Devers-Palo Verde No. 2 Transmission Project

Mitigation Monitoring, Compliance, and Reporting Program

California Public Utilities Commission
and
Bureau of Land Management
U.S. Department of Interior

December 22, 2011

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1.0 Introduction

The Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Devers–Palo Verde No. 2 Transmission Line Project (DPV2 or Project), as adopted by the California Public Utilities Commission (CPUC) on January 25, 2007, in accordance with Decision (D.)07-01-040,[1] includes procedures for preparing and implementing a Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) to ensure compliance with mitigation measures approved in the Final EIR/EIS. The CPUC is the Lead Agency under the California Environmental Quality Act (CEQA). The Lead Agency for the National Environmental Policy Act (NEPA) is the Bureau of Land Management (BLM). In addition, the Project route crosses lands under jurisdiction of the United States Department of Agriculture (USDA) Forest Service (FS) within the San Bernardino National Forest (SBNF). The FS is a signatory to the BLM Record of Decision (ROD).

In addition, the California Independent System Operator (CAISO) Board approved the project on February 24, 2005. However, the Arizona Corporation Commission (ACC) denied SCE's request for a Certificate of Environmental Compatibility for the project on June 6, 2007. SCE appealed the ACC's DPV2 decision and was pursuing the authority Congress granted the Federal 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 project at FERC because it is not pursing a refilling with the ACC for the authorization of the Arizona only portion of the project at this time. On May 14, 2008, SCE filed a Petition for Modification (PFM) of the existing Certificate for Public Convenience and Necessity (CPCN) approved per Decision D.07-01-040. SCE requested that the CPUC authorize SCE to construct DPV2 facilities in only the California portion of DPV2 and the Midpoint Substation near Blythe, California. The CPUC approved SCE's PFM on November 20, 2009 in Decision D.09-11-007.

After the CPUC's 2009 Decision regarding SCE's 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. As a result, the solar developers and SCE developed a plan to expand the Midpoint Substation, now known as the Colorado River Substation, from 45 acres to 90 acres to allow for the required space for generation tie lines to be interconnected with the SCE 500 kV transmission system. SCE filed a Permit to Construct application addressing the substation expansion (A.10-11-005). 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 were evaluated under NEPA and CEQA by the BLM and the California Energy Commission. The environmental review documents addressed the Colorado River Substation expansion, but they did not adequately cover all issues that the CPUC requires to be addressed in accordance with CEQA. Therefore, the CPUC prepared a focused Supplemental EIR to address only the specific issues not yet covered for its purposes by the previous environmental review. On July 14, 2011, the CPUC approved the Southern Alternative for the location of the expanded Colorado River Substation in Decision D.11-07-011.

[1] Following the CPUC's January 25, 2007, approval of DPV2 via D.07-01-040, on June 6, 2007, the Arizona Corporation Commission (ACC) denied the SCE request to construct the Arizona portion of the Project via D.69638. However, on November 20, 2009, via D.09-11-007, the CPUC granted modification of D.07-01-040 and authorized construction of the California portion of the Project conditioned on subsequent approval from the California Independent System Operator (CAISO).

In addition to the Colorado River Substation, a new 500/230 kV Red Bluff Substation will be constructed near Desert Center to connect the Desert Sunlight Solar Farm and other solar projects in the area to the SCE regional transmission grid. The CPUC, as a cooperating agency, used the Desert Sunlight Solar Farm EIS prepared by the BLM in accordance with CEQA to make its discretionary decision to approve SCE's Permit to Construct application for the Red Bluff Substation on July 14, 2011 (Decision D.11-07-020).

Section H of the DPV2 Final EIR/EIS provides the recommended framework for implementation of the MMCRP by the CPUC (CEQA Lead Agency) and BLM (NEPA Lead Agency), and describes the roles and responsibilities of parties that would implement and enforce mitigation measures adopted by the lead agencies. This MMCRP includes the information provided in Section H of the Final EIR/EIS, as well as specific protocols to be followed prior to, during construction, and post construction by CPUC third-party environmental monitors (CPUC EMs) and Southern California Edison (SCE) Project staff. Long-term monitoring during operations and maintenance will be addressed through consultation and a plan with the appropriate resource agencies.

The MMCRP includes direct participation and commitment from SCE and CPUC EMs. The success of the program depends on the project management staff, CPUC EMs, and construction contractor personnel. Therefore, goals of the MMCRP include providing a clear understanding of the Project's organization and the roles and responsibilities of those involved, establishing lines of communication, effectively documenting and reporting compliance with mitigation measures, and preventing problems through timely and comprehensive communication.

The MMCRP provides guidelines and standardizes procedures for environmental compliance on the Project. The MMCRP was developed in coordination with SCE, CPUC, BLM, and CPUC EMs to define the reporting relationships, provide detailed information about the roles and responsibilities of the Project's environmental compliance team members, define compliance reporting procedures, and to establish a communication protocol. The communication lists in the MMCRP will be updated throughout construction.

1.1 Authority for the Mitigation Monitoring, Compliance, and Reporting Program

Mitigation monitoring is required by both CEQA and NEPA. Section 21081.6 of the California Public Resources Code requires a public agency, such as the CPUC, to adopt an MMCRP 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 Council on Environmental Quality (CEQ) has established regulations for implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508). NEPA requires mitigation monitoring in 40 CFR 1505.2(c), with additional specificity provided in the BLM NEPA Handbook (H-1790-1), Chapter 10 (Monitoring). BLM also served as the lead federal agency for Section 7 consultation under the Endangered Species Act and Section 106 consultation under the National Historic Preservation Act and is conducting Tribal Consultation. BLM is responsible for ensuring that mitigation measures adopted in its ROD are implemented and that other terms and conditions in the right-of-way (ROW) grant are adhered to on BLM land.

1.2 Agencies with Jurisdiction

In addition to the CPUC, BLM, and FS, other local, state, and federal agencies have jurisdiction over lands or resources that are crossed by the Project route. Table 1 lists jurisdictional agencies associated with the Project.

The CPUC and BLM, as the Lead Agencies, are responsible for ensuring that all mitigation measures are implemented during construction and operation, and the CPUC monitors will verify SCE's compliance with conditions of permits issued by other agencies [post-construction]. Jurisdictional agencies' designated representatives may visit construction areas at any reasonable and safe time, and may require information regarding the status of compliance with particular mitigation measures. SCE is responsible for satisfying requests from jurisdictional agencies and will notify and copy the CPUC on all correspondences related to final approvals and verifications for the project if not otherwise copied on the correspondence. Additional information on communication protocol is presented in Section 3. Long-term monitoring during operations and maintenance will be addressed through consultation and a plan with the appropriate resource agencies.

The mitigation measures proposed in the Final EIR/EIS and the framework for this MMCRP, as described in Section H of the Final EIR/EIS, were approved by the CPUC on January 25, 2007 (D.07-01-040). The BLM is expected to issue its ROD in the third quarter of 2010.

A draft version of the MMCRP for only the California portion of the Project was distributed to SCE, CPUC, BLM, and CPUC EMs for review and comment.

Table 1. Jurisdictional Agencies Associated with the Devers-Palo Verde No. 2 Transmission Line Project

Agency	Address	Contact Person	Phone	E-mail Address
LEAD AGENCIES				
California Public Utilities Commission	505 Van Ness Ave, 4th Floor San Francisco, CA 94102	Billie Blanchard	415-703-2068	BCB@cpuc.ca.gov
Bureau of Land Management	22835 Calle San Juan De Los Lagos, Moreno Valley, CA 92553	Larry LaPre	951-697-5218	LLaPre@ca.blm.gov
Bureau of Land Management	Palm Springs/South Coast Field Office 1201 Bird Center Drive Palm Springs, CA 92262	John Kalish	760-833-7103	JKalish@blm.gov; John_Kalish@blm.gov
		Mark Massar (biology)	760-833-7121	Mark_Massar@blm.gov
		Holly Roberts	760-833-7149	Holly_Roberts@blm.gov
		Allison Shaffer		Allison_Shaffer@blm.gov
		Ysmael Wariner		YWariner@blm.gov
		George Kline (cultural)		George_Kline@blm.gov
FEDERAL AGENCIES				
United States Department of Agriculture Forest Service	602 S. Tippecanoe Avenue San Bernardino, CA 92408	George Kenline		GKenline@fs.fed.us
United States Fish and Wildlife Service	6010 Hidden Valley Road Carlsbad, CA 92009	Jody Fraser (Red Bluff Substation)		Jody_Fraser@fws.gov
		Tera Baird (DPV2 and CRS)	760-431-9440	Tera_Baird@fws.gov
United States Army Corps of Engineers	3001 W. Pomona-Ricon Road Corona, CA 91720	Jim Mace	951-898-6163	james.e.mace@usace.army.mil
Federal Aviation Administration	15000 Aviation Boulevard Hawthorne, CA 90250	Margie Drilling - Planning for Riverside County	310-725-3628	http://www.faa.gov/contact/
Federal Communications Commission	445 12th Street, SW Washington, DC 20554		888-225-5322	http://www.fcc.gov/contacts.html
Bureau of Reclamation	Southern California Area Office 27708 Jefferson Avenue, Suite 202 Temecula, CA 92590	Bill Steele (Area Manager)	951-695-5310	http://www.usbr.gov/lc/socal/index.html
	Yuma Area Office 7301 Calle Agua Salada Yuma, AZ 85364	Rebecca Rodgers	928-343-8239	RRogers@usbr.gov
		Anna. Pinnell	928-343-8514	APinnell@usbr.gov
TRIBAL LAND/BUREAU OF INDIAN AFFAIRS				
Agua Caliente Indian Reservation	5401 Dinah Shore Drive Palm Springs, CA 92264	Patricia Garcia-Tuck, THPO	760-699-6800	ptuck@aguacaliente-nsn.gov

Table 1. Jurisdictional Agencies Associated with the Devers-Palo Verde No. 2 Transmission Line Project

Agency	Address	Contact Person	Phone	E-mail Address
STATE AGENCIES				
State Lands Commission	100 Howe Ave Suite 100 South Sacramento, CA 95825-8202	Ninette Lee	916-574-1869	leen@slc.ca.gov
California Independent System Operator	151 Blue Ravine Road Folsom, CA 95630	Anthony Ivancovich	916-608-7135	aivancovich@caiso.com
California Dept of Fish and Game	78-078 Country Club Drive, Suite 109 Bermuda Dunes, CA 92203	Magdalena Rodriguez	909-945-3294	mrodriguez@dfg.ca.gov
California Dept of Transportation, District 8	464 W. 4th Street San Bernardino, CA 92401	Dr. Raymond Wolfen - District Director	909-383-4631	
		Arfan Haidary Office of Encroachment Permits	909-383-7553	arfan_haidary@dot.ca.gov
California Dept of Toxic Substances Control	5796 Corporate Avenue Cypress, CA 90630	Maryam Tasnif-Abbasi Voluntary Clean-up Coordinator	714-484-5489	
	1001 I Street Sacramento, CA 95814-2828		800-728-6942	
State Historic Preservation Office	1416 9th Street, Room 1442-7 Sacramento, CA 95814	Milford W. Donaldson	916-653-6624	mwdonaldson@parks.ca.gov
	P.O. Box 942896 Sacramento, CA 94296-0001			
California Air Resources Board	1001 I Street P.O. Box 2815 Sacramento, CA 95812		916-322-2990	
State Water Quality Control Board	1001 I Street Sacramento, CA 95814	Bob Solecki	916-341-5464	rsolecki@waterboards.ca.gov
	73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260			
LOCAL AND REGIONAL				
Riverside County Transportation Dept.	4080 Lemon Street Riverside, CA 92502-1629	Patricia Romo (Deputy Director of Engineering/Planning)	951-955-6740	
	Desert Permit Assistance Center 38686 El Cerrito Road Palm Desert, CA 92211			

Table 1. Jurisdictional Agencies Associated with the Devers-Palo Verde No. 2 Transmission Line Project

Agency	Address	Contact Person	Phone	E-mail Address
Palo Verde Irrigation District	180 West 14th Avenue Blythe, CA 92225-2714		760-922-3144	
Coachella Valley Water District	Coachella Valley Water District P.O. Box 1058 Coachella, CA 92236		760-398-2651	
Mojave Desert Air Quality Management District	14306 Park Ave Victorville, CA 92392	Alan DeSalvio	760-245-1661	adesalvio@mdaqmd.ca.gov
South Coast Air Quality Management District	21865 Copley Dr. Diamond Bar CA 91765	Steve Smith	909-396-2000	ssmith@aqmd.gov
City of Menifee	29714 Haun Rd. Menifee, CA 92586"	Don Allison, Director of Public Works	951-672-6777	dallison@cityofmenifee.us
City of Palm Springs	3200 East Tahquitz Canyon Way Palm Springs, California 92262	David J. Barakian, Director of Public Works, City Engineer	760-323-8253	
City of Banning	99 E. Ramsey St., Banning, CA 92220	Duane Burke, Public Works	951-922-3105	dburk@ci.banning.ca.us
City of Beaumont	550 East 6th Street, Beaumont, CA 92223	Ernest Egger, Director of Planning	951-769-8518	eegger@ci.beaumont.ca.us
City of Blythe	440 S. Main Street Blythe, CA 92225	Dept. of Engineering	760-922-6611	
Cathedral City	68700 Avenida Lalo Guerrero Cathedral City, CA 92234	Dept. of Engineering	760-770-0349	
City of Indio	100 Civic Center Mall Indio, CA 92202	Dept. of Engineering	760-391-4017	
OTHER UTILITIES				
Southern California Gas Pipeline				
BNSF Railroad	2650 Lou Menk Drive Fort Worth, TX 76131-2830			
Metropolitan Water District	P.O. Box 54153 Los Angeles, CA 90054-0153		213-217-6000	EngineeringSubstructures@mwdh2o.com RealEstateServices@mwdh2o.com

1.3 Project Description

1.3.1 Project Overview

The CPUC's approval of SCE's Petition for Modification (PFM) to build the California portion of DPV2 includes two major transmission lines and construction of the new Midpoint Substation, now called the Colorado River Substation.

The first transmission line will be a 500 kilovolt (kV) transmission line between the new Colorado River Substation near Blythe, California (just west of the California-Arizona border), and SCE's Devers Substation in North Palm Springs in Riverside County, California. This 500 kV transmission line will be approximately 110 circuit miles long and will parallel the existing DPV1 line.

To allow the power to reach SCE's load centers, the CPUC also authorized SCE to construct the 41.6-mile Devers-Valley No. 2 transmission line, an alternative to the West of Devers portion of DPV2. The Devers-Valley No. 2 transmission line will be a second 500 kV transmission line between SCE's Devers and Valley Substations.

The Colorado River Substation will be constructed west of Blythe, about 15 miles west of the California-Arizona border. Construction of the Midpoint Substation was not authorized in the original CPUC Decision D.07-01-040 in January 2007. However, the environmental impacts of the two alternative substation locations were fully evaluated in the Final EIR/EIS.[2] The Final EIR/EIS concluded that either location was "equally environmentally superior/preferable." Hence, when the CPUC approved SCE's PFM in November 2009, Decision D.09-11-007 stated that SCE may pursue either of the studied locations for purposes of CEQA/NEPA, and approval of construction of the Colorado River Substation at the Desert Southwest Transmission (DSW) Project Midpoint Substation location does not trigger the need for additional environmental review. Based on detailed design plans, SCE chose the Midpoint-DSW Substation site as the location where the Colorado River Substation will be constructed. However, after the CPUC's 2009 Decision regarding SCE's PFM, several large solar power projects were proposed in the Blythe area, which resulted in the proposed expansion of the Colorado River Substation from 45 acres to 90 acres. The CPUC prepared a Supplemental EIR to analyze the substation expansion, and the CPUC authorized SCE to construct the 90-acre Colorado River Substation at the Southern Alternative site location, which is approximately 4,000 feet south of the Midpoint-DSW Substation site and south of the DPV1/DPV2 transmission corridor.

The CPUC also authorized SCE to construct upgrades to other electrical transmission and telecommunications facilities related to the Colorado River–Devers and Devers-Valley No. 2 transmission lines.

Finally, the CPUC has also authorized SCE to construct a new 500/230 kV Red Bluff Substation near Desert Center.

[2] The Colorado River Switchyard at the Midpoint-DSW Substation location would be north of the DPV2 ROW, primarily within APN 879-080-025 on the Southeast quadrant of Section 6, Township 7 South, Range 21 East. It was originally included in the Desert Southwest Transmission Project (DSWTP) Final EIR/EIS published by the Imperial Irrigation District and BLM in October 2005. The DPV2 Midpoint Substation would have also been adjacent to the DPV2 corridor to the north, but it would have been approximately 5 miles southeast of the Midpoint-DSW Substation site.

Schedule

SCE expects to have the Project energized in 2013. Project-related construction activities on each transmission line (see Table 2) will not begin until pre-construction preconstruction mitigation measures and submittals have been satisfied (see Section 1.3.3). Once pre-construction mitigation measures have been completed, the CPUC will issue a Notice-to-Proceed (NTP), indicating that construction can begin on the ROW. The NTP may include CPUC or other agency conditions or requirements that must be satisfied before work begins or during construction. In some cases, it may be appropriate to issue transmission line- or component-specific NTPs when pre-construction mitigation measures have been completed for one line or component and not another. Section 6 lists the mitigation measures, the timing for completion, and whether CPUC review or approval is required before construction on the ROW can begin.

1.3.2 Construction Work Packages

The Project has been divided into multiple construction work packages as listed in Table 2, and a map of the work packages is provided in Attachment A**.** The anticipated start dates for the work packages are also shown in Table 2.

Table 2. Construction Packages

Work Package	Section	Description	Location	Dates
Colorado River–Devers		Roads, foundations, towers and California Series Capacitor	Start point – Devers Substation	October 2011
Devers-Valley		Roads, foundations, and towers	Start point – Devers Substation	October 2011
Colorado River Substation		Perimeter wall/fencing, foundations, and electrical equipment	Near Blythe	August 2011
Devers Substation Improvements		Equipment for second 500 kV transmission line	Devers Substation	December 2011
Valley Substation Improvements		Equipment to receive second 500 kV transmission line from Devers Substation	Valley Substation	May 2012
Telecom		OPGW, fiber optics, and microwave towers, etc.	Devers to Colorado River and Devers to Valley	August 2011
Distribution		Light/power for Colorado River Substation	Colorado River Substation	August 2011
Real Property (Construction and Helicopter Yards)		Material storage, marshalling, tower assembly, batch plants, and helicopter staging	Devers to Colorado River and Devers to Valley	June 2011
Red Bluff Substation		Perimeter wall/fencing, foundations, and electrical equipment	Near Desert Center	October 2011

Note: Work packages, their extent, and start dates reflect the Project as of March 2011, but could change based on design and construction considerations.

The mitigation measures listed in Section 6.3 include the location in which the mitigation measure applies. In general, the mitigation measures are applicable to all Project areas; however certain biological protection measures and other resource measures are work package specific. SCE will work closely with the construction contractor to ensure that site-specific mitigation measures are clearly identified and implemented.

1.3.3 Project Authorizations by Lead, Responsible, and Cooperating Agencies

This MMCRP provides information necessary to successfully implement mitigation measures during construction. The mitigation measures listed in Section 6.3 are included in Sections D.2 through D.13 of the Final EIR/EIS. Those sections also explain the intent of each mitigation measure and the potential impacts that could result if the mitigation measures are not implemented.

In addition to complying with the adopted mitigation measures and applicant proposed measures (APMs), construction activities must be conducted in accordance with requirements of the authorizations listed below.

Lead Agencies – CPUC and BLM

- **California Public Utilities Commission** Certificate of Public Convenience and Necessity (issued on January 25, 2007; Petition for Modification approved on November 20, 2009)
- **BLM** Amendment to Right-of-Way Grant (issued on July 19, 2011, Record of Decision, Notice to Proceed)

Federal Agencies

- **United States Department of Agriculture Forest Service** Revised Easement – Crossing San Bernardino National Forest lands
- **United States Fish and Wildlife Service** Right-of-Way Grant – Crossing Coachella Valley National Wildlife Refuge, Consultation for Section 7 of the Endangered Species Act, Habitat Conservation Plans – Riverside County
- **United States Army Corps of Engineers** Section 401/404 Permit – Streambed alteration/crossing
- **Federal Aviation Administration** 7460(1) Permit and Notice to Airmen – Shavers Summit Airport and "Airstrip" near Const. D-151
- **Agua Caliente Indian reservation** Resolution of land acquisition issues by consultations between Agua Caliente Tribe and SCE, or eminent domain proceedings

State Agencies

- **State Lands Commission** Right-of-Way Easement
- **California Department of Fish and Game** Streambed Alteration 1602 Permit (if required)
- **Department of Water Resources** Colorado Aqueduct Encroachment/Crossing Permit (as required)
- **State Water Resources Control Board**, 401 Certification, Storm Water Construction General Permit 99-08-DWD, National Pollutant Discharge and Elimination System (NPDES) Permit, Waste Discharge Requirements (WDRs)
- **Regional Water Quality Control Board** Storm Water Pollution Prevention Plan
- **California Department of Transportation, District 8** Overload Permit, Road/Highway Encroachment Permits (as required)
- **California Department of Toxic Substances Control** EPA Hazardous Waste Generator ID

- **California State Historic Preservation Office** Cultural Resources Use Permit, Field Use Authorization, or an Archaeological Resources Protection Act (ARPA) Permit (if required), Consultation for Section 106 of the National Historic Preservation Act
- **California Air Resources Board** Portable Engine Registration for specified non-mobile portable engines

Local Agencies

- **Riverside County** Road/Highway Encroachment/Crossing Permit/Review, Flood Control/Drainage Channel Encroachment/Crossing Permit/Review
- **Mojave Desert Air Quality Management District** Air Quality Permit for the Colorado River Switchyard (Engine Generator if greater than 50 horsepower [hp]) – Prior to installation of engine, air quality permits for portable engines greater than 50 hp not registered under the California Air Resources Board (CARB) Portable Engine Registration Program
- **South Coast Air Quality Management District** Fugitive Dust Control Plan, air quality permits for portable engines greater than 50 hp not registered under the CARB Portable Engine Registration Program
- **Coachella Valley Water District** Utility Clearance and Encroachment Permit
- **City of Palm Springs** Applicable Local Permits
- **Southern California Gas Pipeline** Encroachment/Crossing Permit
- **BNSF Railroad** Encroachment/Crossing Permit
- **Metropolitan Water District** Line crossing permit for crossing the Julian Hinds–Mirage 220 kV transmission line and the Colorado River Aqueduct crossing

2.0 Roles and Responsibilities

This section describes the roles and responsibilities of key Project personnel with respect to the MMCRP. Figure 1 provides an organizational chart of the overall Project members responsible for implementing the MMCRP and their relationships to other staff working on the Project. The figure also establishes the preliminary lines of communication among the team members. Table 3 provides an at-a-glance summary of the personnel categories that would be involved in the mitigation implementation and monitoring effort (more detailed explanations are provided in this section).

Table 3. Summary of Roles and Responsibilities

	SCE	
	Title	Responsibility
EPM	Environmental Project Manager	Projectwide mitigation and permit compliance
EC	Environmental Coordinator	Mitigation compliance and resource coordination for each work package
SME	Subject Matter Expert	Mitigation and regulatory compliance for an area of expertise (i.e., biological or cultural resources)
FL	Field Leads	Day-to-day environmental monitoring during construction across multiple construction sites
FM	Field Monitors	Construction monitoring for mitigation compliance and implementation, including surveys, flagging, relocating resources, etc.
CMT	Construction Management Team	Manages overall project construction
CWPM	Construction Work Package Manager	Manages work package construction
CSM	Construction Site Manager	Manages onsite construction activity
	SCE Construction Contractor	Constructs the project element or work package, including mitigation implementation.
	CPUC	
PM	CPUC Project Manager	Ensures that mitigation measures are implemented.
CPUC EM	CPUC's Third-party Environmental Monitors	Monitors SCE compliance with required mitigation measures during construction
CPUC LEM	CPUC Lead Environmental Monitor	Manages the day-to-day monitoring activities of the CPUC EMs
AMM	Aspen Monitoring Manager	Manages third-party lead and environmental monitors

2.1 Organization and Roles of Each Entity

2.1.1 Southern California Edison

SCE, as the Project proponent, has primary responsibility to:

- Comply with DPV2 EIR/EIS, CRS Supplemental EIR, and Desert Sunlight Solar Project EIS requirements for mitigation monitoring, compliance, and reporting before and during construction and for post construction restoration and compensation.
- Prepare required mitigation plans and acquire applicable permits.

- Comply with requirements, conditions, and stipulations set forth in federal, state, and local easements, grants, and permits.
- Incorporate mitigation requirements, as applicable, into the Project design and contract specifications.
- Oversee contractor compliance with plans and contract specifications, including mitigation measures.

During Project construction, SCE will implement a communication protocol among its environmental project manager, environmental coordinators, subject matter experts, field leads, field monitors, the construction management team, and the construction contractor to implement and track mitigation responsibilities. This protocol will include issue identification, issue resolution, agency coordination, and other communication requirements. In addition, SCE has an internal compliance unit, Regulatory Oversight, which is based in the Project Management Office. Regulatory Oversight will provide internal oversight of contract compliance and mitigation implementation.

SCE will implement and track mitigation requirements through environmental monitoring, the construction management team, and the SCE construction contractor. The roles and responsibilities of the personnel categories are generally described below and are subject to further refinement and organization. Figure 1 provides a flowchart of the basic functional activities among SCE environmental monitoring staff, the construction management team, and the construction contractor.

2.1.1.1 Environmental Monitoring

The primary purpose of environmental monitoring is to ensure implementation of required mitigation measures during and after construction. Mitigation activities required during preconstruction will be completed by the time construction begins, including converting mitigation measures to contract specifications, detailed design plans, and other applicable plans.

Because of the sensitivity of biological resources and archaeological resources, monitoring of mitigation implementation for each of these resources will be managed with an individual focus, as described below. Other environmental resource areas will be managed as a group.

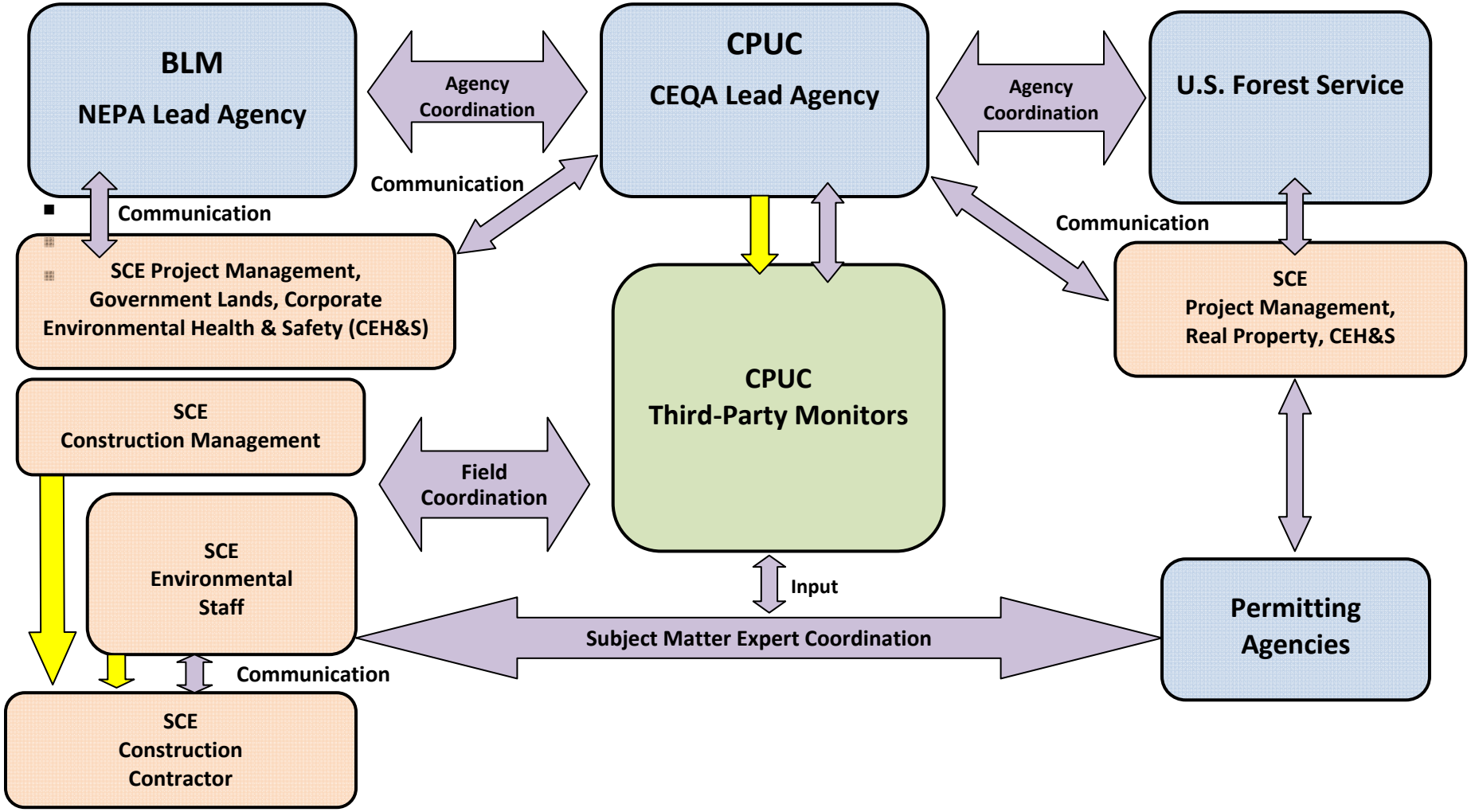
Environmental monitoring by SCE during construction will involve the following categories of resources:

- SCE environmental project manager
- SCE environmental coordinators
- SCE subject matter experts
- Field leads
- Field monitors

Close coordination with the CPUC EMs will occur at applicable levels in accordance with the communication protocol discussed in Section 3.3.

Blue Boxes – Agencies
Pink Boxes – SCE
Purple Arrows – Coordination
Yellow Arrows – Lines of Authority

Figure 1
MMCRP Organization – Lines of Communication



SCE Environmental Project Manager (EPM)

SCE's EPM, as referenced in the contact list (Attachment B), will provide the appropriate level of resources for successful implementation of the MMCRP. The EPM's responsibilities include, but are not limited to the following:

- Direct the development and implementation of preconstruction environmental mitigation, planning, permitting, and compliance activities; environmental inspection program; and environmental training.
- Ensure compliance with and monitoring compliance of mitigation and other environmental requirements during construction.
- Monitor and report post-construction restoration and compensation requirements.

The EPM will manage multiple environmental coordinators who will oversee mitigation compliance during construction of each work package.

Environmental Coordinators (ECs)

An SCE EC will be designated for each DPV2 work package and will oversee mitigation compliance for the work package. Roles and responsibilities of ECs are varied; they will serve as liaisons between the CPUC and SCE, remain fully aware of the infield monitoring effort and issues, and resolve issues as they arise. If there are Project changes, the EC will initiate the variance or similar process. Roles and responsibilities for ECs include:

- Provide oversight of applicable mitigation requirements
- Coordinate with CPUC and third-party monitors
- Provide oversight of environmental monitoring
- Coordinate with subject matter experts
- Coordinate with field leads
- Coordinate with construction management personnel
- Coordinate with SCE's internal compliance unit (Regulatory Oversight)
- Resolve issues
- Issue holds on construction

Subject Matter Experts (SME)

SCE SMEs will establish and manage the mitigation measure requirements and regulatory compliance for their areas of expertise. Each work package will have a designated biological or cultural SME. Other SMEs (e.g., water and air quality) will not be assigned to specific work packages, but will have internal oversight of mitigation implementation.

SMEs will be responsible for the management and delivery of final resource work products, resource-specific monitoring in support of construction schedules, and permit compliance. They will review their respective technical and reporting documents (i.e., survey reports, monitoring reports) and will submit final technical and reporting documents to the appropriate SCE EC and construction management personnel. Roles and responsibilities for SMEs include:

- Coordinate and consult with resource agencies
- Provide supporting data requirements for Project variances and agency permits
- Review regulatory documents that may require implementation of conditions

- Manage applicable mitigation requirements
- Coordinate with ECs
- Coordinate with and manage field leads and field monitors
- Coordinate with construction managers
- Provide oversight of monitoring efforts in their areas of expertise
- Coordinate with SCE's internal compliance unit (Regulatory Oversight)
- Review and provide quality assurance/quality control (QA/QC) of monitoring reports and documentation
- Resolve field issues and conflicts, including work stoppages and non-compliance issues (evaluate incidents and provide direction to the field leads for the appropriate corrective action, including estimated time delay and avoidance measures, in coordination with the EC, field leads, and construction manager).

In addition to the mitigation-related responsibilities, SMEs will coordinate with resource agencies for permit compliance and related requirements.

Field Leads (FLs)

FLs will oversee the day-to-day environmental monitoring activities during construction. FLs will anticipate the need for field monitors based on Look-Aheads provided by the construction contractor and construction manager and schedule monitoring resources to support construction. In addition, FLs will provide day-to-day direction to the field monitors and serve as the liaison between SMEs and field monitors.

Because biological and cultural resources are key resource areas that require protection, each work package will have a designated FL for biological and cultural resource mitigation. Other FLs will be assigned as applicable. FLs will oversee field monitors across multiple concurrent construction work crews.

Roles and responsibilities for FLs include:

- Coordinate with respective SMEs
- Coordinate with the EC
- Coordinate with the construction manager and construction contractor
- Schedule field monitors to support anticipated construction
- Provide day-to-day direction, oversight, and mentoring of field monitors based on SME guidance
- Clarify mitigation requirements and CPUC/BLM or agency/permit conditions to field monitors
- Review and provide QA/QC of daily monitoring reports
- Prepare weekly summary reports to SMEs, the EC, and the construction manager
- Coordinate with the CPUC, BLM, and regulatory agency personnel in the field
- Coordinate with SCE's internal compliance unit (Regulatory Oversight)
- Provide immediate notification of non-compliance or place 1-hour holds on construction
- Convey work stoppage information such as delay times
- Participate in tailboard meetings to focus construction contractor and monitors on issues or resources

Field Monitors (FMs)

FMs will monitor construction activities and implement mitigation requirements. Some FMs will be experts in a particular resource area, such as biological resources or cultural resources. Other FMs will be gen-

eralists responsible for monitoring compliance with mitigation requirements other than those related to biological or cultural resources.

For biological and cultural resources, FMs will conduct surveys (i.e., biological or cultural preconstruction clearance surveys), relocate biological resources, verify staking, flag or mark sensitive resources in the field, and monitor construction to ensure applicable Project requirements are met, as directed by FLs and SMEs.

FMs will prepare appropriate reports (i.e., daily monitoring forms including photos, survey reports) in accordance to SCE compliance reporting and documentation guidelines.

FMs will have the authority to place a 1-hour hold on work activity if a violation is taking place or is eminent, to investigate potential discoveries, or to provide mitigation measure guidance. Once a construction hold has begun, the FM will communicate with the SMEs, FL, EC, and the construction manager. The construction manager, in consultation with the FL, SMEs, and EC, will communicate to the construction contractor additional estimated time delays (if any) and the avoidance measures (i.e., flagged Environmentally Sensitive Area or construction site restriction). The FL will also communicate the expected time delay, avoidance measure, or resolution to the FMs.

In summary, roles and responsibilities for FMs include:

- Perform day-to-day in-field resource monitoring at each construction site
- Participate in daily tailboards
- Conduct preconstruction surveys of the construction site and areas around equipment
- Verify staking, flagging, or marking sensitive resources in the field
- Relocate biological resources
- Place 1-hour holds on construction, as needed
- Provide mitigation guidance as needed
- Document non-compliance issues
- Coordinate with the FL, SMEs, EC, and construction manager, as needed
- Prepare daily monitoring reports

The SCE monitoring team will also ensure that post-construction restoration requirements, as required by mitigation measures, are implemented and monitored.

2.1.1.2 Construction Management Team (CMT)

The CMT will oversee, manage, and coordinate with the construction contractor to ensure overall project construction is completed as required in the plans and contract, within the required schedule. The CMT will ensure that mitigation requirements, as included in the design plans and specifications, are implemented and that coordination occurs regarding work stoppages.

The CMT will be composed of the following:

- Construction work package managers
- Construction site managers
- Field inspectors
- Construction management coordinators

Construction Work Package Manager (CWPM)

CWPMs, as referenced in the contact list (Attachment B), will provide the overall direction, management, leadership, and corporate coordination for the construction work packages. The CWPM's responsibilities related to the environmental program include:

- Oversee and ensure that construction is accomplished on schedule and requirements are met
- Coordinate among engineering, construction management, and environmental staff
- Integrate environmental compliance responsibilities into all levels of Project construction
- Ensure compliance with Project policies, guidelines, and procedures
- Communicate Project activities, schedules, and public relations issues to the Project team

Construction Site Managers (CSMs)

CSMs will oversee construction contractor activities in the field. Communication will be maintained daily among SCE's engineering, procurement, and construction personnel, as well as the construction management coordinator. CSMs will ensure contractual requirements are implemented by the construction contractor within the construction schedule.

Field Inspectors

Field inspectors will provide daily monitoring of construction activities, site operation procedures, material receipt inspections, and construction specification compliance.

Construction Management Coordinators

Construction management coordinators will revise and submit the construction schedule to the FLs, verifying flagging of the disturbance areas with the construction contractor after the NTP is issued, and coordinating the daily construction schedules with SMEs, the EC, and FLs. Construction management coordinators will attend daily tailboards and construction meetings to coordinate environmental issues with the construction contractor and clarify resolutions to these issues. Construction management coordinators will provide daily, weekly, and monthly reports to the CSMs; summarize Project changes by the construction contractor for variance requests; and clarify mitigation measure compliance with the construction contractor.

Construction management coordinators will also report any violations or spills to the FLs.

2.1.1.3 SCE Construction Contractor

The construction contractor will be responsible for constructing the Project elements in each work package, including mitigation requirements, as included in the design plans and contract specifications.

The construction contractor will provide daily construction schedules and Look-Aheads to the CMT. The construction contractor will describe the types of activities planned so that the adequate monitoring resources can be provided. The construction contractor will delineate any disturbance areas prior to mobilization to a work area. The construction management coordinator will verify disturbance areas are properly staked. The construction contractor will receive Authorization to Proceed (ATP) from the CMT prior to scheduling construction activities.

Daily tailboards will provide essential communication to the Project team onsite. The tailboard will involve the construction contractor's submittal of daily activities and multiday Look-Aheads to the construction management coordinators, who will coordinate with the FLs and FMs. Sensitive resources or environ-

mental issues will be evaluated and discussed for the particular work site. Contingencies for brief delays (weather related) and longer delays (site condition related) will be evaluated in the event that an alternative course of action is needed. Tailboard discussion topics will include activities related to staying on schedule, relevant construction and mitigation topics applicable to the day's activities, and mobilization and demobilization needs for both resources and equipment. Key environmental responsibilities for construction contractor staff include:

- Review and understand the environmental requirements
- Implement environmental protection requirements and conditions during construction and maintain compliance with Project requirements
- Attend the Project's environmental training program before beginning work on the Project
- Respond to SCE EM's requests during construction

2.1.1.4 Additional SCE Roles

As discussed above, SCE has an internal compliance unit, Regulatory Oversight, which is based in the Project Management Office. Regulatory Oversight will provide internal oversight of contract compliance and mitigation implementation, independent of the CMT.

2.1.1.5 Mitigation Compliance

SCE is responsible for successfully implementing all the adopted mitigation measures in the MMCRP. Standards for successful mitigation also are implicit in some mitigation measures, such as obtaining non-discretionary permits or avoiding a specific impact entirely. Additional resource avoidance or impact minimization conditions may be imposed by applicable agencies with jurisdiction through the discretionary permit process, such as the United States Fish and Wildlife Service (USFWS), and these conditions will be managed by SCE with CPUC/BLM oversight.

SCE will inform the CPUC Project Manager in writing (i.e., variance request) of mitigation measures that are not or cannot be successfully implemented. The CPUC, in coordination with its third-party EMs, jurisdictional agencies, and SCE, will assess whether alternative mitigation is appropriate and can be implemented, and specify in writing to SCE the subsequent actions required.

SCE's project compliance and non-compliance violation levels and the specific corrective actions are defined as follows:

- ***Level 0B (Observation).***

  Observed project activities that do not currently result in non-compliance with a mitigation measure (MM) or applicant proposed measure (APM), but may result in a future incident if not addressed. Examples of observations include BMPs in disrepair, absence of a water truck onsite, loose bird netting or other deterrents in disrepair, minimally-staked work areas adjacent to Environmental Sensitive Areas***.***

- ***Level NIO (No Incident Observed).***

  Observed project activities that achieve compliance with the project's environmental mitigation measures and requirements will be documented as "Level NIO – No Incident Observed".

- ***Level O (Compliant).***

  Activities that result in incidents outside of the contractor's control (e.g., uncovering previously unknown cultural resources) and the contractor subsequent to the discovery complies with the project's applicable environmental applicant proposed measures (APMs), mitigation measures

(MMs), permit conditions, and approval (e.g., variances/addendums) requirements will be documented as "Level 0 – Compliant".

- ***Level 1 (Clarification/Correction Required).***

  Activities that result in a partial implementation of the mitigation measures and require minor clarification of mitigation measure requirements to the construction contractor, SCE's Site Representative, or the Owner's Engineer (OE's) Environmental Coordinator will be documented as a "Level 1 – Clarification/Corrective Action Required".

  If repetitive infractions of a mitigation measure continue (whether unintentional or due to lack of action) the incident(s) will be documented and elevated to the Subject Matter Field Lead. The Subject Matter Field Lead will then coordinate with the OE's Environmental Coordinator and the SCE Subject Matter Expert and/or SCE Environmental Coordinator.

  A documented pattern of repetitive Level 1 incidents may result in a subsequent non-compliance incidents being elevated to a Level 2 – Minor Incident, or a Level 3 – Major Incident.

- ***Level 2 (Minor Incident).***

  Activities that result in a deviation from the mitigation measure requirements that result in minor impacts or missed resulting in significant impacts to resources will be documented as a Level 2 – Minor Incident. A Level 2 – Minor Incident may result in a 1-hour work halt so that the monitor has time to notify the Subject Matter Field Lead(s) and the OE's Environmental Coordinator.

  The Level 2 – Minor Incident environmental issue can be resolved without a significant delay in construction activities. This work halt will give the monitor time to identify the exclusion area to avoid any further potential impacts to resources, if required, before allowing the resumption of work in a sensitive area.

  Prompt corrective action of Level 2 idenfying Minor Incident events will minimize the potential for the problem to escalate to a Level 3 – Major Incident non-compliance level. If the Contractor fails to address a minor problem in a timely manner (within 24 hours), or conditions worsen due to lack of response, the incident could be elevated to a Level 3 – Major Incident.

- ***Level 3 (Major Incident).***

  A "Level 3 – Major Incident" event is a major environmental incident that is not in compliance with the applicant proposed measures, mitigation measures, permit condition, approval (e.g., variances, addendums) requirements, and/or environmental construction specifications; violation of the law; or documented repetitive occurrences of Level 2 – Minor Incident events including but not limited to:

  - Construction activities occurring in an exclusion zone with direct impacts to sensitive or endangered species, cultural resources, human remains, or an archaeological site
  - Eminent danger or documented impact to a sensitive or endangered species
  - Repeated deviation from required mitigation measures/requirements that have been repeatedly documented as Level 2 – Minor Incidents
  - Improper installation of erosion or sediment control structures resulting in sedimentation or impacts to water quality or putting sensitive resources at risk

  Level 3 events will require the monitor to halt construction (1-hour work halt) to avoid impacting a sensitive resource or to avoid a major environmental incident. The Subject Matter Field Lead(s), the OE's Environmental Coordinator, or the SCE Site Representative will be immediately notified. The

SCE Subject Matter Expert and the SCE Environmental Coordinator will also be notified to assist in providing a required course of action and coordination with the CPUC/BLM/other resource or jurisdictional agencies. The Kenny Environmental Coordinator or OE's Construction Site Manager will communicate to the construction contractor any additional time delay (greater than 1-hour work halt) and environmental avoidance measures to be implemented by the construction contractor.

The OE's Construction Site Manager will discuss time constraints, avoidance measures, and the construction schedule with the contractor.

2.1.2 California Public Utilities Commission

2.1.2.1 CPUC Project Manager (PM)

The CPUC PM (see Attachment B, Contact List) has the overall responsibility for ensuring that mitigation measures are implemented as adopted by the CPUC. The CPUC PM will determine the effectiveness of the MMCRP based on the implementation of the measures included in the mitigation monitoring table. The CPUC delegates field monitoring and reporting responsibilities to third-party EMs during construction and will oversee their work through telephone calls and review of daily and weekly status reports. The CPUC PM will be notified of all noncompliance situations and may suggest measures to help resolve the issue(s). All variance requests will be submitted to the CPUC PM for review and approval.

The CPUC PM will issue NTPs for construction of each work package identified by SCE. Where a NTP covers BLM, California Department of Fish and Game (CDFG), or other jurisdictional lands, the CPUC's NTP does not authorize construction to start, but only documents compliance with all relevant mitigation measures and permit conditions. *No construction may occur on BLM or other jurisdictional lands without specific approval by those agencies.*

2.1.2.2 CPUC Third-Party Monitors

The overall monitoring program will be administered under the direction and oversight of the CPUC PM. The CPUC will delegate daily monitoring and reporting responsibilities to a third-party monitoring program (Aspen). Individual roles are defined in Attachment B, Contact List. The number of third-party monitors (CPUC EMs) and frequency of site inspections will depend on the number of concurrent construction activities and their locations with respect to sensitive resources and land uses, and compliance with Project mitigation measures and permit conditions during construction.

SCE's environmental monitoring team has primary responsibility for ensuring that construction activities are conducted in accordance with approved Project mitigation measures, compliance plans, and permit conditions. The role of the CPUC third party monitors (Aspen) is to ensure and document that compliance is being achieved using verbal and written communications.

- **Aspen Monitoring Manager.** The Monitoring Manager supervises Aspen's Lead and Environmental Monitors, as well as determines the appropriate level of inspection frequency and is responsible for weekly report preparation. The Monitoring Manager also serves as the main point of contact with the CPUC Project Manager for major issues and noncompliance discussions.
- **Lead Environmental Monitor (CPUC LEM).** The CPUC LEM will oversee the day to day monitoring activities of the EMs, be the primary point of contact with in-field agency personnel, and coordinate preparation of draft weekly reports. The LEM will have the most direct contact with the CPUC Project Manager on day-to-day issues.
- **CPUC Environmental Monitors (CPUC EMs).** CPUC EMs will be an integral part of the project team and will stay apprised of construction activities and schedule changes, and will monitor construction

activities for compliance with project mitigation measures, compliance plans, and permit conditions. The CPUC EMs will document compliance through maintaining daily logs and use of a mitigation measure tracking table. The CPUC EMs will also provide input for the draft weekly reports. The CPUC EMs shall note problems with monitoring, notify designated project members, and report the problems to the CPUC Project Manager. The enforcement and shut-down authority of the CPUC EM in the field is limited to issues that address imminent safety issues or resource danger. All other issues will be brought to the attention of the SCE field representative to address appropriately.

2.1.3 Bureau of Land Management

As the NEPA Lead Agency, BLM is responsible for ensuring that mitigation measures are implemented on BLM land. BLM will work with the CPUC and SCE in monitoring mitigation during construction of the Project and may use the CPUC's environmental contractor or monitoring staff for compliance monitoring on its lands. BLM's resource specialists may also have a field presence for Project inspection and to review and resolve on-the-ground issues that may arise on BLM land. No activities may occur on BLM-managed lands without BLM approval.

BLM Field Manager

The BLM Palm Springs/South Coast Field Manager is the authorized officer to make BLM decisions for this Project. The BLM Field Manager will issue all authorizations for the use of BLM land.

BLM Project Manager

The BLM Project Manager will report to the BLM Field Manager and will coordinate the implementation of the Project among BLM staff at the field, district, and state office levels. The BLM Project Manager is the primary point of contact with SCE, as well as governmental agencies, for review of documents, reports, mitigation progress, and Project planning.

BLM Resource Specialists

Resource specialists will be involved with implementation of this Project, and they will assist the BLM Project Manager and EMs with evaluation of conditions and Project status relative to mitigation requirements or other stipulations. BLM resource specialists will include archaeologists, biologists, geologists, and other staff as required.

2.1.4 United States Department of Agriculture Forest Service

The Devers-Valley transmission line crosses lands under jurisdiction of the USDA FS within the SBNF and has an existing FS-issued easement. The FS will document the general easement conditions that apply to SCE for construction, maintenance, and use of the 500 kV transmission line along with ancillary improvements within the SBNF. The easement is signed by the Forest Supervisor.

The easement incorporates the appropriate terms and conditions that apply to National Forest System (NFS) lands and is monitored and enforced by the FS. SCE FMs will monitor construction activities on SBNF lands to ensure compliance with requirements of the FS easement and applicable mitigation measures. The CPUC EMs may coordinate with the FS and may serve as field monitors for the CPUC on NFS lands, or the FS may use monitoring staff of its choosing. No activities may occur without authorization from the FS.

Authorized Officer

The Forest Supervisor will issue a revised easement when the Project is approved by the FS and will be responsible for the overall administration of easement requirements. Decisions to amend the easement are made at this level.

Authorized Officer for Administration

The District Ranger is authorized to administer the day-to-day activities associated with the easement. The District Ranger may approve plans and activities as required under the easement, will issue NTPs for activities on NFS lands, and will issue letters of non-compliance if necessary.

Easement Administrator

District staff will handle easement administration for the District Ranger and Forest Supervisor, including preparation of correspondence, plan review, NTPs, and field inspections.

Easement Monitor

The Easement Monitor will monitor compliance with easement requirements in the field. The Easement Monitor documents observations and provides summaries of key findings to the Easement Administrator and Authorized Officer. Several Easement Monitors may be assigned to the Project.

Project Coordinator

The Project Coordinator reports to the Forest Lands Staff Officer and will coordinate the compliance with easement conditions among the various staff units in the SBNF. The Project Coordinator is the primary point of contact with SCE and other agencies for plan review and approval.

Resource Specialists

Resource specialists may be involved with plan review and approval under the easement, as well as assisting the Easement Administrator and Easement Monitors with evaluation of conditions on the ground relative to easement conditions. Resource specialists may include engineers, botanists, biologists, earth scientists, fuels specialists, and other staff as required by the easement.

2.1.5 United States Army Corps of Engineers (USACE)

Section 404 of the Clean Water Act (CWA) (33 U.S.C. Section 1251 et seq., formerly the Federal Water Pollution Control Act of 1972) authorizes the USACE to regulate the discharge of dredged or fill material to the waters of the United States and adjacent wetlands associated with the approved Project. The USACE issues individual site-specific or general (nationwide) permits for such discharges. USACE issuance of a Section 404 permit triggers the requirement that a Section 401 certification must also be obtained.

The CPUC EMs are familiar with the ACOE permit conditions and check for implementation in the field. If an issue arises during construction, the CPUC Ems, along with SCE, will notify the ACOE representative so that he/she can take action. In addition, the ACOE representative will be asked if he/she would like to be on the weekly report distribution. No activities that would potentially affect waters of the U.S. or adjacent wetlands may occur until the Section 404 permits are approved and certified.

2.1.6 United States Fish and Wildlife Service (USFWS)

Under Section 7 of the Federal Endangered Species Act (FESA) of 1973, as amended (16 U.S.C. 1531 et seq.) and the Fish and Wildlife Coordination Act, BLM has consulted with USFWS and the CDFG (see Section 2.1.7). As part of the FESA Section 7 consultation process, USFWS issued a Biological Opinion (BO) in January 2011 in response to the Biological Assessment (BA) submitted by BLM, the NEPA lead agency (see Attachment K for a copy of the USFWS BO). SCE will implement requirements in the BO, and the SCE SME will ensure compliance with the BO.

Where conservation measures relate to construction activities the CPUC EMs will ensure that the conservation measures in the BO are implemented. If a potential violation occurs during construction, the CPUC EMs will notify the USFWS representative(s) (as well as the CPUC and BLM PMs) so that appropriate action can be taken. USFWS representatives will also be consulted by the CPUC PM if an issue arises relevant to an adopted conservation measure to protect federally listed species, or if any species addressed in the BO are affected during construction in a manner not anticipated in the BO. In addition, the USFWS representative(s) will be included in the weekly report distribution. Long-term monitoring during operations and maintenance will be addressed through consultation and a plan with USFWS.

2.1.7 California Department of Fish and Game (CDFG)

The CDFG has jurisdiction over the conservation, protection, and management of California's fish, wildlife, native plants, and the habitats necessary for their sustenance. CEQA lead agencies have a legal obligation to consult with CDFG as to their projects' impacts on biological resources.

CDFG issues California Endangered Species Act (CESA) Incidental Take Permits pursuant to Fish and Game Code Sections 2081(b) and 2081(c), and California Code of Regulations, Title 14, Subdivision 3, Chapter 6, Article 1, beginning with Section 783. CESA prohibits the take of any species of wildlife designated as an endangered, threatened, or candidate species by the Fish and Game Commission. However, the Department may authorize the take of such species by permit if the conditions set forth in Fish and Game Code Sections 2081(b) and 2081(c) are met. (See also California Code of Regulations, Title 14, Section 783.4.)

As part of the CESA Section 2081 permitting process, SCE biologists consulted with CDFG during preparation of the BA in support of the BO. CDFG was also consulted by the CPUC during development of the mitigation measures in the EIR/EIS. In addition, measures and standards were developed by CDFG as part of its permit conditions for managing the listed species, including full mitigation for impacts, funding of implementation, and monitoring of mitigation measures.

The California Fish and Game Code §3511, §4700, §5050, and §5515 provide for the highest level of protection for mammals, birds, reptiles and amphibians, and fish listed as Fully Protected. Designated species may not be taken or possessed at any time. CDFG cannot issue permits that authorize the "take" of any fully protected species, except for certain circumstances such as scientific research and live capture and relocation to protect livestock.

Two statutes outside of CESA provide protection for birds, nests, and eggs: Fish and Game Code §3503 prohibits the taking, possession, or needless destruction of nest, eggs, and birds, and Fish and Game Code §3503.5 prohibits the taking, possession, or destruction of birds of prey (*Falconiformes* and *Strigiformes*) or their nests and eggs.

CESA's protection for plants is subject to the Native Plant Protection Act (NPPA, §§ 1900-1913). The NPPA affords the CDFG Commission the authority to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take. CESA expands on the original NPPA and enhances legal protection for plants, but the NPPA remains part of the Fish and Game Code.

The CDFG will require a Streambed Alteration Agreement, pursuant to Section 1600 *et seq.* of the Fish and Game Code, prior to the commencement of any activity that will substantially change the bed, channel, or bank (which may include associated riparian resources) of a river, stream or lake; use materials from a streambed; and/or result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake. The CDFG's issuance of a Streambed Alteration Agreement for a project that is subject to CEQA requires CEQA compliance actions by the Department as a Responsible Agency. As a Responsible Agency under CEQA, CDFG may consider the local jurisdiction (Lead Agency's) CEQA documentation for the project.

The CPUC EMs will coordinate with the CDFG, as needed during construction. The CPUC EMs are familiar with the CDFG permit conditions and will ensure implementation in the field. If an issue arises during construction, the CPUC EMs will notify the CDFG representative (as well as the CPUC and BLM PMs) so that appropriate action can be taken. In addition, the CDFG representative will be included in the weekly report distribution.

3.0 Communication

Communication is a critical component of a successful environmental compliance program. To avoid Project delays and possible shut-downs, environmental and construction representatives will interact regularly and maintain professional, responsive communications at all times. Similarly, SCE representatives will coordinate closely with CPUC EMs throughout the monitoring effort to demonstrate that issues are addressed and resolved in a timely manner. Therefore, this section provides a communication protocol to accurately disseminate information on ongoing surveys and mitigation measures, construction activities, and planned or upcoming work to all levels of the Project.

3.1 Pre-Construction Compliance Coordination

SCE is required by the terms of the mitigation measures and the permitting requirements of other regulating agencies to prepare plans and obtain approval of these plans, in addition to performing surveys and studies prior to construction. SCE will conduct meetings, conference calls, and site visits with the CPUC, technical representatives of the CPUC third-party monitors, other agencies (such as BLM, SBNF, etc) and SCE's internal Regulatory Oversight unit. The purpose of the pre-construction coordination process is to discuss and document SCE's submittal status, document the findings of data reviews and jurisdictional agency approvals, review SCE submittals, and document the status of mitigation measures as they apply to the Project or phased work packages, and discuss refinements to the Project. The goal of the pre-construction process is to complete all required actions so the CPUC and other agencies, as appropriate, can issue NTP authorizations for each Project work package.

3.1.1 Pre-Construction Activities

A pre-construction meeting was held on August 18, 2010 with the CPUC, BLM, SCE, and CPUC EMs to review the MMCRP and mutually agree upon the Project's communication protocol. Based on discussion at the meeting and ongoing input from each party, this MMCRP has been updated. Other pre-construction activities include the following:

- Inclusion of mitigation requirements into contract design and specifications
- Field verification of each tower and construction site for the purpose of making tower, spur road, and pulling/splicing location siting adjustments based on the presence of sensitive resources, including biological and cultural resources
- Field verification of each construction yard site and helicopter yard site for site selection purposes, based on the presence of resources, including biological and cultural resources

3.2 Agency Compliance Website

An interactive website is being set up by the CPUC to make available current versions of reports, maps, and other documents prepared for mitigation compliance. The website will facilitate sharing of data and status reports, which change almost daily, especially during the pre-construction period, but also during Project construction.

The secured website will be available to all interested lead, cooperating, and responsible agencies (see Table 1). Access will be by assigned password and e-mail address.

The website will include the following documents:

- Action item table for tracking status of submitted items and items to be completed by various parties
- A status table for tracking status of compliance with each mitigation measure

- SCE's current versions of Project design drawings and maps, consistent with critical infrastructure information requirements.

3.3 Communication Protocol During Construction

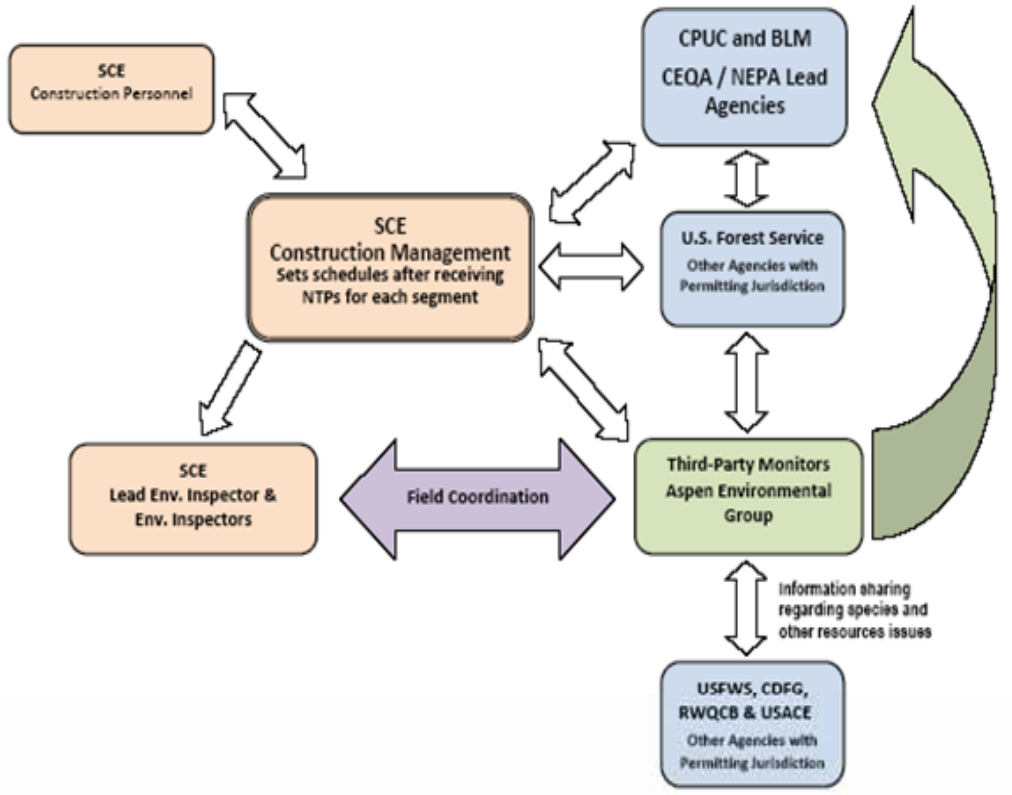
To ensure that the CPUC EMs can get accurate information on ongoing surveys, construction work, and schedules, the following protocols have been formulated:

- The CPUC EMs' primary point of contact will be SCE's FLs. If the FL is not available, the FM will be the point of contact. If issues can't be resolved at the FL or FM level, the issue will be elevated to the CPUC EM Project Manager/SCE SME and EC via e-mail or telephone.
- SCE (FLs) will inform CPUC EMs of all current and planned survey and construction activity, including status of permits and activity locations, in a timely manner. Timely notification of activity is that which allows reasonable response time for agency monitors to be present for that activity. Notification will correspond to organization and roles for each entity as identified in Section 2.1.
- The CPUC LEM and other designated agency representatives or staff can talk to anyone on the construction site to ask questions about their activity, but the construction personnel may opt to refer him/her to the CWPM or CSM. The SCE CSM and CWPM are the appropriate contacts for information on construction activity schedules or construction practices.
- SCE will provide a list of all construction monitoring personnel and managers, identified by work package or component, title, and contact information for each person, to the CPUC LEM. Updated lists will be distributed to keep all parties informed of monitor and staff additions/changes, as well as construction scheduling changes. This list of personnel, subsequent updates, and construction scheduling changes will be distributed to all persons on the list throughout the construction process.
- CPUC EMs will continue to report compliance concerns first to SCE FLs and SCE FMs and give them time to contact resource agencies and/or resolve compliance issues. FLs may coordinate with the SCE SMEs in resolving issues in accordance with SCE's monitoring procedures. Documentation of each of these communication efforts, along with documentation of subsequent actions to achieve compliance, will be reported. Because SCE is the permit holder with jurisdictional agencies, the SCE SMEs will consult with applicable resource agencies. However, if the CPUC EMs have an ongoing unresolved concern about a mitigation measure that could affect a permit condition or could result in resource endangerment, the SCE SME, in the presence of CPUC EMs, will call the appropriate resource agency to discuss the issue. The SCE SME will take the lead in the coordination effort and in resolving the issue.
- The resource agencies will be notified immediately (within 24 hours) by the SCE SME of any substantive issues (e.g., non-compliant events and special-status plant or animal species or bird nest sightings) regarding their respective resources and activities taken to resolve the issue, consistent with permit requirements. In addition, the CPUC EM will receive immediate notification if they are not already aware of the issue or are not at the specific location. Special-status species observations during focused surveys in areas of active construction should be reported in the same manner as daily monitoring observation (via SCE's database reporting system or by means of other agreed upon methods). Special-status species observations in areas where construction has not yet began shall be summarized in preconstruction biological reports submitted to the CPUC for review and approval.
- Prior or subsequent to immediate agency notification, SCE SMEs will develop a plan to resolve the issue and will follow up with the respective agencies to explain their strategy and receive agency approval.
- SCE will expeditiously submit a preliminary electronic notification and/or provide verbal notification of a suspected event, followed by a timely submittal of a final verbal or electronic notification that properly characterizes the event, as described in Section 4.0.

- If "take" is imminent or if there is a danger/hazard, the CPUC EM can request that work be stopped in that area immediately (as long as it can be done safely); this request should be made to the CSM, CWPM, SCE FL, or SCE FM. At any time, anyone can order an activity to be halted temporarily if take or a hazard is imminent.
- Weekly conference calls will include a discussion of construction and compliance activities, with CPUC EMs, SCE FLs, and agency staff participating.

The flowchart in Figure 2 illustrates how information generally flows during construction.

Figure 2
General Communication Protocol During Construction



3.4 Weekly Progress Meetings During Construction

SCE will conduct weekly field meetings with construction managers, contract administrators, contractor supervisors, and SCE's environmental representatives to discuss work completed, work anticipated for the following period, and the status of mitigation measures. The weekly field meetings will also be a forum for discussing environmental compliance issues or concerns with the construction contractors and CMT. SCE may request that CPUC's and other agency's EMs participate in the meeting to help resolve issues, if any, that may have arisen during the previous period. Alternatively, SCE or CPUC's EMs may recommend a separate meeting to discuss mitigation, variance requests, or other Project-related issues. These meetings may be held at the field trailer or on the Project ROW to discuss a site-specific issue.

In addition to the weekly progress meetings conducted at the field level, the SCE EPM, SCE construction manager, SCE EM, and the CPUC Lead EM or CPUC PM, BLM, or other jurisdictional agencies may partic-

ipate in a weekly teleconference call. The weekly teleconference calls would be similar to the weekly progress meeting; however, the conference calls would focus on the Mitigation Monitoring Program.

3.5 Daily Communication During Construction

Many of the problems encountered during construction can be resolved in the field through regular communication among SCE FLs, FMs, construction contractors, and CPUC EMs. Field staff will be equipped with cell phones and will be available to receive phone calls at all times during construction. A project contact list has been included in Attachment B. The organization charts depicted in Section 2.0 and communication protocol in Section 3.3 illustrate the possible lines of communication that may be used during construction. The lines of communication may be revised as the Project progresses to ensure successful communication. The following provides additional guidelines to ensure effective communication in the field.

3.5.1 CPUC EMs

The CPUC EM's primary point of contact in the field is the SCE FL. The CPUC EM will contact the SCE FL if an activity is observed that conflicts with one or more of the mitigation measures, so that the situation can be corrected. If the CPUC EM cannot immediately reach the SCE FL, the FM, construction manager, SCE SME, or SCE EC will be contacted to address the issue. Similarly, the CPUC EM will contact the SCE FL or EC for information on where construction crews are working, the status of mitigation measures, and for schedule forecasts. The CPUC EM may discuss construction procedures directly with the construction contractors; however, SCE may require its construction contractors to defer questions to an onsite SCE representative. In all cases, the CPUC EM will contact the designated SCE representative if a problem is noted that requires action from the construction contractor. The CPUC EM will not direct the construction contractor, but will contact the SCE FL or FM. In the event an activity imposes an imminent threat to a sensitive resource or undue risk (e.g., stopping a clearing crew from unknowingly cutting coastal sage scrub in an exclusion area), the CPUC EM will try to contact the SCE FL or FM, who has the authority to stop work; however, if they are not immediately available, the CPUC has the authority to stop work at that location only assuming it is safe to do so.

3.5.2 SCE

SCE will provide the CPUC EM with a list of construction monitoring personnel and construction supervisory staff to contact regarding compliance issues. The contact list will include each person's title, responsibility, and whether their position is work package specific. The contact list will be updated as new personnel are assigned to the Project and redistributed as necessary.

SCE will prepare and distribute a weekly environmental compliance status report for distribution to key team members, including the CPUC. The CPUC EM will review the weekly report to ensure that the status of mitigation measures is consistent with observations in the field. Questions regarding the status of mitigation measures will be directed to the SCE EC**.** The weekly environmental compliance status report will also be a tool to keep all parties informed of construction progress and schedule changes.

It should be noted that daily and weekly compliance reports will also be prepared by CPUC EMs, as described in Section 4.1.2.

3.5.3 BLM

As discussed in Section 2.1.3, BLM will work with the CPUC and SCE in monitoring mitigation during construction of the Project and may use the CPUC's environmental contractor or monitoring staff for com-

pliance monitoring on its lands (see the discussion under Section 3.5.1 above). BLM's resource specialists may also have a field presence for Project inspection and to review and resolve on-the-ground issues that may arise on BLM land and its primary point of contact in the field is the SCE FL.

3.6 Coordination with Other Agencies Before and During Construction

As discussed in Section 2.0, several local, state, and federal agencies have jurisdiction over portions of the Project. In addition, many of the mitigation measures were derived from specific permit conditions or agency input. The CPUC EM, along with SCE, will be responsible for contacting resource agencies and immediately notifying them of issues regarding their jurisdiction.

3.6.1 Coordination During Construction

CPUC EMs may request copies of e-mail correspondences, phone logs, or other documentation between SCE and resource agencies to avoid direct involvement from CPUC EMs. However, if an unresolved issue regarding compliance with a mitigation measure affects a permit requirement under the jurisdiction of a resource agency, the CPUC EM will contact the SME who has responsibility for contacting the agency to discuss resolution, consistent with the communication protocol in Section 3.3.

3.6.2 Interagency Conference Calls

During the pre-construction process or during construction, the Lead Agencies and/or SCE may determine that conference calls may be necessary or appropriate to discuss the status of specific mitigation compliance as they relate to permit requirements. These calls will be scheduled in advance, to the extent feasible, by e-mail, and will involve applicable SCE SMEs. An agenda will be provided before each call.

3.7 Contact List

A contact list has been included as Attachment B. The contact list includes the names of SCE and CPUC EMs, project managers, supervisory staff, and other members of the team. The list also includes phone numbers, fax numbers, and e-mail addresses where team members can be reached during construction. The contact list will be updated periodically and redistributed to the project team.

4.0 Environmental Compliance and Field Procedures

4.1 Mitigation Measures Compliance and Reporting

4.1.1 Pre-Construction Compliance Verification

SCE is required by the terms of the mitigation measures and requirements of various other regulating agencies to prepare plans and obtain approval of these documents, in addition to performing various surveys and studies prior to construction. Copies of such documentation will be retained by the CPUC third-party monitors, and will be provided to the CPUC with all files at the completion of the project. The plans, surveys, studies, and other documentation required to be completed by SCE before construction are listed in the Mitigation Measure/Applicant Proposed Measure tables in Section 6.3 and as presented in Attachment H.

While these documents are being reviewed by the approving agencies, they are also reviewed by the CPUC. Compliance with all pre-construction mitigation measures and APMs presented will be verified prior to construction, and construction may not start on any work package before SCE receives a written NTP from the CPUC Project Manager.

The CPUC third-party monitors, including project management staff and the technical experts, will review and provide comments on all mitigation plans and reports. Resource agencies will also be involved in the review of applicable plans and reports, primarily restoration related, and will provide comments. Comments on these documents will be provided to SCE to ensure that they adequately accomplish the intended reduction in impacts. For required local and State agency permitting/consultations, the CPUC third-party monitors will track SCE's progress as it relates to SCE's construction plans and project mitigation and permitting requirements. Based on SCE's construction plans, CPUC may authorize construction to begin on a phased basis, and the CPUC third-party monitors will handle pre-construction compliance review accordingly. CPUC may issue NTPs for construction of each phase separately, as soon as pre-construction compliance is satisfactorily accomplished for that phase.

IMPORTANT: The CPUC will not authorize construction to begin until all pre-construction requirements have been fulfilled for a given phase. To save time, SCE should identify all required work space needs for each phase of construction prior to the start of active construction, so that the locations and their use can be included in the NTP. Refer to Section 4.2.2.

4.1.2 Notice to Proceed Procedures

The NTP approval(s) shall document that pre-construction mitigation measure requirements, applicable survey and study, as well as project permit requirements have been met. In consideration of linear or phased projects, more than one NTP can be requested for the Project. Each NTP request will be applicable to a defined aspect or component of construction. In some instances, compliance with every requirement cannot be met prior to NTP issuance, and in such cases, the NTP may be conditioned to define actions to be taken and documented prior to construction. Therefore, an NTP may be issued for a particular work package conditioned upon compliance with applicable pre-construction mitigation measures and permits.

CPUC will review the NTP request and pre-construction requirement submittals to ensure that all of the information required to process the approval is included. CPUC may need additional information to process the NTP approval. Copies of permits from other resource agencies will be provided. . In general, an NTP request must include the following information:

- A description of the work
- Detailed description of the location, including maps, photos, and/or other supporting documents
- Verification that all mitigation measures, permit conditions or requirements, APMs, project parameters, or other project stipulations have been met, apply, or do not apply to the work covered by the NTP request
- In the case where some outstanding compliance items cannot be met prior to issuance of the NTP, an outline of outstanding submittals and how they will be met prior to construction
- Up-to-date biological resource surveys or a commitment to survey and submit results prior to construction
- Cultural resource surveys or verification that no cultural resources will be significantly impacted
- Copies of permits issued by other agencies
- Date of expected construction and duration of work

Please note that variance requests can be submitted with the NTP request for incorporation into the NTP (please see Section 4.2.2 for variance submittal requirements).

4.1.3 Compliance Reporting During Construction

As described in Section 2, the CPUC EMs will perform compliance inspection throughout the construction period to ensure compliance with all applicable mitigation measures, plans, permits, and conditions of approval of the CPUC. Site visits may be coordinated with SCE or conducted unannounced. Supplemental information provided by SCE, including pre-construction submittals, survey reports, weekly reports, meeting notes, and agency correspondences, will also be used to verify compliance.

The CPUC EMs will document observations along the ROW through the use of field notes and digital photography. The photographs are to be provided in the weekly reports and correlate to a discussion of specific construction or compliance activity. In addition, field inspection forms will be utilized in the field to document compliance of specific crews, construction activities, or resource protection measures. The forms will provide a standardized checklist to facilitate inspections, as well as a list of mitigation measures that were verified during the site visit. Information gathered from the inspection forms and field notes will be used to generate weekly status reports and update the status of mitigation measures listed in Section 6.3. A sample site inspection form has been included in Attachment C. Weekly reports will be provided to all permitting agencies via e-mail and/or posted on a collaboration website during construction.

4.1.3.1 Compliance and Non-Compliance Violation Levels

Project compliance and non-compliance violation levels and the specific corrective actions by the CPUC monitoring team are defined as follows:

- ***Level A Compliance.*** This level indicates that all mitigation measures and permit conditions are being complied with and there are no violations. No corrective action is necessary.
- ***Level B Non-Compliance.*** One aspect of a mitigation measure is not in compliance, resulting in only partial implementation of a mitigation measure or permit condition, but no significant impact. An oral warning shall be issued to SCE's EC (or assigned designee such as an FL) and corrective action shall be required within 1 day or a required maximum period, as determined by the CPUC EM. If corrective action is not taken within the stated period, a Project Memorandum will be issued. Level B Non-Compliance**.** One or more aspects of a mitigation measure are not in compliance, making the mitigation or permit condition ineffective and resulting in minor impacts. If allowed to continue, the

non-compliant activity could result in a significant impact over time. An oral warning followed by a Project Memorandum shall be submitted to SCE's EC (or assigned designee). Corrective action shall begin by the next construction day or a stated maximum period, as be determined by the CPUC EM. If corrective action is not initiated by the next construction day, a Non-Compliance Report (NCR) shall be issued.

- ***Level C Non-Compliance.*** One or more of the aspects of a mitigation measure or permit condition are not in compliance, and the implementation of a mitigation measure is deficient or non-existent, resulting in potentially significant impact(s) or an immediate threat of major, irreversible environmental damage or property loss. An oral warning, followed by an NCR, shall be submitted to SCE's EC (or assigned designee). Corrective action shall begin immediately.

SCE's monitoring system is described in Section 2.1.1.5 (Mitigation Compliance).

4.1.3.2 Reporting and Documentation

The SCE environmental monitoring effort and SCE's internal auditing program (Regulatory Oversight) will be implemented based on the previously listed levels. All non-compliant activity will be reported by Aspen to the CPUC Project Manager via immediate notification or daily or weekly reporting based on the severity of the non-compliant event, consistent with the communication protocol in Section 3.3. No Aspen personnel (PM, CPUC Lead EM, or CPUC EM) has the authority to shut down or restart construction activities. However, the CPUC EM has the authority to redirect work if an immediate threat to safety or a sensitive resource is imminent. Based on the severity of a given infraction or pattern of non-compliant activity, the CPUC PM has the authority to shut down project construction activities. If a shutdown of construction activity occurs, construction shall not resume until the CPUC PM authorizes it.

The CPUC EM shall document all observations and communications in a logbook and will determine whether the observed construction activities are consistent with mitigation measures, APMs, and project parameters, and permit conditions, as identified in the Final EIR/EIS and adopted by the CPUC. All compliance levels and issues will be documented in the daily/weekly reports. The CPUC EM shall not direct the work of a construction contractor or subcontractor. Construction activity that deviates from mitigation measures, particularly when the activity puts a resource at risk, will be considered non-compliant. A notice of non-compliance may also be issued if a mitigation measure is not implemented according to the timing restrictions listed in the mitigation table. Examples of non-compliant activities include, but are not limited to the following:

- Use of new access roads, staging areas, or extra workspaces not identified on the project drawings or approved for use during construction
- Encroachment into an exclusion zone or sensitive resource area designated for avoidance
- Brush clearing outside the approved work limits
- Grading, foundation, or line work without required biological preconstruction surveys or biological monitor onsite
- Improper installation of erosion or sediment control structures if such structures places a sensitive resource at risk
- Discharge of sediment-laden trench or foundation hole water into a water body or storm drain

The CPUC EM will immediately notify the designated SCE EC or FL of a non-compliant activity that requires immediate corrective action. A Non-Compliance Report will be sent to SCE EPM from the CPUC EM that outlines the incident, lists actions required to bring the activity back into compliance, and provides a timeline for follow-up. Through the issuance of Project Memoranda and Non-Compliance

Reports, patterns of compliance issues can be discerned, preventative measures can be developed, and remedial work, if needed, can be scheduled.

If a construction activity or observed resource protection measure only slightly deviates from project requirements and does not put a resource at immediate risk, the CPUC EM may elect to issue a verbal notification or a Project Memorandum to correct the issue. Construction activities that could result in a verbal notification or Project Memorandum include, but are not limited to the following:

- Failure to properly maintain an erosion or sediment control structure, but the structure remains functional
- Use of an existing unapproved access road (first offense)
- Project personnel beginning work on the ROW without proof of training
- Work outside the approved work limits where the off-ROW incident is within a previously disturbed area, such as a gravel lot

The following list and the flowchart in Figure 3 below take the communication protocol laid out in Section 3.3 and the compliance/non-compliance levels above, and further illustrates an example of the communication process and actions that will occur when the CPUC EM identifies a non-compliant event that is unobserved by the SCE FL or Field Monitors regarding biological resources during construction. If no sensitive species or resources are affected by the non-compliant event, Steps 5 and 6 will not be required. A non-compliant event regarding other environmental resources may involve other applicable agencies.

Step 1. Verbally notify SCE and request immediate correction.

Step 2. Inform CPUC/BLM of status and CPUC PM, and USDA FS if on SBNF land.

Step 3. Issue verbal warning or prepare written Project Memorandum (Level 2) or Non-Compliance Report (Level 3), depending on severity, and deliver it to SCE.

Step 4. If written notification issued, inform CPUC/BLM of the Project Memorandum or NCR. Initiate coordination between CPUC/BLM, and SCE to resolve the issue. CPUC PM, request a Stop-Work Order from CPUC/BLM if required.

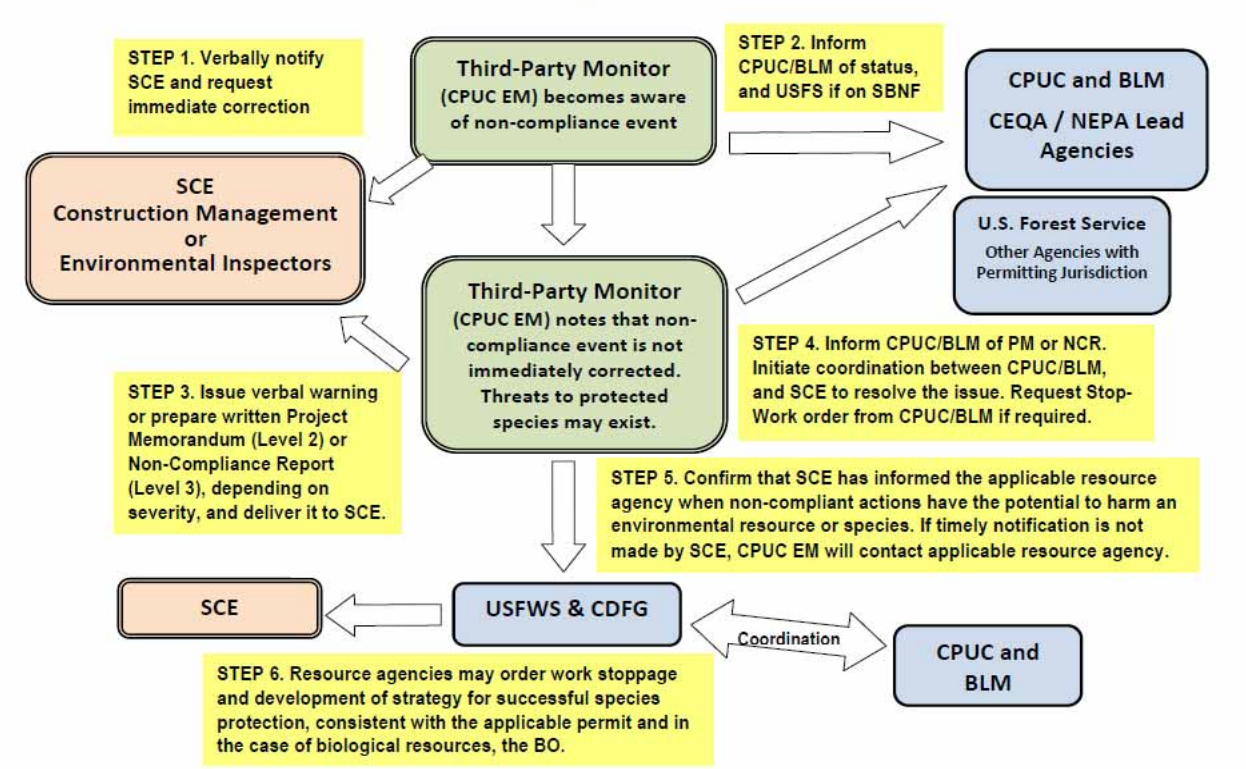
Step 5. Confirm that SCE has informed the applicable resource agency when non-compliant actions have the potential to harm an environmental resource or species (outside the reporting process associated with incidental takes as permitted by the resource agency). If timely notification is not made by SCE, the CPUC EM will contact the applicable resource agency.

Step 6. CPUC/BLM and/or resource agencies may order work stoppages and development of strategies for successful resource/species protection, consistent with the applicable permit and in the case of biological resources, the BO.

The following steps describe the process in which disputes regarding mitigation implementation between CPUC and SCE are resolved. The resolution process could occur concurrently with the communication protocol during construction for non-compliant events.

Separate enforcement steps by the regulatory agencies may not follow these steps.

Figure 3
Communication Protocol During Construction Non-Compliance Events



The MMCRP will likely reduce or eliminate many potential disputes. However, even with the best preparation, differences in mitigation implementation approaches may occur. In such event, the following procedure will be used:

Step 1. Differences in mitigation implementation approaches, disputes, and complaints (including those of the public) should be directed to the CPUC PM for resolution. The PM will attempt to resolve the dispute with SCE's Environmental Project Manager.

Step 2. Should this informal process fail, the CPUC PM may initiate enforcement or compliance action to address deviations from the Project or adopted Mitigation Monitoring Program, if they have occurred without prior authorization or variance.

Step 3. If the differences, 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, the 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) will meet or confer with the filer and other affected participants to resolve the dispute. The Executive Director will issue an Executive Resolution describing the decision, and serve 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.

Involved parties may also seek review by the Commission through 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.

Separate enforcement steps by the regulatory agencies may follow different steps or procedures. The CPUC PM and the SCE Environmental PM or SME will coordinate with other permitting agencies for issues outside the CPUC jurisdiction.

The dispute resolution process could occur concurrently with the communication protocol during construction for non-compliant events (described in Section 4.1.4.1 above).

Various unanticipated events may also occur that impact project personnel, public safety, or other resources. These events may not result in a deviation or violation of a mitigation measure or permit condition, but it is important that these events are reported to the appropriate agencies so they may respond to questions or concerns from the public. Accordingly, SCE will immediately report these events to the CPUC, BLM, and other regulatory agencies as appropriate upon verification of such information.

A Reportable Event is any event an implemented mitigation measure failed to address, an occurrence that could result in a risk to public health and safety, or any event requiring emergency response, or is a 'near miss' event involving a helicopter or large piece of construction equipment and, in SCE's reasonable judgment, had the potential to result in serious bodily harm or death. The following list and the flowchart in Figure 4 illustrate the protocol for communicating these events.

Step 1. Project or contractor personnel witnessing a potential Reportable Event notifies the Field Lead (FL), Construction Site Manager (CSM), or work-related/immediate supervisor for the day.

Step 2. FL, CSM, or work-related/immediate supervisor for the day notifies the CMT and the EPM.

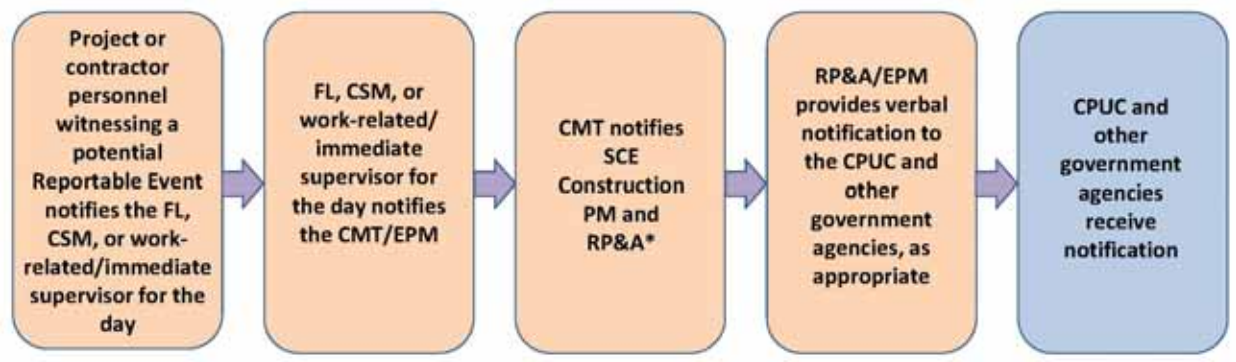
Step 3. CMT notifies the SCE Construction PM and Regulatory Policy and Affairs (RP&A), Federal Lands, etc.[3]

Step 4. Once the event is verified, RP&A/EPM provides verbal notification to the CPUC and other government agencies, as appropriate.

Step 5. Subsequently, and as expeditiously as possible, SCE will submit a final verbal or electronic notification properly characterizing the event, if required, to the appropriate agency.

[3] Depending on agency to be contacted, involved SCE organizations could consist of RP&A, Federal Lands, etc.

Figure 4
Communication Protocol for Field Safety Reportable Events



* Depending on agency to be contacted, involved SCE organizations could consist of RP&A, Federal Lands, etc.

4.2 Project Refinements

4.2.1 Transition from Preliminary Design to Final Engineering

The EIR/EIS analysis of the Devers-Palo Verde No. 2 Project is based on preliminary design, as described in Section B.3.1 of the Final EIR/EIS, which states that:

> *During project construction, SCE will utilize a procedure to adjust and finalize transmission tower and stub road locations to ensure that final tower sites are located to maximize stability of the towers while minimizing construction, right-of-way and environmental issues and to accommodate future operations and maintenance needs. The procedure is also utilized to finalize the location of splicing, tensioning, and pulling sites. Under this siting procedure, a multidisciplinary SCE team would visit each proposed structure site following the completion of preliminary engineering and prior to the commencement of detailed, final engineering of the structures. Each tower site and associated stub road would be reviewed by the team to assess the suitability of the site and a buffer area along each stub road and around each tower site would be inspected. If no environmental sensitivities are identified and there are no other issues affecting construction, maintenance, or real estate, the site would be marked as approved and the team would move to the next tower site and stub road. Final engineering would proceed on that tower at the approved location.*

Because the project has now been approved by CPUC, BLM, and other jurisdictional agencies, SCE has been in the process of completing final project design and engineering. Some project component locations have been refined as engineering progresses in order to comply with mitigation measures requiring resource avoidance to minimize or avoid environmental impacts and to reduce or eliminate feasibility constraints.

SCE submitted to the Lead Agencies a final engineered plan or other documentation that illustrates the location of project components at the time of the Final EIR/EIS. Any changes that have been made since the Final EIR/EIS were documented and transmitted to the CPUC. All changes were reviewed by the CPUC and BLM, to determine whether there are changes that require additional CEQA or NEPA compliance review (i.e., that no new or more severe impacts are created by the changes). A Mitigation Consistency Determination memorandum (dated May 26, 2011) was prepared by the CPUC to document

the changes and the impacts of the final plan and the BLM will address the refinements in the DPV2 ROD. Detailed maps will be presented on the Project website, consistent with critical infrastructure information requirements.

4.2.2 Project Modifications Following Final Engineering

At various times throughout project construction (following approval of final design plans), 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. SCE, in consultation with the applicable resource agencies, will work together to find solutions when modifications are necessary for specific field situations to avoid conflicts with adopted mitigation measures, conservation measures, or specifications.

4.2.2.1 Variance Procedures

The CPUC PM and the BLM will 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 or BLM if it creates new significant impacts. A variance should be limited to minor Project changes that will not trigger other permit requirements, will not increase the severity of an impact to a new level of significance, will not create a new significant impact, or that is in compliance 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 modification from the approved Project, adopted mitigation measures, APMs, and correction of such modification, will be reported immediately to the CPUC/BLM for their review. The CPUC/BLM will review the variance request to ensure that all of the information required to process the variance is included. The CPUC/BLM PM may request a site visit or additional information to process the variance. In general, a variance may also require approval by jurisdictional agencies. In general a variance request must include the following information:

An explanation of the necessity for the variance

- A detailed description of the location, including maps, photos, and/or other supporting documents
- Identification of the mitigation measure, APM, Project parameter, or other Project stipulation for which the variance is being requested, and a reference to the approved documents
- A description of how the variance request deviates from a Project requirement or the approved project
- Biological resource surveys or verification that no biological resources will be significantly impacted after application of approved mitigation
- Cultural resource surveys or verification that no cultural resources will be significantly impacted after application of approved mitigation
- Landowner approval if the location is not within SCE's ROW or property and if the initial agreement does not allow for such changes
- Water/wetland/stormwater-related resource information if the variance would approve any additional land disturbance, road distance or width, changes to jurisdictional delineation of waters, changes to water protection BMPs, etc.
- Date of expected construction at the variance site

A sample variance request form is included as Attachment D. All variances issued throughout Project construction will be tracked in tabular format in the weekly reports.

4.2.2.2 Temporary Extra Work Space Procedures

For the purposes of this MMCRP, Temporary Extra Work Space (TEWS) is defined as a preexisting work space (i.e., no site preparation is required) that would be utilized by SCE during construction for a period of up to 60 days, and that was not specifically identified and evaluated during the CEQA process. Anything required to be utilized for a period longer than 60 days will require a variance (see Section 3.2.2.1). SCE must demonstrate that: (1) the TEWS is located in a disturbed area with no sensitive resources or land uses onsite or adjacent to the proposed work space, (2) SCE has permission of the applicable landowner (e.g., municipality or private) to use the work space, and (3) that use of the TEWS will not result in any significant environmental impacts.

In the event that SCE determines a need for a construction TEWS, it must submit such a request to the CPUC/BLM, consistent with the communication protocol. SCE will not be permitted to use a TEWS prior to receiving written authorization from the CPUC /BLM. If appropriate, SCE will also send a copy of the TEWS to USFWS.

Following is a list of the specific information that SCE would be required to submit with its TEWS request:

- Date of request
- Location of the TEWS (detailed description, including maps if required)
- Property owner of TEWS
- An explanation of the necessity for the TEWS
- An analysis that demonstrates no new significant impacts will result from use of the TEWS including: compaction contributing to runoff rates or other stormwater/watershed effects; observed existing impacts to the site, such as old oil spills or other potentially hazardous or polluting substances; abandoned vehicles, equipment, or other materials; or other sensitive resources
- Biological and botanical survey, especially for invasive plants, and mitigation for invasive plants if present
- Cultural resource survey
- Duration and dates of expected use of the TEWS
- Details of the expected condition of the site after use

A sample TEWS form is included as Attachment E.

4.3 Lessons Learned from Past CPUC Projects

Certain issues have arisen during the pre-construction and construction compliance processes on other transmission projects under the CPUC jurisdiction. In order to avoid misunderstandings and other potential problems on the DPV2 project, this section addresses some past issues and lists suggestions for avoiding them in the future.

4.3.1 Pre-Construction Compliance

- The project description at the time of CPUC project approval and EIR certification does not present final engineering, but it defines the approved project and the basis for comparison for subsequent changes. SCE will comply with the process set forth in Section 4.3.1 to transition the preliminary

design to final engineering. NTP requests will be reviewed accordingly, in accordance with final engineering described in Section 4.3.1. During the MMCRP phase, the process does, however, allow for minor adjustments to tower locations, etc., in order to facilitate sensitive resource avoidance.

- Mitigation measure requirements are assumed finalized at the time of CPUC project approval and EIR certification, and pre-construction compliance submittals will be reviewed accordingly. The variance process allows for change to mitigation measure implementation, in the case of unforeseen circumstances, as long as the intent of the mitigation measure is satisfied (i.e., the impact is mitigated as intended, consistent with residual impact determinations in the EIR/EIS).
- As specified by the approved mitigation measures, demonstration of agency consultation should be provided during the pre-construction and construction phases.
- For biological surveys, both protocol and non-protocol surveys need to be conducted in the appropriate season. If surveys cannot be conducted during the appropriate season, CDFG and/or USFWS concurrence is required for lands with potential for sensitive biological resources. Consideration must be made for years where rainfall was significantly less or more than average. Biological clearance surveys should be conducted immediately prior to construction, including CPUC Environmental Monitor validation of the clearance survey results and review of any necessary flagging, etc., required by the clearance or other survey results. Biological surveys may need to be repeated if construction is delayed.
- Bringing a contractor(s) on board earlier in the process benefits the identification of workspace and access needs. For example, on a past project, the applicant identified stringing locations, but when it was time to string, the construction contractor changed the locations because of constraints with the amount of conductor that could be placed on a reel, resulting in the need to relocate or enlarge many stringing sites, which was done through the variance process.

4.3.2 Construction Compliance

- Communication between the applicant and its construction contractors and environmental staff has been an ongoing issue on some past projects, which has created the following problems:
  - The applicant did not provide maps and/or survey/plan information to their monitors.
  - The applicant did not communicate the permitting/NTP status to their construction contractors. Construction contractors routinely complained that the CPUC had not issued the NTP, even when the applicant had not submitted request yet, which created tension in the field.
  - On several occasions, the applicant had their own crews conducting construction activities, rather than hiring a construction contractor (e.g., for sub transmission work). There was a disconnect between these construction crews and the NTP requirements (i.e., crews started work without biological resources clearance surveys being conducted, resource flagging being installed, etc.).
  - The applicant's cultural resources group was not aware of the need to immediately notify the CPUC EM in the event of an Unanticipated Discovery even though the requirement was specified in the NTPs.
- The CPUC EMs were not invited to the weekly construction meetings, and so were unable to express concerns with upcoming scheduled work, or be given advance notice when crews planned on entering sensitive areas. Therefore, a 1-Week or 2-Week Look Ahead should be provided by the construction contractor to improve communication.
- Resource maps must be updated to reflect historical and currently identified resources. For example, during nesting season, biological resource maps should be updated weekly to reflect the extensive nesting activity occurring. This mapping effort must be planned.

- It is important to be proactive during the nesting season to prevent construction delays. For example, the applicant should receive early concurrence from CDFG and USFWS for removal of "inactive nests" (i.e., prior to eggs being laid). Once a nest is "active," agency consultation is required to reduce buffers, and in some cases, the agencies will not allow a buffer reduction (e.g., for Swainson's hawk, etc.). While a nest is active, work cannot occur within the buffer zone.
- Weekly conference calls with the applicant, CPUC, and Aspen are beneficial, and the subcontractor monitoring staff should attend the calls.

5.0 Records Management

Daily inspection and weekly status reports will be filed and used by the CPUC third-party monitor to prepare a final environmental compliance report following the completion of construction. The final report will provide a discussion on how each mitigation measure was implemented and include copies of submittals required for compliance. In addition, the success criteria will be evaluated for applicability to future projects.

5.1 Agency Records During Monitoring

As described in Section 3.2, Aspen will develop a password-protected website for use by Lead Agencies and responsible agencies during pre-construction and construction, to facilitate the sharing of project documents, files, reports, and maps.

5.2 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 by the CPUC for public inspection on request, consistent with critical infrastructure requirements and requirements to protect cultural resources. In order to facilitate the public's awareness, the CPUC will post this MMCRP document to the CPUC public website, and will make weekly reports and other pertinent project documents available on the project. Access to Critical Energy Infrastructure Information (CEII) documentation and location of protected cultural resources will not be available on the public Web site. Other monitoring compliance reports, copies of permits, and documents will also be available in their final form on the project website once they are approved by the CPUC or other permitting agencies. The CPUC public website is accessible at:

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

Information on the project can also be found at the BLM website at

http://ww.ca.blm.gov/palmsprings/devers_paloverde.html.

6.0 Mitigation Measures

The following tables include the mitigation measures and APMs from the DPV2 EIR/EIS (Section 6.1), the CRS Supplemental EIR (Section 6.2), and the Desert Sunlight Solar Project EIS (Section 6.3), as well as conservation measures from the DPV2 Biological Opinion (see Attachment K).

For the Colorado Rivers Substation (Tables CRS-1 through CRS-5 in Section 6.2), only new mitigation measures and measures that were revised from the DPV2 EIR/EIS are included. All other applicable measures from DPV2 Final EIR/EIS that will be implemented for CRS have already been incorporated in Tables DPV-4 through DPV-15.

6.1 DPV2 Mitigation Measures

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— MM 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 Proposed 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. Hydro-seeding, 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.
Location	All vegetated 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.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	All areas temporarily disturbed will be re-contoured, as appropriate, to restore natural slopes and pre-construction contours. Unavoidable impacts to special status vegetation communities or habitats that support listed species shall be mitigated through either offsite compensation or onsite restoration. SCE's restoration strategy is based on the FEIR/EIS impact analysis, which specified the restoration of disturbed sensitive native vegetation communities to reduce Project impacts to less than significant. Per the FEIR/FEIS page D.2-109, "Construction impacts to vegetation may occur in a variety of ways, including the direct removal of plants during the course of construction. As these impacts are generally localized and are primarily temporary in nature they are not usually considered significant unless the habitat type is regionally unique or is known to support sensitive species." SCE has interpreted special status vegetation communities to include those habitat types primarily defined by the CDFG (2003, 2009), support species protected by state and federal Endangered Species Acts (ESAs), as well as areas falling under federal, state, or regional jurisdiction as waters of the US or waters of the state. The following breakdown provides SCE's approach: • All disturbance (temporary and permanent) within the BLM's Northern and Eastern Colorado Deserts Coordinated Management Plan (NECO) Plan Area, which spans from the Colorado River Substation to approximately the Cactus City Rest Area, will be mitigated/restored through an in lieu fee program approved by the BLM, USFWS, and CDFG at no greater than a 5:1 ratio. • Special status vegetation communities that provide habitat for Coachella Valley fringe-toed lizard, flat-tail horned lizard, and Coachella Valley milk-vetch within the CV MSHCP Plan Area will be mitigated/restored through offsite mitigation programs approved by the BLM, USFWS, and CDFG. • All other temporary disturbance to special status vegetation communities will be accomplished by onsite habitat restoration directed by the Habitat Restoration Specialist.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

	Temporary impacts are described as ground disturbance associated with clearing of each tower pad, tower construction activities, and pulling and splicing activities. Consistent with the low impact construction approach to this project, vegetation clearing in temporary disturbance areas will only occur where necessary to allow for equipment access and stormwater management. In most cases, the wire pull and splice sites will not require site grading and vegetation will not be removed. Drive and crush methods will be used in these temporary disturbance areas to minimize impacts and ensure root systems remain intact. After construction is complete these areas would be free to re-vegetate and recover naturally. The HRCP will identify the types of disturbance levels and recommended offsetting restoration measures. Compensation for temporary and permanent impacts to vegetation communities will be equivalent to, and not duplicate, the restoration measures (offsite mitigation) SCE will implement for impacts to species protected by state and federal endangered species acts (ESA) as directed in the Project's ESA Section 7 Biological Opinion and Fish and Game Code Section 2080.1 Consistency Determination. For the purposes of the project's state and federal ESA effects analysis (Section 7 Biological Opinion and Section 2080.1 Consistency Determination) relative to the 30-year life of the project, all temporary impacts were considered equivalent to permanent impacts since full recovery in the desert can take decades or longer. Therefore, offsite compensatory mitigation instead of onsite habitat restoration was preferred by the USFWS, BLM, and CDFG to offset impacts to listed species and their habitat (which is considered a special status vegetation community). Since a majority of the project occurs on BLM-administered lands, SCE intends to incorporate post-construction reclamation/rehabilitation efforts as required by the BLM to re-establish a vegetative cover that is similar to pre-construction conditions via erosion control and invasive species control efforts. A sufficient seed bank exists in the first several inches of soil to naturally re-vegetate temporarily disturbed sites, particularly locations of drive and crush activities. However, in some instances depending on the disturbance level, soil salvage and/or broadcast of native seeds may be implemented to re-vegetate areas. Temporary impacts to special status vegetation communities that are not compensated for offsite as required in the project's Biological Opinion or Consistency Determination will be mitigated on-site through habitat restoration based on the disturbance level as described in the HRCP. SCE anticipates that refinements to the HRCP may be required following initial approval of the plan.
MITIGATION MEASURE	— (MM B-1a) 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 vegetated 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.
Responsible Agency	BLM and CPUC
Timing	Post construction
Interpretation & Approach	To ensure that disturbed areas do not result in the establishment of noxious or invasive weeds the Applicant shall monitor for a period of five years unless otherwise authorized by the BLM. Achievement of success criteria for onsite habitat restoration efforts within desert dunes and desert sand fields, desert palm oasis woodland, and mesquite bosque/hummock vegetation communities will be reviewed and approved by the BLM in compliance with the NECO Plan Area. Achievement of success criteria for other onsite sensitive vegetation communities will be submitted to the CPUC for review and approval by the Habitat Restoration Specialist. Post-construction monitoring requirements per the BLM Integrated Weed Management Manual 9015 include three (3) years for C-rated weeds (including Russian thistle, tocalote) and five (5) years for A- and B-rated weeds (including giant reed, perennial peppercress, saltcedar). Monitoring will be conducted in the areas of control and eradication efforts only within the disturbance areas and is not considered part of any habitat restoration effort. Post-construction monitoring of known infestation/control areas will be conducted in consultation with BLM, when applicable. The 3-5 year post-construction monitoring of weed abatement areas includes those areas treated for weeds within the temporary disturbance zones of the Project.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— MM 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.
Location	All project areas within the Coachella Valley Preserve
Monitoring / Reporting Action	Biological monitor to evaluate impacted areas and implement mitigation measures.
Responsible Agency	BLM, CPUC, CDFG, USFWS
Timing	Prior to construction
Interpretation & Approach	As required by this mitigation measure, a one-year weed removal effort will be conducted during the spring following construction within the Coachella Valley Preserve. However, SCE intends to implement a 3- to 5-year post-construction monitoring effort per the BLM Integrated Weed Management Manual 9015. The 3-5 year post-construction monitoring of weed abatement areas includes those areas treated for weeds within the temporary disturbance zones of the Project.
MITIGATION MEASURE	— (MM B-2a) 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.
Location	All locations along the proposed route that occur on BLM land will be surveyed.
Monitoring / Reporting Action	Review and approval of Noxious Weed Control Plan.
Responsible Agency	BLM, CPUC, CDFG, USFWS
Timing	60 days prior to construction
Interpretation & Approach	Noxious Weed Control Plan will include but may not be limited to BLM- and state-listed high priority invasive and noxious weeds listed by the California Invasive Plant Council and the California Department of Food and Agriculture for the Low Desert/Mojave Weed Management Area, and on BLM lands, or species identified by the BLM as posing a risk to native species. The plan will also address vehicle washing procedures required in MM B-2b.
MITIGATION MEASURE	— (MM B-2a) 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.
Location	All locations along the proposed route that occur on BLM land will be surveyed.
Monitoring / Reporting Action	BLM, CPUC, CDFG, and USFWS to identify candidates for eradication. Selected weed populations shall then be eradicated prior to construction and verified in the field.
Responsible Agency	BLM, CPUC, CDFG, USFWS
Timing	Prior to construction
Interpretation & Approach	Noxious Weed Control Plan will include but may not be limited to BLM- and state-listed high priority invasive and noxious weeds listed by the California Invasive Plant Council and the California Department of Food and Agriculture for the Low Desert/Mojave Weed Management Area, and on BLM lands. Based on BLM input, discrete populations of weeds that are candidates for eradication within areas of disturbance on BLM lands will be identified and eradicated.
MITIGATION MEASURE	— (MM B-2a) 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 proposed route that occur on BLM land will be surveyed.
Monitoring / Reporting Action	Monitored during construction.
Responsible Agency	BLM, CPUC, CDFG, USFWS

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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.
Location	Entire project area within BLM land
Monitoring / Reporting Action	Biological monitor to evaluate impacted areas and implement mitigation measures.
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	Washing procedures for clearing and grading equipment will be included in the Noxious Weed Control Plan, identified as part of MM B-2a. The procedures outlined in the Noxious Weed Control Plan will be implemented upon BLM approval of the plan. Daily records of wash station activity will be submitted to the BLM and CPUC on a weekly basis during active construction periods for activities occurring within areas of weed infestation identified as part of MM B-2a on BLM lands. SCE has interpreted the measure such that delivery vehicles from outside contractors, such as concrete trucks, are exempt from this requirement. Once the Noxious Weed Inventory and Control Plan is completed, SCE will submit its results to the CPUC and the CPUC will review the results and determine whether it agrees with this interpretation.
MITIGATION MEASURE	— (MM B-2b) 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	All project areas within the Coachella Valley Preserve
Monitoring / Reporting Action	Biological monitor to evaluate impacted areas and implement mitigation measures.
Responsible Agency	BLM and CPUC
Timing	Post construction
Interpretation & Approach	As required by this mitigation measure, a one-year weed removal effort will be conducted during the spring following construction within the Coachella Valley Preserve. However, SCE intends to implement a 3- to 5-year post-construction monitoring effort per the BLM Integrated Weed Management Manual 9015. The 3-5 year post-construction monitoring of weed abatement areas includes those areas treated for weeds within the temporary disturbance zones of the Project.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— MM 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. A 300-foot buffer shall be implemented in the event that raptors or other species protected under the MBTA are located. This buffer will be evaluated after consultation with CPUC/BLM/CDFG/and USFWS.
Location	Entire project area in California
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Responsible Agency	BLM, USFWS, CDFG and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Construction clearance surveys by a qualified and CPUC/BLM approved biologist shall be conducted in areas within 500 feet of tower sites, laydown/staging areas, substation sites, and access road/spur road locations. Protocol level bird surveys will be limited to the habitat and range of potentially occurring state or federally listed species. In accordance with the EIR/EIS, if state or federally listed breeding birds with active nests are found, an initial 500-foot avoidance buffer around the active nest will be established and no activity will occur within the buffer until the young have fledged, the nest fails, or a buffer reduction is approved by CDFG and USFWS. Under the Migratory Bird Permit Memorandum (MBPM-2), active nests are defined as nests with eggs or young. An initial 300-foot buffer shall be implemented in the event raptors or other species protected under the MBTA are located. The biological monitor shall conduct regular monitoring of the nest to determine the appropriateness of the buffer based on bird species, behavior, tolerance to disturbance and adjacent construction activity. This buffer will be evaluated and may be adjusted after consultation with CDFG and USFWS. The CPUC and BLM will be informed of established buffer determinations. Alternatively, a plan may be developed to pre-establish species specific buffers based on behavior and construction activity to reduce the need for a consultation every time an active nest is discovered. No active construction activities will be allowed within established buffers until the young have fledged from the nest or the nest fails. SCE should conduct and submit pre-construction nesting bird surveys within two weeks prior to construction
MITIGATION MEASURE	— MM 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-vegetated disturbed areas of the construction site.
Location	Entire project area in California
Monitoring / Reporting Action	Transplanting plan will be submitted for approval and executed accordingly.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction, as appropriate
Interpretation & Approach	A plant transplanting plan shall be prepared in compliance with the California Native Plant Protection Act (NPPA), federal Endangered Species Act (FESA), state Endangered Species Act (CESA), and BLM's Northern and Eastern Colorado Deserts Coordinated Management Plan (NECO).

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— (MM B-6a) 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.
Location	Entire project area in California
Monitoring / Reporting Action	Transplanting plan will be submitted for approval and executed accordingly.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction, as appropriate
Interpretation & Approach	Individual plants protected under the NPPA (California Native Plant Society List 1 or 2), FESA (endangered, threatened, or candidate), CESA (endangered, threatened, or candidate), and NECO (BLM sensitive), and suitable for transplanting will be surveyed and enumerated/marked in the field.
MITIGATION MEASURE	— (MM B-6a) 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 in California
Monitoring / Reporting Action	Verify mitigation coordination with USFWS and CDFG.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction, as appropriate
Interpretation & Approach	SCE shall identify individual listed plants (federal- or state-listed endangered, threatened, or candidate) that can be avoided as part of the Sensitive Resources Avoidance Report (APM B-8). If avoidance is not possible, SCE shall provide habitat compensation in coordination with the USFWS and CDFG, as documented within the Habitat Restoration/Compensation Plan (MM B-1a).
MITIGATION MEASURE	— MM 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.
Location	All locations along the proposed route that support desert tortoise
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Responsible Agency	BLM, CPUC, USFWS, and CDFG
Timing	Prior to and during construction
Interpretation & Approach	SCE shall conduct construction clearance surveys for desert tortoise burrows and pallets within permanent and temporarily impacted areas 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 addressed in compliance with the project's Endangered Species Act Section 7 Biological Opinion.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— (MM B-7b) • 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 proposed route that support desert tortoise
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Responsible Agency	BLM, CPUC, USFWS, and CDFG
Timing	During construction
Interpretation & Approach	SCE will implement the above measures and all of the conservation measures specific to desert tortoise contained within the project's Endangered Species Act Section 7 Biological Opinion.
MITIGATION MEASURE	— MM 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 proposed route
Monitoring / Reporting Action	BLM and SCE will assess amount of land to be acquired based on acreage of disturbance.
Responsible Agency	BLM and CPUC
Timing	Post construction
Interpretation & Approach	SCE will implement the above measure and all of the conservation measures specific to desert tortoise contained within the project's Endangered Species Act Section 7 Biological Opinion.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— MM 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.
Location	All locations of the proposed route within the Coachella Valley fringe-toed lizard Critical Habitat that experienced permanent loss due to construction activities
Monitoring / Reporting Action	USFWS, CDFG, and CPUC will determine amount of land to be mitigated.
Responsible Agency	BLM, CDFG, USFWS, and CPUC.
Timing	Post construction
Interpretation & Approach	SCE will implement the above measure and all of the conservation measures specific to Coachella Valley fringe-toed lizard contained within the project's Endangered Species Act Section 7 Biological Opinion.
MITIGATION MEASURE	— (MM B-7d) 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.
Location	All locations of the proposed route within the Coachella Valley fringe-toed lizard Critical Habitat that experienced permanent loss due to construction activities
Monitoring / Reporting Action	Fencing to be verified by biological monitor.
Responsible Agency	BLM, CDFG, USFWS, and CPUC
Timing	During construction
Interpretation & Approach	SCE will implement the above measure and all of the conservation measures specific to Coachella Valley fringe-toed lizard contained within the project's Endangered Species Act Section 7 Biological Opinion.
MITIGATION MEASURE	— (MM B-7d) 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 proposed route within the Coachella Valley fringe-toed lizard Critical Habitat that experienced permanent loss due to construction activities
Monitoring / Reporting Action	Survey results shall be submitted to all responsible agencies.
Responsible Agency	BLM, CDFG, USFWS, and CPUC
Timing	During construction
Interpretation & Approach	SCE will implement the above measure and all of the conservation measures specific to Coachella Valley fringe-toed lizard and flat-tail horned lizard contained within the project's Endangered Species Act Section 7 Biological Opinion.
USFWS Biological Opinion: Coachella Valley Fringe-toed and Flat-tailed Horned Lizard Conservation Measure – Construction Phase	BO-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.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

USFWS Biological Opinion: Coachella Valley Fringe-toed and Flat-tailed Horned Lizard Conservation Measure – Construction Phase	BO-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.
USFWS Biological Opinion: Coachella Valley Fringe-toed and Flat-tailed Horned Lizard Conservation Measure – Construction Phase	BO-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.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

USFWS Biological Opinion: Coachella Valley Fringe-toed and Flat-tailed Horned Lizard Conservation Measure – Construction Phase	BO-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.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

USFWS Biological Opinion: Coachella Valley Fringe-toed and Flat-tailed Horned Lizard Conservation Measure – Construction Phase	BO-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.
USFWS Biological Opinion: Coachella Valley Fringe-toed and Flat-tailed Horned Lizard Conservation Measure – O&M Phase	BO-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.
USFWS Biological Opinion: Coachella Valley Fringe-toed and Flat-tailed Horned Lizard Conservation Measure – O&M Phase	BO-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.
MITIGATION MEASURE	— MM 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 (Devers-Valley No. 2 Alternative). 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 .
Location	All locations of the project area that support suitable coastal sage scrub habitat (Devers-Valley No. 2 Alternative)
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Responsible Agency	BLM, CDFG, USFWS, and CPUC

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

Timing	Prior to and during construction
Interpretation & Approach	Focused, USFWS protocol-level presence/absence surveys for the coastal California gnatcatcher have been conducted and the results were negative (Dudek, 2008). The results of the coastal California gnatcatcher surveys were discussed and feedback was provided by the CDFG and USFWS. New project features developed through final engineering that are sited within Riversidean/coastal sage scrub will be evaluated for habitat suitability. If the areas are determined to provide suitable habitat in consultation with the USFWS, protocol-level surveys would be conducted with a 300-foot minimum buffer prior to construction.
MITIGATION MEASURE	— (MM B-7e) 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 (Devers-Valley No. 2 Alternative)
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Responsible Agency	BLM, CDFG, USFWS, and CPUC
Timing	During and post construction
Interpretation & Approach	SCE has completed compliance with the Federal ESA. The USFWS and CDFG have determined that the project will have no effect on the coastal California gnatcatcher. Therefore, the above requirements do not apply during or following construction activities. Documentation of this determination will be provided by SCE. New project features developed through final engineering that occur in Riversidean/coastal sage scrub, habitat for the coastal California gnatcatcher, will be protocol-level surveyed along with a 300-foot minimum buffer prior to construction.
MITIGATION MEASURE	— MM B-7f: Conduct focused surveys for Stephens' kangaroo rat and San Bernardino kangaroo rat. Prior to the implementation of construction in areas that support suitable habitat for Stephens' kangaroo rat (Potrero ACEC/Conservation Unit along the Devers-Valley No. 2 Alternative) and San Bernardino kangaroo rat. 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.
Location	All locations of the project area that support suitable habitat for Stephen'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.
Responsible Agency	BLM, CDFG, USFWS, and CPUC
Timing	Prior to construction
Interpretation & Approach	Focused, USFWS protocol trapping surveys for the Stephens' kangaroo rat and San Bernardino kangaroo rat have been conducted (Dudek, 2009). The results were positive for Stephens' kangaroo rat and negative for San Bernardino kangaroo rat. SCE has consulted with the USFWS and CDFG on survey methodology and results. SCE will implement the conservation measures specific to Stephens' kangaroo rat contained within the project's Endangered Species Act Section 7 Biological Opinion, which includes the installation of exclusionary fencing and trapping/relocation of individuals. SCE will implement the 14-day pre-construction clearance survey to avoid survey conflicts as required by other, overlapping mitigation measures.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— (MM B-7**f**) 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 Stephen'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.
Responsible Agency	BLM, CDFG, USFWS, and CPUC
Timing	Prior to, during, and post construction, as appropriate
Interpretation & Approach	SCE will implement the above measures and all of the conservation measures specific to Stephens' kangaroo rat contained within the project's Endangered Species Act Section 7 Biological Opinion.
USFWS Biological Opinion: Stephens' Kangaroo Rat Conservation Measures – Construction Phase	BO-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 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.
USFWS Biological Opinion: Stephens' Kangaroo Rat Conservation Measures – Construction Phase	BO-18. During construction in suitable habitat, work will only occur during daylight hours and no night lighting will be used in kangaroo rat habitat.
USFWS Biological Opinion: Stephens' Kangaroo Rat Conservation Measures – Construction Phase	BO-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.
USFWS Biological Opinion: Stephens' Kangaroo Rat Conservation Measures – Construction Phase	BO-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.
USFWS Biological Opinion: Stephens' Kangaroo Rat Conservation Measures – Construction Phase	BO-21. No fuel modification will be conducted in suitable habitat.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

USFWS Biological Opinion: Stephens' Kangaroo Rat Conservation Measures – Construction Phase	BO-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.
USFWS Biological Opinion: Stephens' Kangaroo Rat Conservation Measures – O&M Phase	BO-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.
MITIGATION MEASURE	— MM 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 habitat located within the Project ROW and within 100' of all surface disturbing activities.
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 may be assessed by a biological opinion.
Responsible Agency	BLM, CDFG, USFWS, and CPUC.
Timing	Prior to construction
Interpretation & Approach	Focused special-status plant surveys were conducted in 2005 (EPG, Greystone; 2005), 2007 (EPG, 2007), and 2008 (BRC, Dudek; 2008). SCE has consulted with the USFWS and CDFG on survey methodology and results. New project features developed through final engineering will be surveyed prior to construction. SCE to provide survey results and maps to CPUC/BLM.
MITIGATION MEASURE	— (MM B-8a) 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.
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 may be assessed by a biological opinion.
Responsible Agency	BLM, CDFG, USFWS, and CPUC.
Timing	Prior to and during construction
Interpretation & Approach	SCE will prepare a Sensitive Biological Resources Avoidance Report (as required by APM B-8) that will document the process of evaluating sensitive plant locations, and modifying structure and construction site placement during focused field reviews and approvals.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— (MM B-8a) 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 Proposed Project construction or maintenance activities.
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 may be assessed by a biological opinion.
Responsible Agency	BLM, CDFG, USFWS, and CPUC
Timing	Prior to construction
Interpretation & Approach	SCE will implement all of the conservation measures specific to all listed plant species. Coachella Valley milk-vetch (the only listed plant observed within project impact areas) included in the Project's ESA Section 7 BO. SCE to provide survey results and maps to CPUC/BLM.
USFWS Biological Opinion: Coachella Valley Milk-vetch Conservation Measures – Construction Phase	BO-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.
USFWS Biological Opinion: Coachella Valley Milk-vetch Conservation Measures – Construction Phase	BO-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.
USFWS Biological Opinion: Coachella Valley Milk-vetch Conservation Measures – Construction Phase	BO-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.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

USFWS Biological Opinion: Coachella Valley Milk-vetch Conservation Measures – Construction Phase	BO-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=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.
USFWS Biological Opinion: Coachella Valley Milk-vetch Conservation Measures – O&M Phase	BO-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.
MITIGATION MEASURE	— MM 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
Responsible Agency	BLM and CPUC
Timing	Prior to construction

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

Interpretation & Approach	Pre-construction (baseline) biological surveys were conducted in 2008 (BRC, Dudek; 2008). Focused special-status bird surveys were conducted in 2008 (Dudek, 2008). Focused special-status amphibian surveys were conducted in 2007 (EPG, 2007) and 2008 (Dudek, 2008). Focused special-status reptile surveys were conducted in 2007 (BRC, EPG; 2007) and 2008 (BRC; Dudek, 2008). Focused special-status mammal surveys were conducted in 2007 (EPG, 2007), 2008 (BRC, EPG; 2008), and 2009 (Dudek, 2009). SCE has prepared project maps identifying all special-status species. Additional construction 7-day clearance biological surveys are anticipated prior to construction in coordination with other mitigation measures. SCE shall provide previous survey reports and maps .Pre-construction biological surveys should be conducted and submitted for all biological resources within 14 days of construction. Biological survey clearance surveys immediately prior to construction may also be required. SCE will implement the 14-day pre-construction clearance survey to avoid survey conflicts as required by other, overlapping mitigation measures.
MITIGATION MEASURE	— MM 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. SCE shall notify the CPUC/BLM if any sensitive species are located during construction of the project. 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.
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	SCE will coordinate with the BLM and CPUC on sensitive species observations that may affect construction activities. On Forest Service lands, SCE shall also notify the Forest Service of all sensitive species (including forest watchlist animals and Forest Service Region 5 species) observations that may affect construction activities. SCE shall maintain a daily monitoring log.
MITIGATION MEASURE	— MM 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.
Location	Entire project area
Monitoring / Reporting Action	A qualified biological monitor shall oversee implementation of the WEAP and submit copies of all documentation and training materials.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	SCE will prepare a WEAP training program for review and approval by the BLM and CPUC. Once finalized, copies will be sent to the BLM and CPUC.
MITIGATION MEASURE	— (MM B-9c) 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.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

Location	Entire project area
Monitoring / Reporting Action	Course outline to be submitted and approved.
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	SCE will prepare a WEAP training program for review and approval by the BLM and CPUC. Once finalized, copies will be sent to the BLM and CPUC.
MITIGATION MEASURE	— (MM B-9c) Training materials and updates of training materials shall also be provided to the Forest Service for review and participation in the WEAP.
Location	Entire project area
Monitoring / Reporting Action	Submittal to be verified.
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	SCE will prepare a WEAP training program for review by the USFS. Once finalized, copies will be sent to the USFS.
MITIGATION MEASURE	— (MM B-9c) 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	Submittals to be verified.
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	SCE will maintain an updated list of WEAP-trained personnel that will be available upon request to the BLM and CPUC.
MITIGATION MEASURE	— MM 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, banded Gila monster, 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.
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.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	The impact identified for this mitigation measure is focused on the Arizona portion of the project, which is no longer a part of the project. However, SCE will conduct pre-construction biological surveys and monitoring in California that will cover these reptiles pursuant to MM B-9a and B-9b.
MITIGATION MEASURE	— (MM B-9d) Following the clearance surveys, exclusion fencing will be erected or a biological monitor will be onsite during construction activities.
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.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

Interpretation & Approach	As stated in the comment above, the impact identified for this mitigation measure is focused on the Arizona portion of the project, which has been removed from the project. However, SCE anticipates implementing similar monitoring efforts where sensitive reptiles are found during the construction phase of the project.
MITIGATION MEASURE	— (MM B-9d) 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. Trenches, holes, or other excavations will be examined for banded Gila monster prior to filling. If individuals are found, the biological monitor will relocate them to nearby suitable habitat.
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.
Responsible Agency	BLM and CPUC.
Timing	Prior to and during construction
Interpretation & Approach	As stated in the comment above, the impact identified for this mitigation measure is focused on the Arizona portion of the project, which has been removed from the project. However, SCE anticipates implementing similar monitoring efforts where sensitive reptiles are found during the construction phase of the project.
MITIGATION MEASURE	— (MM B-9d) During construction, if a common chuckwalla, banded Gila monster, 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 individual's 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.
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	As stated in the comment above, the impact identified for this mitigation measure is focused on the Arizona portion of the project, which has been removed from the project. However, SCE anticipates implementing similar monitoring efforts where sensitive reptiles are found during the construction phase of the project.
USFWS Biological Opinion: Desert Tortoise Conservation Measures – Construction Phase	BO-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.
USFWS Biological Opinion: Desert Tortoise Conservation Measures – Construction Phase	BO-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.
USFWS Biological Opinion: Desert Tortoise Conservation Measures – Construction Phase	BO-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.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

USFWS Biological Opinion: Desert Tortoise Conservation Measures – Construction Phase	BO-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.
USFWS Biological Opinion: Desert Tortoise Conservation Measures – Construction Phase	BO-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.
USFWS Biological Opinion: Desert Tortoise Conservation Measures – Construction Phase	BO-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.
USFWS Biological Opinion: Desert Tortoise Conservation Measures – Construction Phase	BO-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.
USFWS Biological Opinion: Desert Tortoise Conservation Measures – Construction Phase	BO-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.
USFWS Biological Opinion: Desert Tortoise Conservation Measures – Construction Phase	BO-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.
USFWS Biological Opinion: Desert Tortoise Conservation Measures – Construction Phase	BO-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.
USFWS Biological Opinion: Desert Tortoise Conservation Measures – Construction Phase	BO-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.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

	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 [32.37 ha (80ac)] multiplied by $105 per acre . 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.
USFWS Biological Opinion: Desert Tortoise Conservation Measures – Construction Phase	BO-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)].

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

	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 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.
USFWS Biological Opinion: Desert Tortoise Conservation Measure –	BO-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

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

O&M Phase	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.
USFWS Biological Opinion: Desert Tortoise Conservation Measure – O&M Phase	BO-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.
USFWS Biological Opinion: Desert Tortoise Conservation Measure – O&M Phase	BO-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.
USFWS Biological Opinion: Desert Tortoise Conservation Measure – O&M Phase	BO-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).
MITIGATION MEASURE	— MM 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.
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.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	SCE will conduct pre-construction surveys for the western burrowing owl within 30 days of the start of construction in areas of suitable habitat.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— (MM B-9e) 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 Proposed Project site 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.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented. Unless otherwise authorized by the USFWS and BLM only passive relocation will be used.
MITIGATION MEASURE	[Deleted; does not apply to approved project in California]~~— MM B-9f: Perform construction outside of breeding and lambing period. Construction activities conducted within suitable habitat near Burnt Mountain, Harquahala Mountain, and Kofa NWR shall not occur during the period of the year when bighorn sheep are lambing (from January 1 to April 30).~~
~~Location~~	~~All locations within suitable habitat near Burnt Mountain, Harquahala Mountain, and Kofa NWR~~
~~Monitoring / Reporting Action~~	~~Biological monitor shall oversee monitoring, and if necessary, ensure compliance with mitigation measure.~~
~~Responsible Agency~~	~~BLM, USFWS, and CPUC~~
~~Timing~~	~~Prior to and during construction~~
Interpretation & Approach	The project as currently permitted no longer traverses any portion of Arizona. Therefore, this portion of the measure, which references locations in Arizona, does not apply to the DPV2 project in California.
MITIGATION MEASURE	— (MM B-9f) 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 preconstruction surveys.
Responsible Agency	BLM, USFWS, and CPUC
Timing	Prior to, during and post construction

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

Interpretation & Approach	A Biological Assessment/Evaluation (BA/BE) was conducted for the Installation and Operation of Ten Towers along the DPV2 line in San Bernardino National Forest (Dudek 2009). The BA/BE concluded that the Project Area is not expected to support lambing habitat for the species nor were individuals observed during the field visit. The area has only been used by rams following a recent relocation project (DeForge, 2009). These sheep are now located substantially east of the project. Although the assessment indicated that this area was not used for lambing. SCE will contact the USFS and Bighorn Institute 2 weeks prior to construction activities occurring on USFS land or within the Snow Creek area of the project to ensure individuals are not present, would not be affected by construction activities, and/or to identify additional avoidance measures. Additionally, the BLM, USFWS, and CDFG concurred that the project would have no affect on bighorn sheep for the remainder of the project and as a result take for this species was not included in the ESA Section 7 Biological Opinion and Section 2080.1 Consistency Determination. SCE has completed pre-construction (baseline) surveys and compliance with the Federal Endangered Species Act. The USFWS has determined that the project will have no affect on the bighorn sheep. Therefore this measure will be implemented if the no affect call was predicated on the avoidance of construction during the lambing season.
MITIGATION MEASURE	— MM 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.
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.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented (SCE has completed pre-construction (baseline) surveys for American badger). SCE shall provide survey results and maps to document survey findings.
MITIGATION MEASURE	— (MM B-9g) 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.
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.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	No badger dens were detected that would require avoidance. Mitigation measure will be implemented as specified if badger dens are found inside project areas during construction clearance surveys. SCE shall provide survey results and maps.
MITIGATION MEASURE	— (MM B-9g) 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.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

Interpretation & Approach	No badger dens were detected that would require avoidance. Mitigation measure will be implemented as specified if badger dens are found during construction clearance surveys. SCE shall provide survey results and maps.
MITIGATION MEASURE	— MM B-9h: Conduct pre-construction surveys for roosting bats. SCE shall conduct surveys focused 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.
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.
Responsible Agency	CPUC and BLM
Timing	Prior to construction
Interpretation & Approach	Suitable roosting and nursery habitat surveys for bats were conducted in 2008 (Dudek, 2008). SCE shall provide survey results and maps to document findings.
MITIGATION MEASURE	— (MM B-9h) If suitable roosting/nursery sites are found, then focused surveys shall be conducted to determine if the sites support sensitive bat species.
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.
Responsible Agency	See above
Timing	Prior to construction
Interpretation & Approach	Focused and acoustical bat surveys were conducted in 2009, but no roosts or listed bats were detected within a 500-foot buffer of proposed structures (Dudek, 2009). SCE shall provide survey results and maps to document findings.
MITIGATION MEASURE	— (MM B-9h) 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.
Responsible Agency	See above
Timing	Prior to construction
Interpretation & Approach	No roosts or nursery habitat were detected that require relocation of structures. SCE shall provide survey results and maps to document findings.
MITIGATION MEASURE	— MM 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.
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.
Responsible Agency	BLM and CPUC
Timing	Prior to construction

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

Interpretation & Approach	Focused special-status mammal surveys were conducted in 2007, 2008, and 2009 (EPG, 2007; 2008; BRC, 2008; Dudek, 2009). No nesting colonies were identified. SCE shall provide survey results and maps to document findings.
MITIGATION MEASURE	— (MM B-9i) 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.
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Focused special-status mammal surveys were conducted in 2007, 2008, and 2009 (EPG, 2007; 2008; BRC, 2008; Dudek, 2009). No nesting colonies were identified. SCE shall provide survey results and maps to document findings.
MITIGATION MEASURE	— MM 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 along the ROW within the Western Riverside MSHCP boundaries
Monitoring / Reporting Action	BLM and CPUC to review submitted compliance documentation.
Responsible Agency	CPUC
Timing	Prior to and during construction
Interpretation & Approach	SCE will complete compliance with the Federal and California ESAs. A project-specific ESA Section 7 BO and Section 2080.1 Consistency Determination will be issued by the USFWS and CDFG.
MITIGATION MEASURE	— MM B-13b. Implement the Best Management Practices required by the Western Riverside County MSHCP. SCE shall provide documentation that is 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.
Responsible Agency	CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

Interpretation & Approach	Measure will be implemented (measure will be implemented where applicable).
MITIGATION MEASURE	— MM 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 raptor species, describes the seasonal limitations on disturbing nesting raptors species (excluding ravens), describes the procedure for obtaining a permit from USFWS's Division of Migratory Birds, and describes procedures for documenting the activities on an annual basis.
Location	All locations along ROW that support desert tortoise
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE submitted raven control plan.
Responsible Agency	CPUC; BLM Palm Springs Field Office; USFWS Division of Migratory Bird
Timing	Prior to, during, and post construction
Interpretation & Approach	SCE has completed compliance with the Federal Endangered Species Act and included a raven control plan as one of the project's conservation measure (#34) within the Biological Opinion. SCE proposes to implement the Raven Control Plan as outlined in the Biological Assessment Conservation Measure #34 in place of this one. This plan includes conducting depredation surveys and contributing to a range-wide raven management program.
MITIGATION MEASURE	— (MM B-16a) SCE shall gain approval of the plan from the USFWS's Division of Migratory Birds.
Location	All locations along ROW that support desert tortoise
Monitoring / Reporting Action	CPUC/BLM to verify approval.
Responsible Agency	CPUC; BLM Palm Springs Field Office; USFWS Division of Migratory Bird
Timing	Prior to, during, and post construction
Interpretation & Approach	The raven control plan incorporated as part of the formal ESA Section 7 consultation process is proposed instead of the previously listed plan. SCE will obtain approval of the plan from the BLM and USFWS through the issuance of the BO.
MITIGATION MEASURE	— (MM B-16a) 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 all SCE and other transmission line companies operating in ROW receive proper training.
Responsible Agency	CPUC; BLM Palm Springs Field Office; USFWS Division of Migratory Bird
Timing	Prior to, during, and post construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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 within the San Bernardino National Forest
Monitoring / Reporting Action	CPUC/BLM verifies that SBNF approves the construction plan and monitor verifies that construction does not occur in Riparian Conservation Areas.
Responsible Agency	San Bernardino National Forest
Timing	Prior to and during construction
Interpretation & Approach	An assessment of jurisdictional aquatic resources has been completed and no riparian areas that meet the USFS definition of a Riparian Conservation Area were identified within construction areas on USFS lands (Dudek, 2009). SCE shall provide documentation to confirm avoidance.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— APM B-1. Vegetation. Avoid direct disturbance of highly sensitive features (as identified in E. Linwood Smith's (1985) Impact Assessment/Mitigation Planning Chart; see Appendix E) with spanning and careful local adjustment in tower footing placement. (BLM B-5.1 Vegetation) [Note: The reference to Appendix E is unknown. There is no Appendix E as part of the BLM right-of-way grant (provided from PEA Appendix A). However, the Smith report itself is found in FSEIS (1988) as Appendix B, Study of Desert Bighorn Sheep.]
Location	Locations within project disturbance areas that have the potential to support sensitive biological resources.
Monitoring / Reporting Action	CPUC to monitor
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	SCE has updated the 1985 highly sensitive features impact assessment and prepared Project maps identifying special-status species from surveys conducted for the Project from 2007 to-date. This information is being used during final engineering design evaluation and the results will be documented in the Sensitive Biological Resources Avoidance Plan, as required by APM B-8.
MITIGATION MEASURE	— APM B-2. Vegetation. Avoid the introduction of noxious weeds and/or other invasive species through standard noxious weed measures. This will benefit most of the species covered by the [Coachella Valley Multiple Species Habitat Conservation] plan. (SCE)
Location	Locations within project disturbance areas that occur on BLM land where noxious weeds are identified as part of MM B-2a.
Monitoring / Reporting Action	CPUC to monitor
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	SCE will identify populations of BLM- and state-listed high priority invasive and noxious weeds as well as other known noxious weed populations listed by the California Invasive Plant Council and the California Department of Food and Agriculture for the Low Desert/Mojave Weed Management Area in areas of disturbance on BLM lands. SCE shall implement weed management activities consistent with BLM directives.
MITIGATION MEASURE	— APM B-3. Vegetation [SUPERSEDED BY MM B-9e]. ~~Vehicular travel must be on established roads to the maximum extent practicable. Any off-road vehicle use should be strongly discouraged. This will benefit many of the species covered by the [Coachella Valley Multiple Species Habitat Conservation] plan. (SCE)~~
MITIGATION MEASURE	— APM B-4. Vegetation/Wildlife. Avoid sand compaction at all sites in the Coachella Valley. This will benefit such species as the giant sand treader cricket, Coachella Valley Jerusalem cricket, and Coachella Valley milkvetch. (SCE)
Location	Locations within project disturbance areas that have the potential to support the giant sand treader cricket, Coachella Valley Jerusalem cricket, and Coachella Valley milkvetch within the Coachella Valley MSHCP Plan Area.
Monitoring / Reporting Action	CPUC to monitor
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented
Mitigation Measure	— APM B-5. Vegetation [SUPERSEDED BY MM B-9e].
MITIGATION MEASURE	— APM B-6. Vegetation. Avoid vehicular travel in washes to protect triple-ridged milkvetch. (SCE)
Location	Locations within project disturbance areas that have the potential to support triple-ridged milkvetch within the Coachella Valley MSHCP Plan Area.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

Monitoring / Reporting Action	CPUC to monitor
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	As part of MM B-8a, SCE has completed focused special-status plant surveys in 2005, 2006, and 2007 (EPG, Greystone, 2006; EPG, 2007; BRC; Dudek, 2008). SCE has consulted with the USFWS and CDFG on survey methodology and results. No triple-ridged milkvetch were detected. If the species is found during future construction 7-day clearance surveys just prior to construction, vehicular travel will avoid any occurrences of triple-ridged milkvetch. SCE shall provide previous survey results. SCE will implement the 14-day pre-construction clearance survey to avoid survey conflicts as required by other overlapping mitigation measures.
MITIGATION MEASURE	— APM B-7. Vegetation/Wildlife. No activities whatever should occur in wetland areas. (SCE)
Location	Locations within project disturbance areas that support federal jurisdictional wetlands, as defined by the USACE.
Monitoring / Reporting Action	CPUC to monitor
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	Federal jurisdictional wetlands will be avoided by the Project. In the event the Project must affect federal jurisdictional wetlands; the USACE, CDFG, and State Water Quality Control Board will be consulted to obtain required permits.
MITIGATION MEASURE	— APM B-8. Vegetation. Provide additional detailed surveys and tower-specific adjustments as needed prior to construction for major sensitive feature sites (e.g., concentrations of sensitive plants, individual palm trees, woody dune or wash communities) which cannot be easily avoided by spanning. (See Appendix B of the Devers–Palo Verde No. 2 EIR [1987] and Appendix E of the SEIS [1988].) The methodologies and results of these surveys must be submitted to and approved in writing by the BLM Authorized Officer. (BLM B-5.2 Vegetation)
Location	Locations within project disturbance areas that have the potential to support sensitive vegetation communities.
Monitoring / Reporting Action	BLM to review findings and avoidance measures submitted by SCE.
Responsible Agency	BLM
Timing	Prior to construction
Interpretation & Approach	SCE will prepare a Sensitive Biological Resources Avoidance Plan that will document the process of evaluation of sensitive biological resource locations and modification of structure placement [to be submitted and approved by the BLM]
MITIGATION MEASURE	— APM B-9. Vegetation. Initiate transplant efforts for *Ferocactus* and *Coryphantha* as soon as probable losses can be determined. Any plans for transplanting must be developed in consultation with a BLM botanist and approved in writing by the BLM Authorized Officer. (BLM B-5.4 Vegetation)
Location	Locations within project disturbance areas that support *Ferocactus* and *Coryphantha* species.
Monitoring / Reporting Action	BLM to coordinate and review transplanting plan submitted by SCE.
Responsible Agency	BLM
Timing	Prior to and during construction
Interpretation & Approach	The impact identified for this mitigation measure is focused on the Arizona portion of the project, which is no longer part of the project. However, SCE will conduct pre-construction botanical surveys for sensitive plants and potential individual species for transplanting on BLM lands pursuant to MM B-6a. SCE will coordinate with the BLM to obtain approval of the plant transplanting plan in accordance with BLM management plans.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— APM B-11. Vegetation. The Authorized Officer may require vegetation in certain areas to be cleared by hand tools. Scalping of top soil and removal of low growing vegetation will not be allowed unless authorized by the Authorized Officer. (BLM B-5.6 Vegetation)
Location	Locations within project disturbance areas that have the potential to support sensitive vegetation communities.
Monitoring / Reporting Action	BLM to coordinate and review transplanting plan submitted by SCE.
Responsible Agency	BLM
Timing	Prior to and during construction
Interpretation & Approach	SCE will coordinate with BLM during the review of the Sensitive Biological Resource Avoidance Report (APM B-8). Identified areas of disturbance to sensitive vegetation communities (coastal sage scrub, desert dunes and desert sand fields, desert fan palm oasis woodland, mesquite bosque/hummocks, and southern cottonwood-willow riparian forest) will be evaluated and a decision made whether hand-clearing is appropriate during development of the Habitat Restoration/Compensation Plan (MM B-1a).
MITIGATION MEASURE	— APM B-12. Vegetation. Where possible, towers or access roads will be located so as to avoid sensitive plants or plant communities. Where this is not feasible, affected individual plants will be transplanted. Towers will also be placed so that lines will span critical wildlife habitat. (BLM B-5.7 Vegetation)
Location	Locations within project disturbance areas that have the potential to support sensitive vegetation communities and/or species critical habitat as defined by the USFWS.
Monitoring / Reporting Action	SCE will submit for review and approval a Sensitive Biological Resources Avoidance Plan and Plant Transplanting Plan, if necessary
Responsible Agency	BLM
Timing	Prior to and during construction
Interpretation & Approach	SCE will implement APM B-8 and MM B-6a, which will document avoidance of listed plants and identify potential plants that may be suitable for transplanting.
MITIGATION MEASURE	— APM B-13. Vegetation. Tower sites will be selected to allow maximum spacing of sensitive features. (BLM B-5.8 Vegetation)
Location	Locations within project disturbance areas that have the potential to support sensitive vegetation communities.
Monitoring / Reporting Action	SCE will submit for review and approval a Sensitive Biological Resources Avoidance Plan.
Responsible Agency	BLM
Timing	Prior to construction
Interpretation & Approach	SCE will implement APM B-8, which will document avoidance of sensitive vegetation.
MITIGATION MEASURE	— APM B-14. Vegetation. Minimize the area needed for equipment operation and material storage and assembly. (BLM B-5.3 Vegetation)
Location	Locations within project disturbance areas that have the potential to support sensitive vegetation communities.
Monitoring / Reporting Action	SCE will submit for review and approval a Sensitive Biological Resources Avoidance Plan.
Responsible Agency	BLM
Timing	Prior to construction
Interpretation & Approach	SCE will implement APM B-8, which will document minimization of sensitive vegetation impacts.
MITIGATION MEASURE	— APM B-16. Wildlife. [SUPERSEDED BY MM B-9e]
MITIGATION MEASURE	— APM B-17. Wildlife. [SUPERSEDED BY MM B-9e]

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— APM B-18. Wildlife. Disturbed areas – To the maximum extent possible, transmission pylons and poles, equipment storage areas, and wire-pulling sites should be sited in a manner that avoids desert tortoise burrows. (SCE)
Location	Locations within project disturbance areas that support desert tortoise burrows.
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with APM.
Responsible Agency	BLM, CPUC, USFWS, and CDFG
Timing	Prior to and during construction
Interpretation & Approach	SCE will implement APM B-8, which will document avoidance of desert tortoise burrows. SCE shall perform pre-construction biological surveys a minimum of 2 weeks prior to construction to identify potential burrows.
MITIGATION MEASURE	— APM B-19. Wildlife. Restoration – Whenever possible, spur roads and access roads and other disturbed sites created during construction should be recontoured and restored. (SCE)
Location	All sensitive vegetation communities 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.
Responsible Agency	BLM and CPUC
Timing	Prior to, during, and post construction
Interpretation & Approach	SCE will implement this measure through implementation of the project's Habitat Restoration/Compensation Plan (MM B-1a).
MITIGATION MEASURE	— APM B-20. Wildlife. Ravens – All transmission lines should be designed in a manner that would reduce the likelihood of nesting by common ravens. Each transmission line company should remove any common raven nests that are found on its structures. Transmission line companies must obtain a permit from USFWS's Division of Migratory Birds to take common ravens or their nests. (SCE)
Location	Locations along ROW that support desert tortoise
Monitoring / Reporting Action	Same as MM B-16a
Responsible Agency	BLM and CPUC
Timing	Prior to, during, and post construction
Interpretation & Approach	SCE has completed compliance with the Federal ESA and included a raven control plan as one of the Project's conservation measures (34) within the BO, which will be implemented to satisfy this measure. As part of implementing the conservation measures included in the Project's ESA Section 7 BO and MM B-16a, SCE will identify offending raven with predation on juvenile tortoises. SCE will make a contribution to the National Fish and Wildlife Foundation (NFWF), acting on behalf of the BLM, to participate in the range-wide raven management program administered by the U. S. Fish and Wildlife Service.
MITIGATION MEASURE	— APM B-21. Wildlife. No clearing of or other disturbance to riparian habitats. If unavoidable, riparian habitats must be replaced or restored. This action will benefit several riparian bird species including summer tanager, yellow warbler, yellow breasted chat, least Bell's vireo, and southwestern willow flycatcher. (SCE)
Location	Locations within project disturbance areas that have the potential to support riparian bird species including summer tanager, yellow warbler, yellow breasted chat, least Bell's vireo, and southwestern willow flycatcher.
Monitoring / Reporting Action	SCE will submit for review and approval a Sensitive Biological Resources Avoidance Plan and Habitat Restoration/Compensation Plan, if necessary
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

Interpretation & Approach	SCE will implement APM B-8 to avoid riparian habitat disturbance to the maximum extent practicable. Identified areas of disturbance to riparian habitat will be restored according to the Habitat Restoration/Compensation Plan (MM B-1a).
MITIGATION MEASURE	— APM B-22. Wildlife. Avoid impact to mesquite-dominated habitats to protect crissal thrasher. (SCE)
Location	Locations within project disturbance areas that support mesquite-dominated habitats suitable for crissal thrasher within the Coachella Valley MSHCP Plan Area.
Monitoring / Reporting Action	BLM/CPUC/SCE to monitor compliance
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	SCE will implement APM B-8 to avoid mesquite-dominated habitat disturbance to the maximum extent practicable. Identified areas of disturbance to mesquite-dominated habitat will be restored according to the Habitat Restoration/Compensation Plan (MM B-1a).
MITIGATION MEASURE	— APM B-23. Wildlife. Minimize impact to or removal of creosote bush to benefit LeConte's thrasher. (SCE)
Location	Locations within project disturbance areas that support creosote bush suitable for LeConte's thrasher within the Coachella Valley MSHCP Plan Area.
Monitoring / Reporting Action	BLM/CPUC/SCE to monitor compliance
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	SCE will implement APM B-8 to minimize LeConte's thrasher habitat disturbance to the maximum extent practicable. Identified areas of disturbance will be restored according to the Habitat Restoration/Compensation Plan (MM B-1a).
MITIGATION MEASURE	— APM B-24. Wildlife. Avoid any alterations to the vegetation structure of Washington fan palm oases to benefit southern yellow bat. (SCE)
Location	Locations within project disturbance areas that support Washington fan palm oases suitable for southern yellow bat within the Coachella Valley MSHCP Plan Area.
Monitoring / Reporting Action	BLM/CPUC/SCE to monitor compliance
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	SCE will implement APM B-8 to avoid Washington fan palm oases disturbance to the maximum extent practicable. Identified areas of disturbance will be restored according to the Habitat Restoration/Compensation Plan (MM B-1a).
MITIGATION MEASURE	— APM B-25. Wildlife. Avoid any alterations of mesquite hummock habitat to benefit Coachella Valley round-tailed ground squirrel. (SCE)
Location	Locations within project disturbance areas that support mesquite hummock habitat suitable for Coachella Valley round-tailed ground squirrel within the Coachella Valley MSHCP Plan Area.
Monitoring / Reporting Action	BLM/CPUC/SCE to monitor compliance
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	SCE will implement APM B-8 to avoid mesquite hummock disturbance to the maximum extent practicable. Identified areas of disturbance will be restored according to the Habitat Restoration/Compensation Plan (MM B-1a).

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— APM B-26. **Wildlife.** Wash communities along the entire route and sand dune communities in the Coachella Valley (see Map 10-AZ in the Draft SEIS and Figure 4.5-1 in the CPUC Draft EIR, 1987) will be spanned to the extent possible. (BLM B-5.2 Wildlife)
Location	Locations within project disturbance areas that support riparian or sand dune vegetation communities within the Coachella Valley.
Monitoring / Reporting Action	BLM/CPUC/SCE to monitor compliance
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	SCE will implement APM B-8 to avoid riparian and sand dune vegetation disturbance to the maximum extent practicable. Identified areas of disturbance will be restored according to the Habitat Restoration/Compensation Plan (MM B-1a).
MITIGATION MEASURE	— APM B-27. **Wildlife.** Prior to construction activities, the Holder shall have a qualified tortoise biologist present a class or briefing to construction workers. Subjects addressed shall include tortoise sensitivity to human disturbance, daily and seasonal activity patterns, and proper handling for removal from roadways. (BLM B-5.4 Wildlife)
Location	All project areas that may support desert tortoise.
Monitoring / Reporting Action	A qualified biological monitor shall implement desert tortoise training
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	SCE will prepare a desert tortoise training program as part of WEAP and ESA Section 7 BO conservation measures for desert tortoise.
MITIGATION MEASURE	— APM B-28. **Wildlife.** The Holder shall hire a qualified tortoise biologist to conduct daily inspections of roads and work areas within tortoise habitat during the tortoise season of activity (February 15 to June 15, July 15 to October 15). Tortoises found to be in jeopardy will be removed to a nearby site. Tortoises may be held for short periods, if judged necessary, to allow construction crews to pass through an area. The Holder will provide proper facilities for such temporary holding. (BLM B-5.6 Wildlife)
Location	Locations along the proposed route that support desert tortoise
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	SCE will implement MM B-7 and all of the conservation measures specific to desert tortoise included in the Project's ESA Section 7 BO.
MITIGATION MEASURE	— APM B-29. **Wildlife.** The Holder shall restrict the speed on all roads within tortoise habitat to a maximum of 25 miles per hour. The Holder is responsible for ensuring compliance with this limit by its employees. (BLM B-5.6 Wildlife)
Location	SCE access roads along the proposed route within desert tortoise habitat
Monitoring / Reporting Action	BLM/CPUC/SCE to monitor compliance
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	SCE will implement this measure and all of the conservation measures specific to desert tortoise contained within the project's Endangered Species Act Section 7 Biological Opinion.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— APM B-30. Wildlife. Within tortoise habitat in California, spur roads shall not be bladed except where necessary to allow access for construction vehicles. Required vehicles shall enter on one pathway which is flagged and developed only by the passage of vehicles crushing vegetation. The spur shall be flagged by a qualified tortoise biologist prior to use. The spur shall avoid tortoise burrows and large perennial plants, yet be as short as possible within these requirements. (BLM B-5.7 Wildlife)
Location	New SCE stub roads along the proposed route within desert tortoise habitat
Monitoring / Reporting Action	SCE will submit for review and approval a Sensitive Biological Resources Avoidance Plan.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	SCE will implement APM B-8, which will document avoidance and minimization of desert tortoise burrows.
MITIGATION MEASURE	— APM B-31. Wildlife. Any desert tortoise observed on access roads or work areas will be moved immediately away from the roadway into safe areas. (BLM B-5.8 Wildlife)
Location	Locations along the proposed route that support desert tortoise
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	SCE will implement MM B-7 and all of the conservation measures specific to desert tortoise included in the Project's ESA Section 7 BO.
MITIGATION MEASURE	— APM B-32. Wildlife. In areas considered to comprise suitable tortoise habitat, or other areas where tortoise are observed, all access roads and tower construction sites will be surveyed by a qualified biologist to delineate burrows or individuals for protection. Burrows near construction sites will be clearly delineated on the ground. Road, footing, and work area alignments should be modified to the extent possible to avoid adversely affecting any tortoise burrows encountered during these surveys. Where tortoise burrows will be unavoidably destroyed, they should be excavated carefully using hand tools, under the supervision of a field biologist with demonstrated prior experience with this species. See Map 11-AZ in Appendix F in the Draft EIS (1988) and Figure 4.5-2 in the Devers–Palo Verde No. 2 EIR (1987). Also see Appendix E for link and milepost descriptions and mitigation measures. (BLM B-5.9 Wildlife)
Location	Locations along the proposed route that support desert tortoise
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	SCE will implement MM B-7 and all of the conservation measures specific to desert tortoise included in the Project's ESA Section 7 BO.
MITIGATION MEASURE	— APM B-33. Wildlife. If possible, no new roads, tower sitings, or spur roads will be built in blow sand areas. However, if new spur roads are required through wind-blown sand habitat, the road will be returned to natural conditions and effectively closed (gated or bermed) following construction. Pre-construction surveys will identify wind-blown sand dune habitats. (BLM B-5.10 Wildlife)
Location	Locations within project disturbance areas that support wind-blown sand dune vegetation communities within the Coachella Valley.
Monitoring / Reporting Action	SCE to monitor compliance
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

Interpretation & Approach	SCE has conducted pre-construction (baseline) surveys to identify wind-blown sand dune habitat and will implement APM B-8 to minimize wind-blown sand dune vegetation community disturbance to the extent practicable. Identified areas of disturbance will be restored according to the Habitat Restoration/Compensation Plan (MM B-1a).
MITIGATION MEASURE	— APM B-34. Wildlife. Where the project crosses through the Coachella Valley Preserve, the Holder will cooperate with the Preserve in closing (gating) existing access roads.
Location	All project areas within the Coachella Valley Preserve
Monitoring / Reporting Action	SCE will contact the Coachella Valley Preserve manager to coordinate access
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (APM B-34) (a) A qualified biologist will also be present with work crews to survey and clear work areas daily for Coachella Valley fringe-toed lizard (CVFTL), flat-tailed horned lizard (FTHL), and other sensitive species in the Preserve to identify if any additional areas of occupied CVFTL and FTHL habitat are present along the route or at construction staging areas. (b) This survey will be conducted during appropriate seasons (March 15 to May 15) and conditions for species identification. For any areas of suitable habitat, this measure will apply.
Location	All Project areas within the Coachella Valley Preserve that support sensitive species habitat.
Monitoring / Reporting Action	Training and survey results shall be submitted to all responsible agencies.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	SCE will implement all of the conservation measures specific to Coachella Valley fringe-toed lizard and flat-tail horned lizard included in the Project's ESA Section 7 BO.
MITIGATION MEASURE	— (APM B-34) In the Coachella Valley, compacted soils should be scarified and seeded with a mix of native plant seeds, including bugseed (*Dicoria canescens*), to promote revegetation of plant species valuable to the lizard.
Location	Locations within Project disturbance areas that support habitat for the Coachella Valley fringe-toed lizard within the Coachella Valley.
Monitoring / Reporting Action	BLM/CPUC to monitor compliance
Responsible Agency	BLM and CPUC
Timing	During and post construction
Interpretation & Approach	Identified areas of disturbance will be restored according to the Habitat Restoration/Compensation Plan (MM B-1a).
MITIGATION MEASURE	— (APM B-34) Construction activity and surface disturbance will be prohibited during the period from January 1 to March 31 for the protection of the bighorn sheep lambing areas. (BLM B-5.11 Wildlife)
Location	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 construction clearance surveys.
Responsible Agency	BLM, CPUC, and USFS
Timing	Prior to and during construction

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

Interpretation & Approach	SCE has completed compliance with the Federal ESA. The USFWS and CDFG have determined that the Project will have no affect on the bighorn sheep. Therefore, the above requirements do not apply during or following construction activities. SCE will provide documentation to support this determination. SCE will contact the USFS and Bighorn Institute 2 weeks prior to construction activities occurring on USFS land or within the Snow Creek area of the Project to ensure individuals are not present and will not be affected by construction activities.
MITIGATION MEASURE	— APM B-35. Wildlife. Avoid upland areas where desert tortoises might occur and/or have a biologist present during construction activities that involve earth moving in order to move any tortoises (in burrows or cover-sites, or on the surface) that would likely be impacted. (BLM B-5.17 Wildlife)
Location	Locations along the proposed route that support desert tortoise
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	SCE will implement MM B-7 and all of the conservation measures specific to desert tortoise included in the Project's ESA Section 7 BO.
MITIGATION MEASURE	— APM B-36. Wildlife. Avoid construction activities that would tend to create wind barriers that might result in sand stabilization in order to minimize impacts to populations of the Coachella Valley fringe-toed lizard. (BLM B-5.18 Wildlife)
Location	All Project areas that support Coachella Valley fringe-toed lizard habitat.
Monitoring / Reporting Action	SCE will implement APM B-8
Responsible Agency	BLM
Timing	During construction
Interpretation & Approach	All of the conservation measures specific to Coachella Valley fringe-toed lizard contained within the project's Endangered Species Act Section 7 Biological Opinion.
MITIGATION MEASURE	— APM B-37. Wildlife. Mitigation for the coastal California gnatcatcher should include protocol-driven pre-construction surveys. If gnatcatchers are found to be present, suitable habitat should be avoided, including relocating towers and access. If habitat cannot be avoided, SCE should either restore damaged habitat, as at the Weapons Support Facility, Fallbrook Detachment, San Diego County (Soil Ecology and Research Group, 2004), or participate in land set-aside programs such as the Natural Community Conservation Planning program (NCCP). Another potential mitigation action would be that of assisting in the provision of funding for monitoring programs that may be undertaken through the Western Riverside County Multiple Species Habitat Conservation Plan. (SCE)
Location	Locations of the Project area that support suitable coastal sage scrub habitat for the coastal California gnatcatcher.
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Responsible Agency	BLM and CPUC
Timing	Prior to, during and post construction
Interpretation & Approach	SCE has completed protocol, pre-construction (baseline) surveys for the coastal California gnatcatcher in compliance with the Federal ESA. The USFWS and CDFG have determined that the Project will have no affect on the coastal California gnatcatcher. SCE shall provide documentation supporting this determination. Therefore, the above requirements do not apply during or following construction activities at this time. New Project features developed through final engineering will be surveyed prior to construction, as described.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	~~— APM B-38. Wildlife. For least Bell's vireo, suitable habitat would be completely avoided by relocating tower sites and/or associated access roads. There would be approximately 0.8 acres of suitable habitat potentially affected by the proposed West of Devers 230 kV upgrade; this small area should be entirely avoided. If avoidance is not possible and the habitat is damaged or lost, SCE should participate in habitat banking programs or provide funding through the Western Riverside County Multiple Species Habitat Conservation Plan for plan-related monitoring of this species. (SCE)~~
Location	~~West of Devers 230 kV upgrade alignment~~
Monitoring / Reporting Action	~~None~~
Responsible Agency	~~None~~
Timing	~~None~~
Interpretation & Approach	The impact identified for this mitigation measure is focused on the now-removed West of Devers portion of the Project. Therefore, SCE does not anticipate implementing this mitigation measure. Furthermore, SCE has completed compliance with the Federal ESA. The USFWS and CDFG have determined that the Project will have no affect on the least Bell's vireo. SCE has provided documentation supporting this determination. This determination was confirmed in a telephone conversation between Aspen and the USFWS on May 24, 2011. As existing mitigation measures identified in the DPV2 Final EIR/EIS, specifically MM B-5a (Conduct pre-construction surveys and monitoring for breeding birds), would provide for the detection of this species, the CPUC approved SCE's request to remove APM B-38
MITIGATION MEASURE	— APM B-39. Wildlife. Stephens' kangaroo rat habitat would be avoided, where possible. (SCE)
Location	Locations of the Project area that support suitable habitat for Stephen's kangaroo rat
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Focused, USFWS-protocol trapping surveys for the Stephens' kangaroo rat have been conducted and the results were positive (Dudek, 2009). SCE has consulted with the USFWS and CDFG on survey methodology and results. SCE will implement APM B-8 to avoid habitat impacts where practical, and all of the conservation measures specific to Stephens' kangaroo rat included in the Project's ESA Section 7 BO.
USFWS Biological Opinion: General Conservation Measure – Construction Phase	BO-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 or Qualified 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.
USFWS Biological Opinion: General Conservation Measure – Construction Phase	BO-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 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.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

USFWS Biological Opinion: General Conservation Measure – Construction Phase	BO-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.
USFWS Biological Opinion: General Conservation Measure – Construction Phase	BO-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.
USFWS Biological Opinion: General Conservation Measure – Construction Phase	BO-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.
USFWS Biological Opinion: General Conservation Measure – Construction Phase	BO-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.
USFWS Biological Opinion: General Conservation Measure – Construction Phase	BO-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.
USFWS Biological Opinion: General Conservation Measure – Construction Phase	BO-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.
USFWS Biological Opinion: General Conservation Measure – Construction Phase	BO-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.
USFWS Biological Opinion: General Conservation Measure – Construction Phase	BO-10. Motor vehicle speed along project routes and existing access roads within modeled, critical, and/or occupied 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.
USFWS Biological Opinion: General Conservation Measure – Construction Phase	BO-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.
USFWS Biological Opinion: General Conservation Measure – Construction Phase	BO-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).
USFWS Biological Opinion: General Conservation Measure – Construction Phase	BO-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.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

USFWS Biological Opinion: General Conservation Measure – Construction Phase	BO-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 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.
USFWS Biological Opinion: General Conservation Measure – Construction Phase	BO-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 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.
USFWS Biological Opinion: General Conservation Measure – Construction Phase	BO-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.
USFWS Biological Opinion: General Conservation Measure – O&M Phase	BO-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.
USFWS Biological Opinion: General Conservation Measure – O&M Phase	BO-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.

Table DPV-1. Mitigation Measures and Applicant Proposed Measures – Biological Resources

USFWS Biological Opinion: General Conservation Measure – O&M Phase	BO-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.
USFWS Biological Opinion: General Conservation Measure – O&M Phase	BO-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.
USFWS Biological Opinion: General Conservation Measure – O&M Phase	BO-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.
USFWS Biological Opinion: General Conservation Measure – O&M Phase	BO-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.
USFWS Biological Opinion: General Conservation Measure – O&M Phase	BO-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.
USFWS Biological Opinion: Construction and O&M Reporting	BO-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.

Table DPV-2. Mitigation Measures and Applicant Proposed Measures – Visual Resources

MITIGATION MEASURE	— MM 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.
Location	Mitigation Measure V-1a applies to all sites and all routes.
Monitoring / Reporting Action	CPUC and BLM to verify in the field during construction and following construction.
Responsible Agency	CPUC, BLM on BLM-administered lands
Timing	During construction
Interpretation & Approach	Measure applies to temporary construction areas and material and equipment storage areas, including storage sites for excavated materials if those sites will be visible from nearby roads, residences, public gathering areas, or recreational areas, facilities, or trails. SCE will screen these facilities from viewers using fencing as described in the measure. SCE will submit plans demonstrating compliance to the BLM and CPUC for those facilities with impacts to viewers. This measure does not apply to pulling/splicing locations or tower sites.
MITIGATION MEASURE	— (MM V-1a) 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 all sites and all routes.
Monitoring / Reporting Action	CPUC and BLM to verify plans.
Responsible Agency	CPUC, BLM on BLM-administered lands
Timing	Prior to construction
Interpretation & Approach	See Mitigation Measure V-1a.
MITIGATION MEASURE	— MM 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.
Location	Mitigation Measure V-1b applies to all static sites.
Monitoring / Reporting Action	Monitor implementation in the field during construction.
Responsible Agency	CPUC, BLM on BLM-administered lands
Timing	During construction
Interpretation & Approach	Measure will be implemented.

Table DPV-2. Mitigation Measures and Applicant Proposed Measures – Visual Resources

MITIGATION MEASURE	— (MM V-1b) 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, whichever 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 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	Mitigation Measure V-1b applies to all static sites.
Monitoring / Reporting Action	CPUC and BLM to review and approve the Construction Lighting Mitigation Plan prior to construction.
Responsible Agency	CPUC, BLM on BLM-administered lands
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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.
Location	All grading sites for access roads, spur roads, and ancillary facilities
Monitoring / Reporting Action	Verify compliance during construction.
Responsible Agency	CPUC, BLM on BLM-administered lands
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM V-2a) 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.
Responsible Agency	CPUC, BLM on BLM-administered lands
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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 revegetated 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.
Location	All grading sites for access roads, spur roads, and ancillary facilities
Monitoring / Reporting Action	Verify implementation following construction.
Responsible Agency	CPUC, BLM on BLM-administered lands
Timing	Prior to and during construction

Table DPV-2. Mitigation Measures and Applicant Proposed Measures – Visual Resources

Interpretation & Approach	This measure applies to all ground disturbance areas not occupied by permanent facilities. It is expected that this measure will be consistent with the BLM habitat restoration/rehabilitation approaches in the Habitat Restoration and Compensation Plan (HRCP) required under MM B-1. However, if actual or potential inconsistencies with the HRCP are anticipated, the appropriate CPUC-approved visual resources specialist and biologist(s) will review the nature of the inconsistency, in the field if necessary, to satisfactorily resolve the potential inconsistency.
MITIGATION MEASURE	— (MM V-2b) 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.
Responsible Agency	CPUC, BLM on BLM-administered lands
Timing	Prior to construction
Interpretation & Approach	This measure applies to all ground disturbance areas not occupied by permanent facilities. It is expected that this measure will be consistent with the BLM habitat restoration/rehabilitation approaches in the Habitat Restoration and Compensation Plan (HRCP) required under MM B-1. However, if actual or potential inconsistencies with the HRCP are anticipated, the appropriate CPUC-approved visual resources specialist and biologist(s) will review the nature of the inconsistency, in the field if necessary, to satisfactorily resolve the potential inconsistency.
MITIGATION MEASURE	— MM 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.
Location	Locations of all land scars that would be visible to the public
Monitoring / Reporting Action	Verify implementation following construction.
Responsible Agency	CPUC, BLM on BLM-administered lands
Timing	Prior to and during construction
Interpretation & Approach	This measure applies to all ground disturbance areas not occupied by permanent facilities.
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 • all new and reconductored 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, Dillon Road, and SR 62 • all new conductors are to be non-specular in design in order to reduce conductor visibility and visual contrast • to the extent feasible no new access roads are to be constructed downhill from existing or proposed towers to reduce the potential for skylining.
Location	Applies to all tower locations and route segments.

Table DPV-2. Mitigation Measures and Applicant Proposed Measures – Visual Resources

Monitoring / Reporting Action	SCE to submit final design plans and implementation is to be verified during and following construction.
Responsible Agency	CPUC, BLM on BLM-administered lands
Timing	Prior to construction for design plans. During and following construction for verification.
Interpretation & Approach	Location of towers will be subject to consideration/restrictions of other resources (biological and archaeological); DPV2 tower heights must be increased from the heights specified in the EIR/EIS due to subsequent changes in GO 95 clearance requirements. However, any proposed changes to tower locations or heights, from that evaluated in the EIR/EIS, must be reviewed and approved by the CPUC, BLM (on BLM-administered lands), and USFS (on USFS-administered lands).
MITIGATION MEASURE	— MM V-6a. Reduce Visual Contrast Associated with Ancillary Facilities. SCE shall submit to BLM and CPUC a Surface Treatment Plan describing the application of colors and textures to all facility structures, buildings, walls, fences, and components comprising all ancillary facilities including substations/switchyards, series capacitor banks, and optical repeater stations. The Surface Treatment Plan must reduce glare and minimize visual intrusion and contrast by blending the facilities with the landscape. The Treatment Plan shall be submitted to BLM and CPUC for approval at least 90 days prior to (a) ordering the first structures that are to be color treated during manufacture, or (b) construction of any of the ancillary facility component, whichever comes first. If the BLM or CPUC notifies SCE that revisions to the Plan are needed before the Plan can be approved, within 30 days of receiving that notification, SCE shall prepare and submit for review and approval a revised Plan. The Surface Treatment Plan shall include: • specification, and 11"x17" color simulations at life size scale, of the treatment proposed for use on project structures, including structures treated during manufacture • a list of each major project structure, building, tower and/or pole, and fencing specifying the color(s) and finish proposed for each (colors must be identified by name and by vendor brand or a universal designation) • two sets of brochures and/or color chips for each proposed color • a detailed schedule for completion of the treatment • a procedure to ensure proper treatment maintenance for the life of the project. • SCE shall not specify to the vendors the treatment of any buildings or structures treated during manufacture, or perform the final treatment on any buildings or structures treated on site, until SCE receives notification of approval of the Treatment Plan by the BLM and CPUC. Within 30 days following the start of commercial operation, SCE shall notify the BLM and CPUC that all buildings and structures are ready for inspection.
Location	Applies to all permanent ancillary facilities including substations, switchyards, series capacitor banks, and optical repeater stations. This measure does not apply to Valley Substation or the series capacitor bank, given the structural and color context already established by the existing equipment.
Monitoring / Reporting Action	CPUC and BLM to review Surface Treatment Plan prior to start of construction and verify implementation following construction.
Responsible Agency	CPUC, BLM on BLM-administered lands
Timing	Prior to construction
Interpretation & Approach	This measure will be implemented. Color chips for project structures will be provided by SCE, from selected manufacturer bidding samples, to be approved by CPUC, BLM, and SBNF prior to Contract award. *For Substations*. Measure applies to architectural components visible to public from local viewing areas including 8-foot perimeter wall and interior components. Where feasible and available from vendors, SCE will request low reflectivity and neutral finishes. SCE will also request dull finishes. This measure is applicable to facility structures, buildings, walls, and fences. It does not appear applicable to electrical equipment. However, the creation of noticeable and significant color contrasts within the substation confines should be avoided. So, every attempt should be made to "harmoniously" blend the components with each other and the landscape. SCE will take similar approach as used for Tehachapi Renewable Transmission Project (TRTP). Based on numerous transmission line towers and gen-tie towers and lines adjacent to substations, no benefit to treating transmission line towers located inside substation walls.

Table DPV-2. Mitigation Measures and Applicant Proposed Measures – Visual Resources

MITIGATION MEASURE	— MM 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.
Location	Applies to all permanent ancillary facilities including substations, switchyards, series capacitor banks, and optical repeater stations.
Monitoring / Reporting Action	Verify implementation following construction.
Responsible Agency	CPUC, BLM on BLM-administered lands
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM V-6c) 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
Responsible Agency	CPUC, BLM on BLM-administered lands
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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.
Location	Applies to all tower locations and route segments [Similar to Mitigation Measure V-3a, but applies to Devers-Valley #2 Alternative]
Monitoring / Reporting Action	CPUC, BLM, and Forest Service to review Project Design Plan prior to start of construction and verify implementation following construction.
Responsible Agency	CPUC, BLM on BLM-administered lands, Forest Service on National Forest Lands
Timing	Prior to and during construction

Table DPV-2. Mitigation Measures and Applicant Proposed Measures – Visual Resources

Interpretation & Approach	Location of towers will be subject to consideration/restrictions of other resources (biological and archaeological); tower heights will be subject to GO 95 and existing topography. However, any proposed changes to tower locations or heights, from that evaluated in the EIR/EIS, must be reviewed and approved by the CPUC, BLM (on BLM-administered lands), and USFS on USFS (on USFS-administered lands."
MITIGATION MEASURE	— (MM V-40a) 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.
Monitoring / Reporting Action	CPUC, BLM, and Forest Service to review Project Design Plan prior to start of construction and verify implementation following construction.
Responsible Agency	CPUC, BLM on BLM-administered lands, USFS on USFS lands.
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
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 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.
Responsible Agency	CPUC, BLM on BLM-administered lands, Forest Service on National Forest Lands
Timing	Prior to construction

Table DPV-2. Mitigation Measures and Applicant Proposed Measures – Visual Resources

Interpretation & Approach	SCE will consult with the SBNF staff for final details including non-specular conductor color. No paint shall be used on towers or foundations located on SBNF land, per 1/29/08 SBNF meeting minutes. Color chips for project structures will be provided by SCE, from selected manufacturer bidding samples, to be approved by CPUC, BLM, and SBNF prior to Contract award. As discussed in the conference call on February 16, 2011, this measure requires approval of tower steel color on SBNF land by NFS, BLM and CPUC prior to awarding a contract for tower steel. SCE will document its discussion with the SBNF Forest Supervisor and conclusion reached on the dark-colored steel sample for towers on SBNF lands. The meeting minutes from 2/14/11, including identification of the specific towers to be erected with dark-colored steel and attached color photographs of tower steel samples will be sent to the SBNF Forest supervisor for concurrence and proof of compliance. Following receipt of confirmation from the SBNF Forest Supervisor, SCE will forward the meeting minutes and color photographs to BLM and CPUC for review/approval. Compliance documentation for all aspects of the above mitigation measure will be submitted to CPUC.
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.
Responsible Agency	CPUC, BLM on BLM-administered lands, Forest Service on National Forest Lands
Timing	Prior to and during construction
Interpretation & Approach	SCE will consult with SBNF for areas within USFS lands. Color chips for project structures will be provided by SCE, from selected manufacturer bidding samples, to be approved by CPUC, BLM, and NFS prior to Contract award. This measure also addresses towers off of NFS lands but visible from NFS lands. The summary of tower locations needs to also include these towers off of NFS lands, along with the meeting summary and steel sample photographs. As discussed in the conference call on February 16, 2011, this measure requires approval of tower steel color on SBNF land by NFS, BLM and CPUC prior to awarding a contract for tower steel. SCE will document its discussion with the SBNF Forest Supervisor and conclusion reached on the dark-colored steel sample for towers on SBNF lands. The meeting minutes from 2/14/11, including identification of the specific towers to be erected with dark-colored steel and attached color photographs of tower steel samples will be sent to the SBNF Forest supervisor for concurrence and proof of compliance. Following receipt of confirmation from the SBNF Forest Supervisor, SCE will forward the meeting minutes and color photographs to BLM and CPUC for review/approval. Compliance documentation for all aspects of the above mitigation measure will be submitted to CPUC.
MITIGATION MEASURE	— APM V-1. Non-specular conductors will be used [to reduce glare and visual contrast]. (BLM B-6.1) [bracketed text added by SCE].
Location	500 kV transmission lines
Monitoring / Reporting Action	SCE shall provide project design plans. Implementation is to be verified during and following construction.
Responsible Agency	BLM and CPUC
Timing	Prior to construction for design plans. During and following construction for verification.
Interpretation & Approach	Measure will be implemented.

Table DPV-2. Mitigation Measures and Applicant Proposed Measures – Visual Resources

MITIGATION MEASURE	— APM V-2. For the proposed alignment, tower spacing will correspond to the spacing of the existing transmission line structures. Additionally, new tower heights will be adjusted such that the top elevations of each set of towers (new and existing) are horizontal with each other. This will coordinate perceptions of towers and conductors as one element. Site-specific conditions will determine when such mitigation is feasible. Other exceptions to these two measures are where towers will be sited to avoid sensitive features and/or to allow conductors to clearly span features. (BLM B-6.2) [PEA adds: "SCE will comply with the above mitigation measure to the extent possible. However, the ISO has specified that the capacity of the line be 2700 amps under normal conditions and 3600 amps under emergency conditions. This capacity rating is an increase from the 1988 DPV2 capacity rating. This capacity rating necessitates that the heights of some of the proposed Devers-Harquahala towers be slightly taller than [adjacent towers], and in some locations tower spacing may not correspond to the adjacent DPV1 structures, to provide adequate ground clearance." (PEA, p. 6-31).
Location	500 kV transmission line – all segments
Monitoring / Reporting Action	SCE shall provide project design plans. Implementation is to be verified during and following construction.
Responsible Agency	BLM and CPUC
Timing	Prior to construction for design plans. During and following construction for verification.
Interpretation & Approach	Location of towers will be subject to consideration/restrictions of other resources (biological and archaeological); DPV2 tower heights must be increased from the heights specified in the EIR/EIS due to subsequent changes in GO 95 clearance requirements. However, any proposed changes to tower locations or heights, from that evaluated in the EIR/EIS, must be reviewed and approved by the CPUC, BLM (on BLM-administered lands), and USFS on USFS (on USFS-administered lands.
MITIGATION MEASURE	— APM V-3. At all highway and recreation routes-of-travel crossings, towers will be placed at the maximum feasible distance, and when feasible, [except in locations where matching existing tower spacing is deemed appropriate]. (BLM B-6.3) [From "and where feasible," the BLM text reads "...at right angles, from the crossing." SCE has replaced this phrase in the bracketed text.].
Location	At all highway and recreation routes-of-travel crossings
Monitoring / Reporting Action	SCE shall provide project design plans. Implementation is to be verified during and following construction.
Responsible Agency	BLM and CPUC
Timing	Prior to construction for design plans. During and following construction for verification.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM V-4. Improvements to existing access and new access will be accomplished according to Mitigation Measures 1 and 2 as identified under soils. (BLM B-6.4).
Location	500 kV transmission line
Monitoring / Reporting Action	SCE shall provide project design plans. Implementation is to be verified during and following construction.
Responsible Agency	BLM and CPUC
Timing	Prior to construction for design plans. During and following construction for verification.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM V-5. Standard tower spacing would be modified to correspond with spacing of existing transmission line towers where feasible and within limits of standard tower design to reduce visual contrast. (BLM B-6.8a).
Location	500 kV transmission line
Monitoring / Reporting Action	SCE shall provide project design plans. Implementation is to be verified during and following construction.
Responsible Agency	BLM and CPUC
Timing	Prior to construction for design plans. During and following construction for verification.

Table DPV-2. Mitigation Measures and Applicant Proposed Measures – Visual Resources

Interpretation & Approach	Location of towers will be subject to consideration/restrictions of other resources (biological and archaeological). However, any proposed changes to tower locations, from that evaluated in the EIR/EIS, must be reviewed and approved by the CPUC, BLM (on BLM-administered lands), and USFS on USFS (on USFS-administered lands).
MITIGATION MEASURE	— APM V-6. Towers would be placed so as to avoid features and/or to allow conductors to clearly span the feature (within limits of standard tower design) to minimize the amount of sensitive feature disturbed and/or reduce visual contrast (e.g., avoiding skyline situations through placement of tower to one side of a ridge or adjusting tower location to avoid highly visible locations and utilize screening of nearby landforms). (BLM B-6.8b).
Location	500 kV transmission line
Monitoring / Reporting Action	SCE shall provide project design plans. Implementation is to be verified during and following construction.
Responsible Agency	BLM and CPUC
Timing	Prior to construction for design plans. During and following construction for verification.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM V-7. The proposed steel lattice towers would be constructed using a dulled galvanized steel finish, which would result in visual contrast reduction. (SCE).
Location	500 kV transmission line route – all segments
Monitoring / Reporting Action	SCE shall provide project design plans. Implementation is to be verified during and following construction.
Responsible Agency	BLM and CPUC
Timing	Prior to construction for design plans. During and following construction for verification.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM V-8. Non-specular conductors would be used to reduce glare and resulting visual contrast. (SCE).
Location	500 kV transmission line route – all segments
Monitoring / Reporting Action	SCE shall provide project design plans. Implementation is to be verified during and following construction.
Responsible Agency	BLM and CPUC
Timing	Prior to construction for design plans. During and following construction for verification.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM V-9. Towers would be located adjacent to existing structures where feasible. Exceptions are at locations where the tower heights and/or spans would be modified based on terrain features allowing for adequate conductor clearance to ground and other facilities within the right-of-way. (SCE).
Location	500 kV transmission line route – all segments.
Monitoring / Reporting Action	SCE shall provide project design plans. Implementation is to be verified during and following construction.
Responsible Agency	BLM and CPUC
Timing	Prior to construction for design plans. During and following construction for verification.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM V-10. At all highway and recreation routes-of-travel crossings, including the I-10 crossing. towers would be placed at the maximum feasible distance, except in locations where matching existing tower spacing is deemed appropriate, and when feasible, at 90 degree angles from the crossing. (SCE)
Location	500 kV transmission line route – all segments
Monitoring / Reporting Action	SCE shall provide project design plans. Implementation is to be verified during and following construction.

Table DPV-2. Mitigation Measures and Applicant Proposed Measures – Visual Resources

Responsible Agency	BLM and CPUC
Timing	Prior to construction for design plans. During and following construction for verification.
Interpretation & Approach	Measure will be implemented.

Table DPV-3. Mitigation Measures and Applicant Proposed Measures – Land Use

MITIGATION MEASURE	— MM 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:
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.
Responsible Agency	CPUC; BLM Palm Springs field office
Timing	45 days prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM L-1a) 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.
Location	Construction activity in all segments.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE submits public notice mailer.
Responsible Agency	CPUC; BLM Palm Springs field office
Timing	15 days prior to construction
Interpretation & Approach	For transmission line and tower construction, notification mailers would be based on construction work segments and associated time periods as defined by the construction contractor. Notification would occur at least 15 days prior to initiation of construction of the applicable segment. If significant construction delays occur, an additional notice shall be prepared and distributed. (Seven days does not provide adequate time to realize construction delay, prepare a mailer, and mail the notice; we would like 15 days rather than 7 days to comply)
MITIGATION MEASURE	— (MM L-1a) 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. If construction is delayed as noted above, an additional round of newspaper ads shall be placed to discuss the status and schedule of construction.
Location	Construction activity in all segments.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE submits newspaper ads in local papers.
Responsible Agency	CPUC; BLM Palm Springs field office
Timing	15 days prior to construction
Interpretation & Approach	For transmission line and tower construction, newspaper advertisements would be based on construction work segments and associated time periods, as defined by the construction contractor. On round of newspaper advertisements would occur at least 15 days prior to initiation of construction of the applicable segment. If significant construction delays occur, an additional round of newspaper ads shall be placed (we would like 15 days rather than 7 days to comply).

Table DPV-3. Mitigation Measures and Applicant Proposed Measures – Land Use

MITIGATION MEASURE	— (MM L-1a) 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 office, 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.
Location	Construction activity in all segments.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE posts notices
Responsible Agency	CPUC; BLM Palm Springs field office
Timing	30 days prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM L-1a) 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 identifies public liaison and toll free hotline
Responsible Agency	CPUC; BLM Palm Springs field office
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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. 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 office
Timing	30 days prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM L-1d: Coordinate with affected business owners. *DELETED* (not applicable; applied to West of Devers only)
Location	Construction activities or material storage near the Cabazon Premium Outlets and Morongo Casino (measure applies to West of Devers).

Table DPV-3. Mitigation Measures and Applicant Proposed Measures – Land Use

MITIGATION MEASURE	— MM 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 CPUC and the BLM. Schools near the project route: • Banning High School, Valley View Elementary School, Romoland Elementary School
Location	Construction activities for the Devers-Valley No. 2 line
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.
Responsible Agency	CPUC; BLM Palm Springs field office
Timing	30 days prior to construction
Interpretation & Approach	Measure applies to facilities within the Devers-Valley route that will be affected by construction.
MITIGATION MEASURE	— APM L-1 [Applies in Arizona only; deleted]
MITIGATION MEASURE	— APM L-2: Although the Holder (ROW grant holder, SCE) may restore and maintain existing access roads, they cannot be either widened or upgraded without approval of the Authorized Officer. (BLM B-1.1)
Location	500 kV transmission line
Monitoring / Reporting Action	BLM/SCE to monitor compliance
Responsible Agency	BLM
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM L-3 [SUPERSEDED BY MM Ag-4a]: ~~New access road construction will be kept to a minimum. (BLM B-1.2)~~
MITIGATION MEASURE	— APM L-4 [SUPERSEDED BY MM Ag-4a]: ~~Where feasible, the following additional mitigation measures would be implemented:~~
MITIGATION MEASURE	— APM L-8: Link 14 crosses an open pit gravel operation. Potential impacts would be mitigated during construction by coordinating with the owner/operator to avoid critical mining periods and high volume earth-moving days. Operational mitigation would include spanning the mine. (SCE)
Location	Gravel mining operation.
Monitoring / Reporting Action	CPUC/BLM/SCE to monitor compliance
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM L-9 [SUPERSEDED BY MM WR-1a]: ~~Link 100 crosses the Pacific Crest National Trail, causing a potential temporary impact during construction. Temporary impacts also may occur where Link 102 crosses Noble Creek Regional Park and the Oak Valley Golf Course. Mitigation for construction includes avoiding high use periods and holidays. Mitigation for operation would require construction using structures placed parallel to existing structures to span and avoid displacement of recreational facilities. (SCE)~~

Table DPV-4. Mitigation Measures and Applicant Proposed Measures – Wilderness and Recreation

MITIGATION MEASURE	— MM 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. • 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 • Indio Hills Palms State Park • BLM off-highway vehicle trails in Shavers Valley
Location	At construction sites that occur within, and along primary access roads that serve, the following recreation areas: 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, and BLM off-highway vehicle trails in Shavers Valley.
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE postpones construction activities per the discretion of the authorized officer for the recreation area.
Responsible Agency	CPUC; BLM Palm Springs field office
Timing	Minimum 40 days prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM WR-1a) 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 locate construction equipment to avoid temporary preclusion of recreation areas per the recommendations of the authorized officer.
Location	See above
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE postpones construction activities per the discretion of the authorized officer for the recreation area.
Responsible Agency	CPUC; BLM Palm Springs field office
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented
MITIGATION MEASURE	— (MM WR-1a) SCE shall locate construction equipment to avoid temporary preclusion of recreation areas per recommendations of the authorized officer.
Location	See above
Monitoring / Reporting Action	Monitor ensures that construction equipment is located appropriately.
Responsible Agency	CPUC; BLM Palm Springs field office
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM WR-1a) SCE shall also prepare a public notice of construction activities consistent with Mitigation Measure L-1a (Prepare Construction Notification Plan)
Location	See above
Monitoring / Reporting Action	Monitor ensures that SCE notifies public appropriately.
Responsible Agency	CPUC; BLM Palm Springs field office

Table DPV-4. Mitigation Measures and Applicant Proposed Measures – Wilderness and Recreation

Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented
MITIGATION MEASURE	— (MM WR-1a) 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.
Location	See above
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE postpones construction activities per the discretion of the authorized officer for the recreation area.
Responsible Agency	CPUC; BLM Palm Springs field office
Timing	30 days prior to and during construction.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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 USDA Forest Service to establish a temporary detour of the trail to avoid hazardous construction areas.
Location	Along the Pacific Crest National Scenic Trail for 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.
Responsible Agency	CPUC; BLM Palm Springs field office; USDA Forest Service.
Timing	Minimum 40 days prior to construction
Interpretation & Approach	Measure will be implemented
MITIGATION MEASURE	— (MM WR-1b) 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 USDA Forest Service and submit this documentation to the CPUC/BLM 30 days prior to construction.
Location	See above
Monitoring / Reporting Action	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.
Responsible Agency	CPUC; BLM Palm Springs field office; USDA Forest Service.
Timing	Minimum 30 days prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM WR-3a: Coordinate tower and road locations with the authorized officer for the recreation area. Where the proposed route 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

Table DPV-4. Mitigation Measures and Applicant Proposed Measures – Wilderness and Recreation

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.
Monitoring / Reporting Action	CPUC/BLM 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.
Responsible Agency	CPUC; BLM, Palm Springs field office
Timing	Minimum 30 days prior to construction
Interpretation & Approach	Measure will be implemented.

Table DPV-5. Mitigation Measures and Applicant Proposed Measures – Agriculture

MITIGATION MEASURE	— MM AG-1a: Establish agreement and coordinate construction activities with agricultural landowners. Sixty (60) days prior to the start of project construction, 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.
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.
Responsible Agency	CPUC, BLM Palm Springs field office
Timing	60 days prior to construction
Interpretation & Approach	SCE currently owns or has easements for most of the ROW and has existing agreements that allow tenant farming within certain areas. SCE will coordinate operations with agricultural owners within the context of existing agreements and/or agreements in order to minimize construction impacts. Where an easement or agreement for farmland does not exist, SCE will obtain a new agreement that provides includes provisions for construction coordination. SCE shall submit agreements (or non-confidential portions thereof) to the CPUC and BLM so monitors can verify their existence. Mitigation Measure would not apply to Devers-Valley.
MITIGATION MEASURE	— (MM AG-1a) 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.
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 agreements between SCE and affected landowners ensure that construction schedules occur during time periods agreed upon.
Responsible Agency	CPUC, BLM Palm Springs field office
Timing	Prior to and during construction
Interpretation & Approach	See Mitigation Measure AG-1a.
MITIGATION MEASURE	— (MM AG-1a) (2) ensure that any areas damaged or disturbed by construction are restored to a condition mutually agreed upon by the landowner and SCE.
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 agreed upon restoration occurs.
Responsible Agency	CPUC, BLM Palm Springs field office
Timing	During and post construction
Interpretation & Approach	Restoration consists of removal of construction materials or debris and restoration to preconstruction conditions.

Table DPV-5. Mitigation Measures and Applicant Proposed Measures – Agriculture

MITIGATION MEASURE	— (MM AG-1a) 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 Proposed 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.
Responsible Agency	CPUC, BLM Palm Springs field office
Timing	Prior to, during, and post construction.
Interpretation & Approach	See Mitigation Measure AG-1a.
MITIGATION MEASURE	— MM 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
Responsible Agency	CPUC, BLM Palm Springs field office
Timing	90 days prior to construction
Interpretation & Approach	SCE will match tower spans with existing DPV1 towers as feasible within agricultural land. Also, see Interpretation and Approach for MM AG-1a. SCE will define the instances in which matching of tower spans is “infeasible” for the CPUC at least 90 days prior to construction. If any matching of the tower spans with DPV1 is considered to be infeasible by SCE at that point (or sooner), then SCE should provide reasoning as to why that is the case so that the CPUC/BLM can determine if there would be any additional impacts during the operational life of the project. Mitigation Measure AG-4a is not required along Devers-Valley.

Table DPV-6. Mitigation Measures and Applicant Proposed Measures – Cultural & Paleontological Resources

MITIGATION MEASURE	— MM 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, reconductoring 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.
Responsible Agency	BLM and CPUC
Timing	Prior to construction.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM C-1b: Avoid and protect potentially significant resources. On the basis of preliminary National Register of Historic Places (NRHP) eligibility assessments (Mitigation Measure C-1a) the BLM and CPUC 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. Where operationally feasible, potentially NRHP-eligible resources shall be protected from direct project impacts by project redesign.
Location	All locations within ground-disturbing activities within potentially NRHP-eligible resources
Monitoring / Reporting Action	BLM, CPUC, and USFS, where applicable, to review inventory findings and eligibility evaluation.
Responsible Agency	BLM and CPUC
Timing	Prior to construction.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM C-1b) Where the BLM and CPUC decide 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 CPUC and 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).
Location	All locations within ground-disturbing activities within potentially NRHP-eligible resources
Monitoring / Reporting Action	BLM, CPUC, and USFS, where applicable, to review inventory findings and eligibility evaluation.

Table DPV-6. Mitigation Measures and Applicant Proposed Measures – Cultural & Paleontological Resources

Responsible Agency	BLM and CPUC
Timing	Prior to construction.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM C-1b) All potentially NRHP-eligible resources (as determined by the BLM and CPUC) 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.
Location	All locations within ground-disturbing activities within potentially NRHP-eligible resources
Monitoring / Reporting Action	BLM, CPUC, and USFS, where applicable, to review inventory findings and eligibility evaluation. CPUC EM to monitor protective fencing installations.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	ESA flagging and monitoring will be used to protect sites during construction activities.
MITIGATION MEASURE	— (MM C-1b) Construction personnel and equipment shall be instructed on how to avoid ESAs. ESAs shall not be identified specifically as cultural resources
Location	All locations within ground-disturbing activities within potentially NRHP-eligible resources
Monitoring / Reporting Action	BLM, CPUC, and USFS, where applicable, to review inventory findings and eligibility evaluation. CPUC EM to review training materials and verify ESA avoidance instruction activities.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.

Table DPV-6. Mitigation Measures and Applicant Proposed Measures – Cultural & Paleontological Resources

MITIGATION MEASURE	— MM 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 and CPUC, 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. The HPTP shall be submitted to the BLM and CPUC 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 and CPUC, appropriate local governments, appropriate Native Americans, and the appropriate State Historic Preservation Officer prior to implementation.
Location	All locations within ground- disturbing activities with potentially NRHP-eligible resources.
Monitoring / Reporting Action	BLM and CPUC to review and approve HPTP. BLM conduct required Native American consultation. BLM draft and negotiate agreement document for appropriate signatures (BLM, SHPOs, Advisory Council on Historic Preservation, Native American Tribes).
Responsible Agency	BLM and CPUC
Timing	Prior to construction.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM C-1c) 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.
Location	All locations within ground- disturbing activities with potentially NRHP-eligible resources.
Monitoring / Reporting Action	BLM and CPUC to review and approve HPTP. BLM conduct required Native American consultation. BLM draft and negotiate agreement document for appropriate signatures (BLM, SHPOs, Advisory Council on Historic Preservation, Native American Tribes).

Table DPV-6. Mitigation Measures and Applicant Proposed Measures – Cultural & Paleontological Resources

Responsible Agency	BLM and CPUC.
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM C-1c) 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 to review and approve HPTP.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM C-1d: Conduct data recovery to reduce adverse effects. If National Register of Historic Places (NRHP)-eligible resources, as determined by the BLM and SHPO, cannot be protected from direct impacts of the Proposed 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.
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.
Responsible Agency	BLM and CPUC
Timing	Prior to, during, and post construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM C-1d) 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 and CPUC.
Location	Within 100 ft of resources identified in HPTP that require data-recovery mitigation.
Monitoring / Reporting Action	BLM and CPUC review and approve final report of data recovery, curation of artifacts and data, and dissemination of final report.
Responsible Agency	BLM and CPUC
Timing	Prior to, during, and post construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM C-1d) 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 and CPUC for their review and approval, as well as to appropriate State repositories and local governments.

Table DPV-6. Mitigation Measures and Applicant Proposed Measures – Cultural & Paleontological Resources

Location	Within 100 ft of resources identified in HPTP that require data-recovery mitigation.
Monitoring / Reporting Action	BLM and CPUC review and approve final report of data recovery, curation of artifacts and data, and dissemination of final report.
Responsible Agency	BLM and CPUC
Timing	During construction; Final report of data-recovery investigations within one year of completion of fieldwork.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM C-1d) Construction work within 100 feet of cultural resources that require data-recovery fieldwork shall not begin until authorized by the BLM or CPUC, as appropriate.
Location	Within 100 ft of resources identified in HPTP that require data-recovery mitigation.
Monitoring / Reporting Action	BLM and CPUC to review and authorize where appropriate
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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)
Location	All locations identified in the HPTP.
Monitoring / Reporting Action	BLM and CPUC receive and act on reports of failure of ESAs to protect cultural resources.
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM C-1e) 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 and CPUC. Archaeological monitoring shall be conducted by a qualified archaeologist familiar with the types of historical and prehistoric resources that could be encountere 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 and CPUC. 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 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.
Location	All locations identified in the HPTP.
Monitoring / Reporting Action	The qualifications of the principal archaeologist and archaeological monitors shall be approved by the BLM and CPUC. BLM and CPUC will also verify Native American Monitoring where appropriate.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.

Table DPV-6. Mitigation Measures and Applicant Proposed Measures – Cultural & Paleontological Resources

MITIGATION MEASURE	— (MM C-1e) 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 CPUC, 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 and CPUC. The Applicant shall notify the BLM of any damage to cultural resource ESAs. The Applicant shall consult with the BLM and CPUC to mitigate damages and to increase effectiveness of ESAs. 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 the HPTP.
Monitoring / Reporting Action	BLM and CPUC, as well as USFS and Aqua Caliente THPO, as appropriate, review monthly monitoring reports.
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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 th procedures to be followed upon the discovery of archaeological materials, including Native America 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 oth cultural materials on or off the right-of-way by the Applicant, his representatives, or employees will n 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.
Location	Entire project
Monitoring / Reporting Action	BLM and CPUC review verification of required training.
Responsible Agency	BLM and CPUC
Timing	Prior to construction.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM C-1f) 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 or CPUC, as appropriate, to make the necessary plans for evaluation and treatment of the find(s) or mitigation of adverse effects to ESAs.
Location	Entire project

Table DPV-6. Mitigation Measures and Applicant Proposed Measures – Cultural & Paleontological Resources

Monitoring / Reporting Action	BLM and CPUC review and approve contract specifications. BLM and CPUC receive prompt notification of new resource discoveries and violations.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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. BLM conducts and document consultation with appropriate Native American tribes and agencies. BLM documents final disposition or treatment of Native American human remains.
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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 Proposed 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.
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.
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM C-3a) 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	Monitoring of the plan shall occur during construction
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.

Table DPV-6. Mitigation Measures and Applicant Proposed Measures – Cultural & Paleontological Resources

MITIGATION MEASURE	— MM 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 and CPUC. As part of the inventory report, the Applicant shall evaluate and refine the paleontological sensitivity modeling of sediments that will be affected.
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.
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM C-4b: Develop Paleontological Monitoring and Treatment Plan. The Applicant shall, upon approval of the paleontological inventory report by the BLM and CPUC, prepare and submit for approval a plan to mitigate identified impacts. 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. Notices to proceed will be issued by the BLM and CPUC following approval of the Paleontological Monitoring and Treatment Plan.
Location	Entire Project.
Monitoring / Reporting Action	BLM and CPUC review and approve treatment plan.
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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.
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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 approved Treatment Plan per Mitigation Measure C-4b (Develop Paleontological Monitoring and Treatment Plan).

Table DPV-6. Mitigation Measures and Applicant Proposed Measures – Cultural & Paleontological Resources

Location	Locations identified in paleontological treatment plan.
Monitoring / Reporting Action	BLM and CPUC review and approve treatment plan. BLM and CPUC review and approve of final data-recovery report and disposition of fossils.
Responsible Agency	BLM and CPUC
Timing	During construction; report within one year of data-recovery fieldwork.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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. The following issues shall be addressed in training or in preparation for construction:
Location	Entire project
Monitoring / Reporting Action	BLM and CPUC review verification of required training.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM C-4e) 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.
Location	Entire project
Monitoring / Reporting Action	BLM and CPUC to review and approve contract specifications.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM C-4e) 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.
Location	Entire project
Monitoring / Reporting Action	BLM and CPUC review verification of required training.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.

Table DPV-6. Mitigation Measures and Applicant Proposed Measures – Cultural & Paleontological Resources

MITIGATION MEASURE	— (MM C-4e) 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 CPUC and proceed with data recovery in accordance with the approved Treatment Plan consistent with Mitigation Measure C-4b (Develop Paleontological Monitoring and Treatment Plan).
Location	Entire project
Monitoring / Reporting Action	BLM and CPUC receive prompt notification of new resource discoveries and violations.
Responsible Agency	BLM and CPUC
Timing	During construction.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM C-5a: 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 Proposed Project. 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.
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.
Responsible Agency	BLM and CPUC
Timing	30 days before and during Project operation.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM C-5a) 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.
Location	All locations identified in long-term protection plan.
Monitoring / Reporting Action	Details of the long-term monitoring of sites will be determined by the BLM and CPUC, and, per the Programmatic Agreement for DPV2, will be incorporated into the HPMP, in consultation with all interested parties.
Responsible Agency	BLM and CPUC
Timing	Details of the long-term monitoring of sites will be determined by the BLM and CPUC, and, per the Programmatic Agreement for DPV2, will be incorporated into the HPMP, in consultation with all interested parties.
Interpretation & Approach	Measure will be implemented.

Table DPV-6. Mitigation Measures and Applicant Proposed Measures – Cultural & Paleontological Resources

MITIGATION MEASURE	— (MM C-5a) 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.
Location	All locations identified in long-term protection plan.
Monitoring / Reporting Action	Details of the long-term monitoring of sites will be determined by the BLM and CPUC, and, per the Programmatic Agreement for DPV2, will be incorporated into the HPMP, in consultation with all interested parties.
Responsible Agency	BLM and CPUC
Timing	Details of the long-term monitoring of sites will be determined by the BLM and CPUC, and, per the Programmatic Agreement for DPV2, will be incorporated into the HPMP, in consultation with all interested parties.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM C-5a) 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	Following construction, annual site monitoring; immediate notification to BLM and CPUC of adverse changes.
Responsible Agency	BLM and CPUC
Timing	Details of the long-term monitoring of sites will be determined by the BLM and CPUC, and, per the Programmatic Agreement for DPV2, will be incorporated into the HPMP, in consultation with all interested parties.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM C-1. [SUPERSEDED BY MM C-1a].
MITIGATION MEASURE	— APM C-2. [SUPERSEDED BY MM C-1a].
MITIGATION MEASURE	— APM C-3. [SUPERSEDED BY MM C-1a]
MITIGATION MEASURE	— APM C-4 [SUPERSEDED by MM C-1c]
MITIGATION MEASURE	— APM C-5 [SUPERSEDED BY MM C-1b]
MITIGATION MEASURE	— APM C-6 [SUPERSEDED BY MM C-1d]
MITIGATION MEASURE	— APM C-7 When necessary to relocate the proposed line, ancillary facilities, temporary facilities, or work areas as a result of inventory, onsite avoidance decisions, or the Holder's approved request for relocation, the Holder shall inventory the proposed new locations for cultural resources and provide inventory results to the Authorized Officer prior to construction. Any mitigation deemed necessary by the Authorized Officer shall be completed prior to undertaking any surface disturbing activities. (BLM B-9.7)
Location	Entire project
Monitoring / Reporting Action	CPUC and BLM to review SCE's cultural resources inventory, as applicable.
Responsible Agency	BLM and CPUC
Timing	Prior to construction

Table DPV-6. Mitigation Measures and Applicant Proposed Measures – Cultural & Paleontological Resources

Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM C-8 All cultural resource work undertaken by the Holder on public lands shall be carried out by qualified professionals designated on a currently valid Cultural Resource Use Permit for the appropriate state. (BLM B-9.8)
Location	500 kV transmission line
Monitoring / Reporting Action	CPUC and BLM shall verify that qualified professionals are used.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented
MITIGATION MEASURE	— APM C-9 Notices to proceed will be issued following completion, and approval by the Authorized Officer, of any fieldwork determined necessary through the inventory, evaluation, and consultation process described above. (BLM B-9.9
Location	Entire project
Monitoring / Reporting Action	Coordination between BLM and SCE
Responsible Agency	BLM
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM C-10 Vehicles and equipment shall be confined and operated only within areas specified by the Authorized Officer. (BLM B-9.10)
Location	Entire project
Monitoring / Reporting Action	BLM/CPUC/SCE to monitor compliance
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM C-11-[SUPERSEDED BY MM C-1f]
MITIGATION MEASURE	— APM P-1 [SUPERSEDED BY MMs C-4a, C-4c, C-4d, C-4e]

Table DPV-7. Mitigation Measures and Applicant Proposed Measures – Noise

MITIGATION MEASURE	— MM 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 located within the limits of a local jurisdiction (county, city) with designated noise rules, standards, or ordinances, as well as work areas within a wilderness area, recreation area, 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
Responsible Agency	BLM and CPUC, local jurisdictions
Timing	During construction
Interpretation & Approach	Measure applies to Project areas within local jurisdictions and within proximity to sensitive receptors, including wilderness areas, recreation areas, and wildlife refuges. Local approval to alter construction times may be required; to the extent the approvals are ministerial in nature.
MITIGATION MEASURE	— APM N-1: The proposed construction would comply with local noise ordinances. There may be a need to work outside of the aforementioned local ordinances in order to take advantage of low electrical draw periods during the nighttime hours. SCE would comply with variance procedures requested by local authorities if required. (SCE)
Location	Entire project
Monitoring / Reporting Action	Provide copies of noise-related variances
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.

Table DPV-8. Mitigation Measures and Applicant Proposed Measures – Transportation and Traffic

MITIGATION MEASURE	— MM 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.
Responsible Agency	BLM and CPUC, affected local jurisdictions.
Timing	During and after construction
Interpretation & Approach	SCE will coordinate repairs with the affected agencies and will provide documentation to the CPUC that all repairs have been made within 60 days of the end of construction within the county.

Table DPV-9. Mitigation Measures and Applicant Proposed Measures – Public Health and Safety

MITIGATION MEASURE	— MM 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 and ensure it is implemented in the field.
Responsible Agency	BLM, CPUC, and USFWS
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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.
Location	All locations along the proposed and alternative routes.
Monitoring / Reporting Action	Review documentation of training
Responsible Agency	BLM, CPUC, and USFWS
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM P-1b) 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.
Location	All locations along the proposed and alternative routes.
Monitoring / Reporting Action	Review documentation of training
Responsible Agency	BLM, CPUC, and USFWS
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM P-1b) 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	Monitor BMP implementation
Responsible Agency	BLM, CPUC, and USFWS
Timing	During construction
Interpretation & Approach	Measure will be implemented.

Table DPV-9. Mitigation Measures and Applicant Proposed Measures – Public Health and Safety

MITIGATION MEASURE	— MM 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 and review manifest for hazardous waste disposal.
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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.
Location	All locations along the proposed and alternative routes.
Monitoring / Reporting Action	Observe construction sites and activities for compliance
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM P-1d) 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 proposed and alternative routes.
Monitoring / Reporting Action	Review HSCERP
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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.
Location	All proposed and alternative route segments that are within or immediately adjacent to agricultural uses.
Monitoring / Reporting Action	CPUC Monitor to review sample results
Responsible Agency	CPUC, BLM, and appropriate local and State regulatory agencies
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM P-2a) 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 state of California (as appropriate) and the appropriate county shall be contacted to provide oversight regarding the handling, treatment, and/or disposal options.
Location	All proposed and alternative route segments that are within or immediately adjacent to agricultural uses.

Table DPV-9. Mitigation Measures and Applicant Proposed Measures – Public Health and Safety

Monitoring / Reporting Action	Observe construction sites and activities for compliance. Review documentation for required special handling and disposal.
Responsible Agency	CPUC, BLM, and appropriate local and State regulatory agencies
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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 proposed and 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.
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	If contamination is encountered, the contractor will immediately notify SCE, who will then immediately notify the CPUC or BLM.
MITIGATION MEASURE	— MM 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 proposed existing, and alternative substations, switching stations, and series capacitor banks.
Monitoring / Reporting Action	Review and approve plans and observe construction sites and activities for compliance
Responsible Agency	BLM, CPUC, and USFWS
Timing	During construction and post construction (60 days before operation)
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	MM PS-1a: Limit the conductor surface electric gradient. As part of the design and construction process for the Proposed Project, 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.
Responsible Agency	CPUC
Timing	Prior to construction.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	MM 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.

Table DPV-9. Mitigation Measures and Applicant Proposed Measures – Public Health and Safety

Location	Along the overhead route segment
Monitoring / Reporting Action	Review documentation provided.
Responsible Agency	CPUC
Timing	During the operations of the project.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	MM PS-2a: Implement Grounding Measures. As part of the siting and construction process for the Proposed Project, 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 route
Monitoring / Reporting Action	Review documentation provided; verify that necessary grounding measures are installed.
Responsible Agency	CPUC
Timing	Prior to energizing the transmission line.
Interpretation & Approach	Measure will be implemented.

Table DPV-10. Mitigation Measures and Applicant Proposed Measures – Air Quality

MITIGATION MEASURE	— MM 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.
Location	Riverside County (MDAQMD and SCAQMD jurisdiction)
Monitoring / Reporting Action	Review Fugitive Dust Emission Control Plan.
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	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (MM AQ-1a) • 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 material 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	Verify SCAQMD or local jurisdiction (within Coachella Valley) concurrence with the Plan. Inspect activities for dust control.
Responsible Agency	BLM, USFWS, CPUC, MDAQMD, and SCAQMD in California. May also involve local city jurisdictions within the Coachella Valley that have received delegation of Rule 403.1 compliance from SCAQMD.
Timing	During construction
Interpretation & Approach	SCE will implement measures to reduce fugitive dust emissions from unpaved road travel and unpaved staging and parking areas to the maximum extent feasible through the use of soil binders applied prior to use and reapplied as necessary to maintain a stabilized surface. SCE will reduce fugitive emissions from construction sites and exposed soil piles through watering the active construction sites and soil piles and stabilizing disturbed construction sites and soil piles following active construction using soil binders or vegetation. In addition, SCE will implement measures to keep visible dust from being tracked on to paved roadways. This will be achieved through the use of gravel placed on access road approaches, shaker plates, visual inspections, and/or tire sweeping (including loaded equipment) prior to vehicles entering a paved road. If visible dust is still tracked onto paved roadways, water sweepers would be used to clean the paved roadways. Finally, prior to beginning tower construction activities, SCE will provide maps to its contractors that show the travel routes that should be followed to minimize unpaved road use.

Table DPV-10. Mitigation Measures and Applicant Proposed Measures – Air Quality

MITIGATION MEASURE	— MM 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
Responsible Agency	CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM AQ-1c: Restrict engine idling. Diesel engine idle time shall be restricted to no more than a 10 minutes duration.
Location	Riverside County (MDAQMD and SCAQMD jurisdiction)
Monitoring / Reporting Action	Inspect activities for compliance with idle time restriction.
Responsible Agency	CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM AQ-1d: Use lower emitting off-road diesel-fueled equipment. All off-road 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 off-road 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 off-road 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 off-road equipment and off-road equipment records kept for APM-10.
Responsible Agency	CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM AQ-1e: Use on-road vehicles that meet California on-road standards. All on-road construction vehicles working within California shall meet all applicable California on-road 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 on-road equipment
Responsible Agency	CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM AQ-1f: Use lower emitting off-road gasoline-fueled equipment. All off-road 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)

Table DPV-10. Mitigation Measures and Applicant Proposed Measures – Air Quality

Monitoring / Reporting Action	Inspect off-road equipment
Responsible Agency	CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM AQ-1g: Reduce helicopter use during construction. Helicopter use in California 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 California 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
Responsible Agency	CPUC
Timing	During construction
Interpretation & Approach	In addition to conductor installation, helicopters will be used for tower and foundation construction in areas not accessible by roads. Helicopter use for these purposes will be limited to the extent feasible.
MITIGATION MEASURE	— MM 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.
Responsible Agency	CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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.
Responsible Agency	BLM
Timing	Prior to project approval and construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	APM A-1, Heavy duty off-road diesel engines would be properly tuned and maintained to manufacturers' specifications to ensure minimum emissions under normal operations. (SCE)
Location	Entire project
Monitoring / Reporting Action	CPUC/SCE to monitor compliance
Responsible Agency	CPUC
Timing	During construction

Table DPV-10. Mitigation Measures and Applicant Proposed Measures – Air Quality

Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM A-2, Water or chemical dust suppressants would be applied to unstabilized disturbed areas and/or unpaved roadways in sufficient quantity and frequency to maintain a stabilized surface. (SCE)
Location	Entire project
Monitoring / Reporting Action	CPUC/SCE to monitor compliance
Responsible Agency	CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM A-3. Water or water-based chemical additives would be used in such quantities to control dust on areas with extensive traffic including unpaved access roads; water, organic polymers, lignin compounds, or conifer resin compounds would be used depending on availability, cost, and soil type. (SCE)
Location	500 kV transmission lines
Monitoring / Reporting Action	CPUC/SCE to monitor compliance
Responsible Agency	CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM A-4. Surfaces permanently disturbed by construction activities would be covered or treated with a dust suppressant after completion of activities at each site of disturbance. (SCE)
Location	Entire project
Monitoring / Reporting Action	CPUC/SCE to monitor compliance
Responsible Agency	CPUC
Timing	During and post construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM A-5. Vehicle speeds on unpaved roadways would be restricted to 15 miles per hour. (SCE)
Location	Entire project.
Monitoring / Reporting Action	CPUC/SCE to monitor compliance
Responsible Agency	CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM A-6. Vehicles hauling dirt would be covered with tarps or by other means. (SCE)
Location	Entire project. This measure does not apply to hauling dirt around a single active construction site, or hauling dirt on unpaved roads for distances of less than one mile between construction sites as long as the fugitive dust control performance for those roads are not being negatively impacted by dirt from these hauling activities.
Monitoring / Reporting Action	CPUC/SCE to monitor compliance
Responsible Agency	CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.

Table DPV-10. Mitigation Measures and Applicant Proposed Measures – Air Quality

MITIGATION MEASURE	— APM A-7. Site construction workers would be staged offsite at or near paved intersections and workers would be shuttled in crew vehicles to construction sites. As part of the construction contract, SCE would require bidders to submit a construction transportation plan describing how workers would travel to the job site. (SCE)
Location	Entire project.
Monitoring / Reporting Action	CPUC/SCE to monitor compliance with transportation plan requirements.
Responsible Agency	CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM A-8. [Superseded by MM AQ-1i] ~~Emissions credits would be purchased to offset any emissions levels which are over the emissions thresholds. (SCE)~~
Location	500 kV transmission lines
Monitoring / Reporting Action	CPUC/SCE to monitor compliance
Responsible Agency	CPUC
Timing	Prior to, during, and post construction
Interpretation & Approach	Measure will be implemented through the implementation of MM AQ-1i.

Table DPV-11. Mitigation Measures and Applicant Proposed Measures – Hydrology and Water Resources

Note: Public Health & Safety measures are NOT repeated here (see Table 12).

MITIGATION MEASURE	— MM 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	Final design plans shall include re-vegetation and erosion control specifications. CPUC/BLM to verify implementation.
Responsible Agency	BLM and CPUC
Timing	Prior to, during, and post construction
Interpretation & Approach	Supplementing the required SWPPP and APMs that address short-term/temporary erosion impacts, disturbed soils will be re-vegetated or permanent erosion control structures installed in order to minimize and/or avoid long-term erosion that could result in water quality degradation. Measure is applicable to areas subject to erosion. Any revegetation of disturbed soils will be consistent with the BLM restoration/rehabilitation approach in the Habitat Restoration and Compensation Plan required under MM B-1.
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 areas where life or property 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
Responsible Agency	BLM and CPUC
Timing	Plans to be approved by BLM and CPUC 60 days prior to construction.
Interpretation & Approach	Diversion dikes that would be implemented per APMs W-4 through W-6 could result in adverse impacts to adjacent property through diversion and concentration of flows, thus requiring this mitigation measure to ensure proper design of dikes and minimization of associated impacts. Measure will be implemented
MITIGATION MEASURE	— APM W-1: During the first year following construction, potential soil erosion sites will be inspected by the Holder after each major rainstorm as access permits. For the purpose of this measure, a major rainstorm is defined as any singular storm where the total precipitation exceeds the arithmetic mean for similar events in the area and results in flooding. Examples include cloudbursts (high quantity – short duration) or storms where saturated soils produce runoff (high quantity – long duration). (BLM B-4.1)
Location	Entire project.
Monitoring / Reporting Action	CPUC/BLM to ensure that SCE inspects all sites subject to potential erosion following each major rainstorm.
Responsible Agency	BLM and CPUC
Timing	During the first year following construction.
Interpretation & Approach	Measure will be implemented to reduce the amount of erosion and sedimentation that would result from storm events that affect areas disturbed by Project construction.
MITIGATION MEASURE	— APM W-2: Construction equipment will be kept out of flowing stream channels except when absolutely necessary to construct crossings. (BLM B-4.2)
Location	All project locations where flowing stream channels are present.

Table DPV-11. Mitigation Measures and Applicant Proposed Measures – Hydrology and Water Resources

Note: Public Health & Safety measures are NOT repeated here (see Table 12).

Monitoring / Reporting Action	BLM/CPUC to monitor compliance
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction.
Interpretation & Approach	Measure will be implemented to minimize the potential for surface water resources to be adversely affected by Project construction equipment.
MITIGATION MEASURE	— APM W-3: Erosion control and hazardous material plans will be incorporated into the construction bidding specifications to ensure compliance. (BLM B-4.3)
Location	Entire project.
Monitoring / Reporting Action	CPUC/BLM to verify based on review of specifications
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented to ensure that erosion control and hazardous material plans are employed during construction of the project, reducing the potential for Project-related erosion, sedimentation, and/or hazardous materials spill(s) to result in water quality degradation.
MITIGATION MEASURE	— APM W-4: Appropriate design of tower footing foundations, such as raised foundations and/or enclosing flood control dikes, will be used to prevent scour and/or inundation by a 100-year flood. (BLM B-4.4)
Location	All locations where Project infrastructure would be placed in a FEMA-designated 100-year Flood Hazard Area.
Monitoring / Reporting Action	BLM/CPUC to monitor compliance
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction.
Interpretation & Approach	Measure will be implemented to ensure that the placement of Project infrastructure does not result in flood-related damage to the infrastructure or to surrounding/downstream areas.
MITIGATION MEASURE	— APM W-5: Towers will be located to the extent feasible to avoid active drainage channels, especially downstream of steep hillslope areas, to minimize the potential for damage by flash flooding and mud and debris flows. (BLM B-4.5)
Location	Entire project.
Monitoring / Reporting Action	BLM / CPUC to monitor compliance
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction.
Interpretation & Approach	Measure will be implemented to minimize the potential for the placement of Project infrastructure to cause damage to the infrastructure and/or surrounding area(s) as a result of flash flooding, mudflow, or debris flow.
MITIGATION MEASURE	— APM W-6: Diversion dikes or other structural enhancements will be required to divert runoff around a tower structure if (a) the location in an active channel cannot be avoided; and (b) where there is a very significant flood scour/deposition threat, unless specifically exempted by the BLM Authorized Officer. (BLM B-4.6)
Location	Entire project
Monitoring / Reporting Action	BLM / CPUC to monitor compliance
Responsible Agency	BLM and CPUC

Table DPV-11. Mitigation Measures and Applicant Proposed Measures – Hydrology and Water Resources

Note: Public Health & Safety measures are NOT repeated here (see Table 12).

Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented to minimize the potential for flood-related impacts to occur as a result of infrastructure placement within an active channel or an area of high flood scour/deposition threat.
MITIGATION MEASURE	— APM W-7: Runoff from roadways will be collected and diverted from steep, disturbed, or otherwise unstable slopes. (BLM B-4.7)
Location	All roadways along the project.
Monitoring / Reporting Action	BLM / CPUC to monitor compliance
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented to prevent surface water runoff from Project roadways from resulting in erosion and sedimentation that could cause water quality degradation.
MITIGATION MEASURE	— APM W-8: Ditches and drainage concourses will be designed to handle the concentrated runoff, will be located to avoid disturbed areas, and will have energy dissipations at discharge points. (BLM B-4.8)
Location	All ditches and drainage concourses designed for the project.
Monitoring / Reporting Action	BLM / CPUC to monitor compliance
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented to ensure that stormwater drainage features (ditches and drainage concourses) are appropriately designed to accommodate concentrated runoff and to prevent flooding or erosion and sedimentation.
MITIGATION MEASURE	— APM W-9: Cut and fill slopes will be minimized by a combination of benching and following natural topography where possible. (BLM B-4.9)
Location	All locations where construction would occur on a slope.
Monitoring / Reporting Action	BLM / CPUC to monitor compliance
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented to minimize earth disturbance associated with hillside construction, and minimize the potential for erosion and sedimentation that could result in water quality degradation.

Table DPV-12. Mitigation Measures and Applicant Proposed Measures – Geology, Mineral Resources & Soils

MITIGATION MEASURE	— MM 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. 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 proposed route segments: Midpoint Substation to Cactus City Rest Area; Cactus City Rest Area to Devers Substation; and the following alternative routes: the reroute associated with the Desert Southwest Transmission Project; Alligator Rock–North of Desert Center; Devers-Valley No. 2.
Monitoring / Reporting Action	CPUC and BLM to review plan and ensure that it is implemented in the field.
Responsible Agency	BLM, CPUC, and USFWS
Timing	Prior to and during construction.
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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.
Responsible Agency	BLM and CPUC
Timing	60 days prior to construction and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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	Devers-Valley Alternative MPs DV7.5–DV12.0, DV16–DV18, DV23–DV30, and DV32.5–DV35.0.
Monitoring / Reporting Action	CPUC and BLM to review study results and proposed solutions. Ensure that study recommendations are implemented during construction.
Responsible Agency	BLM and CPUC
Timing	60 days prior to construction and during construction
Interpretation & Approach	Measure will be implemented.

Table DPV-12. Mitigation Measures and Applicant Proposed Measures – Geology, Mineral Resources & Soils

MITIGATION MEASURE	— MM 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	Devers-Valley Alternative MPs DV13-DV15 and DV30.0-DV32.5.
Monitoring / Reporting Action	CPUC and BLM to review study results and ensure that study recommendations are implemented during construction.
Responsible Agency	BLM and CPUC
Timing	60 days prior to construction and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— MM 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	At the Indio Pit gravel quarry located approximately between Project MPs E205 and E206
Monitoring / Reporting Action	CPUC and BLM to review plan and ensure that that the plan is implemented during construction.
Responsible Agency	BLM and CPUC
Timing	60 days prior to construction and during construction
Interpretation & Approach	Measure and submittal time requirements apply to construction activities that could affect Indio Pit quarry operations.
MITIGATION MEASURE	— MM 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	At crossings of the active Banning Fault, approximately between Proposed Route MPs E205 and E206 and at MP E224.5. Also, at the Dillon Road Substation site associated with the DSW Alternative and at the Banning, Garnet Hill, San Jacinto, and Casa Loma Fault crossings that would be associated with the DV Alternative. In addition, at expansion of Devers Substation.
Monitoring / Reporting Action	CPUC and BLM to review report and ensure that that the recommendations of the report are implemented during construction.
Responsible Agency	BLM and CPUC
Timing	60 days prior to construction and during construction
Interpretation & Approach	Measure will be implemented
MITIGATION MEASURE	— APM G-1 The line will be located to minimize the disruption of any active mining operations. (BLM B-2.1)
Location	500 kV transmission line
Monitoring / Reporting Action	SCE shall submit final design plans
Responsible Agency	BLM and CPUC

Table DPV-12. Mitigation Measures and Applicant Proposed Measures – Geology, Mineral Resources & Soils

Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM G-2: Individual transmission towers will not be sited on nor straddle the mapped traces of any known fault that has been designated active or potentially active.
Location	500 kV transmission line
Monitoring / Reporting Action	SCE shall submit final design plans for CPUC and BLM review, indicating locations of towers near active fault traces and plans or documents regarding tower location modifications based on fault locations.
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (APM G-2) In areas where known faults are present, the Holder will visually check the tower site area before clearing, and will check the tower footing holes for any trace of a previously unmapped fault. If manifestations of a fault are found, construction will immediately stop at that site and the Holder will consult with the Holder's Geologist and the BLM Authorized Officer. The Holder's Geologist and the BLM Authorized Officer will determine if it is a fault trace and if so, will ascertain if it is active, potentially active, or inactive. (BLM B-2.2)
Location	500 kV transmission line
Monitoring / Reporting Action	SCE shall submit final design plans for CPUC and BLM review, indicating locations of towers near active fault traces and plans or documents regarding tower location modifications based on fault locations.
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM G-3: Towers will be located so that the line will span the surface traces of active and potentially active faults such that a relative lateral surface displacement would shorten the span between towers, and thus avoid potential line breaks. Where this is not feasible, the Holder will incorporate slack spans to bridge the fault(s) such that the projected lateral surface displacement, as forecast by the Holder's Geologist and accepted by the BLM Authorized Officer, will not structurally affect the associated towers. (BLM B-2.3)
Location	500 kV transmission line
Monitoring / Reporting Action	SCE shall submit final design plans for CPUC and BLM review, indicating locations of towers near active fault traces and plans or documents regarding tower location modifications based on fault locations.
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM G-4: In general, an appropriate tower design which accounts for lateral wind loads and conductor loads exceeds any credible seismic loading (groundshaking). (BLM B-2.4)
Location	500 kV transmission line
Monitoring / Reporting Action	SCE shall submit final design plans for CPUC and BLM review
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.

Table DPV-12. Mitigation Measures and Applicant Proposed Measures – Geology, Mineral Resources & Soils

MITIGATION MEASURE	— APM G-5: Towers will be located to avoid areas of highly sensitive dune sand areas. Where these areas cannot be avoided, towers will be located to minimize disturbance to the deposits at a site approved by the BLM Authorized Officer. (BLM B-2.5. Note: Text here omits references to specific figures and maps in the original [1987-88] DEIR and DEIS.)
Location	500 kV transmission line
Monitoring / Reporting Action	SCE shall submit final design plans indicating towers near or within sensitive dune sand areas and any plans or documents regarding tower location modifications based on the sensitive dune sand locations.
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM G-6: Wherever feasible to minimize the potential for slope instability, towers will be located to avoid gullies or active drainages, and over-steepened slopes. (BLM B-2.6)
Location	500 kV transmission line
Monitoring / Reporting Action	SCE shall submit final design plans indicating towers near or within areas of unstable slopes and any plans or documents regarding tower location modifications based on slope instability locations.
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM G-7: SCE will provide a list of sites where helicopter construction is recommended.
Location	Entire project
Monitoring / Reporting Action	SCE shall submit a list of helicopter sites to the CPUC and BLM for review and approval
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (APM G-7) The Authorized Officer may require, on a site-specific basis, helicopter-assisted construction in sensitive areas. Sensitive areas are those that exhibit both (1) high erosion potential and/or slope instability; and (2) a lack of existing stub roads within a reasonable distance of the tower site, or existing access that is not suitable for upgrading to accommodate conventional tower construction or line stringing equipment, and where it is determined that, after field review, the issues of erosion and/or slope instability cannot be successfully mitigated through implementation of accepted engineering practices. (BLM B-2.7)
Location	500 kV transmission line
Monitoring / Reporting Action	SCE shall submit a list of helicopter sites to the BLM for review and approval, updated as necessary for newly selected sites
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM G-8: Mitigation of potentially significant impacts to the western end of the proposed transmission line due to (1) potential surface fault rupture along the Banning, Mission Creek, and Mecca Hills faults, and (2) potential for severe seismic shaking can be achieved by standard design methods listed below: a. Individual towers will be sited so as not to straddle active fault traces. b. The alignment will be designed to cross an active fault such that future rupture on the fault would not cause excessive stress on the line or the towers. c. Standard foundation and structural design measures will be utilized to minimize the impact from severe seismic shaking. (BLM B-2.8)

Table DPV-12. Mitigation Measures and Applicant Proposed Measures – Geology, Mineral Resources & Soils

Location	At areas identified in APM - the Banning, Mission Creek, and Mecca Hills faults.
Monitoring / Reporting Action	SCE shall submit final design plans for review and approval by CPUC and BLM
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented
MITIGATION MEASURE	— APM G-9: Appropriate design of tower foundations will be used to reduce the potential for settlement and compaction. (BLM B-2.9)
Location	Entire project
Monitoring / Reporting Action	SCE shall submit final design plans for review and approval by CPUC and BLM
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM G-10: New access roads and soil disturbance will be avoided or minimized in all areas designated as having high erosion hazards or potential slope instability. If the Authorized Officer, after consultation and review of alternatives (including helicopter or helicopter assisted construction), deems the proposed new access road feasible, design plans must be submitted for approval, in writing, prior to construction. (BLM B-3.1. Note: Text here omits references to specific figures and maps in the original [1987-88] DEIR and DEIS.)
Location	Entire project
Monitoring / Reporting Action	SCE shall submit final design plans for review and approval by CPUC and BLM
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM G-11: New access roads, which are required, will be designed to minimize ground disturbance from grading. They will follow natural ground contours as closely as possible and include specific features for road drainage, including water bars on slopes over 25 percent. Other measures could include drainage dips, side ditches, slope drains, and velocity reducers. Where temporary crossings are constructed, the crossings will be restored and repaired as soon as possible after completion of the discrete action associated with construction of the line in the area. (BLM B-3.2)
Location	Entire project
Monitoring / Reporting Action	SCE shall submit final design plans for review and approval by CPUC and BLM
Responsible Agency	BLM and CPUC
Timing	Prior to, during and post construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM G-12: Side casting of soil during grading will be minimized. Excess soil and excavated soil will be properly stabilized or, dispersed around tower construction sites or on stub or access roads. (BLM B-3.3)
Location	Entire project
Monitoring / Reporting Action	CPUC and BLM to monitor compliance
Responsible Agency	BLM and CPUC
Timing	During construction

Table DPV-12. Mitigation Measures and Applicant Proposed Measures – Geology, Mineral Resources & Soils

Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM G-13: During grading operations, care would be exercised to minimize side casting. No earth would be removed below final elevations, and no cuts would be made deeper than necessary for clearing and road construction. (SCE)
Location	Entire project.
Monitoring / Reporting Action	SCE to monitor compliance
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM G-14: Upon completion of construction, any drainage deficiencies would be corrected to prevent future erosion.
Location	Entire project
Monitoring / Reporting Action	SCE to monitor compliance
Responsible Agency	BLM and CPUC
Timing	Post construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (APM G-14) Trees and brush would be cleared only when necessary to provide electrical clearance, line reliability, or suitable access for maintenance and construction. (SCE)
Location	Entire project
Monitoring / Reporting Action	SCE to monitor compliance
Responsible Agency	BLM and CPUC
Timing	During and post construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM G-15: Counterpoise may need to be installed if the local soil conditions indicate that the soil has a resistance above 30 ohms. This is accomplished by attaching a 0.375-inch cable to the tower steel. The cable is installed 1 foot underground and extends approximately 100 feet within the ROW from two or more footings. (SCE)
Location	Entire project
Monitoring / Reporting Action	SCE to monitor compliance
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM G-16: The line would be located to minimize the disruption of any active mining operations. (SCE)
Location	Devers-Valley No. 2 Alternative
Monitoring / Reporting Action	CPUC and BLM to monitor compliance
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.

Table DPV-12. Mitigation Measures and Applicant Proposed Measures – Geology, Mineral Resources & Soils

MITIGATION MEASURE	— APM G-17: Appropriate tower design would be used to mitigate the potential for impacts from very strong seismic groundshaking. In general, an appropriate tower design which accounts for lateral wind loads and conductor loads during line stringing exceeds any credible seismic loading (groundshaking). (SCE)
Location	Proposed Route between approximately MP E195 and the Devers Substation, at towers near the Dillon Substation along the DSW Alternative, and along the Devers-Valley No. 2 Alternative
Monitoring / Reporting Action	SCE shall submit final design plans
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM G-18: Whenever possible to minimize the potential for slope instability, towers would be located to avoid gullies or active drainages, and over-steepened slopes. (SCE)
Location	Devers-Valley No. 2 Alternative
Monitoring / Reporting Action	SCE shall submit final design plans for review and approval by CPUC and BLM
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— APM G-19: New access roads, where required, would be designed to minimize ground disturbance from grading. They would follow natural ground contours as closely as possible and include specific features for road drainage, including water bars on slopes over 25 percent. Other measures could include drainage dips, side ditches, slope drains, and velocity reducers.
Location	Devers-Valley No. 2 Alternative
Monitoring / Reporting Action	SCE shall submit final design plans and CPUC/BLM will review
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	Measure will be implemented.
MITIGATION MEASURE	— (APM G-19) Where temporary crossings are constructed, the crossings would be restored and repaired as soon as possible after completion of the discrete action associated with construction of the line. Side casting of soil during grading would be minimized. Excess soil would be properly stabilized, or if necessary, hauled to an approved disposal site. (SCE)
Location	Devers-Valley No. 2 Alternative
Monitoring / Reporting Action	CPUC and BLM monitor during construction
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	Measure will be implemented.

6.2 Colorado River Substation Mitigation Measures

Table CRS-1. CRS Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	B-1a (rev): 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 Proposed 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.
Location	All vegetated areas disturbed by construction activities, including temporary disturbances, at the Colorado River Substation and associated facilities
Monitoring / Reporting Action	BLM and CPUC/CDFG to review findings and restoration success submitted by the approved Habitat Restoration Specialist with respect to the performance standards
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction

Table CRS-1. CRS Mitigation Measures and Applicant Proposed Measures – Biological Resources

Interpretation & Approach	This portion of the measure and its interpretation and approach are from MM B-1a for the transmission line components of the DPV2 Final EIR/EIS and also applies to the Colorado River Substation and associated facilities. All temporarily disturbed areas not incorporated in the project design plans will be re-contoured, as appropriate, to restore natural slopes and pre-construction contours. Unavoidable impacts to special status vegetation communities or habitats that support listed species shall be mitigated through either offsite compensation or onsite restoration. SCE's restoration strategy is based on the FEIR/EIS impact analysis, which specified the restoration of disturbed sensitive native vegetation communities to reduce Project impacts to less than significant. Per the FEIR/FEIS page D.2-109, "Construction impacts to vegetation may occur in a variety of ways, including the direct removal of plants during the course of construction. As these impacts are generally localized and are primarily temporary in nature they are not usually considered significant unless the habitat type is regionally unique or is known to support sensitive species." SCE has interpreted special status vegetation communities to include those habitat types primarily defined by the CDFG (2003, 2009), support species protected by state and federal Endangered Species Acts (ESAs), as well as areas falling under federal, state, or regional jurisdiction as waters of the US or waters of the state. The following breakdown provides SCE's approach: • All disturbance (temporary and permanent) within the BLM's Northern and Eastern Colorado Deserts Coordinated Management Plan (NECO) Plan Area, which spans from the Colorado River Substation to approximately the Cactus City Rest Area, will be mitigated/restored through an in lieu fee program approved by the BLM, USFWS, and CDFG at no greater than a 5:1 ratio. • Special status vegetation communities that provide habitat for Coachella Valley fringe-toed lizard, flat-tail horned lizard, and Coachella Valley milk-vetch within the CV MSHCP Plan Area will be mitigated/restored through offsite mitigation programs approved by the BLM, USFWS, and CDFG. • All other temporary disturbance to special status vegetation communities will be accomplished by onsite habitat restoration directed by the Habitat Restoration Specialist. Temporary impacts are described as ground disturbance associated with clearing of each tower pad, tower construction activities, and pulling and splicing activities. Consistent with the low impact construction approach to this project, vegetation clearing in temporary disturbance areas will only occur where necessary to allow for equipment access and stormwater management. In most cases, the wire pull and splice sites will not require site grading and vegetation will not be removed. Drive and crush methods will be used in these temporary disturbance areas to minimize impacts and ensure root systems remain intact. After construction is complete these areas would be free to re-vegetate and recover naturally. The HRCP will identify the types of disturbance levels and recommended offsetting restoration measures. Compensation for temporary and permanent impacts to vegetation communities will be equivalent to, and not duplicate, the restoration measures (offsite mitigation) SCE will implement for impacts to species protected by state and federal endangered species acts (ESA) as directed in the Project's ESA Section 7 Biological Opinion and Fish and Game Code Section 2080.1 Consistency Determination. For the purposes of the project's state and federal ESA effects analysis (Section 7 Biological Opinion and Section 2080.1 Consistency Determination) relative to the 30-year life of the project, all temporary impacts were considered equivalent to permanent impacts since full recovery in the desert can take decades or longer. Therefore, offsite compensatory mitigation instead of onsite habitat restoration was preferred by the USFWS, BLM, and CDFG to offset impacts to listed species and their habitat (which is considered a special status vegetation community). Since a majority of the project occurs on BLM-administered lands, SCE intends to incorporate post-construction reclamation/rehabilitation efforts as required by the BLM to re-establish a vegetative cover that is similar to pre-construction conditions via erosion control and invasive species control efforts. A sufficient seed bank exists in the first several inches of soil to naturally re-vegetate temporarily disturbed sites, particularly locations of drive and crush activities. However, in some instances depending on the disturbance level, soil salvage and/or broadcast of native seeds may be implemented to re-vegetate areas. Temporary impacts to special status vegetation communities that are not compensated for offsite as required in the project's Biological Opinion or Consistency Determination will be mitigated onsite through habitat restoration based on the disturbance level as described in the HRCP. SCE anticipates that refinements to the HRCP may be required following initial approval of the plan.

Table CRS-1. CRS Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— [MM B-1a (rev)] 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. The following performance standards must be met by the end of the monitoring period: (a) at least 80% of the vegetative cover observed within the restoration area shall be native species that naturally occur in desert scrub habitats; (b) absolute cover and density of native plant species within the restoration areas shall equal at least 60% of the pre-disturbance or reference vegetation cover; and (c) the site shall have gone without irrigation or remedial planting for a minimum of three years prior to completion of monitoring. 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 vegetated areas disturbed by construction activities, including temporary disturbances, at the Colorado River Substation and associated facilities
Monitoring / Reporting Action	BLM and CPUC/CDFG to review findings and restoration success submitted by the approved Habitat Restoration Specialist with respect to the performance standards
Responsible Agency	BLM and CPUC
Timing	Post construction
Interpretation & Approach	Underlined text indicates new text added in the Final Supplemental from what was approved in the DPV2 Final EIR/EIS. This revised portion of measure MM B-1a applies to the Colorado River Substation and associated facilities only. To ensure that disturbed areas do not result in the establishment of noxious or invasive weeds the Applicant shall monitor for a period of five years unless otherwise authorized by the BLM. Achievement of success criteria for onsite habitat restoration efforts within desert dunes and desert sand fields vegetation communities will be reviewed and approved by the BLM in compliance with the NECO Plan Area. Achievement of success criteria for other onsite sensitive vegetation communities will be submitted to the CPUC for review and approval by the Habitat Restoration Specialist. Performance standards stated in the measure will be based on reference populations within the immediate vicinity. The criteria will be based on species diversity, not coverage. Post-construction monitoring requirements per the BLM Integrated Weed Management Manual 9015 include three (3) years for C-rated weeds (including Russian thistle, tocalote) and five (5) years for A- and B-rated weeds (including giant reed, perennial peppercress, saltcedar). Monitoring will be conducted in the areas of control and eradication efforts only within the disturbance areas and is not considered part of any habitat restoration effort. Post-construction monitoring of known infestation/control areas will be conducted in consultation with BLM, when applicable. The 3-5 year post-construction monitoring of weed abatement areas includes those areas treated for weeds within the temporary disturbance zones of the Project.
MITIGATION MEASURE	B-7b (rev): 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.
Location	All locations at the Colorado River Substation and associated facilities that support desert tortoise
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Responsible Agency	BLM, CPUC, USFWS, and CDFG
Timing	Prior to and during construction
Interpretation & Approach	The same interpretation and approach for measure MM B-7b from the DPV2 Final EIR/EIS will also apply for the Colorado River Substation and associated facilities. SCE shall conduct construction clearance surveys for desert tortoise burrows and pallets within permanent and temporarily impacted areas 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 addressed in compliance with the project's Endangered Species Act Section 7 Biological Opinion.

Table CRS-1. CRS Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— [MM B-7b (rev)] • 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 1,640 feet (500 meters) ~~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 at the Colorado River Substation and associated facilities that support desert tortoise
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Responsible Agency	BLM, CPUC, USFWS, and CDFG
Timing	During construction
Interpretation & Approach	Underline and ~~strikeout~~ text indicates revisions made to the measure from what was approved in the DPV2 Final EIR/EIS. This revised portion of measure MM B-7b applies to the Colorado River Substation and associated facilities only. SCE will implement the above measures and all of the conservation measures specific to desert tortoise contained within the project's Endangered Species Act Section 7 Biological Opinion.

Table CRS-1. CRS Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	B-7c (rev): 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. SCE may elect to fund the acquisition and initial improvement of compensation lands through the National Fish and Wildlife Foundation (NFWF) by depositing funds for that purpose into NFWF's Renewable Agency Action Team (REAT) Account. Initial deposits for this purpose must be made in the same amounts as the Security (refer to Table D.2-1) and may be provided in lieu of Security. If this option is used for the acquisition and initial improvement and the actual land cost is higher than the estimated Security amount, SCE shall make an additional deposit into the REAT Account if necessary to cover the actual acquisition costs and administrative costs and fees of the compensation land purchase once land is identified and the actual costs are known. If the actual costs for acquisition and administrative costs and fees are less than that estimated by CDFG, the excess money deposited in the REAT Account shall be returned to SCE. Money deposited for the initial protection and improvement of the compensation lands shall not be returned to SCE. The responsibility for acquisition of compensation lands may be delegated to a third party other than NFWF, such as a nongovernmental organization supportive of desert habitat conservation, by written agreement of CPUC, BLM, and CDFG. Such delegation shall be subject to approval by CPUC, in consultation with BLM and CDFG, prior to land acquisition, initial protection or maintenance and management activities.
Location	All locations along the Project that contain modeled, critical and occupied desert tortoise habitat.
Monitoring / Reporting Action	BLM and SCE will assess amount of land to be acquired or funds to be deposited based on acreage of disturbance.
Responsible Agency	BLM and CPUC
Timing	Post construction
Interpretation & Approach	Underlined text indicates new text added in the Final Supplemental from what was approved in the DPV2 Final EIR/EIS. SCE will implement the above measure and all of the conservation measures specific to desert tortoise contained within the project's Endangered Species Act Section 7 Biological Opinion.
MITIGATION MEASURE	B-8b: Minimize off-site impacts to Harwood's eriastrum, Harwood's milk-vetch, and flat-seeded spurge habitat. SCE and their contractors or affiliates shall avoid adverse impacts to Harwood's eriastrum, Harwood's milk-vetch, and flat-seeded spurge habitat (i.e., sandfields and dunes) adjacent to the project site that may result from project construction or operation, such as equipment staging, spoils transport or storage, weed control, soil tackifiers or stabilization agents, collection and disposal of accumulating aeolian sand, or erosion. SCE shall prepare and implement a focused Special-Status Plant Impact Avoidance and Minimization Plan to describe specific measures to be taken during substation construction and operation to minimize impacts to Harwood's eriastrum, Harwood's milk-vetch, and flat-seeded spurge habitat. The Plan shall include consideration of the following components: 1. Delineation of the limits of construction disturbance area on-site prior to beginning of construction (the construction disturbance area includes equipment staging areas, spoils transport or storage areas, access routes and all other areas that may be temporarily disturbed by construction); 2. Preconstruction surveys to identify and designate suitable habitat (whether occupied or not) for any of these species throughout the construction disturbance area and a 250-foot buffer area surrounding it
Location	Colorado River Substation and associated facilities
Monitoring / Reporting Action	Special-Status Plant Impact Avoidance and Minimization Plan will be submitted for approval and executed accordingly.
Responsible Agency	CPUC and BLM

Table CRS-1. CRS Mitigation Measures and Applicant Proposed Measures – Biological Resources

Timing	Prior to construction
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Measure will be implemented at the Colorado River Substation and associated facilities (access road improvements, staging areas, distribution line extension, telecommunication lines, and other improvements described in the SEIR). SCE will conduct a pre-construction special-status plant habitat suitability survey within the construction disturbance areas and a 250-foot buffer area.
MITIGATION MEASURE	— [MM B-8b] 3. Specific measures to be implemented and monitored throughout substation construction and operation, including but not limited to a. prevent overspray of herbicides, pesticides, soil tackifiers, or other potential toxins into suitable habitat during weed control or other site maintenance activities. b. on-site management of runoff to prevent nuisance runoff from draining into suitable habitat and prevent erosion of the habitat during heavy rains. c. management and control of weeds on and adjacent to the site to prevent weed invasions into suitable adjacent special-status plant habitat; d. prevent damage to suitable special-status plant habitat that may result from collecting or disposing accumulating sand; 4. Schedule and format for reporting to CPUC on implementation and progress of the components listed above. The Plan shall be reviewed and approved by the CPUC at least 60 days prior to construction.
Location	Colorado River Substation and associated facilities
Monitoring / Reporting Action	Special-Status Plant Impact Avoidance and Minimization Plan will be submitted for approval and executed accordingly.
Responsible Agency	CPUC and BLM
Timing	Prior to, during and post construction
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Measure will be implemented at the Colorado River Substation and associated facilities.
MITIGATION MEASURE	B-9d (rev): Conduct pre-construction reptile surveys. Prior to construction, SCE shall conduct surveys in areas of suitable habitat for Mojave fringe-toed lizard, ~~Sonoran desert tortoise,~~ common chuckwalla, banded Gila monster, and desert rosy boa within 48 hours prior to the start of construction activities. If Mojave fringe-toed lizards, 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.
Location	All areas of the Colorado River Substation and associated facilities that may support sensitive reptiles
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Underline and ~~strikeout~~ text indicates revisions made to the measure from what was approved in the DPV2 Final EIR/EIS. This revised portion of measure MM B-9d applies to the Colorado River Substation and associated facilities only. SCE will conduct pre-construction biological surveys and monitoring in California that will cover these species at the Colorado River Substation and associated facilities pursuant to MM B-9a and B-9b.
MITIGATION MEASURE	— [MM B-9d(rev)] Following the clearance surveys, exclusion fencing will be erected or a biological monitor will be onsite during construction activities.
Location	All areas of the Colorado River Substation and associated facilities that may support sensitive reptiles
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.

Table CRS-1. CRS Mitigation Measures and Applicant Proposed Measures – Biological Resources

Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	The same interpretation and approach for this portion of measure MM B-9d from the DPV2 Final EIR/EIS will also apply for the Colorado River Substation and associated facilities. SCE anticipates implementing similar monitoring efforts where these sensitive species are found during the construction phase of the project.
MITIGATION MEASURE	— [MM B-9d(rev)] • 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. Trenches, holes, or other excavations will be examined for banded Gila monster prior to filling. If individuals are found, the biological monitor will relocate them to nearby suitable habitat.
Location	All areas of the Colorado River Substation and associated facilities that may support sensitive reptiles
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	The same interpretation and approach for measure MM B-7b from the DPV2 Final EIR/EIS will also apply for the Colorado River Substation and associated facilities. SCE anticipates implementing similar monitoring efforts where sensitive reptiles are found during the construction phase of the project.
MITIGATION MEASURE	— [MM B-9d(rev)] • During construction, if a Mojave fringe-toed lizard, common chuckwalla, banded Gila monster, 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 USFWS's 2009 *Desert Tortoise Field Manual* or more current guidance provided by CDFG and USFWS *Guidelines for Handling Sonoran Desert Tortoises Encountered During Construction Projects* will be followed by qualified personnel.~~
Location	All areas of the Colorado River Substation and associated facilities that may support sensitive reptiles
Monitoring / Reporting Action	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	~~Strikeout~~ text indicates revisions made to the measure from what was approved in the DPV2 Final EIR/EIS. This revised portion of measure MM B-9d applies to the Colorado River Substation and associated facilities only. SCE anticipates implementing similar monitoring efforts where sensitive reptiles are found during the construction phase of the project.
MITIGATION MEASURE	B-9g(rev): Conduct pre-construction surveys and passive relocation for American badger and desert kit fox. Prior to construction, SCE shall conduct pre-construction surveys for American badger and desert kit fox. Surveys will be conducted prior to ground disturbance activities in areas that contain habitat for ~~this~~ these species.
Location	All locations at Colorado River Substation and associated facilities where construction activities would occur near or on suitable habitat for the American badger and desert kit fox

Table CRS-1. CRS Mitigation Measures and Applicant Proposed Measures – Biological Resources

Monitoring / Reporting Action	BLM and CPUC to verify documentation of survey and avoidance or excavation documentation.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Underline and ~~strikeout~~ text indicates revisions made to the measure from what was approved in the DPV2 Final EIR/EIS. This revised portion of this measure MM B-9g applies to the Colorado River Substation and associated facilities only. Measure will be implemented at the Colorado River Substation and associated facilities.
MITIGATION MEASURE	— [MM B-9g(rev)] Badger and desert kit fox dens located outside the project area shall be flagged for avoidance. Unoccupied dens located in the ~~right of way~~ project area shall be covered to prevent the animal from re-occupying the den prior to construction.
Location	All locations at Colorado River Substation and associated facilities where construction activities would occur near or on suitable habitat for the American badger and desert kit fox
Monitoring / Reporting Action	BLM and CPUC to verify documentation of survey and avoidance or excavation documentation.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Underline and ~~strikeout~~ text indicates revisions made to the measure from what was approved in the DPV2 Final EIR/EIS. This revised portion of measure MM B-9g applies to the Colorado River Substation and associated facilities only. Mitigation measure will be implemented as specified if badger dens and/or kit fox are found inside or within 100 feet of project areas during construction clearance surveys. SCE shall provide survey results and maps.
MITIGATION MEASURE	— [MM B-9g(rev)] 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. After verification that the den is unoccupied, it shall be excavated and backfilled by hand to ensure that no badgers or kit fox are trapped in the den. Dens shall be hand–excavated only before or after the breeding season (February 1–May 30). Any relocation of badgers or desert kit fox shall take place after consultation with the BLM, Forest Service, and CDFG.
Location	All locations at Colorado River Substation and associated facilities where construction activities would occur near or on suitable habitat for the American badger and desert kit fox
Monitoring / Reporting Action	BLM and CPUC to verify documentation of survey and avoidance or excavation documentation.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Underline and ~~strikeout~~ text indicates revisions made to the measure from what was approved in the DPV2 Final EIR/EIS. This revised portion of measure MM B-9g applies to the Colorado River Substation and associated facilities only. Mitigation measure will be implemented as specified if badger or kit fox dens are found during construction clearance surveys. SCE shall provide survey results and maps.

Table CRS-1. CRS Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	B-9j: Provide compensatory mitigation and restoration/enhancement of protected land for impacts to sand dune habitat. To mitigate for habitat loss and direct impacts to Mojave fringe-toed lizards, SCE shall acquire compensatory habitat. If sufficient acreage (in accordance with the ratios below) is not available, SCE shall enhance or restore marginal MFTL habitat. Requirements and performance standards of each of these options is described below. Acquisition of Compensatory Habitat Compensation lands shall be purchased in fee or in easement in whole or in part, at the following ratios: • 3:1 mitigation for direct impacts to stabilized and partially stabilized sand dunes (approximately 98 acres or final acreage permanently impacted by the project footprint plus any permanent disturbance areas required for moving accumulated sand); and • 0.5:1 mitigation for indirect impacts to stabilized and partially stabilized sand dunes (1,365 acres indirectly impacted by the project, including indirect impacts of moving accumulated sand). If compensation lands are acquired, SCE shall provide funding for the acquisition in fee title or in easement, initial habitat improvements, and long-term maintenance and management of the compensation lands. The compensation lands for direct impacts (at a 3:1 ratio) must be stabilized and partially stabilized sand dune habitat. 1. *Criteria for Compensation Lands*: The compensation lands selected for acquisition shall: a. Provide suitable habitat for Mojave fringe-toed lizards, and, aside from the minimum amount of stabilized and partially stabilized sand dunes described above, may also include sand drifts over playas or sandy Sonoran creosote bush scrub; b. Be within the Chuckwalla Valley with potential to contribute to Mojave fringe-toed lizard habitat connectivity and build linkages between known populations of Mojave fringe-toed lizards and preserve lands with suitable habitat; c. Contain at least one occurrence of Harwood's milk-vetch, Harwood's eriastrum, or flat-seeded spurge if these species are identified in pre-construction surveys required per Mitigation Measure B-8b(2). d. Be near larger blocks of lands that are either already protected or planned for protection, or which could feasibly be protected long-term by a public resource agency or a non-governmental organization dedicated to habitat preservation; e. Provide quality habitat for Mojave fringe-toed lizard that has the capacity to regenerate naturally when disturbances are removed; f. Not have a history of intensive recreational use or other disturbance that might make habitat recovery and restoration infeasible; g. Not be characterized by high densities of invasive species, either on or immediately adjacent to the parcels under consideration, that might jeopardize habitat recovery and restoration; h. Not contain hazardous wastes that cannot be removed to the extent the site is suitable for habitat; i. Not be subject to property constraints (i.e. mineral leases, cultural resources); and j. Be on land for which long-term management is feasible.
Location	Mojave fringe-toed lizard habitat at Colorado River Substation and associated facilities
Monitoring / Reporting Action	Review documentation of acquisition of compensatory habitat
Responsible Agency	BLM, CPUC and CDFG
Timing	Prior to construction
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Measure will be implemented at the Colorado River Substation and associated facilities. Adjustments to the acreages listed in the measure will be made based on the final engineered footprint of the CRS at the approved site.

Table CRS-1. CRS Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— [MM B-9j] 2. *Security for Implementation of Mitigation*: SCE shall provide financial assurances to the CPUC, BLM, and CDFG to guarantee that an adequate level of funding is available to implement the acquisitions and enhancement of Mojave fringe-toed lizard habitat as described in this condition. Financial assurance can be provided to the CPUC and CDFG in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security"). Prior to submitting the Security to the CPUC, the project owner shall obtain the CPUC's approval in consultation with CDFG and BLM, of the form of the Security. These funds shall be used solely for implementation of the measures associated with the project. The final amount due will be determined by an updated appraisal and a PAR analysis. The preliminary estimate of the required Security is presented in Table D.2-1. SCE may elect to fund the acquisition and initial improvement of compensation lands through the National Fish and Wildlife Foundation (NFWF) by depositing funds for that purpose into NFWF's Renewable Agency Action Team (REAT) Account. Initial deposits for this purpose must be made in the same amounts as the Security (refer to Table D.2-1) and may be provided in lieu of Security. If this option is used for the acquisition and initial improvement and the actual land cost is higher than the estimated Security amount, SCE shall make an additional deposit into the REAT Account if necessary to cover the actual acquisition costs and administrative costs and fees of the compensation land purchase once land is identified and the actual costs are known. If the actual costs for acquisition and administrative costs and fees are less than that estimated by CDFG, the excess money deposited in the REAT Account shall be returned to SCE. Money deposited for the initial protection and improvement of the compensation lands shall not be returned to SCE. The responsibility for acquisition of compensation lands may be delegated to a third party other than NFWF, such as a nongovernmental organization supportive of desert habitat conservation, by written agreement of CPUC, BLM, and CDFG. Such delegation shall be subject to approval by CPUC, in consultation with BLM and CDFG, prior to land acquisition, initial protection or maintenance and management activities.
Location	Mojave fringe-toed lizard habitat at Colorado River Substation and associated facilities
Monitoring / Reporting Action	Review Security
Responsible Agency	BLM, CPUC and CDFG
Timing	Prior to construction
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Measure will be implemented at the Colorado River Substation and associated facilities.
MITIGATION MEASURE	— [MM B-9j] 3. *Preparation of Management Plan*: SCE shall submit to the CPUC, BLM, and CDFG a Management Plan that describes site-specific enhancement measures for the Mojave fringe-toed lizard habitat on the acquired compensation lands. The objective of the Management Plan shall be to enhance the value of the compensation lands for Mojave fringe-toed lizards, and may include enhancement actions such as weed control, fencing to exclude livestock, erosion control, or protection of sand sources or sand transport corridors.
Location	Mojave fringe-toed lizard habitat at Colorado River Substation and associated facilities
Monitoring / Reporting Action	Review MFTL Habitat Management Plan
Responsible Agency	BLM, CPUC and CDFG
Timing	During construction
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Measure will be implemented at the Colorado River Substation and associated facilities.

Table CRS-1. CRS Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— [MM B-9j] Restoration/Enhancement of Protected Land If sufficient compensatory mitigation land is unavailable for acquisition as described above, a portion of the compensation funds may be used to implement MFTL habitat restoration/ enhancement measures on land protected by a conservation easement or BLM land that will not be developed in the future (e.g., ACEC, wilderness area, DWMA). Land targeted for restoration/enhancement shall also be occupied by MFTL or adjacent to MFTL-occupied land. Compensatory mitigation land shall be determined to be unavailable if after 18 months after the beginning of project ground disturbance SCE (or NFWF if NFWF option is selected) is able to determine through due diligence that: (1) land owners are unwilling to sell sufficient acreage or (2) acquisition cost per acre exceeds fair market value. The amount of land on which to implement MFTL habitat restoration/enhancement measures shall be twice the number of mitigation acres that could not be acquired. For example, if 1000 acres is required (based on the acreage of the final project footprint at a ratio of 3:1 or 0.5:1) and only 800 acres could be acquired, enhancement measures shall be implemented over a 400-acre area ((1000-800) x 2 = 400). MFTL habitat enhancement measures may include, but would not be limited to: • Long-term eradication of invasive plants, particularly Sahara mustard and Russian thistle; and/or • Removal of upwind barriers to dispersal (e.g., removal of upwind tamarisk windrows, or of land uses that would tend to stop moving sand from reaching protected habitat downwind). The restoration/enhancement area shall be approved by CDFG, BLM, and CPUC.
Location	Mojave fringe-toed lizard habitat at Colorado River Substation and associated facilities (if sufficient compensatory mitigation land is unavailable for acquisition)
Monitoring / Reporting Action	Review restoration/enhancement area compensation fund usage; review and observe habitat restoration/enhancement measures
Responsible Agency	BLM, CPUC and CDFG
Timing	Prior to, during and post construction
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Measure will be implemented at the Colorado River Substation and associated facilities.
MITIGATION MEASURE	— [MM B-9j] In addition, a site-specific Habitat Enhancement Plan shall be prepared by SCE that describes the methodology for implementation of site-specific enhancement measures for Mojave fringe-toed lizard habitat on the subject lands. The objective of the Management Plan shall be to enhance the value of the subject lands for Mojave fringe-toed lizards in perpetuity.
Location	Mojave fringe-toed lizard habitat at Colorado River Substation and associated facilities (if sufficient compensatory mitigation land is unavailable for acquisition)
Monitoring / Reporting Action	Review Habitat Enhancement Plan
Responsible Agency	BLM, CPUC and CDFG
Timing	During construction
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Measure will be implemented at the Colorado River Substation and associated facilities.

Table CRS-1. CRS Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	— [MM B-9j] Verification No later than 30 days prior to beginning Project ground-disturbing activities, SCE shall provide written verification of an approved form of Security. Actual Security shall be provided no later than 7 days prior to the beginning of Project ground-disturbing activities. SCE, or an approved third party, shall complete and provide written verification of the proposed compensation lands acquisition within 18 months of the start of Project ground-disturbing activities. No less than 90 days prior to acquisition of the property, SCE shall submit a formal acquisition proposal to the CPUC, BLM, and CDFG describing the parcels intended for purchase. SCE, or an approved third party, shall provide the CPUC, BLM, and CDFG, with a management plan for the compensation lands and associated funds within 180 days of the land or easement purchase, as determined by the date on the title. SCE, or an approved third party, shall provide the CPUC, BLM, and CDFG, with a management plan for restoration/enhancement activities on protected or qualifying BLM land no later than 60 days prior to construction; the restoration/enhancement management plan must include a detailed monitoring and reporting component. The CPUC shall review and approve the management plan(s), in consultation with BLM and CDFG.
Location	Mojave fringe-toed lizard habitat at Colorado River Substation and associated facilities
Monitoring / Reporting Action	Ensure appropriate documentation submitted
Responsible Agency	BLM, CPUC and CDFG
Timing	Prior to and during construction
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Measure will be implemented at the Colorado River Substation and associated facilities.
MITIGATION MEASURE	— [MM B-9j] Within 90 days after completion of Project construction, SCE shall provide to the CPUC, BLM, and CDFG an analysis with the final accounting of the amount (detailed by habitat type) of Mojave fringe-toed lizard habitat disturbed during Project construction.
Location	Mojave fringe-toed lizard habitat at Colorado River Substation and associated facilities
Monitoring / Reporting Action	Review final accounting of MFTL habitat disturbance
Responsible Agency	BLM, CPUC and CDFG
Timing	Post construction
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Measure will be implemented at the Colorado River Substation and associated facilities.
MITIGATION MEASURE	— [MM B-9j] The project owner shall provide written verification to the CPUC, BLM, and CDFG that the compensation lands or conservation easements have been acquired and recorded in favor of the approved recipient no later than 18 months from the start of ground-disturbing activities.
Location	Mojave fringe-toed lizard habitat at Colorado River Substation and associated facilities
Monitoring / Reporting Action	Review written verification of acquisition of compensation lands
Responsible Agency	BLM, CPUC and CDFG
Timing	During or post construction
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Measure will be implemented at the Colorado River Substation and associated facilities.

Table CRS-1. CRS Mitigation Measures and Applicant Proposed Measures – Biological Resources

MITIGATION MEASURE	B-15a (rev): Utilize collision-reducing techniques in installation of transmission lines and telecommunication linear facilities. SCE shall install the transmission line and telecommunication linear facilities 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 at Colorado River Substation and associated telecom facilities where potential avian collisions could occur
Monitoring / Reporting Action	Design plans to be submitted showing collision reducing techniques. BLM and CPUC to verify the placement of poles and lines, and the existence of collision-reducing devices on poles and lines located above existing structures/features on telecommunication facilities.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Underlined text indicates additions made to the measure from what was approved in the DPV2 Final EIR/EIS. This revised measure MM B-15a applies to the Colorado River Substation and associated facilities only. SCE has determined locations along the DPV2 ROW where potential avian collisions could occur due to the proximity of the transmission line to bird feeding and roosting locations and such locations are not located in the vicinity of the Colorado River Substation. The APLIC Collision Manual does not identify telecommunication lines themselves a collision hazard and have no recommendations for marking telecommunication lines when they occur below distribution lines or as a stand-alone line. Additionally, the telecommunication lines would not occur significantly above existing transmission line towers and lines, topographic features, or tree lines. Therefore, in compliance with APLIC standards, SCE does not anticipate marking telecommunication lines.

Table CRS-2. CRS Mitigation Measures and Applicant Proposed Measures – Cultural Resources

MITIGATION MEASURE	C-5a (rev): 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 Proposed Project. 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 evaluating potential~~addressing~~ inadequacies that present the possibility of allowing ~~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.
Location	All locations at Colorado River Substation and associated facilities 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.
Responsible Agency	BLM and CPUC
Timing	Post construction (30 days before and during project operation)
Interpretation & Approach	Underline and ~~strikeout~~ text indicates revisions made to the measure from what was approved in the DPV2 Final EIR/EIS. This revised measure supersedes MM C-5a from the DPV2 Final EIR/EIS for the Colorado River Substation and associated facilities. Measure will be implemented.
MITIGATION MEASURE	— [MM C-5a (rev)] 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 any potential to be ~~been~~ impacted by erosion or vehicle or maintenance impacts, and measures to prevent such effects shall be implemented. Protective measures shall include erosion controls such as those defined in Mitigation Measure H-1a and APM W-3 (which require pre- and post-construction erosion controls). For properties that have been impacted, the Applicant shall provide recommendations for mitigating impacts and for improving protective measures.
Location	All locations at Colorado River Substation and associated facilities identified in long-term protection plan
Monitoring / Reporting Action	Details of the long-term monitoring of sites will be determined by the BLM and CPUC, and, per the Programmatic Agreement for DPV2, will be incorporated into the HPMP, in consultation with all interested parties.
Responsible Agency	BLM and CPUC
Timing	Post construction (details of the long-term monitoring of sites will be determined by the BLM and CPUC, and, per the Programmatic Agreement for DPV2, will be incorporated into the HPMP, in consultation with all interested parties)
Interpretation & Approach	Underline and ~~strikeout~~ text indicates revisions made to the measure from what was approved in the DPV2 Final EIR/EIS. This revised measure supersedes MM C-5a from the DPV2 Final EIR/EIS for the Colorado River Substation and associated facilities. Measure will be implemented.
MITIGATION MEASURE	— [MM C-5a (rev)] 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.
Location	All locations at Colorado River Substation and associated facilities identified in long-term protection plan

Table CRS-2. CRS Mitigation Measures and Applicant Proposed Measures – Cultural Resources

Monitoring / Reporting Action	Details of the long-term monitoring of sites will be determined by the BLM and CPUC, and, per the Programmatic Agreement for DPV2, will be incorporated into the HPMP, in consultation with all interested parties.
Responsible Agency	BLM and CPUC
Timing	Post construction (details of the long-term monitoring of sites will be determined by the BLM and CPUC, and, per the Programmatic Agreement for DPV2, will be incorporated into the HPMP, in consultation with all interested parties)
Interpretation & Approach	This revised measure supersedes MM C-5a from the DPV2 Final EIR/EIS for the Colorado River Substation and associated facilities. Measure will be implemented.
MITIGATION MEASURE	— [MM C-5a (rev)] 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 <u>that could not be prevented based on annual inspection,</u> 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 at Colorado River Substation and associated facilities identified in long-term protection plan
Monitoring / Reporting Action	Following construction, annual site monitoring; immediate notification to BLM and CPUC of adverse changes.
Responsible Agency	BLM and CPUC
Timing	Post construction (details of the long-term monitoring of sites will be determined by the BLM and CPUC, and, per the Programmatic Agreement for DPV2, will be incorporated into the HPMP, in consultation with all interested parties).
Interpretation & Approach	Underlined text indicates additions made to the measure from what was approved in the DPV2 Final EIR/EIS. This revised measure supersedes MM C-5a from the DPV2 Final EIR/EIS for the Colorado River Substation and associated facilities. Measure will be implemented.

Table CRS-3. CRS Mitigation Measures and Applicant Proposed Measures – Public Health and Safety

MITIGATION MEASURE	P-1a (rev): Develop Hazardous Substance Control and Emergency Response Plan. A Hazardous Substance Control and Emergency Response Plan (Plan) shall be prepared by SCE for the project, and a copy shall be kept on-site (~~or~~and in vehicles during construction and maintenance of the project. The Plan shall define an emergency response program to ensure quick and safe cleanup of accidental spills, including prescriptions for hazardous-material handling procedures to reduce the potential for a spill during construction. The Plan shall also identify areas where refueling and vehicle-maintenance activities shall occur, and Identify areas for storage of hazardous materials. The directions and requirements listed in this plan shall also be reiterated in the Stormwater Pollution Prevention Plan (SWPPP) prepared for the project. SCE shall submit the Plan ~~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	Colorado River Substation and associated facilities
Monitoring / Reporting Action	Review and approve plan and ensure it is implemented in the field.
Responsible Agency	BLM, CPUC, and USFWS
Timing	Prior to and during construction
Interpretation & Approach	Underline and ~~strikeout~~ text indicates revisions made to the measure from what was approved in the DPV2 Final EIR/EIS. This revised measure supersedes MM P-1a from the DPV2 Final EIR/EIS for the Colorado River Substation and associated facilities. Measure will be implemented.
MITIGATION MEASURE	P-1c (rev): Ensure proper disposal of construction waste. All non-hazardous construction and demolition waste, including trash and litter, garbage, and other solid waste shall be stored in totally enclosed containment, and shall be disposed of properly, through a permitted waste management provider. 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. Storage of fuels and hazardous materials shall be prohibited within 200 feet of groundwater supply wells and within 400 feet of community or municipal wells. SCE shall document compliance by providing a list of permitted waste management providers and hazardous waste facilities to be used for disposal of construction and demolition waste to the CPUC or BLM or USFWS, as appropriate, for review and approval at least 60 days before the start of construction.
Location	Colorado River Substation and associated facilities
Monitoring / Reporting Action	Review list of waste management providers and facilities; observe construction activities for compliance and review manifest for hazardous waste disposal.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction
Interpretation & Approach	Underlined text indicates additions made to the measure in the Final Supplemental EIR from what was approved in the DPV2 Final EIR/EIS. This revised measure supersedes MM P-1c from the DPV2 Final EIR/EIS for the Colorado River Substation and associated facilities. Measure will be implemented.
MITIGATION MEASURE	P-4a(rev): ~~Prepare~~ Provide Proof of Approved Spill Prevention, Countermeasure, and Control Plans. In accordance with Title 40 of the CFR, Part 112, and in order t~~T~~o minimize, avoid, and/or clean up unforeseen spill of hazardous materials during operation of the proposed facilities, the Colorado River Regional Water Quality Control Board (RWQCB) will require SCE ~~shall~~ to ~~update or~~ prepare~~, if necessary, the~~ and implement a Spill Prevention, Countermeasure, and Control (SPCC) P~~p~~lan for each substation, series capacitor~~s~~, and the switchyard. If an existing SPCC Plan is available it may be updated for compliance with this measure. In accordance with state and federal requirements, each SPCC Plan shall include engineered and operational methods for preventing, containing, and controlling potential releases, and provisions for quick and safe cleanup. SCE shall document compliance by providing a copy of the approved ~~Spill Prevention, Control, and Countermeasures~~ SPCC ~~p~~Plans to the CPUC or BLM or USFWS, as appropriate, for review and approval at least 60 days before the start of operation. For any substation, series capacitor, or switchyard that is not required by the RWQCB to possess a SPCC Plan, SCE shall submit to the CPUC or BLM or USFWS, as appropriate, at least 60 days before the start of operation, proof that a SPCC Plan is not required by the RWQCB.

Table CRS-3. CRS Mitigation Measures and Applicant Proposed Measures – Public Health and Safety

Location	Colorado River Substation and associated facilities
Monitoring / Reporting Action	Review and approve plans or documentation; observe construction sites and activities for compliance
Responsible Agency	BLM, CPUC, and USFWS
Timing	Prior to, during and post construction (60 days before operation)
Interpretation & Approach	Underline and ~~strikeout~~ text indicates revisions made to the measure from what was approved in the DPV2 Final EIR/EIS. This revised measure supersedes MM P-4a from the DPV2 Final EIR/EIS for the Colorado River Substation and associated facilities. A SPCC Plan shall be approved/certified by an SCE professional Engineer and submitted to the BLM and CPUC prior to bringing any transformer oils onto the project site. Containment, as prescribed in the SPCC, shall be installed and functional, or an equivalent temporary secondary containment providing capacity volumes as directed by the SPCC Plan shall be installed prior to bringing any transformer oils onto the project site.

Table CRS-4. CRS Mitigation Measures and Applicant Proposed Measures – Hydrology and Water Quality

MITIGATION MEASURE	H-5a: Construction site dewatering management. If groundwater is unexpectedly encountered during project construction, dewatering activities shall be performed in accordance with the California Stormwater Quality Association (CASQA) Handbook for Construction or other similar guidelines, as approved by the County of Riverside. Examples of construction site dewatering Best Management Practices include but are not limited to the following: fiber rolls, gravel bag berms, straw bale barriers, sediment basins and sediment traps, weir tanks, dewatering tanks, and various filters (gravity bag filter, sand media particulate filter, pressurized bag filter, cartridge filter).
Location	Colorado River Substation and associated facilities
Monitoring / Reporting Action	Monitor dewatering BMPs implementation if groundwater is encountered
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Measure will be implemented as applicable.
MITIGATION MEASURE	— [MM H-5a] The project Applicant shall notify the Colorado River Bain Regional Water Quality Control Board (RWQCB) and County at the onset of dewatering and submit written description of all executed dewatering activities, including steps taken to return encountered groundwater to the subsurface, upon the completion of dewatering activities at the affected site(s).
Location	Colorado River Substation and associated facilities
Monitoring / Reporting Action	Ensure RWQCB and Riverside County notification and review documentation
Responsible Agency	BLM and CPUC
Timing	During construction
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. All dewatering activities shall also be reported immediately to the CPUC and BLM. If shallow ground water is encountered in quantities that require dewatering, the RWQCB will be notified to determine whether: 1) The shallow ground water can be re-used on site for construction similar to water supply well water, or 2) Whether the dewatering activities fall under Region 9 General permit 2000-90, 2001-96, or whether additional permitting is required. In addition, all dewatering activities shall also be reported immediately to the CPUC and BLM.
MITIGATION MEASURE	H-7a: Groundwater Well Contingency Plan. Prior to issuance of construction permits, the Applicant shall prepare a Groundwater Well Contingency Plan (Plan) to drill and construct a secondary supply well that would supplement groundwater production rates from the primary supply well, should the pumping capacity (daily yields) of the primary well become inadequate to meet the project requirements. The Plan shall identify the following features of the secondary supply well, should it be needed: ■ location within the Colorado River Substation (CRS) site; ■ proximity to existing wells (private and/or municipal); ■ estimated total depth, well screen depth, diameter, and estimated yield; and ■ time required to have the well drilled, constructed, developed and fully operational. The secondary supply well may be installed at any time prior to or during construction, as long as it is consistent with features identified in the Plan, as described above. In addition to the above, the Plan shall also specify what conditions would trigger use of the second supply well, as well as the person responsible for determining when to utilize the second supply well.
Location	Colorado River Substation
Monitoring / Reporting Action	Review Groundwater Well Contingency Plan

Table CRS-4. CRS Mitigation Measures and Applicant Proposed Measures – Hydrology and Water Quality

Responsible Agency	BLM and CPUC
Timing	Prior to construction (30 days)
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Measure will be implemented. A Ground Water Contingency Plan (GWCP) will be prepared and included as a portion of the Water Supply plan discussed under Mitigation Measure MM H-7c.
MITIGATION MEASURE	— [MM H-7a]The County of Riverside shall be notified prior to installation of the secondary supply well, should it be necessary. The Applicant shall submit the Groundwater Well Contingency Plan to the CPUC and the County of Riverside for review and approval thirty (30) days before the start of extraction of groundwater for construction or operation.
Location	Colorado River Substation
Monitoring / Reporting Action	Review Plan and ensure Riverside County is notified prior to installation of the secondary supply well
Responsible Agency	BLM and CPUC
Timing	Prior to, during and post construction (if secondary well installed)
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Measure will be implemented.
MITIGATION MEASURE	H-7b: Groundwater Monitoring and Reporting. Prior to issuance of construction permits and prior to any groundwater pumping activities, a Groundwater Monitoring and Reporting Plan (Plan) shall be prepared by a Certified Hydrogeologist (CHG) and submitted by the Applicant (SCE) to the California Public Utilities Commission (CPUC) for review and approval. The Plan shall provide detailed methodology for monitoring background and site groundwater levels, water quality, and flow.
Location	Colorado River Substation
Monitoring / Reporting Action	Review Groundwater Monitoring and Reporting Plan
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. A Groundwater Monitoring and Reporting Plan (GWMRP) will be prepared and included as a portion of the Water Supply Plan discussed under Mitigation Measure MM H-7c.
MITIGATION MEASURE	— [MM H-7b] Monitoring shall be performed during pre-construction, construction, and project operation with the intent to establish pre-construction and project-related groundwater level and water quality trends that can be quantitatively compared against observed and simulated trends near the project pumping well(s). During pre-construction monitoring, it shall be determined whether groundwater can be pumped from above the Colorado River accounting surface of 234 feet above mean sea level (amsl). If it is not possible to verify that groundwater for the Proposed Project would be exclusively pumped from above the Colorado River accounting surface, then Mitigation Measure H-7c (Water Supply Plan for Use of Colorado River Water) would be required. The monitoring wells shall include the following: SCE's primary supply well (proposed), SCE's secondary supply well (per Mitigation Measure H-7a), State Well Number 7S/21E-5F1 (approximately 4,800 feet northeast of the new project well), and at least one off-site down-gradient well. Water quality monitoring shall include annual sampling and testing for Total Dissolved Solids (TDS), which include minerals, salts, and metals dissolved in water. Water quality samples shall be drawn from each of the aforementioned monitoring well locations.
Location	Colorado River Substation
Monitoring / Reporting Action	Review groundwater level and water quality trends; verify whether groundwater would be exclusively pumped from above the Colorado River accounting surface
Responsible Agency	BLM and CPUC
Timing	Prior to, during and post construction

Table CRS-4. CRS Mitigation Measures and Applicant Proposed Measures – Hydrology and Water Quality

Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. SCE will construct a primary well (and may also construct a secondary well, if needed) for the project. SCE will monitor the static water level of the primary well, the secondary well (if applicable) State Well Number 7S/21E-5F1, and at least one off-site down-gradient well on a schedule determined by the Certified Hydrogeologist responsible for developing the Groundwater Monitoring and Reporting Plan as appropriate to effectively characterize existing groundwater conditions and the Project's effects on such conditions. The determination of whether or not the SCE well(s) are drawing from below the Colorado River accounting surface shall be made based on the static water level at only the new SCE well(s), because the static water level at the more distant monitoring wells could be influenced by other factors besides the SCE well(s). In the event that monitoring indicates that the static water level has fallen below the Colorado River accounting surface (as noted above, for the area in which the project is located, the accounting surface is at elevation 234 feet above mean sea level [amsl]), then the Applicant shall immediately implement Mitigation Measure H-7c.
MITIGATION MEASURE	— [MM H-7b]The Plan shall include a schedule for submittal of both quarterly monitoring data reports during construction (one report every three months, from the onset of construction activities), and annual monitoring data reports during construction, operation, and maintenance (one report every twelve months, from the onset of construction, for a duration of at least five years, described below). Monitoring data reports shall be submitted by the Applicant to the CPUC for review and approval, as specified in the Plan. Quarterly and annual reports shall include water level monitoring data and water quality monitoring data. Annual summary reports shall include but are not limited to the following: • Daily usage, monthly range, and monthly average of daily water usage in gallons per day; • Total water used on a monthly and annual basis in acre-feet; • Summary of all water level and water quality data; and • Identification of trends that indicate potential for offsite wells to experience deterioration of water level or water quality.
Location	Colorado River Substation
Monitoring / Reporting Action	Review Plan and quarterly and annual reports
Responsible Agency	BLM and CPUC
Timing	During and post construction
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Measure will be implemented.
MITIGATION MEASURE	— [MM H-7b] Based on the results of the quarterly and annual trend analyses during the first 5 years of the project from the initiation of project construction, the Applicant shall determine if the project pumping has resulted in water level decline of 5 feet or more below the baseline trend at nearby private wells. If drawdown of 5 feet or more occurs at off-site wells, the Applicant shall immediately reduce groundwater pumping until water levels stabilize or recover, sustaining drawdown of less than 5 feet. Alternatively, the Applicant shall provide compensation to the well owner, including reimbursement of increased energy costs, or deepening the well or pump setting.
Location	Colorado River Substation
Monitoring / Reporting Action	Review quarterly and annual trend analyses; observe reduction in pumping or ensure compensation to well owner, if necessary
Responsible Agency	BLM and CPUC
Timing	During and post construction

Table CRS-4. CRS Mitigation Measures and Applicant Proposed Measures – Hydrology and Water Quality

Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Analysis of ground water level trends will be conducted and reported in the quarterly and annual reports. Ground water level trends in both the site wells and off-site wells will be plotted to determine the impact from project pumping as well as the impact from climatic conditions. Threshold values to indicate the onset of project pumping on offsite wells shall be established based upon site specific and climatic conditions. If drawdown of 5 feet or more below baseline trend conditions occurs at private off-site wells, and such drawdown is attributable to pumping from SCE's well(s), then project pumping will be immediately reduced until water levels stabilize or recover, sustaining drawdown of less than 5 feet. (SCE shall have the burden to demonstrate that the drawdown is not attributable to pumping from SCE's well(s) and, if the CPUC determines that SCE has failed to meet the burden, then SCE shall be required to mitigate the drawdown.) Alternatively, compensation with the affected well owner, including reimbursement of increased energy costs, or deepening the well or pump setting can be negotiated.
MITIGATION MEASURE	— [MM H-7b] After the first 5 years of project, the Applicant and CPUC shall jointly evaluate the effectiveness of the Groundwater Monitoring and Reporting Plan and determine if monitoring frequencies, laboratory testing program, or procedures should be revised or eliminated.
Location	Colorado River Substation
Monitoring / Reporting Action	Review effectiveness of Groundwater Monitoring and Reporting Plan
Responsible Agency	BLM and CPUC
Timing	Post construction (after 5 years)
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Measure will be implemented.
MITIGATION MEASURE	— [MM H-7b] The Applicant shall file an annual "Notice of Extraction and Diversion of Water" with the State Water Resources Control Board in accordance with Water Code Sections 4999 et seq. The Applicant shall include a copy of the filing in the annual compliance report. The report will allow the CPUC to review submitted data monitoring reports for compliance. Following review and approval of the fifth annual summary report, the CPUC will determine whether groundwater wells surrounding the project site are affected by project activities in a way that requires additional mitigation and, if so, shall determine what measures are needed.
Location	Colorado River Substation
Monitoring / Reporting Action	Review annual summary reports
Responsible Agency	BLM, CPUC and SWRCB
Timing	During and post construction
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. As required by California Water Code Section 5001(after 1955) each person who extracts ground water in excess of 25 acre-feet in any year shall file with the board on or before March 1st of the succeeding year a "Notice of Extraction and Diversion of Water" (hereinafter called "notice") in the form provided in Section 5002. The anticipated project pumping after completion of construction activities is less than 25 acre-ft/yr. Therefore filing of a "Notice of Extraction and Diversion of Water" will not be required after completion of pumping operations conducted during construction.

Table CRS-4. CRS Mitigation Measures and Applicant Proposed Measures – Hydrology and Water Quality

MITIGATION MEASURE	H-7c: Water Supply Plan for Use of Colorado River Water. If pre-construction groundwater monitoring conducted in compliance with Mitigation Measure H-7b (Groundwater Monitoring and Reporting Plan) indicates that groundwater pumping for the Proposed Project would draw water from below the Colorado River accounting surface of 234 feet above mean sea level (amsl), the Applicant (SCE) shall undertake one or more of the activities identified below to mitigate project impacts to flows in the Colorado River. These activities shall result in replacement of water used by the project over the life of the project. Measures of water conservation should be considered in the following order of priority: • Payment for irrigation improvements in Palo Verde Irrigation District (PVID); • Purchase of water allotments within the Colorado River Basin that will be held in reserve; • Use of tertiary treated water; • Implementation of water conservation programs in the floodplain communities of the Chuckwalla Valley Groundwater Basin, the Palo Verde Mesa Groundwater Basin, and/or Colorado River; and/or • Participation in the U.S. Bureau of Land Management's (BLM) Tamarisk Removal Program. If the Applicant has filed an application to the U.S. Bureau of Reclamation (USBR) to obtain an allocation of water from the Colorado River, these allocations can be used to satisfy some or all of the water offsets needed to comply with this condition on an acre-foot per acre-foot basis. Use of any other options for water offsets will require the Applicant to demonstrate to the satisfaction of CPUC that the appropriate amounts of water will be conserved.
Location	Colorado River Substation, if groundwater pumping would draw water from below the Colorado River accounting surface of 234 feet above mean sea level (amsl)
Monitoring / Reporting Action	Ensure implementation of water conservation measures
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. As required by Mitigation Measure H 7b, SCE will regularly monitor the static water levels in the primary well, the secondary well (if applicable), State Well Number 7S/21E-5F1, and at least one off-site down-gradient well on a schedule determined appropriate by the Certified Hydrogeologist responsible for the Groundwater Monitoring and Reporting Plan. If monitoring activities indicate that the static water level of the groundwater well or wells being used for project pumping operations is below the Colorado River accounting surface of 234 feet amsl, SCE will offset water use from below the accounting surface through implementation of one or more of the water conservation actions identified in Mitigation Measure H-7c. The quantity of replacement water accounted for through purchase of water allotments held in reserve or implementation of water conservation action(s) must be equal to the quantity of groundwater pumped from below the Colorado River accounting surface during project pumping operations, over the life of the project. If the static groundwater level in the primary or secondary well falls below the accounting surface, SCE will implement one or more of the following approaches until the full quantity of water pumped from below the Colorado River accounting surface during project-related pumping operations has been conserved, representing a replacement of consumed Colorado River water: • Payment for irrigation improvements in Palo Verde Irrigation District (PVID); • Purchase of a water allotment (which are held in reserve) for a quantity sufficient to offset the project groundwater use over the life of the project. • Use of tertiary treated water; • Implementation of water conservation programs in the floodplain communities of the Chuckwalla Valley Groundwater Basin, the Palo Verde Mesa Groundwater Basin, and/or Colorado River; and/or • Participation in the U.S. Bureau of Land Management's (BLM) Tamarisk Removal Program. SCE will provide information to the CPUC to allow the CPUC to evaluate whether the selected approach to complying with Mitigation Measure H 7c will result in replacement of water used by the project over the life of the project.

Table CRS-4. CRS Mitigation Measures and Applicant Proposed Measures – Hydrology and Water Quality

MITIGATION MEASURE	— [MM H-7c] The activities proposed for mitigation will be outlined in a Water Supply Plan that will be provided to the CPUC for review and approval prior to the onset of groundwater pumping at the project site. The Water Supply Plan shall include the following at a minimum: • Identification of water offset activities and associated water source(s) to replace the quantity of water diverted from the Colorado River over the life of the project on an acre-foot per acre-foot basis; • Demonstration of the Applicant's legal entitlement to the water or ability to conduct the activity; • Include a discussion of any needed governmental approval of the identified activities, including a discussion of whether that approval that requires; • Discuss whether any governmental approval of the identified activities will be needed, and, if so, whether that additional approval will require compliance with CEQA or NEPA; • Demonstration of how water diverted from the Colorado River will be replaced for each identified activity; • An estimated schedule of completion for each identified activity; • Performance measures that would be used to evaluate the amount of water replaced by each identified activity; • Monitoring and Reporting Plan outlining the steps necessary and proposed frequency of reporting to show that each identified activity is achieving the intended benefits and replacing Colorado River diversions; and • If the application for allocation from the Colorado River is accepted by the USBR, the Applicant shall submit to the CPUC for their approval, a copy of a water allocation from the Colorado River issued by the appropriate agency. The Applicant shall implement the activities reviewed and approved in the Water Supply Plan in accordance with the agreed upon schedule in the Water Supply Plan. If agreement on identification or implementation of mitigation activities cannot be achieved, the Applicant shall immediately halt construction or operation until assurance that the agreed upon activities can be identified and implemented. The Applicant shall submit the Water Supply Plan to the CPUC for review and approval thirty (30) days before the start of extraction of groundwater for construction or operation.
Location	Colorado River Substation, if groundwater pumping would draw water from below the Colorado River accounting surface of 234 feet above mean sea level (amsl)
Monitoring / Reporting Action	Review Water Supply Plan; observe compliance with Plan activities in accordance with the agreed upon schedule
Responsible Agency	BLM and CPUC
Timing	Prior to, during and post construction

Table CRS-4. CRS Mitigation Measures and Applicant Proposed Measures – Hydrology and Water Quality

Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. A Water Supply Plan (WSP) will be prepared and submitted to CPUC for review and approval thirty (30) days before the start of extraction of groundwater for construction or operation. The WSP will include: • The GWCP described in Mitigation Measure MM H-7a; • GWMRP described under Mitigation Measure MM H-7b; • Identification of water offset activities and associated water source(s) to replace the quantity of water diverted from the Colorado River accounting surface over the life of the project on an acre-foot per acre-foot basis; • Demonstration of the Applicant's legal entitlement (i.e., contract for allotment) or ability to conduct the activity; • A discussion of governmental approval(s) of the activities necessary to implement the WSP, including whether such approval(s) may require compliance with CEQA and/or NEPA; • Demonstration of how water diverted from the Colorado River accounting surface will be replaced for each identified activity; • An estimated schedule of completion for each identified activity; • Performance measures that would be used to evaluate the amount of water replaced by each identified activity; • Monitoring and Reporting Plan outlining the steps necessary and proposed frequency of reporting to show that each identified activity is achieving the intended benefits and replacing water pumped from below the Colorado River accounting surface; and • If SCE obtains an allotment of water from the Colorado River, SCE shall submit to the CPUC for their approval, a copy of the agreement with the entity providing the water allotment. The activities provided in the approved WSP will implemented in accordance with the agreed upon schedule provided in the WSP.

Table CRS-5. CRS Mitigation Measures and Applicant Proposed Measures – Greenhouse Gas

MITIGATION MEASURE	GHG-1: Avoid sulfur hexafluoride emissions. SCE shall ensure that project equipment, specifically the circuit breakers at the Colorado River Substation, maintains a leakage rate of 0.5 percent per year or less for sulfur hexafluoride (SF_6). To accomplish this, SCE shall include this limit as a performance specification for the gas insulated switchgear that would be installed as part of the project. Maintenance, repair, and replacement of all gas insulated switchgear shall be consistent with manufacturer's recommendations for achieving this performance specification and in compliance with CARB regulations for reducing sulfur hexafluoride emissions from gas insulated switchgear (17 CCR 95350).
Location	Colorado River Substation
Monitoring / Reporting Action	Potential for SF_6 leaks is minimized according to a leak reduction standard that would be consistent with the CARB Climate Change Scoping Plan
Responsible Agency	BLM and CPUC
Timing	Prior to and post construction (during operation)
Interpretation & Approach	This is a new measure that was not included in the DPV2 Final EIR/EIS. Measure will be implemented.

6.3 Red Bluff Substation Mitigation Measures

Table RB-1. Mitigation Measures and Applicant Proposed Measures – Air Quality

MITIGATION MEASURE	MM-AIR-1 Sunlight and SCE shall require all on-site construction equipment to meet EPA Tier 2 or higher emissions standards according to the following: • April 1, 2010, to December 31, 2011: All off-road diesel-powered construction equipment greater than 50 horsepower (hp) shall meet Tier 2 off-road emissions standards. In addition, all construction equipment shall be outfitted with the BACT devices certified by the California Air Resources Board (CARB). Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 2 or Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. • January 1, 2012, to December 31, 2014: All off-road diesel-powered construction equipment greater than 50 hp shall meet Tier 3 off-road emissions standards. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. • Post-January 1, 2015: All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. • A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided when each applicable unit of equipment is mobilized.
Location	All Areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Copies of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided to the BLM and CPUC when each applicable unit of equipment is mobilized.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction

Table RB-1. Mitigation Measures and Applicant Proposed Measures – Air Quality

Implementation & Approach	If the specified tier engine is not available in 2012 or 2013, then engines greater than 50 hp shall be retrofitted to meet the specified tier NOx and PM emission levels. If the Contractor has documented that no equipment or emissions equivalent retrofit is available for a particular equipment type, to meet the specified tier NOx and PM emission levels, a tier engine one level below will be used, if the Contractor provides documentation from at least two construction equipment rental firms that the specified tier or equivalent retrofit is not available.
MITIGATION MEASURE	AM-AIR-6 SCE would develop and implement a dust control plan to ensure compliance with SCAQMD Rule 403 during substation construction. Although preparation of a written dust control plan is not a formal requirement of SCAQMD Rule 403, compliance with all of the substantive provisions of Rule 403 (See Tables 3.2-2 and 3.2-3 in Chapter 3) is a legal requirement and is accommodated in the emissions analyses prepared for this EIS.
Location	All Areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Review the dust control plan and monitor implementation during construction.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	AM-AIR-7 SCE would require bidders for the construction contract to submit a transportation plan describing how workers would travel to the Project site.
Location	All Areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verification of submittal of transportation plans
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	SCE will identify Contractor travel route and arrival/departure procedures and restrictions in the Contractor's Construction Specifications/Contract Documents.

Table RB-2. Mitigation Measures and Applicant Proposed Measures – Vegetation

MITIGATION MEASURE	MM-BIO-1 Construction Monitoring. A BLM-approved biologist shall conduct construction monitoring during all construction activities to ensure that construction activities are contained within the staked and flagged construction areas at all times.
Location	All Areas associated with Red Bluff substation construction
Monitoring / Reporting Action	BLM to approve biologist resumes prior to and during construction. Monitoring shall be conducted during construction.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Biological monitor resumes shall be submitted to the BLM prior to construction for review and approval. Measure will be implemented.
MITIGATION MEASURE	—[MM-BIO-1] The construction monitor shall also be present during all ground disturbing activities to either actively or passively relocate special status wildlife species, other than the desert tortoise, nesting bird species, and burrowing owl (e.g., rosy boa, chuckwalla, Palm Springs round-tailed squirrel, American badger, and Colorado Valley woodrat [and burro deer, Nelson's bighorn sheep, and mountain lion if need be]), found within the construction zones to a suitable location outside of the project footprint. The construction monitor shall also inspect fencing and netting at all construction ponds to ensure that the ponds are not accessible to potential avian or canid desert tortoise predators or to wildlife that could drown or become entrapped within the exclosures. Netting and fencing must prevent the ponds from becoming water source "subsidies" to predators or from becoming hazards to native wildlife. The construction monitor shall have the authority to stop work and report directly to the Applicant's Environmental Manager to ensure compliance with the Project Description, applicant-proposed measures, and mitigation measures. The construction monitor shall provide the Applicant's Environmental Manager with weekly updates and quarterly monitoring reports.
Location	All Areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Monitoring shall be conducted during construction. Review weekly updates and quarterly monitoring reports.
Responsible Agency	BLM, CPUC
Timing	During construction
Implementation & Approach	Measure will be implemented. SCE will not have construction ponds; therefore, the netting and fencing for the construction ponds is not applicable.
MITIGATION MEASURE	—[MM-BIO-1] After construction has been completed, the construction monitor shall provide the Applicant's Environmental Manager with a final monitoring report. The Applicant's Environmental Manager shall provide BLM with weekly status updates on the status of construction and monitoring efforts and shall provide BLM with copies of the quarterly monitoring reports and the final monitoring report. BLM shall be responsible for ensuring that construction monitoring is conducted during all construction activities.
Location	All Areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Weekly status updates on the status of construction and monitoring efforts, quarterly monitoring reports and the final monitoring report shall be reviewed by the BLM and submitted to the CPUC.
Responsible Agency	BLM, CPUC
Timing	During and post construction
Implementation & Approach	Measure will be implemented.
MITIGATION MEASURE	MM-BIO-2 Off-site Compensation: 1. This Mitigation Measure provides further detail and specificity to the habitat compensation land requirements described in Applicant Measure AM-BIO-1. The draft Habitat Compensation Plan shall be revised to reflect acreages and habitat types as described herein, The revised habitat Compensation Plan shall be submitted for approval to BLM, USFWS, CDFG, and CPUC before its finalization and implementation.
Location	All habitat disturbance areas associated with Red Bluff substation construction

Table RB-2. Mitigation Measures and Applicant Proposed Measures – Vegetation

Monitoring / Reporting Action	The draft Habitat Compensation Plan shall be revised to reflect acreages and habitat types. The revised habitat Compensation Plan shall be submitted for approval to BLM, USFWS, CDFG, and CPUC
Responsible Agency	BLM, CPUC, USFWS, CDFG
Timing	During and post construction
Implementation & Approach	Prior to project energization. Measure will be implemented.
MITIGATION MEASURE	—[MM-BIO-2] The Applicant (Sunlight or SCE) shall acquire and protect, in perpetuity, compensation habitat to mitigate impacts to biological resources listed below. The compensation lands shall be placed under conservation management to be funded through the terms described herein. The acreages and ratios shall be based upon final calculation of impacted acreage for each resource and on ratios set forth in Applicant Measure AM-BIO-1 and in the draft Habitat Compensation Plan dated 17 Dec 2010. Acreages of anticipated compensation requirements as summarized throughout this measure are based on impacts analysis of Alternative 1 in Sections 4.3 and 4.4 and ratios described in Applicant Measure AM-BIO-1. Acreages shall be adjusted as appropriate for other alternatives. Desert dry wash woodland (101 acres at 3:1 ratio). • Occupied desert tortoise habitat (2,757 acres at 1:1 ratio; 1,214 acres at 2:1 ratio; 191 acres at 5:1 ratio). • occupied or suitable habitat for breeding or wintering burrowing owls (13 acres for each occupied burrow, estimated as two burrows), • state-jurisdictional streambeds (302 acres, including the desert dry wash woodland, above, at 3:1 ratio), • creosote bush scrub (4,072 acres at 1:1 ratio). • occupied foxtail cactus habitat (estimated as two acres, at 1:1 ratio), • undisturbed habitat for most wildlife species including desert kit fox and American badger (i.e., away from sources of noise or other disturbance such as highways, wind farms, etc.) (4,173 acres, at 1:1 ratio), • occupied chuckwalla and rosy boa habitat (Red Bluff Substation A site, 149 acres, at 1:1 ratio), • suitable/occupied upland shrubland nesting habitat for migratory birds (4,173 acres, at 1:1 ratio), • suitable foraging habitat for golden eagles, and within foraging range of a known nesting site (4,173 acres, at 1:1 ratio), • suitable or occupied roosting habitat for special status bats (101 acres desert dry wash woodland at Solar Farm B and 149 acres rocky slopes at Red Bluff Substation A), and • suitable or occupied habitat for Palm Springs round-tailed ground squirrel (estimated as 92 acres, based on Gen-Tie Line A-1 disturbance), Colorado Valley woodrat (estimated as 149 acres at Red Bluff Substation A location). Of the resources listed above, BLM's focus is on desert dry wash woodland, occupied desert tortoise habitat, occupied or suitable habitat for breeding or wintering burrowing owls, and state-jurisdictional streambeds. Under Alternative 1, a total of 4,176-acres would be disturbed. Total habitat compensation lands shall be no fewer than 6,707 acres, including, at minimum, 6,140-acres of occupied desert tortoise habitat and 819 acres of state-jurisdictional streambeds (including at least 288 acres of desert dry wash woodland). Further details are described in text and Table 4.3-10, below. Final compensation requirements shall be adjusted to account for any deviations in project disturbance, according to final design, as-built project footprint or, if a different Project alternative is approved, adjusted to reflect that alternative. Desert Sunlight shall be responsible for all compensation for habitat disturbance at the Solar Farm Layout and Gen-Tie Lines; SCE shall be responsible for all compensation for habitat disturbance at the Red Bluff Substation site.

Table RB-2. Mitigation Measures and Applicant Proposed Measures – Vegetation

Table 4.3-10. Minimum Total Compensation Acreage

Acres of Resource	Impact	Compensation Ratio	Compensation Acres
Previously disturbed (no compensation)	3	0	0
Desert tortoise habitat (moderate density)[1]	1,214	2:1	2,428
State-jurisdictional desert dry wash and desert dry wash woodland (302 ac.), less 24 acres desert dry wash woodland within DWMA/ CHU2	278	3:1	834 (to include 288 acres dry wash woodland)
Wildlife Management Areas Chuckwalla DWMA, Chuckwalla CH3	191	5:1	955
Balance of total project disturbance 4,176 – (3 + 1,214 + 278 + 191) = 2,490	2,490	1:1	2,490
Minimum Total Habitat Compensation Requirement			6,707

[1] Draft Habitat Compensation Plan, Table 2 (Desert Sunlight Holdings, 17 Dec 2010)
[2] Table 4.3-5 Summary of Impacts on Jurisdictional Resources
[3] Table 4.4-5

2. Of the total acreage to be disturbed under Alternative 1, three (3) acres have been previously disturbed and no compensation is required; 1,214 acres are moderate-density occupied desert tortoise habitat to be compensated at a ratio of 2:1; 302 acres (including 101 acres of desert dry wash woodland) are state-jurisdictional streambeds to be compensated at a ratio of 3:1; and 191 acres are within the Chuckwalla DWMA and/or Chuckwalla Critical Habitat Unit, to be compensated at a ratio of 5:1.
3. Compensation habitat for biological resources may be "nested." For example, compensation for the roosting habitat of bats that roost in desert dry wash woodland (Appendix H) would be fulfilled by desert dry wash woodland compensation lands, and would be counted as providing compensation for both the roosting bats and desert dry wash woodland. Similarly, compensation for the roosting habitat of bats that roost in rock crevices (Appendix H) may be fulfilled by compensation lands that also provide habitat for rosy boa and chuckwalla. Thus, compensation for impacts to bat roosting habitat may be fully nested within other compensation requirements.
4. Where impacted habitats meet criteria as two or more compensation ratios, the highest ratio will apply. For example, the Red Bluff Substation A site would affect a total of 149 acres, all within the Chuckwalla DWMA and CHU (Table 4.4-5); impacts to the Chuckwalla DWMA and CHU would require mitigation at a 5:1 ratio. Although 29 of the 149 acres are desert dry wash woodland (Table 4.3-6) would require compensation at a lower, 3:1 ration (if they were outside the DWMA and CHU), all 149 acres of impacts to the Chuckwalla DWMA and CHU shall be compensated at the 5:1 ratio. However, compensation lands for desert dry wash woodland at the 3:1 ratio (i.e., 87 acres) may be nested within the overall 5:1 compensation,
5. Compensation land selection criteria. Criteria for the acquisition, initial protection and habitat improvement, and long-term maintenance and management of compensation lands for impacts to biological resources shall include all of the following:
   a. compensation lands selected for acquisition to meet BLM, USFWS, CDFG, and CPUC requirements shall be equal to or better than the quality and function of the habitat impacted;
   b. provide habitat acreage with capacity to regenerate naturally when disturbances are removed;
   c. be near larger blocks of lands that are either already protected or planned for protection, or which could feasibly be protected long-term by a public resource agency or a non-governmental organization dedicated to habitat preservation;
   d. be contiguous and biologically connected to lands currently occupied by desert tortoise, ideally with populations that are stable, recovering, or likely to recover;

Table RB-2. Mitigation Measures and Applicant Proposed Measures – Vegetation

	e. not have a history of intensive recreational use or other disturbance that might cause future erosional damage or other habitat damage, and make habitat recovery and restoration infeasible; f. not be characterized by high densities of invasive species, either on or immediately adjacent to the parcels under consideration, that might jeopardize habitat recovery and restoration; g. not contain hazardous wastes that cannot be removed to the extent that the site could not provide suitable habitat; h. must provide wildlife movement value equal to that on the Project site; and i. have water and mineral rights included as part of the acquisition, unless the BLM and CPUC, in consultation with CDFG and USFWS, agree in writing to the acceptability of land without these rights. j. Additional selection criteria for desert tortoise compensation lands. i. compensation lands for impacts to desert tortoise shall be within the Eastern Colorado Desert Tortoise Recovery Unit, and ii. shall have potential to contribute to desert tortoise habitat connectivity and build linkages between desert tortoise designated critical habitat, known populations of desert tortoise, and/or other preserve lands; k. Additional Selection Criteria for special-status plant compensation lands. The compensation lands selected for acquisition for impacts to special-status plants shall include at least one of the following categories: i. Occupied Habitat, No Habitat Threats: The compensation lands selected for acquisition shall be occupied by the target plant population and shall be characterized by site integrity and habitat quality that are required to support the target species, and shall be of equal or better habitat quality than that of the affected occurrence. The occurrence of the target special-status plant on the proposed acquisition lands should be viable, stable or increasing (in size and reproduction). ii. Unoccupied but Adjacent. The Project owner may also acquire habitat for which occupancy by the target species has not been documented, if the proposed acquisition lands are adjacent to occupied habitat. The Project owner shall provide evidence that acquisitions of such unoccupied lands would improve the defensibility and long-term sustainability of the occupied habitat by providing a protective buffer around the occurrence and by enhancing connectivity with undisturbed habitat. l. If all or any portion of the acquired compensation lands meets the habitat occupancy or suitability requirement for more than one of the resources listed above, that portion of those compensation lands may also be used to fulfill that portion of the obligation to acquire compensation lands to mitigate impacts to those resources. 6. The total amount of compensation mitigation lands required under this measure may exceed the requirements of AM BIO-1, in order to provide mitigation for all of the resources identified in this measure.
Location	All habitat disturbance areas associated with Red Bluff substation construction
Monitoring / Reporting Action	The Applicant (Sunlight or SCE) shall acquire and protect, in perpetuity, compensation habitat to mitigate impacts to biological resources as verified by USFWS, CDFG, BLM and CPUC.
Responsible Agency	BLM, CPUC, USFWS, CDFG
Timing	During and post construction
Implementation & Approach	Prior to project energization. Although the quantities stipulated in the measure apply to the entire DSSF, SCE will only implement the measure in accordance with the habitat disturbance acreage associated with the Red Bluff Substation Project.

Table RB-2. Mitigation Measures and Applicant Proposed Measures – Vegetation

MITIGATION MEASURE	—[MM-BIO-2] 7. Review and Approval of Compensation Lands Prior to Acquisition. The Project owner (SCE) shall submit a formal acquisition proposal to the BLM, USFWS, CDFG, and CPUC describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands in relation to the selection criteria listed above, and must be approved by the BLM and CPUC in coordination with CDFG and USFWS.
Location	All habitat disturbance areas associated with Red Bluff substation construction
Monitoring / Reporting Action	SCE shall submit a formal acquisition proposal to the BLM, USFWS, CDFG, and CPUC, and must be approved by the BLM and CPUC in coordination with CDFG and USFWS.
Responsible Agency	BLM, CPUC, USFWS, CDFG
Timing	During and post construction
Implementation & Approach	Prior to project energization. Measure will be implemented.
MITIGATION MEASURE	—[MM-BIO-2] 8. Management Plan. The Project owner or approved third party shall prepare a management plan for the compensation lands in consultation with the entity that will be managing the lands. The goal of the management plan shall be to support and enhance the long-term viability of the biological resources. The Management Plan shall be submitted for review and approval to the BLM and CPUC, in consultation with CDFG and USFWS.
Location	All habitat disturbance areas associated with Red Bluff substation construction
Monitoring / Reporting Action	The Management Plan shall be submitted for review and approval to the BLM and CPUC, in consultation with CDFG and USFWS.
Responsible Agency	BLM, CPUC, USFWS, CDFG
Timing	During and post construction
Implementation & Approach	Prior to project energization. Measure will be implemented.
MITIGATION MEASURE	—[MM-BIO-2] 9. Compensation Lands Acquisition Requirements. The Project owner shall comply with the following requirements relating to acquisition of the compensation lands after the BLM, USFWS, CDFG, and CPUC have approved the proposed compensation lands: a. Preliminary Report. The Project owner, or an approved third party, shall provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary or requested documents for the proposed compensation land to the BLM, USFWS, CDFG, and CPUC. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the BLM and CPUC. For conveyances to the State, approval may also be required from the California Department of General Services, the Fish and Game Commission and the Wildlife Conservation Board. b. Title/Conveyance. The Project owner shall acquire and transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement, as required by the BLM USFWS, CDFG, and CPUC. Any transfer of a conservation easement or fee title must be to CDFG, to a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), or to BLM or other public agency approved by the BLM and CPUC. If an approved non-profit organization holds fee title to the compensation lands, a conservation easement shall be recorded in favor of CDFG or another entity approved by the BLM and CPUC. If an entity other than CDFG holds a conservation easement over the compensation lands, the BLM and CPUC may require that CDFG or another entity approved by the BLM, USFWS, CDFG, and CPUC, in consultation with CDFG, be named a third party beneficiary of the conservation easement. The Project owner shall obtain approval of the BLM, USFWS, CDFG, and CPUC of the terms of any transfer of fee title or conservation easement to the compensation lands. c. Initial Protection and Habitat Improvement. The Project owner shall fund activities that the BLM and CPUC require for the initial protection and habitat improvement of the

Table RB-2. Mitigation Measures and Applicant Proposed Measures – Vegetation

compensation lands. These activities will vary depending on the condition and location of the land acquired, but may include trash removal, construction and repair of fences, invasive plant removal, and similar measures to protect habitat and improve habitat quality on the compensation lands. The costs of these activities are estimated to be $330 per acre of compensation land, but actual costs will vary depending on the measures that are required for the compensation lands. A non-profit organization, CDFG or another public agency may hold and expend the habitat improvement funds if it is qualified to manage the compensation lands (pursuant to California Government Code section 65965), if it meets the approval of the BLM and CPUC in consultation with USFWS and CDFG, and if it is authorized to participate in implementing the required activities on the compensation lands. If CDFG takes fee title to the compensation lands, the habitat improvement fund must be paid to CDFG or its designee.

d. Property Analysis Record. Upon identification of the compensation lands, the Project owner shall conduct a Property Analysis Record (PAR) or PAR-like analysis to establish the appropriate amount of the long-term maintenance and management fund to pay the in-perpetuity management of the compensation lands. The PAR or PAR-like analysis must be approved by the BLM and CPUC before it can be used to establish funding levels or management activities for the compensation lands.

e. Long-term Maintenance and Management Funding. The Project owner shall provide money to establish an account with non-wasting capital that will be used to fund the long-term maintenance and management of the compensation lands. The amount of money to be paid will be determined through an approved PAR or PAR-like analysis conducted for the compensation lands. Until an approved PAR or PAR-like analysis is conducted for the compensation lands, the amount of required funding is initially estimated to be $1,450 for every acre of compensation lands. If compensation lands will not be identified and a PAR or PAR-like analysis completed within the time period specified for this payment, the Project owner shall either: (i) provide initial payment equal to the amount of $1,450 multiplied by the number of acres the Project owner proposes to acquire for compensatory mitigation; or (ii) provide security to the BLM and CPUC under subsection (g), "Mitigation Security," below, in an amount equal to $1,450 multiplied by the number of acres the Project owner proposes to acquire for compensatory mitigation. The amount of the required initial payment or security for this item shall be adjusted for any change in the Project Disturbance Area. If an initial payment is made based on the estimated per-acre costs, the Project owner shall deposit additional money as may be needed to provide the full amount of long-term maintenance and management funding indicated by a PAR or PAR-like analysis, once the analysis is completed and approved. If the approved analysis indicates less than $1,450 per acquired acre will be required for long-term maintenance and management, the excess paid will be returned to the Project owner. The Project owner must obtain the BLM and CPUC's approval of the entity that will receive and hold the long-term maintenance and management fund for the compensation lands. The BLM and CPUC will consult with USFWS and CDFG before deciding whether to approve an entity to hold the Project's long-term maintenance and management funds.

   The Project owner shall ensure that an agreement is in place with the long-term maintenance and management fund holder/manager to ensure the following requirements are met:

   i. Interest. Interest generated from the initial capital long-term maintenance and management fund shall be available for reinvestment into the principal and for the long-term operation, management, and protection of the approved compensation lands, including reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and any other action that is approved by the BLM and CPUC and is designed to protect or improve the habitat values of the compensation lands.

   ii. Withdrawal of Principal. The long-term maintenance and management fund principal shall not be drawn upon unless such withdrawal is deemed necessary by the BLM, USFWS, CDFG, and CPUC or by the approved third-party long-term maintenance and management fund manager, to ensure the continued viability of the species on the compensation lands.

   iii. Pooling Long-Term Maintenance and Management Funds. An entity approved to hold long-term maintenance and management funds for the Project may pool those funds

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	with similar non-wasting funds that it holds from other projects for long-term maintenance and management of compensation lands. However, for reporting purposes, the long-term maintenance and management funds for this Project must be tracked and reported individually to the BLM, USFWS, CDFG, and CPUC. f. Other Expenses. In addition to the costs listed above, the Project owner shall be responsible for all other costs related to acquisition of compensation lands and conservation easements, including but not limited to the title and document review costs incurred from other state agency reviews, overhead related to providing compensation lands to CDFG or an approved third party, escrow fees or costs, environmental contaminants clearance, and other site cleanup measures.
Location	All habitat disturbance areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Preliminary Report, Title/Conveyance, Initial Protection and Habitat Improvement, Property Analysis Record, Long-term Maintenance and Management Funding, agreement is with the long-term maintenance and management fund holder/manager shall be submitted to the BLM, CPUC, USFWS an CDFG.
Responsible Agency	BLM, CPUC, USFWS, CDFG
Timing	During and post construction
Implementation & Approach	Prior to project energization. Measure will be implemented.
MITIGATION MEASURE	**—[MM-BIO-2]** g. Mitigation Security. No fewer than 30 days prior to ground disturbance, the Project owner shall provide financial assurances to the BLM and CPUC to guarantee that an adequate level of funding is available to implement any of the mitigation measures required by this condition that are not completed prior to the start of ground-disturbing Project activities. Financial assurances shall be provided to the BLM, USFWS, CDFG, and CPUC in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") approved by the BLM, USFWS, CDFG, and CPUC. The actual costs to comply with this condition will vary depending on the actual costs of acquiring compensation habitat, the costs of initially improving the habitat, and the actual costs of long-term management as determined by a PAR report. Prior to submitting the Security to the BLM, USFWS, CDFG, and CPUC, the Project owner shall obtain the BLM, USFWS, CDFG, and CPUC's approval of the form of the Security. The BLM, USFWS, CDFG, and CPUC may draw on the Security if the BLM, USFWS, CDFG, and CPUC determine the Project owner has failed to comply with the requirements specified in this condition. The BLM, USFWS, CDFG, and CPUC may use money from the Security solely for implementation of the requirements of this condition. The BLM, USFWS, CDFG, and CPUC's use of the Security to implement measures in this condition may not fully satisfy the Project owner's obligations under this condition, and the Project owner remains responsible for satisfying the obligations under this condition if the Security is insufficient. The unused Security shall be returned to the Project owner in whole or in part upon successful completion of the associated requirements in this condition. Security for the requirements of this condition shall be calculated as shown in Table 4.3-11. However, regardless of the amount of the security or actual cost of implementation, the project owner shall be responsible for implementing all aspects of this condition, including acquisition and protection of additional habitat acreage if necessary to compensate for all impacts listed in Section 1 of this Mitigation Measure.

Table 4.3-11. Biological Resource Compensation/Mitigation Cost Estimate[1] of Estimated Costs[2]

Task	Cost
1. Land Acquisition (6,707 acres)	$1000 per acre[3]
2. Level 1 Environmental Site Assessmet (42 parcels at estimated 160-acre average parcel size)	$3000 per parcel[4]
3. Appraisal	$5000 per parcel
4. Initial site work - clean-up, enhancement, restoration	$330 per acre[5]
5. Closing and Escrow Costs – 1 transaction includes landowner to 3rd party and 3rd party to agency	$5000 per transaction

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	6. Biological survey for determining mitigation value of land (habitat based with species specific augmentation)	$5000 per parcel
	7. 3rd party administrative costs - includes staff time to work with agencies and landowners; develop management plan; oversee land transaction; organizational reporting and due diligence; review of acquisition documents; assembling acres to acquire….	10% of land acquisition cost (#1)
	8. Agency costs to review and determine accepting land donation – includes 2 physical inspections; review and approval of the Level 1 ESA assessment; review of all title documents; drafting deed and deed restrictions; issue escrow instructions; mapping the parcels.	15% of land acquisition costs (#1) × 1.17 (17% of the 15% for overhead)
	SUBTOTAL - Acquisition & Initial Site Work	$11,524,000
	9. Long-term Management and Maintenance (LTMM) Fund - includes land management; enforcement and defense of easement or title [short and long term]; monitoring….	$1450 per acre[6]
	TOTAL (if compensation not implemented through NFWF account)	$21,249,000
	NFWF Fees	
	10. Establish the project specific account	$12,000
	11. NFWF management fee for acquisition & initial site work	3% of SUBTOTAL
	12. NFWF Management fee for LTMM Fund	1% of LTMM Fund
	TOTAL for deposit in REAT-NFWF Project Specific Account	$21,704,000

[1] All costs are best estimates as of spring 2011. Actual costs will be determined at the time of the transactions and may change the funding needed to implement the required mitigation obligation. Note: regardless of the estimates, the developer is responsible for providing adequate funding to implement the required mitigation.

[2] Companion table to the excel spreadsheet with formulas.

[3] Generalized estimate taking into consideration a likely jump in land costs due to demand, and an 18-24 month window to acquire the land after agency decisions are made. If the agencies, developer, or 3rd party has better, credible information on land costs in the specific area where project-specific mitigation lands are likely to be purchased, that data overrides this general estimate. Note: regardless of the estimates, the developer is responsible for providing adequate funding to implement the required mitigation.

[4] For the purposes of determining costs, a parcel is 160 acres.

[5] Based on information from CDFG.

[6] Estimate for purposes of calculating general costs. The actual long term management and maintenance costs will be determined using a Property Assessment Report (PAR) tailored to the specific acquisition.

Location	All habitat disturbance areas associated with Red Bluff substation construction
Monitoring / Reporting Action	No fewer than 30 days prior to ground disturbance, the Project owner shall provide financial assurances to the BLM and CPUC to guarantee that an adequate level of funding is available to implement any of the mitigation measures required by this condition that are not completed prior to the start of ground-disturbing Project activities.
Responsible Agency	BLM and CPUC
Timing	Prior to construction
Implementation & Approach	Although the quantities stipulated in the measure apply to the entire DSSF, SCE will only implement the measure in accordance with the habitat disturbance acreage associated with the Red Bluff Substation Project.
MITIGATION MEASURE	—[MM-BIO-2] h. The Project owner may elect to comply with the requirements in this condition for acquisition of compensation lands, initial protection and habitat improvement on the compensation lands, or long-term maintenance and management of the compensation lands by funding, or any combination of these three requirements, by providing funds to implement those measures into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF). To use this option, the Project owner must make an initial deposit to the REAT Account in an amount equal to the estimated costs (as set forth in the Security section of this condition) of implementing the requirement and additional fees, management funds, and other costs

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	associated with the NFWF account. If the actual cost of the acquisition, initial protection and habitat improvements, or long-term funding is more than the estimated amount initially paid by the Project owner, the Project owner shall make an additional deposit into the REAT Account sufficient to cover the actual acquisition costs, the actual costs of initial protection and habitat improvement on the compensation lands, and the long-term funding requirements as established in an approved PAR or PAR-like analysis. If those actual costs or PAR projections are less than the amount initially transferred by the applicant, the remaining balance shall be returned to the Project owner. i. The responsibility for acquisition of compensation lands may be delegated to a third party other than NFWF, such as a non-governmental organization supportive of desert habitat conservation, by written agreement of the BLM, USFWS, CDFG, and CPUC. Such delegation shall be subject to approval by the BLM and CPUC, in consultation with CDFG and USFWS, prior to land acquisition, enhancement or management activities. Agreements to delegate land acquisition to an approved third party, or to manage compensation lands, shall be executed and implemented within 18 months of the BLM and CPUC's certification of the Project. j. The Applicant may choose to compensate and mitigate for impacts to state-listed endangered species pursuant to §2081 of the California Endangered Species Act using one or both of the "in-lieu fee" or "advance mitigation" mechanisms set forth in SB 34. Compensation lands acquired through SB 34 may in whole or in part satisfy the compensation habitat requirements set forth in this mitigation measure, only to the extent that they do in fact provide habitat values and mitigation for significant impacts to the species and biological resources identified above, and are consistent with the selection criteria described above.
Location	All habitat disturbance areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Verification of funding provision shall be made by BLM, CPUC, USFWS, CDFG
Responsible Agency	BLM, CPUC, USFWS, CDFG
Timing	During and post construction
Implementation & Approach	Prior to project energization. Measure will be implemented.
MITIGATION MEASURE	MM-BIO-3 Implement transplantation and WEAP training. Cacti flagged for transplantation per AM-BIO-3 shall be transplanted per the Vegetation Salvage Plan described in AM-BIO-5 and special status plant species shall be salvaged per the Vegetation Salvage Plan described in AM-BIO-5.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Verify worker environmental training and that cacti flagged for transplantation shall be and special status plant species shall be salvaged.
Responsible Agency	BLM,CPUC
Timing	Prior to construction
Implementation & Approach	Measure will be implemented.
MITIGATION MEASURE	—[MM-BIO-3] The Applicant and SCE shall be responsible for ensuring that all workers at the site, throughout the duration of construction, operation, and decommissioning activities, receives the training described in AM-BIO-4. Specific language in Mitigation Measure BIO-3 will take precedence over any discrepancy with the Applicant Measures cited herein.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Verification of worker training.
Responsible Agency	BLM, CPUC
Timing	Prior to, during, and post construction
Implementation & Approach	Measure will be implemented.
MITIGATION MEASURE	MM-BIO-4 Salvage and Restoration Plan Performance Standards. Salvage will occur prior to construction in any area of the proposed Project as described in the approved Vegetation Salvage Plan (described in AM-BIO-5).

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Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Verification of salvage
Responsible Agency	BLM, CPUC
Timing	Prior to construction
Implementation & Approach	Measure will be implemented.
MITIGATION MEASURE	—[MM-BIO-4] Post-Project seeding and planting (revegetation) will occur at the decommissioning phase of the Project as described under an approved Restoration Plan (AM-BIO-5).
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Verification of restoration
Responsible Agency	BLM, CPUC
Timing	During and post construction
Implementation & Approach	Pending BLM memo and/or CPUC variance authorization, compacted soils at the material laydown yard will be treated through ripping, tillage, or pitting, and the soil surface will be left sufficiently "rough". Seeding with native shrubs and forbs from locally gathered/commercially available seed will be conducted one time, to encourage restoration (Bainbridge, 2007).
MITIGATION MEASURE	—[MM-BIO-4] Both salvage and revegetation efforts shall be monitored yearly and shall continue for a period of no less than 10 years or until the defined performance standards are achieved (whichever is sooner). The following performance standards must be met by the end of the monitoring period: (a) at least 80% of the species and vegetative cover observed within the temporarily disturbed areas shall be native species that naturally occur in desert scrub habitats; (b) absolute cover and density of native plant species within the revegetated areas shall equal at least 60% of the pre-disturbance or reference vegetation cover; and (c) the site shall have gone without irrigation or remedial planting for a minimum of three years prior to completion of monitoring. Remediation activities (e.g., whether additional planting, removal of non-native invasive species, or erosion control) shall be taken during the 10-year period if necessary to ensure the success of the revegetation effort. If the mitigation fails to meet the established performance standards after the 10-year maintenance and monitoring period, monitoring and remedial activities shall extend beyond the 10-year period until the per-formance standards are met, unless otherwise specified by the BLM and CPUC. As needed to achieve performance standards, the Project owner shall be responsible for replacement planting or other remedial action as agreed to by BLM and CPUC. Replacement plants shall be monitored with the same survival and growth requirements as required for original revegetation plantings. If a fire or flood damages a revegetation area within the 10-year monitoring period, the owner shall be responsible for a one-time replacement. If a second fire or flood occurs, no replanting is required, unless the event is caused by the owner's activity (as determined by BLM or other firefighting agency investigation).
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Verification of restoration monitoring
Responsible Agency	BLM, CPUC
Timing	Post construction
Implementation & Approach	SCE will mitigate for all habitat lost, at a 5:1 ratio. Salvage efforts will be monitored for a period of 10 years or until the performance standards are achieved as defined in a BLM memo and/or CPUC variance authorization (whichever is sooner).
MITIGATION MEASURE	MM-BIO-5 Desert Dry Wash Woodland Monitoring and Reporting Plan. In addition to complying with MMWAT-3 (Groundwater Level Monitoring, Mitigation, and Reporting), the Project owner shall prepare and submit a Desert Dry Wash Woodland Monitoring and Reporting Plan to BLM and CPUC for review and approval prior to commencing project-related pumping activities. Upon approval, the Project owner shall finalize and implement the Plan. The Desert Dry Wash Woodland Monitoring and Reporting Plan shall outline the following information and actions:

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	1. Prior to Project operations, the baseline health and vigor four (4) groundwater dependent plant species (desert ironwood, blue palo verde, desert willow, and smoke tree) shall be recorded within four zones: immediately off-site at the project boundary, and at ¼-mile, ½-mile and 1-mile distances from proposed Project groundwater supply well locations. At minimum, the baseline conditions for 10 individuals for each of the target species within each sampling zone shall be recorded. At least one "control" site at least 2 miles from the project site, shall also be sampled. 2. A qualified botanist or plant physiologist shall develop a sampling protocol to be carried out in desert dry wash woodland at each sampling zone (above) and control site to monitor stress and mortality of target plants once operations begin. The protocol shall include a measure of pre-dawn water potential, as measured by standard plant physiology techniques. Through corresponding this data to climate factors and groundwater monitoring data collected under MM-WAT-3 as well as the control site, the survey shall, where possible, identify under what circumstances each factor may have the greatest effect on plants. This protocol shall be developed in coordination with BLM, CDFG, and CPUC and shall be approved by BLM, CDFG, and CPUC. 3. If a significant difference in plant stress or mortality are shown in one or more sample locations in comparison to the control site, the Project owner shall coordinate with BLM, CPUC, and CDFG to determine if the plant stress is due to climate factors (e.g., drought), pathogens (disease, insect infestation, etc.), or project activities. The Desert Dry Wash Woodland Monitoring and Reporting Plan shall identify what constitutes a significant difference in plant stress or mortality under this mitigation measure. If it is related to project activities, then the Project owner shall either refrain from pumping, reduce groundwater pumping to allow for recovery of the groundwater table, or provide additional habitat compensation as described below.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Review and approve Desert Dry Wash Woodland Monitoring and Reporting Plan prior to commencing project-related pumping activities. Verify implementation of the Plan.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Only two desert dry wash woodland species (desert ironwood and blue palo verde) are present within the project area; therefore, this study will be limited to these species. Eight individuals will be surveyed at each of the six sampling sites (including the control site).
MITIGATION MEASURE	—[MM-BIO-5] Monthly Desert Dry Wash Woodland Monitoring summary memos shall be submitted to BLM, CDFG, and CPUC during the construction period of the Project. In addition, annual Desert Dry Wash Woodland Monitoring reports shall be submitted for at least the first three years following completion of construction of the Project, if found necessary. The summary memos shall contain the monitoring data required as part of the monitoring program requirements under MM WAT-3. In addition, each Desert Dry Wash Woodland Monitoring Report shall provide maps and text discussion of each study site, changes in plant health and vigor, changes in groundwater levels in the production wells, and the year's monitoring data. If results of the groundwater monitoring program under MM WAT-3 indicate that the project pumping has resulted in water level decline of one foot or more below the baseline trend, and vegetation monitoring for plant stress, mortality, and water potential have documented one or more of the sampling sites for the four groundwater dependent plant species as reaching the threshold (above), the Project owner shall reduce groundwater pumping until water levels stabilize or recover, provide for temporary supplemental watering, or compensate for additional impacts to desert dry wash woodland at the ratio of 3:1, consistent with Mitigation Measure MM BIO-2. Estimated acreage of additional dry wash woodland impacts shall be submitted to BLM and CPUC for approval. Upon approval, the Project owner shall initiate compensation according to the requirements and conditions for habitat compensation as described in Mitigation Measure MM BIO-2.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Review monthly Desert Dry Wash Woodland Monitoring summary memos and annual Desert Dry Wash Woodland Monitoring reports.
Responsible Agency	BLM, CPUC, CDFG
Timing	During construction

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Implementation & Approach	If significant differences in plant stress or mortality are shown in one or more sample location in comparison to the control site, and it is determined that project activities are the cause, the project owner shall implement the following measures: 1) provide additional water to the desert dry wash woodland at the direction of a qualified botanist or 2) provide additional habitat compensation as described in the measure. Sampling will occur within 30 days preceding installation of the well; once every two months during construction; and once every two months for the first year following construction. During construction, the results of the study will be reported in quarterly compliance reports submitted to the BLM, CDFG, and CPUC. Annual compliance reports will also be submitted, and a final report will be submitted after a period of three years post construction.
MITIGATION MEASURE	—[MM-BIO-5] At the conclusion of the three-year monitoring period for Desert Dry Wash Woodland following completion of Project construction, the Project owner, CPUC, and BLM shall jointly evaluate the effectiveness of the Desert Dry Wash Woodland Monitoring and Reporting Plan and determine if monitoring frequencies or procedures should be revised, extended to the operation and decommissioning periods, or eliminated. Should additional data be forthcoming to demonstrate that this potential impact is not verifiable or attributable to this specific project or found inconsistent with state or federal statute, it may be modified or eliminated.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Jointly evaluate the effectiveness of the Desert Dry Wash Woodland Monitoring and Reporting Plan and determine if monitoring frequencies or procedures should be revised.
Responsible Agency	BLM,CPUC
Timing	Post construction
Implementation & Approach	Post construction monitoring for Desert Dry Wash Woodland will be limited to 1 year. No further monitoring will be required since water use from the on-site well will be nominal during operation and maintenance of the unmanned facility.
MITIGATION MEASURE	AM-BIO-2 An Integrated Weed Management Plan (IWMP) (Ironwood Consulting 2010b) has been prepared pursuant to BLM's Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States (BLM 2007) and the National Invasive Species Management Plan (The National Invasive Species Council 2008), and will be implemented by the Applicant to reduce the potential for the introduction of invasive species during construction, operation and maintenance, and decommissioning of the Project. The draft plan is provided in Appendix H of this document and will be reviewed and approved by the BLM.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Review and approve Integrated Weed Management Plan
Responsible Agency	BLM, CPUC
Timing	Prior to construction
Implementation & Approach	Measure will be implemented.
MITIGATION MEASURE	—[AM-BIO-2] The following measures are required in the Plan and will be implemented by the Applicant to monitor and control invasive species: • Preventative Measures During Construction – Equipment Cleaning: To prevent the spread of weeds into new habitats, and prior to entering the Project work areas, construction equipment will be cleaned of dirt and mud that could contain weed seeds, roots, or rhizomes. Equipment will be inspected to ensure they are free of any dirt or mud that could contain weed seeds and the tracks, feet, tires, and undercarriage will be carefully washed, with special attention being paid to axles, frame, cross members, motor mounts, underneath steps, running boards, and front bumper/brush guard assemblies. Other construction vehicles (e.g. pick-up trucks) that will be frequently entering and exiting the site will be inspected and washed on an as-needed basis. All vehicles will be washed off-site when possible. Should off-site washing prove infeasible, an on-site cleaning station will be set up to clean equipment before it enters the work area. Either high-pressure water or air will be used to clean equipment and the cleaning site will be situated away from any sensitive biological resources. If possible,

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water used to wash vehicles and equipment will be collected and re-used.

- Site Soil Management: Soil management will consist of limiting ground disturbance to the minimum necessary for construction activities and using dust suppressants to minimize the spread of seeds. Disturbed vegetation and topsoil will be re-deposited at or near the area from which they are removed to eliminate the transport of soil-borne noxious weed seeds, roots, or rhizomes. BLM-approved dust suppressants (e.g. water and/or palliative) will be minimized on the site as much as possible, but will use during construction to minimize the spread of airborne weed seeds, especially during very windy days.
- Weed-free Products: Any use of hay or straw bales on the Project site will be limited to certified weed-free material. Other products such as gravel, mulch, and soil may also carry weeds and these products, too, will be certified weed-free. If needed, mulch will be made from the local, on-site native vegetation cleared from the Project area. Soil will not be imported onto the Project site from off-site sources.
- Personnel Training. Weed management will be part of mandatory site training for all construction personnel and will be included in initial Worker Environmental Awareness Program training briefings. Training will include weed identification and the threat of impacts including impacts to local agriculture, vegetation communities, wildlife, and creating fire potential. Training will also cover the importance of preventing the spread of weeds.

- Containment and Control Measures

  When Project monitoring (see below) indicates that invasive species are spreading, invasive species will be removed using mechanical and chemical methods. The Applicant will use mechanical weed removal methods as the preferred method, but herbicides may be used when conditions (such as wind, proximity of native vegetation) are such that the effect on native species is expected to be minimal. During suppression or eradication activities, care will be taken to have the least affect on native plant species. Herbicides used will be limited to those approved by the BLM. Herbicides will be applied before the invasive species flower and set seed.

  If monitoring indicates the spread of athel, a woody invasive species, then athel will be controlled by cutting the trees and applying GarlonTM Ultra Herbicide to the stump immediately after cutting. GarlonTM is approved for use on athel by the BLM. All cut material generated during athel clearance will be removed from the site by truck. This material will be covered with a tarp or other material that will keep athel cuttings or seed from being spread by truck movement.

  The Applicant and its contractors will follow the BLM's Herbicide Use Standard Operating Procedures provided in Appendix B of the Record of Decision for the *Final Vegetation Treatments Using Herbicides Programmatic Environmental Impact Statement* (BLM 2007). Personnel responsible for weed control will be trained in the proper and safe use of all equipment and chemicals used for weed control.

- Monitoring

  Baseline weed conditions will be assessed during the pre-construction phase of the Project, during pre-construction surveys and staking and flagging of construction areas. A stratified random sampling technique will be used to identify and count the extent of weeds on the site.

  Monitoring will take place each year during construction, and annually for three years following the completion of construction. The purpose of annual monitoring will be to determine if weed populations identified during baseline surveys have increased in density or are spreading as a result of the Project. Control methods will be implemented when measurable weed increases, as well as visually verified increases, are detected during monitoring. This will include small patches of unusually high density weeds (e.g., concentrations in swales) that are growing as a result of Project activities.

  During construction, daily monitoring records will be kept by biological monitors that will include information relevant to invasive weeds. During Project operations and maintenance, the facility owner or appropriate designee will be required to continually update the potential noxious and invasive weed list and provide monitoring and management appropriate to any new species in coordination with the BLM.

  After the three years of operations monitoring is complete, general management and monitoring of the Project area will be conducted by designated site personnel each year

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	during both the germinating and early growing season (November through April) to eliminate new weed individuals prior to seed set. Throughout construction and long-term monitoring, personnel will be trained to identify weedy and native species and work with a trained vegetation monitor to determine where elimination is necessary. • Reporting Results of monitoring and management efforts will be included in annual reports and a final monitoring report completed at the end of three years of post-construction monitoring. Copies of these reports will be kept on file at the site. Copies of each annual report as well as the final monitoring report will be sent to the BLM for review and comment. BLM will use the results of these reports to determine if any additional monitoring or control measures are necessary. • Success Criteria Weed control will be ongoing on the Project site for the life of the Project, but plan success will be determined by BLM after the three years of operations monitoring through the reporting and review process. Success criteria will be defined as having no more than ten percent increase in a weed species or in overall weed cover in any part of the Project.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Verify implementation of Integrated Weed Management Plan and mitigation requirements, review results of monitoring and management efforts.
Responsible Agency	BLM, CPUC
Timing	Prior to, during, and post construction
Implementation & Approach	The substation will be unmanned post construction, therefore monitoring of weeds will be limited to 3 years of biological monitoring activities during O&M.
MITIGATION MEASURE	AM-BIO-3 Pre-Construction Surveys for Special Status Plant Species and Cacti. Prior to construction, the Applicant will stake and flag the construction area boundaries, including the construction areas for the Solar Farm site, Gen-Tie Lines, and Red Bluff Substation; construction laydown, parking, and work areas; and the boundaries of all and permanent access roads. A BLM-approved biologist will then survey all areas of proposed ground disturbance for special status plant species and cacti during the appropriate blooming period for those species having the potential to occur in the construction areas. All cacti observed will be flagged for transplantation and special status plant species observed will be flagged for salvage.
Location	Red Bluff Substation; construction laydown, parking, and work areas; and the boundaries of all and permanent access roads.
Monitoring / Reporting Action	Verify flagging and review pre-construction surveys.
Responsible Agency	BLM, CPUC
Timing	Prior to construction
Implementation & Approach	Focused surveys for special status plant species have been conducted during the appropriate blooming period, and their locations have been documented. A BLM-approved biologist will survey all areas of proposed ground disturbance for special status plant species and cacti, as close to the appropriate blooming period as feasible, for those species having the potential to occur in the construction areas. This pre-construction survey will determine the health status of cactus species within the project area and document any additional perennial sensitive plant species. All special status plant species and cacti meeting the health requirements outlined in the BLM-approved Vegetation Salvage Plan, will be flagged for transplantation.
MITIGATION MEASURE	AM-BIO-4 Worker Environmental Awareness Program (WEAP). The Applicant will implement a WEAP to educate on-site workers about sensitive environmental issues associated with the Project. The program will be administered to all on-site personnel including surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, subcontractors, and delivery personnel. The program will be implemented during site mobilization, ground disturbance, grading, construction, operation, and closure. The program will: • Be developed by or in consultation with a biologist and consist of an on-site or training center presentation in which supporting written material and electronic media, including photographs of protected species, is made available to all participants;

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	• Discuss the locations and types of sensitive biological resources on the Project site and adjacent areas, and explain the reasons for protecting these resources and penalties for harm or damage to these resources; • Include a discussion of fire prevention measures to be implemented by workers during Project activities, including a request that workers dispose of cigarettes and cigars appropriately and not leave them on the ground or buried; • Describe the temporary and permanent habitat protection measures to be implemented at the Project site; • Identify whom to contact if there are further comments and questions about the material discussed in the program; and • Include a training acknowledgement form to be signed by each worker indicating that they received training and shall abide by the guidelines. The training will place special emphasis on the special status species that have been observed in the Project locations or have a high likelihood to occur, including special status plant species, desert tortoise and other special status reptile species, Palm Springs round-tailed ground squirrel, burrowing owl, golden eagle, nesting bird species and bat species, and the American badger. BLM will be responsible for ensuring that each construction worker at the site, throughout the duration of construction activities, receives the above training.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Review training materials and verify training of all workers on the Project through review of training logs.
Responsible Agency	BLM, CPUC
Timing	Prior to, during, and post construction
Implementation & Approach	Measure will be implemented.

Table RB-2. Mitigation Measures and Applicant Proposed Measures – Vegetation

MITIGATION MEASURE	AM-BIO-5 The Applicant will prepare and implement a Vegetation Resources Management Plan that contains the following components: • A *Vegetation Salvage Plan* which discusses the methods that will be used to transplant cacti present within the Project locations following BLM's standard operating procedures, as well as methods that will be used to transplant special status plant species that occur in the Project locations if feasible. The Plan will include the following: – Criteria for determining whether an individual plant is appropriate for salvage; – The appropriate season for salvage; – Equipment and methods for salvage, transport, and planting; – A requirement that plants be marked to identify the north-facing side prior to transport, and replanted in the same orientation; – Storage and/or pre-planting requirements for each species; – A requirement to collect seed and voucher specimens from the special status species located within the Project locations; – The proposed location and several alternative locations for transplanting the cacti; – A requirement for ten years of maintenance of the transplanted individuals, including removal of invasive species and irrigation (if necessary); – A requirement for ten years of monitoring to determine the percentage of surviving plants each year and to adjust maintenance activities using an adaptive management approach. • A *Restoration Plan* which discusses the methods that will be used to restore creosote bush scrub and desert dry wash woodland habitat that is temporarily disturbed by construction activities. The Plan will include the following: – A planting plan, including the number, size, and species of container plants and/or the amount and species of seed necessary to revegetate both habitat types; – The appropriate season for planting and/or seeding; – The methodology for planting and/or seeding; – A description of the method(s) for irrigation and an irrigation schedule for the restoration areas; – Success criteria for percent cover of native plant species over a ten year period following installation of container plants and/or completion of seeding, and a requirement for replacement plantings when success criteria are not met; – A requirement that the percent cover of invasive species in the restoration areas will be maintained no higher than 10 percent for up to 10 years following installation of container plants and/or completion of seeding; – A requirement for ten years of maintenance of the restored areas, including removal of invasive species and irrigation; – A requirement for ten years of monitoring of the restored areas to evaluate compliance with success criteria and to adjust maintenance activities using an adaptive management approach; and – A requirement for annual monitoring reports which will be submitted to BLM. The Vegetation Salvage Plan and Restoration Plan will specify success criteria and performance standards as required per Mitigation Measure BIO-4, Salvage and Restoration Plan Performance Standards. BLM will be responsible for reviewing and approving the Plan and for ensuring that the Applicant implements the Plan including maintenance and monitoring required in the Plan.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Review Vegetation Resources Management Plan that contains a Vegetation Salvage Plan and A Restoration Plan. Verify implementation.
Responsible Agency	BLM, CPUC
Timing	Prior to, during, and post construction
Implementation & Approach	Pending BLM memo and/or CPUC variance authorization, compacted soils at the material laydown yard will be treated through ripping, tillage, or pitting, and the soil surface will be left sufficiently "rough". Seeding with native shrubs and forbs from locally gathered/commercially available seed will be conducted once, after completion of construction, to encourage restoration (Bainbridge, 2007).

Table RB-3. Mitigation Measures and Applicant Proposed Measures – Wildlife

MITIGATION MEASURE	MM-WIL-1 American Badger and Desert Kit Fox Protection Plan. To avoid direct impacts to American badgers or desert kit foxes, pre-construction surveys shall be conducted for these species concurrent with the desert tortoise surveys. Surveys shall be conducted as described below: Biological Monitors shall perform pre-construction surveys for badger and kit fox dens in the Project area, including areas within 90 feet of all Project facilities, utility corridors, and access roads. Surveys may be concurrent with desert tortoise surveys. If dens are detected, each den shall be classified as inactive, potentially active, or definitely active.
Location	All areas associated with Red Bluff substation construction and areas within 90 feet of all Project facilities
Monitoring / Reporting Action	Review pre-construction biological surveys for American badger and desert kit fox.
Responsible Agency	BLM, CPUC, CDFG
Timing	Prior to construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	—[MM-WIL-1] Inactive dens that would be directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse by badgers or kit foxes. Potentially and definitely active dens that would be directly impacted by construction activities shall be monitored by the Biological Monitor for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand. If tracks are observed, and especially if high or low ambient temperatures could potentially result in harm to badger or kit fox from burrow exclusion, various passive hazing methods may be used to discourage occupants from continued use. After verification that the den is unoccupied it shall then be excavated and backfilled by hand to ensure that no badgers or kit foxes are trapped in the den. In the event that passive relocation techniques fail, the Applicant will contact the California Department of Fish and Game to explore other relocation options, which may include trapping.
Location	All areas associated with Red Bluff substation construction and areas within 90 feet of all Project facilities
Monitoring / Reporting Action	Review monitoring, passive relocation, den decommissioning summary and CDFG coordination.
Responsible Agency	BLM, CPUC, CDFG
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	MM-WIL-2 Nelson's Bighorn Sheep Protection Plan. If effects to Nelson's Bighorn Sheep cannot be avoided, the Applicant shall consult with the California Department of Fish and Game (CDFG) to determine the appropriate level of restoration and mitigation for effects to essential habitat and/or travel corridors for Nelson's bighorn sheep by implementing the following measures: (a) The project owner shall compensate or replace the permanent loss of Nelson's bighorn sheep habitat at a 1:1 ratio as approved by the CDFG. This may include monetary contributions or donations as mitigation which are tied to programs or activities designed to offset potential resource losses or for mitigation banking for habitat restoration, enhancement, and/or acquisition projects provided that an appropriate and cooperatively developed mitigation agreement has been finalized between the Applicant and CDFG. (b) Compensation or replacement mitigation should be oriented within or adjacent to the project area and designed to rectify the same functions, habitat types and species being impacted wherever possible. Off-site compensation should be considered when mitigation measures cannot be applied to adjacent areas or to benefit the same species that are impacted. (c) All final actions associated with compensation mitigation will be approved by CDFG to insure that agreements are consistent with the CDFG's Sonoran Desert Mountain Sheep Meta-Population Plan.

Table RB-3. Mitigation Measures and Applicant Proposed Measures – Wildlife

Location	Where applicable
Monitoring / Reporting Action	Compensation documentation and/or proffer shall be verifies prior to working in areas which could affect Nelson's big horned sheep.
Responsible Agency	BLM, CPUC, CDFG
Timing	Prior to, during, and post construction
Implementation & Approach	Compensation land as required by MM WIL-2 will be nested within desert tortoise compensation habitat.
MITIGATION MEASURE	—[MM-WIL-2] (d) Any roads or permanent structures built in Nelson's bighorn sheep habitat or movement corridors must be constructed in such a way as to allow continued bighorn movement, except in the case of the Solar Farm and Substation facilities which will be fenced. Some strategies could include under or over passes, ramps cut into steep side slopes, alternatives to continuous guard rails and/or fence specifications along roads that allow sheep movement. Plans for these structures will be developed in coordination with CDFG.
Location	Where applicable
Monitoring / Reporting Action	Review roads and permanent structure installations
Responsible Agency	BLM, CPUC, CDFG
Timing	Prior to and during construction
Implementation & Approach	Access roads will not be fenced. Berms adjacent to access roads will be constructed in a manner that could be easily crossed by Nelson's bighorn sheep. The loop-in line component of the project will contain towers; however, open space between the towers will provide for movement of this species. The distribution line currently exists, and approximately 18 poles will be replaced, without creating new restrictions to wildlife movement.
MITIGATION MEASURE	MM-WIL-5 Prepare and Implement a Bird Monitoring and Avoidance Plan. Prior to the issuance of a ROW grant, the Applicant shall retain a BLM-approved, qualified biologist to prepare a Bird Monitoring and Avoidance Plan in consultation with CDFG and USFWS. This plan shall follow the Avian Protection Plan guidelines outlined by USFWS and Avian Power Line Interaction Committee (APLIC). The plan will require monitoring of (1) the death and injury of birds from collisions with facility features such feeder/distribution lines and solar panels, and (2) impacts to aquatic insects from polarized light from solar panels that may affect insectivorous (insect-eating) birds. The study design shall be approved by BLM in consultation with the CDFG and USFWS. Bird mortality study. The bird mortality component of the Bird Monitoring Study shall include at a minimum: detailed specifications on data, a carcass collection protocol, and a rationale justifying the proposed schedule of carcass searches. The study shall also include seasonal trials to assess bias from carcass removal by scavengers as well as searcher bias. Polarized light and insectivorous birds study. The study of polarized light impacts on insectivorous birds shall include at a minimum: detailed specifications regarding data requirements, including protocols for collection and identification of insect eggs found on solar panels, and a rationale for a data collection schedule.
Location	SCE feeder and distribution lines
Monitoring / Reporting Action	BLM-approved, qualified biologist to prepare a Bird Monitoring and Avoidance Plan in consultation with CDFG and USFWS.
Responsible Agency	BLM, CDFG, USFWS, CDFG
Timing	Prior to and during construction
Implementation & Approach	Bird strike mortalities will be recorded during monitoring, in compliance with the Avian and Bat Protection Plan.
MITIGATION MEASURE	—[MM-WIL-5] During construction and for one year following the beginning of the solar farm operation the biologist shall submit annual reports to BLM, CDFG, and USFWS describing the dates, durations, and results of monitoring and data collection. The annual reports shall provide a detailed description of any project-related bird or wildlife deaths or injuries detected during the monitoring study or at any other time and data collected for the study of polarized light impacts on insectivorous birds. The report shall analyze any project-related bird fatalities

Table RB-3. Mitigation Measures and Applicant Proposed Measures – Wildlife

	or injuries detected, and provides recommendations (in consultation with the County) for future monitoring and any adaptive management actions needed. Thresholds. Thresholds will be determined by BLM in consultation with CDFG and USFWS. If BLM determines that either (1) bird mortality caused by solar facilities is substantial and is having potentially adverse impacts on special-status bird populations, or that (2) the attraction of polarized light from solar panels is causing reproductive failure of aquatic insect populations at high enough levels to adversely affect insectivorous special-status birds, the Applicant shall be required to implement some or all of the mitigation measures below. Implementation Measures. To minimize bird mortality caused by solar facilities, the Applicant may be required to install additional bird flight diverters alterations to project components that have been identified as key mortality features, or implement other appropriate actions approved by BLM and regulatory agencies based on the findings of the Bird Monitoring and Avoidance Plan. To minimize indirect impacts of polarized light on insectivorous birds, the Applicant may be required to install non-polarizing white borders and grids on or around solar panels, which Horvath et al. (2010) found to dramatically reduce the attractiveness of solar panels to aquatic insects, or other measures that are shown to be effective. If mitigation actions are required, the annual reporting shall continue until BLM, in consultation with CDFG and USFWS, determines whether more years of monitoring are needed, and whether additional mitigation and adaptive management measures are necessary. After the Bird Monitoring Study is determined by BLM to be complete, the Applicant shall prepare papers that describe the design and monitoring results of the two studies to be submitted to peer-reviewed scientific journals. Proof of submittal shall be provided to BLM, CDFG, and USFWS within one year after the monitoring studies are complete.
Location	SCE feeder and distribution lines
Monitoring / Reporting Action	During construction and for one year following the beginning of the solar farm operation the biologist shall submit annual reports to BLM, CDFG, and USFWS describing the dates, durations, and results of monitoring and data collection.
Responsible Agency	BLM, CDFG, USFWS, CDFG
Timing	During and post construction
Implementation & Approach	Bird strike mortalities will be recorded during monitoring, in compliance with the Avian and Bat Protection Plan.
MITIGATION MEASURE	MM-WIL-6 Prepare and Implement Golden Eagle Nesting Surveys, Nest Site Monitoring, and Adaptive Management, as described below. Where details of this Mitigation Measure may conflict with Applicant Measure AM-WIL-3, this measure (MM-WIL-6) shall take precedence. 1. For each year during which construction will occur, an inventory of all golden eagle territories within ten miles of project facilities shall be conducted to determine if whether any territory is active. Survey methods for the inventory shall be as described in the Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations (Pagel et al. 2010) or more current guidance from the USFWS. A nesting territory or shall be considered occupied or unoccupied based on criteria in Pagel (2010) or more current guidance from the USFWS. 2. Inventory Data: Data collected during the inventory shall include at least the following: territory status (unknown, vacant, occupied, breeding successful, breeding unsuccessful); nest location, nest elevation; age class of golden eagles observed; nesting chronology; number of young at each visit; digital photographs; and substrate upon which nest is placed.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Inventory of all golden eagle territories within 10 miles of project facilities shall be submitted for review.
Responsible Agency	BLM, CPUC, USFWS
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented. The Avian and Bat Protection Plan (AM-WIL-3) will include the requirements of MM-WIL-6, rather than preparing a separate Golden Eagle Nesting Surveys, Nest Site Monitoring, and Adaptive Management Plan.

Table RB-3. Mitigation Measures and Applicant Proposed Measures – Wildlife

MITIGATION MEASURE	—[MM-WIL-6] 3. Monitoring and Adaptive Management Plan: If an occupied nest (as defined by Pagel et al. 2010) is detected within 10 miles of any project component, the Project owner or SCE shall prepare and implement a Golden Eagle Monitoring and Management Plan for the duration of construction to ensure that Project construction activities do not result in injury or disturbance to golden eagles. The monitoring methods shall be consistent with those described in the Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations (Pagel et al. 2010) or more current guidance from the USFWS. The Monitoring and Management Plan shall be prepared in consultation with BLM, USFWS, CDFG, and CPUC. It shall be implemented by Desert Sunlight or SCE, according to project component; each applicant shall designate a biologist, to be approved by BLM, USFWS, CDFG, and CPUC. Triggers for adaptive management shall include any evidence of Project-related disturbance to nesting golden eagles, including but not limited to: agitation behavior (displacement, avoidance, and defense); increased vigilance behavior at nest sites; changes in foraging and feeding behavior, or nest site abandonment. The Monitoring and Management Plan shall include a description of adaptive management actions, which shall include, but not be limited to, cessation of construction activities that are deemed by the Designated Biologist to be the source of golden eagle disturbance.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	If an occupied nest is detected within 10 miles of any project component, the Project owner or SCE shall prepare a Golden Eagle Monitoring and Management Plan for review. Implementation shall be monitored.
Responsible Agency	BLM, CPUC, USFWS
Timing	Prior to, during, and post construction
Implementation & Approach	Measure will be implemented. The Avian and Bat Protection Plan (AM-WIL-3) will include the requirements of MM-WIL-6, rather than preparing a separate Golden Eagle Nesting Surveys, Nest Site Monitoring, and Adaptive Management Plan.
MITIGATION MEASURE	MM-WIL-7 Alternate to long-distance (greater than 500 meters) desert tortoise translocation. The draft Desert Tortoise Translocation Plan defined under Applicant Measure AM-WIL-1 shall be updated to identify and describe, as an alternative to translocation, a strategy to remove desert tortoises on the project site from the wild and place them permanently in facilities approved by USFWS and CDFG, to be fully funded by the applicants. All suitable care or holding facilities for desert tortoises shall be listed and described in the draft plan, and capacity of each facility to accommodate desert tortoises from the project site shall be provided. The updated draft plan and shall be submitted to BLM, CPUC, USFWS and CDFG for review and approval. Upon approval of a final Desert Tortoise Translocation Plan and issuance of state and federal approvals, the applicant (Sunlight and/or SCE), shall either translocate tortoises into the wild or shall permanently place them in approved facilities, consistent with the Final Desert Tortoise Translocation Plan.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	The draft Desert Tortoise Translocation Plan defined under Applicant Measure AM-WIL-1 shall be updated for review
Responsible Agency	BLM, CPUC, USFWS, CDFG
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented.
MITIGATION MEASURE	MM-WIL-8 Plans required under Applicant Measures AM WIL-1, AM WIL-2, and AM WIL-3 shall be submitted for review and approval by USFWS, CDFG, BLM and CPUC.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Review Desert Tortoise Translocation Plan, Raven Management Plan and Avian and Bat Protection Plan.
Responsible Agency	BLM, CPUC, USFWS, CDFG
Timing	Prior to construction
Implementation & Approach	Measure will be implemented.

Table RB-3. Mitigation Measures and Applicant Proposed Measures – Wildlife

MITIGATION MEASURE	AM-WIL-1 A *Desert Tortoise Translocation Plan* (Ironwood Consulting 2010d) has been prepared for the Project and will be implemented by the Applicant to ensure that construction monitoring will be conducted by a BLM-, USFWS-, and CDFG-approved biologists during all construction activities and that any desert tortoise found with the construction zone will be translocated to a suitable location outside of the project footprint. The draft plan is attached as Appendix H of this document and will be reviewed and approved by BLM. The final plan will conform to the 2010 USFWS desert tortoise relocation guidelines titled Translocation of Desert Tortoises (Mojave Population) from Project Sites: Plan Development Guidance. Unpublished Report dated August 2010. The *Desert Tortoise Translocation Plan* contains an analysis of several recipient sites for desert tortoises to be translocated from the Solar Farm site and Red Bluff Substation. The final selected recipient site will be determined by BLM, the USFWS, and CDFG.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Verify implementation of *Desert Tortoise Translocation Plan* (Ironwood Consulting 2010d) an that monitoring is conducted by BLM-, USFWS-, and CDFG-approved biologists. Review and approve biologists, monitor during construction.
Responsible Agency	BLM, CPUC, USFWS, CDFG
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented.
MITIGATION MEASURE	—[AM-WIL-1] Desert tortoises found along the linear components of the Project, including the Gen-Tie Line, Telecommunications site, and access roads will be translocated out of harm's way pursuant to USFWS guidance *(U.S. Fish and Wildlife Service. 2009. Desert Tortoise Field Manual. Ventura Fish and Wildlife Office, Ventura, California)*. Specifically, biological monitors will be present during all construction activities to ensure that active burrows are avoided. If a desert tortoise is found, the tortoise will be allowed to passively traverse the site while construction in the immediate area is halted. If the tortoise does not move out of harm's way after approximately 20 minutes, a biologist authorized to handle desert tortoise, will actively move the animal out of harm's way. Vehicles parked in desert tortoise habitat will be inspected immediately prior to being moved. If a tortoise is found beneath a vehicle, a biologist authorized to handle desert tortoise will be contacted to move the animal out of harm's way, or the vehicle will not be moved until the desert tortoise leaves of its own accord. For desert tortoises in the Solar Farm site and Red Bluff Substation, they will be relocated using the following three phase translocation process: • Installation of Perimeter Fencing – Prior to clearance surveys (see below), the perimeter of the Solar Farm site and Red Bluff Substation site will be fenced with security fencing and desert tortoise exclusion fencing. All fencing activities will be monitored by a qualified biological monitor. All fencing will be checked and repaired, as necessary, on a daily basis to ensure its integrity. – All individual desert tortoises found above ground during construction of the perimeter fence will be given a unique identifier, fitted with a transmitter, and placed inside the Solar Farm site. • Clearance Surveys and Translocation – If construction is scheduled to commence in the non-active season for desert tortoise (approximately June 1 to September 1 and November 1 to April 1), prior to construction activities, the Solar Farm site and Red Bluff Substation site will be fenced into subsections with temporary desert tortoise exclusion fencing. Clearance surveys will then be performed for the desert tortoise within each of the subsections. If a desert tortoise or active burrow is found within a subsection, construction will not begin until the active season of the desert tortoise (approximately April 1 to June 1 and September 1 to November 1), when the species can be translocated. If two complete passes are conducted within a subsection without detecting a desert tortoise or active burrow, construction may commence within the subsection. All desert tortoises observed during the clearance surveys performed in the non-active season will be fitted with transmitters and translocated during the next active season. – If construction is scheduled to commence in the active season for desert tortoise, prior to construction activities, the Solar Farm site and Red Bluff Substation site will be fenced into

Table RB-3. Mitigation Measures and Applicant Proposed Measures – Wildlife

	subsections with temporary desert tortoise exclusion fencing. Clearance surveys will then be performed for the desert tortoise within each of the subsections. During the active season, a complete health assessment and disease testing will be performed on each individual desert tortoise found to determine if it should be translocated the recipient site or the Desert Tortoise Conservation Center. Individuals will be fitted with a transmitter and translocated to the recipient site or the Desert Tortoise Conservation Center. • Long-term Monitoring – All translocated desert tortoises will be monitored at least once within 24 hours of their release, and a minimum of twice weekly for the first two weeks after translocation. Then, all translocated desert tortoises will be monitored for a period of five years, at a minimum of once a week between March 15 and May 31, twice a month from June 1 to November 15, and once a month between November 15 and March 15. During the 5-year long-term monitoring program, an equal number of resident desert tortoises at the control site will also be monitored along with the desert tortoises at the recipient site. – Health assessments will be conducted for all translocated individuals annually prior to overwintering (between October 15 and November 15) and subsequent to overwintering (between March 1 and April 1). A health assessment will also be completed for each translocated individual at the end of the 5-year monitoring period. Any health problems or mortalities observed will be reported to the USFWS and CDFG verbally within 48 hours or via email within 5 business days. Fresh carcasses will undergo a necropsy as directed by USFWS and CDFG and animals showing clinical signs of disease will be transported to the Desert Tortoise Conservation Center. – Vegetation transects will also be established in 2010 within the recipient sites and will be surveyed annually between March 15 and April 30 to measure potential changes in habitat characteristics. • Reporting – During translocation, all activities will be recorded on standardized data sheets and/or digital data recorders. The Lead Biologist for the translocation effort will send emails to BLM, USFWS, CDFG, and SCE prior to the 5th day of the month summarizing the translocation activities performed the previous month. Annual project reports will also be sent to BLM, USFWS, and CDFG. – During long-term monitoring, all activities will be recorded on standardized data sheets and/or digital data recorders. The Lead Biologist will send brief quarterly status reports via email to BLM, USFWS, and CDFG. An annual report will also be submitted to BLM on or before January 15 so that the February 1 deadline for annual reports to the USFWS can be met. A final report will be submitted to BLM following the fifth year of monitoring, summarizing the overall success of the monitoring program.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Verification that prior to clearance surveys, the perimeter of the Red Bluff Substation site is security fencing and desert tortoise exclusion fencing. All fencing activities will be monitored. Clearance surveys will then be reviewed. Health assessments and long term monitoring shall be reviewed. Emails from SCE shall be received prior to the 5th day of the month summarizing the translocation activities performed the previous month. Annual project reports will also be reviewed by BLM, USFWS, and CDFG.
Responsible Agency	BLM, CPUC, USFWS, CDFG
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented.
MITIGATION MEASURE	—[AM-WIL-1] During the construction and operations and maintenance phases of the Project, the following Best Management Practices will also be implemented by the Applicant to reduce adverse effects to desert tortoise: 1. Speed limits on all unpaved areas of the Project will be a maximum of 15 miles per hour; 2. No dogs or firearms will be allowed on the Project site during construction or operation and maintenance activities; 3. Construction and operation and maintenance activities will be limited to daylight hours to the extent possible;

Table RB-3. Mitigation Measures and Applicant Proposed Measures – Wildlife

	4. Trash will always be contained within raptor and raven-proof receptacles and removed from the site frequently, including trash collected in vehicles in the field; 5. Water required for construction purposes will not be stored in open containers or structures and will be transported throughout the site in enclosed water trucks; and 6. Water sources for the Project (such as wells) will be checked periodically by biological monitors to ensure they are not creating open water sources by leaking or consistently overfilling trucks. All vehicles leaking fuel or other liquids will be immediately removed to the staging area and repaired – all vehicles will carry spill materials and all spills will be cleaned up promptly and disposed of correctly.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Monitor compliance with BMPs.
Responsible Agency	BLM, CPUC, USFWS, CDFG
Timing	During and post construction
Implementation & Approach	Entire measure will be implemented. Additionally, construction vehicles working on the access road, distribution line, and transmission system shall be equipped with spill response kits. Spill kits will be located on-site for the substation and telecom sites, in accordance with the Hazardous Materials, Waste Handling, and Emergency Response Procedures Plan.
MITIGATION MEASURE	AM-WIL-2 Contribute to a USFWS Regional Raven Management Plan. The Applicant shall contribute to the U.S. Fish and Wildlife Service (USFWS) Regional Raven Management Program by making a one-time payment of $105 per acre of project disturbance to the national Fish and Wildlife Federation Renewable Energy Action Team raven control account.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Verify contribution to USFWS Regional Raven Management Plan.
Responsible Agency	BLM, CPUC, USFWS
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented.
MITIGATION MEASURE	—[AM-WIL-2] A *Raven Management Plan* (Ironwood Consulting 2010e) has been prepared and will be implemented by the Applicant to minimize the potential for the project to attract ravens to the Project site. The draft plan is attached as Appendix H of this document and will be reviewed and approved by BLM.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	BLM to review and approve Raven Management Plan. Monitor implementation of the approved plan.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented.
MITIGATION MEASURE	—[AM-WIL-2] Specifically, the following measures will be implemented by the Applicant to reduce the potential for the Project to introduce food subsidies and open water sources for the species: 1. Traffic speeds on all Project-related dirt roads will be limited to 15 miles per hour to reduce road killed animals. Biological monitors will be monitoring speeds during construction activities; 2. Refuse management will be an integral part of the construction process. A sufficient number of refuse containers will be supplied and all containers will have sealable and lockable lids with the goal of preventing strong winds from blowing garbage around, wildlife from entering refuse containers, and unauthorized people from tampering with refuse. Biological monitors will periodically check on refuse containers to ensure they are not overflowing and are being closed properly; 3. All work vehicles will have a sufficient supply of strong garbage bags to aid in collection and

Table RB-3. Mitigation Measures and Applicant Proposed Measures – Wildlife

	disposal of refuse at the end of each day into the large containers discussed above; 4. Waste management contractors will supply an adequate number of portable toilets to promote a hygienic environment; 5. The open ponds needed to store water required for construction purposes will be fenced and lined, and will have netting around them, as described in AM-WIL-4, to keep ravens away. Water will be transported throughout the site in enclosed water trucks; and 6. Water sources for the Project (such as wells) will be checked periodically by biological monitors to ensure they are not creating open water sources by leaking or consistently overfilling trucks.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Monitor implementation of mitigation measure requirements.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented.
MITIGATION MEASURE	—[AM-WIL-2] Throughout the construction and operation and maintenance phases of the Project five years post-construction, all incidental sightings of common ravens within the Project locations will be logged either by a biological monitor (during construction) or by a designated person by Sunlight and SCE (five years post-construction). In addition, for five years following construction, nest surveys for this species will be completed at least twice each spring between March 15 and June 1, and further assessments will be performed on the ground underneath raven nests during spring months to determine the presence of any desert tortoise predation. If monitoring data shows a potential increase in raven roosting or nesting behavior within the Sunlight Project components, additional measures will be implemented by the Applicant to minimize the attractiveness of the Project site to the species, including one or more of the following: 1. Bird spikes installed on top of potential perches designed to prevent birds from gaining a foothold on the perch because of their porcupine design; 2. Repellant coils installed on top of potential perches to deter birds from gaining footholds because of their destabilizing coil design; 3. Bird control wire designed so that a line or grid of variable height posts is interconnected by a wire. This creates a confusing landing area in the same spirit as trip wires used for unsuspecting people; 4. Bird netting; and/or 5. Electric shock deterrents with low voltage pulses. Inactive nests will be dismantled and passive deterrents will be installed. For active nests, a biological monitor will determine the number of fledglings and their status of development. Once the nest is determined to no longer be active, it will be removed and passive deterrents installed. Non-lethal deterrents will be the first course of action. However, ravens may adapt quickly to avoid passive deterrents. If problem ravens are proven to be an active threat to resident desert tortoises, then they could be subject to lethal removal in coordination with BLM, USFWS, and CDFG in compliance with the Migratory Bird Treaty Act and California Fish and Game Code. If monitoring data shows a potential increase in raven roosting or nesting behavior within the SCE Project components, SCE will coordinate with BLM, USFWS, and CDFG to determine the appropriate control measures, including continued raven nest monitoring and/or contribution to a region-wide raven control plan. On or before January 15th of each calendar year of monitoring, an annual report will be submitted to BLM that summarizes all monitoring activities sufficient for the BLM to provide necessary reporting to the USFWS and CDFG during their annual permitting report, due on or before February 1 of each year.
Location	All areas associated with Red Bluff substation construction
Monitoring / Reporting Action	Annual monitoring report shall be submitted to BLM for review. If monitoring data shows a potential increase in raven roosting or nesting behavior within the SCE Project components,

Table RB-3. Mitigation Measures and Applicant Proposed Measures – Wildlife

	SCE will coordinate with BLM, USFWS, and CDFG to determine the appropriate control measures.
Responsible Agency	BLM, CPUC
Timing	During and post construction
Implementation & Approach	Measure will be implemented as described in the Raven Management Plan.
MITIGATION MEASURE	AM-WIL-3 An *Avian and Bat Protection Plan* (Ironwood Consulting 2010f) has been prepared and will be implemented by the Applicant to specify necessary actions to be taken to protect nesting bird and bat species. The draft plan is attached as Appendix H of this document and will be reviewed and approved by BLM. The final plan will conform to the 2010 USFWS avian and bat guidelines titled Considerations for Avian and Bat Protection Plans U.S. Fish and Wildlife Service White Paper.
Location	All areas associated with Red Bluff substation construction and a 500-foot buffer
Monitoring / Reporting Action	An *Avian and Bat Protection Plan* shall be reviewed and approved by BLM. Monitor implementation of the approved plan.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	—[AM-WIL-3] The following measures will be implemented by the Applicant to protect burrowing owls in the Project locations during construction: • Phase III burrow surveys will be completed within 30 days prior to planned construction in each construction unit and within a 150-meter (500 foot) buffer area. • All active burrowing owl nests will be avoided with a buffer of 75 meters (250 feet) during the nesting season (February 1 – August 31st). Initial avoidance buffers may be modified per the direction of a biological monitor based on the type of construction activity and bird species as approved by CDFG or USFWS. Outside nesting season or after determining that a nest has failed or young have fledged, owls will be passively relocated after concurrence of specific methods by CDFG. Passive relocation will include: – Identifying suitable relocation sites within one mile of the Project area; – Creating or enhancing at least two natural or artificial burrows per relocated owl; – Passively relocating burrowing owls; and – Monitoring and reporting the results of the passive relocation.
Location	All areas associated with Red Bluff substation construction and 500-foot buffer
Monitoring / Reporting Action	Phase III burrow surveys shall be reviewed by BLM and CPUC. Monitor implementation of the mitigation requirements.
Responsible Agency	BLM, CPUC, USFWS, CDFG
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented.
MITIGATION MEASURE	—[AM-WIL-3] The following measures will be implemented by the Applicant to protect nesting bird species in the Project locations during construction which are protected by the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503 and 3513: • Pre-construction surveys will be completed in the Project locations and in adjacent habitat areas and any nests observed will be identified and clearly marked. For passerines, an exclusion area where construction will not be allowed to commence will be established approximately 100 meters (330 feet) from any active nest. For raptors (other than golden eagles), the exclusion area will be established approximately 170 meters (500 feet) from any active nest (excluding nests of the common raven). For golden eagles, the exclusion area will be established approximately 1.6 kilometers (one mile) from any active nest. Initial protective buffers may be modified per the direction of a biological monitor based on type of construction activity and bird species and per approval by CDFG or USFWS. Nests will be checked within one week prior to planned construction to determine nest success and whether young have fledged. The exclusion boundary will not be removed until the biological monitor has determined that the nest has failed or young have fledged.

Table RB-3. Mitigation Measures and Applicant Proposed Measures – Wildlife

	• Vegetation clearing will be conducted outside of the bird breeding season (approximately February 1 to August 31) to the maximum extent practicable, taking into account the necessary timing of conservation measures for other species, including the desert tortoise. • Biological monitors will be present on-site during all phases of construction and will be tasked with monitoring avian nesting in adjacent habitats. If nests are found, the same procedures would be used as discussed above for pre-construction surveys.
Location	All areas associated with Red Bluff substation construction and 500-foot buffer
Monitoring / Reporting Action	Pre-construction nesting bird surveys shall be reviewed by BLM and CPUC. Monitor implementation of the mitigation requirements, buffer restrictions and vegetation clearing restrictions.
Responsible Agency	BLM, CPUC, USFWS, CDFG
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented. The measure as written provides flexibility for reducing the buffer areas with approval of responsible agencies.
MITIGATION MEASURE	—[AM-WIL-3] The following measures will be implemented by the Applicant to protect roosting bats in the Project locations during construction: • Pre-construction surveys will be completed in the Project locations and adjacent habitat areas and any active bat colonies will be identified and clearly marked. An exclusion area will be established approximately 50 meters (165 feet) from any active colony, and whenever possible, these areas will be avoided during construction activities.
Location	All areas associated with Red Bluff substation construction and 500-foot buffer
Monitoring / Reporting Action	Roosting bat surveys shall be reviewed by BLM and CPUC. Monitor implementation of the mitigation requirements and buffer restrictions.
Responsible Agency	BLM, CPUC, USFWS, CDFG
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	—[AM-WIL-3] For five years post-construction, the Applicant will record incidental sightings of raptors and bats in the Project locations. In addition, the Applicant will conduct nest surveys within the Project locations at least twice each spring between March 1 and June 1, separated by at least 30 days where all project-related infrastructure will be inspected for active and inactive raptor nests. The Applicant will submit quarterly status reports via email to BLM, USFWS, and CDFG. On or before January 15th of each calendar year, an annual report will be submitted to BLM that summarizes all monitoring activities sufficient for BLM to provide necessary reporting to the USFWS and CDFG in their annual permitting report, due on or before February 1st of each year. These reports may include recommendations for future adaptive management actions.
Location	All areas associated with Red Bluff substation construction and 500-foot buffer
Monitoring / Reporting Action	Quarterly and annual status reports shall be reviewed by BLM, CPUC, USFWS, and CDFG. Monitor implementation of the mitigation requirements.
Responsible Agency	BLM, CPUC, USFWS, CDFG
Timing	During and post construction
Implementation & Approach	Measure will be implemented

Table RB-4. Mitigation Measures and Applicant Proposed Measures – Cultural and Paleontological Resources

MITIGATION MEASURE	MM-CUL-1 The Memorandum of Agreement shall detail the process for activities to proceed in areas where historic properties are now known not to exist; the process for phased completion of field investigations for the evaluation of cultural resources and assessment of effects; a historic property treatment plan (HPTP); procedures to resolve adverse effects under Section 106; coordination between the CEQA process and Section 106 compliance; procedures for treatment of inadvertent discoveries; procedures for determining treatment and disposition of human remains; compliance monitoring; dispute resolution; and tribal participation. Resolution of effects to cultural resources eligible for or listed on the NRHP may include research and documentation, data recovery excavations, curation, public interpretation, use or creation of historic contexts (especially for historic landscapes and the potential DTC-C-AMA historic district), and/or report distribution.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Memorandum of Agreement including a Historic Properties Treatment Plan (HPTP) and coordination between the CEQA process and section 106 compliance etc. shall be reviewed and approved by BLM and CPUC. Monitor implementation during construction.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measures will be implemented
MITIGATION MEASURE	MM-CUL-2 On the basis of preliminary CRHR eligibility assessments, NRHP eligibility assessments made under the Memorandum of Agreement, or existing NRHP eligibility determinations, the BLM and CPUC may require the relocation of Project components to avoid or reduce damage to cultural resource values. Where operationally feasible, potentially NRHP-eligible resources shall be protected from direct Project impacts by Project redesign within previously surveyed and analyzed areas.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify project re-design if applicable.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measures will be implemented
MITIGATION MEASURE	MM-CUL-3 Where the BLM and CPUC decide that CRHR or NRHP-eligible or –listed cultural resources cannot be protected from direct impacts by Project redesign, the Applicant shall comply with appropriate mitigative treatment(s) that will be detailed in the Memorandum of Agreement and cultural resources mitigation and monitoring plan.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Review cultural resources mitigation and monitoring plan. Monitor compliance with Memorandum of Agreement and cultural resources mitigation and monitoring plan during construction.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measures will be implemented
MITIGATION MEASURE	MM-CUL-4 All CRHR-listed or eligible cultural resources (as determined by the CPUC) and all NRHP-listed or eligible cultural resources (as determined by the BLM) that will not be affected by direct impacts, but are within 50 feet of Project locations, will be monitored by a qualified archaeologist. Protective fencing or other markers, at the BLM's discretion, shall be erected and maintained to protect these resources from inadvertent trespass for the duration of construction in the vicinity.
Location	All CRHR-listed or eligible cultural resources and all NRHP-listed or eligible cultural resources that will not be affected by direct impacts, but are within 50 feet of Project locations.
Monitoring / Reporting Action	Review qualifications of archaeologists, protective markers and monitoring.
Responsible Agency	BLM, CPUC

Table RB-4. Mitigation Measures and Applicant Proposed Measures – Cultural and Paleontological Resources

Timing	Prior to and during construction
Implementation & Approach	ESA flagging and monitoring will be used to protect sites during construction activities.
MITIGATION MEASURE	MM-CUL-5 The historic property treatment plan that will be included in the Memorandum of Agreement will, at a minimum, employ avoidance, mitigation, and data recovery as mitigation alternatives. As part of the historic property treatment plan, the Applicant shall prepare a research design and a scope of work for evaluation of cultural resources and for data recovery or additional treatment of NRHP-listed or eligible sites that cannot be avoided. Data recovery of 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. Additional content of the treatment plan will be dictated by the consultations associated with the Memorandum of Agreement.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Memorandum of Agreement including a Historic Properties Treatment Plan (HPTP) shall be reviewed and approved by BLM and CPUC. Monitor implementation during construction.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	MM-CUL-6 Construction work within 100 feet of cultural resources that require data-recovery fieldwork shall not begin until authorized by the BLM.
Location	Construction work within 100 feet of cultural resources that require data-recovery.
Monitoring / Reporting Action	BLM to authorize construction work within 100 feet of cultural resources that require data-recovery.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	MM-CUL-7 Archaeological monitoring shall be conducted by a qualified archaeologist familiar with the types of historical and prehistoric resources that could be encountered within the Project area, and under direct supervision of a principal archaeologist. All cultural resources personnel will be approved by the BLM through the agency's Cultural Resource Use Permitting process. A Native American monitor may be required at culturally sensitive locations specified by the BLM following government-to-government consultation with Indian tribes. The monitoring plan shall indicate the locations where Native American monitors will be required and shall specify the tribal affiliation of the required Native American monitor for each location. The Applicant shall retain and schedule any required Native American monitors.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	All cultural resources personnel will be approved by the BLM through the agency's Cultural Resource Use Permitting process. A Native American monitor may be required at culturally sensitive locations specified by the BLM following government-to-government consultation with Indian tribes. The monitoring plan shall indicate the locations where Native American monitors will be required and shall specify the tribal affiliation of the required Native American monitor for each location.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	MM-CUL-8 In the event of inadvertent discoveries during construction, operation and maintenance, or decommissioning, procedures outlined in the Memorandum of Agreement and the monitoring and mitigation plan will be adhered to. At a minimum, this will include stop work orders in the vicinity of the find, recordation and evaluation of the find by a qualified archaeologist, notification of the find to BLM, and appropriate treatment measures, possibly including data recovery or avoidance.

Table RB-4. Mitigation Measures and Applicant Proposed Measures – Cultural and Paleontological Resources

Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	In the event of inadvertent discoveries notify the BLM. Verify Memorandum of Agreement implementation.
Responsible Agency	BLM, CPUC
Timing	During construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	MM-*CUL-9* The BLM will continue to consult with Indian tribes to identify sacred sites, TCPs and traditional use areas that might be affected by the Project. If such places are identified, the BLM will consult further with tribes to resolve access impediments or other identified impacts. This may include redesign of the Project
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	The BLM will continue to consult with Indian tribes to identify sacred sites, TCPs and traditional use areas that might be affected by the Project.
Responsible Agency	BLM, CPUC
Timing	Prior to construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	*AM-PR-1* The Applicant shall be responsible for the following measures. A qualified paleontologist will conduct a study to further characterize the paleontological sensitivity of the Project Study Area. The study will result in a map of the Project sites that would identify areas of high paleontological sensitivity and areas of lesser sensitivity. The study may also include a paleontology reconnaissance of the sites by professional paleontologists, if deemed necessary by the BLM after review of the initial site characterization. Should the site characterization or the site reconnaissance identify areas of high potential for paleontological resources, additional measures could be implemented, as determined by the BLM.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	The BLM will review paleontological site characterization.
Responsible Agency	BLM, CPUC
Timing	Prior to construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	—[*AM-PR-1]* A qualified paleontologist will develop a monitoring and mitigation plan prior to construction to mitigate adverse impacts on paleontological resources if excavation is to occur in an area of high paleontological sensitivity or expose new sediments with an unknown potential for paleontological sensitivity. The plan will include measures to be followed in the event that fossil materials are encountered during construction. • The monitoring and mitigation plan shall include a schedule and plan for monitoring earth-moving activities, and a provision that monitoring personnel have the authority to temporarily halt or divert excavation activities to allow removal of fossil specimens and recording of information on the location, orientation, etc. associated with the collected specimen. • Worker awareness training will be implemented to ensure that the construction personnel understand the potential for fossil remains being uncovered and/or disturbed by earth-moving activities; where such remains are most likely to be encountered during earth moving; and requirements and procedures to be followed in the event of suspected fossil discoveries. The awareness training may be given along with other sensitivity trainings (e.g., for biological resources) or incorporated into tailgate safety meetings. • The Applicant will have a paleontology monitor on site during construction when there are ground-disturbing activities in areas of identified high paleontological sensitivity.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	The BLM will review paleontologist qualifications, monitoring and mitigation plan if excavation is to occur in an area of high paleontological sensitivity. During construction worker awareness training and monitoring shall be verified.

Table RB-4. Mitigation Measures and Applicant Proposed Measures – Cultural and Paleontological Resources

Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	—[*AM-PR-1]* Recovered fossils will be curated with a museum or other curation facility approved by the BLM.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	The BLM will review and approve curation museum or other facility.
Responsible Agency	BLM, CPUC
Timing	During and post construction
Implementation & Approach	Measure will be implemented

Table RB-5. Mitigation Measures and Applicant Proposed Measures – Geologic Resources

MITIGATION MEASURE	AM-GEO-3 SCE shall undertake the following mitigation measures as part of the Substation Project: Prior to final design of the Substation, a combined geotechnical engineering and engineering geology study shall be conducted by SCE to identify site-specific geologic conditions and potential geologic hazards in sufficient detail to support sound engineering. Appropriate mitigations for identified geological hazards will be identified in the geotechnical study.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Geotechnical engineering and engineering geology study shall be reviewed and approved by the BLM and CPUC.
Responsible Agency	BLM, CPUC
Timing	Prior to construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	—[AM-GEO-3] For new substation construction, specific requirements for seismic design will be followed based on the Institute of Electrical and Electronic Engineers' 693 "Recommended Practices for Seismic Design of Substations".
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verification that Electronic Engineers' 693 "Recommended Practices for Seismic Design of Substations shall be reviewed by the BLM and CPUC
Responsible Agency	BLM, CPUC
Timing	Prior to construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	—[AM-GEO-3] New access roads, where required, will be designed to minimize ground disturbance during grading. Cut and fill slopes will be minimized by a combination of benching and following natural topography where feasible.
Location	New access roads and cut and fill slopes part of Red Bluff Substation construction.
Monitoring / Reporting Action	Verification that minimization of ground disturbance and cut and fill slopes shall be reviewed by the BLM and CPUC.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	—[AM-GEO-3] Any disturbed areas associated with temporary construction will be returned to preconstruction conditions (to the extent feasible) after the completion of Project construction.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Monitor restoration of disturbed areas during and post construction.
Responsible Agency	BLM, CPUC
Timing	During and post construction
Implementation & Approach	Measure will be implemented in accordance with the BLM-approved Restoration Plan and Project SWPPP.
MITIGATION MEASURE	AM-GEO-4 SCE shall implement the following mitigation measures to reduce impacts from wind and water erosion to soils: Obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity (General Permit) 2009-0009 Division of Water Quality (DWQ). As part of expected obligations under the General Permit, the Project proponent will prepare and implement a construction Storm Water Pollution Prevention Plan (SWPPP) prior to the commencement of soil disturbance activities associated with Project construction.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify SWPPP and NPDES coverage.
Responsible Agency	BLM, CPUC
Timing	Prior to construction

Table RB-5. Mitigation Measures and Applicant Proposed Measures – Geologic Resources

Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	—[AM-GEO-4] Use nonhazardous dust suppressants approved by the BLM to suppress wind-blown dust generated at the site during construction. Dust suppressants are materials that work by either agglomerating the fine particles, adhering/binding the surface particles together, or increasing the density of the surface material.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Dust suppressants shall be submitted to BLM for review and approval. Use of dust suppressants shall be monitored during construction.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	—[AM-GEO-4] Implement erosion control measures during construction, such as stabilization of the heavily used construction entrance areas, employing a concrete wash out area, as needed, and tire washes near the entrance to existing roadways.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Monitor implementation of erosion controls during construction.
Responsible Agency	BLM, CPUC
Timing	During construction
Implementation & Approach	Heavily used construction entrance areas will be stabilized by installing and maintaining track-out control devices at the entrance to paved roadways, as described in the FDECP, SWPPP, Construction Drawings, and Specifications. A tire track-out device and tire inspection/sweeping station will be located at the access driveway, prior to entering upon Chuckwalla Valley Road. Gravel will be placed on the access road approach, shaker plates will be installed, visual inspections and tire sweeping (including loaded equipment) will be conducted, as needed, prior to vehicles entering upon the paved roadway. If visible dust is still tracked onto paved roadways, street sweepers will be used to clean paved roadways.

Table RB-6. Mitigation Measures and Applicant Proposed Measures – Land Use

MITIGATION MEASURE	AM-LAND-1 Property owners within 300 feet of the Project shall be notified of all major Project construction milestones, such as start of Project construction. Said property owners shall be provided with a detailed construction schedule at least 30 days before construction so that they are informed as to the time and location of disturbance. Updates shall be provided as necessary.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify noticing materials and distribution.
Responsible Agency	BLM, CPUC
Timing	Prior to construction
Implementation & Approach	Measure will be implemented.
MITIGATION MEASURE	AM-LAND-2 The Project shall be designed to minimize disturbance or modification of existing uses such as transmission lines, pipelines, and underground cables. If disturbance or modification of existing uses were necessary, Sunlight shall coordinate with the owners to determine an acceptable solution. Sunlight shall fund any necessary avoidance measures or modifications.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify project design and coordination efforts.
Responsible Agency	BLM, CPUC
Timing	Prior to construction
Implementation & Approach	If disturbances to existing lines are encountered during the construction of Red Bluff, SCE will coordinate with the owners to determine an acceptable solution.

Table RB-7. Mitigation Measures and Applicant Proposed Measures – Noise

MITIGATION MEASURE	MM-NOI-1 SCE shall limit construction activity within a quarter mile of an inhabited dwelling to 6:00 AM to 6:00 PM during June through September and 7:00 AM to 6:00 PM during October through May. Certain electrical connection activities at the solar farm site would occur at night for safety reasons, but would not require any heavy equipment operations.
Location	All areas associated with Red Bluff substation construction within a quarter mile of an inhabited dwelling.
Monitoring / Reporting Action	Monitor construction activity in regard to work hours.
Responsible Agency	BLM, CPUC
Timing	During construction
Implementation & Approach	Measure will be implemented in applicable project areas. MM-NOI-1 is not applicable to construction at the Red Bluff Substation or the Chuckwalla Mountain Communications Site, where no inhabited dwellings exist within a quarter mile of the sites.
MITIGATION MEASURE	AM-NZ-1 SCE would limit most construction activity to daytime hours consistent with Riverside County noise ordinance limitations (beginning about 7:00 AM during most of the year, and perhaps starting as early as 6:00 AM during the summer months). Certain electrical connection activities at the solar farm site would occur at night for safety reasons, but would not require any heavy equipment operations.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Monitor construction activity in regard to work hours.
Responsible Agency	BLM, CPUC
Timing	During construction
Implementation & Approach	Measure will be implemented in applicable project areas. AM-NZ-1 is not applicable to construction at the Red Bluff Substation or the Chuckwalla Mountain Communications Site, where no inhabited dwellings exist within a quarter mile of the sites.
MITIGATION MEASURE	AM-NZ-2 SCE would construct a masonry security wall around the perimeter of the Red Bluff Substation. This wall would also provide localized noise shielding for adjacent areas.
Location	Red Bluff substation construction.
Monitoring / Reporting Action	Monitor construction activities.
Responsible Agency	BLM, CPUC
Timing	During construction
Implementation & Approach	Measure will be implemented

Table RB-8. Mitigation Measures and Applicant Proposed Measures – Hazards and Hazardous Materials

MITIGATION MEASURE	AM-HAZ-2 Based on the preliminary information provided in the Phase I ESA and the Class I cultural inventory of the Project site, the Applicant proposes to take the following steps to better determine the nature and extent of potential MEC issues and then take appropriate corrective action measures. The first step is to better understand the history of military activities within the proposed Project footprint. This would include further research regarding prior MEC removals that may have been issued in the past for certain areas by military or other investigating entities, and may include consultations with Department of Defense personnel and archival research. As a result of the historical occurrence of military training activities throughout the DTC-C-AMA, potentially including the Project area, this MEC consultation and archival research will address the entire Project footprint, including the specific areas of concern identified by the Phase I ESA and cultural resource surveys. With that more comprehensive understanding, the Applicant will propose, as necessary, further appropriate above and below-ground assessments, under the direction of an expert consultant team, to delineate areas for further investigation and then removal. The Applicant, under direction from the BLM, will determine which site-specific in-field investigative techniques and methodologies will be utilized to investigate and resolve potential MEC issues prior to Project construction.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	MEC consultation and archival research shall be verified. The Applicant, under direction from the BLM, will determine which site-specific in-field investigative techniques and methodologies will be utilized to investigate and resolve potential MEC issues prior to Project construction.
Responsible Agency	BLM, CPUC
Timing	Prior to construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	—[AM-HAZ-2] Finally, all construction workers will receive appropriate MEC health and safety awareness training to ensure that they know what actions to take if unanticipated MEC or other suspicious articles are encountered during construction.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify workers receive appropriate MEC health and safety awareness training.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	AM-HAZ-6a SCE shall implement standard fire prevention and response practices for the construction activities where hazardous materials are in use. SCE shall be responsible for implementing the approved plan. The plan shall include the following: • The purpose and applicability of the plan; and • Procedures for fire prevention and response that include identification of site-specific and operational risks, tools and equipment needed, and fire prevention and safety considerations; a red-flag warning system, activity levels, fire-related training, and coordination with BLM and County of Riverside.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Review Fire Prevention and Response Plan.
Responsible Agency	BLM, County of Riverside, CPUC
Timing	Prior to construction
Implementation & Approach	Measure will be implemented in accordance with the Fire Prevention Plan, required by AM-HAZ-9.
MITIGATION MEASURE	AM-HAZ-6b As applicable, SCE shall follow fire codes per California Department of Forestry and Fire Protection (2008) requirements for vegetation clearance during construction of the Project to reduce the fire hazard potential.
Location	Vegetation clearance areas

Table RB-8. Mitigation Measures and Applicant Proposed Measures – Hazards and Hazardous Materials

Monitoring / Reporting Action	Monitor adherence to fire codes.
Responsible Agency	BLM, County of Riverside, CPUC
Timing	During construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	AM-HAZ-6c Hazardous materials and waste handling shall be managed in accordance with the following SCE plans and programs. SCE shall be responsible for implementing the following plans: • *Spill Prevention, Countermeasure, and Control Plan (SPCC Plan).* In accordance with Title 40 of the CFR, Part 112, SCE shall prepare a SPCC for the proposed substation, as applicable. The plan shall include requirements specified by 40 CFR Part 112 as follows: – A description of the facility; – A self-certification statement; – A record of plan review and amendments; and – A list of oil/petroleum product storage containers associated with the facility, identification of the secondary containment systems; identification of spill control measures to be implemented; inspection types and frequency, testing procedures to ensure the integrity of petroleum containers, recordkeeping procedures, personnel training; security; emergency procedures and notifications in case of a spill; a contact list in case of a spill; and SPCC spill reporting requirements.
Location	Red Bluff substation
Monitoring / Reporting Action	Review SPCC Plan, monitor implementation
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Please note that an approved SPCC Plan shall be submitted to the BLM and CPUC prior to bringing any transformer oils onto the substation site. Containment as proscribed in the SPCC shall be installed and functional or equivalent temporary secondary containment providing plan capacity shall be installed prior to bringing any transformer oils onto the substation site. Measure will be implemented
MITIGATION MEASURE	—[AM-HAZ-6c] *Hazardous Materials Business Plans (HMBPs).* Prior to operation of new or expanded substations, SCE shall prepare or update and submit, in accordance with the Emergency Planning & Community Right to Know Act, an HMBP, as applicable. SCE shall be responsible for implementing the approved plan. The plan shall include: • Introduction to the plan that identifies business activities; • Identification of owner/operator with contact information; • A hazardous materials inventory statement listing all hazardous materials used during construction and operation; • A facility map; • An emergency response/contingency plan that includes an evacuation plan, emergency contacts, emergency resources, any special arrangements with emergency responders, emergency procedures, post-incident reporting/recording responsibilities; earthquake vulnerability inspection or isolation; emergency equipment; and an employee training plan that documents training areas and capabilities.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Review Hazardous Material Business Plans and emergency response/contingency plan. Monitor implementation.
Responsible Agency	BLM, CPUC
Timing	During and post construction
Implementation & Approach	Plan will be submitted to the CPUC prior to energization of the Red Bluff Substation.

Table RB-8. Mitigation Measures and Applicant Proposed Measures – Hazards and Hazardous Materials

MITIGATION MEASURE	—[AM-HAZ-6c] *Storm Water Pollution Prevention Plan (SWPPP):* A Project-specific construction SWPPP shall be prepared and implemented prior to the start of construction of the Red Bluff Substation A. SCE shall be responsible for implementing the approved plan. The plan shall include: • Objectives of the SWPPP; • A vicinity map; • Pollutant source identification and BMPs selection; • Water pollution control drawings; • Construction BMP maintenance, inspection and repair; • Post-construction storm water management practices; • Training; • List of subcontractors; • Plans and permits • Site inspections; • Discharge reporting; • Record keeping and reports; • Sampling and analysis plan for sediments; and • Sampling and analysis plan for non-visible pollutants.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify SWPPP, monitor implementation.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	—[AM-HAZ-6c] *Health and Safety Program:* SCE shall prepare and implement a health and safety program to address site-specific health and safety issues. SCE shall be responsible for implementing the approved plan. The plan shall include: • An organizational structure; • A description of site characteristics and a job hazard analysis; • A description of site controls that includes a site map; identification of site access restrictions, site security, site work zones, any required exclusion zones, any contaminant reduction zones, relevant support zones, and site communications; • Training requirements and documentation of training; • Medical surveillance; • Personal protective equipment; • Exposure monitoring; • Heat stress; • Spill containment; • Decontamination; • Emergency response; • Relevant standard operating procedures; and • Confined space (if relevant).
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Review Health and Safety Program, monitor during implementation.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented

Table RB-8. Mitigation Measures and Applicant Proposed Measures – Hazards and Hazardous Materials

MITIGATION MEASURE	—[AM-HAZ-6c] *Hazardous Materials and Hazardous Waste Handling:* A Project-specific hazardous materials management and hazardous waste management program plan shall be developed prior to initiation of the Project. Material Safety Data Sheets would be made available to all Project workers. SCE shall be responsible for implementing the plan that shall include: • Introduction to the plan that identifies business activities; • Identification of owner/operator with contact information; • A hazardous materials inventory statement listing all hazardous materials used during construction and operation; • A facility map; and • An emergency response/contingency plan that includes an evacuation plan, emergency contacts, emergency resources, any special arrangements with emergency responders, emergency procedures, post-incident reporting/recording responsibilities; earthquake vulnerability inspection or isolation; emergency equipment; and an employee training plan that documents training areas and capabilities. • *Emergency Release Response Procedures:* An Emergency Response Plan as part of the Hazardous Materials Business Plan detailing responses to releases of hazardous materials shall be developed prior to construction activities. All construction personnel, including environmental monitors, shall be aware of state and federal emergency response reporting guidelines. SCE shall be responsible for implementing the plan.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Review Project-specific hazardous materials management and hazardous waste management program and Emergency Response Plan, monitor during construction.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	AM-HAZ-6d Hazardous materials shall be used or stored and disposed of in accordance with federal, state, and local regulations.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Monitor storage and disposal of hazardous materials.
Responsible Agency	BLM, CPUC
Timing	During construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	AM-HAZ-6e The Substation shall be grounded to limit electric shock and surges that could ignite fires.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify grounding plans and monitor installations.
Responsible Agency	BLM, CPUC
Timing	During construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	AM-HAZ-6f All construction and demolition waste shall be removed and transported to an appropriately permitted disposal facility.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Monitor disposal manifests.
Responsible Agency	BLM, CPUC
Timing	During construction
Implementation & Approach	Measure will be implemented

Table RB-8. Mitigation Measures and Applicant Proposed Measures – Hazards and Hazardous Materials

MITIGATION MEASURE	AM-HAZ-7 SCE shall submit FAA Form 7460-1 and receive a Determination of No Hazard to Navigable Airspace and comply with any AC/7460-1K (Obstruction Marking and Lighting) requirements from the FAA for construction of the 185-foot microwave tower associated with the Desert Center Communications Center.
Location	185-foot microwave tower associated with the Desert Center Communications Center.
Monitoring / Reporting Action	Verify FAA Determination of No Hazard.
Responsible Agency	BLM, CPUC, FAA
Timing	Prior to and during construction
Implementation & Approach	FAA Determination of No Hazard shall be submitted to the BLM and CPUC prior to installation of the 185-foot tower.
MITIGATION MEASURE	AM-HAZ-8 SCE shall provide the BLM and the County of Riverside with a Project-specific Emergency Response and Inventory Plan prior to initiating construction. SCE shall be responsible for implementing the approved plan. The plan shall include the following. • An evacuation plan; • A list of emergency contacts; • A list of emergency resources; • Any special arrangements with emergency responders; • Relevant emergency procedures; • Post-incident reporting/recording responsibilities; • Identification of site components that may be vulnerable to earthquakes with procedures for inspection or isolation after a seismic event; • A list of on-site emergency equipment; and • An employee training plan that documents training areas and capabilities.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify submittal of Emergency Response and Inventory Plan
Responsible Agency	BLM, CPUC, County of Riverside
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented in accordance with the Hazardous Material, Waste Handling, and Emergency Response Procedures Plan, required by AM-HAZ-6c, with submittal of the approved plan to the County of Riverside..
MITIGATION MEASURE	AM-HAZ-9 Project facilities shall be designed, constructed, and operated in accordance with applicable fire protection and other environmental, health and safety requirements. In compliance with County of Riverside requirements, a Project-specific fire prevention plan for both construction and operation of the substation shall be completed by SCE prior to initiation of construction. The plan shall include the following: • The purpose and applicability of the plan; and • Procedures for fire prevention and response that include identification of site-specific and operational risks, tools and equipment needed, and fire prevention and safety considerations; red-flag warning system, activity levels, fire-related training, and coordination with BLM and County of Riverside.
Location	Project facilities associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify submittal of Project-specific Fire Prevention Plan. Monitor implementation during construction.
Responsible Agency	BLM, CPUC, County of Riverside
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented.

Table RB-9. Mitigation Measures and Applicant Proposed Measures – Socioeconomics and Special Designations

MITIGATION MEASURE	AM-SOCIO-1 The public shall be notified of Project activities and scheduling to inform the public of projected impacts on the surrounding area. This notification shall provide the public with the opportunity to plan their personal and business activities appropriately.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify noticing materials prior to construction.
Responsible Agency	BLM, CPUC
Timing	Prior to construction
Implementation & Approach	Measure will be implemented in accordance with AM-LAND-1.
MITIGATION MEASURE	AM-SD-1 During operation and maintenance of Red Bluff Substation A, lights shall normally be off. Where needed during emergency and scheduled work during the night, lights shall be shielded, shall be directed downward, and shall be motion sensitive to minimize glare in surrounding areas.
Location	Red Bluff substation construction.
Monitoring / Reporting Action	Monitor during operation and maintenance.
Responsible Agency	BLM, CPUC
Timing	Post construction
Implementation & Approach	Task lighting used on the Red Bluff Project will be operated with manual On and Off switches, to ensure worker safety. All other provisions of this measure will be implemented.

Table RB-10. Mitigation Measures and Applicant Proposed Measures – Traffic and Transportation

MITIGATION MEASURE	AM-TRANS-2 Sunlight shall document road conditions at the beginning and end of Project construction and decommissioning and contribute fair share cost for pavement maintenance and other needed repairs.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify road documentation prior to construction
Responsible Agency	BLM, CPUC
Timing	Prior to, during, and post construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	AM-TRANS-4 Sunlight shall coordinate with the Department of Defense (DOD) R-2508 Complex Sustainability Office, Region IX, based in San Diego, California, as well as with local regional military installations regarding low-level flight operations relative to the Project to assure that no special precautions are needed.
Location	185-foot microwave tower associated with the Desert Center Communications Center.
Monitoring / Reporting Action	Verify coordination with DOD and regional military installations.
Responsible Agency	BLM, CPUC, DOD
Timing	Prior to construction
Implementation & Approach	Measure will be implemented

Table RB-11. Mitigation Measures and Applicant Proposed Measures – Visual Resources

MITIGATION MEASURE	MM-VR-1 *Revegetation.* The Applicant and SCE shall minimize the amount of ground surface to be disturbed and revegetate disturbed soil areas, as described below: • Limit Disturbance Areas. The boundaries of all areas to be disturbed (including staging areas, access roads, and sites for temporary placement of spoils) shall be delineated with stakes and flagging before construction, in consultation with the Designated Biologist and VRM specialist. Spoils and topsoil shall be stockpiled in disturbed areas approved by the Designated Biologist. Parking areas, staging and disposal site locations similarly shall be located in areas approved by the Designated Biologist and VRM specialists. All disturbances, Project vehicles and equipment shall be confined to the flagged areas. Vegetation along roadways and boundaries of other disturbed areas shall be scalloped and feathered to reduce the hard line visual impact, especially as seen from Kaiser Road and SR-177.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify VRM specialist and disturbance boundary delineation prior to construction. Monitor during construction.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Implementation of this measure will be consistent with the BLM-approved restoration approaches described in the Restoration Plan required under AM BIO-5 and the Project SWPPP.
MITIGATION MEASURE	—[MM-VR-1] Minimize Road Impacts. New and existing roads that are planned for construction, widening, or other improvements shall not extend beyond the minimum necessary and flagged as described above. All vehicles passing or turning around shall do so within the planned impact area or in previously disturbed areas. Where new access is required outside of existing roads or the construction zone, the route shall be clearly marked (i.e., flagged or staked) before the onset of construction.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify disturbance boundary delineation prior to construction.
Responsible Agency	BLM, CPUC
Timing	Prior to construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	—[MM-VR-1] Revegetation of Temporarily Disturbed Areas. The Applicant and SCE shall prepare and implement a revegetation plan to restore all areas subject to temporary disturbance to pre-Project grade and conditions. Temporarily disturbed areas within the Project area include all proposed locations for linear facilities, temporary access roads, construction work temporary lay-down areas, and construction equipment staging areas. No less than 30 days following the publication of the BLM's Record of Decision/ROW Issuance, whichever comes first, the Applicant and SCE shall submit to the BLM a final agency-approved revegetation plan that has been reviewed and approved by the BLM.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Review and approve revegetation plan prior to construction.
Responsible Agency	BLM, CPUC
Timing	Prior to construction
Implementation & Approach	Revegetation plan requirements will be implemented in accordance with the BLM-approved restoration approaches described in the Restoration Plan, required under AM BIO-5 and the Project SWPPP.
MITIGATION MEASURE	—[MM-VR-1] Within 30 days after completion of Project construction, the Applicant and SCE each shall provide to the BLM for review and approval a written report identifying which items of the revegetation plan have been completed, a summary of all modifications to mitigation measures made during the Project's construction phase, and which items are still outstanding. It shall also include a plan for revegetation monitoring.
Location	All areas associated with Red Bluff substation construction.

Table RB-11. Mitigation Measures and Applicant Proposed Measures – Visual Resources

Monitoring / Reporting Action	Review revegetation summary report including the plan for revegetation monitoring.
Responsible Agency	BLM, CPUC
Timing	Post construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	MM-VR-2 *Litter and Trash Control.* During construction, all trash and food-related waste shall be placed in self-closing containers and removed weekly as needed from the site.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Monitor during construction.
Responsible Agency	BLM, CPUC
Timing	During construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	MM-VR-3 *Fugitive Dust Control.* To minimize fugitive dust on the Project site, a dust control plan shall be developed that will impose limits on the speed of travel for construction vehicles, and will require that dust palliatives be applied to the site, as described in AM-AIR-1 and AM-AIR6, and in compliance with SCAQMD Rule 403.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify dust control plan submittal. Monitor during construction.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented

Table RB-11. Mitigation Measures and Applicant Proposed Measures – Visual Resources

MITIGATION MEASURE	MM-VR-4 *Lighting Control.* Consistent with safety and security considerations, the Applicant and SCE shall design and install all permanent exterior lighting and all temporary construction lighting such that (a) lamps and reflectors are not visible from beyond the Solar Farm site, including any off-site security buffer areas; (b) lighting shall not cause excessive reflected glare; (c) direct lighting shall not illuminate the nighttime sky, except for required FAA aircraft safety lighting; (d) illumination of the Project and its immediate vicinity shall be minimized; (e) skyglow caused by Project lighting will be avoided, and (f) the plan shall comply with local policies and ordinances. All permanent light sources shall be below 2,500 Kelvin color temperature (warm white) and shall have cutoff angles not to exceed 45 degrees of nadir. The Applicant and SCE shall submit to the BLM and CPUC for review and approval a Lighting Mitigation Plan that includes the following: • Specification that LPS or amber LED lighting will be emphasized, and that white lighting (metal halide) would (a) only be used when necessitated by specific work tasks, (b) not be used for dusk-to-dawn lighting, and (c) would be less than 2500 Kelvin color temperature; • Specification and map of all lamp locations, orientations, and intensities, including security, roadway, and task lighting; • Specification of each light fixture and each light shield; • Total estimated outdoor lighting footprint, expressed as lumens or lumens per acre; • Definition of the threshold for substantial contribution to light pollution in Joshua Tree National Park, in coordination with the Night Sky Program Manager (see below); • Specifications on the use of portable truck-mounted lighting; • Lighting design shall consider setbacks of Project features from the site boundary to help satisfy the lighting mitigation requirements; • Light fixtures that are visible from beyond the Project boundary shall have cutoff angles sufficient to prevent lamps and reflectors from being visible beyond the Project boundary; • Specification of motion sensors and other controls to be used, especially for security lighting; • Surface treatment specification that will be employed to minimize glare and skyglow; • Results of a Lumen Analysis (based on final lighting plans), in consultation with the National Park Service (NPS) Night Sky Program Manager (Chad Moore – (970) 491-3700), in order to determine the extent of night lighting exposures in the surrounding NPS lands. If the lighting exposure on NPS lands exceeds the allowable threshold (which is to be determined in consultation with the NPS Night Sky Program Manager and BLM), additional control measures will be instituted to reduce the lighting exposures to levels below the threshold; and • Documentation that coordination with the NPS Night Sky Program Manager and the BLM has occurred.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Review and approve Lighting Mitigation Plan. Monitor plan and mitigation measure requirements during construction.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	A separate Construction Lighting Mitigation Plan and Permanent Lighting Mitigation Plan will be prepared for approval and implementation.
MITIGATION MEASURE	MM-VR-5 *Surface Treatment of Project Structures/Buildings.* The Applicant and SCE shall treat the surfaces of all Project structures and buildings visible to the public such that (a) their colors minimize visual contrast by blending with the characteristic landscape colors; (b) their colors and finishes do not create excessive glare; and (c) their colors and finishes are consistent with local policies and ordinances. The transmission line conductors shall be non-specular and nonreflective, and the insulators shall be nonreflective and nonrefractive. The Applicant and SCE shall comply with BLM requirements regarding appropriate surface treatments for Project elements.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify that Project plans follow surface treatment requirements. Monitor during construction.

Table RB-11. Mitigation Measures and Applicant Proposed Measures – Visual Resources

Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	MM-VR-6 *Project Design.* The Applicant and SCE shall use proper design fundamentals to reduce the visual contrast to the characteristic landscape. These include proper siting and location; reduction of visibility; repetition of form, line, color (see Mitigation MM-VR-5) and texture of the landscape; and reduction of unnecessary disturbance. Design strategies to address these fundamentals shall be based on the following factors: • Earthwork: Select locations and alignments that fit into the landforms to minimize the size of cuts and fills. • Vegetation Manipulation: Retain as much of the existing vegetation as possible. Use existing vegetation to screen the development from public viewing. Use scalloped, irregular cleared edges to reduce line contrast. Use irregular clearing shapes to reduce form contrast. Feather and thin the edges of cleared areas and retain a representative mix of plant species and sizes. • Structures: Minimize the number of structures and combine different activities in one structure. Use natural, self-weathering materials and chemical treatments on surfaces to reduce color contrast. Bury all or part of the structure. Use natural appearing forms to complement the characteristic landscape. Screen the structure from view by using natural land forms and vegetation. Reduce the line contrast created by straight edges. Use road aggregate and concrete colors that match the color of the characteristic landscape surface. Co-locate facilities within the same disturbed corridor. • Reclamation and Restoration: Reduce the amount of disturbed area and blend the disturbed areas into the characteristic landscape. Replace soil, brush, rocks, and natural debris over disturbed area. Newly introduce plant species shall be of a form, color, and texture that blends with the landscape. The Applicant and SCE and BLM shall develop a set of visual resources BMPs to serve as a running list of proven practices to reduce the overall visual contrast of the proposed Project.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	SCE and BLM shall develop a set of visual resources BMPs to serve as a running list of proven practices to reduce the overall visual contrast of the proposed Project. Monitor during construction.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented

Table RB-12. Mitigation Measures and Applicant Proposed Measures – Water Resources

MITIGATION MEASURE	MM-WAT-1 Groundwater Wells, Installation. The Applicant proposes to construct new groundwater wells in support of the Project that would produce water from the Chuckwalla Valley Groundwater Basin (CVGB). The Project owner shall ensure that the wells are completed in accordance with all applicable state and local water well construction permits and requirements. Prior to initiation of well construction activities, the Project owner shall submit for review and comment a well construction packet to the County of Riverside and fees normally required for the County's well permit, with copies to the Compliance Project Manager (CPM). The Project shall not construct a well or extract and use groundwater until approval has been issued by the county and the CPM to construct and operate the well. Wells permitted and installed as part of pre-construction field investigations that subsequently are planned for use as Project water supply wells require CPM approval prior to their use to supply water to the Project.
Location	All ground water well locations
Monitoring / Reporting Action	Verify County of Riverside CMP approval.
Responsible Agency	BLM, CPUC, County of Riverside CPM
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	—[MM-WAT-1] Post-Well Installation. The Project owner shall provide documentation as required under County permit conditions to the CPM that the well has been properly completed. In accordance with California's Water Code Section 13754, the driller of the well shall submit to the Department of Water Resources (DWR) a Well Completion Report for each well installed. The Project owner shall ensure the Well Completion reports are submitted. The Project owner shall ensure compliance with all County water well standards and the County requirements for the life of the wells, and shall provide the CPM with two copies each of all monitoring or other reports required for compliance with the County of Riverside water well standards and operation requirements, as well as any changes made to the operation of the well.
Location	All groundwater well locations
Monitoring / Reporting Action	Verify that Well Completion Report for each well installed has been submitted to DWR. Verify monitoring or other reports required for compliance with the County of Riverside water well standards and operation requirements have been submitted to CPM.
Responsible Agency	BLM, CPUC, County of Riverside CPM, DWR
Timing	During and post construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	MM-WAT-2 Construction Water Use. The proposed Project's use of groundwater during construction shall not exceed a total of 1,400 AF during the 26-month construction period for the solar farm, 360 AF for the Red Bluff Substation, and 7 AF for the Gen-Tie Line. Before groundwater can be used for construction, the Project owner shall install and maintain metering devices as part of the water supply and distribution system to document Project water use and to monitor and record in gallons per day the total volume of water supplied to the Project from this water source. The metering devices shall be operational for the life of the Project.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify installation of metering devices.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	MM-WAT-4 Mitigation for the Use of Fencing. Desert tortoise exclusion fencing and security fencing shall be installed around the entire perimeter of the Project site as described in AM-WIL-1.
Location	Parameter of Project sites associated with Red Bluff substation construction.
Monitoring / Reporting Action	Monitor fencing installations and inspections.
Responsible Agency	BLM, CPUC, USFWS, CDFG, CPM
Timing	Prior to construction

Table RB-12. Mitigation Measures and Applicant Proposed Measures – Water Resources

Implementation & Approach	Measure will be implemented along the perimeter of the substation site however the access road, loop-in, distribution line, Desert Center and Chuckwalla Communication site construction will not be fenced. Biological sweeps and monitoring will be conducted in the alternative.
MITIGATION MEASURE	—[MM-WAT-4] During construction the desert tortoise exclusion fence will be inspected on a daily basis to ensure the integrity of the fence is maintained. During operation of the Project, fence inspections shall occur at least once per month throughout the life of the Project, and within 24 hours after storms or other events that might affect the integrity and function of desert tortoise exclusion fences. Fence repairs shall be completed within two days (48 hours) of detecting problems that affect the functioning of the desert tortoise exclusion fencing. If fence damage occurs during any time of year when tortoises may be active, the Project owner shall be responsible for monitoring the site of the damaged fence until it is fully repaired, to prevent a desert tortoise from entering the Project area. All incidents of damaged tortoise exclusion fence, including dates of damage and repair; extent of damage, and monitoring summaries (methods and results), shall be reported to the BLM, CPM, CDFG, and USFWS. All wildlife found entrapped or dead in the fence shall be reported to the BLM, CPM, CDFG, and USFWS. Fencing shall be installed with breakaway design features so as not to interfere with or impede storm water or flood flows, or associated sediment loads.
Location	Perimeter of Project sites associated with Red Bluff substation construction.
Monitoring / Reporting Action	Monitor fencing installations and inspections.
Responsible Agency	BLM, CPUC, USFWS, CDFG, CPM
Timing	Prior to and during construction
Implementation & Approach	See AM-WIL-1. Measure will be implemented
MITIGATION MEASURE	AM-WAT-1 Training construction staff in the management of hazardous materials and use of spill control and cleanup equipment;
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify training construction staff in the management of hazardous materials and use of spill control and cleanup equipment.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	DPV2 plan may be implemented during construction. Measure will be implemented
MITIGATION MEASURE	AM-WAT-2 Having a clear chain of command within the organizational structure with responsibility for implementing, monitoring, and correcting BMPs;
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify chain of command regarding BMPs.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	AM-WAT-3 Covering and containing hazardous materials so that they are not in contact with precipitation or runoff
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Monitor containment of hazardous materials
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	AM-WAT-4 Storing hazardous materials in one or more central areas, and instituting rules requiring all hazardous materials to be secured at the end of the day;
Location	All areas associated with Red Bluff substation construction.

Table RB-12. Mitigation Measures and Applicant Proposed Measures – Water Resources

Monitoring / Reporting Action	Monitor containment of hazardous materials
Responsible Agency	BLM, CPUC
Timing	During construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	AM-WAT-5 Maintaining good inventory records; storing hazardous liquids and dispensing equipment in secondary containment;
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Monitor and review inventory materials upon request
Responsible Agency	BLM, CPUC
Timing	During construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	AM-WAT-6 Maintaining adequate quantities of spill containment and response equipment at readily accessible points throughout the site;
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Monitor and review inventory materials upon request
Responsible Agency	BLM, CPUC
Timing	During construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	AM-WAT-7 Identifying the worst case and most likely spill scenarios, and providing spill response equipment adequate to respond to these scenarios;
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Review worst case spill scenarios and monitor spill response equipment.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	AM-WAT-8 Using chemicals presenting the least environmental hazard wherever possible;
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Monitor during construction.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Where applicable MSDS sheets will be submitted for site chemicals showing associated hazards. Measure will be implemented
MITIGATION MEASURE	AM-WAT-9 Storing the smallest quantities of hazardous materials possible on the site;
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Monitor during construction.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	AM-WAT-10 Maintaining site security to reduce vandalism;
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Monitor during construction.
Responsible Agency	BLM, CPUC

Table RB-12. Mitigation Measures and Applicant Proposed Measures – Water Resources

Timing	During construction
Implementation & Approach	Measure will be implemented
MITIGATION MEASURE	AM-WAT-11 Requiring all contractors to abide by the program BMPs and to identify any hazardous materials and specific BMPs pertaining to their trade or activity.
Location	All areas associated with Red Bluff substation construction.
Monitoring / Reporting Action	Verify contract agreements, verify contractor training, monitor during construction.
Responsible Agency	BLM, CPUC
Timing	Prior to and during construction
Implementation & Approach	Measure will be implemented