynamic changes in habitat suitability associated with blow sand ecosystems, we presume that fringe-toed lizards will be present in modeled habitat in the Devers-Valley and CRS-Devers segments over the life of the project.

While no fringe-toed lizard density estimates are available for the action area or the project footprint, fringe-toed lizard densities throughout the species' range have been estimated to be 0.5

per ha (0.2 per ac) to 148 per ha (60 per ac) (Turner et al. 1981; A. Muth and M. Fisher, unpubl. data, 1985-2003; M. Fisher pers. comm. 2006). Using an estimated density of 0.5 per ha (0.2 per ac), we estimate that 32 adult fringe-toed lizards could be present in the project footprint[8]. We used the lower end of the density estimate because we anticipate that actual densities in the project footprint will be low due to existing habitat degradation from O&M activities associated with existing transmission lines and the relatively small size of the blow sand habitat and isolation of these patches from other occupied habitat. We acknowledge that the estimate of 32 adult fringe-toed lizards likely is an overestimate since it is not based on site-specific data, but based on densities from throughout the species range, and zero fringe-toed lizards were detected during surveys of the project footprint. However, we determined that applying the estimate of 32 adult fringe-toed lizards in the project footprint would provide a biologically conservative approach based on the best data available to establish a baseline for analysis of the potential impacts of the proposed project.

Coachella Valley Fringe-toed Lizard Critical Habitat

The CRS-Devers segment crosses approximately 10 km (6 mi) of designated fringe-toed lizard critical habitat (Table 1). This area of the ROW within critical habitat does not contain blow sand habitat as mapped by Greystone (2005) and is not occupied by fringe-toed lizards. However, this area is important for maintaining occupied fringe-toed lizard blow sand habitat in the Coachella Valley Preserve since sand from this area is transported down washes during flood events and then carried by wind across the Preserve to depositional zones inhabited by the lizard.

Flat-tailed Horned Lizard

Population levels within the action area are not known because insufficient monitoring data are available to support calculation of population estimates. The CVMSHCP modeled 15,211 ha (37,587 ac) of horned lizard habitat within the plan area, roughly extending from east of Cabazon to the vicinity of Indio north of I-10. The CRS-Devers segment will cross approximately 6 km (4 mi) of modeled habitat (Table 1).

Surveys and habitat assessments were conducted for this species in areas of potential and suitable habitat in 1985 (Karl and Uptain 1985), 1993 (Dames and Moore 1994), 2002 (EPG 2002, Karl 2002), 2003 (EPG 2003), and 2007 (EPG 2009). Karl and Uptain (1985; see Figure 9) observed two individuals in or near the ROW and concluded that suitable habitat occurs along several tower sites in the Chuckwalla and Coachella valleys. According to Dames and Moore (1994) and EPG (2009), suitable horned lizard habitat occurs along the DPV2 ROW.

Based on the species' presence in or near the ROW, the presence of modeled and mapped suitable habitat in the ROW, the cryptic nature of this species, and the dynamic changes in

[8] We estimated the density of fringe-toed lizards in the action area as linear extent of DPV2 crossing species habitat (per Table 1) multiplied by the 40-m (130-ft) DPV2 ROW width multiplied by a fringe-toed lizard density of 0.5 per ha (0.2 per ac).

habitat suitability associated with blow sand ecosystems, we presume that horned lizards will be present in the CRS-Devers segment in modeled habitat over the life of the project.

Density estimates for the horned lizard are also not available for the action area or the project footprint. However, horned lizard densities in other parts of the species' range have been conservatively estimated to be 1.0 per ha (0.4 per ac). Using an estimated density of 1.0 per ha (0.4 per ac), we estimate that 64 horned lizards could be present in the project footprint[9]. However, we anticipate the actual densities in the project footprint will be considerably lower due to existing habitat degradation from O&M activities associated with existing transmission lines and the relatively small size of the blow sand habitat and isolation of these patches from other occupied habitat. We acknowledge that the estimate of 64 adult horned lizards likely is an overestimate since it is not based on site-specific data, but based on densities from other parts of the species range, and only two horned lizards were detected during surveys of the project footprint and adjacent areas. However, we determined that applying the estimate of 64 adult horned lizards in the project footprint would provide a biologically conservative approach based on the best data available to establish a baseline for analysis of the potential impacts of the proposed project.

Desert Tortoise

Within the planning area for the CVMSHCP, modeled 231,115 ha (571,098 ac) of tortoise habitat within the plan area ranged roughly from west of Cabazon to west of Desert Center. The Devers-Valley and CRS-Devers segments cross approximately 42 km (26 mi) of modeled habitat, 105 km (65 mi) of critical habitat, and 5 km (3 mi) of occupied habitat (Table 1).

The eastern portion of the CRS-Devers segment is within the Eastern Colorado Desert Recovery Unit as identified in the species' recovery plan (Service 1994a) and the BLM's NECO plan area. In the species' draft revised recovery plan, both the eastern portion of the Devers-Valley segment and the entire CRS-Devers segment are in the Colorado Desert Recovery Unit (Service 2008a).

Surveys and habitat assessments for tortoises were conducted in the project footprint in 1985 (Karl and Uptain 1985), 1993 (Dames and Moore 1994), 2002 (EPG 2002, Karl 2002), 2003 (EPG 2003), 2005 (Alice Karl and Associates et al. 2005), 2007 (EPG 2009), and 2008 (BioResource Consultants 2008, Dudek 2008). Surveys conducted in 2008 by BioResource Consultants (2008) and in 2009 and 2010 by AECOM (2010a, 2010b) focused primarily on the CRS area. Surveys conducted by Dames and Moore (1994), Alice Karl and Associates et al. (2005), BioResource Consultants (2008), and by AECOM (2010a, 2010b) were conducted following the Service's recommended survey protocol (Service 1992). Live tortoise and/or sign were found in the CRS-Devers segment only. However, surveys for tortoises in the Devers-

[9] We estimated the density of horned lizards in the action area as linear extent of DPV2 crossing species habitat (per Table 1) multiplied by the 40-m (130-ft) DPV2 ROW width multiplied by a horned lizard density of 1.0 per ha (0.4 per ac).

Valley segment were only conducted around 17 specific tower sites (Dudek 2008) and not within suitable habitat along the entire Devers-Valley segment.

Surveys along the CRS-Devers ROW yielded the following results: 10 live tortoises, 5 burrows, 2 shells, and 4 scat in 1985 (Karl and Uptain 1985, Figure 9); 6 live tortoises, 29 burrows, 124 scat, 6 pallets, 10 carcasses, and 1 set of tracks in 1994 (Dames and Moore 1994; Appendix C); 7 burrows and 1 scat in 2002 (EPG 2002, Appendix 4; Karl 2002); 1 live tortoise, 5 burrows, and 1 scat in 2003 (EPG 2003); 2 live tortoises, 12 bone fragments and carcasses, 22 burrows, and 26 scat in 2005 (see Table 1B in Alice Karl and Associates et al. 2005); and 11 live tortoises, 17 carcasses, 53 burrows, 69 scat, and 1 pallet in 2007 (Smith 2009 cited in EPG 2009).

Surveys in the CRS yielded the following results: one burrow about 0.40 km (0.25 mi) south of the CRS in 2005 (Alice Karl and Associates et al. 2005); one scat near the northeast corner of the CRS and three burrows (not active), two carcasses (one intact), and six scat within approximately 3.2 km to 4.8 km (2 to 3 mi) from the CRS footprint in 2008 (BioResource Consultants 2008); two burrows (not active), one carcass, and bone fragments within the 1.6-km (1-mi) survey area adjacent to the CRS footprint in 2009 and 2010 (AECOM 2010a, 2010b). These data indicate the CRS site and surrounding habitat areas, including the 1.61-km (1-mi) area around the CRS site, is low density tortoise habitat used by relatively few tortoises for breeding, feeding, and sheltering, and dispersal to surrounding areas.

Based on the presence of live tortoises and sign in the CRS-Devers segment, and the presence of modeled habitat in the Devers-Valley and CRS-Valley segments, we presume that tortoises will be present in modeled habitat, critical habitat, and occupied habitat along the entire DPV2 ROW over the life of the project. Applying the results of the most recent protocol surveys (Alice Karl and Associates et al. 2005) indicates that at least four live tortoises likely occurred in the CRS-Devers ROW and CRS footprint during surveys conducted in 2005 but that two were undetected: one because it was underground and one because it escaped detection. This estimate is based on an 80 percent probability that a tortoise is above ground based on the previous winter rainfall and a 63 percent probability of detecting a tortoise if above ground (see Service 2010c). However, these surveys represent single points in time and onsite tortoises may have remained undetected and/or tortoises may have moved on to the site from surrounding areas after surveys were conducted. While direct comparison is not possible due to potentially varying survey methods and effort, a review of the results of all pre-project surveys conducted within the project footprint illustrates the variability in tortoise abundance among the years surveys were conducted: 10 in 1985, 6 in 1994, zero in 2002, 1 in 2003, 2 in 2005, and 11 in 2007. Varying numbers of tortoises were also found adjacent to the project footprint during these surveys. For example, an additional 19 tortoises were found during ZOI surveys of the DPV2 ROW in 2005. Therefore, the estimate of four tortoises likely underestimates the abundance of tortoises that may occur in the project footprint.

Applying the same detection probabilities to the 1994 protocol survey results (6 live tortoises) that we applied to the 2005 survey results (2 live tortoises) yields an estimate of 12 tortoises in the project footprint. Therefore, based on the estimates calculated using data from protocol

surveys conducted in 1994 and 2005, we estimate that 4 to 12 subadult and adult tortoises may occur in the project footprint. While we acknowledge that the estimate of up to 12 subadult and adult tortoises may be an overestimate, this estimate fits relatively closely within the variability of tortoise abundance found over the survey years (as discussed above). Also, we have determined that applying the estimate of 12 subadult and adult tortoises in the project footprint would provide a biologically conservative approach based on the best data available to establish a baseline for analysis of the potential impacts of the proposed project.

In addition to subadult and adult tortoises, the project footprint is likely to contain juvenile tortoises [≤160 mm (6.3 in)]. Estimating densities of juvenile tortoises is difficult because they are extremely difficult to detect due to their small size and cryptic nature. However, based on a 4-year study of their population ecology, Turner et al. (1987) determined that juveniles accounted for 31 to 51 percent of the overall population. Using this range and the estimated 12 subadult and adult tortoises in the project footprint, we estimate that the project footprint may support from 4 to 6 juveniles. We recognize that the survey data used for these estimates come from a limited number of studies and that population levels are constantly changing. We also recognize that since our estimate of the number of subadult and adult tortoises in the project footprint could be an overestimate (as discussed above), this estimate of juveniles in the project footprint could be an overestimate as well, but provides the best available data available to establish a baseline for analysis.

We also expect the proposed project footprint contains tortoise eggs. Estimating the number of tortoise eggs is also extremely difficult given that the eggs are buried beneath the soil surface. To estimate the number of eggs that could be present, we used the average number of eggs found in a clutch (i.e., 5.8, see Service 1994a). Assuming a 1:1 sex ratio, six of the tortoises estimated in the project footprint may be reproductive females that together could produce approximately 35 eggs per year. However, the number of females or eggs within the project footprint is difficult to estimate based on the low number of tortoises found during the pre-project surveys. Given the number of assumptions and extrapolations used to estimate the number of eggs [i.e., that 12 tortoises may occur in the project footprint and that 6 of those 12 may be female and equally reproductive as the tortoises in the Turner et al. (1984) study area], we determined that the estimate of 35 eggs in the project footprint has an unknown but high level of uncertainty, and therefore, does not provide a useful measure for analyzing the effects of the proposed project. Therefore, we cannot calculate a reliable estimate for the number of eggs that may be impacted by the proposed project.

Desert Tortoise Critical Habitat

The CRS-Devers line crosses approximately 105 km (65 mi) of the Chuckwalla Critical Habitat Unit (CHU), from near Cactus City to west to the CRS. Approximately 37 km (23 mi) of the line in the Chuckwalla CHU, starting near Cactus City and extending east, is also within the CVMSHCP area. Live tortoises and sign were found within the portion of the DPV2 ROW crossing critical habitat.

Conservation Lands

For the kangaroo rat, habitat will be acquired within the Southwestern Riverside County Multiple Species Reserve and habitat in the Lake Perris State Recreation Area portion of the San Jacinto Lake Perris Stephens' Kangaroo Rat Reserve will be enhanced. Both of these areas are occupied, contain the habitat features required by the species, are conserved, and will be managed in perpetuity for the benefit of the species.

For the milk-vetch, fringe-toed and horned lizards, and tortoise, habitat conserved to offset project impacts will be acquired in the CVMSHCP or NECO plan areas as described in the "Conservation Measures" section above. Privately-owned lands with suitable habitat for the appropriate species will be acquired and managed in perpetuity for the species they are intended to benefit. Also, since the replacement habitat is intended to benefit the populations of these species adversely affected by the project, it will be located within or adjacent to priority conservation areas in the CVMSHCP or NECO plan areas with comparable or better habitat value than the lands impacted by the proposed project. Using available data on landownership and willing sellers, the Service, BLM, and CDFG have determined that a sufficient amount of privately owned property containing habitat for the milk-vetch, fringe-toed and horned lizards, or tortoise exists that should be available for acquisition. The Service is also aware of private lands that have been identified by private organizations as available for potential acquisition to offset impacts to tortoise habitat in the NECO plan area.

The abundance of milk-vetch, fringe-toed and horned lizards, and tortoises in future conservation areas is unknown since the specific areas have not yet been identified. However, given that acquisition will focus on areas of equivalent or higher value that are important for feeding, breeding, sheltering, and/or movement of these species, we anticipate that these future conservation lands will contain suitable habitat that is currently occupied or adjacent to currently occupied areas.

Factors Affecting the Species' Environment within the Action Area

Project Area

The Service previously exempted/authorized incidental take of the kangaroo rat, milk-vetch, fringe-toed and horned lizards, and tortoise, and associated loss of habitat in the action area under several biological opinions and incidental take permits associated with several projects and/or HCPs.

In 1996, the Service issued an incidental take permit for the Stephens' Kangaroo Rat HCP in Western Riverside County, which indentified seven core Stephens' kangaroo rat reserves totaling 6,070 ha (15,000 ac) of occupied habitat.

The Coachella Valley Fringe-toed Lizard HCP (CVFTL HCP) was adopted in 1986 and established a system of reserves to protect blow sand habitat for fringe-toed lizards. The

reserves, called the Coachella Valley Reserve System, were mitigation for development covered by the CVFTL HCP, and also included existing BLM lands and some lands that were already mitigation for other projects. The Preserve System included approximately 6,900 ha (17,000 ac) of land reported in 1985 to contain approximately 3,200 ha (7,800 ac) of blow sand. The CVFTL HCP estimated that 2,100 ha (5,201 ac) of "occupiable habitat" were present in the Thousand Palms Reserve and 490 ha (1,200 ac) were present in the Whitewater Floodplain Reserve in 1986. More recent assessments have shown that less than 25 percent of these acreages were likely habitat for the species in 2005 (Groom and Grant, in prep; Service GIS analysis).

The Service issued biological opinions for two transmission lines in the action area, exempting take of the fringe-toed lizard and tortoise associated with the Blythe line in 2005 and, take of tortoise associated with the Desert Southwest in 2006. The Service also recently issued biological opinions for two solar energy projects in the action area. The biological opinions for the Blythe (issued October 8, 2010) and Genesis (issued November 2, 2010) solar energy projects exempted take of tortoise associated with the construction and O&M of gen-tie lines that are proposed to interconnect to the proposed DPV2 transmission line at the Colorado River Substation.

The Service issued a biological opinion on the California Desert Conservation Area (CDCA) Plan Amendment for the Coachella Valley in December 2002. Pursuant to the record of decision for the plan amendment (BLM 2002), BLM is obligated to manage public lands consistently with the then proposed CVMSHCP. As stated in the record of decision: "To facilitate consistency with the goals and objectives of the CVMSHCP, the BLM established habitat conservation objectives for protecting sensitive species and their habitats. These habitat objectives apply to all BLM-administered public lands that fall within the conservation area boundary established through the CVMSHCP. Future activities on BLM lands within the conservation area must achieve the habitat objectives either through avoidance or application of appropriate mitigation measures to be in conformance with the Coachella Valley Plan and consistent with the CVMSHCP" (BLM 2002).

The Service amended the biological opinion on the CDCA Plan Amendment for the Coachella Valley in June 2010. Where necessary to incorporate new information available since the 2002 biological opinion, the amendment updates the status of the species/critical habitat, environmental baseline, effects of the proposed action on the species/critical habitat, cumulative effects, conclusion, incidental take statement, and conservation recommendation sections for the milk-vetch, fringe-toed lizard, and tortoise.

The Service issued a programmatic biological opinion evaluating the effects of BLM's CDCA plan amendment for the NECO bioregional planning unit on the tortoise in 2002 and as amended in 2005 and 2007. In 2008, the Service issued a permit for the CVMSHCP, which identifies a regional reserve system within 21 conservation areas designed to conserve the species covered by the Plan, including milk-vetch, fringe-toed and horned lizards, and tortoises. The CVMSHCP addresses the overall effects of eliminating habitat for these species over the 75-year term of the

plan for those non-Federal jurisdictions that are permittees under the plan. The permit authorizes incidental take of the fringe-toed lizard after the permittees relinquish their permits under the CVFTL HCP; the relinquishment process is now taking place. Per the CVMSHCP, approximately 14,730 ha (36,398 ac) of milk-vetch habitat, 10,963 ha (27,070 ac) of fringe-toed habitat, 15,211 ha (37,587 ac) of horned lizard habitat, and 231,115 ha (571,098 ac) of tortoise habitat were modeled in the CVMSHCP area in 1996.

As discussed above, the proposed project is within an existing utility corridor established prior to the issuance of the biological opinions/permits discussed above (established prior to or at the time of construction of the DPV1 line in 1982). Since most of the actions covered in the previously issued biological opinions/permits, with the exception of the Blythe and Desert Southwest transmission lines, occur outside of the DPV2 project area, these projects have not directly impacted the habitat quality in the project area beyond what has been degraded due to ongoing O&M activities associated with DPV1. However, actions covered under these previously issued biological opinions have allowed for additional habitat degradation adjacent to the project area, likely contributing to additional habitat degradation in the project area due to factors such as introduction and spread of invasive plant species and urban predators associated with habitat fragmentation and edge effects. Also, while issuance of biological opinions for the Blythe and Desert Southwest projects allowed for additional take of the fringe-toed lizard and tortoise and additional degradation of milk-vetch, fringe-toed lizard, and tortoise habitat in the project area, these biological opinions also included offsetting measures for all or most of the adverse effects, resulting in little to no erosion of the environmental baseline of these species.

Also, since the Stephens' Kangaroo Rat HCP and CVMSHCP permits identified regional reserve systems for kangaroo rat, milk-vetch, fringe-toed and horned lizard, and/or tortoise habitat and future conservation areas acquired to offset habitat impacts associated with the proposed project will be within or adjacent to the these reserve systems, the proposed project also will not contribute significantly to an erosion of the environmental baseline of these species.

Conservation Lands

To offset impacts to the kangaroo rat, habitat will be acquired in the Southwestern Riverside County Multiple Species Reserve and restored/enhanced in the Lake Perris State Recreation Area portion of the San Jacinto Lake Perris Stephens' Kangaroo Rat Reserve. While the location of the lands to be acquired to offset impacts to the milk-vetch, fringe-toed and horned lizards, and tortoise have not yet been determined, land acquisition is intended to benefit the populations of these species adversely affected by the project and acquired lands will be located within or adjacent to priority conservation areas in the CVMSHCP or NECO plan areas with comparable or better habitat value than the lands impacted by the proposed project. These future conservation lands will be conserved and managed in perpetuity for the species they are intended to benefit.

EFFECTS OF THE ACTION

Effects of the action refer to the direct and indirect effects of an action on the species or critical habitat that would be added to the environmental baseline, along with the effects of other activities that are interrelated or interdependent with that action. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration. Indirect effects are those that are caused by the proposed action and are later in time, but are still reasonably certain to occur. In contrast to direct effects, indirect effects can often be more subtle, and may affect species and habitat quality over an extended period of time, long after project activities have been completed. Indirect effects are of particular concern for long-lived species such as the tortoise, because project-related effects may not become evident in individuals or populations until years later.

This biological opinion does not rely on the regulatory definition of "destruction or adverse modification" of critical habitat at 50 CFR § 402.02. Instead, we have relied upon the statute and the August 6, 2004, Ninth Circuit Court of Appeals decision in *Gifford Pinchot Task force v. U.S. Fish and Wildlife Service* (No. 03-35279) to complete the following analysis with respect to critical habitat.

Methodology

Permanent versus Temporary Impacts

The BA (SCE 2010) discusses impacts to habitat in terms of being either permanent or temporary. Permanent impacts are described as ground disturbance associated with construction of the spur road associated with each tower and the four concrete pylons that form the base of each tower. Temporary impacts are described as ground disturbance associated with clearing of each tower pad, tower construction activities, and pulling and splicing activities. The BA considers these impacts as temporary because after construction is complete, these areas would be free to revegetate and recover naturally.

Since full recovery of vegetation in the desert can take decades or longer, we consider all ground-disturbing impacts associated with the proposed project to be permanent. Vasek et al. (1975) found that in the Mojave Desert transmission line construction and O&M activities result in a permanently devegetated maintenance road, enhanced vegetation along the road edge and between tower sites, and reduced vegetation cover under the towers, which recovered significantly but not completely in about 33 years. Based on a quantitative review of studies evaluating post-disturbance plant recovery and success in the Mojave and Sonoran Deserts, Abella (2010) found that reestablishment of perennial shrub cover (to amounts found on undisturbed areas) generally occurs within 100 years but fewer than 40 years in some situations. He also found that vegetation recovery times are likely impacted by a number of variables, including but not limited to climate, invasion by nonnative plants, and level of ongoing disturbance. Based on these factors, we consider temporary impacts to be equivalent to

permanent impacts for the purposes of our effects analysis relative to the 30-year life of the project.

Approximately 292.18 ha (722 ac) of habitat for the kangaroo rat, milk-vetch, fringe-toed and horned lizards, and tortoise would be directly impacted by construction of the proposed project (temporary and permanent impacts together; Table 1). Habitat for these species may also be impacted by Class 1, 2, and 4 O&M activities. However, while we do not precisely know at this time how much habitat would be impacted by O&M activities, given the description of these activities, we anticipate habitat impacts would be relatively small. Also, the CMs included as part of the project description would help avoid, minimize, and offset impacts to the kangaroo rat, milk-vetch, fringe-toed and horned lizard, and tortoise resulting from construction as well as O&M activities. These benefits would extend to all life stages of these species, though less so to eggs, seeds, and juveniles that are more difficult to detect, and therefore more difficult to avoid or relocate. The effects of the action vary among the five species, and are described below.

Stephens' Kangaroo Rat

As discussed in the "Environmental Baseline" section above, one kangaroo rat was detected at one tower location in the Devers-Valley segment in 2009. However, based on the available density estimates for this species, we estimate that up to 12 juvenile and adult kangaroo rats could occur in suitable habitat in the Devers-Valley segment the 30-year life of the project.

Direct Effects

Death and Injury

Project-related construction and O&M activities could result in the death or injury of juvenile and adult kangaroo rats on the surface and in their burrow systems because they are difficult to detect and may not all be found and relocated during preconstruction clearance surveys. Death or injury of kangaroo rats could result from collisions with or crushing by vehicles or heavy equipment, or crushing or burial of individuals or eggs in burrows during construction and O&M-related activities. Kangaroo rats could also be injured or killed after being trapped in construction excavations or pipes. Because of increased human presence in the area, kangaroo rats may be injured or killed due to collection or vandalism associated with increased encounters with workers' or visitors' pets. Kangaroo rats could also be injured or killed as a result of collection and relocation activities.

To minimize the potential death or injury of kangaroo rats residing in or entering the construction disturbance area, SCE would implement the general and species-specific CMs proposed as part of the project. Death or injury of kangaroo rats would be minimized by the presence of a Qualified Biologist during all construction activities in occupied habitat, installation of exclusion fencing around work areas, and relocation of kangaroo rats out of harm's way (CM 17). Any occupied kangaroo rat burrows overlooked by the initial clearance surveys may be detected during construction-related activities by routine site inspections by the

FCR or incidental observations by construction workers (CM 2). The contractual obligations and worker education and awareness program would enhance the effectiveness of detecting kangaroo rats during construction activities (CMs 4 and 14) and either avoiding them or relocating them out of harm's way. The posting and enforcement of speed limits (CM 10) would further reduce the risk to any kangaroo rats that inadvertently venture onto the roadway during construction activities. Kangaroo rats in construction areas could fall into trenches and other excavations and become trapped, injured, or killed. To reduce the likelihood of such accidents, all hazardous excavations would be covered and inspected (CM 13). Death and injury of kangaroo rats would also be minimized by conducting construction activities during daylight hours only, by using a load spreading device to reduce impacts to burrow systems, and by constructing berms in a manner that prevents kangaroo rat burrowing (CMs 18, 0, and 20).

To minimize the death or injury of kangaroo rats residing in or entering the O&M disturbance area, SCE would implement general and species-specific CMs during the O&M phase proposed as part of the project. SCE would also implement relevant construction-phase CMs during the O&M phase. Specifically, death or injury of kangaroo rats during O&M activities would be minimized by demarcation of all temporary work area boundaries (CM 49) and the presence of a Qualified Biologist during all Class 2 ground-disturbing activities in occupied habitat and relocation of kangaroo rats out of harm's way (CM 51) or trapping and holding until project work is complete. The worker education and awareness program would enhance the effectiveness of detecting kangaroo rats during Class 1 and 2 O&M activities (CM 50) and of either avoiding them or relocating them out of harm's way. The posting and enforcement of speed limits (CM 10) would further reduce the risk to any kangaroo rats that inadvertently venture onto the roadway during O&M activities. To reduce the likelihood of kangaroo rats falling into trenches and other excavations dug during O&M activities and becoming trapped, injured, or killed, all hazardous excavations would be covered and inspected (CM 13). Death and injury of kangaroo rats would also be minimized by conducting O&M activities during daylight hours only, by using a load spreading device to reduce impacts to burrow systems, and by constructing berms in a manner that prevents kangaroo rat burrowing (CMs 18, 19, and 20).

Death or injury of kangaroo rats could also result from capture and relocation activities. Little is known regarding the fate of kangaroo rats that have been moved out of harm's way or relocated. Though relocation improves the survival probability of individual animals, relocation from the project footprint into surrounding habitat occupied by resident animals has the potential to disrupt behavior and social structure. Such disruption may impair breeding, feeding, and sheltering by elevating the frequency and intensity of aggressive interactions between individuals. However, because few kangaroo rats are anticipated to be found in the project footprint and these few would be moved a relatively short distance [no more than 500 m (1,640 ft)], a considerable amount of unoccupied habitat likely exists in the project area, and many of the individuals in the project area have previously been in contact with each other, we anticipate that impacts to resident individuals would be minor since most of the animals likely would avoid territorial disputes by returning to their natal ranges or occupying vacant habitat. We also anticipate that the potential for death or injury due to capture and relocation during construction

and O&M activities would be avoided/minimized by the requirement that capture and relocation be conducted by a Service-approved Qualified Biologist (CMs 17 and 51).

We expect that death or injury of most adult kangaroo rats in the disturbance area would be avoided during construction and O&M activities through compliance with the conservation measures. Since juveniles are difficult to detect, we anticipate that a low but unknown number of juveniles occurring in the project footprint would be lost due to project construction and O&M activities. However, we do not expect loss of juveniles in the project footprint will affect the species' local population since the habitat is low quality and most likely does not support a large population, and early life stages naturally suffer higher mortality rates and are not as important to the long-term conservation of the species as reproducing adults. Also, given the small number of kangaroo rats likely occurring in the action area, we anticipate a small number may need to be moved out of harm's way during construction and O&M activities. Since these individuals would be moved a short distance [no more than 500 m (1,640 ft)] from where they are found or rereleased in the same location, we do not anticipate additional significant impacts to resident kangaroo rats adjacent to the project footprint.

Habitat Loss

The loss and degradation of perennial shrubs would result in the loss of sheltering and feeding habitat for the kangaroo rat. Burrows may be crushed and rendered unusable during construction and O&M activities. To help offset the permanent and temporary losses of suitable habitat resulting from construction activities, 1.13 ha (2.8 ac) of kangaroo rat habitat would be restored or enhanced and 0.08 ha (0.2 ac) would be acquired (CM 22). Losses of kangaroo rat habitat resulting from Class 2 and 4 O&M activities would also be offset following the process and compensation ratios identified for construction-related impacts (CM 48).

Indirect Effects

We expect that kangaroo rats in the project footprint would be indirectly impacted by the loss of perennial, native shrubs used for sheltering and feeding. Perennial shrubs could be lost due to replacement by introduced or previously naturalized nonnative, invasive plants that respond positively to ground surface disturbing activities. Crushing of perennial, native shrubs in the project footprint would be avoided to the maximum extent possible (CM 7), increasing the ability of the habitat to continue to support kangaroo rats after the construction phase. While the project footprint is already impacted by invasive Saharan mustard and other nonnative plants, the spread of nonnative, invasive plants into previously uninfested areas would be minimized during construction and O&M activities by delineating the uninfested areas and subsequent removal of nonnative, invasive species that spread into these areas over the life of the project (CM 15). Additional introduction and spread of nonnative, invasive plants in kangaroo rat habitat also would be minimized during construction and O&M activities by washing all ground-disturbing equipment before entering kangaroo rat suitable habitat for the first time (CM 15).

Effect on Recovery

Per section 2(b) of the Act, the primary purposes of the Act are to provide a means whereby the ecosystems upon which listed species depend may be conserved, and to provide a program for the recovery of listed species. Per section 2(c), Congress established a policy requiring all Federal agencies to use their authorities in seeking to recover listed species in furtherance of the purposes of the Act. Consistent with these purposes and Congressional policy, sections 3(5), 4(f), 7(a)(1), and the implementing regulations (50 CFR § 402.02) to section 7(a)(2), and related preamble at 51 FR 19926-19957, generally require Federal agencies to further the survival and recovery of listed species in the use of their authorities. Pursuant to these mandates, our analysis below assesses (1) whether the action offsets its adverse effects to the environmental baseline of the kangaroo rat, and (2) the extent to which the action would cause "significant impairment of recovery efforts" or adversely affect the "species' chances for survival to the point that recovery is not attainable" (51 FR 19934).

The majority of impacts to kangaroo rat habitat from the proposed project occur in unoccupied habitat isolated from conservation areas. Tower M-30-T1 (DV-110) will be constructed in occupied kangaroo rat habitat and located adjacent to land conserved through the Western Riverside County MSHCP, which is adjacent to the Potrero Conservation Unit of the San Jacinto Wildlife Area and San Jacinto Lake Perris Reserve. We do not anticipate the proposed impacts would affect the recovery potential of the species because: (1) the impacts would occur within an existing utility corridor degraded by ongoing O&M activities, (2) the project would not result in additional habitat fragmentation, (3) permanent impacts to this occupied habitat resulting from construction of the DPV2 project would total 0.08 ha (0.2 ac) and temporary impacts would be restored, (4) an equivalent number of acres would be enhanced for kangaroo rat habitat as are impacted (CM 22), and (5) any additional impacts resulting from Class 2 and Class 4 O&M activities would be similarly offset (CM 48). Also, we anticipate that (1) few juveniles or adults likely occur in the project footprint, (2) few, if any, would be lost due to implementation of the conservation measures, and (3) the small number that may be lost due to construction, O&M, and/or relocation activities would not impede the recovery potential of the species.

Coachella Valley Milk-vetch

As discussed in the "Environmental Baseline" section above, milk-vetch was found in the CRS-Devers segment in 1985, 1987, 1994, 2003, and 2005. Based on these observations and the presence of modeled habitat for milk-vetch in the Devers-Valley and CRS-Devers segments, we presume that milk-vetch would be found in modeled habitat in both segments over the 30-year life of the project.

Direct Effects

Death and Injury

Project-related construction and O&M activities could result in the death or injury of milk-vetch in a variety of ways and could uproot, bury, or crush plants and seeds because they are difficult to detect and may not all be found and salvaged during preconstruction clearance surveys. Death or injury of milk-vetch could result from crushing by vehicles or heavy equipment. Because of increased human presence in the area, milk-vetch plants may be injured or killed due to collection or vandalism.

To minimize the death and injury of milk-vetch in the construction disturbance area, SCE would implement the general and species-specific CMs proposed as part of the project. Death or injury of milk-vetch would be minimized by conducting, to the extent possible, all construction activities in milk-vetch modeled habitat outside of the germination and growing season (CM 23) and by having a Service-approved Qualified Biologist conduct preconstruction surveys and be present during construction activities in modeled habitat (CM 24). Direct loss of plants during construction activities also would be minimized by avoiding all milk-vetch locations identified during preconstruction surveys and salvage of any milk-vetch in the project footprint that cannot be avoided (CM 25). Death or injury of milk-vetch could also result from salvage activities. However, this potential impact should be avoided/minimized by the requirement that salvage be conducted by a Service-approved Qualified Biologist following Service-approved methods (CM 24 and 25).

Any milk-vetch overlooked by the initial clearance surveys may be detected during construction-related activities by routine site inspections by the FCR or incidental observations by construction workers (CM 2). The contractual obligations and worker education and awareness program would enhance the effectiveness of detecting milk-vetch during construction, operations, and maintenance activities (CM 4 and 14) and either avoiding or salvaging them.

To minimize the death or injury of milk-vetch in the O&M disturbance area, SCE would implement general and species-specific CMs during the O&M phase proposed as part of the project. SCE would also implement relevant construction-phase CMs during the O&M phase. Specifically, death or injury of milk-vetch during O&M activities would be minimized by demarcation of all temporary work area boundaries (CM 49) and the presence of a Qualified Biologist during all Class 2 ground-disturbing activities in milk-vetch modeled habitat and salvage of milk-vetch found (CM 52). Potential death or injury of milk-vetch from collection and salvage activities should be avoided/minimized by the requirement that collection and salvage be conducted by a Service-approved Qualified Biologist (CMs 24 and 25). The worker education and awareness program would enhance the effectiveness of detecting milk-vetch during Class 1 and 2 O&M activities (CM 50) and of either avoiding them or salvaging them.

We expect that death and injury of most milk-vetch would be avoided during construction and O&M activities through compliance with the conservation measures.

Habitat Loss

The loss of perennial shrubs in milk-vetch habitat could result in subsequent degradation of habitat. To help offset the permanent and temporary/long-term losses of 25.5 ha (63 ac) of modeled and occupied habitat (Table 1) resulting from construction activities, a total of 50.99 ha (126 ac) of milk-vetch habitat would be acquired and permanently conserved in or adjacent to priority conservation areas for the in the CVMSHCP (CM 26). The acquired lands would be selected to benefit the same milk-vetch population adversely affected by the proposed project, if possible, and a management endowment would be provided to ensure the capability for monitoring and managing the site in perpetuity. Permanent and temporary losses of milk-vetch modeled habitat resulting from O&M activities would also be offset following the process and compensation ratios identified for construction-related impacts (CM 48).

Indirect Effects

The proposed project crosses the sand transport corridors for the Coachella Valley Preserve and Willow Hole Reserve. The sand transport corridors are areas identified as important to supplying sand to the preserves. Because of the general unidirectional winds in the Coachella Valley, blow sand predominantly travels down the valley. Historically, blow sand was replaced by sand washed down from the mountains or hills that was then blown through the valley. Anthropogenic modification of the land has disrupted the sand transport process in some cases. Though the proposed project crosses two sand transport corridors, we do not expect that the tower footings or spur roads would inhibit sand flow.

We expect that milk-vetch plants and seeds in the project footprint may be indirectly impacted by replacement by introduced or previously naturalized nonnative, invasive plants that respond positively to ground disturbing activities. However, the potential introduction and spread of nonnative, invasive plants in milk-vetch habitat would be minimized during construction and O&M activities by washing all ground-disturbing equipment before entering modeled habitat for the first time (CM 15). While the project footprint is already impacted by invasive Saharan mustard and other nonnative plants, the additional spread of nonnative, invasive plants into previously uninfested areas also would be minimized during construction and O&M activities by delineating the uninfested areas and subsequent removal of nonnative, invasive species that spread into these areas over the life of the project (CM 15).

Effect on Recovery

Per section 2(b) of the Act, the primary purposes of the Act are to provide a means whereby the ecosystems upon which listed species depend may be conserved, and to provide a program for the recovery of listed species. Per section 2(c), Congress established a policy requiring all Federal agencies to use their authorities in seeking to recover listed species in furtherance of the purposes of the Act. Consistent with these purposes and Congressional policy, sections 3(5), 4(f), 7(a)(1), and the implementing regulations (50 CFR § 402.02) to section 7(a)(2), and related preamble at 51 FR 19926-19957, generally require Federal agencies to further the survival and

recovery of listed species in the use of their authorities. Pursuant to these mandates, our analysis below assesses (1) whether the action offsets its adverse effects to the environmental baseline of the fringe-toed lizard, and (2) the extent to which the action would cause "significant impairment of recovery efforts" or adversely affect the "species' chances for survival to the point that recovery is not attainable" (51 FR 19934).

The proposed project would impact modeled habitat and traverse priority conservation areas identified in the CVMSHCP for this species. However, we do not anticipate the proposed project would impede the recovery potential of the species because: (1) the impacts would occur within an existing utility corridor degraded by ongoing O&M activities, (2) the project would not result in additional habitat fragmentation, (3) 50.99 ha (126 ac) of milk-vetch habitat would be acquired and conserved in perpetuity to offset impacts associated with construction of the DPV2 project (CM 26), and (4) any additional impacts resulting from Class 2 and Class 4 O&M activities would be similarly offset (CM 48). Also, we anticipate that (1) few, if any, individuals would be lost upon implementation of the conservation measures and (2) the small number that may be lost during construction, O&M, and/or salvage activities will not impede the recovery potential of the species.

Coachella Valley Fringe-toed and Flat-tailed Horned Lizards

As discussed in the "Environmental Baseline" section above, no fringe-toed lizards were found within the Devers-Valley or CRS-Devers segments and two horned lizards were observed in or adjacent to the CRS-Devers segment. However, based on the available density estimates for both species and the presence of modeled habitat for fringe-toed lizards in both the Devers-Valley and CRS-Devers segments and modeled habitat for horned lizard in the CRS-Devers segment, we estimate that up to 32 adult fringe-toed lizards could occur in modeled habitat in both segments and that up to 64 adult horned lizards could occur in modeled habitat in the CRS-Devers segment over the 30-year life of the project. However, as also discussed in the "Environmental Baseline" section above, we anticipate the actual densities of both species in the project footprint are likely to be considerably lower due to existing habitat degradation from O&M activities associated with existing transmission lines, and the relatively small size of the blow sand habitat and isolation of these patches from other occupied habitat.

Direct Effects

Death and Injury

Project-related construction and O&M activities could result in the death or injury of fringe-toed or horned lizards in a variety of ways and could kill or injure individuals because they are difficult to detect and may not all be found and relocated during preconstruction clearance surveys. Fringe-toed and horned lizard juveniles and eggs are extremely difficult to detect and are unlikely to be found and relocated during project activities. Roads pose a mortality risk to horned lizards because they are difficult to see and avoid, and they typically freeze in place rather than run when confronted with a threat. In contrast, fringe-toed lizards typically flee from

disturbance and are therefore much less vulnerable to road-related mortality. Death or injury of fringe-toed or horned lizards could result from collisions with or crushing by vehicles or heavy equipment, or crushing or burial of individuals or eggs in burrows during construction and O&M-related activities. Fringe-toed or horned lizards could also be injured or killed after being trapped in construction excavations. Because of increased human presence in the area, fringe-toed or horned lizards may be injured or killed due to collection or vandalism associated with increased encounters with workers' or visitors' pets. Fringe-toed or horned lizards could also be injured or killed because of collection and relocation activities.

To minimize the death and injury of fringe-toed and horned lizards residing in or entering the construction disturbance area, SCE would implement general and species-specific CMs proposed as part of the project. Death or injury of fringe-toed and horned lizards would be minimized by conducting, to the extent possible, all construction activities in fringe-toed or horned lizard modeled/blow sand habitat during the species' active season (CM 27) and by the presence of a Qualified Biologist during all construction activities in fringe-toed or horned lizard habitat who would conduct preconstruction surveys in fringe-toed or horned lizard modeled/blow sand habitat (CM 28).

Any fringe-toed or horned lizards overlooked by the initial clearance surveys may be detected during construction-related activities by routine site inspections by the FCR or incidental observations by construction workers (CM 2). The contractual obligations and worker education and awareness program would enhance the effectiveness of detecting fringe-toed and horned lizards during construction, operations, and maintenance activities (CM 4 and 14) and either avoiding them or relocating them out of harm's way. The posting and enforcement of specified speed limits (CM 10) would further reduce the risk to fringe-toed and horned lizards that inadvertently venture onto the roadway network during construction, operations, and maintenance activities. Fringe-toed and horned lizards in construction areas could fall into trenches and other excavations and become trapped, injured, or killed. To reduce the likelihood of such accidents, all hazardous excavations would be covered and inspected (CM 13).

To minimize the death or injury of fringe-toed and horned lizards residing in or entering the O&M disturbance area, SCE would implement general and species-specific CMs during the O&M phase proposed as part of the project. SCE would also implement relevant construction-phase CMs during the O&M phase. Specifically, death or injury of fringe-toed or horned lizards during O&M activities would be minimized by demarcation of all temporary work area boundaries (CM 49), limiting ground-disturbing activities (Class 2) in fringe-toed or horned lizard modeled habitat to the species' active season (CM 53), and the presence of a Qualified Biologist during all Class 2 ground-disturbing activities in fringe-toed or horned lizard modeled habitat and relocation of fringe-toed and horned lizards out of harm's way (CM 54). The worker education and awareness program would enhance the effectiveness of detecting fringe-toed and horned lizards during Class 1 and 2 O&M activities (CM 50) and of either avoiding them or relocating them out of harm's way. The posting and enforcement of speed limits (CM 10) would further reduce the risk to any fringe-toed or horned lizards that inadvertently venture onto the roadway during O&M activities. To reduce the likelihood of fringe-toed or horned lizards

falling into trenches and other excavations dug during O&M activities and becoming trapped, injured, or killed, all hazardous excavations would be covered and inspected (CM 13).

Death or injury of fringe-toed and horned lizards could also result from capture and relocation activities. Little is known regarding the fate of fringe-toed or horned lizards that have been moved out of harm's way or relocated. Though relocation improves the survival probability of individual animals, relocation from the project footprint into surrounding habitat occupied by resident animals has the potential to disrupt behavior and social structure. Such disruption may impair breeding, feeding, and sheltering by elevating the frequency and intensity of aggressive interactions between individuals. However, zero fringe-toed lizards and only two horned lizards were found in or adjacent to the project footprint. Therefore, any found during construction and O&M activities would be moved a relatively short distance [no more than 500 m (1,640 ft)], any relocated individuals likely have previously been in contact with resident individuals, would find unoccupied habitat patches, or would return to their previous home ranges. Therefore, we anticipate that impacts to resident individuals would be insignificant. We also anticipate that the potential for death or injury of fringe-toed or horned lizards due to capture and relocation during construction and O&M activities would be avoided/minimized by the requirement that capture and relocation be conducted by a Service-approved Qualified Biologist (CM 28, 29, and 54).

We expect that death and injury of some adult fringe-toed and horned lizards would be avoided during construction and O&M activities through compliance with the conservation measures. Since fringe-toed and horned lizard eggs and juveniles are difficult to detect, we anticipate that a small but unknown number of eggs and juveniles occurring in the project footprint would be lost due to construction and O&M activities. Though we cannot accurately estimate the number of eggs and juveniles, we anticipate few would be present because zero fringe-toed and two horned lizards were found in or adjacent to the project footprint. In addition, we do not expect loss of eggs and juveniles in the project footprint will affect the species' local populations since early life stages naturally suffer higher mortality rates and are not as important to the long-term conservation of the species as reproducing adults. Also, given that zero fringe-toed and only two horned lizards were detected in or near the project footprint, we anticipate only a small number may need to be moved out of harm's way during construction and O&M activities, and since these individuals would be moved a short distance from where they are found [less than 500 m (1,640 ft)], we do not anticipate additional significant impacts to resident fringe-toed and horned lizards adjacent to the project footprint.

Habitat Loss

The loss and degradation of perennial shrubs in fringe-toed or horned lizard habitat would result in a subsequent loss of sheltering and feeding habitat for these species. To help offset impacts to fringe-toed lizard modeled and critical habitat and horned lizard modeled habitat (Table 1), a total of 35.61 ha (88 ac) of fringe-toed and 12.95 ha (32 ac) of horned lizard habitat would be acquired and permanently conserved in or adjacent to priority conservation areas for the in the CVMSHCP (CMs 30 **Error! Reference source not found.**and 31). Of this, at least 21.04 ha (52 ac) will be acquired and permanently conserved within fringe-toed lizard critical habitat,

assuming willing sellers are available. The acquired lands would be selected to benefit the same fringe-toed and horned lizard populations adversely affected by the proposed project, if possible, and a management endowment would be provided to ensure the capability for monitoring and managing the site in perpetuity. Permanent and temporary losses of fringe-toed and horned lizard habitat resulting from O&M activities would also be offset following the process and compensation ratios identified for construction-related impacts (CM 48).

Indirect Effects

The proposed project crosses the sand transport corridors for the Coachella Valley Preserve and Willow Hole Reserve. The sand transport corridors are areas identified as important to supplying blow sand to the preserves. Because of the general unidirectional winds in the Coachella Valley, blow sand predominantly travels down the valley. Historically blow sand was replaced by sand washed down from the mountains or hills that was then blown through the valley. Anthropogenic modification of the land has disrupted the sand transport process in some cases. Though the proposed project crosses two sand transport corridors, we do not expect that towers would inhibit sand flow.

We expect that fringe-toed and horned lizards in the project footprint would be indirectly impacted by the loss of native shrubs used for sheltering. Perennial shrubs could be lost due to replacement by replacement by introduced or previously naturalized nonnative, invasive plants that respond positively to ground disturbing activities. Crushing of perennial, native shrubs in the project footprint would be avoided to the maximum extent possible (CM 7), increasing the ability of the habitat to continue to support fringe-toed and horned lizards after the construction phase. While the project footprint is already impacted by invasive Saharan mustard and other nonnative plants, the spread of nonnative, invasive plants into previously uninfested areas would be minimized during construction and O&M activities by delineating the uninfested areas and subsequent removal of nonnative, invasive species that spread into these areas over the life of the project (CM 15). Additional introduction and spread of nonnative, invasive plants in fringe-toed and horned lizard habitat also would be minimized during construction and O&M activities by washing all ground-disturbing equipment before entering fringe-toed and horned lizards modeled habitat for the first time (CM 15).

Transmission line towers may provide perching and nesting sites for avian predators of fringe-toed and horned lizards, such as American kestrels, loggerhead shrikes, red-tailed hawks, or other raptors. However, because the towers would be constructed next to existing DPV1 towers, the population of raptors using the power lines is not likely to increase because raptors typically are territorial. Thus, any birds attempting to use the new towers likely would be chased away by birds already using the existing DPV I towers, or would displace the resident birds.

Coachella Valley Fringe-toed Lizard Critical Habitat

The proposed project footprint crosses approximately 9.6 km (6 mi) of fringe-toed lizard critical habitat and construction activities would permanently and temporarily impact an estimated 10.52

ha (26 ac) (Table 1) of the 4,921-ha (12,160-ac) of designated critical habitat. The area is important as part of a sand transport corridor, but as discussed above, the project would not impede sand flow across the area, and thus would not affect the primary function and conservation role of this portion of critical habitat. In addition, the conservation measures proposed as part of the project, including avoiding the placement of construction yards or helicopter assembly sites in fringe-toed lizard critical habitat (CM 12) and invasive plant species control (CM 15), would help maintain the role and function of critical habitat by avoiding and offsetting adverse effects to the primary constituent elements of critical habitat. In addition, since some habitat between towers will remain undisturbed by the proposed project and, over time, disturbed habitat under the towers may recover to some extent, we anticipate the role and function of critical habitat to provide feeding, breeding, sheltering, and/or movement habitat would be maintained.

Effect on Recovery

Per section 2(b) of the Act, the primary purposes of the Act are to provide a means whereby the ecosystems upon which listed species depend may be conserved, and to provide a program for the recovery of listed species. Per section 2(c), Congress established a policy requiring all Federal agencies to use their authorities in seeking to recover listed species in furtherance of the purposes of the Act. Consistent with these purposes and Congressional policy, sections 3(5), 4(f), 7(a)(1), and the implementing regulations (50 CFR § 402.02) to section 7(a)(2), and related preamble at 51 FR 19926-19957, generally require Federal agencies to further the survival and recovery of listed species in the use of their authorities. Pursuant to these mandates, our analysis below assesses (1) whether the action offsets its adverse effects to the environmental baseline of the fringe-toed lizard, and (2) the extent to which the action would cause "significant impairment of recovery efforts" or adversely affect the "species' chances for survival to the point that recovery is not attainable" (51 FR 19934).

The proposed project would impact fringe-toed and horned lizard modeled habitat and fringe-toed lizard critical habitat and traverse priority conservation areas identified in the CVMSHCP as important for these species. However, we do not anticipate the proposed project would impede the recovery potential of these species because: (1) the impacts are not anticipated to impede sand flow in the sand transport corridor, (2) the impacts would occur within an existing utility corridor degraded by ongoing O&M activities, (3) the project would not result in additional habitat fragmentation (4) fringe-toed and horned lizard habitat of equivalent or better quality would be acquired and conserved in perpetuity to offset impacts associated with construction of the DPV2 project (CMs **Error! Reference source not found.**30 and 31), and (5) any additional impacts resulting from Class 2 and Class 4 O&M activities would be similarly offset (CM 48). Also, we anticipate that (1) few eggs, juveniles, or adults currently occur in the project footprint, (2) few, if any, would be lost due to implementation of the conservation measures, and (3) the small number of fringe-toed or horned lizards that may be lost due to construction, O&M, and/or relocation activities would not impede the recovery potential of these species.

Desert Tortoise

As discussed in the "Environmental Baseline" section above, we estimate that up to 12 tortoises may occur in the CRS-Devers segment over the 30-year life of the project. However, as also discussed in the "Environmental Baseline" section above, we anticipate the actual density of tortoises in the project footprint may be lower due to existing habitat degradation from O&M activities associated with existing transmission lines.

Direct Effects

Death and Injury

Project-related construction and O&M activities could result in the death or injury of tortoises in a variety of ways and could kill or injure tortoise eggs, juveniles, and adults because they are difficult to detect and may not all be found and relocated during preconstruction clearance surveys or during O&M activities. Death or injury of tortoises could result from collisions with or crushing by vehicles or heavy equipment, including crushing of individuals that take shelter under parked vehicles and are killed or injured when the vehicle is moved. Desert tortoises could also be injured or killed after being trapped in construction excavations or pipes. Other direct effects could include individual tortoises or their eggs being crushed or buried in burrows during construction and O&M-related activities. Because of increased human presence in the area, tortoises may be injured or killed due to collection or vandalism associated with increased encounters with workers' or visitors' pets. Desert tortoises may also be attracted to the construction area by application of water to control dust, placing them at higher risk of death or injury. Tortoises could also be injured or killed because of collection and relocation activities.

To minimize the death and injury of tortoises residing in or entering the construction disturbance area, SCE would implement the general and species-specific CMs proposed as part of the project. Death or injury of tortoises would be minimized by conducting, to the extent possible, all construction activities during the species' less active period (CM 32) and by the presence of an Authorized Biologist during all construction activities in tortoise habitat (CMs 33 and 35). The Authorized Biologist would conduct preconstruction surveys in tortoise habitat and relocate any tortoises found in the ROW out of harm's way following Service-approved methods (CM 34, 35, and 36). Also, any tortoises found on the surface or in burrows that cannot be avoided during operations and maintenance activities would be relocated out of harm's way by the Authorized Biologist (CM 36 and 37).

Any tortoises overlooked by the initial clearance surveys may be detected during construction activities by routine site inspections by the FCR, Authorized Biologist, or incidental observations by construction workers (CM 2). The contractual obligations and worker education and awareness program would enhance the effectiveness of detecting tortoises during construction activities (CM 4 and 14) and either avoid or relocate them out of harm's way. The posting and enforcement of specified speed limits (CM 10) and inspections underneath parked vehicles (CM 38) would further reduce the risk to any tortoises that inadvertently venture onto the roadway

during construction activities. Tortoises in construction areas could fall into trenches and other excavations and become trapped, injured, or killed. To reduce the likelihood of such accidents, all hazardous excavations would be covered and inspected (CM 13).

To minimize the death or injury of tortoises residing in or entering the O&M disturbance area, SCE would implement general and species-specific CMs during the O&M phase proposed as part of the project. SCE would also implement relevant construction-phase CMs during the O&M phase. Specifically, death or injury of tortoises during O&M activities would be minimized by demarcation of all temporary work area boundaries (CM 49) and limiting Class 2 ground-disturbing activities in tortoise habitat to the species' active season to the extent possible (CM 32). Also, an Authorized Biologist would be present during all Class 2 ground-disturbing activities in tortoise habitat and relocate tortoises out of harm's way if impacts can't be avoided (CM 37, 55, and 56). The worker education and awareness program would enhance the effectiveness of detecting tortoise during Class 1 and 2 O&M activities (CM 50) and of either avoiding them or relocating them out of harm's way. The posting and enforcement of speed limits (CM 10) and inspections underneath parked vehicles (CM 57) would further reduce the risk to any tortoises that inadvertently venture onto the roadway during O&M activities. To reduce the likelihood of tortoises falling into trenches and other excavations dug during O&M activities and becoming trapped, injured, or killed, all hazardous excavations would be covered and inspected (CM 13).

Death or injury of tortoises could also result from capture and relocation activities. Capturing, handling, and moving tortoises for the purposes of relocating them out of the project footprint may result in accidental death or injury if these methods are performed improperly, such as during extreme temperatures, or if tortoises void their bladders and are not rehydrated. Averill-Murray (2001) determined tortoises that voided their bladders during handling had lower overall survival rates (0.81 to 0.88) than those that did not void (0.96). If multiple tortoises are handled by biologists without the use of appropriate protective measures and procedures, such as reused latex gloves, pathogens may be spread among individuals. Walde et al. (2008) found in a study of tortoises at Fort Irwin that the differences in reproduction among translocated, resident, and control desert tortoises were "not likely to be statistically significant".

Little is known regarding the fate of tortoises that have been moved short distances out of harm's way or relocated because these animals typically have not been marked and monitored post-relocation. However, tortoises translocated shorter distances [i.e., less than 500 m (1,640 ft)] are not likely to move as far following release as tortoises moved longer distances. Walde et al. (2008) found that maximum straight-line dispersal distance for male tortoises was approximately 1.5 km (0.9 mi) in the first year following translocation. The degree to which these animals expand the area they use depends on whether the animals are released into typical or atypical habitat; that is, if the area they area relocated to supports habitat that is similar to that of the source area, tortoises are likely to move less (Nussear 2004). Since tortoises found in the project footprint would be moved out of harm's way, but less than 500 m (1,640 ft) from the point of capture, we do not anticipate that relocation would result in death or injury because these individuals would be moved a relatively short distance and they would remain near or within

their home range. Also, since relocated tortoises typically remain within their home range, we do not anticipate additional significant social or competitive impacts to resident tortoises in the area. We also anticipate that the potential for death or injury of tortoises due to capture and relocation during construction and O&M activities would be avoided/minimized by the requirement that capture and relocation be conducted by a Service-approved Authorized Biologist following Service-approved methods (CM 33, 34, 55, and 56).

We expect that death and injury of most subadult and adult tortoises would be avoided during construction and O&M activities through compliance with the conservation measures. However, since tortoise eggs and juveniles are very difficult to detect, we anticipate that a low but unknown number of eggs or juveniles occurring in the project footprint would be lost due to construction and O&M activities. However, we do not expect loss of eggs and juveniles in the project footprint will affect the species' local populations because (1) the low number of adults found within the right-of-way indicates a correspondingly small number of eggs and juveniles would be present and affected, and (2) early life stages naturally suffer higher mortality rates and are not as important to the long-term conservation of the species as reproducing adults. Also, given that a relatively small number of adult tortoise were found the action area, we anticipate a small number may need to be moved out of harm's way during construction and O&M activities, and since these individuals would be moved a short distance from where they are found and within their home range [within 500 m (1,640 ft)], we do not anticipate additional significant impacts to resident tortoises adjacent to the project footprint.

Habitat Loss

The loss and degradation of perennial shrubs in tortoise habitat would result in loss of sheltering and feeding habitat. Burrows may be crushed and rendered unusable as a result of construction and O&M activities. To help offset the permanent and temporary/long-term losses of 241.19 ha (596 ac) of tortoise habitat, 670.16 ha (1,656 ac) of equivalent or better quality habitat would be acquired and permanently conserved for the tortoise (CM 43**Error! Reference source not found.**). The acquired lands would be selected to benefit the same tortoise population adversely affected by the proposed project and a management endowment would be provided to ensure the capability for monitoring and managing the site in perpetuity. Permanent and temporary losses of tortoise habitat resulting from Class 2 and Class 4 O&M activities would also be offset following the process and compensation ratios identified for construction-related impacts (CM 48).

Indirect Effects

We expect that tortoises in the project footprint would be indirectly impacted by the loss of perennial, native shrubs used for sheltering and feeding. Perennial shrubs could be lost due to replacement by introduced or previously naturalized nonnative, invasive plants that respond positively to ground disturbing activities. While the project footprint is currently impacted by invasive Saharan mustard and other nonnative plants, which may be less nutritious for tortoises, the spread of nonnative, invasive plants into previously uninfested areas would be minimized

during construction and O&M activities by delineating the uninfested areas and subsequent removal of nonnative, invasive species that spread into these areas over the life of the project (CM 15). Additional introduction and spread of nonnative, invasive plants in tortoise habitat would also be minimized during construction and O&M activities by washing all ground-disturbing equipment before entering modeled tortoise habitat for the first time (CM 15). Crushing of perennial, native shrubs in the project footprint would be avoided to the maximum extent possible (CM 7), increasing the ability of the habitat to continue to support tortoises after the construction phase.

The construction of new transmission line towers in tortoise habitat may provide additional nesting, perching, and roosting substrate for common ravens, considered a significant predator of juvenile tortoises. Periodic raven nest monitoring, and removal and management of offending ravens from DPV2 towers and substations (CM 42) would likely reduce the effect of raven predation on juvenile tortoises. While there are existing transmission towers adjacent to the proposed DPV2 project footprint (e.g., DPV1), the new towers would provide additional nesting, perching, and roosting site, and therefore, potentially increase raven densities in the area. To further minimize indirect and cumulative impacts of raven predation on tortoises associated with the proposed project, SCE would contribute to the regional Raven Management Plan developed to address raven predation on tortoises at the population level in the California desert region as a recovery action for the species (CM 42). To further minimize raven nesting, SCE would also remove all debris from tree trimming and brush clearing so that it is no longer available for raven nest building (CM 58).

Garbage and uneaten food generated during construction and O&M activities, and roadkill in the ROW also could attract ravens to the area, thereby increasing predation on juvenile tortoises in the area. To prevent generation of food waste by construction and O&M workers, all trash materials would be disposed of and removed to prevent the attraction of tortoise predators to the project footprint (CM 40) and to prevent additional food subsidies, road-killed animals would be immediately removed from the project footprint when encountered during construction activities (CM 41).

Desert Tortoise Critical Habitat

Approximately 107.24 ha (265 ac) of the 413,022 ha (1,020,600 ac), or less than 0.03 percent, of designated critical habitat in the Chuckwalla CHU/DWMA would be permanently and temporarily impacted (Table 1). The conservation measures proposed as part of the project, including avoidance of perennial, native vegetation (CM 7) and invasive plant species control (CM 15) will help maintain the role and function of critical habitat by avoiding and offsetting adverse effects to the primary constituent elements of critical habitat. In addition, the impacts to critical habitat caused by the proposed project would not affect population connectivity across the right-of-way because the transmission line would not create a barrier to tortoise movement. Therefore, since some habitat between towers will remain undisturbed by the proposed project and over time, disturbed habitat under the towers may recover to some extent, we anticipate the

role and function of critical habitat to provide feeding, breeding, sheltering, and/or movement habitat would be maintained.

Effect on Recovery

Per section 2(b) of the Act, the primary purposes of the Act are to provide a means whereby the ecosystems upon which listed species depend may be conserved, and to provide a program for the recovery of listed species. Per section 2(c), Congress established a policy requiring all Federal agencies to use their authorities in seeking to recover listed species in furtherance of the purposes of the Act. Consistent with these purposes and Congressional policy, sections 3(5), 4(f), 7(a)(1), and the implementing regulations (50 CFR §402.02) to section 7(a)(2), and related preamble at 51 FR 19926-19957, generally require Federal agencies to further the survival and recovery of listed species in the use of their authorities. Pursuant to these mandates, our analysis below assesses (1) whether the action offsets its adverse effects to the environmental baseline of the fringe-toed lizard, and (2) the extent to which the action would cause "significant impairment of recovery efforts" or adversely affect the "species' chances for survival to the point that recovery is not attainable" (51 FR 19934).

The proposed project would impact tortoise modeled and critical habitat, traverse priority conservation areas identified in the CVMSHCP as important for the species, is in the Chuckwalla CHU/DWMA, and is in the Eastern Colorado recovery unit. However, we do not anticipate the proposed project would impede the recovery potential of the species because: (1) the impacts would occur within an existing utility corridor degraded by ongoing O&M activities, (2) the project would not fragment habitat or adversely affect tortoise population connectivity, (3) less than 0.03 percent of the Chuckwalla CHU/DWMA would be impacted, (4) 670.16 ha (1,656 ac) of tortoise habitat of equivalent or better quality would be acquired and conserved in perpetuity to offset impacts associated with construction of the DPV2 project (CM 43**Error! Reference source not found.**), (5) any additional impacts resulting from Class 2 and Class 4 O&M activities would be similarly offset (CM 48), and (6) raven impacts would be monitored and managed (CM 42 and 58). Also, implementation of CM 42 would help minimize cumulative effects by contributing to a CDCA-wide program to minimize the impact of raven predation on desert tortoise on a landscape scale. As such, the proposed project would maintain the habitat base for supporting viable tortoise populations in critical habitat and prevent erosion of the environmental baseline in critical habitat, DWMAs, and CVMSHCP conservation areas, which provide the primary focus for recovery efforts.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act. The Service is unaware of any future State, tribal, local or private actions reasonably certain to occur in the action area for the species addressed in this opinion.

CONCLUSION

After reviewing the current status, environmental baseline for the action area, effects of the proposed action, and cumulative effects of the proposed project on the kangaroo rat, milk-vetch, fringe-toed and horned lizards, and tortoise, it is the Service's biological/conference opinion that the proposed action is not likely to jeopardize the continued existence of these species, and is not likely to destroy or adversely modify designated critical habitat for fringe-toed lizard or tortoise. We base this decision on the following reasons:

1. The direct and indirect effects of the proposed project would be effectively minimized through implementation of the proposed Conservation Measures.

2. The action area constitutes a small portion of each species' range, and permanent and temporary habitat losses would be offset by the permanent conservation of a like or greater amount of equivalent or better quality habitat.

3. Most adult kangaroo rats and tortoise, some adult fringe-toed and horned lizards, and most milk-vetch plants within the disturbance area would be captured/salvaged and relocated to suitable habitat outside of the disturbance area. Given that no fringe-toed lizards, two horned lizards, and small numbers of kangaroo rats and tortoises were detected in the project footprint, we anticipate that small numbers of these species may need to be moved out of harm's way during construction and O&M activities. In addition, since these individuals would be moved relatively short distances from where they are found, we do not anticipate additional significant impacts to other resident individuals or populations of these species in the project footprint.

4. With implementation of the Conservation Measures, the impacts of the proposed action are expected to be effectively minimized and offset, and are not likely to appreciably diminish the conservation role and function of designated critical habitat for fringe-toed lizard or tortoise in the action area or these species' ranges.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act, and Federal regulation pursuant to section 4(d) of the Act, prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the

agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

The measures described below for kangaroo rats, fringe-toed lizards, and tortoises are non-discretionary and must be undertaken by the BLM so that they become binding conditions of any grant or permit issued to SCE, as appropriate, for the exemption in section 7(o)(2) to apply. The BLM has a continuing duty to regulate the activity covered by this incidental take statement. If the BLM (1) fails to assume and implement the terms and conditions or (2) fails to require SCE to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. To monitor the impact of incidental take, the BLM must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement. [50 CFR § 402.14(i)(3)].

The prohibitions against taking found in section 9 of the Act do not apply to flat-tailed horned lizard unless the species is listed. However, the Service advises the BLM to consider implementing the following reasonable and prudent measures. If the flat-tailed horned lizard is listed and this conference opinion is adopted as a biological opinion, the measures described below for the flat-tailed horned lizard, with their implementing terms and conditions, will be non-discretionary.

AMOUNT OR EXTENT OF TAKE

As stated above, section 9 of the Act does not address the incidental take of listed plant species. Because the Act does not address the take of listed plant species, this biological/conference opinion does not contain an incidental take statement, reasonable and prudent measures, or terms and conditions for the milk-vetch. BLM should be aware that the Act prohibits the removal of endangered plants from Federal lands and their reduction to possession, the malicious damaging, or destruction on such lands; by regulation, the Service extended this prohibition to threatened species. Section 9(a)(2)(B) prohibits any person from removing, cutting, digging up, or damaging or destroying individuals of an endangered listed plant species in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law.

We anticipate that the number of kangaroo rats, fringe-toed and horned lizards, and tortoises that may be taken would be low due to the small numbers of these species found within the action area, the degraded condition of the habitat, and the anticipated effectiveness of conservation measures described as part of the proposed action. However, quantifying the precise number of individuals that may be incidentally taken is not possible because these species are cryptically-colored to avoid predation, and are often in burrows or buried to avoid environmental extremes or predation, making the observation or detection of death or injury highly unlikely. Also, population numbers fluctuate in response to weather patterns and other biotic and abiotic factors, and population levels and the distribution of individual animals have changed since the species' surveys were completed and are anticipated to continue changing over the 30-year life of the

project. The number of eggs and juveniles of these species are especially difficult to detect and quantify because of small size, in addition to the factors discussed above. As a result, finding dead or injured individuals within the action area is difficult as animals may be crushed or buried underground in burrows that were not found or inspected, and otherwise hard to recognize/detect for the reasons discussed above. Because eggs and juveniles are almost never found during clearance surveys, we assume that virtually all these early life forms will be killed or injured by construction activities within the project footprint.

While we cannot provide precise numbers, we have estimated the number of adult and subadult kangaroo rats, fringe-toed and horned lizards, and tortoises that may occur in the project footprint based on the best available information, and based on these estimates have established take thresholds that, if exceeded, will trigger reinitiation of consultation.

Take of Stephens' kangaroo rats is anticipated and exempted as follows:

- The disturbance of up to 1.21 ha (3 ac) of occupied and potential kangaroo rat habitat from construction and O&M activities may result in accidental death or injury of all kangaroo rats from crushing, trampling, or burial. If the project impacts more than this acreage of kangaroo rat habitat, the take threshold will be exceeded.

- As discussed in the "Environmental Baseline" section above, we used available density estimates to determine that twelve juvenile and adult kangaroo rats could be present but we nonetheless anticipate that considerably fewer individuals likely occur in the project footprint. While we cannot quantify the precise numbers of individuals that may be killed or injured because of construction and O&M activities for the detectability reasons discussed above, we anticipate the number of kangaroo rats that may be killed or injured will be small based on the degraded quality of the habitat in the action area. Therefore, using our best professional judgment in light of best available information, and considering the different levels of activity during the various phases of the proposed project, we anticipate the incidental take of relatively few kangaroo rats, perhaps on the order of ten or fewer individuals from construction activities and five or fewer individuals per year from O&M. Accordingly, we are exempting accidental injury or death of no more than 10 individuals from construction and 5 per year from O&M activities based on the anticipation that the capture and relocation of adults would be effective and minimize the likelihood that more than this number of animals would suffer physical injury. Thus, if more than 10 kangaroo rats are found injured or dead during the construction phase, or more than 5 kangaroo rats per year are found injured or dead during the O&M phase, the take threshold will be exceeded.

- Take, in the form of capture or collection, of up to 12 kangaroo rats for the purposes of relocation from within the project construction and O&M disturbance area. However, because the capture or collection, relocation, and release will be conducted by a Service-approved Biologist, we do not expect these activities to result in direct injury or death of

any relocated kangaroo rats. Therefore, we do not want to limit the ability of the Service-approved Biologist to avoid and minimize the direct injury or death of kangaroo rats by relocating kangaroo rats found during preconstruction clearance surveys. Thus, all take in the form of trapping, capture, or collection for the purposes of relocation is exempted for any juvenile or adult kangaroo rats found during clearance surveys, monitoring activities, or other incidental observations, subject to the reasonable and prudent measures and terms and conditions below. If any kangaroo rats are directly injured or killed during relocation, the take threshold will be exceeded.

Take of Coachella Valley fringe-toed lizards is anticipated and exempted as follows:

- The disturbance of up to 17.81 ha (44 ac) of fringe-toed lizard modeled and critical habitat from construction and O&M activities may result in accidental death or injury of fringe-toed lizard eggs, juveniles, or adults from crushing, trampling, or burial. If the project impacts more than this acreage of fringe-toed lizard habitat, the take threshold will be exceeded.

- As discussed in the "Environmental Baseline" section above, we used available density estimates to determine that 32 adult fringe-toed lizards could be present in the project footprint but we nonetheless anticipate that considerably fewer individuals likely occur in the project footprint. While we cannot quantify the precise numbers of individuals that may be killed or injured as a result of construction and O&M activities for the detectability reasons discussed above, we anticipate the number of individuals that may be killed or injured will be small based on the degraded quality of the habitat in the action area and the fact that finding zero individuals during surveys indicates an apparently small population on the project site. Therefore, using our best professional judgment in light of best available information, and considering the different levels of activity during the various phases of the proposed project, we anticipate the incidental take of relatively few individuals, perhaps on the order of 10 or fewer individuals per year from construction activities and 5 or fewer individuals per year from O&M. However, based on the difficulty in detecting individual lizards, we anticipate that each report of incidental taking likely represents the actual death or injury of up to five individual lizards. As a result, we anticipate up to two fringe-toed lizards may be reported dead or injured from construction activities and one per year may be found from O&M activities. Accordingly, we are exempting accidental injury or death of no more than 10 individuals per year from construction and 5 per year from O&M activities based on the anticipation that the capture and relocation of adults would be effective and minimize the likelihood that more than this number of animals would suffer physical injury. Thus, if more than two fringe-toed lizards per year are found injured or dead during the construction phase, or more than one fringe-toed lizard per year is found injured or dead during the O&M phase, the take threshold will be exceeded.

- Take, in the form of capture or collection, of up to 10 fringe-toed lizards for the purposes of relocation from within the project construction and O&M disturbance area. However, because the capture or collection, relocation, and release will be conducted by a Service-approved Biologist, we do not expect these activities to result in direct injury or death of any relocated fringe-toed lizards. Therefore, we do not want to limit the ability of the Service-approved Biologist to avoid and minimize the direct injury or death of fringe-toed lizards by relocating individuals found during preconstruction clearance surveys. Thus, all take in the form of trapping, capture, or collection for the purposes of relocation is exempted for any eggs, juveniles, or adult fringe-toed lizards found during clearance surveys, monitoring activities, or other incidental observations, subject to the reasonable and prudent measures and terms and conditions below. If any fringe-toed lizards are directly injured or killed during relocation, the take threshold will be exceeded.

Take of flat-tailed horned lizards is anticipated and exempted as follows:

- The disturbance of up to 6.47 ha (16 ac) of horned lizard modeled habitat from construction and O&M activities may result in accidental death or injury of horned lizard eggs, juveniles, or adults from crushing, trampling, or burial. If the project impacts more than this acreage of horned lizard habitat, the take threshold will be exceeded.

- As discussed in the "Environmental Baseline" section above, we used available density estimates to determine that 64 horned lizards could be present in the project footprint but, based on the low habitat quality and the fact that 2 horned lizards were found in or near the project footprint during surveys, we anticipate that considerably fewer individuals likely occur in the project footprint. While we cannot quantify the precise numbers of horned lizards that may be killed or injured as a result of construction and O&M activities for the reasons discussed above, we anticipate the number of horned lizards that may be killed or injured due to the proposed project will be small based on the degraded quality of the habitat in the project footprint and the fact that finding two horned lizards during surveys indicates an apparently small population in the project area. Therefore, using our best professional judgment in light of best available information, and considering the different levels of activity during the various phases of the proposed project, we anticipate the incidental take of relatively few horned lizards, perhaps on the order of 10 or fewer individuals per year from construction activities and 5 or fewer individuals per year from O&M. However, based on the difficulty in detecting individual lizards, we anticipate that each report of incidental taking likely represents the actual death or injury of up to five individual lizards. As a result, we anticipate up to two horned lizards may be reported dead or injured from construction activities and one per year may be found from O&M activities. Accordingly, we are exempting accidental injury or death of no more than 10 individuals per year from construction and 5 horned lizards per year from O&M activities based on the anticipation that the capture and relocation of adults would be effective and minimize the likelihood that more than this number of animals would suffer physical injury. Thus, if more than two horned lizards

per year are found injured or dead during the construction phase, or more than one horned lizard per year is found injured or dead during the O&M phase, the take threshold will be exceeded.

- Take, in the form of capture or collection, of up to 10 horned lizards for the purposes of relocation from within the project construction and O&M disturbance area. However, because the capture or collection, relocation, and release will be conducted by a Service-approved Biologist, we do not expect these activities to result in direct injury or death of any relocated horned lizards. Therefore, we do not want to limit the ability of the Service-approved Biologist to avoid and minimize the direct injury or death of horned lizards by relocating individuals found during preconstruction clearance surveys. Thus, all take in the form of trapping, capture, or collection for the purposes of relocation is exempted for any eggs, juveniles, or adult horned lizards found during clearance surveys, monitoring activities, or other incidental observations, subject to the reasonable and prudent measures and terms and conditions below. If any horned lizards are directly injured or killed during relocation, the take threshold will be exceeded.

Take of the desert tortoise is anticipated and exempted as follows:

- The disturbance of up to 241.19 ha (596 ac) of modeled, critical, and occupied tortoise habitat from construction and O&M activities may result in accidental death or injury of tortoise eggs, juveniles, subadults, or adults from crushing, trampling, or burial. If the project impacts more than this acreage of tortoise habitat, the take threshold will be exceeded.

- As discussed in the "Environmental Baseline" section above, we used available density estimates to determine that 12 tortoises could be present in the project footprint but, based on the low habitat quality and the relatively small number of individuals found in the project footprint during surveys, we anticipate that fewer individuals likely occur in the project footprint. Therefore, using our best professional judgment in light of best available information, we anticipate that the proposed project will result in the incidental take of relatively few tortoises, perhaps on the order of six adults/subadults. Accordingly, we are exempting accidental injury or death of no more than six adult/subadult tortoises as a result of construction and no more than two per year as a result of O&M activities based on the anticipation that the capture and relocation of individuals would be effective and minimize the likelihood that more than this number of animals would suffer physical injury. Thus, if more than six subadult or adult tortoises are found injured or dead during construction and more than two subadult or adult tortoises per year are found injured or dead during O&M activities, the take threshold will be exceeded.

- Take, in the form of capture or collection, of up to 12 subadult or adult tortoises, up to 6 juveniles, and a relatively small but unquantifiable number of eggs for the purposes of

relocation from within the project construction and O&M disturbance area. However, because the capture or collection, relocation, and release will be conducted by a Service-approved Biologist, we do not expect these activities to result in direct injury or death of any relocated tortoises. Therefore, we do not want to limit the ability of the Service-approved Biologist to avoid and minimize the direct injury or death of tortoises by relocating tortoises found during preconstruction clearance surveys. Thus, all take in the form of trapping, capture, or collection for the purposes of relocation is exempted for any eggs, juveniles, or subadult or adult tortoises found during clearance surveys, monitoring activities, or other incidental observations, subject to the reasonable and prudent measures and terms and conditions below. If any tortoises are directly injured or killed during relocation, the take threshold will be exceeded.

IMPACT OF THE TAKING ON THE SPECIES

In the accompanying biological/conference opinion, the Service determined that these levels of anticipated take are not likely to result in jeopardy or adversely affect the recovery of the Stephens' kangaroo rat, Coachella Valley fringe-toed lizard, flat-tailed horned lizard, or desert tortoise.

REASONABLE AND PRUDENT MEASURES

The BLM and SCE are implementing conservation measures as part of the proposed action to minimize the taking of the Stephens' kangaroo rat, Coachella Valley fringe-toed lizard, flat-tailed horned lizard, or desert tortoise. The Service's evaluation in the biological/conference opinion includes consideration of the measures developed by the BLM and SCE to reduce the adverse effects of the proposed project on these species. The following reasonable and prudent measure is intended to supplement the protective measures that were proposed by BLM and SCE as part of the proposed action, and are necessary and appropriate to minimize the impact of the taking on the species. Any subsequent changes in the conservation measures proposed by BLM or SCE or in the conditions under which these activities currently occur may constitute a modification of the proposed action and may warrant re-initiation of formal consultation, as specified at 50 CFR § 402.16.

- SCE shall monitor and report the levels of incidental take of Stephens' kangaroo rat, Coachella Valley fringe-toed lizard, flat-tailed horned lizard, and desert tortoise to the CFWO throughout the life of the project and report on the effectiveness of the project minimization measures to reduce the impact of incidental take of these species.

TERMS AND CONDITIONS

To be exempt from the prohibitions of section 9 of the Act, SCE, BLM, and all contractors/agents/employees must comply with the following terms and conditions, which implement the reasonable and prudent measure described above. These terms and conditions are nondiscretionary and designed to minimize the impact of incidental taking on the species.

Stephens' Kangaroo Rat - To implement the reasonable and prudent measure above:

a) A Habitat Restoration/Compensation Plan to restore temporary impacts to kangaroo rat habitat shall be prepared and submitted for review and approval by the CFWO prior to initiation of project construction.

b) The restoration of kangaroo rat habitat shall be monitored for 5 years or until established success criteria are met. Annual monitoring reports shall be submitted to the CFWO to assess progress and identify potential problems with the restoration site. If the mitigation fails to meet the established performance criteria as outlined in the Habitat Restoration/ Compensation Plan after the 5-year maintenance and monitoring period, monitoring shall extend beyond the 5-year period until the criteria are met or unless otherwise determined by the CFWO and BLM.

Stephens' Kangaroo Rat, Coachella Valley Fringe-toed Lizard, Flat-tailed Horned Lizard, and Desert Tortoise - To implement the reasonable and prudent measure above:

a) SCE shall prepare and provide to the BLM, CFWO, and CDFG an annual report by December 31 of each year of the project. The annual report shall document but not be limited to, the following:

- Compliance with project-specifications and all Conservation Measures outlined in this biological/conference opinion.

- Any activities determined by the FCR to be out of compliance with project-specifications and all Conservation Measures outlined in this biological/conference opinion and the corrective measures implemented to bring the project back into compliance.

- The total amount of kangaroo rat, fringe-toed and horned lizard, and tortoise habitat disturbed by construction and O&M activities during the reporting year in the CVMSHCP and NECO plan areas, respectively.

- The number of eggs, juveniles, subadults, or adult kangaroo rats, fringe-toed and horned lizards, and tortoises found and relocated during preconstruction, construction, and/or O&M activities during the reporting year and a detailed description of the relocation activities. If more than 12 kangaroo rats, 10 adult fringe-toed or horned lizards, or 12 tortoises, or any eggs, juveniles or sub-adults of these species are found within the project footprint, the Qualified or Authorized Biologist shall immediately report the observation to the CFWO, prior to any relocation activities. The CFWO will review the information to determine its consistency with the effects analysis above and determine if relocation of additional individuals of these species would benefit their survival and be

consistent with our assumptions in the biological opinion, and if reinitiation of consultation is warranted.

- The number of kangaroo rats, fringe-toed and horned lizards, and tortoises killed or injured during project construction or O&M activities during the reporting year and a description of the circumstances leading to the death or injury of individuals of these species.

- Invasive plant species control activities conducted during construction or O&M activities in the project footprint during the reporting year and the status of control activities conducted the previous year.

- Activities conducted under the Raven Control Plan during the reporting year, including but not limited to, the results of raven nest monitoring and removal of offending ravens and their nests.

Disposition of Sick, Injured, or Dead Specimens

The CFWO is to be notified immediately at (760) 431-9440 if any kangaroo rats, fringe-toed or horned lizards, or tortoises are found sick, injured, or dead in the project area. Immediate notification means verbal (if possible) and written notice within 1 workday, and must include the date, time, and location of the carcass, and any other pertinent information. Care must be taken in handling sick or injured individuals to ensure effective treatment and care and in handling dead specimens to preserve biological material in the best possible state.

The CFWO should also be notified immediately at (760) 431-9440 if any endangered or threatened species not addressed in this biological/conference opinion is found dead or injured within the action area [combined DPV1/DPV2 ROW and area within 305 m (1,000 ft) of combined ROW] during the life of the project. The same reporting requirements also shall pertain to any healthy individual(s) of any threatened or endangered species found on the action area and handled to remove the animal to a more secure location.

Reporting Requirements

Please refer to the “Conservation Measures” and “Terms and Conditions” sections of this biological/conference opinion above for details on reporting procedures kangaroo rat, milk-vetch, fringe-toed lizard, horned lizard, and tortoise.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to use their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid

adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

- To minimize direct, indirect, and cumulative impacts of raven predation on desert tortoise associated with existing transmission lines and facilities, the Service recommends that SCE implement a programmatic Raven Nest Monitoring program for all of its existing transmission lines in desert tortoise habitat similar to the one that would be implemented along the DPV2 line, and that SCE contributes to the Raven Management Plan for these other facilities.

REINITIATION NOTICE

This concludes formal consultation on the proposed project for Stephens' kangaroo rat, Coachella Valley milk-vetch, Coachella Valley fringe-toed lizard, and desert tortoise. As provided in 50 CFR § 402.16, reinitiation of formal consultation is required where discretionary Federal involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action.

Also, as discussed in the "Re-evaluation of Project Description" section above, SCE, the BLM, Service, and CDFG will re-evaluate the project description and effects analysis in this biological/conference opinion every 10 years starting from the date the biological/conference opinion is issued. If at the time of the re-evaluation, the BLM, Service, and CDFG agree that the O&M activities outlined in the project description of this biological/conference opinion are still relevant and that no additional impacts outside those considered in the effects analysis have or will occur as a result of ongoing O&M activities, the BLM, Service and CDFG will provide written concurrence to SCE stating so. However, if the BLM, Service, or CDFG determine that O&M activities have been implemented inconsistent with the effects analysis of this biological/ conference opinion, the BLM will reinitiate formal consultation on the DPV2 project as provided in 50 CFR § 402.16. Also, if after re-evaluation, the BLM, Service, and CDFG agree that certain O&M measures are no longer relevant or impacts are less than anticipated, the conservation measures can be revised accordingly and the agencies will provide written concurrence to SCE of the revisions.

This concludes the formal conference on the proposed project for the flat-tailed horned lizard (horned lizard). You may ask the Service to confirm the conference opinion as a biological opinion issued through formal consultation if the flat-tailed horned lizard is eventually listed. The request must be in writing. If the Service reviews the proposed action and finds that there have been no significant changes in the action as planned or in the information used during the conference, the Service will confirm the conference opinion as the biological opinion on the project and no further section 7 consultation will be necessary.

If the flat-tailed horned lizard is listed under the Act and this conference opinion is adopted as the biological opinion, the BLM shall request reinitiation of consultation if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect the species or critical habitat in a manner or to an extent not considered in this conference opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the species or critical habitat that was not considered in this conference opinion; or (4) a new species is listed or critical habitat designated that may be affected by the proposed action.

The incidental take statement provided in this conference opinion does not become effective unless the species is listed and the conference opinion is adopted as the biological opinion issued through formal consultation. At that time, the proposed project will be reviewed to determine whether any take of the flat-tailed horned lizard has occurred. Modifications of the opinion and incidental take statement may be appropriate to reflect that take. No take of the flat-tailed horned lizard may occur between the listing of the species and the adoption of the conference opinion through formal consultation, or the completion of a subsequent formal consultation.

If you have any questions regarding this document, please contact Tannika Engelhard of the Carlsbad Fish and Wildlife Office at (760) 431-9440, extension 202.

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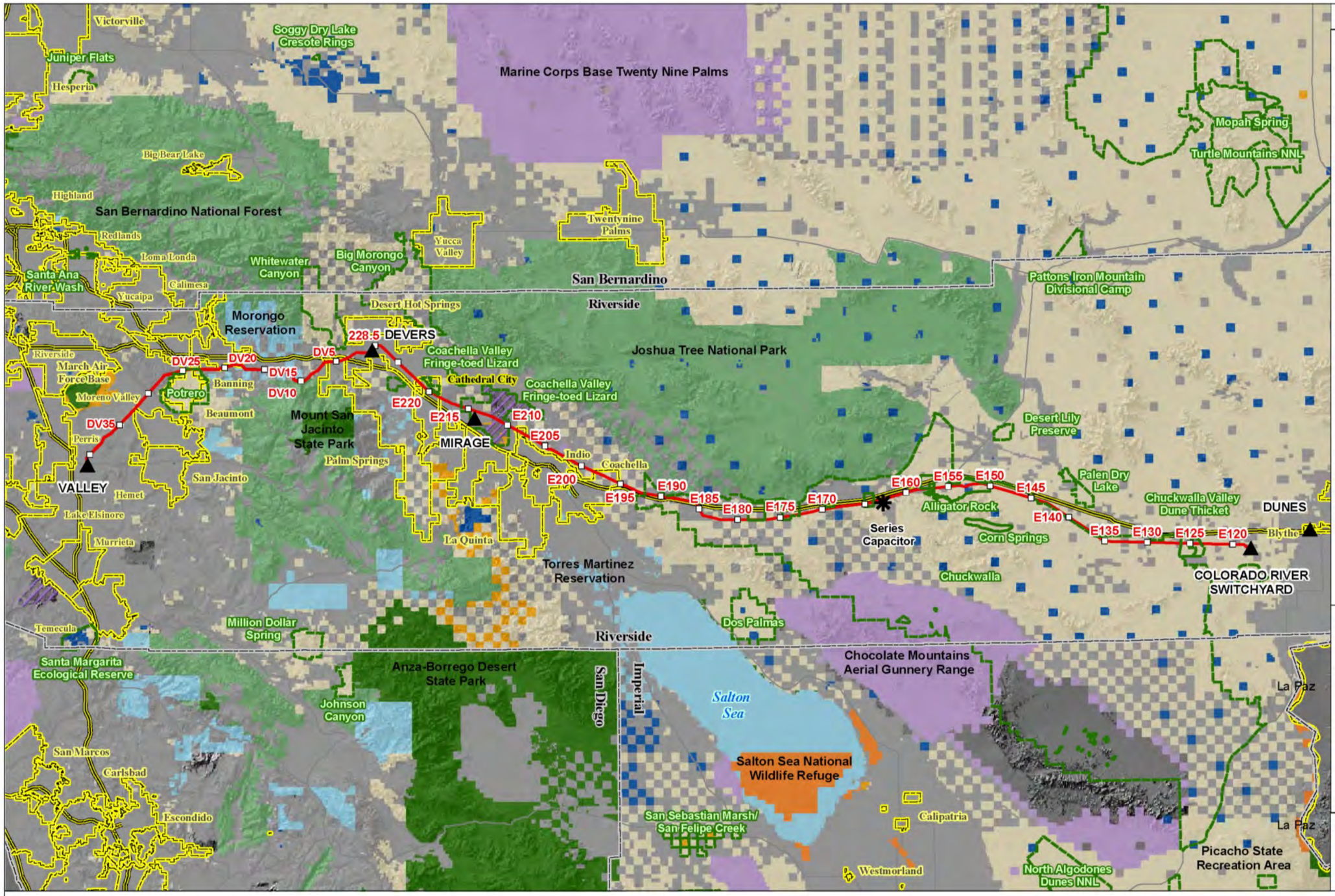


Legend

- Proposed Project (mileposts)
- Substations
- Series Capacitor
- Incorporated Areas
- BLM Area of Environmental Concern (ACEC)

Ownership / Jurisdictions

- BLM
- CA Fish and Game
- Indian Lands
- Military
- Nature Conservancy
- NPS
- Private
- State
- State Parks and Recreation
- U.S. Fish and Wildlife Service

Index Map

Contains Transmission Information Distribution limited to FERC Standards of Conduct CONFIDENTIAL Contains Critical Electric Infrastructure Information If any questions contact Corporate Security (27875) for handling/storage requirements.

Projection: NAD 83 UTM Zone 11

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

680 0 680 1360 Miles

DEVERS-PALO VERDE NO.2 500kV TRANSMISSION LINE PROJECT

LOCATION MAP

Table 1: DPV2 Project Impacts [miles (mi) and acres (ac). Note: "CVAG Modeled Habitat" refers to areas modeled as habitat by the Coachella Valley Association of Governments for the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). For Stephens' kangaroo rat, "occupied habitat" refers to areas in which kangaroo rats were found during project-specific surveys. For desert tortoise, "occupied habitat" refers to areas outside of modeled and critical habitat in which live tortoise and/or sign was found during project-specific surveys.

PROJECT COMPONENT	Stephens' Kangaroo Rat	Coachella Valley Milk-vetch	Coachella Valley Fringe-toed Lizard		Flat-tailed Horned Lizard	Desert Tortoise				
	Occupied and Suitable Habitat	CVAG Modeled Habitat	CVAG Modeled Habitat	Critical Habitat	CVAG Modeled Habitat	CVAG Modeled Habitat: Devers-Valley	CVAG Modeled Habitat: CRS-Devers	Critical Habitat (not in CVAG Modeled Habitat)	Critical Habitat in CVAG Modeled Habitat	Occupied Habitat East of Critical Habitat
Linear extent (mi) of DPV2 crossing species habitat	0.32	12.5	3.8	6.2	4.1	11.38	14.4	42.4	23	3.3
Number of Towers in species habitat	3	45	13	21	14	47	53	134	80	11
Number of Tower Footings in species habitat (4 per tower)	12	180	52	84	56	188	212	536	320	44
Number of Combined Pulling/Splicing Stations in species habitat	0	13	4	2	1	22	7	20	12	2
Number of Independent Splicing Stations in species habitat	0	4	0	2	0	4	6	15	7	1
Number of Fiber Optic Wire Sites in species habitat	0	3	3	4	3	0	4	13	9	1
Number of Guard Structures in species habitat	0	42	4	18	11	59	35	31	21	0
Construction yards in species habitat	0	0	0	0	0	1	0	0	1	0
Helicopter assembly sites in species habitat	0	3	0	0	0	4	1	0	2	0
Total Impacts (Temporary and Permanent) (Acres)										
Access Roads	0	0	0	0	0	0	0	0	0	0
Tower Footings (4 per tower)	0.001	0.04	0.01	0.02	0.01	0.03	0.03	0.07	0.05	0.004
Tower Pads	2.73	37.9	10.92	19.11	11.83	43.15	45.35	121.9	72.8	8.87
	(3 Pads)	(45 Pads)	(12 Pads) 1 tower falls on a conductor pull site	(21 Pads)	(13 Pads) 1 tower falls on a conductor pull site	(47 Pads)	(53 Pads)	(134 Pads)	(80 Pads)	(11 Pads)
Spur Roads	0.14	3.8	1.18	1.85	1.09	8.5	4.94	3.1	3.2	0
	(3 Roads)	(40 Roads)	(13 Roads)	(21 Roads)	(14 Roads)	(38 Roads)	(45 Roads) no spur rd to Const 2251	(45 Roads)	(45 Roads)	0
Combined Pulling/Splicing Stations	0	15.2	4.5	2.06	1.38	23.53	7.41	20.3	11.8	2.06
Independent Splicing Stations	0	0.9	0	0.5	0	0.92	1.38	3.4	1.6	0.23
Fiber Optic Wire Sites	0	0.1	0.1	0.4	0.1	0.28	0.26	2	0.9	0.41
Guard Structures	0	4.6	0.54	1.67	1.28	5.64	3.21	2.8	1.8	0
Construction Yards										0
Blythe (B-1)	0	0	0	0	0	0	0	0	0	0
Chiriaco Summit (S-1)	0	0	0	0	0	0	0	0	12.1	0
Desert Center (DC-1)	0	0	0	0	0	0	0	0	0	0
Desert Center (DC-2)	0	0	0	0	0	0	0	0	0	0
Devers (D-1)	0	0	0	0	0	11.8	0	0	0	0
Perris Yard	0	0	0	0	0	0	0	0	0	0
Highland Yard	0	0	0	0	0	0	0	0	0	0
Helicopter Assembly Sites										
H1A-DV	0	1.1*	0	0	0	1.1	0	0	0	0
H-1X-DV	0	4.7*	0	0	0	4.7	0	0	0	0
H2-DV	0	5.0*	0	0	0	4.9	0	0	0	0

Table 1 (continued):

PROJECT COMPONENT	Stephens' Kangaroo Rat	Coachella Valley Milk-vetch	Coachella Valley Fringe-toed Lizard		Flat-tailed Horned Lizard	Desert Tortoise				
	Occupied and Suitable Habitat	CVAG Modeled Habitat	CVAG Modeled Habitat	Critical Habitat	CVAG Modeled Habitat	CVAG Modeled Habitat: Devers-Valley	CVAG Modeled Habitat: CRS-Devers	Critical Habitat (not in CVAG Modeled Habitat)	Critical Habitat in CVAG Modeled Habitat	Occupied Habitat East of Critical Habitat
Helicopter Assembly Sites (continued)										
H7-DV	0	0	0	0	0	0.29	0	0	0	0
H8-DV	0	0	0	0	0	0	0	0	0	0
H1-DCR	0	0	0	0	0	0	1.55	0	0	0
H4-DCR	0	0	0	0	0	0	0	0	1.4	0
H5-DCR	0	0	0	0	0	0	0	0	1.6	0
Colorado River Switchyard										
Station footprint	0	0	0	0	0	0	0	0	0	44
CRS expansion area	0	0	0	0	0	0	0	0	0	34
Storm Water Detention Basin	0	0	0	0	0	0	0	0	0	1.7
Drainage Improvements (berm)	0	0	0	0	0	0	0	0	0	7.4
Temporary work zone/perimeter buffer	0	0	0	0	0	0	0	0	0	20
Temporary staging area	0	0	0	0	0	0	0	0	0	13.4
Improved Drive Entrance to CRS (25,000ft × 17ft)	0	0	0	0	0	0	0	0	0	10.3
Permanent-driveways to CRS (2) (~500ft × 14ft)	0	0	0	0	0	0	0	0	0	1
Temporary stub road/driveway to staging area (1) (~500ft × 14ft)	0	0	0	0	0	0	0	0	0	0.3
Loop-in tower pads (6) (200ft × 200ft w/ overlaps not in permanent drive entrance)	0	0	0	0	0	0	0	0	0	5.4
Distribution/power line (~4,530ft overhead on 22 poles, ~236ft × 14ft underground)	0	0	0	0	0	0	0	0	0	0.08
Distribution/power line access road (~4,530ft × 14ft)	0	0	0	0	0	0	0	0	0	1.5
Telecomm line	0	0	0	0	0	0	0	0	0	0.06
Expansion Series Capacitor Bank	0	0	0	0	0	0	0	3	0	0
Modifications to existing Valley Substation	0	0	0	0	0	0	0	0	0	0
Modifications to existing Devers Substation	0	0	0	0	0	10	0	0	0	0
TOTALS (ac)**	**3*** **	**63**	**18**	**26**	**16**	**115**	**65**	**157**	**108**	**151**

*

Site also modeled as desert tortoise habitat along the Devers-Valley segment.

** Totals for milk-vetch, fringe-toed and horned lizard, and tortoise rounded up to the next nearest whole number.

*** Total includes 0.20 ac of permanent impacts and 2.80 ac of temporary impacts.

Mitigation Monitoring and Reporting

The Final EIR/EIS included a proposed Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) for the mitigation measures proposed herein for the Devers–Palo Verde No. 2 Transmission Line Project (DPV2). An MMCRP table for the Proposed Project and the alternatives was provided at the end of each issue area's environmental analysis in Section D (D.2 through D.14). This section below provides the required framework for the implementation of the MMCRP by the CEQA Lead Agency, the California Public Utilities Commission (CPUC), and the NEPA Lead Agency, the Bureau of Land Management (BLM), and describes the roles and responsibilities of government agencies in implementing and enforcing adopted mitigation.

Authority for the Mitigation Monitoring, Compliance, and Reporting Program

California Public Utilities Commission

The California Public Utilities Code in numerous places confers authority upon the CPUC to regulate the terms of service and the safety, practices and equipment of utilities subject to its jurisdiction. It is the standard practice of the CPUC, pursuant to its statutory responsibility to protect the environment, to require that mitigation measures stipulated as conditions of approval be implemented properly, monitored, and reported on. In 1989, this requirement was codified statewide as Section 21081.6 of the Public Resources Code. Section 21081.6 requires a public agency to adopt a Mitigation Monitoring, Compliance, and Reporting Program when it approves a project that is subject to preparation of an EIR and where the EIR for the project identifies significant adverse environmental effects. *CEQA Guidelines* Section 15097 was added in 1999 to further clarify agency requirements for mitigation monitoring or reporting.

The purpose of a MMCRP is to ensure that measures adopted to mitigate or avoid significant impacts of a project are implemented. The CPUC views the MMCRP as a working guide to facilitate not only the implementation of mitigation measures by the project proponent, but also the monitoring, compliance and reporting activities of the CPUC and any monitors it may designate.

The CPUC will address its responsibility under Public Resources Code Section 21081.6 when it takes action on SCE's application for a Certificate of Public Convenience and Necessity. If the Commission approves the application, it will also adopt a Mitigation Monitoring, Compliance, and Reporting Program that includes the mitigation measures ultimately made a condition of approval by the Commission.

Bureau of Land Management and Other Federal Lands

BLM was the federal Lead Agency for the preparation of the Final EIR/EIS in compliance with NEPA, the Council on Environmental Quality (CEQ) regulation for implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508), and the BLM NEPA guidance handbook (H-1790-1). As the Lead Agency, BLM is also responsible for ensuring that mitigation measures are implemented on its land. BLM intends to work with the CPUC in implementation of mitigation monitoring during construction of the DPV2 project, and will likely use the CPUC's environmental contractor for monitoring on its lands.

Organization of the Final Mitigation Monitoring Plan

The MMCRP should serve as a self-contained general reference for the Mitigation Monitoring Program adopted by the CPUC and BLM for the DPV2 Project. To accomplish this, the Final Mitigation Monitoring Plan contains seven elements (as indicated below). The elements of the Mitigation Monitoring Plan are as follows:

MMCRP Introduction

- Authority and Purpose of the Program
- Program Adoption Process
- Organization of the MMCRP

Roles and Responsibilities

- Monitoring Responsibility
- Enforcement Responsibility
- Mitigation Compliance Responsibility
- Dispute Resolution

General Monitoring Procedures

- Environmental Monitor
- Construction Personnel
- General Reporting Requirements
- Public Access to Records

Roles and Responsibilities

As the lead agencies under CEQA and NEPA, the CPUC and BLM, respectively, are required to monitor this project to ensure that the required mitigation measures and Applicant Proposed Measures are implemented. The CPUC and BLM will be responsible for ensuring full compliance with the provisions of this monitoring program and has primary responsibility for implementation of the monitoring program. The purpose of the monitoring program is to document that the mitigation measures required by the CPUC and BLM are implemented and that mitigated environmental impacts are reduced to the level identified in the Program.

The CPUC and/or BLM may delegate duties and responsibilities for monitoring to other environmental monitors or consultants as deemed necessary, and some monitoring responsibilities may be assumed by responsible agencies, such as affected jurisdictions and cities. The number of construction monitors assigned to the project will depend on the number of concurrent construction activities and their locations. The CPUC and BLM, however, will ensure that each person delegated any duties or responsibilities is qualified to monitor compliance.

Any mitigation measure study or plan that requires the approval of the CPUC and BLM must allow at least 60 days for adequate review time. When a mitigation measure requires that a mitigation program be developed during the design phase of the project, the Applicant must submit the final program to CPUC and BLM for review and approval for at least 60 days before construction begins. Other agencies and jurisdictions may require additional review time. It is the responsibility of the environmental monitor assigned to each spread to ensure that appropriate agency reviews and approvals are obtained.

The CPUC and BLM along with its environmental monitors will also ensure that any variance process or deviation from the procedures identified under the monitoring program is consistent with CEQA and NEPA requirements; no project variance will be approved by the CPUC and BLM if it creates new significant impacts. As defined in this section, a variance should be strictly limited to minor project changes that will not trigger other permit requirements, that does not increase the severity of an impact or create a new impact, and that clearly and strictly complies with the intent of the mitigation measure. A Proposed Project change that has the

potential for creating significant environmental effects will be evaluated to determine whether supplemental CEQA and/or NEPA review is required. Any proposed deviation from the approved project, adopted mitigation measures, and Applicant Proposed Measures, and correction of such deviation, shall be reported immediately to the CPUC, the BLM, and the environmental monitor assigned to the construction spread for their review and approval. In some cases, a variance may also require approval by a CEQA or NEPA responsible agency.

Enforcement Responsibility

The CPUC and BLM are responsible for enforcing the procedures adopted for monitoring through the environmental monitor assigned to each construction spread. The environmental monitor shall note problems with monitoring, notify appropriate agencies or individuals about any problems, and report the problems to the CPUC and BLM.

The CPUC, BLM, have the authority to halt any construction, operation, or maintenance activity associated with the Devers–Palo Verde No. 2 Transmission Line Project if the activity is determined to be a deviation from the approved project or adopted mitigation measures. The CPUC and/or BLM may assign this authority to the environmental monitor for each construction spread.

Mitigation Compliance Responsibility

The Applicant, SCE, is responsible for successfully implementing all the adopted mitigation measures in the MMCRP. The MMCRP will contain criteria that define whether mitigation is successful. Standards for successful mitigation also are implicit in many mitigation measures that include such requirements as obtaining permits or avoiding a specific impact entirely. Other mitigation measures include success criteria that are listed in table at the end of each issue area section. Additional mitigation success thresholds will be established by applicable agencies with jurisdiction through the permit process and through the review and approval of specific plans for the implementation of mitigation measures.

The Applicant shall inform the CPUC, the BLM, and their monitors in writing of any mitigation measures that are not or cannot be successfully implemented. The CPUC and BLM in coordination with their monitors will assess whether alternative mitigation is appropriate and specify to SCE the subsequent actions required.

Dispute Resolution

It is expected that the Final MMCRP will reduce or eliminate many potential disputes. However, even with the best preparation, disputes may occur. In such event, the following procedure will be observed:

• **Step 1.** Disputes and complaints (including those of the public) should be directed first to the CPUC and/or BLM's designated Project Manager, as appropriate, for resolution. The Project Manager will attempt to resolve the dispute.

• **Step 2.** Should this informal process fail, the CPUC and/or BLM Project Manager may initiate enforcement or compliance action to address deviations from the Proposed Project or adopted Mitigation Monitoring Program.

The following steps apply to the CPUC only:

• **Step 3.** If a dispute or complaint regarding the implementation or evaluation of the Program or the mitigation measures cannot be resolved informally or through enforcement or compliance action by the CPUC, any affected participant in the dispute or complaint may file a written "notice of dispute" with the CPUC's Executive Director. This notice should be filed in order to resolve the dispute in a timely manner, with copies

concurrently served on other affected participants. Within 10 days of receipt, the Executive Director or designee(s) shall meet or confer with the filer and other affected participants for purposes of resolving the dispute. The Executive Director shall issue an Executive Resolution describing his/her decision, and serve it on the filer and other affected participants.

• **Step 4.** If one or more of the affected parties is not satisfied with the decision as described in the Resolution, such party(ies) may appeal it to the Commission via a procedure to be specified by the Commission.

Parties may also seek review by the Commission through existing procedures specified in the Commission's Rules of Practice and Procedure for formal and expedited dispute resolution, although a good faith effort should first be made to use the foregoing procedure.

General Monitoring Procedures

Environmental Monitor

Many of the monitoring procedures will be conducted during the construction phase of the project. The CPUC, the BLM, and the environmental monitor(s) are responsible for integrating the mitigation monitoring procedures into the construction process in coordination with SCE. To oversee the monitoring procedures and to ensure success, the environmental monitor assigned to each construction spread must be onsite during that portion of construction that has the potential to create a significant environmental impact or other impact for which mitigation is required. The environmental monitor is responsible for ensuring that all procedures specified in the monitoring program are followed.

Construction Personnel

A key feature contributing to the success of mitigation monitoring will be obtaining the full cooperation of construction personnel and supervisors. Many of the mitigation measures require action on the part of the construction supervisors or crews for successful implementation. To ensure success, the following actions, detailed in specific mitigation measures included in the Final Implementation Plan, will be taken:

• Procedures to be followed by construction companies hired to do the work will be written into contracts between SCE and any construction contractors. Procedures to be followed by construction crews will be written into a separate agreement that all construction personnel will be asked to sign, denoting consent to the procedures.

• One or more pre-construction meetings will be held to inform all and train construction personnel about the requirements of the monitoring program (as detailed in the Final Implementation Plan).

• A written summary of mitigation monitoring procedures will be provided to construction supervisors for all mitigation measures requiring their attention.

General Reporting Procedures

Site visits and specified monitoring procedures performed by other individuals will be reported to the environmental monitor assigned to the relevant construction spread. A monitoring record form will be submitted to the environmental monitor by the individual conducting the visit or procedure so that details of the visit can be recorded and progress tracked by the environmental monitor. A checklist will be developed and maintained by the environmental monitor to track all procedures required for each mitigation measure and to ensure that the timing specified for the procedures is adhered to. The environmental monitor will note any

problems that may occur and take appropriate action to rectify the problems. The Applicant shall provide the CPUC, BLM, USFWS with written quarterly reports of the project, which shall include progress of construction, resulting impacts, mitigation implemented, and all other noteworthy elements of the project. Quarterly reports shall be required as long as mitigation measures are applicable.

Public Access to Records

The public is allowed access to records and reports used to track the monitoring program. Monitoring records and reports will be made available for public inspection by the CPUC and BLM on request. The CPUC, the BLM, and the Applicant will develop a filing and tracking system. For additional information on mitigation monitoring and reporting for the Devers–Palo Verde No. 2 Transmission Line Project, the Energy Division of the CPUC will maintain an Internet website, accessible at the CPUC website at http://www.cpuc.ca.gov/environment/info/aspen/dpv2/dpv2.htm and at the BLM website at http://www.blm.gov/ca/st/en/fo/palmsprings/devers_paloverde.html. In order to facilitate the public's awareness, the CPUC will make weekly reports available on the website.

Condition Effectiveness Review

As required by CEQA, the CPUC must evaluate the effectiveness of the mitigation measures that are implemented. In order to fulfill its statutory mandates to mitigate or avoid significant effects on the environment and to design a Mitigation Monitoring Program to ensure compliance during project implementation (CEQA 21081.6):

• The CPUC may conduct a comprehensive review of conditions which are not effectively mitigating impacts at any time it deems appropriate, including as a result of the Dispute Resolution procedure outlined in H.6; and

• If in either review, the Commission determines that any conditions are not adequately mitigating significant environmental impacts caused by the project, or that recent proven technological advances could provide more effective mitigation, then the Commission may impose additional reasonable conditions to effectively mitigate these impacts.

These reviews will be conducted in a manner consistent with the Commission's rules and practices.

Mitigation Monitoring Program Tables

These tables, along with the full text of the mitigation measures themselves, will form the basis for implementation of the Mitigation Monitoring Program for the Project as defined by this ROD.

Mitigation Monitoring, Compliance, and Reporting Table

Table 1 presents the mitigation monitoring table for Biological Resources.

Table1. Mitigation Monitoring Program – Biological Resources

IMPACT B-1	Construction activities would result in temporary and permanent loss of native vegetation.
MITIGATION MEASURE	B-1a: Prepare and implement a Habitat Restoration/Compensation Plan. SCE shall restore all areas disturbed by project construction, including temporary disturbance areas around tower construction sites, laydown/staging areas, temporary access and spur roads, and existing tower locations that are removed during construction of the Project. Where onsite restoration is planned for mitigation of temporary impacts to sensitive vegetation communities, SCE shall identify a qualified Habitat Restoration Specialist to be approved by the CPUC/BLM. Hydroseeding, drill seeding, or an otherwise proved restoration technique shall be utilized on all disturbed surfaces using a locally endemic native seed mix approved by the CPUC/CDFG/FWS and BLM. SCE shall flag the limits of disturbance at each construction site. The Plan shall incorporate the measures identified in the June 2006 Memorandum of Understanding regarding vegetation management along rights-of-way for electrical transmission and distribution facilities on Federal lands. In project areas that occur in the WRCMSHCP plan area, SCE shall use the applicable Best Management Practices identified in the WRCMSHCP. The creation or restoration of habitat shall be monitored for five years after mitigation site construction, or until established success criteria are met, to assess progress and identify potential problems with the restoration site. Remedial activities (e.g., additional planting, weeding, or erosion control) shall be taken during the monitoring period if necessary to ensure the success of the restoration effort. If the mitigation fails to meet the established performance criteria after the five-year maintenance and monitoring period, monitoring shall extend beyond the five-year period until the criteria are met or unless otherwise noted by the CPUC/BLM.
Location	All areas disturbed by construction activities, including temporary disturbances.
Monitoring / Reporting Action	BLM and CPUC/CDFG to review findings and restoration success submitted by the approved Habitat Restoration Specialist.
Effectiveness Criteria	Temporary and permanently impacted native vegetation communities shall be restored to preconstruction conditions within 5 years as measured by compliance with success criteria.
Responsible Agency	BLM and CPUC.
Timing	Prior to and after construction, as appropriate.
IMPACT B-2	Construction activities would result in the introduction of invasive non-native or noxious plant species.
MITIGATION MEASURE	B 2a: Conduct invasive and noxious weed inventory. SCE shall survey the project corridor, including access roads, for populations of invasive and noxious weeds prior to the start of construction. All populations of invasive and noxious weeds within 500 feet of each tower location shall be flagged prior to construction. The Applicant shall submit a Noxious Weed Control Plan to BLM, CPUC, CDFG, and/or USFWS at least 60 days prior to the start of construction. The weed control plan shall specify the location of existing weed populations; measures to control introduction and spread of noxious weeds in the project corridor; worker training, specifications, and inspection procedures for construction materials and equipment used in the project corridor; post-construction monitoring for noxious weeds; and eradication and control methods. Known populations of invasive and noxious weeds in the project corridor shall be evaluated by BLM, CPUC, CDFG, and USFWS to identify candidates for eradication. Selected weed populations shall then be eradicated prior to construction. All seeds and straw material shall be certified weed free. All gravel and fill material used during project construction and maintenance shall be certified weed free by the local County Agriculture Commissioner's Office.
Location	All locations along the selected alternative that occur on BLM land will be surveyed.
Monitoring / Reporting Action	Biological monitor to conduct pre-construction surveys, evaluate impacted areas and implement mitigation measures.
Effectiveness Criteria	Successful protection from the introduction or establishment of noxious weeds in post-construction areas.
Responsible Agency	BLM, CPUC, CDFG, USFWS.
Timing	Prior to construction.

MITIGATION MEASURE	B-2b: Implement control measures for invasive and noxious weeds. SCE shall adhere to the BLM management guidelines for reducing the potential for the introduction of noxious weeds and invasive, non-native plant species by implementation of the following standards: Wash all equipment and vehicles. Vehicles and all equipment must be washed BEFORE AND AFTER entering all project sites unless otherwise directed in writing by the BLM. This includes wheels, undercarriages, bumpers and all parts of the vehicle. In addition, all tools such as chain saws, hand clippers, pruners, etc., must also be washed BEFORE AND AFTER entering all project areas. For example, vehicles traveling into contaminated areas are the main dispersal mechanism for yellow star-thistle. All washing must take place where rinse water is collected and disposed of in either a sanitary sewer or a landfill. Keep written logs. When vehicles and equipment are washed, a daily log must be kept stating the location, date and time, types of equipment, methods used and staff present. The log shall contain the signature of the responsible crewmember. Written logs will be available for CPUC/BLM inspection and shall be turned in to BLM on a weekly basis. Post-construction weed abatement on the Coachella Valley Preserve. Post-construction follow-up weed abatement will be conducted on the work areas within the Coachella Valley Preserve . Weed abatement will be conducted during the spring following construction and prior to when the weeds establish flowers or produce seeds.
Location	Entire project area within BLM land.
Monitoring / Reporting Action	Biological monitor to evaluate impacted areas and implement mitigation measures.
Effectiveness Criteria	Successful protection from the introduction or establishment of noxious weeds in post-construction areas.
Responsible Agency	BLM and CPUC.
Timing	Prior to and during construction.
IMPACT B-5	Construction activities during the breeding season would result in a potential loss of nesting birds.
MITIGATION MEASURE	B-5a: Conduct pre-construction surveys and monitoring for breeding birds. SCE shall conduct protocol level surveys for nesting birds if construction activities are scheduled to occur during the breeding season for raptors and other migratory birds. Surveys shall be conducted in areas within 500 feet of tower sites, laydown/staging areas, substation sites, and access road/spur road locations. SCE shall be responsible for designating a CPUC/BLM-approved qualified biologist who can conduct pre-construction surveys and monitoring for breeding birds. If breeding birds with active nests are found, a biological monitor shall establish a 500-foot buffer around the nest and no activities will be allowed within the buffer until the young have fledged from the nest or the nest fails. The biological monitor shall conduct regular monitoring of the nest to determine success/failure and to ensure that project activities are not conducted within the 500-foot buffer until the nesting cycle is complete or the nest fails. The biological monitor shall be responsible for documenting the results of the surveys and the ongoing monitoring.
Location	Entire project area.
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Effectiveness Criteria	Successful avoidance of breeding birds.
Responsible Agency	BLM, FWS, CDFG and CPUC.
Timing	Prior to and during construction, as appropriate.
IMPACT B-6	Construction activities would result in indirect or direct loss of listed plants

MITIGATION MEASURE	B-6a: Develop a transplanting plan. In coordination with the BLM, SCE shall prepare a transplanting plan in compliance with California laws and regulations regarding native and sensitive plants, prior to project construction activities. The plan will provide details on the plants being transplanted, including which species and how many individuals of each species; where the plants will be transplanted; how the plants will be transplanted; how the plants will be maintained during the transplanting efforts; and if the plants will be used to re-vegetate disturbed areas of the construction site. As a condition of the plan, a pre-construction survey will be conducted to mark (using bright-colored flagging) all plants that will be transplanted. Some cacti will need to be transplanted facing the same direction as they currently face (in other words, the north side of the plant must stay facing the north); these cacti will be identified in the plan and appropriately marked to identify which side faces north. For listed plant species SCE shall identify if the plants can be avoided. If avoidance is not possible, SCE shall purchase off site mitigation in coordination with the USFWS and CDFG.
Location	Entire Project area.
Monitoring / Reporting Action	Transplanting plan will be submitted for approval and executed accordingly.
Effectiveness Criteria	Successful transplantation of listed plants.
Responsible Agency	BLM and CPUC.
Timing	Prior to, during, and after construction, as appropriate.
IMPACT B-7	Construction activities would result in indirect or direct loss of listed wildlife or habitat
MITIGATION MEASURE	B-7a: Avoid Colorado River. All tower pads, equipment laydown areas, and pulling sites would be located outside flowing portions of the Colorado River and flowing tributaries of the river.
Location	Colorado River area.
Monitoring / Reporting Action	Biological monitor shall ensure all construction related activities avoid the Colorado River and all flowing tributaries.
Effectiveness Criteria	Successful avoidance of the Colorado River.
Responsible Agency	BLM and CPUC.
Timing	Prior to construction.

MITIGATION MEASURE	B-7b: Conduct pre-construction tortoise surveys. Prior to construction, SCE shall survey the transmission line corridor for desert tortoise burrows and pallets within fourteen (14) days preceding construction. Tortoise burrows and pallets encountered within the construction zone(if any) will be conspicuously flagged by the surveying biologist(s) and avoided during all construction activities. • During construction activities, SCE shall inspect under equipment and vehicles prior to moving equipment. If tortoises are encountered, the vehicle will not be moved until such animals have voluntarily moved to a safe distance away from the parked vehicle or a qualified biologist moves the tortoise. • SCE shall monitor construction activities in all areas with the potential to support desert tortoise. • Desert tortoises will be handled only by a FWS/CDFG permitted and authorized tortoise handler and only when necessary. New latex gloves will be used when handling each desert tortoise to avoid the transfer of infectious diseases between animals. Desert tortoises will be moved the minimum distance possible within appropriate habitat to ensure their safety. In general, desert tortoises will not be moved in excess of 1,000 feet for adults and 300 feet for hatchlings. • Desert tortoises that are found above ground and need to be moved will be placed in the shade of a shrub. All desert tortoises removed from burrows will be placed in an unoccupied burrow of approximately the same size as the one from which it was removed. All excavation of desert tortoise burrows will be done using hand tools, either by, or under the direct supervision of, an authorized tortoise handler. If an existing burrow is unavailable, an authorized tortoise handler will construct or direct the construction of a burrow of similar shape, size, depth, and orientation as the original burrow. Desert tortoises moved during inactive periods will be monitored for at least two days after placement in the new burrows to ensure their safety. An authorized tortoise handler will be allowed some judgment and discretion to ensure that survival of the desert tortoise is likely. • If desert tortoises need to be moved at a time of the day when ambient temperatures could harm them (less than 40 degrees F or greater than 90 degrees F), they will be held overnight in a clean cardboard box. These desert tortoises shall be kept in the care of an authorized tortoise handler under appropriate controlled temperatures and released the following day when temperatures are favorable. All cardboard boxes will be appropriately discarded after one use. • All desert tortoises moved will be marked for future identification. An identification number using the acrylic paint/epoxy covering technique should be placed on the fourth costal scute. No notching would be authorized.
Location	All locations along the Project that support desert tortoise.
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Effectiveness Criteria	Successful avoidance of tortoise impacts.
Responsible Agency	BLM, CPUC, USFWS, and CDFG.
Timing	Prior to and during construction, as appropriate.
MITIGATION MEASURE	B-7c: Purchase mitigation lands for impacts to tortoise habitat. Following construction, SCE shall acquire lands to compensate for the loss of tortoise habitat within the Category II and III management areas in California. The amount of land to be acquired will depend on the acreage of disturbance within these management areas. Acquired lands will be in a nearby area of good tortoise density and within tortoise habitat. BLM and SCE shall conduct a field inspection of the disturbed areas after completion of construction of the transmission line to determine the exact acreage required for compensation. The lands purchased will be transferred to the United States and be administered by the BLM. Land may be transferred to the BLM and/or incorporated into an existing management area.
Location	All locations along the Project.
Monitoring / Reporting Action	BLM and SCE will assess amount of land to be acquired based on acreage of disturbance.
Effectiveness Criteria	Purchased land successfully transferred to BLM or an existing management plan.
Responsible Agency	BLM and CPUC.
Timing	After construction.

MITIGATION MEASURE	B-7d: Purchase mitigation lands for impacts to fringe-toed lizard habitat. SCE shall purchase or enhance lands for all permanent loss of habitat that are within the Coachella Valley fringe-toed lizard Critical Habitat unless otherwise directed by the USFWS Biological Opinion for the Proposed Project. Mitigation Lands shall be determined in consultation with the USFWS, CDFG, and CPUC. Clearing work areas of CVFTL in the Coachella Valley Preserve. A temporary fence or other effective barrier that does not allow lizards to enter the work areas shall be constructed around the perimeter of each of the work areas in the refuge. Any lizards found within the barrier shall be relocated outside of the work areas. Duration of Surveys for fringe-toed lizard and flat-tailed horned lizard. Surveys for CVFTL and FTHL shall be conducted during the appropriate seasons (May 1 through the end of summer) and conditions for species identification. The duration of the surveys shall coincide with the duration of construction activities in potential habitat for these species (particularly on the Coachella Valley Preserve) that occurs during the summer season. For any areas of suitable habitat, this measure shall apply. Construction shall not occur on the Preserve or in other potential habitat areas outside of the detection period for FTHL.
Location	All locations of the Project within the Coachella Valley fringe-toed lizard Critical Habitat that experienced permanent loss due to construction activities.
Monitoring / Reporting Action	USGWS, CDFG, and CPUC will determine amount of land to be mitigated.
Effectiveness Criteria	Land successfully purchased or enhanced and transferred to BLM or an existing management plan.
Responsible Agency	BLM, CDFG, USGWS, and CPUC.
Timing	After construction.
MITIGATION MEASURE	B-7e: Conduct focused surveys for California gnatcatchers. SCE shall conduct protocol level surveys for California Gnatcatchers in all areas supporting suitable coastal sage or Riversidean sage scrub habitats that may be affected by the project (San Bernardino to Vista Substation). This will include a minimum 300 foot buffer around construction areas. Presence/absence of this species shall be determined prior to construction activities. If direct impacts to coastal California gnatcatcher-occupied habitat cannot be avoided, then impacts to this species shall be addressed through either the Section 7 or Section 10(a)(1)(B) Process under the Federal Endangered Species Act of 1973, as amended and consistent with the WRCMSHCP. SCE shall complete compliance with the Federal Endangered Species Act prior to Project construction. After definition of suitable habitat, the following requirements apply: • Construction activities shall be restricted within coastal sage scrub habitat during the gnatcatcher breeding season (March 15 July 31); • SCE shall implement the applicable Best Management practices in the WRSMSHCP; • SCE shall restore, create, or enhance on site coastal sage scrub habitat; and/or • SCE shall purchase land or mitigation bank credits at an appropriate ratio to offset impacts to gnatcatchers and their habitat.
Location	All locations of the project area that support suitable coastal sage scrub habitat.
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Effectiveness Criteria	Successful avoidance or mitigation of California gnatcatcher impacts.
Responsible Agency	BLM, CDFG, USFWS, and CPUC.
Timing	Prior to and during construction, as appropriate.
MITIGATION MEASURE	B-7f: Conduct focused surveys for Stephen**s' kangaroo rat and San Bernardino kangaroo rat.** Prior to the implementation of construction in areas that support suitable habitat for Stephens' kangaroo rat and San Bernardino kangaroo rat (Calimesa and San Timoteo Canyon), SCE shall conduct focused surveys to determine if sign (burrows, scat, and etc.) of these species is present in all areas within 100 feet that would be permanently or temporarily affected by construction activities. All surveys shall be conducted by a qualified biologist who holds the appropriate Federal FWS permits to conduct trapping surveys for these species. If sign is found to be present, then SCE shall conduct focused trapping surveys according to accepted protocols to determine presence/absence of these species. If these species are found, then SCE shall implement measure to avoid direct impacts, including the placement of exclusion fencing around work areas where impacts will occur, trapping of animals from inside impact areas, and placement of those animals outside of exclusion fencing until construction is completed. A qualified biological monitor shall be present during construction to ensure that animals are not harmed. Following completion of construction, SCE shall remove all exclusion fencing and recontour the soils to the pre-construction condition.
Location	All locations of the project area that support suitable habitat for Stephan's kangaroo rat and San Bernardino kangaroo rat.

Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Effectiveness Criteria	Successful avoidance of Stephens' kangaroo rat and San Bernardino kangaroo rat impacts.
Responsible Agency	BLM, CDFG, USFWS, and CPUC.
Timing	Prior to and during construction, as appropriate.
IMPACT B-8	Construction activities would result in indirect or direct loss of individuals, or a direct loss of habitat for sensitive plants.
MITIGATION MEASURE	B-8a: Conduct surveys for listed plant species. SCE shall conduct focused surveys for listed and sensitive plants prior to construction. Surveys shall be conducted during the appropriate floristic period necessary for the identification of sensitive plant species in all suitable habitats located within the Project ROW and within 100' of all surface disturbing activities. Populations of sensitive plants shall be flagged and mapped prior to construction. If listed plants are located during the focused surveys, then modification of the placement of towers, access roads, laydown areas, and other ground disturbing activities would be implemented in order to avoid listed plants. If listed plants cannot be avoided, SCE shall be responsible for the translocation of plants and/or collection of seeds from existing populations that would be impacted and the planting/seeding of these plants in adjacent suitable portions of the ROW that would not be affected by Project construction or maintenance activities. Impacts to listed plant species would addressed through the context of a biological opinion.
Location	All areas with the potential to be disturbed by construction activities.
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures. Impacts will be assessed by a biological opinion.
Effectiveness Criteria	Successful avoidance of impacts to all listed plants.
Responsible Agency	BLM, CDFG, USFWS, and CPUC.
Timing	Prior to, during, and after construction, as appropriate.
IMPACT B-9	Construction activities would result in indirect or direct loss of individuals, or a direct loss of habitat for sensitive wildlife
MITIGATION MEASURE	B-9a: Conduct pre-construction surveys. SCE shall conduct pre-construction surveys for sensitive wildlife in any area subject to project disturbance. Surveys shall be conducted during a time of year when these species are known to be active. The location of sensitive species identified during the pre-construction surveys shall be identified on project maps.
Location	All areas with the potential to be disturbed by construction activities.
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring and report findings to BLM and CPUC.
Effectiveness Criteria	Successful identification and avoidance of all sensitive wildlife that may be impacted by construction activities.
Responsible Agency	BLM and CPUC.
Timing	Prior to construction.
MITIGATION MEASURE	B-9b: Conduct biological monitoring. SCE shall conduct biological monitoring of the project area including the laydown, staging, access roads, and any area subject to project disturbance. The biological monitor shall look for sensitive wildlife species (including forest watchlist animals and Forest Service Region 5 sensitive species) that may be located within or immediately adjacent to the construction areas. If sensitive species are found, the biological monitor shall move them out of harm's way (listed species require take authorization) to avoid direct impacts to these species. In the event that the wildlife species may cause harm to the biologist, the biologist shall notify the construction crews and monitor the species until it moves out of harm's way. The results of all monitoring shall be recorded in daily monitoring notes that shall be included as part of the required monitoring reports for the project. The SCE shall notify the CPUC/BLM if any sensitive species are located during construction of the project. The SCE shall notify the Forest Service of all sensitive species found on Forest Service land.
Location	Entire project area.
Monitoring / Reporting Action	Biological monitor shall oversee monitoring activities and report findings to BLM and CPUC and when necessary ensure compliance with mitigation measures. The Forest Service shall be notified of any reported sightings of Region 5 and forest watchlist animals on Forest Service Lands.
Effectiveness Criteria	Successful avoidance of impacts to all sensitive wildlife.

Responsible Agency	BLM and CPUC.
Timing	During construction.
MITIGATION MEASURE	B-9c: Implement a Worker Environmental Awareness Program. A Worker Environmental Awareness Program (WEAP) shall be implemented for construction crews by a qualified biologist(s) provided by SCE and approved by the CPUC/BLM prior to the commencement of construction activities. Training materials and briefings shall include but not be limited to, discussion of the Federal and State Endangered Species Acts, the consequences of noncompliance with these acts, identification and values of sensitive plant and wildlife species and significant natural plant community habitats, fire protection measures, sensitivities of working on forest service lands and identification of Forest Service sensitive species and MIS wildlife species, hazardous substance spill prevention and containment measures, and review of mitigation requirements. Training materials and a course outline shall be provided to the CPUC and BLM for review and approval at least 30 days prior to the start of construction. Training materials and updates of training materials shall also be provided to the Forest Service for review and participation in the WEAP. SCE shall provide to the CPUC and BLM a list of construction personnel who have completed training, and this list shall be updated by SCE as required when new personnel start work. No construction worker may work in the field for more than 5 days without receiving the WEAP.
Location	Entire project area.
Monitoring / Reporting Action	A qualified biologist shall oversee implementation of the WEAP and submit copies of all documentation and training materials.
Effectiveness Criteria	Successful training of all new workers within the first 5 days of work.
Responsible Agency	BLM and CPUC.
Timing	Prior to and during construction.
MITIGATION MEASURE	B-9d: Conduct pre-construction reptile surveys. Prior to construction, SCE shall conduct surveys in areas of suitable habitat for Sonoran desert tortoise, common chuckwalla, and desert rosy boa within 48 hours prior to the start of construction activities. If common chuckwallas, banded Gila monsters and/or desert rosy boas are found on the construction site, they will be relocated to nearby suitable habitat outside the construction area by a qualified biologist. Following the clearance surveys, exclusion fencing will be erected or a biological monitor will be onsite during construction activities. • If potentially suitable burrows or rock piles are found, they will be checked for occupancy. Occupied burrows will be flagged and avoided (employing a 50 foot buffer) during construction. If the burrow cannot be avoided, it will be excavated and the occupant relocated to an unoccupied burrow outside the construction area and of approximately the same size as the one from which it was removed. If an existing burrow is unavailable, the biologist will construct or direct the construction of a burrow of similar shape, size, depth, and orientation as the original. • During construction, if a common chuckwalla, and/or desert rosy boa occur on the project site, construction activities adjacent to the individual's location will be halted and the animal will be allowed to move away from the construction site. If the individual is not moving, a qualified biologist will relocate it to nearby suitable habitat outside the construction area. It shall be placed in the shade of a shrub. The Forest Service will be notified of any sensitive wildlife identified on NFS lands. Also during construction, if a Sonoran desert tortoise occurs on the project site, construction activities adjacent to the individuals location will be halted and the Guidelines for Handling Sonoran Desert Tortoises Encountered During Construction Projects will be followed by qualified personnel.
Location	All project areas that may support sensitive reptiles.
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Effectiveness Criteria	Successful avoidance of impacts to common chuckwallas, Sonoran desert tortoises, and desert rosy boas.
Responsible Agency	BLM and CPUC.
Timing	Prior to and during construction.

MITIGATION MEASURE	B-9e: Conduct pre-construction surveys and owl relocation. Prior to construction, SCE shall conduct pre-construction surveys for the western burrowing owl. Surveys shall be conducted prior to ground disturbance activities in appropriate areas within the potential impact areas of the project to determine the presence of burrowing owls and to ensure clearance of these areas. If active owl burrows are discovered during pre-construction surveys, owls would be evicted from the burrows using either active or passive techniques as recommended by the BLM and Burrowing Owl Consortium. Owl relocation, as well as discouragement of owls from returning to the site, will occur in the following manner: • During the non-breeding season (September 1 through January 31), burrowing owls occupying the Project will be evicted by passive relocation. Passive relocation would include installation of one-way doors on burrow entrances that would let owls out of the burrow but would not let them back in. • If construction is to occur during the breeding season (February 1 through August 31) and prior to the relocation of the owls, 75 meter (246 foot) protective buffers would be maintained around burrows occupied by owls until a BLM approved biologist approves other action. Other actions could include passive relocation if it is determined that owls have not begun laying eggs or postponement of construction in the area until the young are fledged and no longer dependent upon the nest burrow. • Once fledglings are capable of independent survival and adult non-breeding owls have successfully been relocated offsite, potential owl habitat (squirrel burrows) would be collapsed in order to keep the owls from returning. Ground squirrels would be removed from the site by trapping and relocation or by other approved means. Following squirrel removal, existing ground squirrel burrows would be destroyed.
Location	All project areas with suitable burrowing owl habitat.
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Effectiveness Criteria	Successful avoidance of impacts to burrowing owls.
Responsible Agency	BLM and CPUC.
Timing	Prior to and during construction.
MITIGATION MEASURE	B-9f: Perform construction outside of breeding and lambing period. Construction activities shall not occur during the period of the year when bighorn sheep are lambing (from January 1 to April 30). A pre-construction survey for bighorn sheep shall be conducted on Forest Service lands prior to construction and maintenance of the transmission lines. If bighorn sheep are found, then SCE shall consult with the Forest Service, USFWS, and Bighorn Institute to identify appropriate avoidance measures.
Location	All locations on BLM land and Forest Service lands where bighorn sheep breeding or lambing may occur.
Monitoring / Reporting Action	Biological monitor shall oversee monitoring, and if necessary, ensure compliance with mitigation measure. Biological Monitor shall notify BLM, CPUC, and Forest Service of the findings of the pre-construction surveys.
Effectiveness Criteria	Successful avoidance of impacts to bighorn sheep.
Responsible Agency	BLM, USFWS, and CPUC.
Timing	Prior to and during construction.
MITIGATION MEASURE	B-9g: Conduct pre-construction surveys and relocation for American badger. Prior to construction, SCE shall conduct pre-construction surveys for American Badger. Surveys will be conducted prior to ground disturbance activities in areas that contain habitat for this species. Badger dens located outside the project area shall be flagged for avoidance. Unoccupied dens located in the right of way shall be covered to prevent the animal from re-occupying the den prior to construction. If occupied dens are identified in the area of the ROW that must be disturbed, the CDFG/BLM/Forest Service shall be consulted regarding options for action. Hand-excavation is an option if occupied dens cannot be avoided, but alternatives shall be considered due to potential danger to biologists. Dens shall only be hand–excavated before or after the breeding season (February 1–May 30). Any relocation of badgers shall take place after consultation with the BLM, Forest Service, and CDFG.
Location	All locations where construction activities would occur near or on suitable habitat for the American badger.
Monitoring / Reporting Action	BLM and CPUC to verify documentation of survey and avoidance or excavation documentation.
Effectiveness Criteria	Identification and avoidance of American badger dens.
Responsible Agency	CPUC and BLM.
Timing	Prior to construction.

MITIGATION MEASURE	B-9h: Conduct pre-construction surveys for roosting bats. SCE shall conduct surveys for suitable roosting habitat or nursery sites for sensitive bats at the tower location, access/spur roads, and laydown/staging areas that occur in rocky areas or in areas where caves or old mines are present. If suitable roosting/nursery sites are found, then focused surveys shall be conducted to determine if the sites support sensitive bat species. If sensitive bat species occur at these sensitive roosting/nursery sites, then tower-specific adjustments and adjustments of the locations of access/spur roads and laydown/staging areas shall be made to avoid these sites. If towers, access/spur roads, and/or laydown/staging areas cannot avoid these sites, then construction of the towers, roads, and establishment of laydown/staging areas shall be delayed until the breeding cycles for the sensitive bats are completed. SCE shall consult with a bat specialist in order to determine when the breeding cycle for the sensitive bats are completed. SCE shall document the results of the surveys and any avoidance of roosting/nursery sites for sensitive bats.
Location	All locations where construction activities would occur near rocky areas, caves or old mines.
Monitoring / Reporting Action	BLM and CPUC to review survey and avoidance documentation.
Effectiveness Criteria	Identification and avoidance of suitable roosting habitat or nursery sites for sensitive bats.
Responsible Agency	CPUC and BLM.
Timing	Prior to construction.
MITIGATION MEASURE	B-9i: Schedule construction when the Coachella Valley round-tailed squirrel is dormant. SCE shall conduct pre-construction surveys for Coachella Round Tailed Squirrels prior to construction to identify locations of nesting colonies. Placement of footings, roads, and laydown areas shall avoid nesting colonies of this species. If this species is identified within the ROW, construction activities shall be scheduled only during periods when this species is dormant (between August 1 and February 28).
Location	All locations where construction activities would occur.
Monitoring / Reporting Action	BLM and CPUC to verify that construction activities are not scheduled between March 1 and July 31 in areas where Coachella Valley round-tailed squirrel nesting colonies have been identified.
Effectiveness Criteria	Identification and avoidance of Coachella Valley round-tailed squirrel nesting colonies.
Responsible Agency	CPUC and BLM.
Timing	Prior to construction.
IMPACT B-11	Construction activities would result in adverse effects to the movement of fish, wildlife movement corridors, or native wildlife nursery sites.
MITIGATION MEASURE	B-9f: Perform construction outside of breeding and lambing period (See above).
Location	See above.
Monitoring / Reporting Action	See above.
Effectiveness Criteria	See above.
Responsible Agency	See above.
Timing	See above.
MITIGATION MEASURE	B-9h: Conduct pre-construction surveys for roosting bats (See above).
Location	See above.
Monitoring / Reporting Action	See above.
Effectiveness Criteria	See above.
Responsible Agency	See above.
Timing	See above.
IMPACT B-13	Construction activities may conflict with local policies or ordinances protecting biological resources.
MITIGATION MEASURE	B-13a: Demonstrate compliance with the Western Riverside County MSHCP. SCE shall provide documentation that it has complied with the provisions of the MSHCP.
Location	All locations of the Project within the Western Riverside MSHCP boundaries.
Monitoring / Reporting Action	BLM and CPUC to review submitted compliance documentation.
Effectiveness Criteria	Confirmation of compliance with Western Riverside MSHCP provisions.
Responsible Agency	CPUC.

Timing	During construction.
MITIGATION MEASURE	B-13b: Implement the Best Management Practices required by the Western Riverside County MSHCP. SCE shall provide documentation that it has implemented the Best Management Practices set forth in Appendix C of the Western Riverside MSCHP.
Location	All locations within the Western Riverside MSHCP boundaries where construction activities would occur.
Monitoring / Reporting Action	BLM and CPUC to review submitted documentation.
Effectiveness Criteria	Confirmation of implementation of Best Management Practices in the Western Riverside MSHCP.
Responsible Agency	CPUC.
Timing	During construction.
IMPACT B-15	Operation of the transmission line may result in collisions by listed bird species.
MITIGATION MEASURE	B-15a: Utilize collision-reducing techniques in installation of transmission lines. SCE shall install the transmission line utilizing APLIC standards for collision-reducing techniques as outlined in "Mitigating Bird Collisions with Power Lines: The State of the Art in 1994 (APLIC, 1996)." • Placement of towers and lines will not be located significantly above existing transmission line towers and lines, topographic features, or tree lines to the maximum extent practicable. • Overhead lines that occur significantly above the above-mentioned features and that are located in highly utilized avian flight paths will be marked utilizing aerial marker spheres, swinging plates, spiral vibration dampers, bird flight diverters, avifauna spirals, or other diversion device as to be visible to birds and reduce avian collisions with lines.
Location	All locations along the ROW where potential avian collisions could occur.
Monitoring / Reporting Action	BLM and CPUC to verify the placement of towers and lines, and the existence of collision-reducing devices on towers and lines located above existing structures/features.
Effectiveness Criteria	SCE has located towers and level with or below existing structures/features, or has installed collision-reducing devices on tower and lines.
Responsible Agency	CPUC and BLM.
Timing	During construction.
IMPACT B-16	Operation of the transmission line may result in increased predation of listed and sensitive wildlife species by ravens that nest on transmission towers.
MITIGATION MEASURE	B-16a: Prepare and implement a raven control plan. SCE shall prepare a common raven control plan that identifies the purpose of conducting raven control, provides training in how to identify raven nests and how to determine whether a nest belongs to a raven or a different raptor species, describes the seasonal limitations on disturbing nesting raptors species (excluding ravens), describes the procedure for obtaining a permit from the USFWS's Division of Migratory Birds, and describes procedures for documenting the activities on an annual basis. SCE shall gain approval of the plan from the USFWS's Division of Migratory Birds. SCE shall provide this raven control plan to all transmission line companies that conduct operations within the ROW.
Location	All locations along ROW that support desert tortoise.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE submitted raven control plan and all SCE and other transmission line companies operating in ROW receive proper training.
Effectiveness Criteria	USFWS approves raven control plan. SCE and other transmission line companies operating in the ROW are informed of the purposes of raven control, and receive training on the procedures of raven identification, permitting, and documentation.
Responsible Agency	CPUC, BLM,USFWS Division of Migratory Birds.
Timing	Prior to the completion of construction for preparation and approval of the raven control plan and training of SCE and other companies employees; and ongoing, as needed, throughout operation for training of new employees.

Table 1 Mitigation Monitoring Program **– Biological Resources**

IMPACT B-18	The Project would result in disturbance to Management Indicator Species.
MITIGATION MEASURE	B-5a: Conduct pre-construction surveys and monitoring for breeding birds.
Location	See above.
Monitoring / Reporting Action	See above.
Effectiveness Criteria	See above.
Responsible Agency	See above and San Bernardino National Forest.
Timing	See above.
MITIGATION MEASURE	B-18a: No Activities in Riparian Conservation Areas. The final project design will include protective measures that prohibit construction activities on NFS lands in Riparian Conservation Areas in compliance with the Forest Plan. Examples of activities that will NOT be allowed include ground disturbance, adding potable water to these areas while implementing erosion control measures, and removing water from the waterways.
Location	All locations of the Project within the San Bernardino National Forest.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that construction does not occur in Riparian Conservation Areas.
Effectiveness Criteria	SBNF approves construction plan. SCE and construction contractors have no construction activities in Riparian Conservation Areas.
Responsible Agency	San Bernardino National Forest.
Timing	Prior to the start of construction.
MITIGATION MEASURE	B-18b: Bald and/or golden eagles may now or hereafter be found to utilize the project area. The BLM will not issue a notice to proceed for any project that is likely to result in take of bald and/or golden eagles until the applicant completes its obligation under applicable requirements of the Bald and Golden Eagle Protection Act (Eagle Act), including completion of any required procedure for coordination with the FWS or any required permit. The BLM hereby notifies the applicant that compliance with the Eagle Act is a dynamic and adaptable process which may require the applicant to conduct further analysis and mitigation following assessment of operational impacts. Any additional analysis or mitigation required to comply with the Eagle Act will be developed with the FWS and coordinated with the BLM.
Location	All locations of the Project within the San Bernardino National Forest.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that construction does not occur in Riparian Conservation Areas.
Effectiveness Criteria	SBNF approves construction plan. SCE and construction contractors have no construction activities in Riparian Conservation Areas.
Responsible Agency	San Bernardino National Forest.
Timing	Prior to the start of construction.

Mitigation Monitoring, Compliance, and Reporting Table

Table 2 presents the mitigation monitoring table for Visual Resources.

Table 2 Mitigation Monitoring Program **– Visual Resources**

IMPACT V-1	Short-term visibility of construction activities, equipment, and night lighting. (Class III)
MITIGATION MEASURE	V-1a: Reduce visibility of construction activities and equipment. Substation construction sites and all staging and material and equipment storage areas, including storage sites for excavated materials shall be appropriately located away from areas of high public visibility. If visible from nearby roads, residences, public gathering areas, or recreational areas, facilities, or trails, construction sites and staging and storage areas shall be visually screened using temporary screening fencing. Fencing will be of an appropriate design and color for each specific location. Additionally, avoid construction in areas visible from recreation facilities and areas during holidays and periods of heavy recreational use. This measure encompasses BLM permit requirements BLM B-7.1 and B-7.2. SCE shall submit final construction plans demonstrating compliance with this measure to the BLM and CPUC for review and approval at least 60 days prior to the start of construction.
Location	Mitigation Measure V-1a applies to the selected alternative.
Monitoring / Reporting Action	CPUC and BLM to verify in the field during construction and following construction.
Effectiveness Criteria	Project construction sites (static), construction yards, and staging areas will be screened during construction and all construction areas will appear in their original or improved condition following construction.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	Confirm implementation during and following construction.
MITIGATION MEASURE	V-1b: Reduce construction night lighting impacts. SCE shall design and install all lighting at construction and storage yards and staging areas such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project facilities, vicinity, and nighttime sky is minimized. SCE shall submit a Construction Lighting Mitigation Plan to the BLM and CPUC for review and approval at least 90 days prior to the start of construction or the ordering of any exterior lighting fixtures or components, which-ever comes first. SCE shall not order any exterior lighting fixtures or components until the Construction Lighting Mitigation Plan is approved by the BLM and CPUC. The Plan shall include but is not necessarily limited to the following: • Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light source is shielded to prevent light trespass outside the project boundary. • All lighting shall be of minimum necessary brightness consistent with worker safety. • High illumination areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied.
Location	Mitigation Measure V-1b applies to all static sites within the selected alternative.
Monitoring / Reporting Action	CPUC and BLM to review and approve the Construction Lighting Mitigation Plan prior to construction and to monitor implementation in the field during construction.
Effectiveness Criteria	Light bulbs and reflectors at Construction yards and staging areas would not be visible from public viewing areas and night lighting would not cause reflected glare and illumination beyond the construction site and into the nighttime sky.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	Review and approve plan prior to start of construction and confirm implementation of plan during construction.

IMPACT V-2	Long-term visibility of land scars in arid and semi-arid landscapes. (Class II)
MITIGATION MEASURE	V-2a: Reduce in-line views of land scars. Construct access or spur roads at appropriate angles from the originating, primary travel facilities to minimize extended, in-line views of newly graded terrain. Contour grading should be used where possible to better blend graded surfaces with existing terrain. SCE shall submit final construction plans demonstrating compliance with this measure to the BLM and CPUC for review and approval at least 60 days prior to the start of construction.
Location	All grading sites for access roads, spur roads, and ancillary facilities.
Monitoring / Reporting Action	CPUC and BLM to review construction plans prior to start of construction and verify compliance during construction.
Effectiveness Criteria	In-line views of land scars from grading will be minimized.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	CPUC and BLM to review construction plans prior to start of construction and verify compliance during construction.
MITIGATION MEASURE	V-2b: Reduce visual contrast from unnatural vegetation lines. In those areas where views of land scars are unavoidable, the boundaries of disturbed areas should be aggressively re-vegetated to create a less distinct and more natural-appearing line to reduce visual contrast. Furthermore, all graded roads and areas not required for on-going operation, maintenance, or access shall be returned to pre-construction conditions. This measure partially encompasses BLM permit requirement BLM B-7.9. SCE shall submit final construction and restoration plans demonstrating compliance with this measure to the BLM and CPUC for review and approval at least 60 days prior to the start of construction.
Location	All grading sites for access roads, spur roads, and ancillary facilities.
Monitoring / Reporting Action	CPUC and BLM to review construction and restoration plans prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of unnatural vegetation lines will be minimized and the resulting visual contrast will be minimal.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	CPUC and BLM to review construction and restoration plans prior to start of construction and verify implementation following construction.
MITIGATION MEASURE	V-2c: Reduce color contrast of land scars. In those areas where views of land scars from sensitive public viewing locations are unavoidable, disturbed soils shall be treated with Eonite or similar treatments to reduce the visual contrast created by the lighter-colored disturbed soils with the darker vegetated surroundings. SCE will consult with the Authorized Officer on a site-by-site basis for the use of Eonite. This measure partially encompasses BLM permit requirement BLM B-6.4. SCE shall submit final construction and restoration plans demonstrating compliance with this measure to the BLM and CPUC for review and approval at least 60 days prior to the start of construction.
Location	Locations of all land scars that would be visible to the public.
Monitoring / Reporting Action	CPUC and BLM to review construction and restoration plans prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of high-contrast colors from exposed soils will be minimized and the resulting visual contrast will be minimal.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	CPUC and BLM to review construction and restoration plans prior to start of construction and verify implementation following construction.
IMPACT V-3	Increased structure contrast when viewed from Key Viewpoint 1 south of the Big Horn Mountains. (Class III)

MITIGATION MEASURE	V-3a: Reduce visual contrast of towers and conductors. The following design measures are to be applied to all new structures and conductors in order to reduce the degree of visual contrast caused by the new facilities: • all new and replacement structures are to as closely as possible match the design of the existing structures with which they will be seen; • all new and replacement structures are to be paired as closely as possible with the existing structure(s) in the corridor in order to avoid or reduce the number of off-setting (from existing structures) tower placements; • all new and replacement structures are to match the heights of the existing DPV1 structures to the extent possible as dictated by variation in terrain and per CPUC requirements; • all new and re-conductored spans are to match existing conductor spans as closely as possible in order to avoid or reduce the occurrence of unnecessary visual complexity associated with asynchronous conductor spans, particularly at sensitive crossings such as I-10, U.S. 95, Colorado River, SR 78, Dillon Road, SR 62, Whitewater Canyon Road, and San Timoteo Canyon Road; • all new conductors are to be non-specular in design in order to reduce conductor visibility and visual contrast; • no new access roads are to be constructed downhill from existing or proposed towers to reduce the potential for skylining. SCE shall provide to the CPUC and BLM a Project Design Plan demonstrating implementation of this measure at least 90 days prior to the start of construction, and shall not commence construction until the Project Design Plan has been approved CPUC and BLM.
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
MITIGATION MEASURE	V-6c: Reduce night lighting impacts. SCE shall design and install all permanent lighting such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project facilities, vicinity, and nighttime sky is minimized. SCE shall submit a Lighting Mitigation Plan to the BLM and CPUC for review and approval at least 90 days prior to ordering any permanent exterior lighting fixtures or components. SCE shall not order any exterior lighting fixtures or components until the Lighting Mitigation Plan is approved by the BLM and CPUC. The Plan shall include but is not necessarily limited to the following: • lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources is shielded to prevent light trespass outside the project boundary; • all lighting shall be of minimum necessary brightness consistent with worker safety; • high illumination areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied.
Location	Applies to all permanent ancillary facilities including substations, switchyards, series capacitor banks, and optical repeater stations.
Monitoring / Reporting Action	CPUC and BLM to review Lighting Mitigation Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	Light bulbs and reflectors at Construction yards and staging areas would not be visible from public viewing areas and night lighting would not cause reflected glare and illumination beyond the construction site and into the nighttime sky.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	CPUC and BLM to review Lighting Mitigation Plan prior to start of construction and verify implementation following construction.
IMPACT V-12	Introduction of new structure contrast and industrial character when viewing the proposed Blythe Optical Repeater Station from nearby local roads. (Class III)
MITIGATION MEASURE	V-6a through V-6c (see above)
Location	Applies to all permanent ancillary facilities including substations, switchyards, series capacitor banks, and optical repeater stations.

Monitoring / Reporting Action	CPUC and BLM to review Surface Treatment Plan, Screening Plan and Lighting Mitigation Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	For the Surface Treatment Plan, the occurrence of visual contrast from ancillary facilities will be minimized and facilities will blend with the landscape to the extent feasible. For the Screening Plan, visibility of ancillary facilities will be reduced such that unnecessary visual contrast and industrial character will not occur. For the Lighting Mitigation Plan, light bulbs and reflectors at Construction yards and staging areas would not be visible from public viewing areas and night lighting would not cause reflected glare and illumination beyond the construction site and into the nighttime sky.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	CPUC and BLM to review Surface Treatment Plan, Screening Plan and Lighting Mitigation Plan prior to start of construction and verify implementation following construction.
IMPACT V-13	Increased structure contrast, industrial character, view blockage, and skylining when viewing the proposed Midpoint Substation site from the nearby BLM access road. (Class III)
MITIGATION MEASURE	V-6a through V-6c. (see above)
Location	Applies to all permanent ancillary facilities including substations, switchyards, series capacitor banks, and optical repeater stations.
Monitoring / Reporting Action	CPUC and BLM to review Surface Treatment Plan, Screening Plan and Lighting Mitigation Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	For the Surface Treatment Plan, the occurrence of visual contrast from ancillary facilities will be minimized and facilities will blend with the landscape to the extent feasible. For the Screening Plan, visibility of ancillary facilities will be reduced such that unnecessary visual contrast and industrial character will not occur. For the Lighting Mitigation Plan, light bulbs and reflectors at Construction yards and staging areas would not be visible from public viewing areas and night lighting would not cause reflected glare and illumination beyond the construction site and into the nighttime sky.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	CPUC and BLM to review Surface Treatment Plan, Screening Plan and Lighting Mitigation Plan prior to start of construction and verify implementation following construction.
IMPACT V-14	Increased structure contrast, view blockage, and skylining when viewed from Key Viewpoint 9 on Interstate 10 in the eastern Chuckwalla Valley. (Class III)
MITIGATION MEASURE	V-3a (see above)
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-15	Inconsistency with Interim BLM VRM Class II management objective due to increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 10 in the Alligator Rock ACEC. (Class I)
MITIGATION MEASURE	V-3a (see above)
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	BLM.
Timing	BLM to review Project Design Plan prior to start of construction and verify implementation following construction.

IMPACT V-16	Increased structure contrast, view blockage, and skylining when viewing the Orocopia Mountains from Key Viewpoint 11 on Interstate 10. (Class III)
MITIGATION MEASURE	V-3a (see above)
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-17	Increased structure contrast, industrial character, and skylining when viewing the proposed California Series Capacitor Bank from Interstate 10 or Red Cloud Road. (Class III)
MITIGATION MEASURE	V-6a and V-6c (see above)
Location	Applies to all permanent ancillary facilities including substations, switchyards, series capacitor banks, and optical repeater stations.
Monitoring / Reporting Action	CPUC and BLM to review Surface Treatment Plan, Screening Plan and Lighting Mitigation Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	For the Surface Treatment Plan, the occurrence of visual contrast from ancillary facilities will be minimized and facilities will blend with the landscape to the extent feasible. For the Screening Plan, visibility of ancillary facilities will be reduced such that unnecessary visual contrast and industrial character will not occur. For the Lighting Mitigation Plan, light bulbs and reflectors at Construction yards and staging areas would not be visible from public viewing areas and night lighting would not cause reflected glare and illumination beyond the construction site and into the nighttime sky.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	CPUC and BLM to review Surface Treatment Plan, Screening Plan and Lighting Mitigation Plan prior to start of construction and verify implementation following construction.
IMPACT V-18	Increased structure contrast and view blockage when viewing the Orocopia Mountains from Key Viewpoint 12 on Cottonwood Springs Road, when exiting Joshua Tree National Park. (Class III)
MITIGATION MEASURE	V-3a (see above)
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-19	Increased structure contrast, industrial character, and view blockage when viewed from Key Viewpoint 13 in the Terra Lago golf and residential development in Indio. (Class III)
MITIGATION MEASURE	V-3a (see above)
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	CPUC, BLM on BLM-administered lands.

Timing	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-20	Increased structure contrast, industrial character, and view blockage when viewing toward the Santa Rosa Mountains from Key Viewpoint 14 in the Coachella Valley Preserve, just west of Thousand Palms Canyon Road. (Class III)
MITIGATION MEASURE	V-3a (see above)
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-21	Increased structure contrast and skylining when viewing the San Jacinto Mountains from Key Viewpoint 15 on southbound SR 62. (Class III)
MITIGATION MEASURE	V-3a (see above)
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-22	Increased structure contrast and skylining when viewed from Key Viewpoint 16 on Painted Hills Road in the Painted Hills rural residential community. (Class III)
MITIGATION MEASURE	V-3a (see above)
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-23	Increased structure contrast when viewing the east rim of Whitewater Canyon and Mount San Jacinto from Key Viewpoint 17 on southbound Whitewater Canyon Road. (Class III)
MITIGATION MEASURE	V-3a (see above)
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	CPUC, BLM on BLM-administered lands.
IMPACT V-24	Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 18 on Haugen-Lehmann Way in the West Palm Springs Village residential community. (Class III)
MITIGATION MEASURE	V-3a (see above)

Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-25	Increased structure contrast, structure prominence, and skylining when viewed from Key Viewpoint 19 at the Morongo Community Center. (Class III)
MITIGATION MEASURE	V-3a (see above)
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	CPUC, BLM on BLM-administered lands.
Timing	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-26	Increased structure contrast, view blockage, and skylining when viewed from Key Viewpoint 20 on Murray Street in the City of Banning. (Class III)
MITIGATION MEASURE	V-3a (see above)
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	CPUC, BLM on BLM-administered lands
Timing	CPUC and BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-36	Inconsistency with Interim BLM VRM Class II management objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewing Alligator Rock from Key Viewpoint 30 on eastbound Interstate 10. (Class I)
MITIGATION MEASURE	V-3a (see above)
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	BLM.
Timing	BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-37	Inconsistency with Interim BLM VRM Class III management objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewing the Chuckwalla Mountains from Key Viewpoint 31 on southbound Kaiser Road, north of Desert Center. (Class I)
MITIGATION MEASURE	V-3 (see above)
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	BLM to review Project Design Plan prior to start of construction and verify implementation following construction.

Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	BLM.
Timing	BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-38	Inconsistency with Interim BLM VRM Class II management objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewing Alligator Rock from Key Viewpoint 32 on westbound Interstate 10 east of Desert Center. (Class I)
MITIGATION MEASURE	V-3a (see above)
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	BLM.
Timing	BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-39	Inconsistency with Interim BLM VRM Class II management objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewing Alligator Rock from Key Viewpoint 30 on eastbound Interstate 10. (Class I)
MITIGATION MEASURE	V-3a (see above)
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	BLM.
Timing	BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-40	Increased structure contrast and skylining when viewing the San Jacinto Mountains from Key Viewpoint 33 on the Pacific Crest Trail in the vicinity of the Snow Creek Village residential community. (Class I)
MITIGATION MEASURE	V-40a: Reduce visual contrast of towers and conductors. The following design measures are to be applied to all new structures and conductors in order to reduce the degree of visual contrast caused by the new facilities: (a) all new structures are to as closely as possible match the design of the existing structures with which they will be seen; (b) all new structures are to be paired as closely as possible with the existing structure(s) in the corridor in order to avoid or reduce the number of off-setting (from existing structures) tower placements; (c) all new structures are to match the heights of the existing D-V1 structures to the extent possible as dictated by variation in terrain; (d) all new spans are to match existing conductor spans as closely as possible in order to avoid or reduce the occurrence of unnecessary visual complexity associated with asynchronous conductor spans, particularly at sensitive crossings such as SR 62, I-10, SR 111, SR 243, SR 79, Gilman Springs Road, Ramona Expressway, Menifee Road, and SR 74; (e) all new conductors are to be non-specular in design in order to reduce conductor visibility and visual contrast, and (f) no new access roads are to be constructed downhill from existing or proposed towers to reduce the potential for skylining. SCE shall provide to the CPUC, BLM, and Forest Service a Project Design Plan demonstrating implementation of this measure at least 90 days prior to the start of construction, and shall not commence construction until the Project Design Plan has been approved by the CPUC, BLM, and Forest Service.
Location	Applies to all tower locations and route segments within the selected alternative.
Monitoring / Reporting Action	CPUC, BLM, and Forest Service to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.

Responsible Agency	CPUC, BLM on BLM-administered lands, Forest Service on National Forest Lands.
Timing	CPUC, BLM, and Forest Service to review Project Design Plan prior to start of construction and verify implementation following construction.
MITIGATION MEASURE	V-40b: Reduce visual contrast of towers and conductors on San Bernardino National Forest land. The following design measures are to be applied to all new structures and conductors on SBNF land based on SCE's consultation with SBNF staff prior to completion of final design. The details of these measures shall be developed: In all areas: • Transmission lines should have a permanent coloring of dark gray. • All towers not back-dropped on mid-slope should have permanent coloring of cool mid-gray (battleship gray). In mid-slope areas (as defined by SBNF): • All towers and concrete bases on slopes which could serve as backdrops (mid-slope) should be painted olive drab. • Tower pads should be left uneven without leveling. • No construction roads shall be built. • Towers shall be constructed by air support. At ridge crossing and mid-slope (as defined by SBNF): • Towers should be constructed of lower profile to closer "hug" the top of the ridge to avoid tower silhouetting. • Graphic studies from dominant view sites should be used to best place towers where they would be best back-dropped from expected viewing points. • All towers and concrete bases on slopes which could serve as backdrops (mid-slope) should be painted olive drab. • Tower pads should be left uneven without leveling. • No construction roads shall be built. • Towers should be constructed by air support.
Location	All new structures and conductors within the selected alternative on SBNF land.
Monitoring / Reporting Action	CPUC, BLM, and Forest Service to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized in SBNF.
Responsible Agency	CPUC, BLM on BLM-administered lands, Forest Service on National Forest Lands.
Timing	CPUC, BLM, and Forest Service to review Project Design Plan prior to start of construction and verify implementation following construction.
MITIGATION MEASURE	V-40c: Reduce visual contrast of towers and conductors near the Pacific Crest Trail. For towers located south of I-10 and outside of the SBNF, the following provisions apply: • Where towers could be practicably back-dropped, utilize mitigation suggested for mid-slope and Ridge Crossing on SBNF lands (as defined in Mitigation Measure V-40b). • The PCT shall not be crossed with construction roads. • Locate towers so that the PCT is in the middle of the span (if this does not involve placement of extra or taller span towers to accomplish such action).
Location	Towers located south of I-10 and outside of the SBNF.
Monitoring / Reporting Action	CPUC, BLM, and Forest Service to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized near PCT.
Responsible Agency	CPUC, BLM on BLM-administered lands, Forest Service on National Forest Lands.
Timing	CPUC, BLM, and Forest Service to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-41	Inconsistency with BLM VRM Class II management objective due to introduction of structure contrast and industrial character when viewing the San Jacinto Mountains from BLM-managed lands within the Santa Rosa and San Jacinto Mountains National Monument (in the vicinity of KVP 33). (Class I)
MITIGATION MEASURE	V-40a (see above)

Location	Applies to all BLM-administered lands within the National Monument.
Monitoring / Reporting Action	BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	BLM.
Timing	BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-42	Inconsistency with U.S. Forest Service Scenic Integrity Objective (SIO) due to introduction of structure contrast and industrial character. (Class I)
MITIGATION MEASURE	V-40a (see above)
Location	Applies to all Forest Service-administered lands crossed by the selected alternative route.
Monitoring / Reporting Action	Forest Service to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	Forest Service.
Timing	Forest Service to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-43	Increased structure contrast, skylining, and view blockage when viewed from Key Viewpoint 34 in the residential community in Cabazon. (Class I)
MITIGATION MEASURE	V-40a (see above)
Location	Applies to all tower locations along the selected alternative route.
Monitoring / Reporting Action	CPUC to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	CPUC.
Timing	CPUC to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-44	Impact V-44: Increased structure contrast and skylining when viewing the San Jacinto Mountains and San Gorgonio Pass from Key Viewpoint 35 on southbound State Route 243. (Class I)
MITIGATION MEASURE	V-40a (see above)
Location	Applies to all tower locations along the selected alternative route.
Monitoring / Reporting Action	CPUC to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	CPUC.
Timing	CPUC to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-45	Impact V-45: Increased structure contrast, skylining, and view blockage when viewed from residential areas in southern Banning and Beaumont. (Class I)
MITIGATION MEASURE	V-40a (see above)
Location	Applies to all tower locations along the selected alternative route.
Monitoring / Reporting Action	CPUC to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	CPUC.

Timing	CPUC to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-46	Inconsistency with BLM VRM Class II management objective due to introduction of structure contrast and industrial character when viewing from BLM-managed lands within the Potrero ACEC. (Class I)
MITIGATION MEASURE	V-40a (see above)
Location	Applies to all BLM-administered lands within the Potrero ACEC.
Monitoring / Reporting Action	BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	BLM.
Timing	BLM to review Project Design Plan prior to start of construction and verify implementation following construction.
IMPACT V-47	Increased structure contrast, skylining, and view blockage when viewed from Key Viewpoint 36 on Mapes Road. (Class I)
MITIGATION MEASURE	V-40a (see above)
Location	Applies to all tower locations along the selected alternative route.
Monitoring / Reporting Action	CPUC to review Project Design Plan prior to start of construction and verify implementation following construction.
Effectiveness Criteria	The occurrence of visual contrast from towers and conductor spans will be minimized. Asynchronous tower spans will be minimized.
Responsible Agency	CPUC.
Timing	CPUC to review Project Design Plan prior to start of construction and verify implementation following construction.

Mitigation Monitoring, Compliance, and Reporting Table

Table 3 presents the mitigation monitoring table for Land Use.

Table 3 Mitigation Monitoring Program **– Land Use**

IMPACT L-1	Construction would temporarily disturb the land uses it traverses or adjacent land uses. (Class II)

MITIGATION MEASURE	L-1a: Prepare Construction Notification Plan. Forty-five days prior to construction, SCE shall prepare and submit a Construction Notification Plan to the CPUC and the BLM for approval. The Plan shall identify the procedures to ensure that SCE will inform property and business owners of the location and duration of construction, identify approvals that are needed prior to posting or publication of construction notices, and include template copies of public notices and advertisements (i.e., formatted text). To ensure effective notification of construction activities, the plan shall address at a minimum the following components: • **Public notice mailer.** Fifteen days prior to construction, a public notice mailer shall be pre-pared. The notice shall identify construction activities that would restrict, block, or require a detour to access existing residential properties, retail and commercial businesses, wilderness and Recreation facilities, and public facilities (e.g., schools and memorial parks). The notice shall state the type of construction activities that will be conducted, and the location and duration of construction. SCE shall mail the notice to all residents or property owners within 300 feet of the right-of-way and to specific public agencies with facilities that could be impacted by construction. If construction delays of more than seven days occur, an additional notice shall be prepared and distributed. • **Newspaper advertisements.** Fifteen days prior to construction, newspaper advertisements shall be placed in local newspapers and bulletins. The advertisement shall state when and where construction will occur and provide information on the public liaison person and hotline identified below. • **Public venue notices.** Thirty days prior to construction, notice of construction shall be posted at public venues such as trail crossings, rest stops, desert centers, resource management offices (e.g., Bureau of Land Management field offices, San Bernardino National Forest Ranger Station), and other public venues to inform residents and visitors to the purpose and schedule of construction activities. For public trail closures, SCE shall post information on the trail detour at applicable resource management offices and post the notice within two miles north and south of the detour. For Recreation facilities, the notice shall be posted along the access routes to known Recreational destinations that would be restricted, blocked, or detoured and shall provide information on alternative Recreation areas that may be used during the closure of these facilities. • **Public liaison person and toll-free information hotline.** SCE shall identify and provide a public liaison person before and during construction to respond to concerns of neighboring property owners about noise, dust, and other construction disturbance. Procedures for reaching the public liaison officer via telephone or in person shall be included in notices distributed to the public. SCE shall also establish a toll-free telephone number for receiving questions or complaints during construction and shall develop procedures for responding to callers. Procedures for handling and responding to calls shall be addressed in the Construction Notification Plan.
Location	Construction activity in all segments of the selected alternative.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE submits Construction Notification Plan, which identifies complete notification and public inquiry process.
Effectiveness Criteria	Residents and landowners are informed of construction activities; procedures established and documented for taking and responding to construction comments and concerns.
Responsible Agency	CPUC; BLM.
Timing	Forty-five days prior to construction for Construction Notification Plan.
MITIGATION MEASURE	L-1c: Provide proof of resolution of land acquisition issues for crossing of Agua Caliente Band of Cahuilla Indians tribal lands. SCE shall negotiate in good faith to reach a mutually acceptable agreement with the allottee. If an agreement is reached, SCE shall consult and coordinate with the Planning Department of the Agua Caliente to provide the information and/or fees requested by the Planning Department regarding land use matters. If SCE and the allottee reach an agreement then SCE shall notify the Planning Department of the Agua Caliente, and if SCE and the Planning Department agree on the legal requirements, including appropriate waivers, SCE shall notify the BLM and the CPUC of the agreement; however if SCE and the Planning department are unable to reach an agreement, SCE shall notify the CPUC of the inability to reach agreement and the CPUC may hold a hearing within thirty days of notification. SCE reserves the right to institute eminent domain proceedings. SCE believes that a conditional use permit is not required.
Location	Construction activity within the Cactus City Rest Area to Devers segment.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE coordinates with Tribe.
Effectiveness Criteria	SCE submits documentation of its coordination with the Tribe and the resolution of land acquisition issues to CPUC and BLM.
Responsible Agency	CPUC; BLM Palm Springs Offices.

Timing	Thirty days prior to construction.
MITIGATION MEASURE	L-1d: Coordinate with affected business owners. Where private parking lots serving businesses would be blocked or partially blocked during construction, SCE shall either make prior arrangements with the business owner(s) to provide alternative parking within a reasonable walking distance (i.e., no more than 1,000 feet), or shall coordinate with affected business owners to arrange the construction schedule to ensure that the functions of the business(es) are not disrupted. Thirty days prior to construction, SCE shall submit documentation to the CPUC and the BLM that outlines the course of action that was taken to reduce impacts to businesses near construction areas.
Location	Construction activities or material storage near the Cabazon Premium Outlets and Morongo Casino.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that arrangements are made with businesses whose parking lots are blocked or partially blocked during construction, and that documentation is submitted to the CPUC and the BLM.
Effectiveness Criteria	Affected businesses are in agreement with parking alternative.
Responsible Agency	CPUC; BLM Palm Springs Field Office.
Timing	Thirty days prior to construction.
MITIGATION MEASURE	L-1e: Coordinate construction schedule with public and community facilities. SCE shall coordinate with the public and community facilities and services listed below regarding the construction schedule and duration in order to minimize impacts to these land uses. The purpose of this measure is to work with sensitive land uses that would be impacted by construction and to identify construction times/periods that would have the least impact to peak use of these public and community facilities. This coordination could result in limiting or avoiding construction during school sessions, identifying hauling routes that do not conflict with school commute routes, or working with the memorial parks to address funeral procession routes and noise sensitivities. Thirty days prior to construction, SCE shall document its coordination efforts including contact persons, information provided, and comments received, and submit this documentation to the California Public Utilities Commission and the Bureau of Land Management, where applicable. • Schools near the project route: Beaumont Middle School and High School, Calvary Christian School, Chavez Elementary School, Terrace View Elementary School, public elementary school on East Canyon Vista Drive • San Gorgonio Memorial Park • Desert Lawn Memorial Park • Banning Municipal Airport • Grandview Baptist Church
Location	Construction activities West of Devers.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that coordination with the public facilities and services listed in Mitigation Measure L-1e is conducted, and that documentation is submitted to the CPUC and the BLM.
Effectiveness Criteria	Affected facilities and services have provided input on the construction schedule/timing.
Responsible Agency	CPUC; BLM Palm Springs Field Office.
Timing	Thirty days prior to construction.

MITIGATION MEASURE	AG-4a: Locate transmission towers and pulling/splicing stations to avoid agricultural operations. SCE shall site transmission towers and pulling/splicing stations in locations that minimize impacts to active agricultural operations. Specifically, SCE shall comply with the following measures when siting transmission towers and splicing/pulling stations within areas where active cultivated farmland would be removed through the presence of structures: • SCE shall avoid orchards, vineyards, row crops, and furrow-irrigated crops where towers would interfere with irrigation and harvest activities. • SCE shall avoid irrigation canals and ditches. • SCE shall align towers adjacent to field boundaries and parallel to rows (if located in row crops), and shall avoid diagonal orientations and angular alignments within agricultural land. • SCE shall match tower spans with existing DPV1 towers within agricultural land. • SCE shall construct towers with heights and spacing to minimize safety hazards to aerial applicators flying in the Palo Verde Valley (CA); • SCE shall consult with the Palo Verde Irrigation District (PVID) regarding tower placement to minimize disruption to PVID facilities. SCE shall document and provide proof of compliance with the above listed items 90 days prior to the start of Proposed Project construction. This documentation shall be submitted to the CPUC and the BLM for review and approval prior to the start of construction, and reviewed with affected landowners during coordination presented in Mitigation Measure AG 1a (Establish agreement and coordinate construction activities with agricultural landowners).
Location	Locations where 10 acres or more of Farmland is permanently removed.
Monitoring / Reporting Action	CPUC/BLM monitors review submitted compliance documents.
Effectiveness Criteria	SCE has located towers and pulling/splicing stations in areas with least interference to agriculture; landowners have reviewed locations.
Responsible Agency	CPUC, BLM.
Timing	Ninety (90) days prior to the start of project construction.

D.5.11 Mitigation Monitoring, Compliance, and Reporting Table

Table 4 presents the mitigation monitoring table for Wilderness and Recreation.

Table 4 Mitigation Monitoring Program **– Wilderness and Recreation**

IMPACT WR-1	Construction activities would temporarily reduce access and visitation to recreation or wilderness areas. (Class II)
MITIGATION MEASURE	WR-1a: Coordinate construction schedule and activities with the authorized officer for the recreation area. No less than 40 days prior to construction, SCE shall coordinate construction activities and the project construction schedule with the authorized officer of the recreation areas listed below. SCE shall schedule construction activities to avoid heavy recreational use periods, including major holidays, in coordination with, and at the discretion of the authorized officer. SCE shall located construction equipment to avoid temporary preclusion of recreation areas per the recommendations of the authorized officer. SCE shall also prepare a public notice of construction activities consistent with Mitigation Measure L-1a (Prepare Construction Notification Plan). SCE shall document its coordination efforts with the authorized officer, and provide this documentation to the California Public Utilities Commission and the Bureau of Land Management 30 days prior to construction. • Big Horn Mountains Wilderness Area • San Jacinto Wilderness Area • Santa Rosa and San Jacinto Mountains National Monument • San Bernardino National Forest • Pacific Crest National Scenic Trail • Chuckwalla Valley Dune Thicket Area of Critical Environmental Concern • Alligator Rock Area of Critical Environmental Concern • Coachella Valley Preserve and Coachella Valley Fringe-Toed Lizard Area of Critical Environmental Concern • Potrero Area of Critical Environmental Concern • BLM off-highway vehicle trails in Shavers Valley • Indio Hills Palms State Park • Norton Younglove Reserve • Oak Valley Golf Club
Location	At construction sites that occur within and along primary access roads that serve the following recreation areas: Big Horn Mountains Wilderness Area, San Jacinto Wilderness Area, Santa Rosa and San Jacinto Mountains National Monument, San Bernardino National Forest, Pacific Crest National Scenic Trail, Chuckwalla Valley Dune Thicket ACEC, Alligator Rock ACEC, Coachella Valley Preserve and Coachella Valley Fringe-Toed Lizard ACEC, Potrero ACEC, Indio Hills Palms State Park, Norton Younglove Reserve, Oak Valley Golf Club.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE postpones construction activities per the discretion of the authorized officer for the recreation area. Monitor also ensures that SCE posts notices of construction activities and applicable detour routes along primary recreation access points.
Effectiveness Criteria	Visitors are informed of construction activities and alternative access routes, if applicable. Recreational activities are not precluded during holidays and other peak periods.
Responsible Agency	CPUC; BLM.
Timing	Minimum 40 days prior to construction.
MITIGATION MEASURE	WR-1b: Provide a temporary detour for Pacific Crest National Scenic Trail users. No less than 40 days prior to construction, SCE shall coordinate with the authorized officer of the Pacific Crest National Scenic Trail to establish a temporary detour of the trail to avoid hazardous construction areas. SCE shall prepare a public notice of the temporary trail closure and information on the trail detour consistent with Mitigation Measure L-1a (Prepare Construction Notification). SCE shall document its coordination efforts with the authorized officer and submit this documentation to the CPUC/BLM 30 days prior to construction.

Table 4 Mitigation Monitoring Program **– Wilderness and Recreation**

Location	Along the Pacific Crest National Scenic Trail for two miles north and south of proposed Towers 227 to 229 for the Proposed Project, and two miles north and south of MP 7.6 for the Devers-Valley No. 2 Alternative route. Notices shall also be posted in San Bernardino National Forest ranger stations and the Bureau of Land Management Palm Springs Field Office.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE establishes detour route for users of the Pacific Crest National Scenic Trail. Monitor also ensures that SCE posts notices identifying detour route and its location at San Bernardino National Forest ranger stations, and north and south of the construction site along the trail.
Effectiveness Criteria	Users of the Pacific Crest National Scenic Trail are informed of detour route at San Bernardino National Forest ranger stations or by signs posted along trail.
Responsible Agency	CPUC; BLM; Forest Service.
Timing	Minimum 40 days prior to construction.
MITIGATION MEASURE	WR-1c: Coordinate with local agencies to identify alternative recreation areas. SCE shall coordinate with the local parks and recreation departments regarding construction activities at the park and recreation facilities listed below, in order to identify alternative recreation sites that may be used by the public. SCE shall post a public notice at recreation facilities to be closed or limited during construction consistent with Mitigation Measure L 1a (Prepare Construction Notification Plan to ensure effective notification and minimize construction disturbance). SCE shall document its coordination with the parks and recreation departments and shall submit this documentation to the CPUC/BLM 30 days prior to initiating project construction. • Oak Valley Golf Club
Location	At construction sites that occur within the following recreation areas: Oak Valley Golf Club.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE communicates with city officials to identify alternative recreation areas for city residents during project construction. Monitor also ensures that SCE provides notice at affected recreation areas, which inform the public of upcoming closure periods and alternate recreation areas.
Effectiveness Criteria	City of Beaumont identifies alternate recreation areas. Public is aware of closure periods and alternate recreation sites.
Responsible Agency	CPUC; BLM, Palm Springs Office; City of Beaumont.
Timing	Minimum 30 days prior to construction.

MITIGATION MEASURE	L-1a: Prepare Construction Notification Plan. Forty-five (45) days prior to construction, SCE shall prepare and submit a Construction Notification Plan to the CPUC and BLM for approval. The Plan shall identify the procedures SCE will use to inform property and business owners of the location and duration of construction, identify approvals that are needed prior to posting or publication of construction notices, and include template copies of public notices and advertisements (i.e., formatted text). To ensure effective notification of construction activities, the plan shall address at a minimum the following components: • **Public notice mailer.** Fifteen (15) days prior to construction, a public notice mailer shall be prepared. The notice shall identify construction activities that would restrict, block, or require a detour to access existing residential properties, retail and commercial businesses, wilderness and recreation facilities, and public facilities (e.g., schools and memorial parks). The notice shall state the type of construction activities that will be conducted, and the location and duration of construction. SCE shall mail the notice to all residents or property owners within 300 feet of the right-of-way and to specific public agencies with facilities that would be impacted by construction. If construction delays of more than seven days occur, an additional notice shall be prepared and distributed. • **Newspaper advertisements.** Fifteen (15) days prior to construction, newspaper advertisements shall be placed in local newspapers and bulletins. The advertisement shall state when and where construction will occur and provide information on the public liaison person and hotline identified below. • **Public venue notices.** Thirty (30) days prior to construction, notice of construction shall be posted at public venues such as trail crossings, rest stops, desert centers, resource management offices (e.g., Bureau of Land Management field offices, San Bernardino National Forest Ranger Station), and other public venues to inform residents and visitors to the purpose and schedule of construction activities. For public trail closures, SCE shall post information on the trail detour at applicable resource management offices and post the notice within two miles north and south of the detour. For recreation facilities, the notice shall be posted along the access routes to known recreational destinations that would be restricted, blocked, or detoured and shall provide information on alternative recreation areas that may be used during the closure of these facilities. • **Public liaison person and toll-free information hotline.** SCE shall identify and provide a public liaison person before and during construction to respond to concerns of neighboring property owners about noise, dust, and other construction disturbance. Procedures for reaching the public liaison officer via telephone or in person shall be included in notices distributed to the public. SCE shall also establish a toll-free telephone number for receiving questions or complaints during construction and shall develop procedures for responding to callers. Procedures for handling and responding to calls shall be addressed in the Construction Notification Plan.
Location	Construction activity in all segments of the selected alternative.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE submits Construction Notification Plan, which identifies complete notification and public inquiry process.
Effectiveness Criteria	Residents and landowners are informed of construction activities; procedures established and documented for taking and responding to construction comments and concerns.
Responsible Agency	CPUC; BLM.
Timing	Forty-five (45) days prior to construction for Construction Notification Plan.

IMPACT WR-3	Operation would permanently preclude recreational activities. (Class II)
MITIGATION MEASURE	WR-3a: Coordinate tower and road locations with the authorized officer for the recreation area. Where the selected alternative crosses the recreation areas listed below, SCE shall coordinate with the authorized officer to determine specific tower site and spur road locations in order to minimize impacts to recreational resources. This coordination shall occur no less than 30 days prior to the start of construction. SCE shall document its coordination with the authorized officer and shall submit this documentation to the CPUC and BLM prior to initiating project construction. • Santa Rosa and San Jacinto Mountains National Monument • San Bernardino National Forest • Pacific Crest National Scenic Trail • San Jacinto Wilderness Area • Chuckwalla Valley Dune Thicket ACEC • Alligator Rock ACEC • Coachella Valley Preserve and Coachella Valley Fringe-Toed Lizard ACEC • Potrero ACEC • Norton Younglove Reserve

Location	At construction sites that occur within the following recreation areas: Santa Rosa and San Jacinto Mountains National Monument, San Bernardino National Forest, Pacific Crest National Scenic Trail, Chuckwalla Valley Dune Thicket Area of Critical Environmental Concern, Alligator Rock Area of Critical Environmental Concern, Coachella Valley Preserve and Coachella Valley Fringe-Toed Lizard Area of Critical Environmental Concern, Potrero Area of Critical Environmental Concern, San Jacinto Wilderness Area, Norton Younglove Reserve.
Monitoring / Reporting Action	California Public Utilities Commission/Bureau of Land Management monitor verifies that SCE provides authorized officer for the recreation area with proposed tower locations across the resource. Monitor also ensures that SCE receives approval of tower locations or recommended relocation of tower site from authorized officer, and submits this approval to the CPUC and BLM.
Effectiveness Criteria	Authorized Officer for the recreation area approves proposed tower locations.
Responsible Agency	CPUC; BLM.
Timing	Minimum 30 days prior to construction.

D.6.11 Mitigation Monitoring, Compliance, and Reporting Table

Table 5 presents the mitigation monitoring table for Agriculture.

Table 5 Mitigation Monitoring Program **– Agriculture**

IMPACT AG-1	Construction activities would temporarily convert Farmland to non-agricultural use. (Class II)
MITIGATION MEASURE	AG-1a: Establish agreement and coordinate construction activities with agricultural landowners. Sixty (60) days prior to the start of project construction, Southern California Edison (SCE) shall secure a signed agreement with property owners of Farmland (Prime Farmland, Farmland of Statewide Importance, Unique Farmland) and Williamson Act lands that will be used for construction and operation of the project, access and spur roads, staging areas, and other project-related activities. The purpose of this agreement will be to set forth the use of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Williamson Act lands during construction in order to: (1) schedule proposed construction activities at a location and time when damage to agricultural operations would be minimized, and (2) ensure that any areas damaged or disturbed by construction are restored to a condition mutually agreed upon by the landowner and SCE. SCE shall coordinate with the agricultural landowners in the affected areas where Farmland or Williamson Act land will be temporarily disturbed in order to determine when and where construction should occur in order to minimize damage to agricultural operations. This includes avoiding construction during peak planting, growing, and harvest seasons. If damage or destruction does occur, SCE shall perform restoration activities on the disturbed area in order to return the area to a pre-determined condition or the pre-construction condition, whichever option is agreed upon by the landowner and SCE. This could include activities such as soil preparation, regrading, and reseeding. This measure applies to agricultural landowners with land that is impacted by the Project. SCE shall provide proof of the continued use of Farmland and/or Williamson Act lands through the submittal of a signed agreement between an individual property owner and SCE. The signed agreements shall be submitted to the CPUC and BLM for review and approval prior to the start of construction.
Location	Locations where 10 acres or more of Farmland and/or Williamson Act land are temporarily disturbed.
Monitoring / Reporting Action	CPUC/BLM monitors verify that signed agreements between SCE and affected landowners have been submitted, and ensure that construction schedules occur during time periods agreed upon in the agreement and that agreed upon restoration occurs.
Effectiveness Criteria	Affected landowners are in agreement with construction activities.
Responsible Agency	CPUC, BLM.
Timing	Sixty (60) days prior to the start of project construction.
IMPACT AG-2	Construction activities would interfere with agricultural operations. (Class II)
MITIGATION MEASURE	AG-1a: Establish agreement and coordinate construction activities with agricultural landowners. See above.
Location	See above.
Monitoring / Reporting Action	See above.
Effectiveness Criteria	See above.
Responsible Agency	See above.
Timing	See above.

MITIGATION MEASURE	L-1a: Prepare Construction Notification Plan. Forty-five days prior to construction, SCE shall prepare and submit a Construction Notification Plan to the CPUC and the BLM for approval. The Plan shall identify the procedures to ensure that SCE will inform property and business owners of the location and duration of construction, identify approvals that are needed prior to posting or publication of construction notices, and include template copies of public notices and advertisements (i.e., formatted text). To ensure effective notification of construction activities, the plan shall address at a minimum the following components: • **Public notice mailer.** Fifteen days prior to construction, a public notice mailer shall be pre-pared. The notice shall identify construction activities that would restrict, block, or require a detour to access existing residential properties, retail and commercial businesses, wilderness and Recreation facilities, and public facilities (e.g., schools and memorial parks). The notice shall state the type of construction activities that will be conducted, and the location and duration of construction. SCE shall mail the notice to all residents or property owners within 300 feet of the right-of-way and to specific public agencies with facilities that could be impacted by construction. If construction delays of more than seven days occur, an additional notice shall be prepared and distributed. • **Newspaper advertisements.** Fifteen days prior to construction, newspaper advertisements shall be placed in local newspapers and bulletins. The advertisement shall state when and where construction will occur and provide information on the public liaison person and hotline identified below. • **Public venue notices.** Thirty days prior to construction, notice of construction shall be posted at public venues such as trail crossings, rest stops, desert centers, resource management offices (e.g., BLM field offices, San Bernardino National Forest Ranger Station), and other public venues to inform residents and visitors to the purpose and schedule of construction activities. For public trail closures, SCE shall post information on the trail detour at applicable resource management offices and post the notice within two miles north and south of the detour. For Recreation facilities, the notice shall be posted along the access routes to known Recreational destinations that would be restricted, blocked, or detoured and shall provide information on alternative Recreation areas that may be used during the closure of these facilities. • **Public liaison person and toll-free information hotline.** SCE shall identify and provide a public liaison person before and during construction to respond to concerns of neighboring property owners about noise, dust, and other construction disturbance. Procedures for reaching the public liaison officer via telephone or in person shall be included in notices distributed to the public. SCE shall also establish a toll-free telephone number for receiving questions or complaints during construction and shall develop procedures for responding to callers. Procedures for handling and responding to calls shall be addressed in the Construction Notification Plan.
Location	Construction activity in all segments.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE submits Construction Notification Plan, which identifies complete notification and public inquiry process.
Effectiveness Criteria	Residents and landowners are informed of construction activities; procedures established and documented for taking and responding to construction comments and concerns.
Responsible Agency	CPUC; BLM.
Timing	Forty-five days prior to construction for Construction Notification Plan.
IMPACT AG-4	Operation would interfere with agricultural operations. (Class II)

MITIGATION MEASURE	AG-4a: Locate transmission towers and pulling/splicing stations to avoid agricultural operations. SCE shall site transmission towers and pulling/splicing stations in locations that minimize impacts to active agricultural operations. Specifically, SCE shall comply with the following measures when siting transmission towers and splicing/pulling stations within areas where active cultivated farmland would be removed through the presence of structures: • SCE shall avoid orchards, vineyards, row crops, and furrow-irrigated crops where towers would interfere with irrigation and harvest activities; • SCE shall avoid irrigation canals and ditches; • SCE shall align towers adjacent to field boundaries and parallel to rows (if located in row crops), and shall avoid diagonal orientations and angular alignments within agricultural land; • SCE shall match tower spans with existing DPV1 towers within agricultural land and per CPUC requirements; • SCE shall construct towers with heights and spacing to minimize safety hazards to aerial applicators flying in the Palo Verde Valley (CA) and other agricultural areas; • SCE shall consult with the Palo Verde Irrigation District (PVID) regarding tower placement to minimize disruption to PVID facilities. SCE shall document and provide proof of compliance with the above listed items 90 days prior to the start of Project construction. This documentation shall be submitted to the CPUC and the BLM for review and approval prior to the start of construction, and reviewed with affected landowners during coordination presented in Mitigation Measure AG 1a (Establish agreement and coordinate construction activities with agricultural landowners).
Location	Locations where 10 acres or more of Farmland is permanently removed.
Monitoring / Reporting Action	CPUC/BLM monitors review submitted compliance documents.
Effectiveness Criteria	SCE has located towers and pulling/splicing stations in areas with least interference to agriculture; landowners have reviewed locations.
Responsible Agency	CPUC, BLM.
Timing	Ninety (90) days prior to the start of project construction.

D.7.12 Mitigation Monitoring, Compliance, and Reporting Table

Table 6 presents the mitigation monitoring table for Cultural and Paleontological Resources.

Table 6 Mitigation Monitoring Program **– Cultural and Paleontological Resources**

IMPACT C-1	Construction of the project could cause an adverse change to known historic properties. (Class I, II, or No Impact)
MITIGATION MEASURE	C-1a: Inventory and evaluate cultural resources in Final APE. Prior to construction and all other surface disturbing activities, the Applicant shall have conducted and submitted for approval by the BLM (and the USFS, on San Bernardino National Forest land and the THPO on Agua Caliente land) an inventory of cultural resources within the project's final Area of Potential Effect. The nature and extent of this inventory shall be determined by the BLM in consultation with the appropriate State Historic Preservation Officer (SHPO) and shall be based upon project engineering specifications (BLM B-9.1). Results of this inventory shall also be filed with appropriate State repositories and local governments. As part of the inventory, the Applicant shall conduct field surveys of sufficient nature and extent to identify cultural resources that would be affected by tower pad construction, re-conductoring activities, access road installation, and transmission line construction and operation. At a minimum, field surveys shall be conducted along newly proposed access roads, new construction yards, new tower sites, and any other projected areas of potential ground disturbance outside of the previously surveyed potential impact areas. Site-specific field surveys also shall be undertaken at all projected areas of impact within the previously surveyed corridor that coincide with previously recorded resource locations. The selected right-of-way shall be staked prior to the cultural resource field surveys (based on BLM B-9.2). As part of the inventory report, the Applicant shall evaluate the significance of all affected cultural resources on the basis of surface observations and provide recommendations with regard to their eligibility for the National Register of Historic Places (NRHP) or local registers. Preliminary determinations of NRHP eligibility will be made by the BLM, in consultation with the appropriate local governments, the USFS (on USFS land), and the appropriate SHPO or THPO (based on BLM B-9.3).
Location	All locations within potential ground-disturbing activities.
Monitoring / Reporting Action	BLM, CPUC, and USFS, where applicable, to review inventory findings and eligibility evaluation.
Effectiveness Criteria	Identification and preliminary evaluation of all resources within areas of potential ground disturbance.
Responsible Agency	BLM and CPUC.
Timing	Prior to construction.
MITIGATION MEASURE	C-1b: Avoid and protect potentially significant resources. On the basis of preliminary National Register of Historic Places (NRHP) eligibility assessments (Mitigation Measure C-1b) the BLM may require the relocation of the line, ancillary facilities, or temporary facilities or work areas, if any, where relocation would avoid or reduce damage to cultural resource values (based on BLMB-9.5). Where operationally feasible, potentially NRHP-eligible resources shall be protected from direct project impacts by project redesign. Where the BLM decides that potentially NRHP-eligible cultural resources cannot be protected from direct impacts by project redesign, the Applicant shall undertake additional studies to evaluate the resources' NRHP-eligibility and to recommend further mitigative treatment. The nature and extent of this evaluation shall be determined by the BLM in consultation with the appropriate State Historic Preservation Officer (SHPO) and shall be based upon final project engineering specifications. Evaluations will be based on surface remains, subsurface testing, archival and ethnographic resources, and in the framework of the historic context and important research questions of the project area. Results of those evaluation studies and recommendations for mitigation of project effects shall be incorporated into a Historic Properties Treatment Plan consistent with Mitigation Measure C-1c (Develop and implement Historic Properties Treatment Plan). All potentially NRHP-eligible resources (as determined by the BLM) that will not be affected by direct impacts, but are within 50 feet of direct impact areas will be designated as Environmentally Sensitive Areas (ESAs). Protective fencing, or other markers, at the BLM's discretion, shall be erected and maintained to protect ESAs from inadvertent trespass for the duration of construction in the vicinity. Construction personnel and equipment shall be instructed on how to avoid ESAs. ESAs shall not be identified specifically as cultural resources. A monitoring program shall be developed as part of the Historic Properties Treatment Plan and implemented by the Applicant to ensure the effectiveness of ESAs.

Location	All locations within ground-disturbing activities with potentially NRHP-eligible resources.
Monitoring / Reporting Action	• BLM and CPUC review final construction drawings and rationale for necessity of impacting potentially NRHP-eligible resources. • BLM and CPUC review HRHP-eligibility recommendations. BLM forwards NRHP-eligibility determinations to appropriate SHPO. • BLM and CPUC verify location and protective measures of all ESAs.
Effectiveness Criteria	Known archaeological resources are not adversely affected by construction activity.
Responsible Agency	BLM and CPUC.
Timing	Prior to and during construction.
MITIGATION MEASURE	C-1c: Develop and implement Historic Properties Treatment Plan. Upon approval of the inventory report and the National Register of Historic Places (NRHP)-eligibility evaluations by the BLM, consistent with Mitigation Measures C-1a (Inventory and evaluate cultural resources in Final APE) and C-1b (Avoid and protect potentially significant resources), the Applicant shall prepare and submit for approval a Historic Properties Treatment Plan (HPTP) for NRHP-eligible cultural resources to mitigate or avoid identified impacts. Treatment of cultural resources shall follow the procedures established by the Advisory Council on Historic Preservation for compliance with Section 106 of the National Historic Preservation Act and other appropriate State and local regulations. Avoidance, recordation, and data recovery will be used as mitigation alternatives (BLM B-9.4). The HPTP shall be submitted to the BLM for review and approval. As part of the HPTP, 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-eligible sites that cannot be avoided. Data recovery on most resources would consist of sample excavation and/or surface artifact collection, and site documentation. A possible exception would be a site where burials, cremations, or sacred features are discovered that cannot be avoided. The HPTP shall define and map all known NRHP-eligible properties in or within 50 feet of all project APEs and shall identify the cultural values that contribute to their NRHP-eligibility. A cultural resources protection plan shall be included that details how NRHP-eligible properties will be avoided and protected during construction. Measures shall include, at a minimum, designation and marking of Environmentally Sensitive Areas (ESAs), archaeological monitoring, personnel training, and effectiveness reporting. The plan shall detail: what measures will be used; how, when, and where they will be implemented; and how protective measures and enforcement will be coordinated with construction personnel. The HPTP shall also define any additional areas that are considered to be of high-sensitivity for discovery of buried NRHP-eligible cultural resources, including burials, cremations, or sacred features. The HPTP shall detail provisions for monitoring construction in these high-sensitivity areas. It shall also detail procedures for halting construction, making appropriate notifications to agencies, officials, and Native Americans, and assessing NRHP-eligibility in the event that unknown cultural resources are discovered during construction. For all unanticipated cultural resource discoveries, the HPTP shall detail the methods, the consultation procedures, and the timelines for assessing NRHP-eligibility, formulating a mitigation plan, and implementing treatment. Mitigation and treatment plans for unanticipated discoveries shall be approved by the BLM, appropriate local governments, appropriate Native Americans, and the appropriate State Historic Preservation Officer prior to implementation. The HPTP shall include provisions for analysis of data in a regional context, reporting of results within one year of completion of field studies, curation of artifacts (except from private land) and data (maps, field notes, archival materials, recordings, reports, photographs, and analysts' data) at a facility that is approved by BLM, and dissemination of reports to local and State repositories, libraries, and interested professionals. The BLM will retain ownership of artifacts collected from BLM managed lands. The Applicant shall attempt to gain permission for artifacts from privately held land to be curated with the other project collections. The HPTP shall specify that archaeologists and other discipline specialists conducting the studies meet the Secretary of the Interior's Standards (per 36 CFR 61).
Location	All locations within ground-disturbing activities with potentially NRHP-eligible resources.
Monitoring / Reporting Action	• BLM and CPUC review and approve HPTP. • BLM conduct required Native American consultation. • BLM draft and negotiate appropriate agreement document for appropriate signatures (BLM, SHPOs, Advisory Council on Historic Preservation, Native American Tribes).
Effectiveness Criteria	Known archaeological resources are not adversely affected by construction activity.
Responsible Agency	BLM and CPUC.
Timing	Prior to construction.

MITIGATION MEASURE	C-1d: Conduct data recovery to reduce adverse effects. If National Register of Historic Places (NRHP)-eligible resources, as determined by the BLM, cannot be protected from direct impacts of the Project, data-recovery investigations shall be conducted by the Applicant to reduce adverse effects to the characteristics of each property that contribute to its NRHP-eligibility. For sites eligible under Criterion d, significant data would be recovered through excavation and analysis. For properties eligible under Criteria a, b, or c, data recovery may include historical documentation, photography, collection of oral histories, architectural or engineering documentation, preparation of a scholarly work, or some form of public awareness or interpretation. Data gathered during the evaluation phase studies and the research design element of the Historic Properties Treatment Plan (HPTP) shall guide plans and data thresholds for data recovery; treatment will be based on the resource's research potential beyond that realized during resource recordation and evaluation studies. If data recovery is necessary, sampling for data-recovery excavations will follow standard statistical sampling methods, but sampling will be confined, as much as possible, to the direct impact area. Data-recovery methods, sample sizes, and procedures shall be detailed in the HPTP consistent with Mitigation Measure C-1c (Develop and implement Historic Properties Treatment Plan) and implemented by the Applicant only after approval by the BLM. Following any field investigations required for data recovery, the Applicant shall document the field studies and findings, including an assessment of whether adequate data were recovered to reduce adverse project effects, in a brief field closure report. The field closure report shall be submitted to the BLM for their review and approval, as well as to appropriate State repositories and local governments. Construction work within 100 feet of cultural resources that require data-recovery fieldwork shall not begin until authorized by the BLM.
Location	Within 100 ft of resources identified in HPTP that require data-recovery mitigation.
Monitoring / Reporting Action	• BLM and CPUC review and approve field closure report of data-recovery fieldwork. • BLM and CPUC review and approve final report of data recovery, curation of artifacts and data, and dissemination of final report.
Effectiveness Criteria	Data-recovery investigations, curation, and reporting fulfill all requirements of the agreement document promulgated with the Advisory Council.
Responsible Agency	BLM and CPUC.
Timing	Field closure report prior to construction within 100 ft of affected resource. Final report of data-recovery investigations within one year of completion of fieldwork.
MITIGATION MEASURE	C-1e: Monitor construction. The Applicant shall implement archaeological monitoring by a professional archaeologist during subsurface construction disturbance at all locations identified in the Historic Properties Treatment Plan (HPTP). Full-time monitoring shall occur when ground-disturbing activities take place at all archaeological High-Sensitivity Areas described above and at all cultural resource Environmentally Sensitive Areas (ESAs). These locations and their protection boundaries shall be defined and mapped in the HPTP. Intermittent monitoring may occur in areas of moderate archaeological sensitivity at the discretion of the BLM. 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, and under direct supervision of a principal archaeologist. The qualifications of the principal archaeologist and archaeological monitors shall be approved by the BLM. A Native American monitor may be required at culturally sensitive locations specified by the BLM following government-to-government consultation with Native American tribes. The monitoring plan in the HPTP 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. Compliance with and effectiveness of the cultural resources monitoring plan shall be documented by the Applicant in a monthly report to be submitted to the BLM, and, on San Bernardino National Forest, to the USFS, and on Agua Caliente land, to the THPO, for the duration of project construction. In the event that cultural resources are not properly protected by ESAs, all project work in the immediate vicinity shall be diverted by the archaeological monitor until authorization to resume work has been granted by the BLM. The Applicant shall notify the BLM of any damage to cultural resource ESAs. The Applicant shall consult with the BLM to mitigate damages and to increase effectiveness of ESAs. At the discretion of the BLM, such mitigation may include, but not be limited to modification of protective measures, refinement of monitoring protocols, data-recovery investigations, or payment of compensatory damages in the form of non-destructive cultural resources studies or protection.
Location	All locations identified in the HPTP.
Monitoring / Reporting Action	• BLM and CPUC, as well as USFS and Agua Caliente THPO, as appropriate, review and approve monthly monitoring reports. • BLM and CPUC receive and act on reports of failure of ESAs to protect cultural resources.

Effectiveness Criteria	Known archaeological resources are not adversely affected by construction activities.
Responsible Agency	BLM and CPUC.
Timing	During construction.
MITIGATION MEASURE	C-1f: Train construction personnel. All construction personnel shall be trained regarding the recognition of possible buried cultural remains and protection of all cultural resources, including prehistoric and historic resources during construction, prior to the initiation of construction or ground-disturbing activities. The Applicant shall complete training for all construction personnel. Training shall inform all construction personnel of the procedures to be followed upon the discovery of archaeological materials, including Native American burials. Training shall inform all construction personnel that Environmentally Sensitive Areas (ESAs) must be avoided and that travel and construction activity must be confined to designated roads and areas. All personnel shall be instructed that unauthorized collection or disturbance of artifacts or other cultural materials on or off the right-of-way by the Applicant, his representatives, or employees will not be allowed. Violators will be subject to prosecution under the appropriate State and federal laws and violations will be grounds for removal from the project. Unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop work order (BLM B-9.11). The following issues shall be addressed in training or in preparation for construction: • All construction contracts shall include clauses that require construction personnel to attend training so they are aware of the potential for inadvertently exposing buried archaeological deposits, their responsibility to avoid and protect all cultural resources, and the penalties for collection, vandalism, or inadvertent destruction of cultural resources. • The Applicant shall provide a background briefing for supervisory construction personnel describing the potential for exposing cultural resources, the location of any potential ESA, and procedures and notifications required in the event of discoveries by project personnel or archaeological monitors. Supervisors shall also be briefed on the consequences of intentional or inadvertent damage to cultural resources. Supervisory personnel shall enforce restrictions on collection or disturbance of artifacts or other cultural resources. • Upon discovery of potential buried cultural materials by archaeologists or construction personnel, or damage to an ESA, work in the immediate area of the find shall be diverted and the Applicant's archaeologist notified. Once the find has been inspected and a preliminary assessment made, the Applicant's archaeologist will consult with the BLM to make the necessary plans for evaluation and treatment of the find(s) or mitigation of adverse effects to ESAs.
Location	Entire project.
Monitoring / Reporting Action	• BLM and CPUC review and approve contract specifications. • BLM and CPUC review verification of required training. • BLM and CPUC receive prompt notification of new resource discoveries and violations.
Effectiveness Criteria	• Cultural resources are not adversely affected by construction activities. • All infractions are corrected.
Responsible Agency	BLM and CPUC.
Timing	Prior to and during construction.
IMPACT C-2	Construction of the Proposed Project could cause an adverse change to unknown significant buried prehistoric and historical archaeological sites or buried Native American human remains. (Class I, II, or No Impact)
MITIGATION MEASURE	C-1c: Develop and implement Historic Properties Treatment Plan. (see above)
MITIGATION MEASURE	C-1d: Conduct data recovery to reduce adverse effects. (see above)
MITIGATION MEASURE	C-1e: Monitor construction. (see above)
MITIGATION MEASURE	C-1f: Train construction personnel. (see above)
MITIGATION MEASURE	C-2a: Consult agencies and Native Americans. If human remains are discovered during construction, all work will be diverted from the area of the discovery and the BLM authorized officer will be informed immediately. The Applicant shall follow all State and federal laws, statutes, and regulations that govern the treatment of human remains. The Applicant shall assist and support the BLM in all required government-to-government consultations with Native Americans and appropriate agencies and commissions, as requested by the BLM. The Applicant shall comply with and implement all required actions and studies that result from such consultations, as directed by the BLM.
Location	Entire project.

Monitoring / Reporting Action	• Applicant, monitors, or construction personnel report discoveries to BLM and CPUC immediately. • BLM and CPUC conduct and document consultation with appropriate Native American tribes and agencies. • BLM and CPUC document final disposition or treatment of Native American human remains.
Effectiveness Criteria	Adverse effects to buried archaeological sites are reduced and Native American human remains are avoided or treated in accordance with federal and appropriate State law.
Responsible Agency	BLM and CPUC.
Timing	Prior to or during construction.
IMPACT C-3	Construction of the project could cause an adverse change to Traditional Cultural Properties. (Class II)
MITIGATION MEASURE	C-1b: Avoid and protect potentially significant resources. (see above)
MITIGATION MEASURE	C-1c: Develop and implement Historic Properties Treatment Plan. (see above)
MITIGATION MEASURE	C-1d: Conduct data recovery to reduce adverse effects. (see above)
MITIGATION MEASURE	C-1e: Monitor construction. (see above)
MITIGATION MEASURE	C-1f: Train construction personnel. (see above)
MITIGATION MEASURE	C-2a: Consult agencies and Native Americans. (see above)
MITIGATION MEASURE	C-3a: Complete consultation with Native American and other Traditional Groups. The Applicant shall provide assistance to the BLM, as requested by the BLM, to complete required government-to-government consultation with interested Native American tribes and individuals (Executive Memorandum of April 29, 1994 and Section 106 of the National Historic Preservation Act) and other Traditional Groups to assess the impact of the Project on Traditional Cultural Properties or other resources of Native American concern. As directed by the BLM, the Applicant shall undertake required treatments, studies, or other actions that result from such consultation. Written documentation of the completion of all pre-construction actions shall be submitted by the Applicant and approved by the BLM at least 30 days before commencement of construction activities. Actions that are required during or after construction shall be defined, detailed, and scheduled in the Historic Properties Treatment Plan and implemented by the Applicant, consistent with Mitigation Measure C-1c (Develop and implement Historic Properties Treatment Plan).
Location	Entire project.
Monitoring / Reporting Action	• Signature of agreement documents for treatment of TCPs. • Written documentation and approval by BLM and CPUC of completion of required treatment.
Effectiveness Criteria	TCPs and other resources of Native American concern are treated in accordance with agreements that are made during consultation.
Responsible Agency	BLM and CPUC.
Timing	Prior to construction.
MITIGATION MEASURE	C-5a: Protect and monitor NRHP-eligible properties. (see below)
IMPACT C-4	Construction of the project could destroy or disturb significant paleontological resources. (Class II)
MITIGATION MEASURE	C-4a: Inventory paleontological resources in Final APE. Prior to construction and all other surface-disturbing activities, the Applicant shall have conducted and submitted for approval an inventory of potentially significant paleontological resources, based on field inspection of areas of high or undetermined paleontological sensitivity, that will be affected by the project as determined by the BLM (based on BLM B-10.1). As part of the inventory report, the Applicant shall evaluate and refine the paleontological sensitivity modeling of sediments that will be affected (based on BLM B-10.2).
Location	All locations of high or undetermined paleontological sensitivity within potential ground-disturbing activities.
Monitoring / Reporting Action	BLM and CPUC to review inventory and sensitivity findings.
Effectiveness Criteria	Identification and preliminary evaluation of all resources within potentially ground-disturbing activities.
Responsible Agency	BLM and CPUC.
Timing	Prior to construction.

MITIGATION MEASURE	C-4b: Develop Paleontological Monitoring and Treatment Plan. Based on requirements in the BLM Right-of-Way Grant (1989), the Applicant shall, upon approval of the paleontological inventory report by the BLM, prepare and submit for approval a plan to mitigate identified impacts (BLMB-10.3). The Paleontological Monitoring and Treatment Plan shall identify construction impact areas of high sensitivity for encountering significant resources and the depths at which those resources are likely to be discovered. The Plan shall outline a coordination strategy to ensure that all construction disturbance in high sensitivity sediments will be monitored full-time by qualified professionals. Sediments of undetermined sensitivity will be spot-checked. The Plan shall detail the significance criteria to be used to determine which resources will be avoided or recovered for their data potential. The Plan shall also detail methods of recovery, post-excavation preparation and analysis of specimens, final curation of specimens at a federally recognized, accredited facility, data analysis, and reporting. The Plan shall specify that all paleontological work undertaken by the Applicant on public land shall be carried out by qualified professionals on a currently valid Paleontological Collecting Permit for the appropriate State (BLM B-10.5). Notices to proceed will be issued by the BLM following approval of the Paleontological Monitoring and Treatment Plan (based on BLM B-10.6).
Location	Entire project.
Monitoring / Reporting Action	BLM and CPUC review and approve treatment plan.
Effectiveness Criteria	BLM and CPUC approval of treatment plan.
Responsible Agency	BLM and CPUC.
Timing	Prior to construction.
MITIGATION MEASURE	C-4c: Monitor construction for paleontology. Based on the paleontological sensitivity assessment and Monitoring and Treatment Plan consistent with Mitigation Measure C-4b (Develop Paleontological Monitoring and Treatment Plan), the Applicant shall conduct full-time construction monitoring in areas where and when sediments of high paleontological sensitivity will be disturbed. Construction activities shall be diverted when data recovery of significant fossils is warranted.
Location	Locations identified in paleontological treatment plan.
Monitoring / Reporting Action	Progress reporting to BLM and CPUC as identified in treatment plan.
Effectiveness Criteria	Discovery of significant fossil resources from all localities affected by construction.
Responsible Agency	BLM and CPUC.
Timing	During construction.
MITIGATION MEASURE	C-4d: Conduct paleontological data recovery. If avoidance of significant paleontological resources is not feasible or appropriate, treatment (including recovery, specimen preparation, data analysis, curation, and reporting) shall be carried out by the Applicant, in accordance with the BLM-approved Treatment Plan per Mitigation Measure C-4b (Develop Paleontological Monitoring and Treatment Plan).
Location	Locations identified in paleontological treatment plan.
Monitoring / Reporting Action	BLM and CPUC review and approve treatment plan. BLM and PCUC review and approval of final data-recovery report and disposition of fossils.
Effectiveness Criteria	Recovery of adequate samples of significant fossil resources from all localities affect by construction.
Responsible Agency	BLM and CPUC.
Timing	During construction; report within one year of data-recovery fieldwork.

MITIGATION MEASURE	C-4e: Train construction personnel. All construction personnel shall be trained regarding the recognition of possible buried paleontological resources and protection of all paleontological resources during construction, prior to the initiation of construction or ground-disturbing activities. The Applicant shall complete training for all construction personnel. Training shall inform all construction personnel of the procedures to be followed upon the discovery of paleontological materials. Training shall inform all construction personnel that Environmentally Sensitive Areas (ESAs) must be avoided and that travel and construction activity must be confined to designated roads and areas. All personnel shall be instructed that unauthorized collection or disturbance of federally protected fossils on or off the right-of-way by the Applicant, his representatives, or employees will not be allowed. Violators will be subject to prosecution under the appropriate State and federal laws and will be grounds for removal from the project. Unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop work order (BLM B-9.11). The following issues shall be addressed in training or in preparation for construction: • All construction contracts shall include clauses that require construction personnel to attend training so they are aware of the potential for inadvertently exposing buried paleontological deposits, their responsibility to avoid and protect all such resources, and the penalties for collection, vandalism, or inadvertent destruction of paleontological resources. • The Applicant shall provide a background briefing for supervisory construction personnel describing the potential for exposing paleontological resources, the location of any potential ESA, and procedures and notifications required in the event of discoveries by project personnel or paleontological monitors. Supervisory personnel shall enforce restrictions on collection or disturbance of fossils. • Upon discovery of potential buried paleontological materials by paleontologists or construction personnel, work in the immediate area of the find shall be diverted and the Applicant's paleontologist notified. Once the find has been inspected and a preliminary assessment made, the Applicant's paleontologist will notify the BLM and proceed with data recovery in accordance with the approved Treatment Plan consistent with Mitigation Measure C-5b (Develop Paleontological Monitoring and Treatment Plan).
Location	Entire project.
Monitoring / Reporting Action	BLM and CPUC review and approve contract specifications. BLM and CPUC review verification of required training. BLM and CPUC receive prompt notification of new resource discoveries and violations.
Effectiveness Criteria	Paleontological resources are not adversely affected by construction activity.
Responsible Agency	BLM and CPUC.
Timing	Prior to and during construction.
IMPACT C-5	Operation and long-term presence of the project could cause an adverse change to known historic properties. (Class II)
MITIGATION MEASURE	C-2a: Consult agencies and Native Americans. (see above)
MITIGATION MEASURE	C-3a: Complete consultation with Native American and other Traditional Groups. (see above)

MITIGATION MEASURE	C-5a: Protect and monitor NRHP-eligible properties. Protect and monitor NRHP-eligible properties. The Applicant shall design and implement a long-term plan to protect National Register of Historic Places (NRHP)-eligible sites from direct impacts of project operation and maintenance and from indirect impacts, such as erosion that result from the presence of the project. The plan shall be developed in consultation with the BLM to design measures that will be effective against project maintenance impacts and project-related vehicular impacts. The plan shall also include protective measures for NRHP-eligible properties within the DPV corridor that will experience operational and access impacts as a result of the Project selected alternative. The proposed measures may include restrictive fencing or gates, permanent access road closures, signage, stabilization of erosion, site capping, site patrols, and interpretive/educational programs, or other measures that will be effective for protecting NRHP-eligible properties. The plan shall be property specific and shall include provisions for monitoring and reporting its effectiveness and for addressing inadequacies or failures that result in damage to NRHP-eligible properties. The plan shall be submitted to the BLM and CPUC for review and approval at least 30 days prior to project operation. Monitoring of selected sites shall be conducted annually by a professional archaeologist for a period of five years. Monitoring shall include inspection of all site loci and defined surface features, documented by photographs from fixed photomonitoring stations and written observations. A monitoring report shall be submitted to the BLM and CPUC within one month following the annual resource monitoring. The report shall indicate any properties that have been impacted by erosion or vehicle or maintenance impacts. For properties that have been impacted, the Applicant shall provide recommendations for mitigating impacts and for improving protective measures. After the fifth year of resource monitoring, the BLM or CPUC, as appropriate, will evaluate the effectiveness of the protective measures and the monitoring program. Based on that evaluation, the BLM or CPUC may require that the Applicant revise or refine the protective measures, or alter the monitoring protocol or schedule. If the BLM does not authorize alteration of the monitoring protocol or schedule, those shall remain in effect for the duration of project operation. If the annual monitoring program identifies adverse effects to National Register of Historic Places (NRHP)-eligible properties from operation or long-term presence of the project, or if, at any time, the Applicant, BLM or CPUC become aware of such adverse effects, the Applicant shall notify the BLM and CPUC immediately and implement mitigation for adverse changes, as directed by the BLM and CPUC. At the discretion of the BLM and CPUC, such mitigation may include, but not be limited to modification of protective measures, refinement of monitoring protocols, data-recovery investigations, or payment of compensatory damages in the form of non-destructive cultural resources studies or protection.
Location	All locations identified in long-term protection plan.
Monitoring / Reporting Action	BLM and CPUC review and approval of long-term protection plan; compliance with reporting and monitoring provisions in the approved protection plan. Following construction, annual site monitoring; immediate notification to BLM and CPUC of adverse changes.
Effectiveness Criteria	Known cultural resources are not affected by long-term project operation and adverse changes to NRHP-eligible properties are mitigated.
Responsible Agency	BLM and CPUC.
Timing	30 days prior to and during project operation. During operation, annually for 5 years. Thereafter, on a schedule determined by BLM and CPUC and/or immediately upon discovery of adverse changes to NRHP-eligible property.

Mitigation Monitoring, Compliance, and Reporting Table

Table 7 presents the mitigation monitoring table for Noise.

Table 7 Mitigation Monitoring Program **– Noise**

IMPACT N-1	Construction noise could substantially disturb sensitive receptors or violate local rules, standards, and/or ordinances. (Class II)
MITIGATION MEASURE	N-1a: Implement best management practices for construction noise. SCE shall employ the following noise-suppression techniques to minimize the impact of temporary construction noise and avoid possible violations of local rules, standards, and ordinances: • Construction noise shall be confined to daytime, weekday hours (e.g., 7:00 a.m. to 6:00 p.m.) or an alternative schedule established by the local jurisdiction; • Construction equipment shall use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer; • Construction traffic shall be routed away from residences and schools, where feasible; • Unnecessary construction vehicle use and idling time shall be minimized to the extent feasible. The ability to limit construction vehicle idling time is dependent upon the sequence of construction activities and when and where vehicles are needed or staged. A "common sense" approach to vehicle use shall be applied; if a vehicle is not required for use immediately or continuously for construction activities, its engine should be shut off. (Note: certain equipment, such as large diesel-powered vehicles, require extended idling for warm-up and repetitive construction tasks.)
Location	All project work areas within a wilderness area, recreation area, or wildlife refuge or within one-quarter mile of a noise-sensitive receptor such as a residence, hospital, school, park, wilderness area, or recreation area.
Monitoring / Reporting Action	Review SCE's procedures for implementing best management practices for noise to ensure completeness; ensure implementation during construction.
Effectiveness Criteria	Compliance with local standards and policies results in no violations.
Responsible Agency	CPUC,BLM, local jurisdictions.
Timing	During construction.

Mitigation Monitoring, Compliance, and Reporting Table

Table 8 presents the mitigation monitoring table for Transportation and Traffic.

Table 8 Mitigation Monitoring Program **– Transportation & Traffic**

IMPACT T-7	Construction vehicles and equipment would potentially cause physical damage to roads in the project area. (Class II)
MITIGATION MEASURE	T-7a: Repair roadways damaged by construction activities. If roadways, sidewalks, medians, curbs, shoulders, or other such features are damaged by the project's construction activities, as determined by the CPUC Environmental Monitor or the affected public agency, SCE shall coordinate repairs with the affected public agencies and ensure that any such damage is repaired to the pre-construction condition within 60 days from the end of all construction within each affected county.
Location	All roads used to access the construction sites.
Monitoring / Reporting Action	Verify that each affected roadway has been satisfactorily restored and/or constructed within 30 days of the end of the construction period.
Effectiveness Criteria	Restoration/maintenance or roads to pre-construction conditions as determined by the affected public agency.
Responsible Agency	CPUC, BLM, affected local jurisdictions.
Timing	During and after construction.
IMPACT T-12	Construction would result in the short-term elimination of parking spaces. (Class II)
MITIGATION MEASURE	L-1e: Coordinate with business owners. (See Section D.4)

Mitigation Monitoring, Compliance, and Reporting Table

Table 9 presents a summary of impacts of the Project and the Mitigation Monitoring Program recommended for mitigating public health and safety, including both contamination and electrical field measures.

Table 9 Mitigation Monitoring Program **– Public Health and Safety**	
IMPACT P-1	Soil contamination could result from improper handling and/or storage of hazardous materials during construction activities. (Class II)
MITIGATION MEASURE	P-1a: Develop Hazardous Substance Control and Emergency Response Plan. A Hazardous Substance Control and Emergency Response Plan shall be prepared for the project, and a copy shall be kept on site (or in vehicles) during construction and maintenance of the project. SCE shall document compliance by submitting the plan to the CPUC or BLM or USFWS, as appropriate, for review and approval at least 60 days before the start of construction.
Location	All locations along the proposed and alternative routes.
Monitoring / Reporting Action	Review and approve plan, observe construction activities.
Effectiveness Criteria	Contamination is cleaned up as required.
Responsible Agency	CPUC, BLM, USFWS.
Timing	Prior to construction.
MITIGATION MEASURE	P-1b: Conduct environmental training and monitoring program. An environmental training program shall be established to communicate environmental concerns and appropriate work practices, including spill prevention, emergency response measures, and proper Best Management Practice (BMP) implementation, to all field personnel prior to the start of construction. The training program shall emphasize site-specific physical conditions to improve hazard prevention (e.g., identification of potentially hazardous substances) and shall include a review of all site-specific plans, including but not limited to, the project's Storm Water Pollution Prevention Plan and the Hazardous Substances Control and Emergency Response Plan. SCE shall document compliance by (a) submitting to the CPUC or BLM or USFWS, as appropriate, for review and approval an outline of the proposed Environmental Training and Monitoring Program, and (b) maintaining for monitor review a list of names of all construction personnel who have completed the training program. Best Management Practices, as identified in the project Storm Water Pollution Prevention Plan and the Hazardous Substances Control and Emergency Response Plan, shall be implemented during the construction of the project to minimize the risk of an accidental release and provide the necessary information for emergency response.
Location	All locations along the proposed and alternative routes.
Monitoring / Reporting Action	Review documentation of training.
Effectiveness Criteria	Training and monitoring programs educate project staff and workers regarding all regulatory plan requirements.
Responsible Agency	CPUC, BLM, USFWS.
Timing	Prior to and during construction.
MITIGATION MEASURE	P-1c: Ensure proper disposal of construction waste. All non-hazardous construction and demolition waste, including trash and litter, garbage, and other solid waste shall be disposed of properly. Petroleum products and other potentially hazardous materials shall be removed to a hazardous waste facility permitted or otherwise authorized to treat, store, or dispose of such materials.
Location	All locations along the proposed and alternative routes.
Monitoring / Reporting Action	Observe construction activities for compliance.
Effectiveness Criteria	Construction wastes are disposed of properly.
Responsible Agency	CPUC, BLM
Timing	During construction

MITIGATION MEASURE	P-1d: Maintain emergency spill supplies and equipment. Hazardous material spill kits shall be maintained at all construction sites for small spills. This shall include oil-absorbent material, tarps, and storage drums to be used to contain and control any minor releases. Emergency spill supplies and equipment shall be kept adjacent to all work areas and staging areas, and shall be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials shall be provided in the project's Hazardous Substances Control and Emergency Response Plan.
Location	All locations along the selected alternative route.
Monitoring / Reporting Action	Observe construction sites and activities for compliance.
Effectiveness Criteria	Emergency spill supplies are available at the construction sites.
Responsible Agency	CPUC, BLM.
Timing	During construction.
IMPACT P-2	Residual Pesticides and/or Herbicides could be encountered during grading or excavation in agricultural areas. (Class II)
MITIGATION MEASURE	P-2a: Identify pesticide/herbicide contamination. Soil samples shall be collected in construction areas where the land has historically or is currently being farmed to identify the possibility of and to delineate the extent of pesticide and/or herbicide contamination. Excavated materials containing elevated levels of pesticide or herbicide will require special handling and disposal procedures. Standard dust suppression procedures (as defined in Mitigation Measure AQ-1a shall be used in construction areas to reduce airborne emissions of these contaminants and reduce the risk of exposure to workers and the public. Regulatory agencies for the states of Arizona or California (as appropriate) and the appropriate county shall be contacted to provide oversight regarding the handling, treatment, and/or disposal options.
Location	All selected alternative route segments that are within or immediately adjacent to agricultural uses.
Monitoring / Reporting Action	Observe construction sites and activities for compliance.
Effectiveness Criteria	Excavated soils containing pesticides and herbicides are properly handled and disposed of.
Responsible Agency	CPUC, BLM, appropriate local and State regulatory agencies.
Timing	Prior to construction.
IMPACT P-3	Encountering unknown preexisting contamination during excavation or grading. (Class II)
MITIGATION MEASURE	P-3a: Observe exposed soil for evidence of contamination. During grading or excavation work, the construction contractor shall observe the exposed soil for visual evidence of contamination. If visual contamination indicators are observed during construction, the contractor shall stop work until the material is properly characterized and appropriate measures are taken to protect human health and the environment. The contractor shall comply with all local, State, and federal requirements for sampling and testing, and subsequent removal, transport, and disposal of hazardous materials. Additionally, in the event that evidence of contamination is observed, the contractor shall document the exact location of the contamination and shall immediately notify the CPUC or BLM, describing proposed actions. A weekly report listing encounters with contaminated soils and describing actions taken shall be submitted to the CPUC or BLM.
Location	All selected alternative route segments that are within or immediately adjacent to industrial and/or commercial land use areas.
Monitoring / Reporting Action	Observe construction sites and activities for compliance and review weekly reports.
Effectiveness Criteria	Excavated soils containing industrial contaminants are properly handled and disposed of.
Responsible Agency	CPUC, BLM.
Timing	During construction.
IMPACT P-4	Soil contamination from accidental spill or release of hazardous materials during project operations and maintenance. (Class II)
MITIGATION MEASURE	P-4a: Prepare Spill Prevention, Countermeasure, and Control Plans. To minimize, avoid, and/or clean up unforeseen spill of hazardous materials during operation of the proposed facilities, SCE shall update or prepare, if necessary, the Spill Prevention, Countermeasure, and Control plan for each substation, series capacitors, and the switchyard. SCE shall document compliance by providing a copy of the Spill Prevention, Control, and Countermeasures plans to the CPUC or BLM or USFWS, as appropriate, for review and approval at least 60 days before the start of operation.

Location	All substations, switching stations, and series compositor banks that are part of the selected alternative.
Monitoring / Reporting Action	Review and approve plans and observe construction sites and activities for compliance.
Effectiveness Criteria	Excavated soils containing industrial contaminants are properly handled and disposed of.
Responsible Agency	CPUC, BLM, USFWS.
Timing	During construction.
IMPACT PS-1	Radio and Television Interference. (Class II)
MITIGATION MEASURE	PS-1a: Limit the conductor surface electric gradient. As part of the design and construction process for the selected alternative, the Applicant shall limit the conductor surface electric gradient in accordance with the IEEE Radio Noise Design Guide.
Location	Along the overhead route segment.
Monitoring / Reporting Action	Review construction design plans to ensure consistency with IEEE Radio Noise Design Guide.
Effectiveness Criteria	The potential for magnetic field interference of electronic equipment is reduced.
Responsible Agency	CPUC.
Timing	Prior to construction.
MITIGATION MEASURE	PS-1b: Document and Resolve Electronic Interference Complaints. After energizing the transmission line, SCE shall respond to and document all radio/television/equipment interference complaints received and the responsive action taken. These records shall be made available to the CPUC for review upon request. All unresolved disputes shall be referred by SCE to the CPUC for resolution.
Location	Along the overhead route segment.
Monitoring / Reporting Action	Review documentation provided.
Effectiveness Criteria	All radio/television/equipment interference disputes are resolved.
Responsible Agency	CPUC.
Timing	During the operations of the project.
IMPACT PS-2	Induced Currents and Shock Hazards in Joint Use Corridors. (Class II)
MITIGATION MEASURE	PS-2a: Implement Grounding Measures. As part of the siting and construction process for the selected alternative, SCE shall identify objects (such as fences, metal buildings, and pipelines) within and near the right-of-way that have the potential for induced voltages and shall implement electrical grounding of metallic objects in accordance with SCE's standards. The identification of objects shall document the threshold electric field strength and metallic object size at which grounding becomes necessary.
Location	Along the entire transmission line selected alternative route.
Monitoring / Reporting Action	Review documentation provided; verify that necessary grounding measures are installed.
Effectiveness Criteria	The potential for impacts associated with induced currents and voltages on objects near the energized transmission line are reduced.
Responsible Agency	CPUC.
Timing	Prior to energizing the transmission line.
IMPACT PS-5	Transmission Lines in Agricultural Areas Present a Safety Hazard to Aerial Applicators. (Class III)

MITIGATION MEASURE	L-1a: Prepare Construction Notification Plan. Forty-five days prior to construction, SCE shall prepare and submit a Construction Notification Plan to the CPUC and the BLM for approval. The Plan shall identify the procedures to ensure that SCE will inform property and business owners of the location and duration of construction, identify approvals that are needed prior to posting or publication of construction notices, and include template copies of public notices and advertisements (i.e., formatted text). To ensure effective notification of construction activities, the plan shall address at a minimum the following components: • **Public notice mailer.** Fifteen days prior to construction, a public notice mailer shall be prepared. The notice shall identify construction activities that would restrict, block, or require a detour to access existing residential properties, retail and commercial businesses, wilderness and Recreation facilities, and public facilities (e.g., schools and memorial parks). The notice shall state the type of construction activities that will be conducted, and the location and duration of construction. SCE shall mail the notice to all residents or property owners within 300 feet of the right-of-way and to specific public agencies with facilities that could be impacted by construction. If construction delays of more than seven days occur, an additional notice shall be prepared and distributed. • **Newspaper advertisements.** Fifteen days prior to construction, newspaper advertisements shall be placed in local newspapers and bulletins. The advertisement shall state when and where construction will occur and provide information on the public liaison person and hotline identified below. • **Public venue notices.** Thirty days prior to construction, notice of construction shall be posted at public venues such as trail crossings, rest stops, desert centers, resource management offices (e.g., BLM field offices, San Bernardino National Forest Ranger Station), and other public venues to inform residents and visitors to the purpose and schedule of construction activities. For public trail closures, SCE shall post information on the trail detour at applicable resource management offices and post the notice within two miles north and south of the detour. For Recreation facilities, the notice shall be posted along the access routes to known Recreational destinations that would be restricted, blocked, or detoured and shall provide information on alternative Recreation areas that may be used during the closure of these facilities. • **Public liaison person and toll-free information hotline.** SCE shall identify and provide a public liaison person before and during construction to respond to concerns of neighboring property owners about noise, dust, and other construction disturbance. Procedures for reaching the public liaison officer via telephone or in person shall be included in notices distributed to the public. SCE shall also establish a toll-free telephone number for receiving questions or complaints during construction and shall develop procedures for responding to callers. Procedures for handling and responding to calls shall be addressed in the Construction Notification Plan.
Location	Construction activity in all segments of the selected alternative.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE submits Construction Notification Plan, which identifies complete notification and public inquiry process.
Effectiveness Criteria	Residents and landowners are informed of construction activities; procedures established and documented for taking and responding to construction comments and concerns.
Responsible Agency	CPUC; BLM.
Timing	Forty-five days prior to construction for Construction Notification Plan.

MITIGATION MEASURE	AG-4a: Locate transmission towers and pulling/splicing stations to avoid agricultural operations. SCE shall site transmission towers and pulling/splicing stations in locations that minimize impacts to active agricultural operations. Specifically, SCE shall comply with the following measures when siting transmission towers and splicing/pulling stations within areas where active cultivated farmland would be removed through the presence of structures: • SCE shall avoid orchards, vineyards, row crops, and furrow-irrigated crops where towers would interfere with irrigation and harvest activities; • SCE shall avoid irrigation canals and ditches; • SCE shall align towers adjacent to field boundaries and parallel to rows (if located in row crops), and shall avoid diagonal orientations and angular alignments within agricultural land; • SCE shall match tower spans with existing DPV1 towers within agricultural land and per CPUC requirements; • SCE shall construct towers with heights and spacing to minimize safety hazards to aerial applicators flying in the Palo Verde Valley (CA) and other agricultural areas; • SCE shall consult with the Palo Verde Irrigation District (PVID) regarding tower placement to minimize disruption to PVID facilities. SCE shall document and provide proof of compliance with the above listed items 90 days prior to the start of selected alternative construction. This documentation shall be submitted to the CPUC and the BLM for review and approval prior to the start of construction, and reviewed with affected landowners during coordination presented in Mitigation Measure AG 1a (Establish agreement and coordinate construction activities with agricultural landowners).
Location	Locations where 10 acres or more of Farmland is permanently removed.
Monitoring / Reporting Action	CPUC/BLM monitors review submitted compliance documents.
Effectiveness Criteria	SCE has located towers and pulling/splicing stations in areas with least interference to agriculture; landowners have reviewed locations.
Responsible Agency	CPUC, BLM.
Timing	Ninety (90) days prior to the start of project construction.

Mitigation Monitoring, Compliance, and Reporting Table

Table 10 presents the mitigation monitoring table for Air Quality.

Table 10 Mitigation Monitoring Program **– Air Quality**

IMPACT AQ-1	Construction would generate dust and exhaust emissions. (Class I / II / III)
MITIGATION MEASURE	AQ-1a: Develop and Implement a Fugitive Dust Emission Control Plan. SCE shall develop and implement a Fugitive Dust Emission Control Plan (FDECP) for construction work. Measures to be incorporated into the plan include, but are not limited to the APMs (A-1 and A-5 through A-7) and the following, which also incorporate and revise the requirements of APMs A-2 through A-4 to make them definitive and enforceable: • CARB certified non-toxic soil binders shall be applied to all active unpaved roadways, unpaved staging areas, and unpaved parking area(s) throughout construction (as allowed by responsible agencies such as the BLM or USFWS) in amounts meeting manufacturer's recommendations to meet the CARB certification fugitive dust reduction efficiency of 84 percent. • Water the disturbed areas of the active construction sites, where CARB certified soil binders have not been applied, at least three times per day. • Enclose, cover, water three times daily, or apply non-toxic soil binders according to manufacturer's specifications to exposed piles with a five percent or greater silt content. • Install wheel washers/cleaners or wash the wheels of trucks and other heavy equipment where vehicles exit the site or unpaved access roads and sweep paved streets daily with water sweepers if visible soil materials from the construction sites or unpaved access roads are carried onto adjacent public streets. • Establish a vegetative ground cover or allow natural revegetation to occur on temporarily disturbed areas following the completion of construction (in compliance with biological resources impact mitigation measures), or otherwise create stabilized surfaces on all unpaved areas at each of the construction sites within 21 days after active construction operations have ceased. • Increase the frequency of watering, or implement other additional fugitive dust mitigation measures, to all disturbed fugitive dust emission sources when wind speeds (as instantaneous wind gusts) exceed 25 miles per hour (mph). • Travel route planning will be completed to identify required travel routes to minimize unpaved road travel to each construction site to the extent feasible.
Location	Riverside County (MDAQMD and SCAQMD Jurisdiction).
Monitoring / Reporting Action	Review Fugitive Dust Emission Control Plan. Verify SCAQMD or local jurisdiction (within Coachella Valley) concurrence with the Plan. Inspect activities for dust control.
Effectiveness Criteria	PM10 emissions are reduced. Effectiveness can be monitored by monitoring implementation of the control measures.
Responsible Agency	BLM, USFWS, CPUC, MDAQMD, and SCAQMD. May also involve local city jurisdictions within the Coachella Valley that have received delegation of Rule 403.1 compliance from SCAQMD.
Timing	During construction.
MITIGATION MEASURE	AQ-1b: Use ultra low-sulfur diesel fuel. CARB-certified ultra low-sulfur diesel (ULSD) fuel containing 15 ppm sulfur or less shall be used in all diesel-powered construction equipment.
Location	Riverside County (MDAQMD and SCAQMD Jurisdiction).
Monitoring / Reporting Action	Inspect fuel purchase records.
Effectiveness Criteria	PM10 and PM10 precursor (SOx) emissions are reduced.
Responsible Agency	CPUC.
Timing	During construction.
MITIGATION MEASURE	AQ-1c: Restrict engine idling. Diesel engine idle time shall be restricted to no more than a 10-minute duration.
Location	Riverside County (MDAQMD and SCAQMD Jurisdiction).

Monitoring / Reporting Action	Inspect activities for compliance with idle time restriction.
Effectiveness Criteria	Engine exhaust emissions are reduced. Effectiveness can be monitored by monitoring implementation of the control measure.
Responsible Agency	CPUC.
Timing	During construction.
MITIGATION MEASURE	AQ-1d: Use lower emitting offroad diesel-fueled equipment. All offroad construction diesel engines not registered under CARB's Statewide Portable Equipment Registration Program, which have a rating of 50 hp or more, shall meet, at a minimum, the Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, section 2423(b)(1) unless that such engine is not available for a particular item of equipment. In the event a Tier 2 engine is not available for any offroad engine larger than 100 hp, that engine shall be equipped with a Tier 1 engine. In the event a Tier 1 engine is not available for any offroad engine larger than 100 hp, that engine shall be equipped with a catalyzed diesel particulate filter (soot filter), unless certified by engine manufacturers that the use of such devices is not practical for specific engine types. Equipment properly registered under and in compliance with CARB's Statewide Portable Equipment Registration Program are considered to comply with this mitigation measure.
Location	Riverside County (MDAQMD and SCAQMD Jurisdiction).
Monitoring / Reporting Action	Inspect offroad equipment and offroad equipment records kept for APM-10.
Effectiveness Criteria	Engine exhaust emissions are reduced. Effectiveness can be monitored by monitoring implementation of the control measure.
Responsible Agency	CPUC.
Timing	During construction.
MITIGATION MEASURE	AQ-1e: Use onroad vehicles that meet California onroad standards. All onroad construction vehicles working within California shall meet all applicable California onroad emission standards and shall be licensed in the State of California. This does not apply to construction worker personal vehicles.
Location	Riverside County (MDAQMD and SCAQMD Jurisdiction).
Monitoring / Reporting Action	Inspect onroad equipment.
Effectiveness Criteria	Engine exhaust emissions are reduced. Effectiveness can be monitored by monitoring implementation of the control measure.
Responsible Agency	CPUC.
Timing	During construction.
MITIGATION MEASURE	AQ-1f: Use lower emitting offroad gasoline-fueled equipment. All offroad stationary and portable gasoline powered equipment shall have EPA Phase 1/Phase 2 compliant engines, where the specific engine requirement shall be based on the new engine standard in effect two years prior to the initiating project construction.
Location	Riverside County (MDAQMD and SCAQMD Jurisdiction).
Monitoring / Reporting Action	Inspect offroad equipment.
Effectiveness Criteria	Engine exhaust emissions are reduced. Effectiveness can be monitored by monitoring implementation of the control measure.
Responsible Agency	CPUC.
Timing	During construction.
MITIGATION MEASURE	AQ-1g: Reduce helicopter use during construction. Helicopter use shall be limited to that necessary for conductor installation, using helicopters of the smallest practical size; and helicopters shall not be used for delivering supplies or personnel within federal or State ozone nonattainment areas except as specifically excepted by the CPUC due to limitations in road access and/or to reduce other adverse environmental impacts associated with road construction/travel (such as to biological resources or cultural resources).
Location	Riverside County (MDAQMD and SCAQMD Jurisdiction).
Monitoring / Reporting Action	Visual inspection of material delivery and conductor installation at construction sites.

Effectiveness Criteria	Helicopter emissions, which are much higher than equivalent haul truck emissions for all pollutants except for fugitive dust, are reduced.
Responsible Agency	CPUC.
Timing	During construction.
MITIGATION MEASURE	AQ-1h: Schedule deliveries outside of peak hours. For marshalling and construction yards west of the eastern border of the City of Indio, all material deliveries to the yards and from the yards to the construction sites shall be scheduled to occur outside of peak "rush hour" traffic hours (7:00 to 10:00 a.m. and 4:00 to 7:00 pm) to the extent feasible, and other truck trips during peak traffic hours shall be minimized to the extent feasible.
Location	Riverside County west of the eastern border of the City of Indio (SCAQMD Jurisdiction).
Monitoring / Reporting Action	Inspect marshalling yard activities for delivery incoming and outgoing traffic.
Effectiveness Criteria	Engine exhaust emissions are reduced. Effectiveness can be monitored by monitoring implementation of the control measure.
Responsible Agency	CPUC.
Timing	During construction.
MITIGATION MEASURE	AQ-1i: Obtain NOx emission offsets. SCE shall obtain NOx emission reduction credits or offsets in sufficient quantities to offset construction emissions of NOx that exceed the South Coast Air Basin ozone nonattainment area federal General Conformity Rule applicability threshold as determined in the General Conformity analysis for the project. The emission offset method shall comply with SCAQMD rules and regulations, and offsets shall be obtained by SCE prior to construction.
Location	South Coast Air Basin (SCAQMD Jurisdiction).
Monitoring / Reporting Action	As required in future General Conformity Final Analysis as Approved by BLM.
Effectiveness Criteria	NOx emissions fully offset.
Responsible Agency	BLM.
Timing	Prior to project approval.

Mitigation Monitoring, Compliance, and Reporting Table

Table 11 presents the mitigation monitoring table for Hydrology and Water Resources.

Table 11 Mitigation Monitoring Program **– Hydrology and Water Resources**	
IMPACT H-1	Water quality degradation through soil erosion and sedimentation from construction activity and access roads.
MITIGATION MEASURE	H-1a: Restore disturbed soil with re-vegetation or construction of permanent erosion-control structures. Soil disturbance at towers and access roads shall be the minimum necessary and designed to prevent long-term erosion through revegetation or construction of permanent erosion control structures according to plans to be reviewed and approved by the U.S. Forest Service. Copies of the final approved plans shall be submitted to the CPUC/BLM for their files.
Location	Forest Service land in areas of steep terrain.
Monitoring / Reporting Action	CPUC/BLM to verify implementation.
Effectiveness Criteria	Disturbed soils are re-vegetated or construction of permanent erosion control structures are installed.
Responsible Agency	CPUC, BLM.
Timing	After construction.
IMPACT H-2	Degradation of water quality through spill of potentially harmful materials used in construction. (Class II)
MITIGATION MEASURE	P-1a: Develop Hazardous Substance Control and Emergency Response Plan. A Hazardous Substance Control and Emergency Response Plan shall be prepared for the project, and a copy shall be kept onsite (or in vehicles) during construction and maintenance of the project. SCE shall document compliance by submitting the plan to the CPUC or BLM or USFWS, as appropriate, for review and approval at least 60 days before the start of construction.
Location	All locations along the selected alternative route.
Monitoring / Reporting Action	Review plan, observe construction activities.
Effectiveness Criteria	Contamination is cleaned up as required.
Responsible Agency	CPUC, BLM, USFWS.
Timing	Prior to construction.
MITIGATION MEASURE	P-1b: Conduct environmental training and monitoring program. An environmental training program shall be established to communicate environmental concerns and appropriate work practices, including spill prevention, emergency response measures, and proper Best Management Practice (BMP) implementation, to all field personnel prior to the start of construction. The training program shall emphasize site-specific physical conditions to improve hazard prevention (e.g., identification of potentially hazardous substances) and shall include a review of all site-specific plans, including but not limited to, the project's Storm Water Pollution Prevention Plan and the Hazardous Substances Control and Emergency Response Plan. SCE shall document compliance by (a) submitting to the CPUC or BLM or USFWS, as appropriate, for review and approval an outline of the proposed Environmental Training and Monitoring Program, and (b) maintaining for monitor review a list of names of all construction personnel who have completed the training program. Best Management Practices, as identified in the project Storm Water Pollution Prevention Plan and the Hazardous Substances Control and Emergency Response Plan, shall be implemented during the construction of the project to minimize the risk of an accidental release and provide the necessary information for emergency response.
Location	All locations along the selected alternative route.
Monitoring / Reporting Action	Review documentation of training.
Effectiveness Criteria	Training and monitoring programs educate project staff and workers regarding all regulatory plan requirements.
Responsible Agency	CPUC, BLM, USFWS.
Timing	Prior to and during construction.

MITIGATION MEASURE	P-1c: Ensure proper disposal of construction waste. All construction and demolition waste, including trash and litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials, shall be removed to a hazardous waste facility permitted or otherwise authorized to treat, store, or dispose of such materials.
Location	All locations along the selected alternative route.
Monitoring / Reporting Action	Observe construction activities for compliance.
Effectiveness Criteria	Construction wastes are disposed of properly.
Responsible Agency	CPUC, BLM.
Timing	During construction.
MITIGATION MEASURE	P-1d: Maintain emergency spill supplies and equipment. Hazardous material spill kits shall be maintained at all construction sites for small spills. This shall include oil-absorbent material, tarps, and storage drums to be used to contain and control any minor releases. Emergency spill supplies and equipment shall be kept adjacent to all work areas and staging areas, and shall be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials shall be provided in the project's Hazardous Substances Control and Emergency Response Plan.
Location	All locations along the selected alternative route.
Monitoring / Reporting Action	Observe construction sites and activities for compliance.
Effectiveness Criteria	Emergency spill supplies are available at the construction sites.
Responsible Agency	CPUC, BLM.
Timing	During construction.
IMPACT P-4	Water quality degradation caused by accidental releases of oil from project facilities. (Class II)
MITIGATION MEASURE	P-4a: Prepare Spill Prevention, Countermeasure, and Control Plans. To minimize, avoid, and/or clean up unforeseen spill of hazardous materials during operation of the proposed facilities, SCE shall update or prepare, if necessary, the Spill Prevention, Countermeasure, and Control plan for each substation, series capacitors, and the switchyard. SCE shall document compliance by providing a copy of the Spill Prevention, Control, and Countermeasures plans to the CPUC or BLM or USFWS, as appropriate, for review and approval at least 60 days before the start of operation.
Location	All substations, switching stations, and series compositor banks within the selected alternative.
Monitoring / Reporting Action	Observe construction sites and activities for compliance.
Effectiveness Criteria	Excavated soils containing industrial contaminants are properly handled and disposed of.
Responsible Agency	CPUC, BLM, USFWS.
Timing	During construction.
IMPACT H-6	Encroachment into a floodplain or watercourse by permanent aboveground project features resulting in flooding, flood diversions, or erosion. (Class II)
MITIGATION MEASURE	H-6a: Design diversion dikes or other site remediations to avoid damage to adjacent property. Where diversion dikes are required to protect towers or other project structures from flooding or erosion, these dikes shall be so designed as to avoid increasing the risk of erosion or flooding onto adjacent property where life, existing improvements or land values could be threatened. Diversion dike designs shall be submitted to the CPUC and BLM for review and approval at least 60 days prior to construction.
Location	Any tower in or adjacent to a watercourse and requiring diversion dikes to protect the tower from the watercourse.
Monitoring / Reporting Action	Dike designs shall be submitted to the CPUC/BLM for review and approval. CPUC/BLM to take steps to ensure compliance. Steps may include requesting modifications to the plans, seeking approval from appropriate local, State or federal agencies, or consulting with adjacent landowners.
Effectiveness Criteria	Dike design is approved by CPUC/BLM.
Responsible Agency	CPUC, BLM.
Timing	Plans to be approved prior to tower construction.

Mitigation Monitoring, Compliance, and Reporting Table

Table 12 presents the mitigation monitoring table for Geology, Mineral Resources, and Soils.

Table 12 Mitigation Monitoring Program **– Geology, Mineral Resources, and Soils**

IMPACT G-1	Construction could accelerate erosion (Class II)
MITIGATION MEASURE	G-1a: Protect desert pavement. Grading for new access roads or work areas in areas covered by desert pavement shall be avoided if possible. If avoidance of these areas is not possible, the desert pavement surface shall be protected from damage or disturbance from construction vehicles by use of temporary mats on the surface, or by other suitable means. A plan for identification and avoidance or protection of sensitive desert pavement shall be prepared and submitted to the CPUC, BLM, and USFWS for review and approval at least 60 days prior to start of construction.
Location	All locations where desert pavement may be present, including the following selected alternative segments: Midpoint Sub-station to Cactus City Rest Area; Cactus City Rest Area to Devers Substation; Devers Substation to East Border of Banning; and the following alternative routes: the reroute associated with the Desert Southwest Transmission Project; Devers-Valley No. 2.
Monitoring / Reporting Action	Review plan and ensure that it is implemented in the field.
Effectiveness Criteria	Construction activities do not damage desert pavement.
Responsible Agency	CPUC, BLM, USFWS.
Timing	Prior to and during construction.
IMPACT G-2	Project structures could be damaged by problematic soils. (Class II)
MITIGATION MEASURE	G-2a: Conduct geotechnical studies for soils to assess characteristics and aid in appropriate foundation design. Design-level geotechnical studies shall be performed by the Applicant to identify the presence, if any, of potentially detrimental soil chemicals, such as chlorides and sulfates. Appropriate design measures for protection of reinforcement, concrete, and metal-structural components against corrosion shall be utilized, such as use of corrosion-resistant materials and coatings, increased thickness of project components exposed to potentially corrosive conditions, and use of passive and/or active cathodic protection systems. The geotechnical studies shall also identify areas with potentially expansive or collapsible soils and include appropriate design features, including excavation of potentially expansive or collapsible soils during construction and replacement with engineered backfill, ground-treatment processes, and redirection of surface water and drainage away from expansive foundation soils. Study results and proposed solutions shall be provided to the CPUC and BLM, as appropriate, for review and approval at least 60 days before construction.
Location	All project locations where permanent project structures will be installed.
Monitoring / Reporting Action	Review study results and proposed solutions. Ensure that study recommendations are implemented during construction.
Effectiveness Criteria	Project structures are not damaged by problematic soils.
Responsible Agency	CPUC, BLM.
Timing	Prior to and during construction.
IMPACT G-3	Excavation or grading during construction could cause slope instability. (Class II)

MITIGATION MEASURE	G-3a: Conduct geotechnical surveys for landslides. The Applicant shall perform design-level geotechnical surveys in areas crossing and adjacent to hills and mountains. These surveys will acquire data that will allow identification of specific areas with the potential for unstable slopes, landslides, earth flows, and debris flows along the approved transmission line route and in other areas of ground disturbance, such as grading for access and spur roads. The investigations shall include an evaluation of subsurface conditions, identification of potential landslide hazards, and provide information for development of excavation plans and procedures. Where landslide hazard areas cannot be avoided, appropriate engineering design and construction measures shall be incorporated into the project designs to minimize potential for damage to project facilities. A report documenting these surveys and design measures to protect structures shall be submitted to the CPUC and BLM for review and approval at least 60 days before construction.
Location	Selected alternative route MPs E60-E61, E86-E92, W9-W11, W17-W20.5, W27-W40.1, and W40.1-V3.5 and Devers-Valley Alternative MPs DV7.5–DV12.0, DV16–DV18, DV23–DV30, and DV32.5–DV35.0.
Monitoring / Reporting Action	Review study results. Ensure that study recommendations are implemented during construction.
Effectiveness Criteria	The project does not cause landslides.
Responsible Agency	CPUC, BLM.
Timing	Prior to and during construction.
IMPACT G-4	Project structures could be damaged by landslides, earthflows, and/or debris flows. (Class II)
MITIGATION MEASURE	G-3a: Conduct geotechnical surveys for landslides. (see above)
Location	Selected alternative route MPs E60-E61, E86-E92, W9-W11, W17-W20.5, W27-W40.1, and W40.1-V3.5 and Devers-Valley Alternative MPs DV7.5–DV12.0, DV16–DV18, DV23–DV30, and DV32.5–DV35.0.
Monitoring / Reporting Action	Review study results. Ensure that study recommendations are implemented during construction.
Effectiveness Criteria	Project structures are not damaged by landslides.
Responsible Agency	CPUC, BLM.
Timing	Prior to and during construction.
IMPACT G-5	Project structures could be damaged by seismically included groundshaking and ground failure (Class II)
MITIGATION MEASURE	G-5a: Design project facilities to avoid impact from ground failure. Since seismically induced ground failure has the potential to damage or destroy project components, the Applicant shall complete design-level geotechnical investigations at tower locations in areas with potential liquefaction-related impacts. These studies shall specifically assess the potential for liquefaction and lateral spreading hazards to affect the approved project and all associated facilities. Where these hazards are found to exist, appropriate engineering design and construction measures shall be incorporated into the project designs. A report documenting results of the geotechnical surveys shall be submitted to the CPUC and BLM for review and approval at least 60 days before construction.
Location	Selected alternative route MPs E100-E112 and Devers-Valley Alternative MPs DV13–DV15 and DV30.0–DV32.5.
Monitoring / Reporting Action	Review study results. Ensure that study recommendations are implemented during construction.
Effectiveness Criteria	Project structures are not damaged by liquefaction or lateral spreading.
Responsible Agency	CPUC, BLM.
Timing	Prior to and during construction.
IMPACT G-6	Construction activities would render known mineral resources inaccessible. (Class II)
MITIGATION MEASURE	G-6a: Coordinate with quarry operations. Operations and management personnel for the Indio Pit quarry shall be consulted regarding locations of active mining and for coordination of construction activities in and through those areas. A plan to avoid or minimize interference with mining operations shall be prepared in conjunction with mine/quarry operators prior to construction. SCE shall document compliance with this measure prior to the start of construction by submitting the plan to the CPUC and BLM for review at least 60 prior to the start of construction.
Location	Between selected alternative MPs E205 and E206 and between W16.5 and W17.1.

Monitoring / Reporting Action	Review plan. Ensure that that the plan is implemented during construction.
Effectiveness Criteria	Project does not render known mineral resource inaccessible.
Responsible Agency	CPUC, BLM.
Timing	Prior to and during construction.
IMPACT G-7	Project structures could be damaged by surface fault rupture at crossings of active and potentially active faults. (Class II)
MITIGATION MEASURE	G-7a: Minimize project structures within active fault zones. SCE shall perform a geologic/geotechnical study to confirm the location of mapped traces of active and potentially faults crossed by the project route. For crossings of active faults, the towers shall be placed as far as feasible outside the area of mapped fault traces. Compliance with this measure shall be documented to the CPUC and BLM in a report submitted for review and approval at least 60 days prior to the start of construction.
Location	Between selected alternative MPs E205 and E206 and at MP E224.5, Devers Substation to East Border of Banning Segment, Banning and Beaumont segment at MP W17.2, Loma Linda Fault near the San Bernardino Junction, and the San Jacinto Fault at MP V1.9. Also, at the Dillon Road Substation site associated with the DSW Alternative and the Banning, Garnet Hill, San Jacinto, and Casa Loma Fault crossings that would be associated with the DV Alternative.
Monitoring / Reporting Action	Review report. Ensure that that the recommendations of the report are implemented during construction.
Effectiveness Criteria	Project structures are not damaged by surface fault rupture.
Responsible Agency	CPUC, BLM.
Timing	Prior to and during construction.

Mitigation Monitoring, Compliance, and Reporting Table

Table 13 presents the mitigation monitoring table for Socioeconomics.

Table 13. Mitigation Monitoring Program **– Socioeconomics**

IMPACT S-2	Project construction would place demands on local water or solid waste utilities. (Class II)
MITIGATION MEASURE	S-2a: Recycle construction waste. To comply with the Integrated Waste Management Act of 1989, during project construction SCE and/or its construction contractor shall recycle a minimum of 50 percent of the waste generated during construction activities. Before the start of construction, SCE shall provide the CPUC/BLM with a letter explaining how it will comply with this requirement.
Location	West of Devers Proposed Project Segments.
Monitoring / Reporting Action	CPUC/BLM shall monitor to verify that SCE provides the CPUC with documentation from the recycling and landfill facilities.
Effectiveness Criteria	Recycle a minimum of 50 percent of the waste generated during construction activities.
Responsible Agency	CPUC; BLM.
Timing	Project Construction.

Table Ap. 1-2. Alternatives Fully Analyzed in EIR/EIS

Alternative	Project Objectives, Purpose and Need	Feasible	Avoid/Reduce Environmental Effects
~~SCE Harquahala-West Alternative~~	~~Meets all project objectives.~~	~~Meets legal, regulatory, and technical feasibility criteria. Located in designated BLM Utility Corridor. Approval of TS-5 would not affect this route.~~	~~Meets environmental criteria. 14 miles shorter than the proposed route, eliminates 2 crossings of I-10, and reduces visual, biological, and recreation impacts in the areas of Big Horn Mountains Wilderness Area and Burnt Mountain.~~
~~SCE Palo Verde Alternative~~	~~Meets all project objectives.~~	~~Meets legal, regulatory, and technical feasibility criteria. Would serve as a back-up if SCE's con-tract to use Harquahala Generating Station as the termination point and acquire the Harquahala-Hassayampa 500 kV line falls through.~~	~~Meets environmental criteria. Similar environmental impacts to the Proposed Project and would reduce impacts to agricultural resources and biological impacts to the burrowing owl.~~
~~Harquahala Junction Switchyard Alternative~~	~~SCE would need to enter into an agreement with Harquahala Generating Company and Arizona Public Service (APS) in order to ac-quire the portion of the existing Harquahala- Hassayampa transmission line between the proposed Harquahala Junction Switchyard and Hassayampa Switchyard in order to complete DPV2. If a successful agreement can be established, this alternative would meet all objectives.~~	~~Meets legal, regulatory, and technical feasibility criteria. Arizona Corporation Commission's (ACC) approval of TS-5 Project, including an option to build the Harquahala Junction Switch-yard indicates that if APS chooses not to build the switching station, that this alternative would be regulatorily feasible. If it is not built by APS then SCE could pursue construction of the switchyard by seeking a similar ACC approval.~~	~~Meets environmental criteria. Eliminates or defers the need for ~18 total miles of new 500 kV transmission line and would lessen impacts to wildlife and habitat, vegetation, noxious weeds, and agriculture in comparison to the Proposed Project.~~
Alligator Rock–North of Desert Center Alternative	Meets all project objectives.	Meets legal, regulatory, and technical feasibility criteria.	Meets environmental criteria. Eliminates impacts to the highly sensitive biological and cultural area of Alligator Rock ACEC and would be located in a less sensitive area in terms of biological and cultural resources.
Alligator Rock–Blythe Energy Transmission Line Route Alternative	Meets all project objectives.	Meets legal, regulatory, and technical feasibility criteria.	Meets environmental criteria. Reduces biological and cultural impacts in the Alligator Rock ACEC in comparison to the proposed route.
Alligator Rock–South of I-10 Frontage Alternative	Meets all project objectives.	Meets legal, regulatory, and technical feasibility criteria. If DSWTP were built prior to DPV2, then there could be space constraints.	Meets environmental criteria. Reduces biological and cultural impacts in the Alligator Rock ACEC and avoids steeper rocky terrain farther south at the base of the mountains in comparison to the proposed route.
Devers-Valley No. 2 Alternative	Meets all project objectives.	Meets legal, regulatory, and technical feasibility criteria.	Meets environmental criteria. Eliminates the need for the WOD upgrades and avoids impacts associated with traversing high-density residential areas and tribal lands.
Desert Southwest Transmission Line Project Alternatives	Meets all project objectives.	Meets legal, regulatory, and technical feasibility criteria.	Meets environmental criteria. Similar impacts, but would require construction of 2 additional 25-acre substations and a double-circuit or two parallel 8.8-mile 500 kV lines from Keim to Midpoint Substations. Reduces impacts to biological and cultural resources in the vicinity of Alligator Rock ACEC.

Table Ap. 1-3.	Alternatives Eliminated from EIR/EIS Consideration After Detailed Screening			
Alternative	Project Objectives, Purpose, and Need	Feasible	Avoid/Reduce Environmental Effects	Conclusions
~~SCE North of Kofa NWR – South of I-10 Alternative~~	~~Meets all project objectives.~~	~~Meets legal, regulatory, and technical feasibility criteria. Eliminates policy issues associated with construction of a new line on protected refuge land, but would be outside of an established BLM Utility Corridor, so it would require BLM approval for creation of a new utility corridor. This requirement would not make the alternative infeasible, but adds to its regulatory complexity.~~	~~Avoids impacts to biological and recreational resources within Kofa NWR, but results in similar/greater impacts to these resources outside of Kofa NWR due to more permanent ground disturbance, habitat loss, and the creation of a new corridor. Greater recreational and visual impacts through the La Posa Recreation Areas and along I-10.~~	~~Not analyzed due to greater significant impacts on resources.~~
~~SCE North of Kofa NWR–North of I-10 Alternative~~	~~Meets all project objectives.~~	~~Meets legal and technical feasibility criteria. Eliminates policy issues associated with construction of a new line on protected refuge land, but may not be regulatorily feasible to obtain the required amendment to the Lower Gila South Resource Management Plan (RMP), which currently prohibits overhead transmission lines.~~	~~Avoids impacts to biological and recreational resources within Kofa NWR, but results in similar/greater impacts to these resources outside of Kofa NWR due to more permanent ground disturbance, habitat loss, and the creation of a new corridor. Greater recreational and visual impacts through the La Posa Recreation Areas and along I-10.~~	~~Not analyzed due to greater significant impacts on resources and the challenges in obtaining regulatory approval.~~
~~North of Kofa NWR Alternative~~	~~Meets all project objectives.~~	~~Meets legal, regulatory, and technical feasibility criteria. Eliminates policy inconsistencies associated with construction of a new transmission line on protected refuge land.~~	~~Avoids impacts to resources within Kofa NWR and reduces cultural resources impacts, but creates a new corridor with associated ground disturbance and habitat loss.~~	~~Not analyzed due to substantially greater impacts to bighorn sheep, currently undisturbed biological resources, and to significant visual resources through previously undisturbed land.~~
SCE North of Blythe Alternative	Meets all project objectives.	Meets technical feasibility criteria. Would be legally feasible only if the CRIT agrees to the lines being placed on its land. Regulatory feasibility of the route is questionable, because BLM approval of an RMP amendment would be required.	Eliminates biological, recreation, and visual impacts to Kofa NWR and reduces impacts to agricultural land, but greater impacts to biological resources and substantially greater impacts to visual and cultural resources, especially across the CRIT Reservation.	Not analyzed due to greater significant impacts on resources and potential legal and/or regulatory infeasibility.
SCE South of Blythe Alternative	Meets all project objectives.	Meets legal, regulatory, and technical feasibility criteria.	Reduces impacts to agricultural land, but greater ground disturbance with creation of a new transmission corridor. Greater visual and biological resources impacts by Colorado River and Cibola Wildlife Refuge. Higher cultural sensitivity in the Ripley Intaglio and 2 other major intaglio groups and in the Colorado River terraces, Mule Mountain ACEC, and the Palo Verde Mesa.	Not analyzed due to much greater visual, land use, biological resources, recreation, and cultural resources impacts.

Table Ap. 1-3. Alternatives Eliminated from EIR/EIS Consideration After Detailed Screening

Alternative	Project Objectives, Purpose, and Need	Feasible	Avoid/Reduce Environmental Effects	Conclusions
Paradise Valley Alternative	Meets all project objectives.	Meets technical feasibility criteria. The Paradise Valley Development and the movement of the utility corridor would not be regulatorily feasible if the suggested land exchange is not approved by BLM. Movement of the entire utility corridor (including DPV1) could not legally be pursued under CEQA/ NEPA	If the DPV1 line remains it its current location, the construction of the DPV2 line farther to the south creates greater construction impacts and permanent impacts, such as visual impacts in a new corridor. The Paradise Valley project area is bounded on the south by the Congressionally designated Mecca Hills and Orocopia Mountains Wilderness Areas, and on the north by the Joshua Tree National Park and contains valuable desert tortoise habitat.	Not analyzed due to greater significant impacts on resources and potential legal and/or regulatory infeasibility.
Mesa Verde Substation Alternative	Meets all project objectives.	Meets legal, regulatory, and technical feasibility criteria.	Would require longer access road construction and greater impacts to visual resources, biological resources, and land use.	Not analyzed due to longer access road construction and greater impacts to visual resources, biological resources, and land use with no overall impact reduction.
Wiley Well Substation Alternative	Meets all project objectives.	Meets legal, regulatory, and technical feasibility criteria.	Closer to an existing paved roadway and preferred for cultural resources, but greater visibility, recreational impacts due to its proximity to Chuckwalla Valley Dune Thicket ACEC, and biological impacts to sensitive species, such as Mojave fringed-toed lizard and desert tortoise.	Not analyzed due to greater significant impacts on resources.
North of Existing Morongo Corridor Alternative	Meets all project objectives.	Legal feasibility hinges on approval by the Morongo Tribe of the removal and rebuilding of the lines within the Morongo Indian Reservation. Technical feasibility issues exist with siting the four circuits in or at the base of the San Bernardino Mountains.	Reduces visual resources and land use impacts, but far greater impacts to biological and cultural resources and greater construction time and ground disturbance.	Not analyzed due to feasibility concerns, **the Morongo Tribe's consultation statements during the scoping period, and biological and cultural resources impacts.**
Composite Conductor Alternative	Use of the outmoded existing structures would leave the WOD corridor incapable of meeting the basic project objective of adding 1,200 MW of transmission import capability. Higher costs would make the economic objectives of the Proposed Project less likely to be achieved.	Meets legal, regulatory, and technical feasibility criteria.	The visual benefit of reducing the number of tower lines in the corridor would not be achieved. Structures could require slightly more frequent maintenance than new towers.	Not analyzed due to failure to meet basic project objectives.

Table Ap. 1-3. Alternatives Eliminated from EIR/EIS Consideration After Detailed Screening

Alternative	Project Objectives, Purpose, and Need	Feasible	Avoid/Reduce Environmental Effects	Conclusions
Convert DPV1 from AC to HVDC Trans-mission Line	Would not meet 2 of 4 project objectives. Outage of HVDC line would force SCE to impose SPS or RAS measures, which would conflict with Project Objectives of increased reliability, insurance value against extreme events, and flexibility in operating the grid. There would also be reduced likelihood of achieving the economic objectives.	Meets legal, regulatory, and technical feasibility criteria.	Requires permanent disruption of 20-40 acres and the introduction of a new industrial land use for each converter station, near Devers and the eastern termination point. Less flexibility for interconnections with other existing or proposed AC transmission lines in the CAISO system, which could lead to construction of additional AC facilities parallel to the HVDC line, such as DSWTP and/or BEPTL.	Not analyzed due to failure to meet basic project objectives.
Underground Alternative	Meets all project objectives. If a short segment were considered (e.g., to avoid a specific high impact area), these technologies may not be cost prohibitive to construct.	Meets legal, regulatory, and technical feasibility criteria. Reliability of underground 500 kV technologies has not been fully demonstrated.	Requires a continuous trench creating significant impacts to soils/erosion, cultural resources, biological resources as well as a longer construction time and the need for transition structures. Operational impacts would also be greater associated with maintenance, access to the lines, and longer repair times.	Not analyzed due to significant environmental impacts, the unproven reliability for long-distance underground 500 kV trans-mission lines, the reliability concerns associated with the steep slopes and the active fault crossing, and the high cost of these technologies.
New Conventional Generation	Would not meet the following project objectives of: adding transmission import capability into CA, pro-viding access to low-cost energy, or providing additional transmission infrastructure and improving the reliability and flexibility of the region's transmission system.	Meets legal, regulatory, and technical feasibility criteria.	The long-term operational environmental impacts of power plants (i.e., air emissions, water usage) can be balanced against the impacts of long transmission lines.	Not analyzed due to failure to meet basic project objectives.
Renewable Generation Resources	Would not meet the project objectives of increasing California's transmission import capability from the Southwest and enhance and support the competitive energy market in the Southwest.	Meets legal feasibility criteria. Each would not be able to produce 1,200 MW as is required for the DPV2 Project, but several different technologies could be combined. However, the permitting and construction of the various projects within the project timeline would be unlikely and each of the projects would still require the construction of transmission lines to bring the power into the Los Angeles area.	Avoids the specific impacts associated with the construction and operation of the Proposed Project, but new transmission would still be required from the renewable generation locations, creating impacts similar to those of the Proposed Project, which is proposed to transmit power from an already *existing* generation source.	Not analyzed due to greater significant impacts on resources.

Table Ap. 1-3. Alternatives Eliminated from EIR/EIS Consideration After Detailed Screening

Alternative	Project Objectives, Purpose, and Need	Feasible	Avoid/Reduce Environmental Effects	Conclusions
Conservation and Demand-Side Management	DSM and conservation represent a small fraction of the total capacity requirement needed to meet SCE's import and supply reliability objectives. Would not meet project objectives.	Meets legal, regulatory, and technical feasibility criteria.	Reduces energy consumption, thus would reduce the need for power generation and new transmission lines. Avoids all effects of the Proposed Project.	Not analyzed due to failure to meet basic project objectives.
Distributed Generation	Most DG facilities are very small and it does not appear to be feasible to construct and operate a distributed generation alternative in sufficient quantity to meet projected demand growth that can be served by the large-scale generation in the Palo Verde area. Would not meet project objectives.	Would not be feasible to construct and operate a distributed generation alternative in quantity sufficient to meet projected demand growth that can be served by the large-scale generation in the Palo Verde area and no single entity has proposed implementing a substantial DG program.	Reduces linear construction impacts of transmission lines, because the source of energy generation would be in close proximity to the location of demand. Other environmental effects would depend on the type of generation used.	Not analyzed due to failure to meet basic project objectives.

F. Comparison of Alternatives

F.1 Introduction

This section summarizes and compares the environmental advantages and disadvantages of the Proposed Project and the alternatives evaluated in this Supplemental EIR. This comparison is based on the assessment of environmental impacts of the Proposed Project and each alternative, as identified in Section D. Section C introduces and describes the alternatives considered in this Supplemental EIR; Appendix 1 includes the Alternatives Screening Report, which documents all alternatives considered in the screening process.

Section F.2 describes the California Environmental Quality Act (CEQA) requirements for alternatives and Section F.3 describes the methodology used for comparing alternatives. Section F.4 defines the environmentally superior alternative, based on comparison of each substation alternative with the Proposed Project. Section F.5 presents a comparison of the No Project Alternative with the alternative that is determined in Section F.4 to be environmentally superior.

Conclusion Regarding Environmentally Superior Alternative. In this section, the CPUC has identified the Environmentally Superior Alternative, as required by CEQA Guidelines Section 15126.6(d) and (e)(2). The results of the comparisons of substation alternatives are presented below, with the Environmentally Superior Alternative shown first and the least environmentally preferable alternative shown sixth. The rationale for these conclusions is presented in Section F.4.

1. Avoidance Alternative #1. This alternative is found to have the least environmental impacts. However, if Avoidance Alternative #1 is found to cause significant schedule delays that would affect its ability to meet project objectives, then the decision makers will determine whether it is a feasible alternative (see detailed discussion in Appendix 1, Alternatives Screening Report).
2. Southern Alternative
3. Avoidance Alternative #2
4. Avoidance Alternative #3
5. Partial Avoidance Alternative
6. Proposed CRS
7 No Project Alternative

F.2 CEQA Requirements for Alternatives Comparison

The California Environmental Quality Act (CEQA) requires the following for alternatives analysis and comparison:

> *The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed. Guidelines Section 15126.6(d)*

If the environmentally superior alternative is the No Project Alternative, CEQA requires identification of an environmentally superior alternative among the other alternatives [CEQA Guidelines Section 15126.6(e)(2)].

F.3 Alternatives Comparison Methodology

The following methodology was used to compare alternatives in this EIR/EIS:

- **Step 1: Identification of Alternatives.** A screening process (described in Appendix 1) was used to identify eight site alternatives to the Proposed Project. A No Project Alternative was also identified. No other feasible alternatives meeting most of the project objectives were identified that would lessen or alleviate significant impacts.
- **Step 2: Determination of Environmental Impacts.** The environmental impacts of the proposed and the alternative substation sites were identified in Section D, including the potential impacts of substation construction and operation. The significant and unmitigable (Class I) impacts that would occur with the Proposed Project and alternatives are summarized for each area below.
- **Step 3: Comparison of Proposed Project with Alternatives.** The environmental impacts of the Proposed Project were compared to those of each alternative site to determine the environmentally superior alternative. The environmentally superior alternative was then compared to the No Project Alternative.

Determining an environmentally superior alternative requires balancing many environmental factors. In order to identify the environmentally superior alternative, the most important impacts in each issue area were identified and compared (see the detailed comparison table in Section F.4). If an alternative is not considered environmentally preferred for an issue area and there are no significant unmitigable (Class I) impacts, a ranking has not been established and it is stated that there is no preference for the alternative in terms of that issue area. Although this Supplemental EIR identifies an environmentally superior alternative, it is possible that the ultimate decisionmakers could balance the importance of each impact area differently and reach a different conclusion. The following comparison highlights situations where an alternative would create impacts in one area as an unintended consequence of avoiding impacts to another area.

F.4 Environmentally Superior Alternative

The comparison begins with a summary of the significant impacts that cannot be mitigated (Class I impacts). Highlighting these areas of significant impacts identifies which alternatives would be capable of eliminating significant unavoidable environmental effects of the Proposed Project, and which alternatives would create new significant impacts. This simplifies identification of the environmentally superior alternative while considering all issue areas equally.

The following section also summarizes the advantages and disadvantages of each alternative and presents a determination of whether the Proposed Project or the alternative is considered to be environmentally superior within each resource area. The environmentally preferred alternative is identified for each resource area. An alternative identified as "preferred" in one resource area may still have significant environmental effects, but when compared with the other alternatives, its environmental effects would be reduced.

F.4.1 Substation Site Alternatives

The following section compares five site alternatives with the Proposed Project:

- Partial Avoidance Alternative
- Avoidance Alternative #1

- Avoidance Alternative #2
- Avoidance Alternative #3
- Southern Alternative

The primary impact differences between the proposed CRS site and the alternative sites result from shifting the substation site to minimize impacts to an active sand transport corridor (see discussion in Section C.2). Therefore, for the following disciplines, the impacts of the alternative sites would be similar to those of the CRS expansion, because the peak construction activities would likely be the same and because five site locations are in close geographic proximity. These disciplines are not individually analyzed in this Supplemental EIR for the reasons explained in Section A.2.2, and no environmental preference is identified herein.

- Visual Resources
- Land Use
- Wilderness and Recreation
- Agriculture
- Geology, Mineral Resources and Soils
- Noise
- Transportation and Traffic
- Public Health and Safety
- Air Quality
- Hydrology and Water Resources
- Socioeconomics
- Greenhouse Gas

Mitigation included in the DPV2 Final EIR/EIS (2006) would be implemented at the proposed CRS or any alternative site that is approved.

Summary of Impacts

Construction of the proposed expanded CRS would cause 90 acres of direct disturbance impacts, in addition to direct impacts caused by access roads, telecommunications facilities, well digging and other project components. It would also cause a reduction of sand transported to 1,365 acres downwind (east) of the Proposed Project area. This resultant deflation would ultimately eliminate 1,365 acres of Mojave fringe-toed lizard (MFTL)[1] sand dune habitat that comprises the easternmost extent of the Chuckwalla sand transport corridor. Therefore, the **Proposed Project** would have two significant and unavoidable (Class I) biological resources impacts for the MFTL, three potential significant and unavoidable cultural resources impacts, and one significant and unmitigable impact from cumulative greenhouse gas emissions:

- *Impact B-9:* Construction activities would result in indirect or direct loss of individuals and/or habitat for sensitive wildlife.
- *Impact B-19*: The Proposed Project would contribute to a cumulatively considerable impact to special-status species when combined with impacts from past, present, and reasonably foreseeable future projects.
- *Impact C-1*: Construction of the project could cause an adverse change to known historic properties.
- *Impact C-2*: Construction of the project could cause an adverse change to unknown significant buried prehistoric and historical archaeological sites or buried Native American human remains.
- *Impact C-3*: Construction of the project could cause an adverse change to Traditional Cultural Properties.
- *Impact GHG-1*: Project activities would cause a net increase of greenhouse gas emissions.

All other impacts would be less than significant with implementation of mitigation included in the DPV2 Final EIR/EIS and in Section D of this Supplemental EIR.

[1] MFTL is not a "listed" species, but is a California Department of Fish and Game "species of concern" and a BLM sensitive species.

The **Partial Avoidance Alternative** would reduce both direct and indirect impacts to Mojave fringe-toed lizard sand dune habitat to 90 acres and 855 acres, respectively. However, impacts to MFTL (Impact B-9) would still be significant and unmitigable (Class I). The Partial Avoidance Alternative would also reduce impacts to rare plants and fewer cultural resources would be impacted as well (6 documented resources, 4 of which are unevaluated). Impacts to desert tortoise (10 acres of creosote scrub habitat) would be greater than at the proposed CRS location where the potential for desert tortoise is low. However, impacts to desert tortoise at the Partial Avoidance Alternative site would be less than significant with standard mitigation that was included in the DPV2 Final EIR/EIS (2006).

The **Avoidance Alternative #1** would move the substation outside of the active sand transport corridor, reducing both direct and indirect impacts to Mojave fringe-toed lizard sand dune habitat to less than significant with mitigation. The Avoidance Alternative #1 would also reduce impacts to rare plants. Avoidance Alternative #1 substation footprint itself would impact fewer cultural resources (3 unevaluated resources); however, 3 additional resources would be impacted within the study area buffer for gen-tie/transmission interconnections and the access road (6 total unevaluated documented resources). Impacts to desert tortoise would be greater (90 acres of creosote scrub habitat); however, the impacts would be less than significant with standard mitigation.

The **Avoidance Alternative #2** would move the substation outside of the active sand transport corridor, reducing both direct and indirect impacts to Mojave fringe-toed lizard sand dune habitat to less than significant with mitigation. The substation site would directly impact 20 acres of marginal MFTL habitat that would be adverse, but less than significant and would not require mitigation; however, approximately 10 acres of MFTL habitat that would be impacted by the access road is within the sand transport corridor and would require mitigation to reduce impacts below the level of significance. In addition, because the substation would be out of the sand transport corridor, it would not have the extensive indirect impacts from sand transport obstruction. The Avoidance Alternative #2 would also reduce impacts to rare plants. It would also impact the fewest cultural resources compared to the Proposed Project and other alternatives (4 unevaluated documented resources). Impacts to desert tortoise would be greater (70 acres of creosote scrub habitat); however, the impacts would be less than significant with standard mitigation.

The **Avoidance Alternative #3** would move the substation outside of the active sand transport corridor, reducing both direct and indirect impacts to Mojave fringe-toed lizard sand dune habitat. MFTL mitigation would not be required for the substation site itself, but mitigation would be required for approximately 10 acres of direct impacts resulting from construction/widening of access roads in stabilized and partially stabilized sand dunes. However, this alternative would impact desert tortoise (45 acres of creosote scrub habitat), and would impact a State-jurisdictional wash, but these impacts would be less than significant with mitigation. It would also have slightly greater impacts to cultural resources (15 unevaluated documented resources) than the proposed CRS or the other alternative sites. Avoidance Alternative #3 would slightly reduce impacts to rare plants.

The **Southern Alternative** would move the substation outside of the active sand transport corridor, reducing both direct and indirect impacts to Mojave fringe-toed lizard sand dune habitat. MFTL mitigation would not be required for the substation site itself, but mitigation would be required for approximately 10 acres of direct impacts resulting from construction/widening of access roads in stabilized and partially stabilized sand dunes. Impacts to rare plants would also be reduced, because construction of the substation would be unlikely to affect ribbed cryptantha, Harwood's eriastrum, or other sensitive dune plants. Impacts to cultural resources would be greater (13 documented resources, 10 of which are unevaluated) than at the proposed CRS and other alternatives sites (except Avoidance Alternative #3). Impacts to desert tortoise and creosote scrub habitat (90 acres) would be greater as well; however, the impacts

would also be less than significant with standard mitigation. ~~There would be new impacts to State jurisdictional washes because s~~Several small highly divided sandy channels drain to the west across the site and approximately three have the potential to be jurisdictional. Therefore, the Southern Alternative would create new impacts to ~~State~~ potentially jurisdictional desert washes, which provide important habitat for wildlife and plants. In addition, an active desert kit fox den and other mammalian burrows occur onsite. With incorporation of mitigation required in the DPV2 Final EIR/EIS, these impacts would be less than significant.

Conclusion

Due to the proximity of the alternative sites and the proposed CRS, many of the environment impacts would be similar. Table F-1 compares the five alternative sites with the Proposed Project for biological resources, cultural resources and overall ground disturbance. Table F-1 also indicates land ownership. All of the alternative substations sites and/or their transmission or gen-tie interconnections except for the Southern Alternative would likely be located on some private land.

All of the alternative sites except the Partial Avoidance Alternative would be located outside of the active sand transport corridor and would reduce the Proposed Project's significant and unmitigable impact on MFTL sand dune habitat to a less than significant level. However, all alternative sites would require gen-tie/transmission interconnections as well as the widening of the existing DPV1 access road through the sand transport corridor to Wiley Well Road, which would result in less than significant impacts with implementation of mitigation.

The Partial Avoidance Alternative would reduce both direct and indirect impacts to MFTL sand dune habitat by being located partially outside of the corridor; however, impacts to MFTL (Impact B-9) would still be significant and unmitigable (Class I). Therefore, it is preferred to the proposed CRS, but not the other alternative sites. Likewise, due to their proximity, all of the alternatives would have similar potential significant and unmitigable impacts to TCPs as the Proposed Project.

Overall, ***Avoidance Alternative #1 is the environmentally superior alternative***, due to its reduction of significant impacts to biological resources (MFTL) to a less than significant level with implementation of mitigation along the gen-tie/transmission interconnections and access road. It is also preferred for rare plants. While it is found to be potentially feasible and to meet most project objectives, a portion of the substation is on private property. Therefore, decision makers will evaluate the potential for project delay based on the potential requirement for negotiations with private landowners and possible condemnation proceedings, which could affect SCE's operational timeline objective. Also, approval would be required by the Palo Verde Land and Water Company due to reservation rights on the property.

Otherwise, the ***Southern Alternative would also be environmentally superior should Avoidance Alternative #1 create significant delays that would affect its ability to meet project objectives and be feasible***. The Southern Alternative and the transmission interconnections would be located entirely on public (BLM) land. The Southern Alternative would reduce significant impacts to biological resources to less than significant with the implementation of mitigation along the gen-tie/transmission interconnections and access road**.** It is less environmentally preferred than Avoidance Alternative #1 because it has the potential to impact desert washes and desert kit foxes; however, these impacts would be less than significant with mitigation.

Although the Southern Alternative ~~It~~ would also impact a slightly greater number of unevaluated cultural resources~~.~~, all of the cultural resources documented on both the Southern Alternative and Avoidance Alternative #1 sites likely are ineligible for the National Register of Historic Places (NRHP) (a deter-

mination from the BLM is required for a final eligibility evaluation). Because it is unlikely that any of the sites will be determined to be eligible, and if any sites are determined eligible, mitigation would likely reduce impacts to a less-than-significant level, the Southern Alternative and Avoidance Alternative #1 would have largely similar cultural resources impacts.

Avoidance Alternative #2 and Avoidance Alternative #3 would also both reduce significant impacts to biological resources to less than significant with the implementation of mitigation along the gen-tie/ transmission interconnections and access road. However, these sites would also still affect some lower quality MFTL sand dune habitat within the site footprints, so they are less preferred than Avoidance Alternative #1 and the Southern Alternative. Avoidance Alternative #2 is preferred to Avoidance Alternative #3, because it would impact the fewest documented cultural resources and the gen-tie interconnections would be slightly shorter creating slightly less ground disturbance. Avoidance Alternative #3 would also impact one desert wash.

Table F-1. Comparison of CRS Alternative Sites

	Proposed CRS	Partial Avoidance Alternative	Avoidance Alternative #1	Avoidance Alternative #2	Avoidance Alternative #3	Southern Alternative
Land Ownership: Substation Site	BLM	BLM	BLM and Private	Private	BLM	BLM
Land Ownership: Transmission/Gen-Tie Lines*	BLM	BLM and Private	BLM and Private	BLM and Private	BLM and Private	BLM
COMPARISON OF ISSUE AREAS WITH SIGNIFICANT/UNMITAGABLE IMPACTS						
Biological Resources: MFTL/Sand Dune Habitat (Substation Site)	• Significant & Unmitigable • 98 acres direct and 1,365 acres indirect impacts	• Reduced impacts, but potentially still Significant & Unmitigable • 90 acres direct & 855 acres indirect impacts • Access road as well as transmission interconnections on northwestern side may also impact corridor, but impacts would be less than significant with mitigation	• Environmentally Superior • Impacts less than significant and no MFTL mitigation likely required on the substation site • Access road as well as transmission interconnections on northwestern side may impact corridor, but impacts would be less than significant with mitigation	• Reduced impacts • 30 acres of MFTL habitat directly affected by site, but not within sand dunes and would be less than significant • Access road and transmission interconnections construction in dune habitat would be less than significant with mitigation	• Reduced impacts; • 45 acres of MFTL habitat directly affected, but not within sand dunes and would be less than significant • Access road and transmission interconnections construction in dune habitat would be less than significant with mitigation	• Environmentally Superior • Impacts less than significant and no MFTL mitigation likely required for the substation site • Slightly greater sand transport corridor impacts for access road and transmission interconnections from longer connections and additional tower footing(s); impacts would be less than significant with mitigation
COMPARISON OF ISSUE AREAS WITH LESS THAN SIGNIFICANT IMPACTS						
Biological Resources: Rare Plants	• 98 acres direct and 1,365 acres indirect impacts to sand dune-dependent rare plants (i.e., Harwood's eriastrum, Harwood's milkvetch, and flat-seeded spurge) • Impacts less than significant with mitigation	• Slightly reduced impacts to rare plants	• Environmentally Superior • Impacts substantially reduced to only 10 acres of impact for access road construction/widening	• Reduced impacts to rare plants • Not observed, but 20 acres of suitable habitat exists	• Slightly reduced impacts to rare plants	• Environmentally Superior • Impacts substantially reduced to only 10 acres of impact for access road construction/widening

Table F-1. Comparison of CRS Alternative Sites

	Proposed CRS	Partial Avoidance Alternative	Avoidance Alternative #1	Avoidance Alternative #2	Avoidance Alternative #3	Southern Alternative
Biological Resources: Desert Tortoise/Creosote Scrub	• Environmentally Superior • Low potential to occur in sandy habitat	• Slightly Increased, but less than significant with mitigation • 10 acres of direct impacts to creosote scrub	• Increased, but less than significant with mitigation • 90 acres of direct impacts to creosote scrub	• Increased, but less than significant with mitigation • 70 acres of direct impacts to creosote scrub	• Increased, but less than significant with mitigation • 45 acres of direct impacts to creosote scrub	• Increased, but less than significant with mitigation • 90 acres of direct impacts to creosote scrub
Biological Resources: Desert Washes	• Environmentally Superior • No State jurisdictional desert washes onsite.	• Environmentally Superior • No State jurisdictional desert washes onsite.	• Environmentally Superior • No State jurisdictional desert washes onsite.	• Environmentally Superior • No State jurisdictional desert washes onsite.	• One State jurisdictional desert wash • Impacts less than significant with mitigation	• Numerous potentially jurisdictional desert washes onsite • Impacts less than significant with mitigation
Biological Resources: Desert Mammals	• Environmentally Superior • No desert kit fox or other mammalian burrows documented onsite.	• Environmentally Superior • No desert kit fox or other mammalian burrows documented onsite.	• Environmentally Superior • No desert kit fox or other mammalian burrows documented onsite.	• Environmentally Superior • No desert kit fox or other mammalian burrows documented onsite.	• Environmentally Superior • No desert kit fox or other mammalian burrows documented onsite.	• Active kit fox complex & other mammalian burrows onsite • Impacts less than significant with mitigation
Cultural Resources*	• 7 documented resources (4 unevaluated & 3 isolates) • Potentially significant & unmitigable impacts to TCPs, if identified,** as well as other known and unknown resources.	• Similar or slightly preferred • 6 documented resources (4 unevaluated & 2 isolates) • Potentially significant & unmitigable impacts to TCPs, if identified,** as well as other known and unknown resources.	• Slightly greater impacts • 6 unevaluated resources documented • Potentially significant & unmitigable impacts to TCPs, if identified,** as well as other known and unknown resources.	• Environmentally Superior • 4 unevaluated resources documented • Potentially significant & unmitigable impacts to TCPs, if identified,** as well as other known and unknown resources.	• Greater impacts • 15 unevaluated resources documented • Potentially significant & unmitigable impacts to TCPs, if identified,** as well as other known and unknown resources.	• Greater impacts • 13 documented resources (10 unevaluated & 3 isolates) • Resources centrally located • Potentially significant & unmitigable impacts to TCPs, if identified,** as well as other known and unknown resources.
Ground Disturbance/Gen-Tie Length	• Environmentally Superior	• Environmentally Superior	• Slightly increased	• Increased	• Increased	• Slightly Increased
Hydrology and Water Resources	• Impacts less than significant with mitigation	• Similar to proposed CRS • Impacts less than significant with mitigation	• Similar to proposed CRS • Impacts less than significant with mitigation	• Similar to proposed CRS • Impacts less than significant with mitigation	• Similar to proposed CRS • Impacts less than significant with mitigation	• Similar to proposed CRS • Impacts less than significant with mitigation

Table F-1. Comparison of CRS Alternative Sites

	Proposed CRS	Partial Avoidance Alternative	Avoidance Alternative #1	Avoidance Alternative #2	Avoidance Alternative #3	Southern Alternative
Greenhouse Gas	• Significant & unmitigable impacts from cumulative GHG emissions	• Similar to proposed CRS • Significant & unmitigable impacts from cumulative GHG emissions	• Similar to proposed CRS • Significant & unmitigable impacts from cumulative GHG emissions	• Similar to proposed CRS • Significant & unmitigable impacts from cumulative GHG emissions	• Similar to proposed CRS • Significant & unmitigable impacts from cumulative GHG emissions	• Similar to proposed CRS • Significant & unmitigable impacts from cumulative GHG emissions

* The revised routing of the 220 kV gen-tie interconnections to an alternative site would be executed by NextEra and Solar Millennium for GSEP and BSPP, respectively, which would determine the affected land owners.

** The BLM, as the federal Lead Agency under NEPA and Section 106 of the NHPA, has initiated required government-to-government consultation with appropriate Native American groups and notification to other public groups regarding project effects on traditional cultural values. During scoping for the proposed substation modifications, the CPUC, as CEQA Lead Agency, also contacted local tribes and individuals identified by the NAHC to elicit concerns about cultural resources that could be potentially impacted by the Proposed Project (see Appendix 4). Thus far, no TCPs have been identified in the vicinity of the Proposed Project or alternative sites.

F.4.2 Definition of Environmentally Superior Alternative

The conclusions in Section F.4 for the alternatives evaluated result in identification of Avoidance Alternative #1 as the environmentally superior alternative. This alternative is found to be potentially feasible and to meet most project objectives. However, if Avoidance Alternative #1 is found to cause significant schedule delays that would affect its ability to meet SCE's operational timeline objective for interconnection with BSPP and GSEP, then the decision makers will evaluate whether it is a feasible alternative (see discussion in Appendix 1, Alternatives Screening Report).

The environmentally superior substation site is illustrated in Figure C-1 in Section C of this SEIR.

F.5 No Project Alternative vs. the Environmentally Superior Alternative

The No Project Alternative is described in Section C.6, and certain consequences can be identified without undue speculation. The absence of the Proposed Project would likely lead SCE or the solar project developers to pursue other actions to achieve the objectives of the Proposed Project. The events or actions that are reasonably expected to occur in the foreseeable future without the CRS expansion include the following:

- The approved 500 kV transmission from Colorado River Substation to Devers Substation would be constructed as already approved by the CPUC (and as anticipated to be approved by the BLM).
- The approved solar power projects (BSPP and GESP) would have substantial delays in their online dates because their projects would have to be re-designed and the changes re-evaluated under CEQA and NEPA due to the need for substantially larger and more inefficient infrastructure. Specifically:
  - The BSPP project would likely have to be re-designed to incorporate a larger on-site substation and a 500 kV gen-tie line, rather than a 230 kV gen-tie line to the expanded CRS substation, in order for BSPP to interconnect to the regional transmission system. The additional cost of this larger substation and the delays associated with CEQA and NEPA review of the changes may affect the financial viability of the project and its ability to qualify for financing.
  - The approved GSEP project would use an existing 230 kV transmission line along much of the route between the Genesis solar project site and the CRS. In the No Project scenario, both a larger on-site substation and a new, additional 500 kV line would have to be installed (rather than the current approved plan, which would require only installation of a second circuit onto existing 230 kV towers). Additional environmental review would be required by the BLM and CEC to evaluate these modifications under CEQA and NEPA. An expanded right-of-way would be required for the additional 500 kV line.

SCE, Western Area Power Administration, or the solar generators may pursue the expansion of an existing substation in the Blythe area (the Buck and Blythe Substations are located near the Blythe power plant). This expanded substation could transform the gen-tie lines from 230 to 500 kV, and then a new 500 kV line would be constructed to the CRS. The substation expansion and the revised transmission line route and size would require NEPA and CEQA analysis to define impacts and mitigation.

Because the CPUC has already approved construction of a 44-acre substation at the proposed location for the California-only portion of DPV2, the No Project Alternative includes construction of the originally-approved 44-acre DSW Midpoint Substation, but not the expanded area. Therefore, the No Project Alternative would locate the substation in the active sand transport corridor, but it would have fewer direct and indirect impacts than those of the Proposed Project and the Partial Avoidance Alternative due to its smaller size. In addition, the environmental impacts of the No Project Alternative would also result

from new transmission lines and substation expansion at other locations. These long-term operational impacts include visual impacts of the new transmission lines and substation expansions depending on their locations in more developed areas, which could result in significant impacts elsewhere.

Therefore, because the No Project Alternative could also require construction of additional and higher voltage transmission lines and substation expansions with impacts similar to those described for the Proposed Project, the No Project Alternative is not found to be superior to the Environmentally Superior Alternative as defined in Section F.4.2 above.

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4 and the enclosed Form 1842-1. If an appeal is taken, your notice of appeal must be filed in this office (at the above address) within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition (request) pursuant to regulations 43 CFR 2801.10 or 2881.10 for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

(1) The relative harm to the parties if the stay is granted or denied,

(2) The likelihood of the appellant's success on the merits,

(3) The likelihood of immediate and irreparable harm if the stay is not granted, and

(4) Whether the public interest favors granting the stay.

Appendix G
Mitigation Measures Excerpted from Section 4 of the
Forest Service BA/BE and MIS Report
6/3/2009

4.4 MANAGEMENT AND MONITORING RECOMMENDATIONS

4.4.1 Avoidance/Minimization Measures for TEPCS Animals and Plants, General Wildlife, and Migratory Birds

The primary potential adverse impacts of the project identified for sensitive wildlife are temporary disturbance of essential behavioral activities such as foraging and predator evasion. These potential effects, however, will be minimized through the following protective measures:

General Vegetation and Forest Landscape

- There are no roads and none will be created, therefore vehicles will not cause impacts. Impacts to vegetation will be limited to the tower footings and crews will minimize trampling of vegetation between the work areas and footings.

Nesting Birds

- To the extent possible, vegetation removal with this project will occur outside the typical nesting period for most bird species (i.e., outside the period March 15th to August 15th) in order to limit impacts to nesting birds. When work must take place during the breeding season, nest surveys will be conducted and nest sites will be avoided to the extent possible. If nest sites cannot be avoided, USFWS and CDFG will be consulted to determine appropriate course of action.
- Crews will be trained to avoid working in an area if a nesting bird is located.

General

- Crews will be provided training/identification information on TEPCS animals (Peninsular bighorn sheep, reptiles, etc.) and avoidance with nesting birds, and provided direction for what to do if those species are encountered (immediately contact the project biologist and do not handle the animal). At that time, the project biologist will determine appropriate measures to minimize impacts.
- The limits of the disturbance area will be marked with ribbon and wood/wire stakes.
- Nighttime work (and use of artificial lighting) will not be permitted.

4.4.2 Avoidance/Minimization Measures for TEPCS Animals and Plants, Species Specific Measures

Species specific measures are provided below for TEPCS species with some potential to occur within the Project Area. These measures will be implemented in order to assure that these species are not affected by implementation of the proposed project action.

Peninsular bighorn sheep

SCE will contact the Bighorn Institute prior to commencing work to ensure that bighorn sheep are not present. If sheep are identified within the vicinity, SCE will work with the SBNF and Bighorn Institute to develop an appropriate avoidance and biological

monitoring schedule SCE will implement Sensitive Species Avoidance and Minimization Measures (see below).

Pallid bat
Equipment will not be moved across rocky outcrops or debris piles. SCE will implement Sensitive Species Avoidance and Minimization Measures (see below).

Sensitive reptiles (including San Diego horned lizard, coastal rosy boa, and San Diego ringneck snake)
Equipment will not be moved across rocky outcrops or debris piles. SCE will implement Sensitive Species Avoidance and Minimization Measures (see below).

4.4.3 TEPCS Species Avoidance and Minimization Measures

- Other applicable biological mitigation measures developed for the FEIR/FEIS and those listed below will be applied to the SBNF habitats.
- Minimize soil disturbance.
- Do not touch or handle any reptiles and avoid debris piles as this may be habitat for sensitive species.
- Keep equipment within previous disturbed areas (if any) and avoid vegetation to the extent feasible.
- The proposed work area will be flagged to delineate the limits of disturbance during construction using flagging tape, stakes, or other low-impact marking method.
- FEIR/FEIS Mitigation Measure B-15a. Utilize collision-reducing techniques in installation of transmission lines. SCE shall install the transmission line utilizing APLIC standards for collision-reducing techniques as outlined in "Mitigating Bird Collisions with Power Lines: The State of the Art in 1994 (APLIC, 1996)."
- Placement of towers and lines will not be located significantly above existing transmission line towers and lines, topographic features, or tree lines to the maximum extent practicable.
- Overhead lines that occur significantly above the above-mentioned features and that are located in highly utilized avian flight paths will be marked utilizing aerial marker spheres, swinging plates, spiral vibration dampers, bird flight diverters, avifauna spirals, or other diversion device as to be visible to birds and reduce avian collisions with lines.

4.4.4 Worker Training and Monitoring

A worker-training program will be implemented to ensure knowledge of the potentially occurring sensitive resource and measures used to reduce impacting the species. Crews will be provided training/identification information on several sensitive animals (San Diego horned lizard, San Diego ringneck snake, and Peninsular bighorn sheep) and provided direction for what to do if those species are encountered (immediately contact the project biologist and do not handle or harass the animal). If it is determined that there is a need for additional training in the future, training will be provided.

Joshua Tree
National Park

Cactus City
Rest Area

190 185 180 175 170 165 160 155 150 145 140 135 130 125 120

Midpoint
Substation

Blythe

Rice Valley
Wilderness

Big Maria Mountains
Wilderness

Palen/McCoy
Wilderness

Desert Lily
Preserve
ACEC

Alligator
Rock
ACEC

Palen
Dry Lake
ACEC

Corn
Springs
ACEC

Chuckwalla Mountains
Wilderness

Chuckwalla
Valley Dune Thicket
ACEC

Mule
Mountains
ACEC

Mecca Hills
Wilderness

Orocopia Mountains
Wilderness

Dos
Palmas
ACEC

Little Chuckwalla Mountains
Wilderness

Chocolate Mountains
Aerial Gunnery Range

Palo Verde Mountains
Wilderness

California
Arizona

Salton Sea

177 10 111 78 86

N

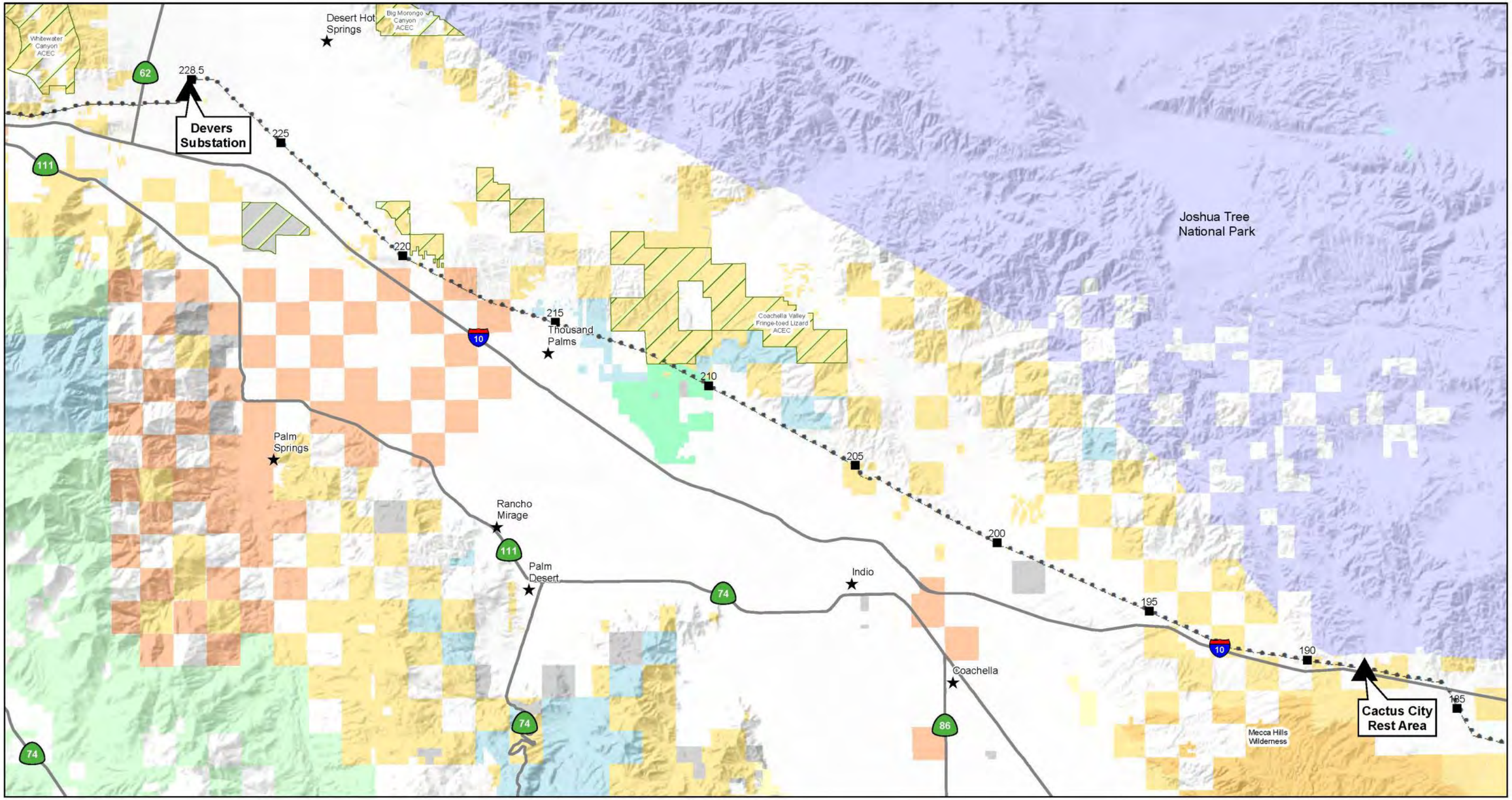
0 5 10 Miles

Legend

- Devers-Palo Verde 2 Selected Route
- Mileposts
- Major Highways
- Area of Critical Environmental Concern (ACEC)
- BLM Wilderness
- Reservations and Rancherias
- Bureau of Land Management
- National Park Service
- Bureau of Reclamation
- US Fish and Wildlife Service
- Military
- State
- Private/Other

Devers-Palo Verde 2
Cactus City-Midpoint Segment

US Department of the Interior
BUREAU OF LAND MANAGEMENT
Palm Springs-South Coast Field Office



Legend

- Devers-Palo Verde 2 Selected Route
- Mileposts
- Major Highways
- Area of Critical Environmental Concern (ACEC)
- BLM Wilderness
- Reservations and Rancherias
- Bureau of Land Management
- US Forest Service
- National Park Service
- Bureau of Reclamation
- US Fish and Wildlife Service
- State
- County/State/Regional
- Private/Other

N

0 5 10 Miles

US Department of the Interior
BUREAU OF LAND MANAGEMENT
Palm Springs-South Coast Field Office

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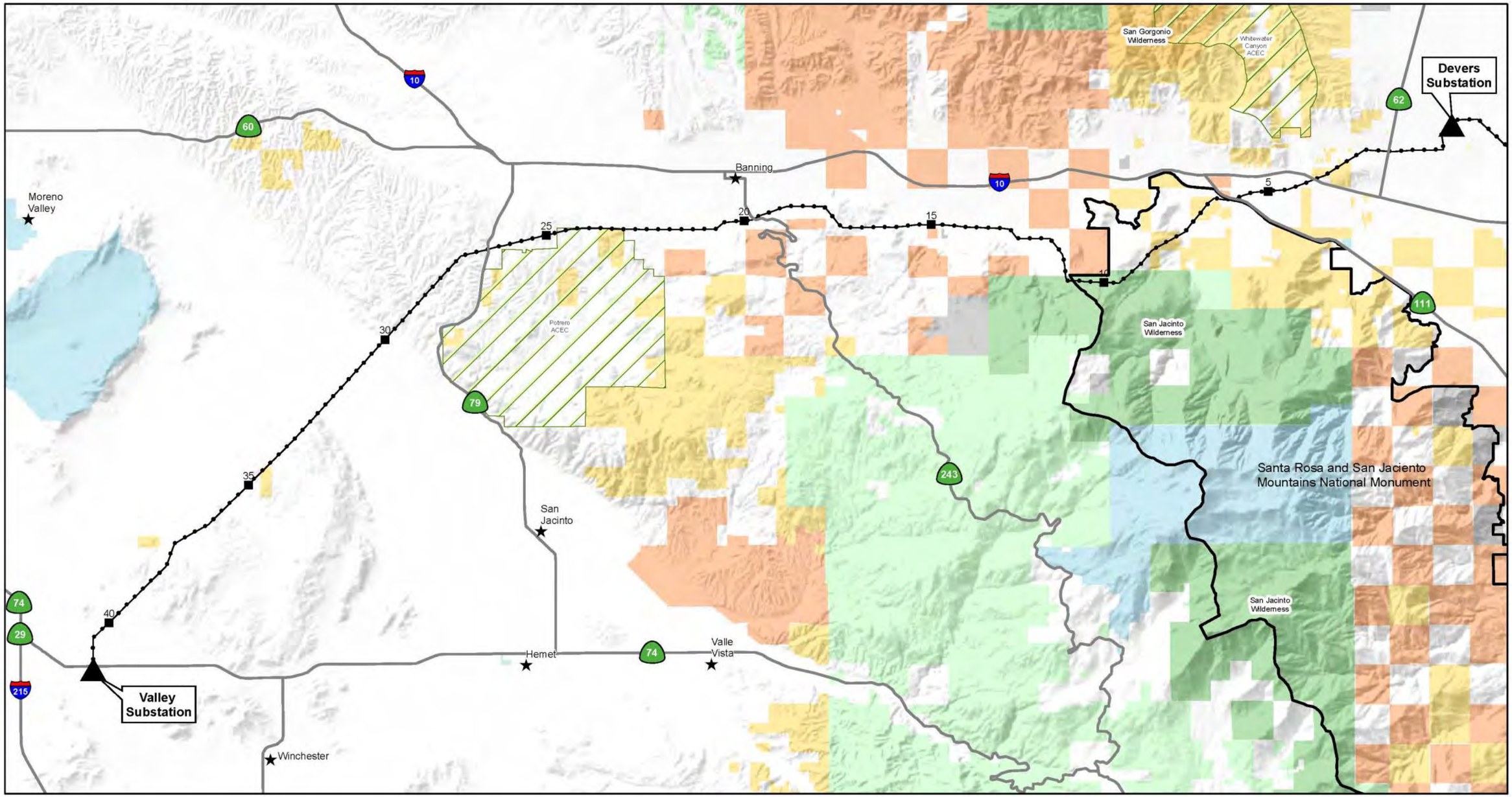
Devers-Palo Verde 2
Cactus City-Devers Segment



Legend

- Devers-Palo Verde 2 Selected Route
- Mileposts
- Major Highways
- National Monument
- Area of Critical Environmental Concern (ACEC)
- BLM Wilderness
- USFS Wilderness
- Reservations and Rancherias
- Bureau of Land Management
- US Forest Service
- State
- County/State/Regional
- Private/Other

N

0 5 10 Miles

US Department of the Interior
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Palm Springs-South Coast Field Office

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Devers-Palo Verde 2
Devers-Valley Segment