# Notice to Proceed Request (NTPR) #5

AGENCY: California Public Utilities Commission

PROJECT: Eldorado-Lugo-Mohave Series Capacitor Project (ELM Project)

COMPONENTS: Installation of an AC mitigation system along Southern California Gas

Company's (SoCalGas's) natural gas pipelines that parallel Southern

California Edison's Lugo-Mohave 500 kV Transmission Line

CPUC SUBMITTAL DATE: July 15, 2025

## 1 ELM Project Introduction

The Southern California Edison (SCE) Eldorado-Lugo-Mohave Series Capacitor Project (ELM Project) is located in San Bernardino County, California, and Clark County, Nevada. The ELM Project will increase the amount of power delivered on the existing Eldorado-Lugo and Lugo Mohave 500 kV transmission lines, address line clearance discrepancies, facilitate communications between substations, and modify substations to accommodate the ELM Project. The ELM Project includes the installation of an alternating current (AC) mitigation system that is required to maintain the integrity and safety of SoCalGas's natural gas high-pressure pipelines, Line 235 (L235) and Line 3000 (L3000), which parallel portions of SCE's Lugo-Mohave 500 kV Transmission Line. The AC mitigation system installation will be located entirely within unincorporated San Bernardino County, California. The existing pipeline corridors for L235 and L3000 traverse federal lands administered by the National Park Service (NPS) within the Mojave National Preserve (MNP) and the Bureau of Land Management (BLM), state lands managed by the California State Lands Commission (CSLC), and privately owned lands in unincorporated San Bernardino County.

#### 1.1 Permits and Approvals

On September 3, 2020, SCE, a regulated California utility, received a California Public Utilities Commission (CPUC) decision granting a Certificate of Public Convenience and Necessity (CPCN) for the ELM Project. The CPCN was issued following completion of environmental review pursuant to the California Environmental Quality Act, including preparation of a Final Initial Study-Mitigated Negative Declaration (IS-MND) published in November 2019. The CPUC has exclusive authority over SCE's application for a CPCN for the ELM Project. Per the requirements in the Mitigation Monitoring, Compliance and Reporting Plan associated with the Final IS-MND, SCE shall obtain approval from the CPUC to execute construction for ELM Project components within the CPUC's jurisdiction. However, separate various permits and approvals from other agencies shall be obtained to execute ELM Project components on lands under those jurisdictional agencies.

This Notice to Proceed (NTP) Request has been developed to obtain a NTP for ELM Project components or portions of ELM Project components within the CPUC's jurisdiction.

https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M346/K285/346285880.PDF

<sup>&</sup>lt;sup>1</sup> CPUC Decision (D.20-08-032),

## 2 Notice to Proceed Request Summary

SCE requests a NTP from the CPUC to install AC mitigation along certain segments of the existing natural gas pipelines that parallel the 500 kV transmission line, located in California on non-federal lands. The components are described below and the locations are shown in the Project Overview Map in Figure 1.

- Installation of 2/0 copper grounding cable parallel to and within 10 feet of L235 and L3000.
- Installation of coupon test stations (CTS) to monitor the level of AC interference over time and to alert SoCalGas of any issues that may develop.
- Installation of solid-state decoupler (SSD) devices to allow AC to pass to ground while retaining direct current (DC) on L235 and L3000.
- Other ancillary improvements necessary to facilitate the installation of AC mitigation components, such as access improvements and laydown yards.

#### 2.1 Copper Grounding Cable

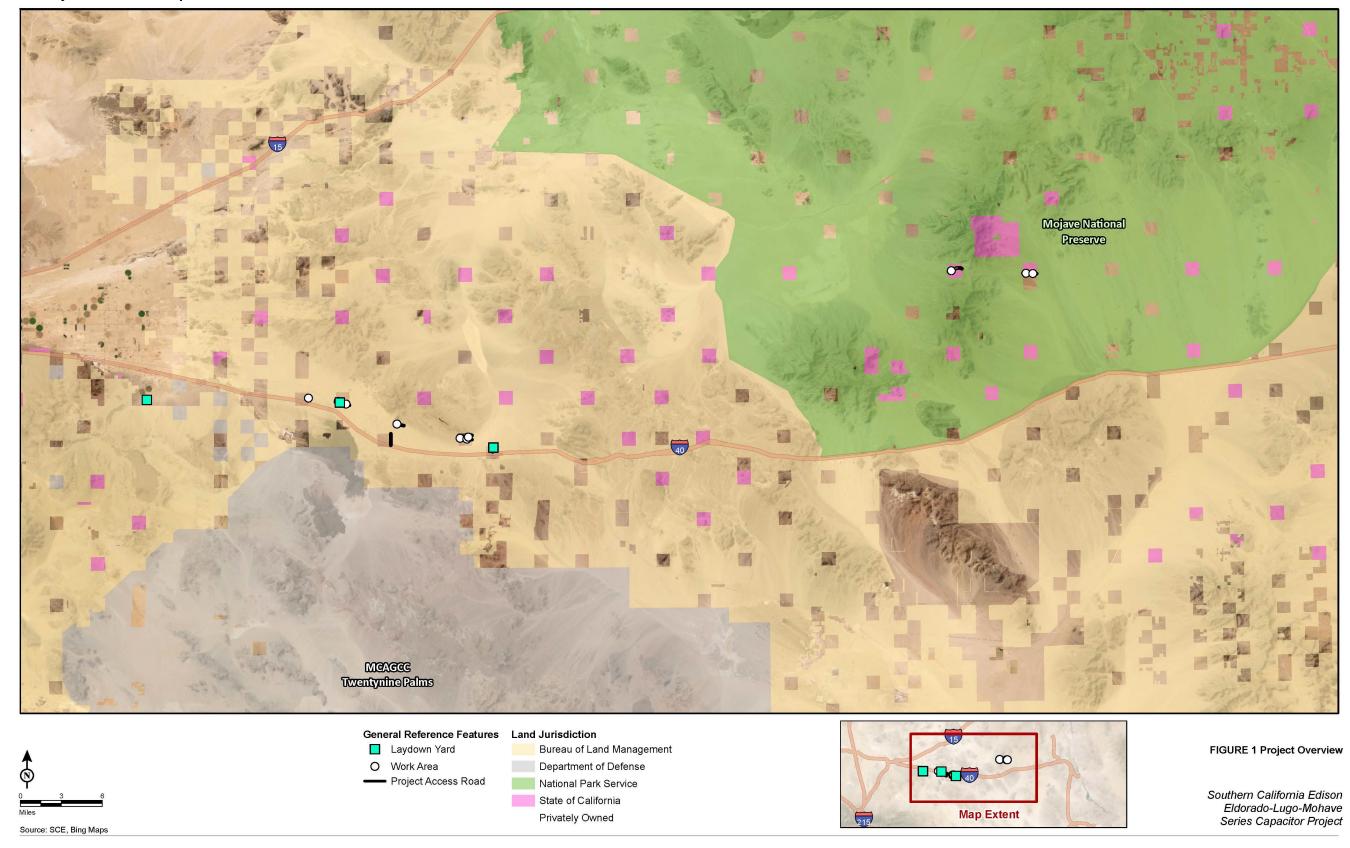
Copper grounding cable will be installed along the existing L235 and L3000 natural gas pipelines. Cable will be installed at a minimum depth of 3 ft., parallel to and within 10 ft. of the pipeline (i.e., L235 or L3000). Trenching for the copper grounding cable installation will be achieved using a "V-ditch" track type tractor, where feasible. The V-ditch tractor will install the copper wire and warning tape concurrently and will not result in an open trench. Where site conditions preclude the use of the V-ditch tractor, excavation and installation will be completed manually.

The grounding cable will be connected to L235 and L3000 through SSD devices. In addition to each ground cable connection to the SSD, a separate cable will be pin-brazed to the associated SoCalGas high-pressure pipeline within the AC mitigation section workspaces. A SSD is designed to allow AC to pass to ground while retaining direct current from a cathodic protection system to mitigate the AC interference without disrupting the cathodic protection on a pipeline. Each SSD device will be placed in below grade structures (approximately 2 ft. by 2 ft. by 1 ft.) and have a specialized Remote Monitoring Unit that will transmit information to SoCalGas for monitoring. An excavation measuring approximately 5 ft. by 5 ft. by 6 to 7 ft. deep will be utilized at each of the SSD locations to expose the top of the pipeline so that both the copper ground cable connection and the separate cable pin-brazed to the pipeline can be attached to the SSD (Exhibit 1). SSD excavations will be located entirely within the AC mitigation section workspaces. AC mitigation section workspaces will be located entirely within SoCalGas's existing right-of-way for L235 and L3000.

#### 2.2 Coupon Test Stations

Three CTSs will be installed to monitor the level of AC interference over time and to alert SoCalGas of any issues that may develop. For each CTS, a 5 ft. by 5 ft. by 3 to 4 ft. deep excavation located approximately 3 ft. from the pipeline will be required. The test coupon will be installed in the excavation with wire extending to grade and terminating inside an enclosure measuring approximately 3 inches (in.) in diameter and 7 ft. tall. Approximately 4 ft. of the enclosure will be above grade (Exhibit 2). CTS workspaces will be located entirely within SoCalGas's existing right-of-way for L235 and L3000.

Figure 1 Project Overview Map



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## 3 AC Mitigation of Natural Gas High-pressure Pipelines

## 3.1 Construction Location, Description of Work Areas and Existing Conditions, and Approximate Acreage of Disturbance by Work Area, Vegetation Type and Land Use

The table in Appendix A contains information on the location of construction activities, the associated work areas, a description of construction activity within those work areas, and a reference to the map page in Appendix A Figure 1 where those are shown. In addition, existing site conditions are described for each work area. Lastly, an approximate acreage of disturbance by work area and by vegetation type or land use is shown.

### 3.2 Project Activity Schedule

Construction of the AC mitigation system is anticipated to start August 2025, or once applicable environmental permits/clearances are received. Construction duration is anticipated to be approximately 7-9 months dependent on field conditions. Construction is to commence on both L235 and L3000 concurrently, starting at the westerly edge of the project boundary and working towards the east. Due to the remoteness of each mitigation section, vehicles and equipment will remain within the right-of-way during off hours, weekends and holidays. The schedule for the work being completed on non-federal lands is identified below.

Project Component	Anticipated Construction Start Date
L3000 Sections 1 and 2	August 2025
L235 Sections 1, 2, 4, 17a, 19, and 20 and CTS 4, 6, and 7	August 2025

### 3.3 Compliance with Mitigation Measures and Applicant-Proposed Measures

Refer to Appendix B: Applicant Proposed Measures and Mitigation Measures.

### 3.4 AC Mitigation Installation

#### 3.4.1 Preconstruction Activities

AC mitigation system installation will be contained within the boundaries of SoCalGas's existing right-of-way; therefore, minimal site preparation will be required for this ELM Project component. Clearing and or drive/crush of vegetation will be conducted at work sites of the AC mitigation system work areas to provide sufficient workspace. A few sites may need minor grading to provide a flat, level workspace. Stormwater Pollution Prevention Plan (SWPPP) requirements will be implemented (i.e., best management practices [BMP]) prior to clearing or minor grading. Existing dirt access roads will be improved to allow for safe passage of equipment and vehicles.

#### 3.4.2 Construction Activities

The table and corresponding maps in Appendix A contain information on the location of construction activities by work area section, a description of construction activity within those work areas and a reference to the map page where those are shown.

AC Mitigation Construction	Major Construction Activities				
AC Mitigation System	Trenching and installing copper wire approximately 10 feet from the edge of the pipeline				
Installation	Excavations to install SSD devices				
	CTS installation for AC interference monitoring				

Typical daily construction activities will include use of construction trailers and portable restrooms, personal parking for construction personnel, and installation of AC mitigation system-related components. Other daily construction activities may include refueling and equipment maintenance and repair, containment of waste disposal, and component assembly. Equipment and vehicles that may be used during construction include the following:

- D4 LGP Tract Type Tractor with "V-ditch" digging rig or D6T Track Type Tractor with V-ditch digging rig
- Backhoe 410
- Vacuum excavator
- Forklift
- Water truck
- Motor grader
- Cat-loader
- 4x4 crew trucks
- Portable restrooms

The workforce size will depend on the contractor and how many crews are assigned during construction at any given time. It is expected that approximately 10 to 15 construction personnel per section will work weekly. The landscape contractor is responsible for implementing mitigation plans during construction such as the Special Status Plant Salvage and Relocation Plan, Cacti and Yucca Salvage and Relocation Plan, and Habitat Restoration and Revegetation Plan (HRRP).

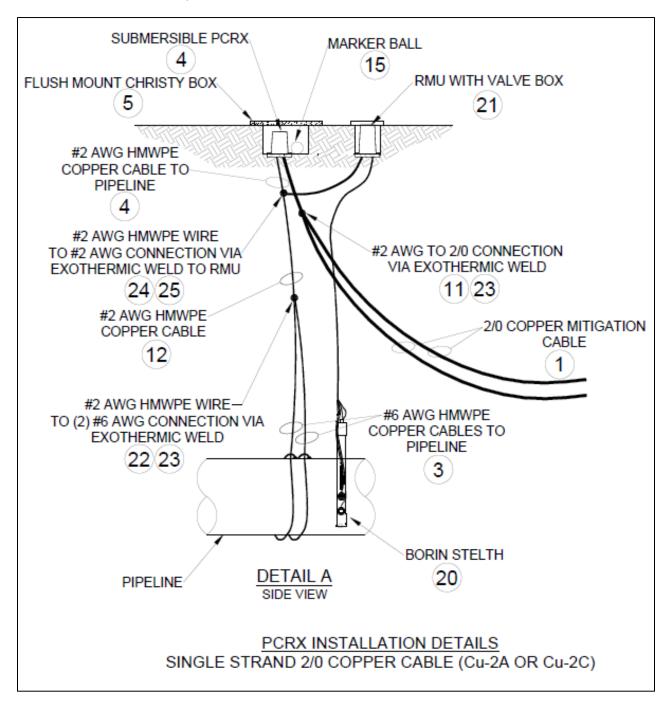
The AC mitigation work will consist of trenching and installing 2/0 copper wire within 10 feet of the edge of pipeline for each of the sections described in Appendix A. For L235, Section 1 and Section 20 will require the installation of 2/0 copper wire on each side of the pipeline. For L3000 Section 1 will require the installation of 2/0 copper wire on each side the pipeline.

Trenching for the 2/0 copper wire will be achieved using a "V-ditch" track type tractor (D4 or D6T model), where feasible. The V-ditch tractor will install the copper wire and warning tape concurrently and will not result in an open trench. Where site conditions preclude the use of the V-ditch tractor, excavation and installation will be completed manually. For each section, a SSD will be required to effectively mitigate the induced AC without disrupting the cathodic protection on the pipelines. For each of the SSD locations, an excavation measuring approximately 5 ft. by 5 ft. by 6 to 7 ft. deep will be performed to expose the top of the pipeline so that a #6 copper wire can be attached (pin-brazed) to the pipe and attaching the other end to the SSD. A separate #6 copper cable will extend from the SSD to the 2/0 copper cable (See Exhibit 1 for typical SSD installation).

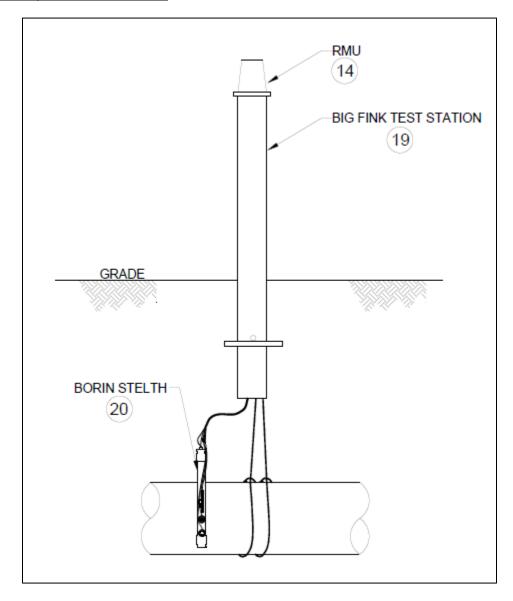
In addition, 3 locations along L235 within non-federal lands will also require CTS to be installed for interference monitoring. For each CTS, a 5 ft. by 5 ft. by 3 ft. to 4 ft. deep excavation located approximately 3 ft. from the pipeline is required. The test coupon will be installed in the excavation with wire extending to grade and terminating inside an enclosure measuring approximately 3 inches in

diameter and 7-ft. tall. Approximately 4 ft. of the enclosure will be above grade (See Exhibit 2 for typical CTS installation).

Exhibit 1 – Solid State Decoupler (SSD)



#### Exhibit 2 – Coupon Test Station (CTS)



The ELM Project components described in this NTPR will be accessed by existing public roadways and existing unpaved access/pipeline patrol roads that intersect paved roadways adjacent to the route. Improvements to the existing access/pipeline patrol roads may be required due to wash outs that occur regularly to these dirt roadways. Access/pipeline patrol road improvement is likely to require a motor grader, water truck, backhoe, motor grader and/or cat-loader. The surface area affected will depend on the nature of the needed repairs. Access road repairs are anticipated to involve two workers.

Upon completion of the work, all areas will be restored to as near to their original condition as reasonably practicable.

#### 3.4.2.1 Dust Control

Several of the construction activities associated with the ELM Project have the potential to result in the release of fugitive dust under certain circumstances, including grading, trenching, excavation, backfilling, cleanup and the use of unpaved access roads. During construction, water trucks will be used to apply water to work areas, trench spoil, and other exposed soil with the potential to create dust to a level that complies with applicable regulations.

#### 3.4.2.2 Other Activities

Additional construction or operational activities are not planned at the ELM Project site.

#### 3.4.3 Right-of-Way Access Pre-Sunrise and Post-Sunset

AC mitigation system construction work is not anticipated to occur at night. If right-of-way access is required at night, reduced vehicle speeds and biological escorts will be implemented to ensure monitors may perform their duties according to the mitigation measures and plans established for the ELM Project.

## 4 Laydown Yards

NTPR-5 includes three laydown yards. The laydown yards will serve as a reporting location for workers, vehicle and equipment parking, and material storage during construction. The yards may be fenced and have construction trailers for supervisory and clerical personnel and may be lit for staging and security. Normal maintenance and refueling of construction equipment will be conducted at the yard; refueling and storage of fuels will be in accordance with the SWPPPs.

The need for temporary power will be determined based on the type of equipment and facilities to be used for construction. If existing distribution lines are available, a temporary service and meter may be used to provide electrical power at the yard. If it is determined that temporary power is not available, then a portable generator may be used intermittently for electrical power.

Materials commonly stored will include, but not be limited to, construction trailers; construction equipment; portable sanitation facilities; signage; consumables (e.g., fuel); waste materials for salvaging, recycling, or disposal; and BMP materials (e.g., straw wattles, gravel, and silt fences).

The laydown yards may also serve as assembly points for crews from where they will be transported to work sites. The majority of materials associated with the construction will be delivered by truck to the laydown yard for subsequent distribution to work areas. Some materials may be delivered directly to construction work areas.

Security personnel will be provided for each laydown yard during off hours, weekends and holidays.

#### 4.1 Site Locations and Conditions

See Figure 2, for the locations of the laydown yards. The site conditions and affected areas for each site are noted in the table that follows.

	Laydown Yards								
			***************************************	Vegetation Impacts					
Construction Location	Latitude/ Longitude	Site Conditions	*Approximate Disturbed Acres	Vegetation Type (If Vegetated) or Land Use	Acres				
Temporary Disturbance									
Laydown Yard 1 – Newberry Springs	34.784723, -116.608186	The parcel of land where this laydown yard is located is characterized by disturbed land that has previously been used as a laydown yard. Fort Cady Road is adjacent to the laydown yard on the north side.	3.32	Disturbed	3.32				
Laydown Yard – Crucero Road	34.731826, -116.162021	The parcel of land where this laydown yard is located is characterized by undeveloped disturbed desert scrub land.	5.06	Disturbed desert scrub	5.06				
Laydown Yard – Ludlow Station North Easement	34.780951°, -116.359556°	The parcel of land where this laydown yard is located is characterized by desert scrub habitat adjacent to a developed SCE Ludlow Series Capacitor yard.	3.22	Desert scrub	3.22				

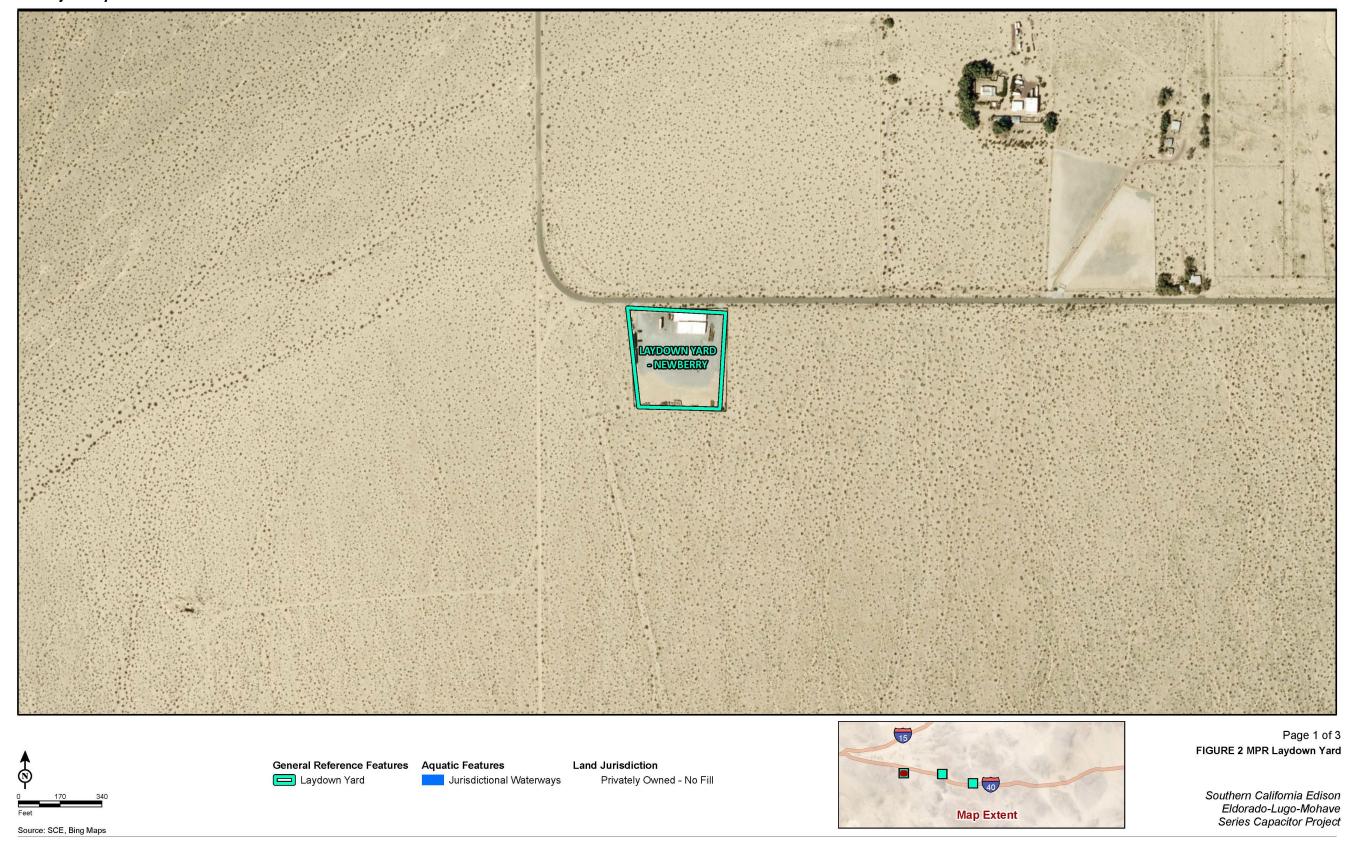
NOTE: \*Acreage is a total estimate for the staging area whether disturbance is a result of previous activity or as a result of construction activity for the staging yard.

## 4.2 Project Activity Schedule

These laydown yards will be used to support the AC mitigation system installation.

Project Component	Anticipated Construction Start Date
Laydown Yard 1 – Newberry Springs	August 2025
Laydown Yard – Crucero Road	August 2025
Laydown Yard – Ludlow Station North	August 2025
Easement	

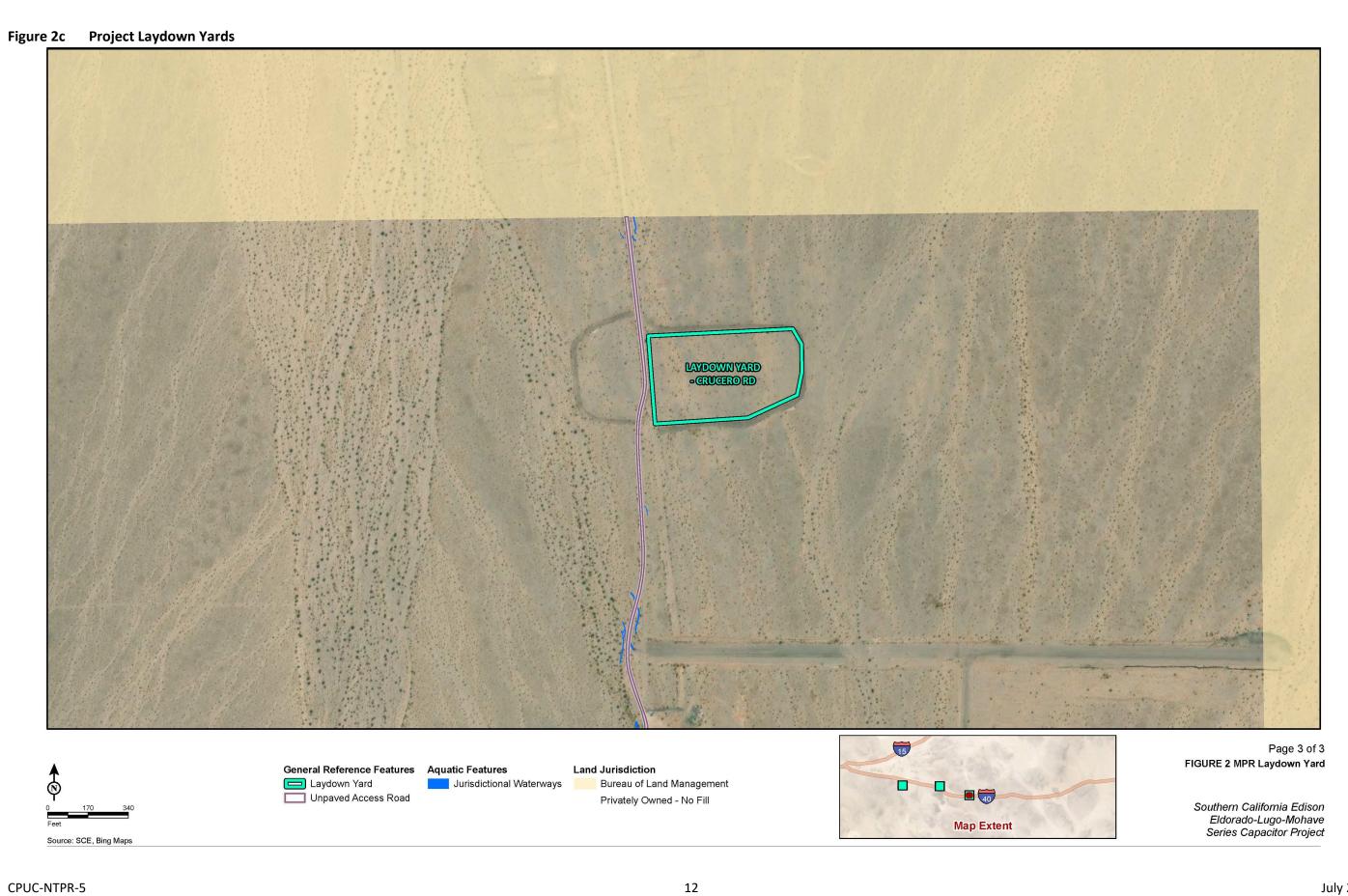
Figure 2 Project Laydown Yards



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Figure 2b Project Laydown Yards L285 SECTION 20 - (DOUBLE) WORK AREA 1235 GTS 6 - WORK AREA L235 SECTION 19 - WORK AREA





CPUC-NTPR-5 Eldorado-Lugo-Mohave Series Capacitor Project

#### 4.3 **Compliance with Mitigation Measures and Applicant Proposed Measures**

Refer to Appendix B: Applicant Proposed Measures and Mitigation Measures.

#### **Checklist of Required Permits, Plans, and Other Project Approvals** 5

#### **Environmental/Biological/Cultural Permits** 5.1

Permit	Required	Approval Date	Applicability/Status		
		Federal			
Clean Water Act (CWA) Section 404	N	N/A	Not required for work described in this NTPR.		
7460(1) Permit and Notice Proposed Construction or Alteration	N	N/A	Not required for work described in this NTPR.		
CWA Section 402 National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP)	Υ	Anticipated August 2025	Section 402 CGP and Stormwater Pollution Prevention Plan (SWPPP) for work described in this NTPR approval is anticipated by August 2025.		
Section 7 Consultation	Υ	Anticipated August 2025	The ELM Project components described in this NTPR have been submitted for coverage under the Bureau of Land Management Biological Opinion for Activities in the California Desert Conservation Area (FWS KRN/SBD/INY/LA/RIV-17B0532-17F1029; hereinafter 2017 BO).		
Section 106 Consultation, National Historic Preservation Act	Υ	Anticipated August 2025	BLM conducting Section 106 review.		
Field Work Authorization (Archaeology)	Υ	N/A	Not required for work described in this NTPR.		
Field Work Authorization (Paleontology)	Υ	N/A	Not required for work described in this NTPR.		
Archaeological Resources Protection Act (ARPA) Permit	Υ	N/A	Not required for work described in this NTPR.		
Permit/Agreement/Consent (Western Area Power Administration)	N	N/A	Not required for work described in this NTPR.		
State					
Certificate of Public Convenience and Necessity (CPCN)	Υ	8/27/20	Proposed decision has been issued.		
2081 Incidental Take Permit	Υ	05/17/2025	Take coverage pursuant to Section 2081 of the California Fish and Game Code will be covered under SoCalGas's Memorandum of Understanding with CDFW regarding Ongoing Maintenance Activities in		

July 2025

Permit	Required	Approval Date	Applicability/Status
			the California Desert Conservation Area (hereinafter CDFW MOU).
401 Certification	N	N/A	Not required for work described in this NTPR.
Waste Discharge Requirement Permit (SWRCB)	Y	Anticipated July 2025	SWRCB processing application for Waste Discharge Requirement Permit.
Temporary work in waterways permit (Nevada)	N	N/A	Not required for work described in this NTPR.
1602 Streambed Alteration Agreement	Υ	Anticipated July 2025	CDFW preparing draft Streambed Alteration Agreement.
NPDES Municipal Storm Water (MS4-I, II)	Ζ	N/A	Not required for work described in this NTPR.
NDOW Special Purpose Permit/Wildlife Authorization	Ν	N/A	Not required for work described in this NTPR.
		Local	
Dust Control Permit	Y	Anticipated August 2025	A dust control operating permit will be obtained from the Mojave Desert Air Quality Management District (MDAQMD).
Generator Permit	N	N/A	Generators requiring air district permits are not anticipated at this time. If required, contractor will be responsible for confirming all applicable air district permits have been secured.
Hazardous Materials Business Plan (HMBP)	N	N/A	Storage of hazardous materials in quantities requiring a HMBP is not anticipated.
Source: CPUC 2021			

# **5.1.1** Mitigation Plans and Reports

Plan/Report	Applicable MMCRP Measure(s)	Applicable	Approval Date	Notes
Burrowing Owl Management and Passive Relocation Plan (BOMPRP)	MM BR-11	Υ	11/24/2020	This plan has been approved by the CPUC.
Cultural Resource Management Plan/Cultural Resource Protection Plan (CRMP/CRPP)	MM CR-1	Υ	12/11/2020	This plan has been approved by the CPUC.
Horizontal Direction Drill (HDD) Fluid Management Plan	MM HWQ-2	N	N/A	An HDD Fluid Management Plan is not required for work associated with components of this NTPR-5.
Alternating Current Interference Analysis	MM UT-1	Υ	N/A	An Alternating Current Study has been submitted to the CPUC. Approval is anticipated on TBD.
Induction Study	MM UT-3	Υ	N/A	An induced current touch study has been submitted to the CPUC. Approval is anticipated on TBD.
Erosion Control Plan	MM HWQ-1	Y	8/17/20	Work will be completed in accordance with the previously approved Erosion Control Plan. Erosion Control Plan is incorporated into the ELM Project SWPPP and will be incorporated into the SWPPP specific to work described in this NTPR.
Fire Management Plan	MM WF-1	Υ	11/17/2020	This plan has been approved by the CPUC.
Dust Control Plan	MM AQ-1	Υ	11/17/2020	This plan has been approved by the CPUC.
Habitat Restoration and Revegetation Plan (HRRP)	MM BR-4	Υ	3/19/2021	This plan has been approved by the CPUC.
Hazardous Materials, Waste Management Plan (HMWMP)	MM HMH-1	Υ	10/20/2020	This plan has been approved by the CPUC.
Helicopter Use Plan	MM T-3	N	N/A	N/A
Integrated Weed Management Plan (IWMP)	MM BR-5	Υ	3/16/2021	This plan has been approved by the CPUC.
Nesting Bird Management Plan (NBMP)	MM BR-10	Υ	12/11/2020	This plan has been approved by the CPUC.
Paleontological Resource Mitigation and Monitoring Plan (PRMMP)	MM PAL-3	Υ	11/17/2020	This plan has been approved by the CPUC.
Raven Management Plan (RMP)	MM BR-9	Υ	11/17/2020	This plan has been approved by the CPUC.
Special Status Plant Salvage and Relocation Plan (SSPSRP)	MM BR-6	Υ	1/27/2021	This plan has been approved by the CPUC.

Plan/Report	Applicable MMCRP Measure(s)	Applicable	Approval Date	Notes
Cacti and Yucca Salvage and Relocation Plan (CYSRPP)	MM BR-6	Υ	12/11/2020	This plan has been approved by the CPUC.
Stormwater Pollution Prevention Plan (SWPPP)	MM HWQ-2	Y	Anticipated August 2025	SoCalGas will submit a SWPPP to cover the work described in this NTPR.
Project Design and Surface Treatment Plan (PDSTP)	MM AES-1	Υ	9/10/2020	This plan has been approved by the CPUC.
Worker Environmental Awareness Program (WEAP)	MM BR-2	Υ	9/10/2020	This plan has been approved by the CPUC.
Construction Notice Mailer	MM N-2	N	N/A	Work within 500 feet of residences, businesses, or other occupied structures is not anticipated for work described in this NTPR.
Source: CPUC 2021			•	

# 5.1.2 Coordination/Notification

Coordination	Applicable MMCRP Measure(s)	Required	Completion Date	Notes		
Fire Agencies	MM WF-1	Y	Complete	The Fire Management Plan has been submitted to the applicable fire agencies.  Coordination with fire agencies will be implemented based on the ELM Project Fire Management Plan.		
Emergency Service Providers (Coordination)	MM T-1	N	N/A	Impacts to roadways are not anticipated for the components subject to this NTPR-5; therefore, coordination with emergency service providers is not required.		
Recreation Area (Notification)	MM AES-2 MM CR-3	N	N/A	No recreation areas will be affected during this work; therefore, notification to recreation areas is not required.		
Right-of-Way Buffer (Notification)	MM T-1	N	N/A	Not anticipated to be required for ELM Project components described in this NTPR is.		
Source: CPUC 2021						

# 5.2 Required Surveys

## 5.2.1 Biological

Survey	Applicable MMCRP Measure(s)	Required	Completion Date	Notes
Nesting Birds	MM BR-10	Y	To be completed.	Required during the nesting season. Preconstruction clearance surveys will be conducted 7 days prior to construction as part of the preconstruction checklist.
Special – Status Plants	MM BR-6	Y	May 2025	These surveys were conducted in areas where special status plants had previously been recorded or suitable habitat known to occur.
Weed Inventory	MM BR-5	Υ	To be completed.	A preconstruction weed inventory will be taken prior to construction.
Cacti and Yucca	MM BR-6	Υ	To be completed.	These surveys will be completed during the installation of work area staking. Cacti and Yucca within work areas are marked for avoidance or for salvage
Desert Tortoise	MM BR-4	Υ	To be completed	Surveys to be completed within 7 days prior to construction.
Burrowing Owl	MM BR-11	Υ	To be completed	Protocol nesting season surveys are in progress and will be completed prior to the start of construction; otherwise, preconstruction surveys will be completed within 7 days prior to construction.
American badger, ringtail, and desert kit fox  Source: CPUC 2021	MM BR-13	Y	To be completed	Preconstruction surveys for desert kit fox, ringtail, and American badger will be conducted within 30 days prior to initiation of construction activities.

## 5.2.2 Cultural

Applicable MMCRP Measure(s)	Required	Completion Date	Notes
MM-CR-1 MM-CR-2	Υ	Anticipated	A Class III Cultural Resources Inventories report for the ELM Project AC mitigation
MM-CR-3		July 2023	areas is currently being completed.
	MMCRP Measure(s) MM-CR-1 MM-CR-2	MM-CR-1 MM-CR-2 Y	MM-CR-1 Anticipated MM-CR-2 Y July 2025

## 5.2.3 Paleontological

Survey	Applicable MMCRP Measure(s)	Required	Completion Date	Notes
Paleontological surveys for the ELM Project	MM-PAL-3	Υ	2025	Paleontological resources surveys for the ELM Project AC mitigation areas were completed in 2025.
Source: CPUC 2021				

## 5.2.4 Tribal

Survey	Applicable MMCRP Measure(s)	Required	Completion Date	Notes
Tribal Consultation based	MM-CR-4		Findings under	A tribal participation plan is included in the
on Class III Cultural	MM CR-5	Υ	Section 106	CRMP and was approved by the tribes on
Resources Survey	APM-TCR-2		Issued 5/18/20	12/04/20.
Source: CPUC 2021				

# 6 Monitoring Required

Type	Required	Notes
Biological	Υ	Biological monitoring will be required as specified in the 2017 Biological Opinion and SoCalGas's CDFW MOU
I ( IIITII TAIL IIII IIII IIII IIII IIII II		Cultural resource monitoring will be required as specified in the CRMP pending the results of the surveys described above.
Paleontological Y Paleontological resource monitoring will be required as specified in the PRI pending the results of the surveys described above.		Paleontological resource monitoring will be required as specified in the PRMMP pending the results of the surveys described above.
Tribal	Υ	Tribal monitoring will be required as specified in the CRMP.
Source: CPUC 20	21	

# 7 Anticipated Notice to Proceed Conditions

Requirement	Anticipated Completion Date	Notes
MM BR-2	Prior to workers	All new ELM Project personnel will receive ELM Project-approved WEAP
IVIIVI BR-Z	arriving onsite	training
MM BR-1	Preconstruction	Preconstruction surveys will be completed before activities start for the
IAIIAI DV-T	Preconstruction	ELM Project components of this NTPR-5.
		Nesting Bird surveys will be conducted prior to construction activities
MM BR-10	Preconstruction	during nesting bird season for the ELM Project components of this NTPR-
		5. Appropriate precautions will be taken to avoid disturbance.
MM BR-11	Preconstruction	Burrowing owl surveys will be conducted for suitable habitat before
IAIIAI DK-TT	Preconstruction	construction begins.
MM BR-6	Preconstruction	Surveys for special-status plants, including cacti and yucca, will be
IVIIVI DK-0	Preconstruction	conducted prior to construction.
MM BR-13	Preconstruction	American badger, ringtail, and desert kit fox surveys will be completed
IVIIVI DK-13	Preconstruction	prior to construction.
MM CR-2	Preconstruction	The WEAP training will address cultural resources training.

Requirement	Anticipated Completion Date	Notes
MM HWQ-1	Preconstruction	Erosion Control Plan will be implemented to comply with California requirements.
Source: CPUC 20	)18	

## 8 References

State of California Public Utilities Commission (CPUC). 2021. Eldorado-Lugo-Mohave Series Capacitor Project Mitigation Monitoring, Compliance, and Reporting Plan

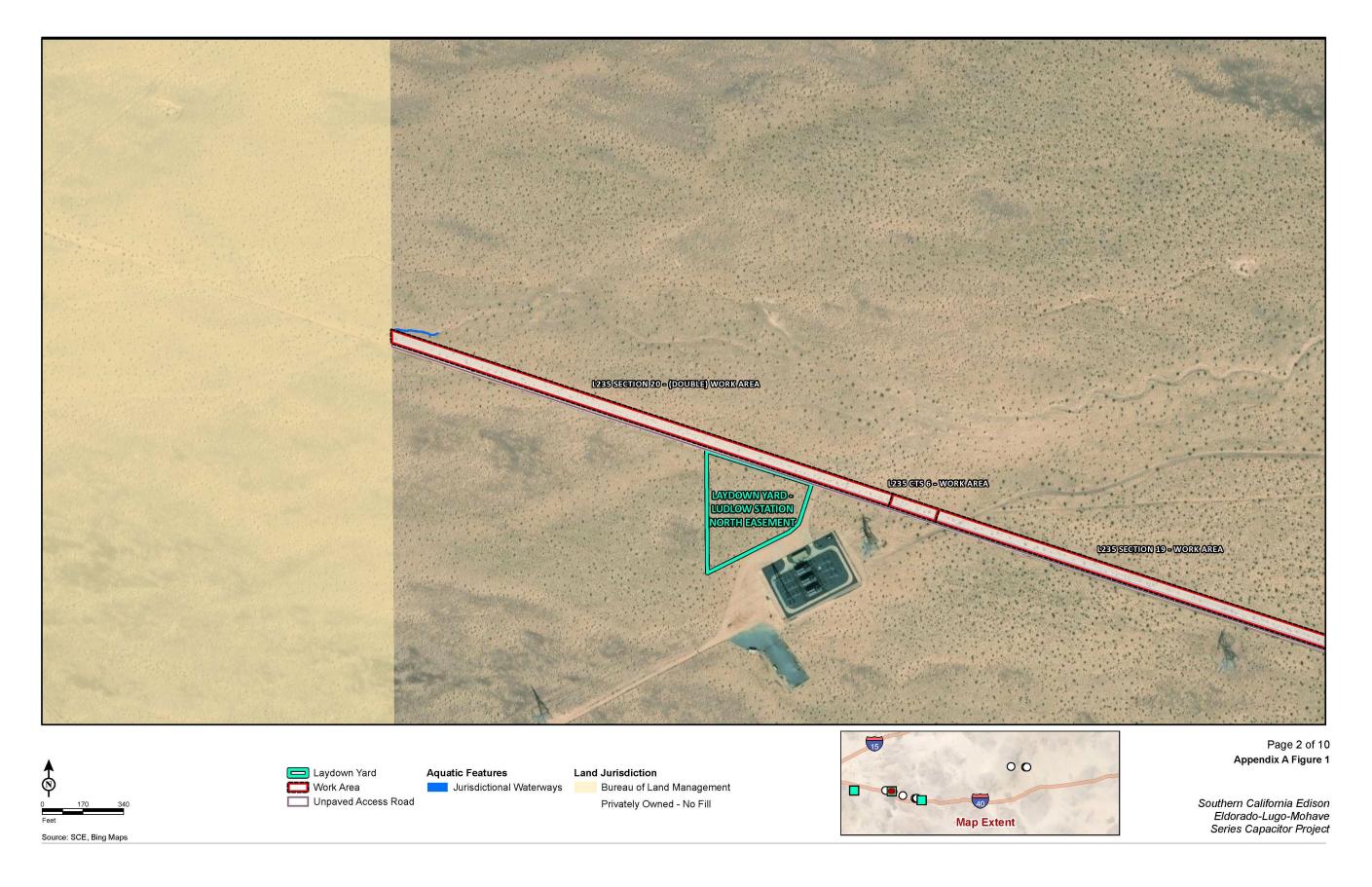
Appendix A: Construction Location, Description of Work Areas and Existing Conditions, and Approximate Acreage of Disturbance by Work Area, Vegetation Type and Land Use

The table and maps contain information on the location of construction activities by the existing natural gas pipeline number and associated coupon test station number or workspace number, a description of the construction activity within those work areas, and a reference to the map page of Figure 1 where those are shown. In addition, existing site conditions are described for each work area. Lastly, an approximate acreage of disturbance by work area and by vegetation type or land use is shown.

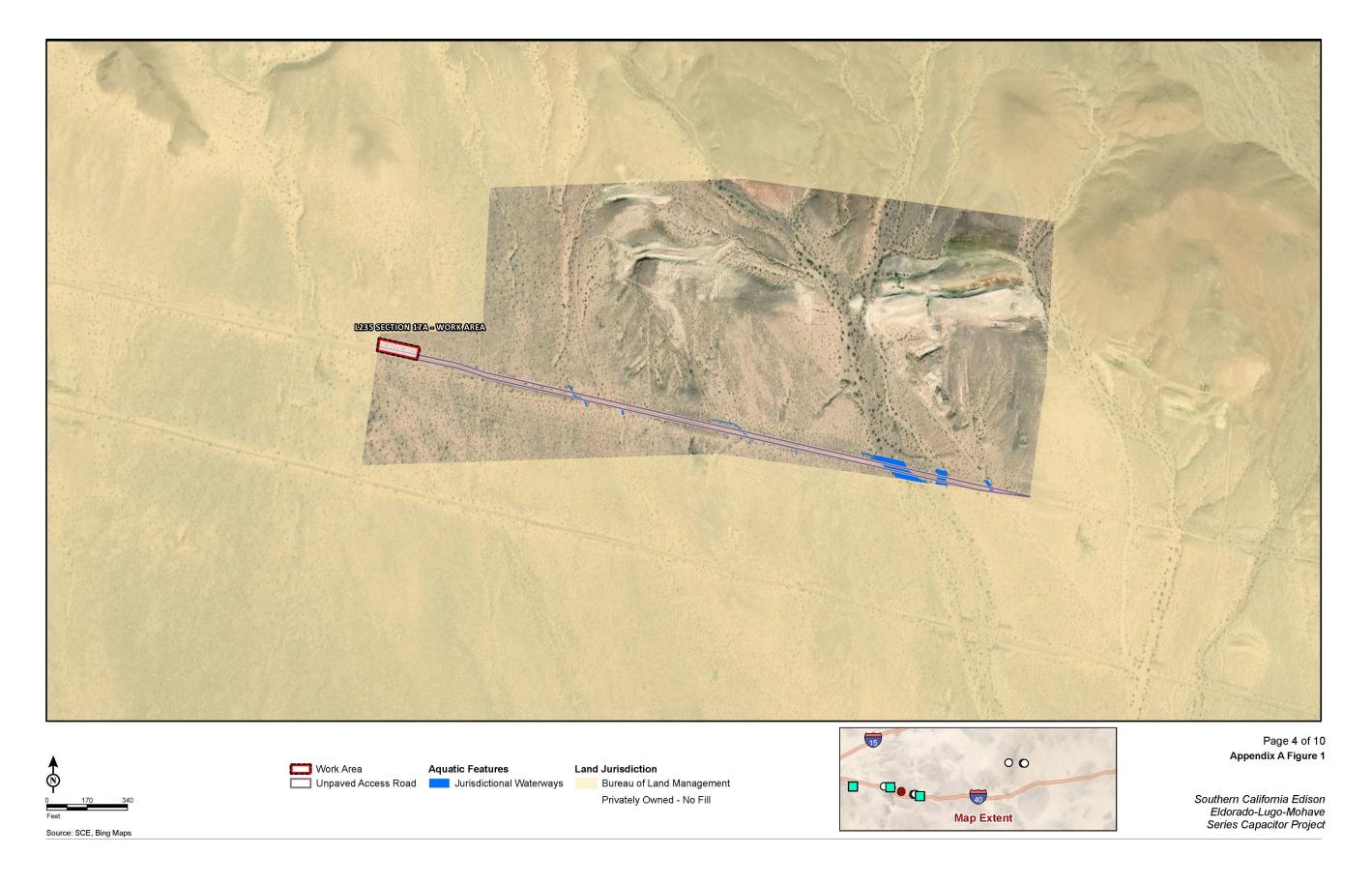
Associated Work Areas, Description of Work	Site Condition	Approxima te Acreage of Disturbanc e Per Work	Vegetation Type (If Vegetated) or Land Use	Disturbance (Previously Disturbed or Undisturbed)	Approxima te Acreage of Disturbanc	
	L235 Section 1 (Figure 1, Pages	9 and 10)				
Copper grounding cable will be installed on both sides of the pipeline with 2 SSD devices approximately 1,800 ft. from each other.	Gently rolling to flat with shallowly incised washes, Creosote bush – white bursage scrub	2.29	Larrea tridentata- Ambrosia dumosa Shrubland	Previously disturbed	2.29	
	L235 Section 2 (Figure 1, Pages	9 and 10)				
Copper grounding cable will be installed on one side of the pipeline with 2 SSD devices approximately 3,400 ft. from each other.	Gently rolling to flat with shallowly incised washes, Creosote bush – white bursage scrub	3.32	Larrea tridentata- Ambrosia dumosa Shrubland	Previously disturbed	3.32	
	L235 Section 4 (Figure 1, Page	s 7 and 8)				
Copper grounding cable will be installed on one side of the pipeline with 4 SSD devices approximately 5,900ft. from each other.	Mountainous with rolling hills to flat, Disturbed variant of Mojave yucca scrub (Yucca schidigera - Larrea tridentata - Ambrosia dumosa Shrubland) dominated by desert senna that becomes very dense in places and some cheesebush (Ambrosia salsola).	4.42	Yucca schidigera — Larrea tridentata — Ambrosia dumosa Shrubland Association (Disturbed)	Previously disturbed	4.42	
	L235 Section 17a (Figure 1,	Page 4)				
Copper grounding cable will be installed on one side of the pipeline with 2 SSD devices approximately 695 ft from each other	Gently rolling to flat with and gently sloping to the east, Creosote bush – white bursage scrub	1.02	Larrea tridentata- Ambrosia dumosa Shrubland	Previously disturbed	1.02	
L235 Section 19 (Figure 1, Pages 2 and 3)						
Copper grounding cable will be installed on one side of the pipeline with 3 SSD devices approximately 4,000 ft. from each other.	Flat, creosote bush – white bursage scrub, undisturbed.	4.7	Larrea tridentata- Ambrosia dumosa Shrubland	Previously disturbed	4.7	

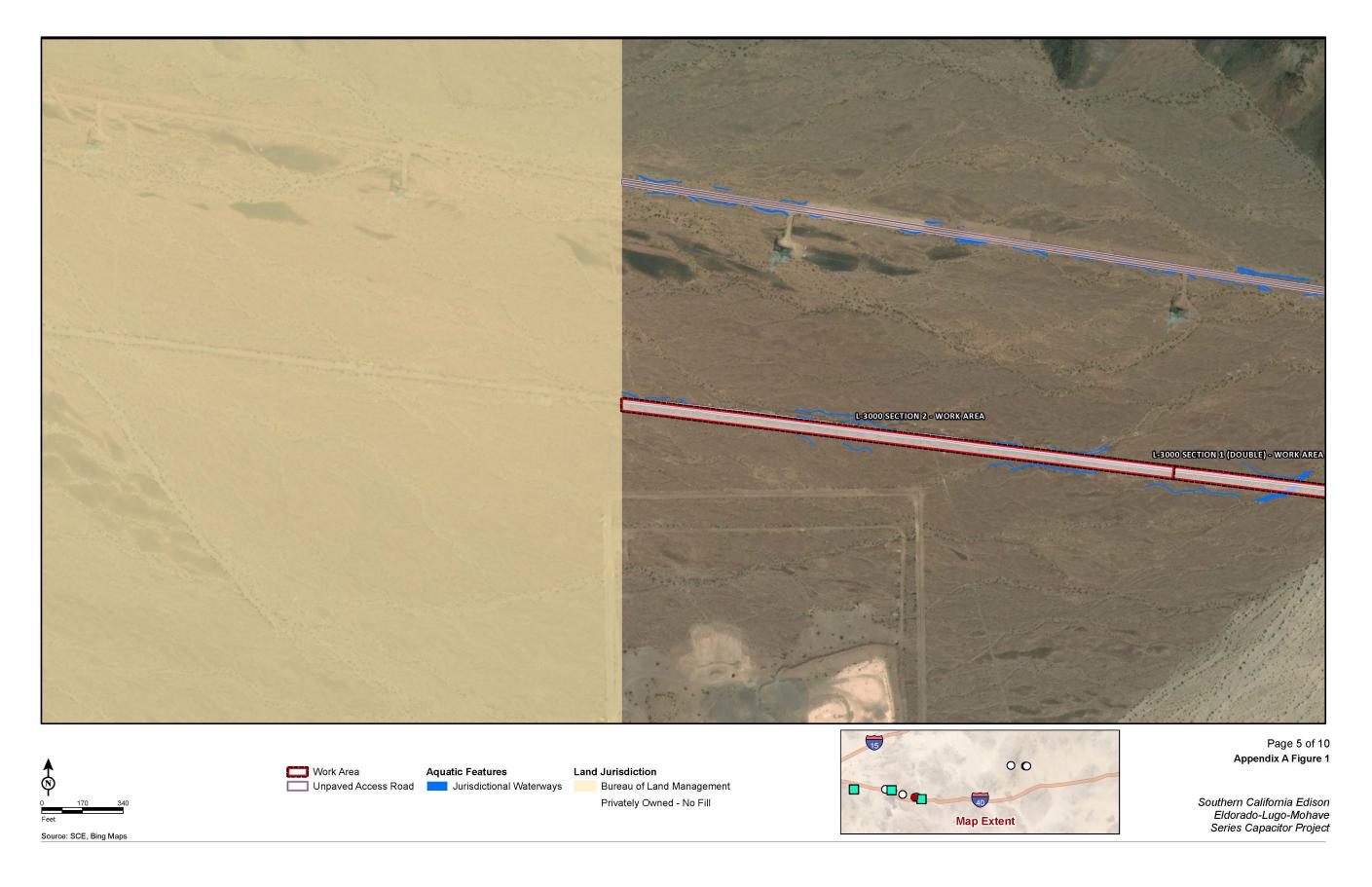
Associated Work Areas, Description of Work	Site Condition	Approxima te Acreage of Disturbanc e Per Work	Vegetation Type (If Vegetated) or Land Use	Disturbance (Previously Disturbed or Undisturbed)	Approxima te Acreage of Disturbanc
	L235 Section 20 (Figure 1, Page	es 2 and 3)			
Copper grounding cable will be installed on both sides of the pipeline with 2 SSD devices approximately 2,400 ft. from each other.	Flat, creosote bush – white bursage scrub, undisturbed.	2.65	Larrea tridentata- Ambrosia dumosa Shrubland	Previously disturbed	2.65
	L235 CTS 4 (Figure 1, Pag	ge 6)	<u> </u>		
Workspace for CTS installation.	Flat with braided washes merging within the work area. Creosote bush - white bursage scrub with scattered catsclaw shrubs throughout the wash bottom.	0.23	Larrea tridentata- Ambrosia dumosa Shrubland	Previously disturbed	0.23
	L235 CTS 6 (Figure 1, Pages 2	2 and 3)		•	
Workspace for CTS installation.	Flat, creosote bush – white bursage scrub, undisturbed.	0.23	Larrea tridentata- Ambrosia dumosa Shrubland	Previously disturbed	0.23
	L235 CTS 7 (Figure 1, Pag	ge 1)			
Workspace for CTS installation.	Flat, creosote bush – white bursage scrub, undisturbed.	0.21	Larrea tridentata- Ambrosia dumosa Shrubland	Previously disturbed	0.21
	L3000 Section 1 (Figure 1, Page	es 5 and 6)			
Copper grounding cable will be installed on both sides of the pipeline with 2 SSD devices approximately 1,600 ft. from each other.	Flat, disturbed Creosote bush - white bursage scrub	2.29	Larrea tridentata- Ambrosia dumosa Shrubland (Disturbed)	Previously Disturbed	2.29
	L3000 Section 2 (Figure 1, Page	es 5 and 6)			
Copper grounding cable will be installed on one side of the pipeline with 2 SSD devices approximately 3,400 ft. from each other.	Flat, disturbed Creosote bush - white bursage scrub	4.01	Larrea tridentata- Ambrosia dumosa Shrubland (Disturbed)	Previously Disturbed	4.01
NOTES: Disturbance is temporary for all locations			,		•

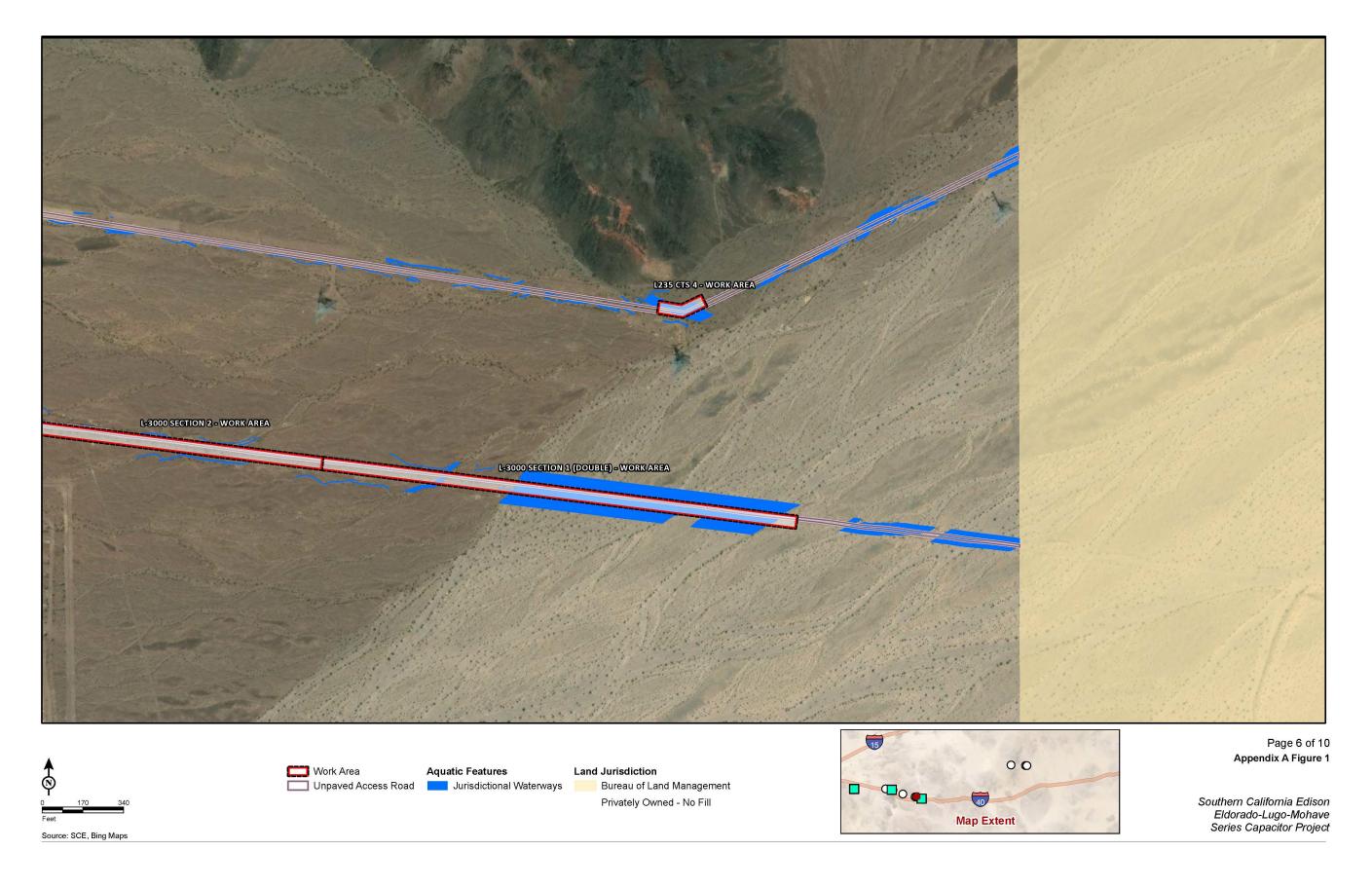




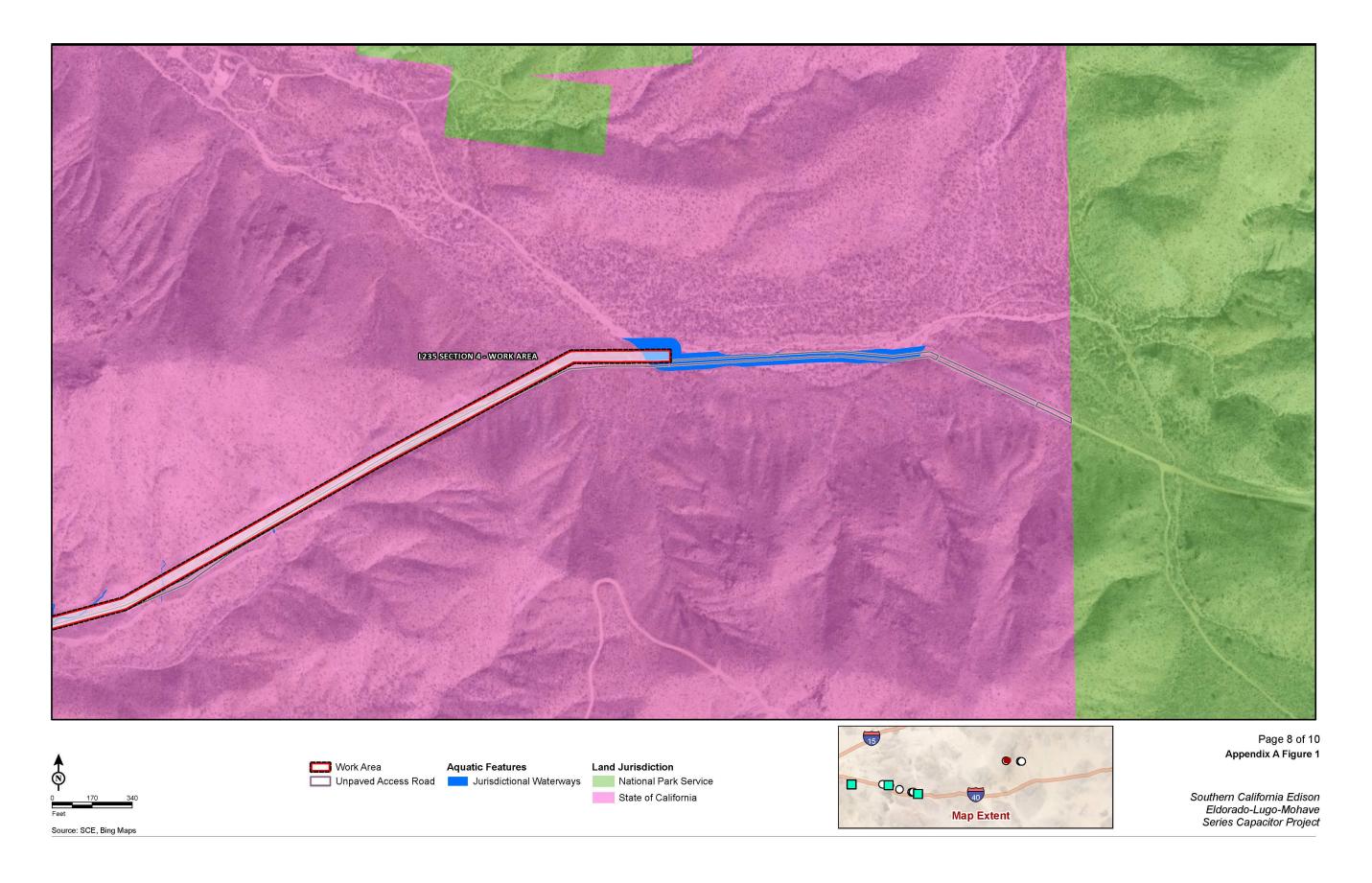
















# **Appendix B: Applicant Proposed Measures** and Mitigation Measures

# B1 Eldorado-Lugo-Mohave Series Capacitor Project Notice to Proceed Request Mitigation Measures

This section describes the pre-construction applicant-Proposed Measures (APM) and Mitigation Measures (MM).

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
Aesthetics			
MM AES-1	Minimize visual contrast in project design. In the final design of approved project structures, SCE shall use design fundamentals that reduce the visual contrast of new facilities with the characteristic landscape. These include surface treatments; siting and location; reduction of visibility; repetition of form, line, color, and texture of the landscape; and reduction of unnecessary disturbance. New and modified transmission structures shall be of a dulled galvanized steel consistent with that of existing structures. SCE shall treat the surfaces of other structures and new buildings visible to the public such that: (a) their colors minimize visual contrast by blending with the characteristic landscape colors; and (b) their colors and finishes do not create excessive glare. The steel used to repair or strengthen structures, new steel structures, and conductors, and OPGW shall have surfaces that are non-specular and non-reflective. Project elements with colored surfaces shall be in hues and tones that do not contrast with the surrounding landscape and are consistent with the palette of natural colors that occur in the area.	SCE to submit PDSTP for review and approval at least 60 days prior to construction.	The PDSTP was approved by the CPUC on 9/10/2020.
	SCE shall provide for review by the CPUC, BLM, and NPS, a draft Project Design and Surface Treatment Plan describing the siting, placement, and other design considerations to be employed to minimize Proposed Project contrast. The draft plan must explain how the design will minimize visual intrusion and contrast by effectively blending earthwork, vegetation manipulation, and facilities with the landscape. The Project Design and Surface Treatment Plan shall describe the colors and textures to be applied to all new facility structures, buildings, walls, fences, and components to be constructed.  The draft Project Design and Surface Treatment Plan shall be submitted at least 60 days prior to the start of construction. If the CPUC notifies SCE that revisions to the plan are needed, SCE shall within 30 days of receiving that notification, prepare and submit for review and approval a revised plan to the CPUC.		

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
MM AES-2	Screen construction activities from view. To reduce significant impacts associated	For exempt project areas,	Screening
	with construction yards, staging areas, and material and equipment storage areas	request to be submitted	requirements are
	shall be visually screened using temporary screening fencing, with the exception of	60 days prior to	listed in the PDSTP.
	construction yards, staging areas, and material and equipment storage areas on	construction at that site.	The PDSTP was
	existing substation properties. Fencing will be of an appropriate structure, material,		approved by the
	and color for each specific location. This requirement shall not apply if SCE can		CPUC on 9/10/2020.
	demonstrate that construction yards are located away from areas of high public		
	visibility including public roads, residential areas, and public recreational facilities or		
	the yards are in areas where high winds pose a risk of the screening detaching and		
	creating a hazard. For any site that SCE proposes to exempt from the screening		
	requirement, SCE shall define the site on a detailed map demonstrating its visibility		
	from nearby roads, residences, or recreational facilities to the agency having		
	jurisdiction over the land (CPUC, BLM, or NPS) for review and approval at least 60		
NANA AEC 2	days prior to the start of construction at that site.	D Alinius in a big or a f	
MM AES-3	Minimize vegetation removal and ground disturbance. Only the minimum amount	Minimization of	CPUC Environmental
	of vegetation necessary for the construction of structures and facilities shall be removed during construction. In particular, vegetation within the ROW and ground	vegetation removal and ground disturbance	Monitor to validate
	clearing at the foot of each tower and between towers shall be limited to the	during construction.	construction area
	clearing actine root of each tower and between towers shall be limited to the	during construction.	staking
	other regulatory requirements. Scars from temporary work areas and access road		
	may be highly visible when located on hill slopes and along ridges, or when visible		
	from elevated vantage points. In order to reduce visual impacts, the boundaries of		
	all areas to be disturbed shall be delineated consistent with the requirements of		
	Biological Resources Mitigation Measure BR-3. Staking, flagging, or other		
	appropriate means shall define construction work areas, such as capacitor site		
	grading areas, staging yards, and pulling sites. Stakes and flagging shall be installed		
	before construction and in consultation with the Project Biologist and the agency's		
	Environmental Monitor or Visual Specialist. Areas staked or flagged shall be as small		
	as possible in order to minimize the visibility of ground disturbance from sensitive		
	viewing locations such as roads, trails, residences, and recreation facilities and areas.		
	Parking areas and staging and disposal site locations shall be similarly located in areas		
	approved by the Project Biologist and the agency's Environmental Monitor or Visual		
	Specialist prior to the start of construction. All disturbances by Proposed Project		
	vehicles and equipment shall be confined to the staked and flagged areas.		
MM AES-4	Minimize night lighting at new project facilities. At the project's new in-line series	CPUC EM to validate that	N1/A
	capacitors and fiber optic repeater facilities, SCE shall avoid night lighting where	light minimization	N/A

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	possible and minimize its use under all circumstances. To ensure this, SCE shall implement the following general principles and specifications:	measures have been incorporated.	
	<ul> <li>When used, portable truck-mounted lighting shall point away from roads and from residences within 1,000 feet.</li> </ul>		
	<ul> <li>White lighting (metal halide &amp; LED) (a) shall only be used when necessitated by specific work tasks; and (b) shall be less than 5000 Kelvin color temperature.</li> </ul>		
	<ul> <li>All lamp locations, orientations, and intensities shall be the minimum needed for safety and security.</li> </ul>		
	<ul> <li>Light fixtures that could be visible from beyond project facility boundaries shall have cutoff angles sufficient to prevent lamps and reflectors from being visible beyond the project facility boundary, including security lighting.</li> </ul>		
	<ul> <li>If security lighting is installed, motion sensors are to be used to activate the security lighting; lights shall operate continuously only when the area is occupied.</li> </ul>		
	<ul> <li>All temporary construction lighting, including at yards, and all permanent exterior lighting shall include: (a) lamps and reflectors that are not visible from beyond the construction site or facility including any off-site security buffer areas; (b) lighting that does not cause excessive reflected glare; and (c) directed lighting that does not illuminate the nighttime sky, except for required FAA aircraft safety lighting, if required.</li> </ul>		
	<ul> <li>Lighted nighttime maintenance is to be minimized or avoided as a routine practice and should occur only during emergencies.</li> </ul>		
Air Quality			
MM AQ-1	Prepare and implement a Dust Control Plan. SCE shall minimize visible fugitive dust emissions by implementing the following dust control measures derived from MDAQMD Rule 403.2. Prior to commencing earth-moving activity, SCE shall prepare and submit to the MDAQMD, Clark County DAQ, CPUC, BLM and NPS a Dust Control Plan that describes all dust control measures that will be implemented for the project, including, but not limited to:	SCE to submit Dust Control Plan to MDAQMD, and CPUC prior to commencing earth-moving activity.	CPUC approved previously-prepared Dust Control Plan on 11/17/2020. A Dust Control Plan pursuant to MDAQMD Rule 403
	<ul> <li>Use periodic watering for short-term stabilization of disturbed surface area to minimize visible fugitive dust emissions. If used, non-water-based or chemical</li> </ul>		will be prepared for

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	soil stabilizers and dust suppressants shall be non-toxic and must not cause loss of vegetation, adverse odors, or additional emissions of ozone precursor reactive organic gases (ROG) or volatile organic compounds (VOC).		work described in this NTPR.
	<ul> <li>Provide stabilized access route(s) to the project site as soon as is feasible and enforce a maximum 15 mile per hour vehicle speed limit on any unpaved surface.</li> </ul>		
	<ul> <li>Stabilize graded site surfaces upon completion of grading when subsequent development is delayed or expected to be delayed more than thirty days, except when such a delay is due to precipitation that dampens the disturbed surface sufficiently to eliminate visible fugitive dust emissions.</li> </ul>		
	<ul> <li>Maintain natural topography to the extent possible.</li> </ul>		
	<ul> <li>Construct parking lots and paved areas first, where feasible.</li> </ul>		
	<ul> <li>Take actions sufficient to prevent project-related trackout or spills onto publicly maintained paved surfaces, and cleanup project-related trackout or spills on publicly maintained paved surfaces within 24 hours.</li> </ul>		
	<ul> <li>Cover loaded haul vehicles or provide adequate freeboard while operating on publicly maintained paved surfaces.</li> </ul>		
	<ul> <li>Reduce non-essential earth-moving activity under high wind conditions, gusts exceeding 25 miles per hour.</li> </ul>		
Biological Resou	ırces		
MM BR-1	Conduct biological monitoring and reporting.  Lead biologist: SCE shall propose one or more lead biologist(s) and submit their resume(s) to the CPUC and BLM for concurrence, no less than 60 days prior to the start of any ground-disturbing activities, including those occurring prior to site mobilization (including, but not limited to geotechnical borings or hazardous waste evaluations). At minimum the lead biologist will hold a bachelor's degree in biological sciences, zoology, botany, ecology, or a closely related field; have at least three years of experience in field biology and at least one year of direct field experience with biological resources found in or near the project area, OR relevant education and experience that demonstrates the ability to carry out the tasks	SCE to submit resumes for lead biologist and biological monitors for concurrence by the CPUC and BLM at least 10 working days prior to the monitor commencing field duties.  SCE shall provide training to biological monitors, in	Biologist resumes have been submitted. Additional monitor resumes will be submitted for approval if required. Monitoring to commence at start of construction.
	education and experience that demonstrates the ability to carry out the tasks required of a lead biologist. The resume(s) shall demonstrate to the satisfaction of	to biological monitors, in addition to WEAP, on bio	construction.

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status	
	the CPUC and BLM the appropriate education and experience to accomplish the assigned biological resources tasks.	resources, mitigation measurement		
	The lead biologist will be SCE's primary point of contact to CPUC, BLM, NPS, CDFW, and USFWS regarding any biological resource issues and implementation of related mitigation measures and permit conditions throughout project construction and post-construction restoration work. In addition, the lead biologist will oversee supervision and training of biological monitors (below) and preparation and submission of all monitoring reports and notifications (below).	requirements, etc., prior to the monitor commencing field duties.  Prior to the start of monitoring activities, SCE shall provide proposed communication protocols and monitoring report formats, describing content and organization, for CPUC and BLM review and approval in consultation with CDFW and USFWS.	commencing field duties.  Prior to the start of monitoring activities, SCE shall provide proposed	
	If the lead biologist is replaced, the specified information of the proposed replacement must be submitted to the CPUC and BLM at least ten working days prior to the termination or release of the preceding lead biologist. In an emergency, SCE shall immediately notify the CPUC and BLM to discuss the qualifications and approval of a short-term replacement while a permanent lead biologist is proposed for consideration.			
	<b>Biological monitors:</b> SCE shall assign qualified biological monitors to the project to monitor all work activities with the potential to impact special status species or their habitat during the construction phase. Work sites or activities considered to have no potential to impact special-status species or habitats will be subject to review and approval by CPUC in coordination with CDFW, USFWS, and BLM.			
	Monitors are responsible for ensuring that impacts to special-status species, native vegetation, wildlife habitat, and sensitive or unique biological resources are avoided or minimized to the fullest extent safely possible. Monitors are also responsible to ensure that work activities are conducted in compliance with the retained APMs, mitigation measures, permit conditions, and other project requirements.			
	Resumes of all biological monitors, including specialty monitors (including but not limited to bat, nesting bird, and special-status species monitors), shall be provided for concurrence by the CPUC and BLM, at least 10 working days prior to the monitor commencing field duties. The resumes shall demonstrate, to the satisfaction of the CPUC and BLM, the appropriate education and experience to accomplish the assigned biological resources tasks.			
	SCE shall provide training to biological monitors, in addition to WEAP (see Mitigation Measure BR-2) and prior to the monitor commencing field duties, on biological resources present or potentially present on the Proposed Project, as well as			

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	mitigation measures, permit requirements, project protocols, and the duties and responsibilities of a biological monitor.		
	Biological monitors shall inform construction crews daily of any environmentally sensitive areas (ESAs), nest buffers, or other resource issues or restrictions that affect the work sites for that day. Biological monitors shall communicate with construction supervisors and crews as needed (e.g., at daily tailgate safety meetings ("tailboards"), by telephone, text message, or email) to provide guidance to maintain compliance with mitigation measures and permit conditions. SCE shall ensure that adequate numbers of monitors are assigned to effectively monitor work activities and that communications from biological monitors are promptly directed to crews at each work site for incorporation into daily work activities. If biological monitors are unavailable for a tailboard meeting, the construction supervisors shall communicate all ESA, nest buffers, or other resource restrictions to crews during the meeting. SCE shall ensure that biological monitors are provided with an accurate daily construction work schedule as well as updated information on any alterations to the daily construction work schedule. This information shall also be provided to CPUC/BLM monitors. SCE shall ensure that biological monitors are provided with upto-date biological resource maps and construction maps in hardcopy or digital format. These maps shall also be provided to CPUC/BLM monitors.		
	Monitors shall be familiar with the biological resources present or potentially present, ESAs, nest buffers, and any other resource issues at the site(s) they are monitoring, as well as the applicable mitigation measures and permit requirements. Monitors shall exhibit diligence in their monitoring duties and refrain from any conduct or potential conflict of interest that may compromise their ability to effectively carry out their monitoring duties.		
	Biological monitor duties and responsibilities: Throughout the duration of construction, SCE shall conduct biological monitoring and have biological monitors on site at all times when project activities are occurring in any area where there is a potential to impact sensitive biological resources or jurisdictional waters, including but not limited to vegetation removal/trimming/disturbance, all ground-disturbing work activities, and initial "drive and crush" in the project area, including work sites, yards, staging areas, access roads, and any area subject to project disturbance. Preconstruction activities (e.g., for geotechnical borings, hazardous waste evaluations,		

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	etc.) and post-construction restoration shall also be monitored by a biological monitor during all such activities.		
	Each day, prior to work activities at each site requiring monitoring, a biological monitor shall conduct clearance surveys ("sweeps") for sensitive plant or wildlife resources that may be located within or adjacent to the construction areas. If sensitive resources are found, the biological monitor shall take appropriate action as defined in all adopted mitigation measures, retained APMs, and permit conditions. Work activities shall not commence at any work site until the clearance survey has been completed and the biological monitor communicates to the contractor that work may begin.		
	Biological monitors shall clearly mark sensitive biological resource areas with staking, flagging, or other appropriate materials that are readily visible and durable. The monitors will inform work crews of these areas and the requirements for avoidance and will inspect these areas at appropriate intervals for compliance with regulatory terms and conditions. The biological monitors shall ensure that work activities are contained within approved disturbance area boundaries at all times.		
	Biological monitors shall have the authority and responsibility to halt any project activities that are not in compliance with applicable mitigation measures, retained APMs, permit conditions, or other project requirements, or will have an unauthorized adverse effect on biological resources.		
	Handling, relocation, release from entrapment, or other interaction with wildlife shall be performed consistent with mitigation measures, safety protocols, permits (including CDFW and USFWS permits), and other project requirements.		
	Biological monitors shall, to the extent safe, practicable, and consistent with mitigation measures and permit conditions, actively or passively relocate wildlife out of harm's way.		
	On a daily basis, biological monitors shall inspect construction areas where animals may have become trapped, including equipment covered with bird exclusion netting, and release any trapped animals. Daily inspections shall also include areas with high vehicle activity (e.g., yards, staging areas), to locate animals in harm's way and relocate them if necessary. If safety or other considerations prevent biological monitors from aiding trapped wildlife or wildlife in harm's way, SCE shall consult with the construction contractor, CDFW, wildlife rehabilitator, or other appropriate		

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	party to obtain aid for the animal, consistent with Mitigation Measure BR-7 (Ensure wildlife impact avoidance and minimization).		
	At the end of each work day, biological monitors shall verify that excavations, open tanks, and trenches have been covered or have ramps installed to prevent wildlife entrapment and communicate with work crews to ensure these structures are installed and functioning properly.		
	Biological monitors shall regularly inspect any wildlife exclusion fencing daily to ensure that it remains intact and functional. Any need for repairs to exclusion fencing shall be immediately communicated to the responsible party, and repairs shall be carried out in a timely manner, generally within one work day.		
	<b>Reporting:</b> SCE shall prepare and implement a procedure for communication among biological monitors and construction crews, to ensure timely notification (i.e., daily or sooner, as needed) to crews of any resource issues or restrictions. SCE will notify the CPUC and BLM of the procedure and will maintain records of daily communication. SCE will provide CPUC and BLM on-line access to project resource management maps and GIS data.		
	Prior to the start of monitoring activities, SCE shall provide proposed monitoring report formats, describing content and organization, for CPUC and BLM review and approval in consultation with CDFW and USFWS.		
MM BR-2	Prepare and implement a Worker Environmental Awareness Program (WEAP). SCE shall prepare and implement a project-specific Worker Environmental Awareness Program (WEAP) to educate on-site workers about the Proposed Project's sensitive environmental issues. The WEAP shall be presented by the lead biologist or a biological monitor to all personnel on-site during the construction phase, including but not limited to surveyors, engineers, inspectors, contractors, subcontractors, supervisors, employees, monitors, visitors, and delivery drivers. If the WEAP presentation is recorded on video, it may be presented by any competent project personnel.	At least 60 days prior to the start of ground-disturbing activities, SCE shall submit the WEAP presentation and associated materials to the CPUC and BLM for review and approval in consultation with the	Approved 9/10/2020
	The WEAP shall consist of a training presentation, with supporting written materials provided to all participants. At least 60 days prior to the start of ground-disturbing activities, SCE shall submit the WEAP presentation and associated materials to the CPUC and BLM for review and approval in consultation with the USFWS and CDFW.	USFWS and CDFW.  Conduct WEAP training for crews prior to the start of construction.	

The WEAP training shall include, at minimum:

- Overview of the project, the jurisdictions the project route passes through (e.g., San Bernardino County, CA; Clark County, Nevada; CSLC; BLM; NPS; BOR; DOD) and any special requirements of those jurisdictions.
- Overview of the federal and state Endangered Species Acts, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, and the consequences of noncompliance with these acts.
- Overview of the project mitigation and biological permit requirements, and the consequences of non-compliance with these requirements.
- Sensitive biological resources on the project site and adjacent areas, including
  nesting birds, special-status plants and wildlife and sensitive habitats known or
  likely to occur on the project site, project requirements for protecting these
  resources, and the consequences of non-compliance.
- Construction restrictions such as limited operating periods, Environmentally Sensitive Areas (ESAs), and buffers and associated restrictions, and other restrictions such as no grading areas, flagging or signage designations, and consequences of non-compliance.
- Avoidance of invasive weed introductions onto the project site and surrounding areas, and description of the project's weed control plan and associated compliance requirements for workers on the site.
- Function, responsibilities, and authority of biological and environmental monitors and how they interact with construction crews.
- Requirement to remain within authorized work areas and on approved roads, with examples of the flagging and signage used to designate these areas and roads, and the consequences of non-compliance.
- Procedure for obtaining clearance from a biological monitor to enter a work site and begin work (including moving equipment), and the requirement to wait for that clearance.
- One-hour hold (or other method SCE will use to halt work when necessary to maintain compliance) and the requirement for compliance.

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	<ul> <li>Nest buffers and associated restrictions and the consequences of non- compliance. Procedure and time frame for halting work and removing equipment when a new buffer is established. Discussion of nest deterrents.</li> </ul>		
	<ul> <li>Explanation that wildlife must not be harmed or harassed. Procedures for covering pipes, securing excavations, and installing ramps to prevent wildlife entrapment. What to do and who to contact if dead, injured, or entrapped animals are encountered.</li> </ul>		
	<ul> <li>General safety protocols such as hazardous substance spill prevention, containment, and cleanup measures; fire prevention and protection measures; designated smoking areas (if any) and cigarette disposal; safety hazards that may be caused by plants and animals; and procedure for dealing with rattlesnakes in or near work areas or access roads.</li> </ul>		
	<ul> <li>Project requirements that have resulted in repeated compliance issues on other recent transmission line projects, such as dust control, speed limits, track out (dirt or mud tracked from access roads or work sites onto paved public roads or other areas), personal protective equipment (PPE), work hours, working prior to clearance, and waste containment and disposal.</li> </ul>		
	<ul> <li>Printed training materials, including photographs and brief descriptions of all special-status plants and animals that may be encountered on the project, including behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements, and protection measures.</li> </ul>		
	<ul> <li>Contact information for SCE, construction management, and contractor environmental personnel, and who to contact with questions.</li> </ul>		
	<ul> <li>Training acknowledgment form to be signed by each worker indicating that they understand and will abide by the guidelines, and a hardhat sticker so WEAP attendance may be easily verified in the field.</li> </ul>		
MM BR-3	Minimize native vegetation and habitat loss. Final engineering of the project shall minimize the extent of disturbance and removal of native vegetation and habitat, to the extent safely possible. Work activities and roadways will avoid or minimize direct or indirect effects to sensitive habitat types or jurisdictional waters and	Prior to any ground- disturbing activities, SCE shall provide CPUC and BLM with final engineering GIS shapefiles depicting all	Final engineering GIS shapefiles will be submitted to the CPUC for approval on prior to construction.

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	provide buffer areas to minimize disturbance. Project access will utilize existing routes or bridges over jurisdictional waters wherever possible.	temporary and permanent disturbance	
	Consistent with project safety and security protocols, landowner preferences, and any other applicable regulations or requirements, existing gates on project access roads will be closed and secured when project personnel enter or leave an area.	areas, as well as summary data on temporary and permanent disturbance	
	Prior to beginning any ground-disturbing activities, SCE shall provide CPUC and BLM with final engineering GIS shapefiles depicting all temporary and permanent disturbance areas, as well as summary data on temporary and permanent disturbance for each vegetation or habitat type.	for each vegetation or habitat type. CPUC EM to verify site staking.	
	On completion of project construction, SCE shall provide CPUC and BLM with GIS shapefiles of all actual temporary and permanent disturbance areas, and summary data of all discrepancies between final engineering and "as-built" conditions for each vegetation or habitat type.		
	To the extent feasible and safe, vegetation removal within work areas will be minimized and construction activities will implement drive and crush access and site preparation rather than grading. Stockpiling of spoils and salvaged topsoil will be located in previously disturbed areas and/or will avoid native habitat areas.		
	Prior to any construction, equipment or crew mobilization at each work site, work areas will be marked with staking or flagging to identify the limits of work and will be verified by project environmental staff and CPUC Environmental Monitor. Staking and flagging will clearly indicate the work area boundaries. Where staking cannot be used, traffic cones, traffic delineators, or other markers shall be used. Staking and flagging or other markers shall be in place during construction activities at each work site and refreshed as needed. Coded flagging colors or color combinations will be consistent and uniform across the project. All work activities, vehicles, and equipment will be confined to approved roads and staked and flagged or marked work areas.		
MM BR-4 [Supersedes	<b>Restore or revegetate temporary disturbance areas.</b> SCE will implement a restoration or revegetation plan for all temporarily disturbed sites. Given that temporary	Prior to construction, SCE shall submit HRRP for	Approved 3/19/2021
APM BIO-01]	impacts to desert tortoise habitat is considered a permanent impact in this MND	review and approval.	
	and under BLM's Programmatic Biological Opinion (BO) provides federal take authorization for the Project, SCE will mitigate for all desert tortoise habitat impacts as permanent impacts through compensatory mitigation. These temporarily	SCE shall provide compensatory mitigation for desert tortoise.	

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	disturbed sites will be subject to revegetation (i.e., re-establishment of vegetation to minimize long-term erosion, dust, and weed infestation) but habitat restoration will not be required. SCE will be required to implement habitat restoration at temporarily disturbed sites not mitigated through off-site compensation. SCE will provide a Habitat Restoration and Revegetation Plan (HRRP) to cover all temporarily disturbed sites, identifying sites to be subject to revegetation alone and those to be restored. The HRRP will describe, at a minimum, which revegetation or restoration method (e.g., natural revegetation, planting, or reseeding with native seed stock in compliance with the Proposed Project's SWPPPs) will be implemented at each temporarily disturbed site. It will include the plant species or habitats to be restored or revegetated, the restoration or revegetation methods and techniques, and the monitoring periods and success criteria.		
	All temporarily disturbed areas will be subject to revegetation and site management activities and success criteria of the Proposed Project's SWPPP/Erosion Control Plan (HWQ-1) and the Integrated Weed Management Plan (BR-5) to ensure soil stabilization, vegetation cover, and weed prevention. In addition to those requirements, for any temporarily disturbed area not subject to compensatory mitigation (BR-8), the HRRP shall include:		
	<ul> <li>Restoration goals and objectives for each portion of the project area, based on vegetation type and jurisdictional status of each site.</li> </ul>		
	Quantitative success criteria for each restoration site, area, or category.		
	<ul> <li>Implementation details, including but not limited to topsoil stockpiling and handling; post-construction site preparation; soil decompaction and recontouring; planting and seeding palettes to include only native, locally sourced materials with confirmed availability from suppliers; fall or other suitable season planting or seeding dates (seeding outside the fall season may increase the risk of revegetation failure and need for subsequent remedial reseeding, irrigation, or other measures).</li> </ul>		
	Maintenance details, including but not limited to irrigation or hand-watering schedule and equipment, erosion control, and weed control measures.		
	Monitoring and Reporting, specifying monitoring schedule and data collection methods throughout establishment of vegetation with key indicators of		

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	successful or unsuccessful progress, and quantitative criteria to objectively determine success or failure at the conclusion of the monitoring period.		
	<ul> <li>Contingency measures such as reseeding, replanting, drainage repairs, adjustments to irrigation or weeding schedule, and extension of maintenance beyond the original schedule, to repair or remediate sites not on track to meet success criteria, or not meeting the criteria at the close of the originally scheduled monitoring period.</li> </ul>		
	<ul> <li>A Gantt Chart or similar exhibit identifying all components of the HRRP, including acquisition of plant materials, specifying site preparation and seeding or planting dates, identifying entity to perform each task (e.g., EPC contractor or restoration contractor) and indicating critical path activities.</li> </ul>		
	The Draft HRRP shall be submitted to CPUC and BLM review and approval prior to the beginning of ground-disturbing activities. SCE shall incorporate all requested revisions in coordination with the CPUC and BLM and finalize the HRRP within 12 months from the start of construction.		
	For all restoration areas, if a fire, flood, or other disturbance beyond the control of SCE, CPUC, and BLM damages the area within the monitoring period, SCE shall be responsible for a one-time replacement. If a second event occurs, no replacement is required.		
	For all revegetation (per SWPPP requirements) or restoration sites (per the HRRP), only seed or potted nursery stock of locally occurring native species will be used. Seeding and planting will be informed by Chapter 5 of <i>Rehabilitation of Disturbed Lands in California</i> (Newton and Claassen, 2003). The list of plants observed during botanical surveys of the project area will be used as a guide to site-specific plant selection.		
	Monitoring of the restoration sites will continue annually for up to 5 years or until the defined success criteria in the HRRP are achieved. SCE will be responsible for implementing remediation measures as needed. Following remediation work, each site will still be subject to the success criteria required for the initial restoration. The monitoring period for remediation work will be concurrent with the monitoring period required for the initial restoration.		

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	Reporting. For all restoration areas, SCE will provide annual reports to the CPUC and BLM verifying the total vegetation acreage subject to temporary and permanent disturbance, identifying which items of the HRRP have been completed, and which items are still outstanding. The annual reports will also include a summary of the restoration activities for the year, a discussion of whether success criteria were met, any remedial actions conducted and recommendations for remedial action, if warranted, that are planned for the upcoming year. Each annual report will be submitted within 90 days after completion of each year of restoration work.		
MM BR-5 [Supersedes APM BIO-03]	Prepare and Implement an Integrated Weed Management Plan. SCE shall prepare and implement an Integrated Weed Management Plan (IWMP) describing the proposed methods of preventing or controlling project-related spread or introduction of weeds. The IWMP also must meet BLM's requirements for NEPA disclosure and analysis if herbicide use is proposed for the project. A Draft IWMP shall be submitted to the CPUC and BLM for review and approval at least 60 days prior to SCE's application for Notice to Proceed, and no pre-construction activities (e.g., for geotechnical borings, hazardous waste evaluations, etc.), construction, equipment or crew mobilization, or project-related ground-disturbing activity shall proceed until the IWMP is approved.	At least 60 days prior to requesting an NTP, SCE shall submit IWMP for review and approval, and conduct preconstruction weed inventory and treatment.	Approved 3/16/2021
	For the purpose of the IWMP, "weeds" shall include designated noxious weeds, as well as any other non-native weeds or pest plants identified on the weed lists of the California Department of Food and Agriculture, the California Invasive Plant Council, or identified by BLM as special concern. The IWMP will include the contents listed below. The IWMP will be implemented throughout project pre-construction, construction, and post-construction revegetation phases, including throughout implementation of the HRRP (Mitigation Measure BR-4). The IWMP will include the information defined in the following paragraphs.		
	<b>Background.</b> An assessment of the Proposed Project's potential to cause spread of invasive non-native weeds into new areas, or to introduce new non-native invasive weeds into the ROW. This section must list known and potential non-native and invasive weeds occurring on the ROW and in the project region and identify threat rankings and potential consequences of project-related occurrence or spread for each species. This section must also identify control goals for each species (e.g., eradication, suppression, or containment) likely to be found within the Proposed Project area.		

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	Pre-construction weed inventory. SCE shall inventory weeds in all areas (both within and outside the ROW) subject to project-related vegetation removal/disturbance, "drive and crush," and ground-disturbing activity. The weed inventory shall also include vehicle and equipment access routes within the ROW and all project staging and storage yards. Weed occurrences shall be mapped and described according to density and area covered.		
	Pre-construction weed treatment. Weed infestations identified in the pre-construction weed inventory shall be evaluated to identify potential for project-related spread and potential benefits (if any) of pre-construction treatment, considering the specific weeds, potential seed banks, or other issues. The IWMP will identify any infestations to be controlled or eradicated prior to project construction, or other site-specific weed management requirements (e.g., avoidance of soil or transport and site-specific vehicle washing where threat or spread potential is high). Control and follow-up monitoring of pre-construction weed treatment sites will follow methods identified in appropriate sections of the IWMP.		
	Prevention. The IWMP shall specify methods to minimize potential transport of new weed seeds onto the ROW, or from one section of the ROW to another. The ROW may be divided into "weed zones," based on known or likely invasive weeds in any portion of the ROW. The IWMP will specify inspection procedures for construction materials and equipment entering the Proposed Project area. Vehicles and equipment may be inspected and cleaned at entry points to specified portions of the ROW, and before leaving work sites where weed occurrences must be contained locally. Construction equipment shall be cleaned of dirt and mud that could contain weed seeds, roots, or rhizomes. Equipment shall be inspected to ensure it is free of any dirt or mud that could contain weed seeds, and the tracks, outriggers, 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. Tools such as chainsaws, hand clippers, pruners, etc., shall be cleaned of dirt and mud before entering project work areas.		
	All vehicles shall be washed off-site when possible. If off-site washing is infeasible, on-site cleaning stations will be set up at specified locations to clean equipment before it enters the work area. Wash stations will be located away from native		

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	habitat or special-status species occurrences. Wastewater from cleaning stations will not be allowed to run off the cleaning station site. When vehicles and equipment are washed, a daily log must be kept stating the location, date and time, types of equipment, methods used, and personnel present. The log shall contain the signature of the responsible crewmember. Written or electronic logs shall be available to BLM and CPUC monitors on request.		
	Erosion control materials (e.g., hay bales) must be certified free of weed seed before they are brought onto the site. The IWMP must prohibit on-site storage or disposal of mulch or green waste that may contain weed material. Mulch or green waste will be removed from the site in a covered vehicle to prevent seed dispersal and transported to a licensed landfill or composting facility.		
	The IWMP must specify guidelines for any soil, gravel, mulch, or fill material to be imported into the Proposed Project area, transported from site to site within the Proposed Project area, or transported from the Proposed Project area to an off-site location, to prevent the introduction or spread of weeds to or from the Proposed Project area.		
	Monitoring. The IWMP shall specify methods to survey for weeds during preconstruction, construction, and restoration phases; and shall specify qualifications of botanists responsible for weed monitoring and identification. It must include a monitoring schedule to ensure timely detection and immediate control of new weed infestations to prevent further spread. Surveying and monitoring for weed infestations shall occur at least two times per year through the close of the restoration phase, to coincide with the early detection period for early season and late season weeds (i.e., species germinating in winter and flowering in late winter or spring, and species germinating later in the season and flowering in summer or fall). It also must include methods for marking invasive weeds on the ROW and recording and communicating these locations to weed control staff. The map of weed locations (discussed above) shall be updated at least once a year. The monitoring section shall also describe methods for post-eradication monitoring to evaluate success of control efforts and any need for follow-up control.		
	Control. The IWMP must specify manual and chemical weed control methods to be employed. The IWMP shall include only weed control measures with a demonstrated record of success for target weeds, based on the best available information. The plan shall describe proposed methods for promptly scheduling and		

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	implementing control activity when any project-related weed infestation is located (e.g., located on a project disturbance site), to ensure effective and timely weed control. Weed infestations must be controlled or eradicated upon discovery, and before they go to seed, to the extent feasible with the goal to prevent further spread. All proposed weed control methods must minimize the extent of any disturbance to native vegetation, limit ingress and egress to defined routes, and avoid damage from herbicide use or other control methods to any environmentally sensitive areas identified within or adjacent to the ROW.		
	New weed infestations shall be treated at a minimum of once annually until eradication, suppression, or containment goals are met. For eradication, when no new occurrences are observed for three consecutive years, the weed occurrence can be considered eradicated and weed control efforts may cease for the site.		
	Manual control shall specify well-timed removal of weeds or their seed heads with hand tools; seed heads and plants must be disposed of in accordance with guidelines from the San Bernardino County Agricultural Commissioner and Nevada Department of Agriculture, if such guidelines are available.		
	The chemical control section must include specific and detailed plans for any herbicide use. It must indicate where herbicides will be used, which herbicides will be used, and specify techniques to be used to avoid drift or residual toxicity to wildlife and native vegetation or special-status plants, consistent with BLM's <i>Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States</i> (BLM, 2007) and <i>National Invasive Species Management Plan</i> (NISC, 2008). Only state and BLM-approved herbicides may be used. Herbicide treatment will be implemented by a Licensed Qualified Applicator. Herbicides shall not be applied during or within 24 hours of predicted rain. Only water-safe herbicides shall be used in riparian areas or within channels (engineered or not) where they could run off into downstream areas. Herbicides shall not be applied when wind velocities exceed six (6) mph. All herbicide applications will follow U.S. Environmental Protection Agency label instructions and will be in accordance with federal, state, and local laws and regulations.		
	<b>Reporting schedule and contents.</b> The IWMP shall specify the reporting schedule and contents of each report.		

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MM BR-6 [Supersedes APM BIO-02]	Minimize and mitigate impacts to special-status plants.  Pre-construction survey. SCE shall conduct focused pre-construction surveys for federal- and state-listed and other special-status plants within suitable habitat. All special-status plant species (including listed threatened or endangered species, and CNPS California Rare Plant Rank (CRPR) 1 and 2 ranked species likely to be impacted by project activities shall be documented in pre-construction survey reports. Surveys shall be conducted by a qualified botanist during the appropriate season in all suitable habitat within 50 feet of disturbance areas. The field surveys and reporting must conform to current CDFW botanical field survey protocol (CDFG 2018). Where any special-status plants may be discovered, the survey area will extend beyond the ROW to determine the extent of the local occurrence, to evaluate the significance of any project impacts. The reports will describe any conditions that may have prevented target species from being located or identified, even if they are present as dormant seed or below-ground rootstock. If pre-construction survey areas conducted in years of poor rainfall or following other extreme events (e.g., recent intense overgrazing or wildfire), then the project shall use data from 2016/2017 and 2019 surveys to define population area and maximum number of individuals (Note, the unusually high rainfall in 2017 and 2019 are likely to better define rare plant locations and have more accurate results than subsequent years with lower rainfall). For species not previously detected on surveys but for which have a high potential to occur, reference populations will be used to determine if the species is detectable for pre-construction surveys conducted in suitable habitat. Prior to initial ground disturbance at individual construction work areas, SCE shall submit pre-construction field survey reports along with maps showing locations of survey areas and special-status plants to the CPUC and BLM for review and approval in coordination wi	SCE shall conduct focused preconstruction surveys for federal- and state-listed and other special-status plants within suitable habitat prior to construction at individual work sites and submit reports to CPUC and BLM for review and approval.  SCE shall prepare a CYSP.  SCE shall prepare Mitigation Plan for impacts to any state or federally listed plants or CRPR 1.	SSPSRP approved on 1/27/2021.  CYSRP was approved on 12/11/2020  Preconstruction surveys for federaland state-listed and other special status plant species were conducted in Fall 2024 and Spring 2025. Survey reports will be submitted August 2025.

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	determining whether an individual plant is appropriate for salvage; (c) the appropriate season for salvage; (d) equipment and methods for collection, transport, and re-planting plants or seed banks, to retain intact soil conditions and maximize success; (e) a requirement to mark each plant to identify the north-facing side prior to transport, and replant it in the same orientation; (f) details regarding storage of plants or seed banks for each species; (g) location of the proposed recipient site, and detailed site preparation and plant introduction techniques for top soil storage, as applicable; (h) a description of the irrigation, weed control, and other maintenance activities; (i) success criteria, including specific timeframe for survivorship and reproduction of each species; and (j) a detailed monitoring program, commensurate with the Plan's goals.		
	<b>Mitigation.</b> SCE shall mitigate impacts to any state or federally listed plants or CRPR 1 or Nevada ranked S1, S2, or S3 species that may be located on the project disturbance areas or surrounding buffer areas through one or a combination of the following strategies. Additionally, impacts to CRPR 2 ranked plants occurring in California will be similarly mitigated.		
	Avoidance of special-status plants will be the preferred strategy wherever feasible. Where avoidance is not feasible, and the project would directly or indirectly affect more than 10 percent of a local occurrence, by either number of plants (shrubs and trees) or extent of occupied habitat (annuals or perennial herbs), SCE shall prepare and implement a mitigation plan to consist of off-site compensation, salvage, horticultural propagation / off-site introduction, or a combination of these.		
	• Avoidance. Work areas shall be located to avoid or minimize impacts to special-status plants to the greatest extent possible. Effective avoidance through project design shall include a buffer area surrounding each avoided occurrence, where no project activities will take place. The buffer area will be clearly staked, flagged, and signed for avoidance prior to the beginning of ground-disturbing activities, and maintained throughout the construction phase. At minimum, the buffer for shrub species shall be equal to twice the drip line (i.e., two times the distance from the trunk to the canopy edge) to protect and preserve the root systems. The buffer for herbaceous species shall be a minimum of 50 feet from the perimeter of the occupied habitat or the individual(s). However, for		

<sup>&</sup>lt;sup>2</sup>An occurrence for a plant is defined as any population or group of nearby populations located more than 0.25 miles from any other population (CDFW, 2009).

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	locations in the mountains, a larger buffer may need to be applied to shrub and herbaceous species if the construction monitors determine there is a risk of indirect effects from erosion or inundation. If a smaller buffer is necessary due to other project constraints, SCE will develop and implement site-specific monitoring and put other measures in place to avoid the take of the species, with the approval of the CPUC and BLM, in coordination with CDFW.		
	• Off-site compensation. SCE shall provide compensation lands consisting of habitat occupied by the impacted CRPR 1 or 2 ranked plant populations at a 1:1 ratio of acreage and number of plants for any occupied habitat directly impacted (whether temporary or permanent) by the project. Occupied habitat will be calculated on the project site and on the compensation lands as including each special-status plant occurrence and a surrounding 50-foot buffer area. If compensation is selected as a means of mitigating special-status plant impacts, it may be accomplished by purchasing credit in an established mitigation bank, acquiring conservation easements, or direct purchase and preservation of compensation lands. Compensation for these impacts may be "nested" or "layered" with compensation for habitat loss described in Mitigation Measure BR-8.		
	• Salvage. SCE shall consult with a qualified restoration ecologist or horticulturist regarding the feasibility and likely success of salvage efforts for each species. If salvage is deemed to be feasible, based on prior success with similar species, then SCE shall prepare and implement a Special-status Plant Salvage and Relocation Plan, to be reviewed and approved by the CPUC and BLM, in consultation with CDFW and USFWS, prior to direct or indirect disturbance of any occupied habitat. For special-status plants, excluding cacti and Yuccas (see above), the goal shall be to improve existing populations or establish new populations. For cacti and yuccas, the goal shall be maximum practicable survivorship of salvaged plants. The Plan will include at minimum: (a) species and locations of plants identified for salvage; (b) criteria for determining whether an individual plant is appropriate for salvage; (c) the appropriate season for salvage; (d) equipment and methods for collection, transport, and re-planting plants or seed banks, to retain intact soil conditions and maximize success; (e) for shrubs, cacti, and yucca, a requirement to mark each plant to identify the porth-facing side prior to transport, and replant it in the same		
	season for salvage; (d) equipment and methods for collection, transport, and re-planting plants or seed banks, to retain intact soil conditions and maximize		

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	(g) location of the proposed recipient site, and detailed site preparation and plant introduction techniques for top soil storage, as applicable; (h) a description of the irrigation, weed control, and other maintenance activities; (i) success criteria, including specific timeframe for survivorship and reproduction of each species; and (j) a detailed monitoring program, commensurate with the Plan's goals.		
	<ul> <li>Annual monitoring reports shall be submitted to CPUC and BLM for five years or until the relocation effort is deemed successful on agreement of SCE and the CPUC. Reports shall include, but not be limited to, details of plants salvaged, stored, and transplanted (salvage and transplanting locations, species, number, size, condition, etc.); adaptive management efforts implemented (date, location, type of treatment, results, etc.); and evaluation of success of transplantation.</li> </ul>		
	<ul> <li>Horticultural propagation and off-site introduction. If salvage and relocation is not believed feasible for special-status plants, then SCE shall consult with a qualified entity to develop an appropriate experimental propagation and relocation strategy, based on the life history of the species affected. The Plan will include at minimum: (a) collection and salvage measures for plant materials (e.g., cuttings), seed, or seed banks, to maximize success likelihood; (b) details regarding storage of plant, plant materials, or seed banks; (c) location of the proposed propagation facility, and proposed methods; (d); time of year that the salvage and other practices will occur; (e) success criteria; and (f) a detailed monitoring program, commensurate with the Plan's goals.</li> </ul>		
MM BR-8 [Supersedes APM BIO-05]	Compensate for desert tortoise habitat loss. SCE shall compensate for all desert tortoise habitat loss through off-site habitat acquisition and management, or through participation in an approved in-lieu fee compensatory mitigation bank, or other agency approved mitigation strategies. This mitigation measure will be applicable to all temporary and permanent project disturbance to natural habitat types, (i.e., all vegetation types identified in Table 5.4-2, excluding active agriculture, barren, and developed lands). This compensatory mitigation for desert tortoise will also mitigate for habitat impacts to other native wildlife species.  Habitat compensation shall be accomplished by acquisition of mitigation land or conservation easements or by providing funding for specific land acquisition, endowment, restoration, and management actions. SCE shall prepare a Habitat Compensation Plan to be reviewed and approved by the CPUC-and, BLM, in coordination with the USFWS and CDFW.	Prior to construction, SCE shall prepare a Habitat Compensation Plan to be reviewed and approved by the CPUC and BLM, in coordination with the USFWS and CDFW.  If the compensation land is held by a private entity, SCE or approved third party shall prepare a management plan for review and approval by	The Habitat Compensation Plan was approved on 3/30/2021

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	SCE shall acquire and protect, in perpetuity, compensation habitat to mitigate impacts to biological resources as detailed below. SCE shall be responsible for the acquisition, initial protection and or habitat improvement. SCE may convey title of the compensation lands to a public agency such as BLM, NPS, or CDFW or the lands may be held by a private conservation entity. If the land is conveyed to BLM, it shall be within a land use designation such as Area of Environmental Concern, wilderness, or similar designation consistent with long-term management for biological resource values and excluding incompatible land uses (e.g., energy development). If it is conveyed to CDFW, or retained under private ownership, it shall be covered by a conservation easement or other terms acceptable to CDFW. If there is any conflict between the requirements of this mitigation measure and requirements of any resource agency permit (e.g., USFWS Biological Opinion or CDFW Incidental Take Permit), the more stringent requirement shall apply.	the CPUC and BLM, in consultation with CDFW and USFWS.  If the land is conveyed to a public agency, SCE will coordinate with the agency as needed to identify management planning needs (if any).	
	The acreages of compensation land shall be based upon final engineering calculation of impacted acreage for each resource and on ratios set forth in this measure, or a USFWS Biological Opinion, a CDFW Streambed Alteration Agreement, a CDFW Incidental Take Permit, or the Consistency Determination, whichever presents a higher ratio. Acreages will be adjusted as appropriate for other alternatives or future modifications during implementation.		
	Compensation shall be provided for impacts to the following resources, at the ratios specified below (acres acquired and preserved to acres impacted). These ratios reflect multiple biological resource values, including habitat suitability for special-status species.		
	<ul> <li>Previously disturbed lands (agriculture, developed/disturbed) and open water:</li> <li>n/a (no habitat compensation required)</li> </ul>		
	<ul> <li>Undisturbed land, including suitable desert tortoise habitat outside designated critical habitat: 1:1</li> </ul>		
	Suitable desert tortoise habitat within designated critical habitat: 5:1		
	The Habitat Compensation Plan must specify compensation acreage for each habitat type, based on final engineering. Final compensation requirements may be adjusted to account for any deviations in project disturbance, according to the as-built shapefiles aerial imagery.		

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	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:		
	<ul> <li>Compensation lands will provide habitat value that is equal to or better than the quality and function of the habitat impacted by the project, taking into consideration soils, vegetation, topography, human-related disturbance, wildlife movement opportunity, proximity to other protected lands, management feasibility, and other habitat values, subject to review and approval by CPUC and BLM;</li> </ul>		
	<ul> <li>Potential compensation sites where creosote rings are found will be prioritized where feasible, and where consistent with the other selection criteria;</li> </ul>		
	<ul> <li>To the extent that proposed compensation habitat may have been degraded by previous uses or activities, the site quality and nature of degradation must support the expectation that it will regenerate naturally when disturbances are removed and SCE will receive appropriate ratio credits for restoration;</li> </ul>		
	<ul> <li>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;</li> </ul>		
	<ul> <li>Not have a history of intensive recreational use or other disturbance that might cause future erosion or other habitat damage, and make habitat recovery and restoration infeasible;</li> </ul>		
	<ul> <li>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;</li> </ul>		
	Not contain hazardous wastes that cannot be removed to the extent that the site could not provide suitable habitat;		
	<ul> <li>Have water and mineral rights included as part of the acquisition, unless the CPUC and BLM, in consultation with CDFW and USFWS, agree in writing to the acceptability of land without these rights.</li> </ul>		

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	Review and Approval of Compensation Lands Prior to Acquisition. SCE shall submit a Draft Habitat Compensation Plan for review and approval by the CPUC and BLM describing the parcel(s) intended for protection. This Plan will discuss the suitability of the proposed parcel(s) as compensation lands in relation to the selection criteria listed above.		
	Management Plan. If the compensation land is held by a private entity, SCE 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 will be to support and enhance the long-term viability of the biological resources. The Management Plan must be submitted for review and approval to the CPUC and BLM, in consultation with CDFW and USFWS. If the land is conveyed to a public agency, SCE will coordinate with the agency as needed to identify management planning needs (if any).		
	Compensation Lands Acquisition Requirements. Compensation land parcels, management planning and funding mechanism, management entities, habitat protection and improvement measures, title conveyance, conservation easement language and easement holder, all will be subject to review and approval by CPUC and BLM in coordination with CDFW and USFWS.		
MM BR-9 [Supersedes APM BIO-04]	Conduct surveys and avoidance for special-status reptiles. Pre-activity Surveys: No more than seven days prior to the onset of ground-disturbing activities, an agency-approved biologist — with experience monitoring and handling desert tortoise — will conduct a pre-activity survey in all work areas within potential desert tortoise, banded Gila monster, desert rosy boa, or Mojave fringe-toed lizard habitat, plus an approximately 300-foot buffer. If potentially suitable burrows, sand fields, or rock piles are found, they shall be checked for occupancy. All desert tortoise burrows within the pre-activity survey area (including desert tortoise pallets) must be flagged or marked using an alternate method with minimal potential risk of cuing predators, to be developed in coordination with CDFW so that they may be avoided during work activities.	No more than 7 days prior to ground-disturbance, conduct survey in all work areas within potential desert tortoise, banded Gila monster, desert rosy boa, or Mojave fringe-toed lizard habitat, plus an approximately 300-foot buffer.	The RMP was approved 11/24/2020.  Pre-activity surveys will be completed no more than seven days prior to the onset of ground-disturbing activities for work described in
	<ul> <li>Raven Management: SCE shall prepare (for CPUC review and wildlife agency approval) and implement a Raven Management Plan (RMP) to minimize avian predation of desert tortoise for the Proposed Project. The purpose of the RMP is to utilize methods that deter raven depredation of juvenile desert tortoises, and other wildlife species. The RMP is not intended to eliminate or control</li> </ul>	If potentially suitable burrows, sand fields, or rock piles are found, they	this NTPR.

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	raven populations but will target offending ravens that have been found to prey upon desert tortoises. The RMP will incorporate an adaptive management strategy for immediate implementation following construction of the Proposed Project. The RMP will be evaluated after three years of implementation, or as needed, if avian predation becomes apparent. The following activities may be implemented as part of the RMP: 1) Common raven nest/power line monitoring, 2) Funding of offending raven control via contract with the U.S. Department of Agriculture, and 3) Alternative control strategies developed in coordination with USFWS (e.g. egg-oiling, laser deterrents, etc.). Mutual and timely cooperation between SCE and the BLM, USFWS, and CDFW is central to effective implementation of the RMP.	will be checked for occupancy and flagged.  SCE shall prepare (for CPUC review and wildlife agency approval) Raven Management Plan.	
MM BR-10 [Supersedes APM BIO-06]	Prepare and implement a Nesting Bird Management Plan. SCE shall prepare and implement a Nesting Bird Management Plan (NBMP) in coordination with CPUC, BLM, CDFW, and USFWS. The NBMP shall describe methods to minimize potential project effects to nesting birds and avoid any potential for unauthorized take. Where scheduling allows SCE will endeavor to conduct clearing of any vegetation, site preparation in open or barren areas, or other project-related activities that may adversely affect breeding birds outside the nesting season. Project-related disturbance including construction and pre-construction activities shall not proceed within 300 feet of active nests of common bird species or 500 feet of active nests of raptors or special-status bird species (except for golden eagle) until approval of the NBMP by CPUC and BLM in consultation with CDFW and USFWS.	SCE shall prepare a NBMP for approval by CPUC and BLM in consultation with CDFW and USFWS.	The NBMP was approved 12/11/2020  If work described in this NTPR occurs during the nesting season, preconstruction nesting bird surveys will occur no more than
	<b>NBMP Content.</b> The NBMP shall include: (1) definitions of default nest avoidance buffers for each species or group of species, depending on characteristics and conservation status for each species and the nature of planned Project activities in the vicinity; (2) a notification procedure for buffer distance reductions should they become necessary; (4) a pre-construction survey protocol (surveys no longer than 7 days prior to starting work activity at any site); (5) a monitoring protocol, to be implemented until adjacent construction activities are completed or the nest is no longer active, including qualifications of monitors, monitoring schedule, and field methods, to ensure that any project-related effects to nesting birds will be minimized; and (6) a protocol for documenting and reporting any inadvertent contact with or effects to birds or nests. The NBMP will be applicable throughout the nesting season (beginning January 1 for raptors, February 1 for most other birds, and continuing through the end of August).		seven days prior to starting work activity.

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	Golden eagles. SCE shall review all available USFWS data to identify known golden eagle nest sites or territories in the vicinity of the Project route. SCE shall either assume that known nest sites are occupied or at its discretion conduct nesting season surveys within a 1 mile radius of the portions of the project area where suitable nesting habitat may exist and where work will occur during the breeding season (December 1 through July 31). If a potentially occupied nest (based either on assumption or field data) is detected within 1 mile of the project, SCE shall implement a one-mile line-of-sight and one-half mile no line-of-sight buffer to ensure that project construction activities do not result in injury or disturbance to golden eagles.		
	<b>Nest deterrents.</b> The NBMP shall describe any proposed measures or deterrents to prevent or reduce bird nesting activity on project equipment or facilities, such as buoys, visual or auditory hazing devices, bird repellents, securing of materials, and netting of materials, vehicles, and equipment. It shall also include timing for installation of nest deterrents and field confirmation to prevent effects to any active nest; guidance for the contractor to install, maintain, and remove nest deterrents according to product specifications; and periodic monitoring of nest deterrents to ensure proper installation and functioning and prevent injury or entrapment of birds or other animals. In the event that an active nest is located on project facilities, materials or equipment, SCE will avoid disturbance or use of the facilities, materials or equipment (e.g., by red-tag) until the nest is no longer active.		
	<b>Communication.</b> The NBMP shall specify the responsibilities of construction monitors with regard to nests and nest issues and specify a direct communication protocol to ensure that nest information and potential adverse impacts to nesting birds can be promptly communicated from nest monitors to construction monitors, so that any needed actions can be taken immediately.		
	The NBMP shall specify a procedure to be implemented following accidental disturbance of nests, including wildlife rehabilitation options. It also shall describe any proposed measures, and applicable circumstances, to prevent take of precocial young of ground-nesting birds such as killdeer or quail. For example, chick fences may be used to prevent them from entering work areas and access roads. Finally, the NBMP will specify a procedure for removal of inactive nests, including verification that the nest is inactive and a notification/approval process.		

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	Reporting. Throughout the construction phase of the project, nest locations, project activities in the vicinity of nests (including helicopter traces), and any adjustments to buffer areas shall be updated and available to CPUC monitors on a daily basis. All buffer reduction notifications and prompt notifications of nest-related non-compliance and corrective actions will be made via email to CPUC monitors. The draft NBMP shall include a proposed format for daily and weekly reporting (e.g., spreadsheet available online, tracking each nest). In addition, the NBMP shall specify the format and content of nest data to be provided in regular monitoring and compliance reports. At the end of each year's nest season, SCE will submit an annual NBMP report to the CPUC, BLM, CDFW, and USFWS. Specific contents and format of the annual report will be reviewed and approved by the CPUC and BLM in consultation with CDFW and USFWS.		
MM BR-11 [Supersedes APM BIO-07]	Conduct surveys and avoidance for burrowing owl. Burrowing owl surveys shall be conducted in accordance with the most current CDFW guidelines in Appendix D of the Staff Report on Burrowing Owl Mitigation (CDFG, 2012; or updated guidelines as they become available) in all potential habitat, regardless whether or not the previous assessment identified burrows. SCE shall take measures to avoid impacts to any active burrowing owl burrow within or adjacent to a work area. The default buffer for a burrowing owl burrow is 300 feet for ground construction, and 300 feet horizontal and 200 feet vertical for helicopter construction. Effectiveness of the buffer area will be monitored, and adjustments will be made if necessary. The Nesting Bird Management Plan (Mitigation Measure BR-10) will specify a procedure for adjusting this buffer, if needed. Binocular surveys may be substituted for protocol field surveys on private lands adjacent to the project site only when SCE has made reasonable attempts to obtain permission to enter the property for survey work but was unable to obtain such permission.	Prior to construction, conduct burrowing owl surveys.  Prepare a draft BOMPRP for review and approval by CPUC and BLM in consultation with CDFW and USFWS	The BOMPRP was approved 11/24/2020.  Burrowing owl surveys are underway for work areas described in this NTPR and will be completed by July 2025.
	If active burrowing owl burrows are located within project work areas, SCE may passively relocate the owls by preparing and implementing a Burrowing Owl Passive Relocation Plan, as described below. SCE shall prepare a draft Burrowing Owl Passive Relocation Plan for review and approval by CPUC and BLM in consultation with CDFW and USFWS prior to the start of any ground-disturbing activities. SCE may not initiate burrowing owl passive relocation prior to finalization of the Plan and approval by CPUC and BLM. No active relocation shall be permitted. No passive relocation of burrowing owls shall be permitted during breeding season, unless a qualified biologist verifies through non-invasive methods that an occupied burrow is		

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	not occupied by a mated pair, and only upon authorization by CDFW. The Plan shall include, but not be limited to, the following elements:		
	<ul> <li>Assessment of Suitable Burrow Availability. The Plan shall include an inventory of existing, suitable, and unoccupied burrow sites within 500 feet of the affected project work site. Suitable burrows will include inactive desert kit fox, ground squirrel, or desert tortoise burrows that are deep enough to provide suitable burrowing owl nesting sites, as determined by a qualified biologist. If two or more suitable and unoccupied burrows are present in the area for each burrowing owl that will be passively relocated, then no replacement burrows will need to be built.</li> </ul>		
	• Replacement Burrows. For each burrowing owl that will be passively relocated, if fewer than two suitable unoccupied burrows are available within 500 feet of the affected project work site, then SCE shall construct at least two replacement burrows within 500 feet of the affected project work site. Burrow replacement sites shall be in areas of suitable habitat for burrowing owl nesting, and subject to minimal human disturbance and access. The Plan shall describe measures to ensure that burrow installation or improvements would not affect sensitive species habitat or any burrowing owls already present in the relocation area. The Plan shall provide guidelines for creation or enhancement of at least two natural or artificial burrows for each active burrow within the project disturbance area, including a discussion of timing of burrow improvements, specific location of burrow installation, and burrow design. Design of the artificial burrows shall be consistent with CDFW guidelines (CDFG, 2012; or more current guidance as it becomes available) and shall be approved by the CPUC, BLM, CDFW, and USFWS.		
	• Methods. Provide detailed methods and guidance for passive relocation of burrowing owls, outside the breeding season. An occupied burrow may not be disturbed during the nesting season (generally, but not limited to, February 1 to August 31), unless a qualified biologist determines, by non-invasive methods, that it is not occupied by a mated pair. 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. Once owls have been passively relocated, burrows will be carefully excavated by hand and collapsed by, or under the direct supervision, of a qualified biologist.		

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	<ul> <li>Monitoring and Reporting. Describe monitoring and management of the replacement burrow site(s) and provide a reporting plan. The objective shall be to manage the relocation area for the benefit of burrowing owls, with the specific goal of maintaining the functionality of the burrows for a minimum of two years. Monitoring reports shall be available to the CPUC and BLM on a weekly basis.</li> </ul>		
MM BR-12	Conduct surveys and avoidance for bats. SCE shall conduct surveys for roosting bats within 200 feet of project work areas within 14 days prior to any grading of rocky outcrops or removal of large trees (12 inches in diameter or greater at 4.5 feet above grade) with loose bark or other cavities, foliage, and palm fronds. Surveys shall be conducted during the breeding season (1 March to 31 July) and the non-breeding season. Surveys shall be performed by a qualified bat biologist (i.e., a biologist holding a CDFW collection permit and a Memorandum of Understanding or equivalent agreement with CDFW allowing the biologist to handle bats). The resume of the biologist shall be provided to the CPUC and BLM for concurrence in consultation with CDFW and USFWS prior to the biologist beginning field duties on the project. Surveys shall include a minimum of one day and one evening.  Any active bat roosts, including occupied day roosts, maternity roosts, and hibernacula, must be identified and clearly marked. An exclusion area will be established 165 feet from any active roost, and these areas will be avoided during construction activities. Ingress and egress along established routes will be permitted in those areas, and additional buffer reductions may be considered in coordination with the qualified bat biologist, CPUC, and CDFW. If active roosts are found, then SCE will either (1) delay construction activities at these sites until the roost is no longer active, or (2) conduct follow-up focused surveys to determine if the sites support special-status bat species. If the roost is occupied by common species, then work activities may proceed. SCE shall consult with a bat specialist in order to determine when the breeding cycle for the special-status bats is completed. SCE shall consult with CDFW regarding eviction of non-breeding bats.  SCE shall submit documentation providing pre-construction survey results and any avoidance of roosting and nursery sites to the CPUC and BLM for review and approval.	Submit resume of biologist for CPUC concurrence in consultation with CDFW and USFWS.  Conduct preconstruction surveys within 200 feet or bat habitat and submit to CPUC and BLM for review and approval.  An exclusion area will be established 165 feet from any active roost, and these areas will be avoided during construction activities; CPUC EM to validating flagging.	N/A. No bat roosting or nesting areas in workspaces for work described in this NTPR.
MM BR-13	Conduct surveys and avoidance for American badger, ringtail, and desert kit fox.  SCE shall conduct pre-construction surveys for desert kit fox, ringtail, and American	SCE shall conduct preconstruction surveys	Preconstruction surveys for desert kit

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status		
	badger no more than 30 days prior to initiation of construction activities. Surveys shall be conducted in areas that contain habitat for this these species and shall include project disturbance areas and access roads plus a 200-foot buffer surrounding these areas. SCE shall submit documentation providing preconstruction survey results to the CPUC and BLM for review and approval. If dens are detected, each den shall be classified as inactive, potentially active, active nonnatal, or active natal.	for desert kit fox, ringtail, and American badger no more than 30 days prior to initiation of construction activities and submit to CPUC and BLM for review and approval.	and American badger no more than 30 days prior be con to initiation of construction activities and submit to CPUC and BLM for review and American be constructed activities and submit activities and submit to CPUC and activities activities and submit to CPUC and activities activities and activities activities and activities activities and activities activities activities activities and activities activit	more than 30 days prior to initiation of construction activities and submit to CPUC and BLM for review and	fox, ringtail, and American badger will be conducted within 30 days prior to initiation of construction activities.
	Inactive dens located in project disturbance areas may be excavated by hand and backfilled to prevent reuse, only upon confirmation that they are inactive.	Active or potentially			
	Active or potentially active dens shall be flagged and project activities, with exceptions as listed below, within 100 feet (non-natal dens) or 200 feet (natal dens, or any active den during the breeding season) shall be avoided. Ingress/egress of construction vehicles and equipment through buffers and low intensity activities such as inspections and BMP maintenance within buffers is allowed, provided a qualified biologist determines that these activities will not impact dens or denning animals. Buffers may be modified with concurrence of CPUC and BLM, in consultation with CDFW and USFWS. If active dens are found within project disturbance areas and avoidance is not possible, SCE shall take action as specified below, after notifying and obtaining concurrence from CPUC, BLM, and CDFW.	active or potentially active dens will be flagged, and project activities will be avoided, unless otherwise specified.			
	Active and potentially active non-natal dens. Outside the breeding season, any potentially active dens that would be directly impacted by construction activities shall be monitored by a qualified mammologist or biologist for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) 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 may be excavated and backfilled by hand. If tracks are observed, the den may be progressively blocked with natural materials (rocks, dirt, sticks, and vegetation piled in front of the entrance) for the next three to five nights to discourage continued use. After verification that the den is no longer active, the den may be excavated and backfilled by hand.				
	Active natal dens. Active natal dens (any den with cubs or pups) or any den active during the breeding season will not be excavated or passively relocated. The cub or pup-rearing season is generally from January 15 through mid-September. A 200-foot no-disturbance buffer shall be maintained around all active natal dens. Discovery of				

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	an active natal den that could be impacted by the project shall be reported to the CPUC, BLM, and CDFW within 24 hours of the discovery along with a map of the den location and a copy of the survey results. A qualified biologist shall monitor the natal den until he or she determines that the pups have dispersed. Any disturbance to denning animals or activities that might disturb denning activities shall be prohibited within the buffer zone. Once the pups have dispersed, methods listed above for non-natal dens may be used to discourage den reuse. After verification that the den is unoccupied, it shall then be excavated by hand and backfilled to ensure that no animals are trapped in the den.		
	If canine distemper is reported in desert kit fox on the site or surrounding areas, then SCE shall coordinate with CPUC, BLM, and CDFW to identify appropriate actions prior to continuing implementation of this mitigation measure in respect to desert kit fox. Any observations of a kit fox that appears sick or any kit fox mortality shall be reported to CPUC, CDFW, and BLM within one work day.		
	In the event that passive relocation techniques fail, SCE shall contact the CPUC, BLM, and CDFW to explore other relocation options.		
	All den monitoring and excavation activities and passive relocations shall be documented and reported to the CDFW, BLM, and CPUC in weekly monitoring reports, and a written summary will be included in each annual monitoring report.		
<b>Cultural Resour</b>	rces		
APM-CUL-02	<b>Cultural Resources Survey.</b> SCE would perform surveys prior to construction for any Proposed Project areas not yet surveyed (e.g., new or modified staging areas, pull sites, or other work areas).	SCE to submit survey results to CPUC and BLM.	Class III Cultural Resources Inventory reports for AC mitigation areas will be submitted in July 2025.
MM CR-1	Retain a Cultural Resources Specialist. Prior to the start of construction, a project Cultural Resources Specialist (CRS) whose training and background conforms to the U.S. Secretary of Interior's Professional Qualifications Standards, as published in Title 36, Code of Federal Regulations, part 61 (36 C.F.R., part 61) shall be retained by SCE to supervise monitoring of construction excavations and to prepare a Cultural Resources Management Plan (CRMP) for the approved project. Their qualifications shall be appropriate to the needs of the project, specifically an archaeologist with demonstrated prior experience in the southern California desert and previous	Prior to construction, resumes for all proposed cultural staff, including Cultural Resources Specialist, shall be provided to the CPUC for review and approval.	The CRMP was approved 12/11/2020

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	experience working with Southern California Tribal Nations. A copy of their qualifications shall be provided to the CPUC for review and approval. The project Cultural Resources Specialist shall use the services of Cultural Resources Monitors, tribal monitors and Field Crew as needed, to assist in mitigation, monitoring, and curation activities, as outlined in the CRMP. A copy of all proposed cultural staff qualifications shall be provided to the CPUC for review and approval prior to beginning work.		
MM CR-2	Cultural resources environmental awareness training. Project personnel, including cultural resources monitors and tribal monitors, shall receive training that includes sensitivity training provided through participating tribes in video format regarding the appropriate work practices necessary to effectively implement the APMs and mitigation measures related to cultural resources and tribal cultural resources, including human remains. Training shall be required for all personnel before they begin work on a project site and repeated as needed for all new personnel before they begin work on the Project. This training program shall be submitted to the CPUC for approval at least 30 days before the start of construction and include procedures to be followed upon the discovery or suspected discovery of archaeological materials, tribal cultural resources, and human remains, consistent with the procedures set forth in the CRMP. This training may be integrated with a broader Worker Environmental Awareness Training program. Documentation of the training will be provided to the BLM and CPUC. The CPUC will provide documentation to the consulting tribes.	At least 30 days prior to the start of construction, a cultural training program shall be submitted to the CPUC for approval.  Training shall be required for all personnel before they begin work on a project site.  Documentation of training to be provided to CPUC and BLM; CPUC to provide to tribes.	The WEAP was approved on 9/10/2020
MM CR-3	Prepare and implement a Cultural Resources Management Plan. Prior to the beginning of construction, SCE shall submit at least 90 days before construction a Cultural Resources Management Plan (CRMP) for the project to the BLM and CPUC for review. The CPUC will submit the CRMP to representatives of consulting tribes for a 30-day review and comment period prior to approving the CRMP. The CPUC will in good faith consider any comments received from consulting tribes and incorporate such comments into the CRMP as deemed feasible. A single plan document that meets the requirements of both BLM and CPUC is acceptable. The CRMP shall be implemented under the direction of the SCE and the project Cultural Resources Specialist. The CRMP shall be prepared at the sole expense of the project proponent and shall meet all regulatory requirements. At a minimum the CRMP must address the following:	At least 90 days before construction, SCE to submit CRMP to the BLM and CPUC for review. The CPUC will submit the CRMP to representatives of consulting tribes for a 30-day review and comment period prior to approving the CRMP.	The CRMP was on 12/11/2020

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	<ul> <li>The duties of the project Cultural Resources Specialist and associated staff shall be fully explained, including oversight/management, monitoring, and reporting duties with respect to known cultural resources and tribal cultural resources as well as site evaluation, data collection, and reporting for any newly identified resources discovered during project activities. The professional standards and ethical guidelines for all cultural resource personnel will be clearly outlined in the CRMP.</li> </ul>		
	<ul> <li>No collection of artifacts is authorized or planned for this project. If an unanticipated discovery requires evaluation via excavation and artifact collection, the retention/disposal, and permanent and temporary curation policies shall be specified. The decision-making process for identifying which artifacts are curated or reburied, where they are reburied and the individuals, including tribal participants, making these decisions shall be described. These policies shall apply to cultural resources materials and documentation resulting from evaluation and treatment of cultural resources and tribal cultural resources discovered during project activities.</li> </ul>		
	The CRMP shall define and map all known prehistoric and historic resources eligible to the NRHP and CRHR within 100 feet of proposed work areas. How these resources will be avoided and protected during construction will be described. Avoidance measures to be used will be described, including where and when they will be implemented. How avoidance measures and enforcement of Environment Sensitive Areas (ESAs) will be coordinated with construction personnel will be included.		
	<ul> <li>The implementation sequence and the estimated time frames needed to accomplish all project-related tasks (i.e., evaluation of new resources resulting in work stoppage, time to complete reports, etc.) during the project activities and any post-project analysis phases of the project, if necessary, shall be specified. The intensity of monitoring proposed for each resource that may be impacted by project activities shall be outlined in the CRMP.</li> </ul>		
	<ul> <li>Person(s) expected to perform each monitoring and, if necessary, treatment task, their responsibilities, and the reporting relationships between project construction management and the monitoring and treatment team shall be outlined in the CRMP.</li> </ul>		

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	Tribal Monitors shall be retained to monitor ground disturbing activities within 100 feet of prehistoric and protohistoric resources. Tribal Monitors shall be retained for data recovery within prehistoric and protohistoric resources identified for data recovery. The ELM Project area spans multiple Tribal areas. The Tribe affiliated with a specific area will be considered first to provide Tribal Monitors. If multiple Tribes or Tribal Organizations are affiliated with a specific area, Tribal Monitors will be selected on a rotating basis. The CRMP will describe the roles and responsibilities of the monitors. Tribal monitors will be compensated. All impact-avoidance measures (such as the presence of monitors) to prohibit or otherwise restrict access to sensitive resource areas that are to be avoided during ground disturbance, construction, and/or operation shall be described. Areas where these measures are to be implemented shall be identified. The description shall address how these measures would be implemented prior to the start of ground disturbance and how long they would be needed to protect the resources from project-related impacts.		
	<ul> <li>The commitment to record resources on Department of Parks and Recreation (DPR) 523 forms, to map, and to photograph all newly identified cultural resources over 50 years of age shall be stated. Participating tribes may offer their perspective regarding the newly identified cultural resource. Comments by tribes may be documented on the DPR 523c, parts A13 (Interpretation) and A14 (Remarks).</li> </ul>		
	<ul> <li>The commitment to curate all artifacts retained as a result of any archaeological investigations in accordance with the appropriate requirements and the California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections, into a retrievable storage collection in a public repository, museum, or reburial at the request of tribal representatives shall be stated. The different curation policies for archaeological material collected on BLM land as opposed to private or state land, shall be clearly articulated.</li> </ul>		
	<ul> <li>The commitment of SCE to pay all curation or reburial fees for artifacts recovered and for related documentation produced during cultural resources investigations conducted for the project shall be stated. Should consulting tribes request that artifacts not be reburied, the CRMP shall identify a curation facility that could accept cultural resources materials resulting from project cultural resources investigations on private or state land. Tribal monitors shall be present for any reburials.</li> </ul>		

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	<ul> <li>A final report shall be prepared presenting the results of the monitoring efforts.</li> <li>The contents, format, and review and approval process of the final report shall meet appropriate federal, state, and local guidelines.</li> </ul>		
<b>Geology and Soi</b>	ls		
MM PAL-1	Retain qualified paleontological staff. Project Paleontologist – Prior to the start of ground disturbance, a qualified paleontologist to serve as Project Paleontologist shall be retained by SCE. The qualifications of the Project Paleontologist shall be submitted to CPUC and BLM for approval. This individual shall retain a BLM paleontological resource use permit for the project and other appropriate permits. To do so this individual shall have the following qualifications as stipulated in BLM Manual 8270-1:  • Professional instruction in a field of paleontology relevant to the work proposed (vertebrate, invertebrate, trace, paleobotany, etc.), obtained through:  • Formal education resulting in a graduate degree from an accredited institution in paleontology, or in geology, biology, botany, zoology or anthropology if the major emphasis is in paleontology; or  • Equivalent paleontological training and experience including at least 24 months under the guidance of a professional paleontologist who meets qualification above that provided increased responsibility leading to professional duties similar to those in qualification above; and  • Demonstrated experience in collecting, analyzing, and reporting paleontological data, similar to the type and scope of work proposed in the application;  • Demonstrated experience in planning, equipping, staffing, organizing, and supervising crews performing the work proposed in the application;  • Demonstrated experience in carrying paleontological projects to completion as evidenced by timely completion and/or publication of theses, research reports, scientific papers and similar documents.  As described in BLM Instruction Manual (IM) 2009-011, the Project Paleontologist will serve as the Principal Investigator (PI) under the BLM permit and is responsible for all actions under the permit, for meeting all permit terms and conditions, and for the performance of all other personnel. This person is also the contact person for the performance of all other personnel. This person is als	Prior to ground disturbance, a resume for the Project Paleontologist will be submitted to CPUC and BLM for approval. Additional paleontological staff must meet the qualifications described in BLM IM 2009-011.	A qualified Project paleontologist was approved

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	Additional Paleontological Staff – The Project Paleontologist may obtain the services of Paleontological Field Agents, Field Monitors, and Field Assistants, if needed, to assist in mitigation, monitoring, and curation activities. These individuals must meet the qualifications described in BLM IM 2009-011.		
MM PAL-2	Provide paleontological environmental awareness training. SCE will provide worker's environmental awareness training on paleontological resources protection as part of its WEAP required under Mitigation Measure BR-2, Prepare and implement a Worker Environmental Awareness Program. This training may be administered by the project paleontologist as a stand-alone training or included as part of the overall worker's environmental awareness training. At a minimum, the training would include the following:	Prior to working on the project, as part of the WEAP, each crew member shall be trained in paleontological resources protection.	The WEAP incorporates paleontologist training.
	<ul> <li>the types of fossils that could occur at the project site;</li> <li>the types of lithologies in which the fossils could be preserved;</li> <li>the procedures that should be followed in the event of a fossil discovery; and</li> <li>penalties for disturbing paleontological resources.</li> </ul>		
MM PAL-3 [Supersedes APM CUL-04]	Prepare and implement a Paleontological Resource Mitigation and Monitoring Plan (PRMMP). Prior to the start of the project, SCE shall submit a Paleontological Mitigation and Monitoring Plan (PRMMP) for the project to the CPUC and BLM for review and approval. The PRMMP shall be prepared and implemented under the direction of the Project Paleontologist and shall address and incorporate mitigation measures PAL-1, PAL-3 and PAL-4. The PRMMP shall be based on Society of Vertebrate Paleontology (SVP) assessment and mitigation guidelines and meet all regulatory requirements. A monitoring plan indicates the avoidance or treatments recommended for the area of the proposed disturbance and must at a minimum address the following:	Prior to the start of the project, SCE shall submit PRMMP to the CPUC and BLM for review and approval.	The PRMMP was approved on 11/27/2020
	<ul> <li>Identification and mapping of impact areas of high sensitivity that will be monitored during construction;</li> </ul>		
	<ul> <li>A coordination strategy to ensure that a qualified paleontologist will conduct monitoring at the appropriate locations at the appropriate intensity;</li> </ul>		
	The significance criteria to be used to determine which resources will be avoided or recovered for their data potential;		

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	<ul> <li>Procedures for the discovery, recovery, preparation, and analysis of paleontological resources encountered during construction, in accordance with standards for recovery established by the SVP;</li> </ul>		
	<ul> <li>Provisions for verification that the project proponent has an agreement with a recognized museum repository, for the disposition of recovered fossils and that the fossils shall be prepared prior to submittal to the repository as required by the repository (e.g., prepared, analyzed at a laboratory, curated, or cataloged);</li> </ul>		
	<ul> <li>Specifications that all paleontological work undertaken by the project proponent shall be carried out by qualified paleontologists with appropriate current permits, including but not limited to a Paleontological Resources Use Permit (for work on public lands administered by BLM) and any other permits required by other jurisdictions;</li> </ul>		
	<ul> <li>Description of monitoring reports that will be prepared which shall include daily logs, monthly reports, and a final monitoring report with an itemized list of specimens found to be submitted to the BLM, the CPUC, the project proponent and the designated repository within 90 days of the completion of monitoring;</li> </ul>		
	<ul> <li>The implementation sequence and the estimated time frames needed to accomplish all project-related tasks during the ground-disturbance and post- ground-disturbance analysis phases of the project shall be specified; and</li> </ul>		
	<ul> <li>Person(s) expected to perform each of the tasks, their responsibilities, and the reporting relationships between project construction management and the mitigation and monitoring team shall be identified.</li> </ul>		
	<ul> <li>All impact-avoidance measures (such as flagging or fencing) to prohibit or otherwise restrict access to sensitive resource areas that are to be avoided during ground disturbance, construction, and/or operation shall be described. Any areas where these measures are to be implemented shall be identified. The description shall address how these measures would be implemented prior to the start of ground disturbance and how long they would be needed to protect the resources from project-related impacts.</li> </ul>		
Hazards and Haz	zardous Materials		
MM HH-1	<b>Prepare and implement a Hazardous Materials and Waste Management Plan.</b> SCE shall prepare and implement a Project-specific Hazardous Materials and Waste	Submit Project-specific HWMP to CPUC and BLM	The Project-specific HWMP was

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	Management Plan pursuant to Title 24, Part 9 of the California Code of Regulations (CCR) that identifies hazardous materials to be transported, used, and stored on site for the proposed construction activities — as well as hazardous wastes generated onsite as a result of the proposed construction activities — and appropriate management procedures according to the specifications outlined below.	30 days prior to the start of construction for review and approval by CPUC.	approved on 10/30/2020
	• Hazardous Materials and Hazardous Waste Handling: The Plan will include the following components: (1) the program shall identify types of hazardous materials to be used during the project and the types of wastes that would be generated; (2) proper hazardous materials use, storage and disposal requirements as well as hazardous waste management procedures; and (3) all project personnel shall be provided with project-specific training to ensure that all hazardous materials and wastes associated with the project are handled in a safe and environmentally sound manner and disposed of according to applicable rules and regulations. Specifically, employees handling wastes shall have or receive hazardous materials training and shall be trained in hazardous waste procedures, spill contingencies, waste minimization procedures and treatment, storage and disposal facility (TSDF) training in accordance with current OSHA Hazard Communication Standard and Title 22 CCR. The Plan shall identify the landfill facilities that are authorized to accept the types of waste generated and hauled, and these landfills shall be used for hazardous waste disposal during construction.		
	<ul> <li>Transport of Hazardous Materials: Hazardous materials that would be transported by truck include fuel (diesel fuel and gasoline) and oil and lubricants for equipment. Containers used to store hazardous materials would be properly labeled and kept in good condition. The Plan shall include written procedures for the transport of hazardous materials used in accordance with U.S. Department of Transportation and Caltrans regulations. A qualified transporter would be selected to comply with U.S. Department of Transportation and Caltrans regulations. The Plan shall identify proposed trucking routes.</li> </ul>		
	<ul> <li>Fueling and Maintenance of Construction Equipment: Written procedures for fueling and maintenance of construction equipment shall be included in the Plan. Refueling and maintenance procedures may require vehicles and equipment to be refueled on site or by tanker trucks. Procedures will require the use of drop cloths made of plastic, drip pans and trays to be placed under</li> </ul>		

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	refilling areas to ensure that chemicals do not come into contact with the ground. Refueling would be located in areas where absorbent pad and trays would be available. The fuel tanks would also contain a lined area to ensure that accidental spillage does not occur. Drip pans or other collection devices would be placed under the equipment at night to capture drips or spills. Equipment would be inspected daily for potential leakage or failures. Hazardous materials such as paints, solvents, and penetrants would be kept in an approved locker or storage cabinet.		
	<ul> <li>Fueling and Maintenance of Helicopters: Written procedures for fueling and maintenance of helicopters shall be included in the Plan. Procedures may require helicopters be refueled at construction work areas, helicopter staging areas, or local airports. Procedures would include the use of drop cloths made of plastic, drip pans and trays to be placed under refilling areas to ensure that chemicals do not come into contact with the ground. Refueling areas shall be identified in the Plan and necessary spill response materials shall be available within each refueling area.</li> </ul>		
	• Emergency Release Response Procedures: The Plan shall include emergency response procedures in the event of a release of hazardous materials. The Plan must prescribe hazardous materials handling procedures for reducing the potential for a spill during construction and would include an emergency response program to ensure quick and safe cleanup of accidental spills. Hazardous materials shall not be stored near drains or waterways. Fueling shall not take place within 50 feet of drains or waterways with flowing water or within 75 feet of drains or waterways that are dry. All construction personnel, including environmental monitors, would be made aware of state and federal emergency response reporting guidelines for accidental spills.		
	The Plan shall be submitted to CPUC and BLM 30 days prior to the start of construction for review and approval by the CPUC.		
Hydrology and V	Vater Quality		
MM HWQ-1	Implement an Erosion Control Plan. SCE shall develop and submit an Erosion Control Plan to the CPUC and BLM for review at least 60 days prior to construction. The Erosion Control Plan may be part of the Stormwater Pollution Prevention Plan (SWPPP) and kept onsite and readily available on request.	SCE to submit Erosion Control Plan to the CPUC and BLM for review at least 60 days prior to construction.	The Erosion Control Plan was approved on 8/17/20. The previously approved Erosion Control Plan

Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
Soil disturbance at structures and access roads is to be minimized and designed to prevent long-term erosion. The Erosion Control Plan shall include:	Prior to construction submit grading plans and all applicable permits.	will be incorporated into the SWPPP
The location of all soil-disturbing activities, including but not limited to new and/or improved access and spur roads.		specific to work described in this NTPR.
<ul> <li>The location of all streams and drainage structures that would be directly affected by soil-disturbing activities (such as stream crossings or public storm drains by the right-of-way and access roads).</li> </ul>		
BMPs to protect drainage structures, such as public storm drains, downstream of soil disturbance activities.		
<ul> <li>Design features to be implemented to minimize erosion during construction and during operation (if the project feature is to remain permanent after construction).</li> </ul>		
<ul> <li>If soil cement is proposed, the specific locations must be defined in the Plan, and evidence of approval by the appropriate jurisdiction shall be submitted to the CPUC and BLM prior to its use.</li> </ul>		
<ul> <li>The location and type of BMPs that would be installed to prevent off-site sedimentation and to protect aquatic resources.</li> </ul>		
<ul> <li>Specifications for the implementation and maintenance of erosion control measures and a description of the erosion control practices, including appropriate design and installation details.</li> </ul>		
<ul> <li>Proposed schedule for inspection of erosion control/SWPPP measures and schedule for corrective actions/repairs, if required. Erosion control/SWPPP inspection reports shall be provided to the CPUC EM.</li> </ul>		
Locations requiring erosion control/SWPPP corrective actions/repairs shall be tracked, including dates of completion, and documented during inspections. Inspections and monitoring shall be performed in compliance with the Federal and California Construction General Permits. The inspection reports shall be maintained and kept with their respective SWPPP, kept on site as required by the Federal and State		
	<ul> <li>Soil disturbance at structures and access roads is to be minimized and designed to prevent long-term erosion. The Erosion Control Plan shall include:</li> <li>The location of all soil-disturbing activities, including but not limited to new and/or improved access and spur roads.</li> <li>The location of all streams and drainage structures that would be directly affected by soil-disturbing activities (such as stream crossings or public storm drains by the right-of-way and access roads).</li> <li>BMPs to protect drainage structures, such as public storm drains, downstream of soil disturbance activities.</li> <li>Design features to be implemented to minimize erosion during construction and during operation (if the project feature is to remain permanent after construction).</li> <li>If soil cement is proposed, the specific locations must be defined in the Plan, and evidence of approval by the appropriate jurisdiction shall be submitted to the CPUC and BLM prior to its use.</li> <li>The location and type of BMPs that would be installed to prevent off-site sedimentation and to protect aquatic resources.</li> <li>Specifications for the implementation and maintenance of erosion control measures and a description of the erosion control practices, including appropriate design and installation details.</li> <li>Proposed schedule for inspection of erosion control/SWPPP measures and schedule for corrective actions/repairs, if required. Erosion control/SWPPP inspection reports shall be provided to the CPUC EM.</li> <li>Locations requiring erosion control/SWPPP corrective actions/repairs shall be tracked, including dates of completion, and documented during inspections. Inspections and monitoring shall be performed in compliance with the Federal and California Construction General Permits. The inspection reports shall be maintained and kept</li> </ul>	Soil disturbance at structures and access roads is to be minimized and designed to prevent long-term erosion. The Erosion Control Plan shall include:  The location of all soil-disturbing activities, including but not limited to new and/or improved access and spur roads.  The location of all streams and drainage structures that would be directly affected by soil-disturbing activities (such as stream crossings or public storm drains by the right-of-way and access roads).  BMPs to protect drainage structures, such as public storm drains, downstream of soil disturbance activities.  Design features to be implemented to minimize erosion during construction and during operation (if the project feature is to remain permanent after construction).  If soil cement is proposed, the specific locations must be defined in the Plan, and evidence of approval by the appropriate jurisdiction shall be submitted to the CPUC and BLM prior to its use.  The location and type of BMPs that would be installed to prevent off-site sedimentation and to protect aquatic resources.  Specifications for the implementation and maintenance of erosion control measures and a description of the erosion control practices, including appropriate design and installation details.  Proposed schedule for inspection of erosion control/SWPPP measures and schedule for corrective actions/repairs, if required. Erosion control/SWPPP inspection reports shall be provided to the CPUC EM.  Locations requiring erosion control/SWPPP corrective actions/repairs shall be tracked, including dates of completion, and documented during inspections. Inspections and monitoring shall be performed in compiliance with the Federal and California Construction General Permits. The inspection reports shall be maintained and kept with their respective SWPPP, kept on site as required by the Federal and State

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	an Annual Report shall be filed for each reporting period in compliance with Federal and California Construction General Permit reporting requirements.		
	SCE shall submit Grading Plans to the CPUC and BLM for approval that define the locations of the specific features listed above.		
	SCE shall submit to the CPUC and BLM evidence of possession of applicable required permits for the representative land disturbance prior to engaging in soil-disturbing construction/demolition activities. Such permits may include, but are not limited to, a CWA Section 402 NPDES California General Permit for Storm Water Discharges Associated with Construction Activities (General Permit) from the applicable Regional Water Quality Control Board(s) (RWQCBs), and the Federal General Permit for Storm Water Discharges Associated with Construction Activities on Tribal Land.		
	Prior to any ground disturbance in stream channels or other waters jurisdictional to the State of California or the Federal Government, SCE shall obtain a Streambed Alteration Agreement from the California Department of Fish and Wildlife, a Section 404 permit from the USACE, and a CWA Section 401 certification from the SWRCB and submit to the CPUC and BLM evidence of possession of such Agreement/permits.		
MM HWQ-2	Prepare and implement an HDD Fluid Management Plan. If Horizontal Directional Drilling (HDD) is required, an HHD Fluid Management Plan shall be prepared and implemented. The plan shall include, at a minimum, the following measures:	If HDD is required, an HHD Fluid Management Plan will be prepared.	N/A
	Worst-case scenario development and response effort descriptions.		
	<ul> <li>Drilling pressure monitoring to ensure pressures do not exceed those needed to penetrate the formation.</li> </ul>		
	<ul> <li>Monitoring by a minimum of two monitors (located both upstream and downstream) throughout drilling operations to ensure early detection and swift response in the event of a surface expression of drilling fluid.</li> </ul>		
	<ul> <li>Site-specific contingency measures shall be developed for the drill site, taking into consideration terrain, access, resource sensitivities, and proximity of suitable areas for staging response equipment for the unanticipated surface expression of drilling fluid.</li> </ul>		
	Agency notification procedures.		

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	Training for responding personnel.		
	<ul> <li>Prevention, containment, clean up, and disposal of released drilling mud. Preventative measures shall include incorporation of the recommendations of a pre-construction geotechnical investigation to determine the most appropriate drilling depth and drilling mud mixture for the HDD bore site. Containment shall be accomplished through construction of temporary berms/dikes and use of silt fences, straw bales, absorbent pads, straw wattles, and plastic sheeting. Clean up shall be accomplished with plastic pails, shovels, portable pumps, and vacuum trucks.</li> </ul>		
	<ul> <li>A copy of the Streambed Alteration Agreement (SAA) shall be provided in the Plan. If the SAA also requires development of a similar plan to address HDD fluid management, that plan, as approved by CDFW, may be used to satisfy this measure provided it adequately addresses the requirements identified herein, as determined by the CPUC and BLM.</li> </ul>		
Noise			
MM N-2	<b>Provide advance notification of construction noise.</b> Sixty days prior to construction, SCE shall prepare and submit a public notice mailer format to the CPUC for approval. The details of notification may be modified in consultation with CPUC as warranted by the circumstances.	60 days prior to construction, SCE shall submit public notice mailer format to the	Work described in this NTPR is not anticipated to require notification.
	No less than 15 days prior to construction that would occur within 500 feet of residences, businesses, or other occupied structures, SCE shall distribute a public notice mailer. The notice shall state the type of construction activities that will be conducted, and the location and duration of construction. The notice shall identify, and SCE shall provide a public liaison person before and during construction to respond to concerns of residents about construction noise. SCE shall also establish a toll-free telephone number for receiving questions or complaints during construction and develop procedures for responding to callers. SCE shall address all complaints within one week of when the complaint is filed, and shall provide to the CPUC, within 15 days of the end of each month, a monthly report with records of all complaints and responses. SCE shall mail the notice to all residents or property owners within 500 feet of the right-of-way or within 1,000 feet of helicopter fly yards and flight paths.	CPUC for approval.  No less than 15 days prior to construction that would occur within 500 feet of residences, businesses, or other occupied structures, SCE shall distribute a public notice mailer.	

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
Transportation			
MM T-1	Prepare and implement a Construction Traffic Control Plan. Prior to the start of construction of a project component that could affect traffic (e.g., OPGW reconductoring over public roadways), SCE shall submit a Construction Traffic Control Plan for review and approval by state and local agencies responsible for public roads that would be directly affected by the construction activities and/or would require permits and approvals. The Construction Traffic Control Plan shall include, but not be limited to:	Prior to construction, SCE shall submit a Construction Traffic Control Plan for review and approval by state and local agencies for application on public	Work described in this NTPR is not anticipated to require a Traffic Control Plan
	<ul> <li>The locations and use of flaggers, warning signs, barricades, delineators, cones, arrow boards, etc. according to standard guidelines outlined in the Manual on Uniform Traffic Control Devices, the Standard Specifications for Public Works Construction, and/or the California Joint Utility Traffic Control Manual.</li> </ul>	roadways.	
	<ul> <li>The locations of all road or traffic lane segments that would need to be temporarily closed or disrupted due to construction activities.</li> <li>The locations where guard poles, netting, or similar means to protect transportation facilities for any construction work requiring the crossing of a local street, highway, or rail line are proposed.</li> </ul>		
	<ul> <li>The use of continuous traffic breaks operated by the Highway Patrol on state highways (if necessary).</li> </ul>		
	<ul> <li>Plans to coordinate in advance with emergency service providers to avoid restricting the movements of emergency vehicles. Police departments and fire departments shall be notified in advance by SCE of the proposed locations, nature, timing, and duration of any roadway disruptions, and shall be advised of any access restrictions that could impact their effectiveness. At locations where roads will be blocked, provisions shall be ready at all times to accommodate emergency vehicles, such as immediately stopping work for emergency vehicle passage, or providing short detours, or developing alternate routes in conjunction with the public agencies.</li> </ul>		
MM T-2	Repair roadways and transportation facilities damaged by construction activities.  If roadways, sidewalks, medians, curbs, shoulders, or other such transportation features are damaged by project construction activities, as determined by Caltrans or other public agency responsible for the transportation feature, such damage shall be	Prior to construction, SCE shall establish the preconstruction conditions of the roads	Preconstruction photos will be taken prior to construction.

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	repaired and restored to the pre-project condition by SCE. Prior to construction, SCE shall establish the pre-construction conditions of the roads within 500 feet in each direction of project access points (where heavy vehicles will leave public roads to reach unpaved access roads, yards, or other project sites) and confer with state and local agencies regarding roads in the agency's jurisdiction to be crossed by the project components. Establishment of existing conditions may include dated photographic or video documentation.	within 500 feet in each direction of project access points and confer with state and local agencies.	
MM T-3	<ul> <li>Prepare and implement a final helicopter use plan. SCE and its contractor shall prepare and obtain approval of a Final Helicopter Use Plan 30 days prior to using helicopters to transport personnel, materials, or equipment for the deconstruction of existing project facilities or construction of new or replacement project facilities. The plan shall identify the specific locations requiring deconstruction or construction work using helicopters. The Final Helicopter Use Plan shall draw upon protocols and methods used on previous transmission line projects and shall be submitted to CPUC and BLM for approval.</li> <li>The Federal Aviation Agency (FAA) has jurisdiction over U.S. airspace, aircraft, aircraft operations, airports, and pilots. To the extent that they do not conflict with any FAA requirements, the following shall apply to helicopter use and be incorporated in the Final Helicopter Use Plan.</li> <li>All aircraft and pilots shall be in full compliance with applicable FAA requirements and standards.</li> <li>On the day before a flight, helicopter flight information shall be provided by email to CPUC/BLM monitors regarding the specific sites to be used for helicopter retrieval of materials, equipment, or personnel and the destination of the materials, equipment, or personnel being transported. Information provided in the email shall include pilot name, contact number, aircraft type, aircraft registration number, aircraft color, work/flight area, anticipated beginning and completion times, and scope of work.</li> <li>The specific locations requiring deconstruction or construction work using</li> </ul>	30 days prior to using helicopters, SCE shall submit a Helicopter Use Plan to CPUC and BLM for approval.  Once the Helicopter Use Plan is made final, SCE shall provide a copy as a courtesy to each jurisdiction through which the Project passes.	N/A
	<ul> <li>The specific locations requiring deconstruction of construction work using helicopters shall be identified.</li> <li>Temporary staging of materials outside of approved yards or on access or spur roads shall not occur without prior approval of CPUC or BLM, as appropriate.</li> </ul>		

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	<ul> <li>The yards to and from which helicopters would fly (fly yards) shall be identified and shall be of sufficient size to ensure safe operations, given the other activities occurring at the yards and the vicinity.</li> </ul>		
	<ul> <li>Fly yards shall be no closer than a horizontal distance of 475 feet from occupied residences to avoid unacceptable nuisances.</li> </ul>		
	<ul> <li>Site-specific steps taken to avoid nuisances and ensure safe refueling shall be identified for each fly yard.</li> </ul>		
	<ul> <li>Flight paths that minimize flights in wilderness areas and near schools, hospitals, nursing homes, and other sensitive group receptors shall be identified and followed.</li> </ul>		
	<ul> <li>Except in an emergency, helicopters shall land or hover near the ground only in areas previously approved for landing, and all dust control and biological and cultural resource protection requirements shall apply.</li> </ul>		
	• External loads will be secured by appropriate rigging, including boxing, netting, choking, and cabling, or other suitable means. Only qualified riggers shall prepare and attach external loads to helicopters, and rigging shall be appropriate to the nature of the load, including the use of devices as necessary to prevent materials being lost in flight. Where appropriate to reduce load inflight spinning and movement, drag chutes will be attached to loads. The need for drag chutes will be determined by the pilot and rigging personnel, where appropriate. At locations where rigging is to occur, a sufficient supply of appropriate rigging and containment materials in good repair shall be on hand at all times.		
	<ul> <li>All aircraft are to be configured with weight sensors such that, when preparing to haul external loads, the pilot is able to determine the weight of the load being lifted.</li> </ul>		
	<ul> <li>Yards or landing zones shall have a designated qualified individual managing the movement of aircraft in and out of the yard or landing zone when flight activity is high.</li> </ul>		
	Appropriate protocols for communication among pilots and between pilots and the ground shall be developed and implemented.		

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	A GPS-based data system shall be installed in each aircraft.		
	<ul> <li>The system shall identify for the pilot all project-approved project flight paths and those areas where overflights are restricted (such as seasonally restricted bird nesting areas and sensitive residential or institutional areas) and shall be updated as often as any flight restrictions are implemented or lifted.</li> <li>The system shall automatically record and preserve flight data sufficient to identify the aircraft's flight path, including altitude above ground. The system shall be capable of providing the information required with regard to flight path and aircraft identifier and provide a location "ping" no less frequently the once every 3 seconds. These data shall be collected daily and maintained by SCE or its contractor for a period of no less than six months and made available to CPUC or BLM upon request.</li> </ul>		
	The Helicopter Use Plan shall be submitted to CPUC and BLM for review and approval at least 30 days prior to the use of helicopters on the project. Once the Helicopter Use Plan is made final, a copy shall be provided as a courtesy to each jurisdiction through which the Project passes.		
Tribal Cultural Ro			
APM-TCR-2	<b>Tribal Engagement Plan.</b> A tribal engagement plan shall be prepared, which will detail how Native American tribes will be engaged and informed throughout the proposed project. The tribal engagement plan will be included in the CRMP.	A tribal engagement plan shall be prepared, which will detail how Native American tribes will be engaged and informed throughout the proposed project	The Tribal Engagement Plan was included in the CRMP.
Also see MMs CR	R-1 through CR-8 above, under Cultural Resources.		
Utilities and Serv	•		
MM UT-1	Provide cathodic protection. Prior to commencing construction or as soon as such data are available, if it is not available before construction, SCE shall determine and report to CPUC and BLM the location of adjacent utilities and other metallic or conducting objects susceptible to induced voltages and currents. The scope of SCE's report shall include the results of an alternating current interference study by SoCalGas on the natural gas pipelines that parallel or cross portions of the Lugo-Mohave 500 kV Transmission Line. Prior to the in-service date of the Proposed	SCE shall provide CPUC and BLM utility/metallic object locations as soon as available and conduct alternating current interference study at required locations and	An alternating current interference study has been provided to the CPUC for review. Approval is anticipated on

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	Project series capacitors, SCE shall ensure that the necessary grounding or other	submit to CPUC and BLM	
	appropriate measures to provide appropriate cathodic protection has been installed and shall confirm this to the CPUC and BLM.	for review and approval at least 60 days prior to cathodic protection	
	If SCE identifies other utilities near the 500 kV Transmission Lines that may be susceptible to increased risk of corrosion due to induced currents or voltages, SCE shall conduct or have conducted an alternating current interference study during construction of the ELM Project that evaluates the alternating current interference effects of the 500 kV transmission lines on such other utilities. The study shall include the development of a model using the maximum magnetic field levels for the transmission lines, including the conductor arrangement. For all utilities identified with a corrosion potential, SCE shall coordinate with the owner of the utility and use data gathered in the alternating current interference study to determine appropriate design measures to protect the utility from corrosion, such as ground mats or gradient control wires for cathodic protection of buried pipelines and other utilities. The study, summary of coordination with potentially affected utilities, and specifications of any design measures to be installed shall be submitted to the CPUC and BLM for review and approval at least 60 days prior to initiation of installation of such protection. All required protective and grounding work shall be completed prior to the in-service date of the Proposed Project series capacitors.	installation.	
MM UT-2	Implement mitigation measures during pipeline protection work. Any agreement between SCE on the one hand and any party undertaking installation of pipeline protection measures required as a result of the ELM Project on the other hand shall include a requirement that applicable mitigation measures required during construction of the ELM Project also apply to and be implemented during any required pipeline-related work. At a minimum, and to the extent that they apply in the geographic area of the pipeline work, these will include mitigation measures for impacts to biological resources, cultural and tribal cultural resources, and hazards and hazardous materials. The BLM and NPS may substitute equally effective mitigation measures or may require additional measures be implemented. A copy of the agreement between SCE and any other party for the pipeline work shall be provided to CPUC, BLM, and NPS. Business confidential information may be redacted, but the general nature of any redaction shall be identified. Absent a binding agreement between SCE and any other party to implement the required mitigation measures, or equally effective measures imposed by BLM and/or NPS, SCE will not be authorized to fund any of the required pipeline work.	A copy of the agreement between SCE and any other party for pipeline work shall be provided to CPUC, BLM, and NPS.	A copy of the agreement between SCE and SoCalGas for the pipeline work will be provided to the CPUC, BLM, and NPS.

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
MM UT-3	Provide safety features for induced currents on adjacent metallic objects. Prior to commencing construction or as soon as such data are available, if it is not available before construction, SCE shall determine and report to CPUC and BLM the location of metallic or conducting objects that may present a shock hazard to the public due to induced voltages or currents. SCE shall prepare an Induced Current Touch study that evaluates the conductive and inductive interference effects of the 500 kV transmission lines and new overhead distribution lines on the identified conductive objects. The Induced Current Touch study, including the criteria and approach that were used to determine what objects could present a shock and the details of the grounding or other measures to be installed, shall be submitted to the CPUC and BLM for review and approval.	SCE shall provide CPUC and BLM metallic object locations that may present a shock hazard as soon as available and prepare an Induced Current Touch Study for CPUC and BLM review and approval.	An Induced Current Touch Study was submitted to the CPUC for review. Approval is anticipated on TBD.
Wildfire	BENT TO TEVIEW and approval.		
MM WF-1	Prepare and implement a Fire Management Plan. A project-specific Fire Management Plan for construction of the ELM project shall be prepared by SCE and submitted for review and approval by the CPUC prior to initiation of construction. The draft copy of the Plan must also be provided to each responsible fire agency at least 90 days before the start of construction activities in areas designated as Very High or High Fire Hazard Severity Zones with a request for comments on the Plan's adequacy within 30 days. Plan reviewers shall include CPUC, BLM, CAL FIRE, and San Bernardino County. Comments received on the draft Plan shall be provided to SCE from all other reviewers, and SCE shall resolve each comment in consultation with the commenting agency. CPUC shall approve the final Plan, which shall be provided to the Plan reviewing agencies at least 30 days prior to the initiation of construction activities in the Fire Hazard Severity Zones. SCE shall fully implement the Plan during all construction activities.	Prior to construction, SCE to submit Fire Management Plan to CPUC for review and approval.	The Fire Management Plan was approved 11/17/2020
	A qualified project Fire Marshal or person of similar title and experience shall be established by SCE to implement and enforce all provisions of the approved Fire Management Plan as well as perform other duties related to fire detection, prevention, and suppression for the project. The Fire Marshal shall monitor construction activities to ensure implementation and effectiveness of the plan. The Plan shall cover:		
	<ul> <li>The purpose and applicability of the plan;</li> <li>Responsibilities and duties;</li> <li>Preparedness training and drills;</li> </ul>		

Mitigation Number	Applicant-Proposed Mitigation/Mitigation Measure Requirements	Requirement	Status
	Procedures for fire reporting, response, and prevention that include:		
	<ul> <li>identification of daily site-specific risk conditions,</li> <li>the appropriate tools and equipment needed on vehicles and to be on hand at sites,</li> <li>reiteration of fire prevention and safety considerations during tailboard meetings, and</li> <li>daily monitoring of the red-flag warning system with appropriate restrictions on types and levels of permissible activity;</li> </ul>		
	Coordination procedures with BLM and San Bernardino County fire officials;		
	Crew training, including fire safety practices and restrictions; and		
	<ul> <li>Methods for verification that Plan protocols and requirements are being followed.</li> </ul>		