Proponent's Environmental Assessment for Southern California Edison Company's Eagle Mountain-Blythe 161 kiloVolt Transmission Line Rating Remediation Project Volume 1

July 31, 2024 (PEA submittal date)

Remove existing subtransmission structures and conductors, install new subtransmission structures and conductors on existing distribution and subtransmission circuits.

The Eagle Mountain-Blythe 161 kiloVolt Transmission Line Rating Remediation Project would be located in Riverside County and the City of Blythe within the State of California.

Application A.24-XX-XX to the California Public Utilities Commission

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Volume 1 - Table of Contents

Volume 1 - List of Tables

Volume 1 - List of Figures

Chapter 1 Executive Summary

This Chapter provides an Executive Summary for Southern California Edison Company's (SCE's) proposed Eagle Mountain-Blythe 161 kiloVolt (kV) Transmission Line Rating Remediation Project (Project).

1.1 Proposed Project Summary

The Project would remediate discrepancies associated with the existing Eagle Mountain-Blythe 161 kV subtransmission line.[1] To remediate these discrepancies, SCE proposes to (1) reconductor the existing Eagle Mountain-Blythe 161 kV subtransmission line, (2) install portions of fault return conductor (FRC) and overhead ground wire (OHGW) on the existing Eagle Mountain-Blythe 161 kV subtransmission line and (3) replace individual existing poles and reuse individual existing subtransmission structures along portions of the existing Eagle Mountain-Blythe 161 kV subtransmission line. The locations where these differing discrepancy remediation approaches would be applied are presented in Appendix A and are described in further detail in Section 3.3, Project Components.

Three additional circuits are collocated along the first mile of the Eagle Mountain-Blythe 161 kV circuit between Eagle Mountain Substation and new structure 7029503. As a result of the taller structure replacements on the Eagle Mountain-Blythe 161 kV circuit, the Proposed Project will also reconductor those portions of existing Eagle Mountain-KEM #1 and #2 66 kV subtransmission lines and the existing Desert Center 12 kV distribution line.

No new substations are proposed to be constructed as part of the Project, and no existing substations would be expanded or upgraded. Work at existing substations as part of the Project would be limited in scope and performed within or adjacent to the existing substation facilities. Ground-disturbing activities would occur within disturbance areas defined as structure replacement work areas, existing structure sites, wire setup sites, and guard structure sites. The network of existing unpaved access roads would be used for Project activities. The sections below provide a summary of the Project purpose, objectives, and proposed activities.

1.1.1 Purpose and Objectives

Under the rules, guidelines, and regulations of the Federal Energy Regulatory Commission (FERC), North American Electric Reliability Council (NERC), Western Energy Coordinating Council (WECC), California Public Utilities Commission (CPUC), and SCE's planning criteria and guidelines, electrical transmission, subtransmission, and distribution systems must have sufficient capacity to maintain safe, reliable, and adequate service to customers. The safety and reliability of the systems must be maintained under normal conditions when all facilities are in service, as well as under abnormal conditions during equipment or line failures, maintenance outages, or outages that cannot be predicted or controlled, which are caused by weather, earthquakes, traffic accidents or any other unforeseeable events.

The design of electric lines in California is governed by General Order (GO) 95, Rules for Overhead Electric Line Construction. The purpose of GO 95 is to (1) formulate the requirements for overhead line design, construction, and maintenance; (2) ensure adequate and reliable service; (3) ensure the safety of those who construct, maintain, and operate overhead electric lines; and (4) ensure the safety of the public. GO 95 Rules 37 through 39 specify minimum vertical and horizontal clearances that must be maintained between

[1] Discrepancies are defined as potential clearance problems between an energized conductor and its surroundings, such as the structure, another energized conductor on the same structure, a different line, or the ground, among others.

an electric power line (referred to as a conductor) and other conductors, or between a conductor and the ground, buildings, and a variety of other objects.

In 2006, SCE discovered certain clearances along some of its circuits did not comply with GO 95 due to the installation of additional infrastructure under SCE lines over time; survey, engineering, and construction inaccuracies; the growth of vegetation; and changes in topography. After informing the CPUC and the California Independent System Operator (CAISO), SCE initiated a Light Detection and Ranging (LiDAR) study and engineering modeling work to confirm these discrepancies. The collective effort to identify and remediate these discrepancies across SCE's system is referred to as the Transmission Line Rating Remediation (TLRR) Program. Based on the LiDAR and engineering modeling work, SCE's TLRR effort is developing a remediation plan for each discrepancy to ensure compliance with GO 95 standards and current published power line ratings. The Project is needed to comply with GO 95 by remediating identified clearance discrepancies through SCE's TLRR effort along the Eagle Mountain-Blythe 161 kV circuit.

The primary objective of the Project is to remediate identified discrepancies to ensure compliance with the standards contained in GO 95 Rule 37, Minimum Clearances of Wires above Railroads, Thoroughfares, Buildings, Etc., Table 1; Rule 38, Minimum Clearances of Wires from Other Wires, Table 2; and Rule 39, Minimum Clearance of Wires from Signs, Table 2-A. A secondary objective is to maintain reliable service to customers served by the subject circuit.

Once online, this project will ensure compliance with GO 95 and maintain system reliability.

1.1.2 Summary of Activities

The Project would include the following major components:

1.1.2.1 Existing Facilities

Several existing structures (i.e., steel poles and associated foundations, wood poles, wood pole H-frames, and wood three-pole structures) and all conductors would be removed as part of the Project. No other facilities would be removed or modified as part of the Project. All facilities to be removed are above-ground facilities. No below-ground facilities (e.g., underground conduit, cable) would be removed as part of the Project.

All above-ground portions of existing structures slated to be removed during the Project will be removed completely. The below-ground portions of wood poles, wood-pole H-frames, and three-pole structures would be removed completely; concrete foundations associated with steel poles proposed to be removed would typically be removed two to three feet below grade. These existing structures will be removed because they will no longer be needed after replacement structures are installed.

For additional information regarding existing facility removal or modification, please refer to Chapter 3, Proposed Project Description, Section 3.3.3, Existing Facilities.

1.1.2.2 Proposed Facilities

As part of the Project, new subtransmission structures, new subtransmission conductor, new distribution conductor, new overhead ground wire (OHGW), and new FRC would be installed. Existing communication cables would be transferred from existing facilities to new facilities. For additional information regarding proposed facilities, please refer to Chapter 3, Proposed Project Description, Section 3.3.4, Proposed Facilities.

1.1.2.2.1 Subtransmission Structures Description

As part of the Project, subtransmission structures [single tubular steel poles (TSPs), three-pole TSPs, and lightweight steel (LWS) H-frames] would be installed, and new overhead conductor, new OHGW, and new fault return cable (FRC) would be supported on those structures. TSPs would be engineered structures constructed from galvanized steel; the design of a given TSP is specific to the location and engineering considerations of that given TSP. TSPs would be installed on a drilled pier, poured-in-place, reinforced concrete foundation. LWS H-frames would be constructed from two LWS poles supporting a horizontal bridge. LWS poles are structures constructed from galvanized steel; LWS poles would be pre-engineered wood pole equivalents. LWS poles would be direct-buried; in some locations, steel, cardboard, plastic forms, and slurry may be placed to stabilize the excavation walls prior to installation of the pole.

1.1.2.2.2 Conductor/Cable

The Proposed Project would replace existing aluminum conductor steel reinforced (ACSR) along several circuits. Approximately 53 circuit miles of existing ACSR conductor would be replaced with new, non-specular conductor with a diameter of 0.741 inch on the Eagle Mountain- Blythe 161 kV circuit. Approximately 2 circuit miles of existing ACSR conductor would be replaced with new 0.953 inch diameter ACSR conductor on the Eagle Mountain-KEM No. 1 and Eagle Mountain-KEM No. 2 66 kV circuits. Approximately 1 circuit mile of existing ACSR conductor would be replaced with new 0.684 inch diameter ACSR conductor on the Desert Center 12 kV circuit.

The ACSR conductor for FRC would have a diameter of approximately 0.563 inch. Approximately 3 miles would be installed in various locations.

OHGW wire would have a diameter of approximately 0.5 inch. Approximately 1 mile would be installed.

1.1.2.3 Other Potentially Required Facilities

The Project would not require the modification or replacement of unconnected utilities or other types of infrastructure. Unconnected and/or third-party infrastructure, where present, would be transferred to new structures where applicable, or would be left in place on existing structures.

The Project is not anticipated to include additional civil engineering work to address site conditions or slope stabilization issues. The establishment and use of construction work areas would generally not require slope stabilization. Where structures are located in areas with steep slopes, structures could be accessed by foot, thus negating the need to prepare a construction work area for a vehicle at that structure. Where the siting of construction work areas is fully or partially discretionary (e.g., the siting of conductor stringing sites), such work areas have been intentionally sited in areas that would not require slope stabilization.

If the need for retaining walls is identified, the location, length, height, and type of such walls would be communicated to the CPUC. Local ministerial permits required would also be obtained as needed.

1.1.2.4 Future Expansions and Equipment Lifespans

There are no current and reasonably foreseeable plans for expansion or future phases of development associated with the Project. The structures, conductor, and overhead cable to be installed as part of the Project could have a usable life of greater than 40 years.

1.2 Land Ownership and Right-of-Way Requirements

The Project alignment is located on private lands with the following exceptions:

- **Federal Land**. Approximately 34.5 miles of the Project alignment is located on lands managed by the Bureau of Land Management (BLM), where SCE has existing rights, permits, and/or grants.
- **City/County Land**. Approximately 0.05 mile of the Project alignment is located on lands managed by Riverside County. The Project alignment is located on and over county and city lands where the alignment crosses State highways owned and administered by county- or city-maintained roadways, whereby SCE has franchise rights.
- **State Land**. The Project is located on and over State lands where the alignment crosses State highways owned and administered by Caltrans. SCE would secure the necessary Caltrans permits to complete construction at the Caltrans crossings.
- **Other Land**. Approximately 1 mile of the Project alignment is located on land owned by the BLM and managed by Metropolitan Water District (MWD), where SCE has existing easement rights.

SCE would construct the Project within existing right-of-way (ROW), where SCE has existing land rights. The land rights SCE has within the ROW are a combination of easements, permits, a license, prescriptive rights, and grants. SCE would utilize its franchise rights along portions of the Project alignment. The existing ROW width on BLM lands ranges from approximately 50 feet to 100 feet wide. Easements on private lands vary in width from approximately 70 feet to 100 feet. SCE would not require the acquisition of any new permanent easement rights along the proposed length of this Project. Based on final engineering and construction requirements, Temporary Entry Permits (TEPs) and/or Temporary Construction Easements (TCEs) may be required from private landowners to provide sufficient equipment, material storage, staging, and construction work areas, as well as access for any approved project component.

For additional information regarding proposed facilities, please refer to Chapter 3, Proposed Project Description, Section 3.4, Land Ownership, Rights-of-Way, and Easements.

1.3 Areas of Controversy

No areas of controversy or major issues related to the Project have been communicated to SCE by representatives from the agencies contacted by SCE (including the BLM and MWD) as described in Chapter 2, Introduction, Section 2.2, Pre-filing Consultation and Public Outreach, of this document. SCE anticipates that possible areas of controversy may include the temporary closure of lanes on some public roads during construction activities and compatibility and design considerations.

1.4 Summary of Impacts

1.4.1 Impact Assessment Methodology

The analysis of environmental impacts is based upon the environmental setting applicable to each resource/issue and the manner in which the construction, operation, and maintenance of the Project would affect the environmental setting and related resource conditions. In accordance with California Environmental Quality Act (CEQA) requirements and guidelines, the impact assessment methodology also considers the following three topics: (1) the regulatory setting and evaluation of whether the Project or alternatives would be consistent with adopted federal, State, and local regulations and guidelines; (2) growth-inducing impacts; and (3) cumulative impacts. Regulatory compliance issues are discussed in each

resource/issue area section. This Proponent's Environmental Assessment (PEA) is organized according to the following major issue area categories:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology, Soils, and Paleontological Resources
- Greenhouse Gas Emissions
- Hazards, Hazardous Materials, and Public Safety
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

To provide for a comprehensive and systematic evaluation of potential environmental consequences to the resource/issue areas, the environmental impact assessments for the Project are based upon a classification system with the following definitions:

- SI: Significant Impact (also referred to as Significant and Unavoidable); adverse impacts may occur that would be significant even after applicant proposed measures have been applied to minimize their severity. A "significant impact" applies where the environmental impact exceeds the significance threshold, or information was lacking to make a finding of less than significant.
- LTSWM: Less than Significant Impact with Mitigation; significant adverse impacts may occur; however, with proper applicant proposed measures, the impacts can be reduced to less than significant.
- LTS: Less than Significant Impact; some impacts may result from the Project; however, they are judged to be less than significant. Impacts are frequently considered less than significant when the changes are minor relative to the size of the available resource base or would not change an existing resource. A "less-than-significant impact" applies where the environmental impact does not exceed the significance threshold.
- NI: No Impact; there would be no impact to the identified resource as a result of the Project.
- ND: No Determination; no determination can be made regarding the Project's impact to the resource at this time. An impact determination would be made pending additional information or analysis.

SCE has proposed measures to reduce impacts to potentially affected resources or areas referred to as Applicant Proposed Measures (APMs). Further, SCE would implement CPUC-identified Draft Environmental Measures as necessary and applicable.

1.4.2 Impact Summary Table

Table 1-1 provides a summary of impacts and impact severity, APMs that would be applied, and significance of impact after mitigation. As shown in Table 1-1, for issue areas where impacts have been determined, the Project would not result in an impact that is significant and cannot be mitigated to a level that is less than significant.

Table 1-1 Summary of Impacts and APMs for the Project

Impact	Impact Class	Applicant Proposed Measure(s)[1]	Residual Impact
Impact AES-1: Have a substantial adverse effect on a scenic vista	LTS	None required.	LTS
Impact AES-2: Substantially damage scenic resources including, but not limited to: trees, rock outcroppings, and historic buildings within a state scenic highway	NI	None required.	NI
Impact AES-3: In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point)	LTSWM	AES-1	LTS
Impact AES-4: Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area	LTSWM	AES-1, AES-2	LTS
Impact AG-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, to nonagricultural use	NI	None Required.	NI
Impact AG-2: Conflict with existing zoning for agricultural use, or a Williamson Act contract	NI	None Required.	NI
Impact AG-3: Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))	NI	None Required.	NI
Impact AG-4: Result in the loss of forest land or conversion of forest land to non-forest use	NI	None Required.	NI
Impact AG-5: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use	NI	None Required.	NI
Impact AIR-1: Conflict with or obstruct implementation of the applicable air quality plan	NI	None Required.	NI
Impact AIR-2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard	LTSWM	AIR-1, AIR-2, NOI-1	LTS
Impact AIR-3: Expose sensitive receptors to substantial pollutant concentrations	LTSWM	AIR-2, NOI-1	LTS

Impact	Impact Class	Applicant Proposed Measure(s)[1]	Residual Impact
Impact AIR-4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people	LTS	None Required.	LTS
Impact BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS	LTSWM	BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6, BIO-7, BIO-8, BIO-9, BIO-10, BIO-11, BIO-12, BIO-13, BIO-14, BIO-15, BIO-16, BIO-17, BIO-18, AIR-2, HAZ-1	LTS
Impact BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS	LTSWM	BIO-1, BIO-2, BIO-9, BIO-10, BIO-11, BIO-12, BIO-13, BIO-14, BIO-18, AIR-2, HAZ-1	LTS
Impact BIO-3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means	LTSWM	BIO-1, BIO-2, BIO-9, BIO-10, BIO-11, BIO-13, BIO-14, AIR-2, HAZ-1	LTS
Impact BIO-4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridor, or impede the use of native wildlife nursery sites	LTS	None Required.	LTS
Impact BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	LTSWM	BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6, BIO-7, BIO-8, BIO-9, BIO-10, BIO-11, BIO-12, BIO-13, BIO-14, BIO-15, BIO-16, BIO-17, BIO-18	LTS
Impact BIO-6: Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan	NI	None Required.	NI
Impact BIO-7: Create a substantial collision or electrocution risk for birds or bats	LTS	None Required.	LTS
Impact CUL-1: Cause a substantial adverse change in the significance of a historical resource as defined in Section 15065.5	LTSWM	CUL-1, CUL-2, CUL-3, CUL-4	LTS
Impact CUL-2: Cause a substantial adverse change in the significance of an archeological resource pursuant to Section 15065.5	LTSWM	CUL-1, CUL-2, CUL-3, CUL-4	LTS
Impact CUL-3: Disturb any human remains, including those interred outside of dedicated cemeteries	LTSWM	CUL-5	LTS
Impact EN-1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation	LTS	None Required.	LTS
Impact EN-2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency	NI	None Required.	NI
Impact EN-3: Add capacity for the purpose of serving a nonrenewable energy resource	NI	None Required.	NI

Impact	Impact Class	Applicant Proposed Measure(s)[1]	Residual Impact
Impact GEO-1: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (Refer to Division of Mines and Geology Special Publication 42) or seismic-related ground failure, including liquefaction	NI	None Required.	NI
Impact GEO-2: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking or landslides	LTS	None Required.	LTS
Impact GEO-3: Result in substantial soil erosion or the loss of topsoil	LTS	None Required.	LTS
Impact GEO-4: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse	LTS	None Required.	LTS
Impact GEO-5: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property	NI	None Required.	NI
Impact GEO-6: Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater	NI	None Required.	NI
Impact GEO-7: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature	LTSWM	PAL-1, PAL-2, PAL-3	LTS
Impact GHG-1: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment	LTS	None Required.	LTS
Impact GHG-2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases	NI	None Required.	NI
Impact HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	LTSWM	HAZ-1	LTS
Impact HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment	LTSWM	HAZ-1	LTS
Impact HAZ-3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	NI	None Required.	NI
Impact HAZ-4: Be located on a site that is included on a list of hazardous material sites, compiled pursuant to Government Code Section 65962.5, and as a result would create a significant hazard to the public or the environment	LTSWM	HAZ-1, HAZ-2	LTS

Impact	Impact Class	Applicant Proposed Measure(s)[1]	Residual Impact
Impact HAZ-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project would result in a safety hazard or excessive noise for people residing or working in the project area	LTS	None Required.	LTS
Impact HAZ-6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	LTSWM	TRA-1	LTS
Impact HAZ-7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires	LTSWM	HAZ-4	LTS
Impact HAZ-8: Create a significant hazard to air traffic from the installation of new power lines and structure	LTS	None Required.	LTS
Impact HAZ-9: Create a significant hazard to the public or environment through the transport of heavy materials using helicopters	NI	None Required.	NI
Impact HAZ-10: Expose people to a significant risk of injury or death involving unexploded ordnance	NI	None Required.	NI
Impact HAZ-11: Expose workers or the public to excessive shock hazards	NI	None Required.	NI
Impact HYDR-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality	LTS	None Required.	LTS
Impact HYDR-2: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin	LTS	None Required.	LTS
Impact HYDR-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site	LTS	None Required.	LTS
Impact HYDR-4: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site	LTS	None Required.	LTS
Impact HYDR-5: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff	LTS	None Required.	LTS
Impact HYDR-6: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows	LTS	None Required.	LTS
Impact HYDR-7: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation	LTS	None Required.	LTS

Impact	Impact Class	Applicant Proposed Measure(s)[1]	Residual Impact
Impact HYDR-8: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan	NI	None Required.	NI
Impact LU-1: Physically divide an established community	NI	None Required.	NI
Impact LU-2: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect	NI	None Required.	NI
Impact MIN-1: Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state	NI	None Required.	NI
Impact MIN-2: Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan	NI	None Required.	NI
Impact NOI-1: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies	LTSWM	NOI-1	LTS
Impact NOI-2: Generation of excessive groundborne vibration or groundborne noise levels	LTS	None Required.	LTS
Impact NOI-3: Exposure of people residing or working in the Project area to excessive noise levels for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport	NI	None Required.	NI
Impact POP-1: Induce substantial unplanned population growth in the area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through the extension of new roads or other infrastructure)	NI	None Required.	NI
Impact POP-2: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere	NI	None Required.	NI
Impact PUB-1: Result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives	NI	None Required.	NI
Impact PUB-2: Result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives	NI	None Required.	NI

Impact	Impact Class	Applicant Proposed Measure(s)[1]	Residual Impact
Impact PUB-3: Result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives	NI	None Required.	NI
Impact PUB-4: Result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives	NI	None Required.	NI
Impact PUB-5: Result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives	NI	None Required.	NI
Impact REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated	NI	None Required.	NI
Impact REC-2: Include recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment	NI	None Required.	NI
Impact REC-3: Reduce or prevent access to a designated recreation facility or area	LTSWM	REC-1, TRA-1	LTS
Impact REC-4: Substantially change the character of a recreational area by reducing the scenic, biological, cultural, geologic, or other important characteristics that contribute to the value of recreational facilities or areas	NI	None Required.	NI
Impact REC-5: Damage recreational trails or facilities	NI	None Required.	NI
Impact TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities	LTSWM	TRA-1	LTS
Impact TRA-2: Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b) (vehicle miles traveled)	LTS	None Required.	LTS
Impact TRA-3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)	NI	None Required.	NI
Impact TRA-4: Result in inadequate emergency access.	LTSWM	TRA-1	LTS
Impact TRA-5: Create potentially hazardous conditions for people walking, bicycling, or driving or for public transit operations	LTSWM	TRA-1	LTS
Impact TRA-6: Interfere with walking or bicycling accessibility	LTSWM	TRA-1	NI
Impact TRA-7: Substantially delay public transit	LTS	None Required.	LTS

Impact	Impact Class	Applicant Proposed Measure(s)[1]	Residual Impact
Impact TCR-1: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in Section 5020.1(k)	ND[2]	TCR-1, TCR-2, CUL-1, CUL-2, CUL-3, CUL-4, and CUL-5[2]	ND[2]
Impact TCR-1: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1	ND[2]	TCR-1, TCR-2, CUL-1, CUL-2, CUL-3, CUL-4, and CUL-5[2]	ND[2]
Impact UTIL-1: Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects	LTS	None Required.	LTS
Impact UTIL-2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years	LTS	None Required.	LTS
Impact UTIL-3: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments	LTS	None Required.	LTS
Impact UTIL-4: Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals	LTSWM	HAZ-1, HAZ-2	LTS
Impact UTIL-5: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste	LTS	None Required.	LTS
Impact UTIL-6: Increase the rate of corrosion of adjacent utility lines as a result of alternating current impacts	NI	None Required.	NI
Impact WF-1: Substantially impair an adopted emergency response plan or emergency evacuation plan	NI	None Required.	NI
Impact WF-2: Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire	NI	None Required.	NI
Impact WF-3: Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment	NI	None Required.	NI

Impact	Impact Class	Applicant Proposed Measure(s)[1]	Residual Impact
Impact WF-4: Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes	NI	None Required.	NI

[1] Full text of the APMs is included in Table 3-9 in Chapter 3, Proposed Project Description.
[2] The CPUC will consult with eligible tribes under PRC Section 21080.3.1 once the Application is complete. Impacts on tribal cultural resources are not addressed in this PEA because under AB 52, the CPUC must identify these resources during consultation. Therefore, no tribal cultural resources have been identified, and the impacts associated with tribal cultural resources have not been determined.
Notes:
SI = Significant Impact
LTS = Less than Significant
LTSWM = Less than Significant with Mitigation
ND = No Determination
NI = No Impact

1.5 Summary of Alternatives

The CPUC's PEA Guidelines (*Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-filing and Proponent's Environmental Assessments*, dated November 2019; page 40) states, "All Applicants will assume that alternatives will be required for the environmental analysis and that an EIR will be prepared unless otherwise instructed by CPUC CEQA Unit Staff in writing prior to application filing." The EM-B Project involves remediation of clearance discrepancies on existing subtransmission infrastructure within an established EM-B Project alignment. Based upon SCE's analysis, no potentially significant impacts were identified and, following consultation with CPUC Energy Division, SCE is not proposing alternatives at this time. In addition, because the EM-B Project involves reconductoring portions of existing subtransmission lines rather than the construction of new subtransmission lines, alternatives that would substantially deviate from the existing alignment (i.e. alternative routes or locations) were not considered. SCE has received instruction from CPUC CEQA Unit Staff that an alternatives analysis is not required for this PEA. In order to comply with CEQA requirements, SCE has provided a description of the No Project Alternative in Chapter 4 of this document.

1.6 Pre-filing Consultation and Public Outreach Summary

To date, SCE has briefed federal and state land managers (BLM and MWD), the California Department of Fish and Wildlife (CDFW), and the CPUC Energy Division CEQA Unit on the scope and potential impacts of the Project. Details regarding this pre-filing consultation with agencies and SCE's public outreach efforts are presented in Chapter 2, Introduction, Section 2.2, Pre-filing Consultation and Public Outreach. Pre-filing consultation and public outreach did not generate any significant outcomes, and thus none were incorporated into the Project.

1.7 Conclusions

The primary conclusion resulting from the environmental impact analyses presented in Chapter 5 of this document is that the Project, as described in Chapter 3, does not result in any potentially significant environmental impact that cannot be mitigated to a level that is not significant.

1.8 Remaining Issues

No major environmental, engineering, or real property-related issues remain to be resolved.

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Chapter 2 Introduction

This Chapter introduces the Eagle Mountain-Blythe (EM-B) 161 kiloVolt (kV) Transmission Line Rating Remediation (TLRR) Project (Project) and identifies the Project purpose, need, and objectives. This information is required by the California Public Utilities Commission's (CPUC) Proponent's Environmental Assessment (PEA) Guidelines (*Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-filing and Proponent's Environmental Assessments*, dated November 2019) and the California Environmental Quality Act (CEQA) Guidelines (Pub. Resources Code § 21000 *et seq*.) and its implementing Guidelines (14 Cal. Code Regs. § 15000 *et seq*). Additional information regarding the Project's purpose and need is provided in Southern California Edison's (SCE) application to the CPUC in accordance with CPUC General Order (GO) 131-D.

This section also provides a roadmap to the organization of this PEA document.

2.1 Project Background

SCE is a public utility that provides electric service to a population of approximately 15 million people within a 50,000-square-mile service area that encompasses approximately 180 cities throughout Southern California. SCE owns and operates approximately 5,000 miles of bulk power facilities (500 kV and 220 kV transmission lines) and 1,500 miles of subtransmission (55 kV to 200 kV) lines. SCE also owns and operates 1,200 miles of radial 115 kV subtransmission lines.

The design of electric lines in California is governed by GO 95, Rules for Overhead Electric Line Construction. The purpose of the Rules contained within GO 95 is to specify requirements applicable to overhead line design, construction, and maintenance—the application of which ensures adequate service and protects both those engaged in the construction, maintenance, operation or use of overhead lines and the public.

GO 95 Rules 37 through 39 specify minimum vertical and horizontal clearances that must be maintained between an electric power line (referred to as a conductor) and other conductors, or between a conductor and the ground, buildings, and a variety of other objects. Conductor clearance in the field (e.g., between a conductor and the ground) is not a static value—it changes depending upon the operational characteristics of the line. As greater amounts of electricity are transmitted by a conductor, the conductor material heats up and expands, resulting in greater sag (and a lesser clearance) in a given span.

In 2006, SCE identified that the clearances along some of its circuits were not compliant with the clearances required by GO 95 due to the installation of additional infrastructure under SCE lines over time; survey, engineering, and construction inaccuracies; the growth of vegetation; and changes in topography. This information was communicated to both the CPUC and the California Independent System Operator (CAISO). SCE then initiated a Light Detection and Ranging (LiDAR) study and engineering modeling work to confirm these discrepancies.[1,2] The discrepancies were reported to the North American Electric Reliability Corporation (NERC) by SCE as the GO 95 discrepancies result in reduction to line ratings, and

[1] An individual instance of non-compliance with GO 95 is referred to as a discrepancy. Discrepancies are defined as potential clearance problems between an energized conductor and its surroundings, such as the structure, another energized conductor on the same structure, a different line, or the ground, among others.

[2] LiDAR technology uses ultraviolet or near infrared light to image objects and map physical features. SCE uses aircraft equipped with LiDAR equipment to identify locations throughout SCE's service territory that do not meet the minimum required clearances for overhead lines established in GO 95.

mitigation plan to address these discrepancies was filed with and accepted by the Western Electricity Coordinating Council.

The collective effort to identify and remediate these discrepancies across SCE's system is referred to as the TLRR Program. Based on the LiDAR and engineering modeling work, SCE's TLRR effort involves developing a remediation plan for each discrepancy to ensure compliance with GO 95 standards and current published ratings.

The Project is one of several projects within SCE's larger TLRR Program.

2.1.1 Purpose and Need

2.1.1.1 Project Need

The Project is needed to comply with GO 95 by remediating identified clearance discrepancies through SCE's TLRR effort along the EM-B 161 kV circuit.

2.1.1.2 Localities Served

The subtransmission line included in the Project would continue to serve the localities it currently serves, and there would be no change to either the local or regional utility system as a result of the Project.

2.1.1.3 California Independent System Operator Consideration

The Project was not identified by the CAISO because the remediation of discrepancies does not fall under its purview. The need for the Project was identified by SCE.

2.1.2 Project Objectives

2.1.2.1 Basic Project Objectives

The Project is being proposed to comply with standards contained in GO 95 on the affected subtransmission line.

The objective of the Project is to remediate identified discrepancies in order to ensure compliance with the standards contained in GO 95 Rule 37, Minimum Clearances of Wires above Railroads, Thoroughfares, Buildings, Etc., Table 1; Rule 38, Minimum Clearances of Wires from Other Wires, Table 2; and Rule 39, Minimum Clearance of Wires from Signs, Table 2-A.[3] Remediation of the discrepancies will also bring the line into operational compliance with SCE's published facility rating methodology, which requires a review of actual field conditions as recommended by NERC. Remediating the identified discrepancies will also comply with applicable NERC reliability standards.

2.1.2.2 How Project Implementation Will Achieve the Basic Project Objectives

Implementation of the Project would achieve the basic Project objectives by remediating existing discrepancies through the replacement and/or modification of existing subtransmission structures and conductor with new structures and conductor that would be engineered and constructed to meet the standards contained in GO 95 and improve circuit reliability.

[3] Where a GO 95-specified clearance is exceeded by an SCE clearance standard, the more-conservative SCE clearancestandard is used in the design.

2.1.2.3 Why Attainment of the Basic Project Objectives is Necessary

Attainment of the basic Project objective is necessary because SCE is required to comply with standards contained in GO 95. Remediating the identified discrepancies will also comply with applicable NERC reliability standards.

2.1.3 Project Applicant

SCE is the Project Applicant. SCE owns each component of the Project. SCE is a public utility that provides electric service to a population of approximately 15 million people within a 50,000-square-mile service area that encompasses approximately 180 cities throughout Southern California.

2.2 Pre-filing Consultation and Public Outreach

2.2.1 Pre-filing Consultation and Public Outreach

2.2.1.1 Description of Pre-filing Consultation and Public Outreach

The sections below describe all pre-filing consultation and public outreach that has occurred to date.

2.2.1.1.1 California Independent System Operator

SCE has not discussed the purpose or need for the Project with CAISO.

2.2.1.1.2 Public Agencies with Jurisdiction over Project Areas or Resources that May Occur in the Project Area

SCE plans to provide periodic updates to local jurisdictions at key milestones throughout the life of the Project, such as prior to filing an application for a Permit to Construct, immediately after a final decision, and prior to the start of construction (assuming the Project is approved).

United States Bureau of Land Management

SCE has met with representatives of the BLM, California Desert District, Palm Springs Office regarding the Project since June 2017. The BLM provided a Notice to Proceed (NTP) for the Project on May 26, 2022.

California Public Utilities Commission

In 2021, SCE met with the CPUC to preview the Project's purpose and need, and to discuss the overall scope of the Project. At the time of this meeting, SCE believed the Project to be exempt, and that the California Department of Fish and Wildlife (CDFW) would take the role of lead agency on the CEQA analysis. In 2022, the CPUC directed SCE to file a Permit to Construct (PTC). In 2023, SCE met with the CPUC to discuss submitting an Initial Study, in lieu of a Proponents Environmental Assessment (PEA), as SCE had already begun preparing a draft Initial Study to submit to CDFW when SCE believed the Project would be exempt and CDFW would take the role of lead agency. The CPUC Energy Division advised SCE to submit a PEA rather than the draft Initial Study. In 2024, SCE met with the CPUC and its consultant, ECorp Consulting, to review the Project's purpose and need, and to provide a status update on the application filing.

SCE has quarterly meetings with the CPUC's Energy Division to discuss its current and upcoming licensing projects.

Metropolitan Water District

SCE has met with representatives of the Metropolitan Water District regarding the Project on a regular basis since February 2021.

California Department of Fish and Wildlife

SCE has met with representatives of the California Department of Fish and Wildfire regarding the Project on a regular basis since June 2017.

Riverside County

SCE has not met with representatives of Riverside County regarding the Project.

City of Blythe

SCE has not met with representatives of the City of Blythe regarding the Project.

2.2.1.1.3 Native American Tribes Affiliated with the Project Area

SCE has not communicated with Native American tribes affiliated with the Project area. Communication with Native American tribes will be performed by the Lead Agency on a government-to-government basis in accordance with regulations under Assembly Bill 52, Section 106 of the National Historic Preservation Act, and others as applicable. On December 7, 2022, Rincon Consultants submitted a request to the Native American Heritage Commission (NAHC) for a Sacred Lands File (SLF) search within the Proposed Project area on behalf of SCE. The NAHC responded on February 23, 2024, stating that the SLF results were negative and provided a list of 30 contacts; these contacts are provided in Appendix E. For information regarding outreach to the NAHC, please see Sections 5.5.1.3.1 and 5.18.1.1.

2.2.1.1.4 Private Landowners and Homeowner Associations

SCE has not discussed the purpose or need for the Project with any private land owners or homeowner associations within the Project area.

2.2.1.1.5 Developers for Large Housing or Commercial Projects Near the Project Area

SCE has not discussed the purpose or need for the Project with the developers for large housing or commercial projects near the Project Area.

2.2.1.1.6 Other Utility Owners and Operators

SCE has not communicated with other utility owners or operators.

2.2.1.1.7 Federal, State, and Local Fire Management Agencies

SCE has not communicated with federal, State, or local fire management agencies regarding the Project. To the extent SCE is required communication with federal, State, and/or local fire management agencies, SCE will monitor the requirement and engage agencies at the appropriate time.

2.2.1.2 Significant Outcomes

No significant outcomes of consultation were incorporated into the Project. No areas of controversy or major issues related to the Project have been communicated to SCE.

2.2.1.3 Development that Could Coincide or Conflict with Project Activities

SCE is not aware of any developments that could conflict with Project activities (i.e., developments within or immediately adjacent to the existing subtransmission line alignment). SCE is aware of developments that could coincide, either spatially or temporally, with the Project; these are addressed in Chapter 7.

2.2.2 Records of Consultation and Public Outreach

Records of communication organized by entity are provided in Appendix G.

2.3 Environmental Review Process

2.3.1 Environmental Review Process

As described in Section 2.2.1.1.2, the BLM provided a NTP for the Project on May 26, 2022. The Project will be subject to environmental review under CEQA. The State environmental review process is anticipated to be completed in 2025.

2.3.2 California Environmental Quality Act Review

2.3.2.1 CEQA Lead Agency

Pursuant to the CPUC's GO 131-D, SCE is applying to the CPUC for a PTC authorizing SCE to construct the Project. To issue a PTC, GO 131-D requires the CPUC to comply with CEQA. Therefore, the CPUC will be the Lead Agency under CEQA for the Project because it has the greatest responsibility for supervising or approving the project as a whole (14 Cal Code Regs. § 15051(b)).

2.3.2.2 Other State and Federal Agencies that May Have Discretionary Permitting Authority

The agencies that may have discretionary permitting authority of aspects of the Project may include but not be limited to:

- BLM has reviewed and evaluated activities on BLM-managed land;
- United States Army Corps of Engineers (USACE) will provide regulatory oversight and require compliance with Section 404 of the Clean Water Act;
- United States Fish and Wildlife Service will consult with federal agencies (e.g., BLM, USACE), regarding impacts to federally threatened or endangered species under the federal Endangered Species Act;
- California Department of Fish and Wildlife (CDFW) will consult with State agencies regarding impacts to state threatened or endangered species under the California Endangered Species Act;
- State Water Resources Control Board/Colorado River Basin Regional Water Quality Control Board will provide regulatory oversight and require compliance with Section 401 of the Clean Water Act;

- State Historic Preservation Officer will consult with agencies regarding potential impacts to historic resources;
- Metropolitan Water District of Southern California (MWD) will review and approve temporary entry permits for activities occurring on MWD-managed lands.

2.3.2.3 Federal, State, and Local Agencies that May Have Ministerial Permitting Authority

Caltrans, Riverside County, and the City of Blythe may have ministerial permitting authority over aspects of the Project.

2.3.2.4 Results of Preliminary Outreach with Agencies

SCE has not been made aware of any unexpected issues that would affect the CEQA process as a result of the outreach described above in Section 2.2.1. Future outreach with federal, State, and local agencies is anticipated to occur on an ongoing basis through survey access requests and applications for applicable permits.

2.3.3 National Environmental Policy Act Review

Those portions of the Project located on federal lands outside of existing Grants and those elements that may result in impacts to federally listed threatened or endangered species are subject to review under the National Environmental Policy Act (NEPA). The BLM has assumed the lead coordination role for NEPA purposes. The BLM provided a Notice to Proceed (NTP) for the Project on May 26, 2022.

2.3.4 Pre-filing California Environmental Quality Act and National Environmental Policy Act Coordination

Pre-filing coordination with CEQA and NEPA review agencies is described in Section 2.2. The coordination to date has identified that separate CEQA and NEPA processes may be engaged for the Project.

2.4 Document Organization

2.4.1 PEA Organization

The Project PEA document contains the following Chapters, as set forth in the CPUC's *Guidelines for Energy Project Applications R*equ*iring CEQA Compliance: Pre-filing and Proponent's Environmental Assessments*, dated November 2019, Revision 1.0.

2.4.1.1 Chapter 1, Executive Summary

This chapter includes a summary of the Project, a discussion of the land ownership and ROW requirements, a presentation of the areas of controversy identified to date, a summary of potential impacts, a summary of the pre-filing consultation and public outreach performed to date, a summary of the major PEA conclusions, and a listing of major issues that remain to be resolved.

2.4.1.2 Chapter 2, Introduction

This chapter includes a presentation of the purpose and need for, and objectives of, the Project, identifies the Applicant, details the pre-filing consultation and public outreach activities conducted to date, outlines the environmental review process, and establishes the organization of the PEA document.

2.4.1.3 Chapter 3, Proposed Project Description

This chapter includes an overview of the Project; a description of the existing and proposed system; a presentation of the components of the Project; information related to land ownership, ROWs, and easements; a description of the construction methodologies to be employed; data regarding the construction workforce, equipment, traffic, and schedule; information on post-construction activities; a discussion of operation and maintenance-related work; decommissioning-related information; a listing of anticipated permits and approvals; and a table presenting applicant proposed measures (APMs).

2.4.1.4 Chapter 4, Description of Alternatives

The CPUC's PEA Guidelines (*Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-filing and Proponent's Environmental Assessments*, dated November 2019; page 40) states, "All Applicants will assume that alternatives will be required for the environmental analysis and that an EIR will be prepared unless otherwise instructed by CPUC CEQA Unit Staff in writing prior to application filing." The EM-B Project involves remediation of clearance discrepancies on existing subtransmission infrastructure within an established EM-B Project alignment. Based upon SCE's analysis, no potentially significant impacts were identified and, following consultation with CPUC Energy Division, SCE is not proposing alternatives at this time. In addition, because the EM-B Project involves reconductoring portions of existing subtransmission lines rather than the construction of new subtransmission lines, alternatives that would substantially deviate from the existing alignment (i.e. alternative routes or locations) were not considered. Moreover, SCE received written instruction on September 29, 2023, from CPUC that an alternatives analysis is not required for this PEA; therefore, this PEA does not include any descriptions of alternatives, which is discussed in this chapter.

2.4.1.5 Chapter 5, Environmental Analysis

This chapter includes a description of the environmental setting, regulatory setting, and impact analysis for each resource area. The resource areas addressed include each environmental factor (resource area) identified in the most recent adopted version of the State CEQA Guidelines Appendix G checklist and any additional relevant resource areas and impact questions that are defined in the CPUC's PEA checklist.

2.4.1.6 Chapter 6, Comparison of Alternatives

SCE received written instruction on September 29, 2023, from CPUC that an alternatives analysis is not required for this PEA; therefore, this PEA does not include any comparison of alternatives, which is discussed in this chapter.

2.4.1.7 Chapter 7, Cumulative Impacts and Other CEQA Considerations

This chapter provides a detailed table listing past, present, and reasonably foreseeable future projects within and surrounding the Project (within an approximately 2-mile buffer); presents a cumulative impact analysis; and provides an evaluation of potential growth-inducing impacts.

2.4.1.8 Chapter 8, List of Preparers

This chapter lists the major authors and preparers of the PEA document.

2.4.1.9 Chapter 9, References

This chapter includes a list of references cited in this PEA.

2.4.1.10 Required PEA Appendices and Supporting Materials

SCE is submitting with this PEA the Required PEA Appendices and Supporting Materials listed in the CPUC's *Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-filing and Proponent's Environmental Assessments*, dated November 2019, Revision 1.0 that are applicable and necessary to support the environmental impact analyses contained in Chapter 5, Environmental Analysis.

Chapter 3 Proposed Project Description

This chapter provides a detailed description of Southern California Edison Company's (SCE's) Eagle Mountain-Blythe (EM-B) 161 kiloVolt (kV) Transmission Line Rating Remediation Project (Project).

3.1 Project Overview

3.1.1 Summary of the Proposed Project

The Project would remediate discrepancies associated with the existing Eagle Mountain-Blythe 161 kV subtransmission line.[1] To remediate these discrepancies, SCE proposes to (1) reconductor the existing Eagle Mountain-Blythe 161 kV subtransmission line, (2) install portions of fault return conductor (FRC) and overhead ground wire (OHGW) on the existing Eagle Mountain-Blythe 161 kV subtransmission line and (3) replace individual existing poles and reuse individual existing subtransmission structures along portions of the existing Eagle Mountain-Blythe 161 kV subtransmission line. The locations where these differing discrepancy remediation approaches would be applied are presented in Appendix A and are described in further detail in Section 3.3.

Three additional circuits are collocated along the first mile of the Eagle Mountain-Blythe 161 kV circuit between Eagle Mountain Substation and new structure 7029503. As a result of the taller structure replacements on the Eagle Mountain-Blythe 161kV circuit, the Proposed Project will also reconductor those portions of existing Eagle Mountain-KEM # 1 and # 2 66 kV subtransmission lines and the existing Desert Center 12 kV distribution line.

No new substations are proposed to be constructed as part of the Project, and no existing substations would be expanded or upgraded. Work at existing substations as part of the Project would be limited in scope and performed within or adjacent to the existing substation facilities.

The Project consists of the following Project components:

- Replacing approximately 53 circuit miles of the existing 161 kV 336 Merlin and 336 Linnet aluminum conductor, steel reinforced (ACSR) with new 336 Oriole ACSR between the Eagle Mountain and Blythe Substations (this process is referred to as "reconductoring"[2])
- Reconductoring approximately 1 circuit mile each of two existing 66 kV subtransmission circuits (Eagle Mountain-KEM #1 66 kV Subtransmission Line and Eagle Mountain-KEM #2 66 kV Subtransmission Line) between Eagle Mountain Substation and new tubular steel pole (TSP) 7029503
- Reconductoring approximately 1 mile of existing 12 kV distribution circuit (Desert Center) between Eagle Mountain Substation and new structure 7029503
- Installing approximately 1 mile of overhead ground wire (OHGW) between Eagle Mountain Substation and new structure 7029503
- Transferring one existing single communication line on the first mile north of Eagle Mountain Substation to the 17 newly installed structures
- Removing 25 steel poles with foundations and one single wood pole and replacing them with 17 TSPs with 17 foundations (9 of the steel poles that would be removed would be not replaced)

[1] Discrepancies are defined as potential clearance problems between an energized conductor and its surroundings, such as the structure, another energized conductor on the same structure, a different line, or the ground, among others.
[2] 336 Oriole (30/7) has a higher rated breaking strength than the 336 Merlin (18/1) and 336 Linnet (26/7) with minimal increase in conductor diameter, which results in fewer required structure replacements.

- Replacing 16 wood three-pole dead-end structures with 16 three-pole TSPs with 48 foundations
- Replacing 11 wood H-frame structures with 11 lightweight steel (LWS) H-frame structures
- Installing approximately 3.26 circuit miles of fault return conductor (FRC) to support LWS grounding requirements at various points along the alignment

The steel poles to be removed support the EM-B 161 kV circuit, two 66 kV circuits, one 12 kV circuit, and one communication line. These steel poles and their associated OHGW and underbuilds[3] are in the portion of the alignment extending for approximately 1 mile north from the Eagle Mountain Substation to new structure 7029503.

Currently, the EM-B circuit comprises 392 structures. This includes 339 structures that would not be removed or replaced as part of this Project. The Project includes removal of 53 structures and replacement with 44 structures, resulting in a total of 383 structures on the circuit after completion of the Project (i.e., a net reduction of 9 structures). For nine of the structures that are permanently removed, the existing disturbance areas (e.g., stub roads and cleared areas) would be restored and no longer used as disturbance areas upon completion of construction.

Ground-disturbing activities would occur within disturbance areas defined as structure replacement work areas, existing structure sites, wire setup sites, and guard structure sites. The network of existing unpaved access roads that would be used for Project activities may require maintenance and/or improvement to ensure safe access. Four laydown yards, which would be used for staging equipment and materials and as a place for personnel to meet, have been identified for the Project (see Section 3.5.3.2 and Appendix A). Two of the laydown yards are existing rocked and fenced areas; therefore, only minor repairs may be required for their use on the Project. Two of the laydown yards are not yet established and would require minor grading, fencing, and rocking in order to be used for the Project. In addition, access to these work areas would be provided by existing public roads and a network of existing unpaved access roads maintained by SCE along the existing right-of-way (ROW). Project construction activities and disturbance areas, including laydown yards and access roads, are described in detail in the following sections.

3.1.2 Geographical Location of the Proposed Project

The Project is located in unincorporated Riverside County and the City of Blythe within the State of California. See Figure 3.1-1 for a Project overview map and Appendix A for detailed Project vicinity maps.

3.2 Existing and Proposed System

3.2.1 Existing System

3.2.1.1 Existing Utility System

The existing Project utility system is comprised of one subtransmission line where discrepancies have been identified and the two connected substations, as described below. The existing system also includes portions of two additional subtransmission lines, one distribution line, and one communication line.

- Subtransmission Lines
  - EM-B 161 kV Subtransmission Line

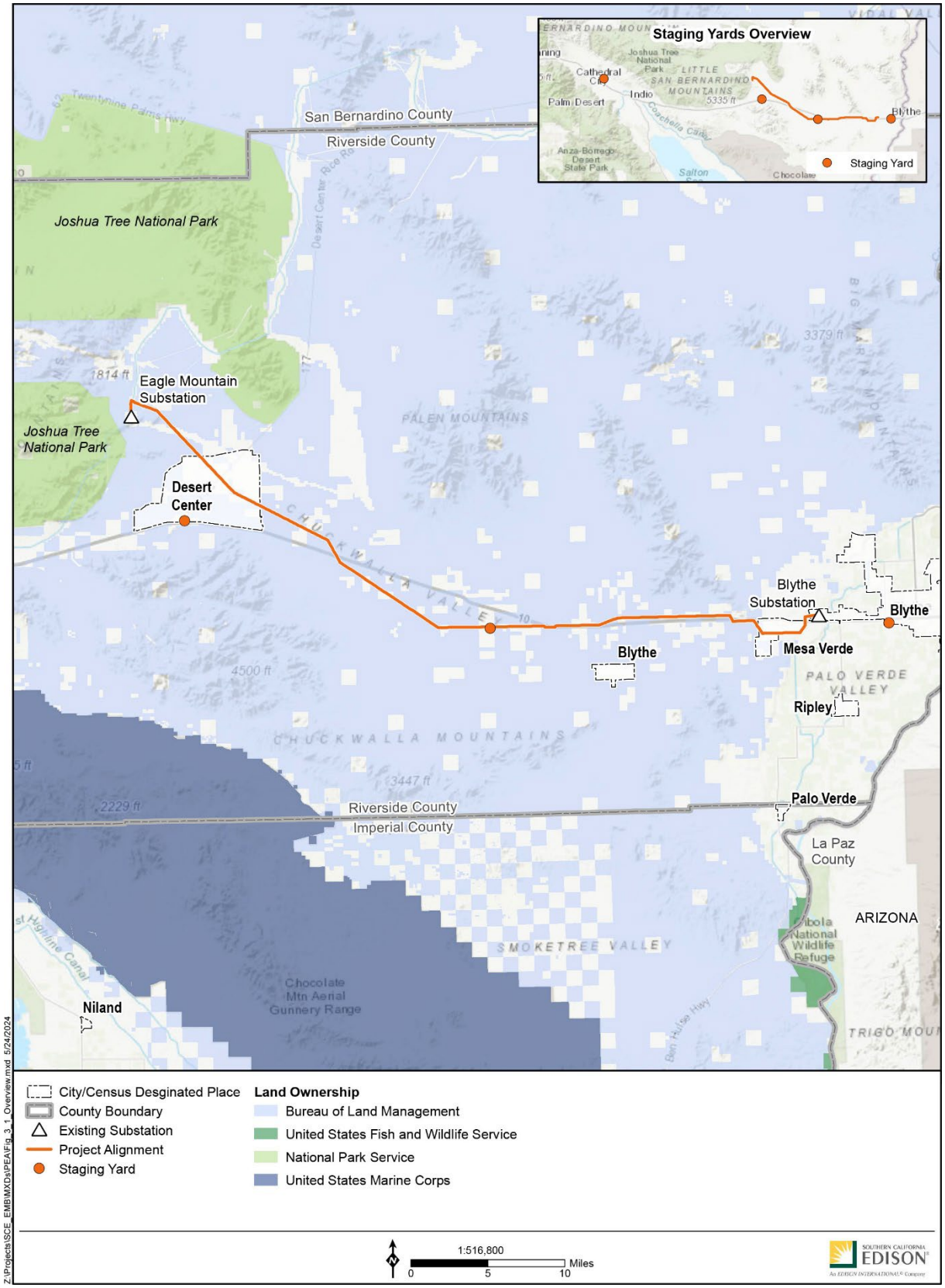
[3] An underbuild circuit is one in which the lower voltage circuit is placed beneath the higher voltage circuit.

- Eagle Mountain-KEM #1 66 kV Subtransmission Line
- Eagle Mountain-KEM #2 66 kV Subtransmission Line

- Distribution Line
  - Desert Center 12 kV Distribution Line

- Substations
  - Eagle Mountain 66/161/220 kV Substation
  - Blythe 33/161 kV Substation

Figure 3.1-1 Proposed Project Overview Map



3.2.1.2 Users and Area Served by the Existing Utility System

The existing infrastructure provides power to communities served from the existing Eagle Mountain and Blythe substations. The infrastructure serves areas that include the towns of Eagle Mountain and Desert Center, surrounding communities in unincorporated Riverside County, and the City of Blythe.

3.2.1.3 Proposed Project and the Existing Local and Regional Systems

The Project includes the replacement of existing infrastructure with new infrastructure of a similar capacity. The proposed infrastructure would be incorporated into the existing system and would continue to be part of the existing system.

3.2.1.4 Schematic Diagram of the Existing System Features

Figure 3-2 provides a schematic diagram of the existing system features.

3.2.1.5 Detailed Maps and Associated GIS Data for Existing Facilities that would be Modified

Maps for existing facilities that would be modified by the Project are presented in Appendix A. Geographic information system (GIS) data are provided under separate electronic cover.

3.2.1.6 Initial and Full Buildout of the Proposed Facilities

The Project, as proposed, represents the full buildout of the Project facilities; Project buildout would not occur in separate stages.

3.2.1.7 System Tie or Loop for Reliability

The Project would not create a second system tie or loop for sustainable reliability.

3.2.1.8 Users and Area Served by the Proposed Utility System

The Project would not provide service to any new users or areas; the existing users and areas served by the existing system (see Section 3.2.1.2) would continue to be served by the replacement infrastructure.

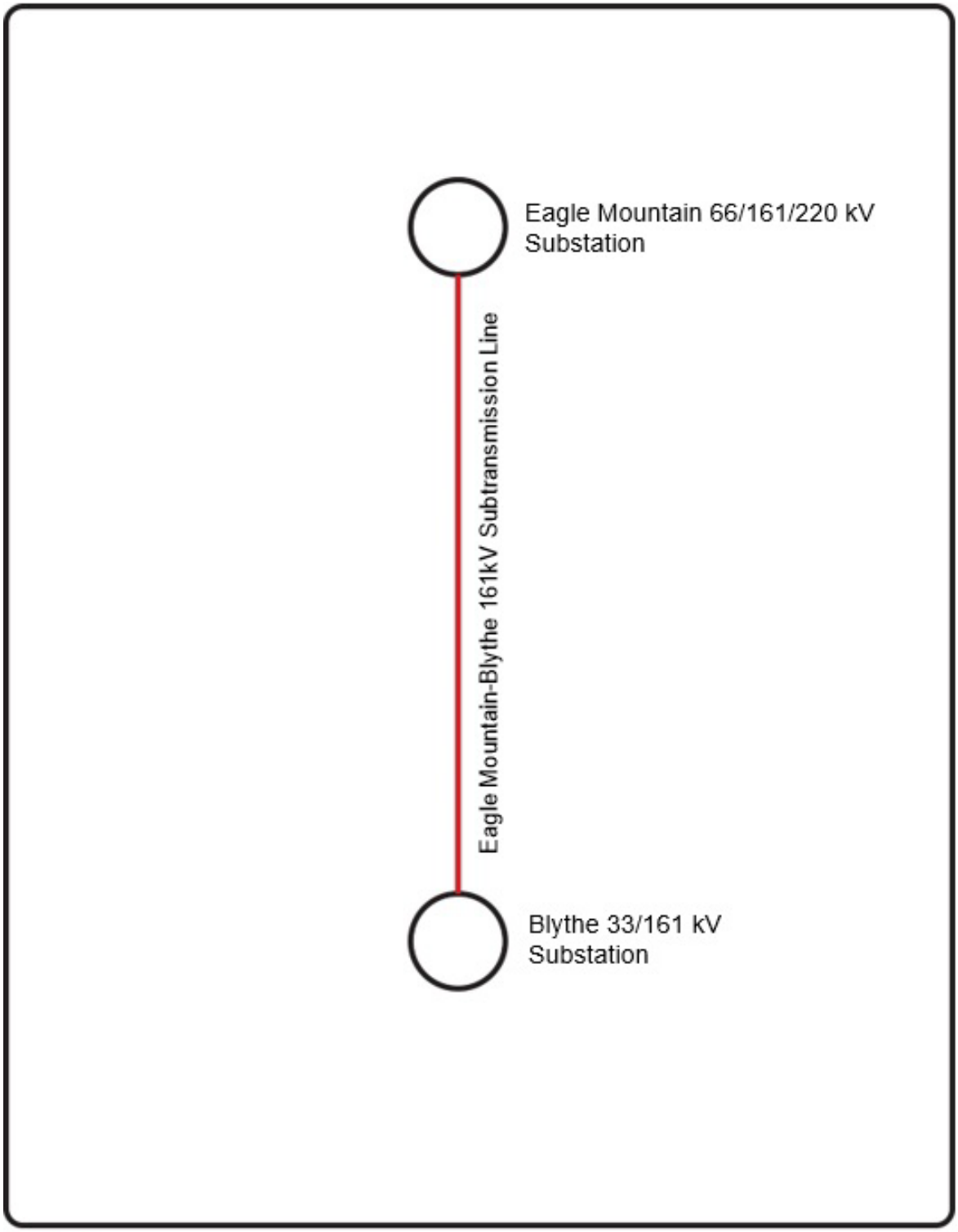
3.2.1.9 Schematic Diagram of the Proposed System Features

Because the Project would not provide service to any new areas and involves the construction of replacement infrastructure, the proposed schematic diagram would be the same as the existing schematic diagram provided in Figure 3.2-1.

3.2.1.10 Detailed Maps and Associated GIS Data for Proposed Facilities

Maps for existing facilities that would be installed and modified by the Project are presented inAppendix A. GIS data are provided under separate electronic cover.

Figure 3.2-1 Schematic Diagram of Existing System Features



3.2.2 Proposed Project System

3.2.2.1 Proposed Project by Component

A description of the Project by component is provided below in Section 3.3. The Project would install new subtransmission structures and new conductor to replace existing structures and conductor. Certain existing structures would be modified. Except as discussed in this chapter, no other upgrades or expansions to existing structures or facilities are included as part of the Project, and there are no other interrelated activities that are part of the whole of the action.

3.2.2.2 System Features

System features that would be added, modified, or disconnected as part of the Project are described in detail in Section 3.3.

3.2.2.3 Expected Capacities of the Proposed Facilities

The Project is designed to remediate discrepancies and improve reliability, not to increase or change the capacity of SCE's electrical system.

Compared to the capacity offered by the existing conductor, the replacement conductor would have a higher capacity. However, the practical use of that higher capacity would be limited by existing substation equipment, which would not change as part of the Project. Therefore, because substation equipment would not be replaced or upgraded as part of the Project, the system-level capacity would not change.

3.2.3 System Reliability

The Project would not create a second system tie or loop for reliability. The existing subtransmission lines and substations included as part of the Project are currently part of the existing utility system. Because the Project would only replace portions of the existing utility system, the infrastructure included as part of the Project would continue to support the existing utility system.

3.2.4 Planning Area

No system planning area (e.g., Electrical Needs Area or Distribution Planning Area) has been defined for the Project. SCE defines a system planning area when considering projects intended to address load growth in the SCE system. As the Project is proposed to remediate clearance discrepancies, and is not proposed to address load growth, no system planning area has been defined or is relevant.

3.3 Project Components

The sections below address the components of the Project.

3.3.1 Design and Engineering

3.3.1.1 Design and Engineering

Design and engineering information for facilities proposed as part of the Project are presented in subsequent sections: the approximate locations of replacement structures to be installed and existing structures to be removed are presented in Appendix A; the dimensions of these structures are presented in Section 3.3.4;

and the limits of areas that would be needed to construct the facilities included as part of the Project are presented graphically in Appendix A and described in Section 3.5.

3.3.1.2 Design Drawings

Appendix A provides the Issued for Construction design drawings for the replacement structures included as part of the Project; these drawings approximate a 100 percent-complete design. This chapter is based on design level assumptions. Actual work scope has been adjusted based on final engineering, detailed identification of field conditions, and compliance with applicable and potential environmental and permitting requirements.

3.3.1.3 Proposed Project Maps

Appendix A contains detailed Project maps that display all facility locations and boundaries with attributes and spatial geometry that corresponds to information in this Proposed Project Description.

3.3.2 Segments, Components, and Phases

3.3.2.1 Segments

Separate segments are not applicable to the Project.

3.3.2.2 Components

The Project includes the components described in greater detail in subsequent sections.

3.3.2.3 Phases

The Project would be constructed in one phase.

3.3.2.4 Overview Map

An overview map showing the entire Project is provided in Figure 3-1.

3.3.3 Existing Facilities

3.3.3.1 Types of Existing Facilities to be Removed or Modified

Several existing structures—including steel poles and associated foundations, wood poles, wood pole H-frames, and wood three-pole structures—and all conductors would be removed as part of the Project. No other facilities would be removed or modified as part of the Project.

3.3.3.1.1 Structures to be Removed

As part of the Project, existing subtransmission structures would be removed. Existing structures to be removed would be removed completely, except as described below in Section 3.3.3.3. Photographs of the existing structure types to be removed are shown in Appendix A. The approximate heights of such structures are presented in Table 3-1.

Table 3-1 Approximate Number and Height of Existing Structures to be Removed or Modified

Pole Type	Number of Structures Removed	Number of Structures Modified	Approximate Height Above Ground, Existing and Modified Structures (Feet)
Steel Pole	25	0	64-83
Single Wood Pole	1	0	77
Wood H-Frame	11	339	56-74
Wood Three-Pole Dead End	16	0	56-80

3.3.3.1.2 Structures to be Modified

Approximately 339 existing structures would be modified. Insulators and hardware would be replaced on all remaining structures.

3.3.3.1.3 Conductor to be Removed

At present, the existing conductor installed along the existing EM-B 161 kV subtransmission line is a mix of 336.4 ACSR 18/1 "Merlin" and 336.4 ACSR 26/7 "Linnet" with diameters of approximately 0.684 inch and 0.72 inch, respectively. Two 66 kV circuits have 653.9 ACSR 18/3 and the one distribution line with 336.4 ACSR 18/1 "Merlin" conductor, with diameters of approximately 0.953 inch and 0.684 inch, respectively. Approximately 56 circuit miles of existing conductor would be removed from the four circuits. The hardware associated with the existing conductor, including insulators, clamps, and fittings would also be removed as part of the Project.

3.3.3.2 Description of Existing Facilities by Component

The quantities and types of existing facilities to be removed are described in the following sections.

3.3.3.3 Above-Ground and Below-Ground Facilities

All facilities to be removed are above-ground facilities; no below-ground facilities (underground conduit, cable, etc.) would be removed as part of the Project.

Some existing structures (steel poles) are attached to foundations. Wood poles and H-frames are direct-buried. The entirety of a wood pole identified for removal (both the above-ground and below-ground portions) would be removed unless removal of the below-ground portion presents potential safety or environmental impacts (such as erosion or soil instability risk) that could be avoided by leaving the below-ground portion in-place. Where steel poles are identified for removal, the above-ground steel would be removed in its entirety. Foundations would typically be removed 2 to 3 feet below grade and the holes would be filled with excess native soil from the area and smoothed to match the surrounding grade. Foundations would not be left in place in locations that could pose a hazard to the public.

The below-ground depths of the existing steel pole foundations and the embedded depth of wood poles and wood-pole H-frames are unknown. The above-ground height of the existing steel poles, wood poles, wood pole H-frames, and three-pole structures that would be removed are presented in Table 3-1.

3.3.3.4 Disposition of Existing Facilities

The above-ground portions of existing structures to be removed would be removed completely. The below-ground portions of wood poles, wood pole H-frames, and three-pole structures would be removed completely; foundations would typically be removed 2 to 3 feet below grade. These existing structures would be removed as they would no longer be needed after replacement structures are installed.

3.3.3.5 Names, Types, and Materials of Existing Facilities

The following structures would be removed or modified as part of the Project:

- Steel poles: Self-supporting monopole structure constructed from galvanized steel that has a foundation.
- Wood Pole: Self-supporting or guyed[4] structure that is direct-buried.
- Wood Pole H-frame: Self-supporting or guyed H-frame structure constructed from two direct-buried wood poles including a cross arm.
- Wood Three-Pole Structure: Wood self-supporting or guyed structure constructed from three direct-buried poles.

There are no capacities or volumes associated with any of the structures to be removed or modified for the Project.

3.3.3.6 Existing Facility Diagram

Images of the existing structure types that would be removed as part of the Project are found in Appendix A.

3.3.3.7 Surface Colors, Textures, Light Reflectivity, and Lighting

The steel poles to be removed are grey in color; the surface texture is weathered; the galvanized steel is moderately light reflective; and there is no aviation safety lighting of, or other lighting on, the existing steel structures. The wood poles, wood pole H-frames, and three-pole structures to be removed are brown in color; the surface texture is grainy and often vertically-striated; because they are wooden, the poles, H-frames, and three-pole structures are generally not light reflective; and there is no aviation safety lighting on the existing poles and H-frames. Appendix A provides drawings of the existing structure types that would be removed as part of the Project.

3.3.4 Proposed Facilities

3.3.4.1 Facilities to be Installed or Modified

No substations, switching stations, gas storage facilities, gas pipelines, or service buildings would be installed as part of the Project.

As part of the Project, new subtransmission structures, new subtransmission conductor, new OHGW, and new FRC would be installed. Existing substations would not be modified (see Section 3.3.8). Existing communication cable would be transferred from existing facilities to new facilities. The locations of these facilities are illustrated in Appendix A.

[4] "Guyed structures" include guy wires, which are typically fastened to a pole and attached to a buried anchor to provide support to the poles, often at an angle or corner.

3.3.4.1.1 Subtransmission Structures Description

New subtransmission structures (single TSPs, three-pole TSPs, and LWS H-frames), and new overhead conductor, OHGW, and FRC cable to be supported on those structures, would be installed as part of the Project. No other wholly new facilities would be installed as part of the Project. Replacement structures are generally located at or adjacent to existing structures in the existing alignments.

TSPs are engineered structures constructed from galvanized steel. The design of a given TSP is specific to the location and engineering considerations of each unique TSP. TSPs would be installed on a drilled pier, poured-in-place, reinforced concrete foundation. LWS H-frames are constructed from two LWS poles supporting a horizontal bridge that extends beyond the poles for several feet. LWS poles—which are pre-engineered wood pole-equivalents—are structures constructed from galvanized steel. LWS poles would be direct-buried; in some locations, steel, cardboard, plastic forms, and slurry may be placed to stabilize the excavation walls prior to installation of the pole.

Subtransmission facilities would be designed consistent with the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (Avian Power Line Interaction Committee [APLIC] 2006) where feasible. Subtransmission facilities would also be evaluated for potential collision reduction devices in accordance with Reducing Avian Collisions with Power Lines: The State of the Art in 2012 (APLIC 2012).

3.3.4.1.2 Conductor/Cable

As part of the Project, 53 miles of existing ASCR conductor would be replaced with new ACSR conductor. The conductor would be non-specular and would have a diameter of approximately 0.741 inch. Approximately 53 circuit miles of new conductor would be installed. ACSR conductor for two 66 kV circuits would have a diameter of approximately 0.953 inch. Approximately 2 circuit miles would be installed. ACSR conductor for one distribution circuit would have a diameter of approximately 0.684 inch. Approximately 1 circuit mile would be installed.

ACSR conductor for FRC would have a diameter of approximately 0.563 inch. Approximately 3 miles would be installed.

OHGW wire would have a diameter of approximately 0.5 inch. Approximately 1 mile would be installed.

3.3.4.2 Description of Proposed Facilities by Component

An accounting of the numbers and types of facilities proposed to be installed are presented in Table 3-2. All structures would be installed along the existing EM-B circuit. This table also presents the range of above-ground and below-ground dimensions of proposed facilities.

3.3.4.3 Above-Ground and Below-Ground Facilities

All facilities to be installed as part of the Project are considered above-ground facilities. The TSPs and LWS H-frames to be installed have both above-ground and below-ground portions; TSPs would be installed on concrete foundations, and LWS H-frames would be direct-buried. The range of burial depths and sizes of foundations associated with the TSPs and LWS H-frames is presented in Table 3-2.

Table 3-2 Structures to be Installed

Pole Type	Proposed Approximate Number of Structures (Number of Foundations)	Approximate Height Above Ground (Feet)	Approximate Pole Diameter (Feet)	Approximate Foundation Depth (TSPs) or Burial Depth (LWS H-frame) (Feet)	Approximate Foundation Diameter (TSPs) or Auger Width (LWS H-frame) (Feet)	Approximate Concrete Volume (Cubic Yards)
TSP	17 (17)	77-107	4.5-6	22-32	6-8	23-71
Three-pole TSP	16 (48)	57-72	4-6	18-28	5-6.5	13-34.4
LWS H-frame	11 (22)	55-101.5	1.4-2.3	7 – 14	Not Applicable (N/A)	N/A

3.3.4.4 Different Facilities

No unique structures such as riser poles (overhead-to-underground configuration poles) would be installed as part of the Project. Dead-end structures or those installed at high-angle inflection points would generally be of a larger diameter than adjoining tangent structures.

Guys are typically used when LWS H-frames are located on angles, corners, and dead-ends to provide support to the poles. Guys may also be used on tangent/suspension poles as field conditions dictate. Guying consists of a guy wire (down guy) that is fastened to a pole and attached to a buried anchor, or when there is not adequate space for the required down guy, a shorter guy pole (stub pole) is typically placed with a down guy and buried anchor in a location that has sufficient room for these facilities. No guys are proposed for the new structures on the Project; however, the need for and location of guy wires and anchors for LWS H-frames would be determined during final construction on a case-by-case basis. Guying across a roadway would be avoided where feasible.

3.3.4.5 Civil Engineering Requirements

3.3.4.5.1 Access Roads

No new permanent roads are included as part of the Project.

3.3.4.5.2 Foundations

Each TSP installed as part of the Project would be attached to a single concrete foundation. TSP concrete pile foundations would be approximately 5 to 8 feet in diameter and would extend underground approximately 18 to 32 feet with approximately 1 to 3 feet of concrete visible above ground. Each TSP would use approximately 13 to 71 cubic yards of concrete.

No other foundations are included as part of the Project.

3.3.4.5.3 Crane Pads

No civil engineering is anticipated to be necessary for development of crane pads.

3.3.4.5.4 Spill Containment

No engineered spill containment structures are included as part of the Project.

3.3.4.6 Permanent and Temporary Facilities

No temporary facilities, such as temporary mobile substations, transformers, capacitors, or switchracks are included in the Project. Furthermore, no temporary poles or shoo-fly lines have been identified at this time. Temporary facilities associated with construction staging areas, such as construction trailers, security features, temporary power facilities, and lighting, are discussed in Section 3.5.2.

3.3.4.7 Names, Types and Materials of Proposed Facilities

The following structures would be installed or modified as part of the Project:

- TSP: Self-supporting monopole structure(s) constructed from galvanized steel.
- Three-pole TSP: Self-supporting structure constructed from three galvanized steel TSPs.
- LWS H-frame: Self-supporting or guyed H-frame structure constructed from two LWS poles and a horizontal member attached to two galvanized steel LWS poles.
- Wood Pole H-frame: Self-supporting or guyed H-frame structure constructed from two wood poles and up to two horizontal members attached to two wood poles.

3.3.4.8 Diagrams of the Proposed Structures

Diagrams of the proposed structures are presented in Appendix A. The typical dimensions of such structures are presented in Table 3-2.

3.3.4.9 Surface Colors, Textures, Light Reflectivity, and Lighting

The TSPs and LWS H-frames installed as part of the Project would be grey in color, with a dull, non-specular finish. Since the galvanized steel would be dull, the light reflectivity of the TSPs and LWS H-frames would be moderate and would lessen over time as the poles weather. SCE does not anticipate any new structure lighting would be installed as part of the Project. The overhead conductor to be installed would be dulled and non-specular.

3.3.5 Other Potentially Required Facilities

3.3.5.1 Other Actions or Facilities that May be Required

3.3.5.1.1 Other Types of Infrastructure

The Project would not require the modification or replacement of unconnected utilities or other types of infrastructure. Unconnected and/or third-party infrastructure, where present, would be transferred to new structures where applicable, or would be left in-place on existing structures.

3.3.5.1.2 Aviation Lighting and/or Marking

An initial review of the Project scope suggests that aviation lighting and/or other marking would not be required for structures that would be constructed as part of the Project. Upon completion of the final design,

SCE would file with the Federal Aviation Administration for official study and determination of the lighting and/or marking requirements for all structures in proximity to existing airports.

3.3.5.1.3 Additional Civil Engineering Requirements to Address Site Conditions or Slope Stabilization

The need for slope stabilization, including retaining walls, is addressed in Section 3.5.

The Project is not anticipated to include additional civil engineering requirements to address site conditions or slope stabilization issues. The establishment and use of construction work areas would generally not require slope stabilization. Where structures are located in areas with steep slopes, structures could be accessed by foot, thus negating the need to prepare a construction work area for a vehicle at that structure. Where the siting of construction work areas is fully or partially discretionary (e.g., the siting of conductor stringing sites), such work areas have been preferentially sited in areas that would not require slope stabilization.

If the need for retaining walls is identified, the location, length, height, and type of such walls would be communicated to the California Public Utilities Commission (CPUC). Local ministerial permits required would also be obtained.

3.3.5.2 Location of Each Facility

The locations of other facilities or types of infrastructure are unknown at this time.

3.3.6 Future Expansions and Equipment Lifespans

3.3.6.1 Current and Reasonably Foreseeable Plans for Expansion

There are no current and reasonably foreseeable plans for expansion or future phases of development associated with the Project.

3.3.6.2 Expected Usable Life

The structures, conductors, and overhead cables to be installed as part of the Project could have a usable life of greater than 40 years.

3.3.6.3 Reasonably Foreseeable Consequences

There are no reasonably foreseeable consequences of the Project; the Project is designed to remediate discrepancies, not to provide new or additional electrical service that could facilitate or trigger the expansion or upgrading of the infrastructure associated with the Project.

3.3.7 Below-Ground Conductor/Cable Installations

3.3.7.1 Type of Line to be Installed

No electrical conductors or cables would be installed below-ground as part of the Project.

3.3.7.2 Type of Casing

No casing would be installed below ground as part of the Project.

3.3.7.3 Type of Infrastructure Installed Within Casing

No electrical conductors or cables would be installed below-ground as part of the Project.

3.3.8 Electric Substations and Switching Stations

No new electric substations or switching stations would be constructed as part of the Project.

3.3.8.1 Transformer Banks

No transformer banks would be added as part of the Project.

3.3.8.2 Gas Insulated Switchgear

No gas-insulated switchgear would be installed as part of the Project.

3.3.8.3 Operation and Maintenance Facilities, Telecommunications Equipment, or SCADA Equipment

No operations and maintenance (O&M) facilities, telecommunications equipment or Supervisory Control and Data Acquisition (SCADA) equipment would be installed as part of the Project.

3.3.9 Gas Pipelines

No gas pipelines are included in the Project.

3.3.10 Gas Storage Facilities – Background and Resource Information

No gas storage facilities are included in the Project.

3.3.11 Gas Storage Facilities – Well-Head Sites

No gas storage facilities are included in the Project.

3.3.12 Gas Storage Facilities – Production and Injection

No gas storage facilities are included in the Project.

3.3.13 Gas Storage Facilities – Electrical Energy

No gas storage facilities are included in the Project.

3.3.14 Telecommunication Lines

No telecommunication lines are included in the Project.

3.4 Land Ownership, Rights-of-Way, and Easements

3.4.1 Land Ownership

The Project Alignment is located on private lands with the following exceptions:

- Federal Land
  - Approximately 34.5 miles of the Project Alignment is located on lands managed by the Bureau of Land Management (BLM), whereby SCE has existing rights, permits, and/or grants.
- City/County Land
  - Approximately 0.05 mile of the Project Alignment is located on lands managed by Riverside County.
  - The Project Alignment is located on and over county and city lands where the alignment crosses state highways owned and administered by county- or city-maintained roadways, whereby SCE has franchise rights.
- State Land
  - The Project is located on and over state lands where the alignment crosses state highways owned and administered by the California Department of Transportation (Caltrans). SCE would secure the necessary Caltrans permits to complete construction at the Caltrans crossings.
- Other Land
  - Approximately 1 mile of the Project Alignment is located on land managed by the Metropolitan Water District of Southern California (MWD), whereby SCE has existing easement rights.

3.4.2 Existing Rights-of-Way or Easements

3.4.2.1 Existing Rights-of-Way or Easements: Identification and Description

SCE would construct the Project within existing ROW, whereby SCE has existing land rights. The land rights SCE has within the ROW are a combination of easements, permits, a license, and grants. SCE would utilize its franchise rights along portions of the Project Alignment. The existing ROW width on BLM lands range from 50 feet to 100 feet wide. Easements on private lands vary in width from 70 feet to 100 feet.

3.4.2.2 Existing Rights-of-Way or Easements: Replacement, Modification, or Relocation of Proposed Project Facilities

The Project proposes to replace, modify, and install facilities within or in close proximity to existing SCE facilities. The Project would be constructed within or just outside SCE's existing ROW. SCE would use a combination of easement, permits, license, grants and franchise to replace, modify, and install the EM-B facilities.

3.4.3 New or Modified Rights-of-Way or Easements

3.4.3.1 New Permanent or Modified Rights-of-Way or Easements

SCE would not require the acquisition of any new permanent easement rights along the proposed length of this Project.

3.4.3.2 Acquisition of New Permanent or Modified Rights-of-Way or Easements

SCE has sufficient land rights to complete the scope of work proposed to complete the Project.

3.4.3.3 Properties/Parcels That May Require Acquisition

The Project does not include acquisition of any additional fee properties or parcels.

3.4.3.4 New ROWs or Easements: Development Restrictions

There are no restrictions associated with SCE's rights to replace, modify, and install the EM-B facilities.

3.4.3.5 Relocation or Demolition of Commercial or Residential Property or Structures

No commercial or residential properties or structures have been identified that would require relocation or demolition as part of the Project.

3.4.4 Temporary Rights-of-Way or Easements

3.4.4.1 Temporary ROWs or Easements: Required for Access

Based on final engineering and construction requirements, Temporary Entry Permits (TEPs) and/or Temporary Construction Easements (TCEs) may be required from private landowners to provide sufficient equipment, material storage, staging, construction work areas, and access for any approved project component.

3.4.4.2 Temporary ROWs or Easements: Construction Area Locations

Generally, wire setup sites, splice sites, structure installation/removal locations, guard sites, and temporary staging areas are planned to occur within the existing ROW. Where portions of temporary construction areas extend beyond the easement and/or ROW boundary, SCE would obtain a TCE or TEP from the landowner.

3.4.4.3 Temporary ROWs or Easements: Acquisition

Temporary land rights on federal lands are not anticipated; however, rights would be acquired from the BLM if required. Temporary land rights (TCEs or TEPs) may be required from private landowners. The total number of temporary land rights to be acquired from private landowners would be determined during preconstruction activities. SCE will work with private landowners to acquire any necessary TCEs or TEPs. Pursuant to California Public Utilities Code Section 612, SCE also has the power of eminent domain to acquire any necessary private land rights for construction of the Project.

3.5 Construction

The following subsections describe the construction activities associated with the Project.

3.5.1 Construction Access (All Projects)

3.5.1.1 Existing Access Roads

3.5.1.1.1 Existing Access Roads: Lengths, Widths, and Ownership

Subtransmission line roads are classified into two groups: access roads and spur roads. Access roads are through roads that run between structure sites and serve as the main transportation route along subtransmission line alignments. Spur roads are roads that lead from access roads and terminate at one or more structure sites.

Construction crews would employ a network of existing dirt access and spur roads along the Project Alignment; this network would be accessed from paved and unpaved public roads.

3.5.1.1.2 Existing Access Roads: Modifications and Rehabilitation

Approximately 56.3 miles of existing access and spur roads would be employed for construction of the Project. At present, all 56.3 miles are projected to require rehabilitation work, including regrading and repair of the existing roadbed. These roads would be cleared of vegetation; blade-graded to remove potholes, ruts, and other surface irregularities; and re-compacted to provide a smooth and dense riding surface of 14 feet wide capable of supporting heavy construction equipment with two 2-foot berms on either side. As part of this rehabilitation, vegetation within and along the existing road prism may be trimmed and/or removed to prevent vegetation from intruding into the roadway. In some locations, road base (crushed rock), temporary plating or matting may be placed within the existing road prism. This road base, temporary plating, or matting may be laid to compensate for soft soils. Road base, plating, or matting would be removed at the end of construction.

This activity may be repeated as required during the course of the Project.

3.5.1.1.3 Existing Access Roads: Incidental Damage

No incidental road damage is anticipated to be caused by Project activities. SCE and construction contractor crews would utilize paved and unpaved public roads to access SCE's network of unpaved access roads; work would also be performed from these paved and unpaved public roads. If ministerial permits are necessary for the movement of oversized or overweight vehicles along public roadways, or to perform work from public roadways, SCE would comply with the conditions of the permit(s), including conditions related to the repair of incidental road damage.

3.5.1.1.4 Detailed Maps and Associated GIS Data for Existing Access

Existing access roads are shown in Appendix A; GIS data are provided under separate electronic cover.

3.5.1.2 New Access Roads

3.5.1.2.1 New Access Roads

No new permanent or temporary access roads would be constructed as part of the Project.

3.5.1.2.2 Lengths, Widths, and Development Methods for New Access Roads

No new permanent or temporary access roads would be constructed as part of the Project.

3.5.1.2.3 New Access Roads: Gates

No new temporary or permanent gates would be installed as part of the Project.

3.5.1.2.4 New Temporary Access Roads: Restoration

No new permanent or temporary access roads would be constructed as part of the Project.

3.5.1.2.5 Detailed Maps and Associated GIS Data

Because no new permanent or temporary access roads are included as part of the Project, none are shown in Appendix A and none are indicated in the GIS data.

3.5.1.3 Overland Access Routes

The Project may require overland access. Where existing spur or access roads to a construction work area are not present, and where surface conditions are amenable, that location may be accessed overland. Where overland travel is feasible, vegetation would be trimmed while leaving the root structure intact, or vehicles would drive over the extant vegetation (overland travel). In some locations, temporary matting may be placed on the surface to facilitate access to a work location. No blading, grading, or gravel placement would occur on overland access routes.

3.5.1.4 Watercourse Crossings

3.5.1.4.1 Temporary/Permanent Watercourse Crossings

No perennial watercourses are crossed at-grade; no temporary watercourse crossings would be required during construction. Ephemeral drainages are currently crossed at-grade or are culverted. These crossings, like the remainder of the access road network, are regularly maintained, including re-establishing the at-grade crossings as needed and repairing or replacing culverts as necessary. During construction of the Project, these at-grade and culverted crossings would be driven over by construction equipment.

Where existing access or spur roads cross a culverted watercourse, temporary steel plating or matting may be laid over the roadway to protect the culverts and to support the movement of heavy construction equipment. Steel plating or matting may also be placed where access roads cross watercourses at-grade, depending on surface conditions at the time of construction. The need to place temporary steel plating or matting would be determined immediately prior to construction, as the locations, morphologies, and physical conditions of the ephemeral drainages crossed by the access road network are subject to change over time.

3.5.1.4.2 Bridge or Culvert Replacement or Installation

No bridges or culverts would be replaced or installed as part of the Project.

3.5.1.4.3 Location, Design, and Construction Methods

The locations of temporary steel plating or matting would be determined prior to construction, as the morphologies and physical conditions of the drainages crossed by the access road network are subject tochange over time.

3.5.1.5 Helicopter Access

No helicopter use is planned as part of the Project.

3.5.2 Staging Areas

3.5.2.1 Staging Area Locations

SCE anticipates using one or more of the possible locations listed in Table 3-3 and shown in Appendix A as the staging areas for the Project. The size of each of the identified staging areas/laydown yards and the total acreage associated with each is presented in Table 3-3.

Table 3-3 Potential Staging Area/Laydown Yard Locations

Staging AreaName	Location	Condition	Approximate Area (Acres)	Nearest Project Component
Mirage Laydown Yard	Ramon Road off Interstate (I-) 10 near Indio, Palm Desert, Cathedral City	Developed	2.38	Eagle Mountain Substation
Desert Center Laydown Yard	Between I-10 and Ragsdale Road	Developed	10.96	Structure Work Area 41694102E_4169101E
Chuckwalla Laydown Yard	South of Chuckwalla Valley Road, 3.5 miles west of I-10	Undeveloped Creosote bush - white burr sage scrub, rigid spineflower - hairy desert sunflower, blue palo verde - ironwood woodland	5.02	Structure Work Area N4587718E_S4587717E
Blythe Laydown Yard	Corner of West 14th Avenue and South Commercial Street in Blythe	Disturbed	3.10	Blythe Substation

3.5.2.2 Staging Area Preparation

3.5.2.2.1 Site Preparation

Two of the staging areas/laydown yards (Desert Center and Mirage) are established and accessible via existing public roads; therefore, no site preparation would be required for their use for the Project. Two of the staging areas/laydown yards (Blythe and Chuckwalla) are not yet established and would require grading, fencing, and rocking in order to be used for the Project. The Project would use established laydown yards prior to construction.

3.5.2.2.2 Staging Area: Uses

Staging areas would be used as a reporting location for workers, vehicle and equipment parking, and as material storage areas. Materials commonly stored at the staging areas would include, but not be limited to, construction trailers, construction equipment, portable worker sanitation facilities, steel poles, conductor/OHGW/FRC reels, hardware, insulators, cross arms, signage, consumables (e.g., fuel and filler compound), waste materials for salvaging, recycling, or disposal, and Storm Water Pollution Prevention

Plan (SWPPP) best management practice (BMP) materials such as, but not limited to, straw wattles, gravel bags, and silt fences.

A majority of materials associated with the construction efforts would be delivered by truck to designated staging areas, while some materials may be delivered directly to the temporary construction areas described in Section 3.5.3.1.

The staging areas may also have construction trailers for supervisory and clerical personnel. Normal maintenance and refueling of construction equipment would also be conducted at these staging areas. All refueling and storage of fuels would be in accordance with the site-specific SWPPP and all applicable federal, State, and local regulations.

3.5.2.2.3 Staging Area: Security

The staging areas would be secured through installation of temporary perimeter fencing and one or more gates; typically, chain-link fencing is used. In some instances, existing fencing may be present at the staging area location; in these instances, temporary perimeter fencing would not be installed. Other security measures that may be employed at staging areas could include cameras, privacy screening, and security personnel.

3.5.2.2.4 Staging Area: Power

Temporary power would be determined based on the type of equipment/facilities being used at the staging areas. If existing distribution facilities are available, a temporary service and meter may be used for electrical power at one or more of the yards. If it is determined that temporary power is not needed or available at the staging areas full-time, a portable generator may be used intermittently for electrical power at one or more of the yards.

3.5.2.2.5 Staging Area: Temporary Lighting

Staging areas may be lit for security; this lighting would be directed internally and on-site. If temporary lighting is needed at staging areas, portable light stands would be placed at point(s) along the outsideof the staging area as necessary. The sources of illumination on the light stands would be shielded, resulting in light being directed downward and inward (toward the staging area). To the extent feasible, light stands would be positioned so that illumination is directed away from the nearest residence(s).

3.5.2.2.6 Staging Area: Grading Activities and/or Slope Stabilization

No slope stabilization or extensive grading activities would be performed at any staging area; the identified staging areas are relatively level, and thus grading activities would be focused on leveling the surface. Because generally level areas are selected for staging areas, no slope stabilization is anticipated.

3.5.3 Construction Work Areas

3.5.3.1 Construction Work Areas

3.5.3.1.1 Known Work Areas

Construction of the Project would be performed in the construction work areas described in the sections below.

Helicopter Landing Zones and Touchdown Areas

No helicopter use is included in the Project.

Vehicle and Equipment Parking, Passing, or Turnaround Areas

Vehicles and construction equipment would be parked during the day and overnight at staging areas and would be parked during the day (and potentially overnight) at wire setup sites and other construction work areas along the Project Alignment. During work on a structure, vehicles and construction equipment would be parked during construction hours at structure work areas and guard structures, and on adjacent access or spur roads. No new passing or turnaround areas along the access and spur road network are included in the Project.

Railroad, Bridge, or Watercourse Crossings

The Project Alignment does not cross any railroads. No new bridges are included in the Project. Watercourse crossings are addressed above in Section 3.5.1.4.

Temporary Work Pads for Facility Installation, Modification, or Removal

Temporary work pads (also and interchangeably referred to as construction work areas) serve as temporary working areas for crews and where project-related equipment and/or materials are placed at or near each structure location. The activities that may be performed at any given temporary work pad would include but not be limited to:

- Install TSP, three-pole TSPs, or LWS H-frame
- Remove existing structure
- Remove conductor from existing structure
- Install conductor, OHGW, and/or FRC on replacement structure
- Splice conductor
- Vegetation removal or trimming
- SWPPP BMP installation
- Surface grading, leveling, and/or compaction

Excavations and Associated Equipment Work Areas

No excavations would occur except those associated with the installation of LWS H-frames, installation of TSP foundations and removal of existing steel pole foundations.

Temporary Guard Structures

Guard structures are temporary facilities that would typically be installed at transportation, flood control, and utility crossings prior to conductor, OHGW, or FRC removal or installation activities. These structures are designed to stop the movement of a conductor, OHGW, or FRC should it momentarily drop below a conventional stringing height. Temporary guard structures may be installed at temporary guard structure locations. Depending on the overall spacing of the conductors being installed, approximately three to five guard poles would be required on either side of a crossing. In some cases, the temporary guard structures could be substituted with the use of specifically equipped boom trucks or, at highway crossings, temporary

netting could be installed if required. Guard structures would be installed at all electrical structures and roads where required. The guard structures would be removed after the conductor is secured into place.

Wire Setup Sites

Wire setup sites are those locations where the equipment necessary for removal of existing conductor, OHGW, and FRC, and equipment necessary for installation of new conductor, OHGW, and FRC, would be set-up and operated. The wire setup sites associated with the Project would be temporary.

"Wire pull" is the term used to describe the length of any given continuous wire installation process between two selected points along the line. Wire pulls are selected based on a variety of factors, including availability of dead-end structures, conductor size, geometry of the line as affected by points of inflection, terrain, and suitability of stringing and splicing equipment set-up locations. On relatively straight alignments, typical wire pulls occur approximately every 13,000 feet on flat terrain. When the line route alignment contains multiple deflections or is situated in rugged terrain, the length of the wire pull is typically diminished. Generally, wire setup sites would be in direct line with the direction of the overhead conductors and established at a distance equal to approximately three times the height of the adjacent structure.

Each conductor, OHGW, or FRC removal or installation operation consists of a puller set-up positioned in a wire setup site located at one end of a wire pull, and a tensioner set-up with wire reel stand truck positioned in a wire setup site at the other end of a wire pull. Wire setup sites may also be utilized for splicing and field snubbing of the conductors. Field snubs (i.e., anchoring and dead-end hardware) would be temporarily installed to sag conductor wire to the correct tension at locations where stringing equipment cannot be positioned in back of a dead-end structure.

Splice Sites, Conductor and Overhead Ground Wire Removal

Prior to the removal of existing conductor, the existing permanent splices found on the existing conductor identified for removal may need to be replaced with temporary splices, as permanent splices that join the conductor together cannot travel through the rollers used during conductor removal activities. At each permanent splice removal site, construction crews in one or two bucket trucks would remove the permanent splice and install a temporary splice.

Jack and Bore Pits, Drilling Areas and Pull-back Areas for Horizontal Directional Drills

The Project does not include the installation of any infrastructure underground that would require the use of jack and bore drilling or horizontal directional drilling.

Retaining Walls

The Project does not include the installation of retaining walls. If, during preconstruction activities, the need for retaining walls or other means to prevent future failures is identified, the location, length, height, and type of such walls or other measures would be communicated to the CPUC.

3.5.3.2 Work Area Disturbance

3.5.3.2.1 Disturbance Types

The following sections include descriptions of the types of disturbance typical of transmission and distribution projects. The disturbance levels expected for the Project are identified, but other disturbance

levels are provided for comparison. This information has been provided to give context to the descriptions of the disturbance areas and work activities described below.

Clearing and Grading

Clearing and grading is the highest level of ground disturbance. For vegetated sites, large vegetation such as shrubs and trees are removed first, and vegetation such as grasses and forbs are mowed to the ground surface. Grading includes altering the elevations and contours of the site by cutting and filling within the site using native materials and/or by importing fill material. Where the engineered sites are permanent, mulched vegetation is removed from the site, and subsoil and topsoil are mixed during the grading process. The hydrology of the site may be altered or obstructed. Where the engineered sites are temporary, mulched vegetation and topsoil may be salvaged for replacement. Upon completion of the work, the site is returned to the original grades and contours, and topsoil and vegetative mulch is replaced to the extent feasible. Clearing and grading is typical of transmission construction where the natural topography is dynamic and engineered areas are required temporarily (e.g., crane pad) or permanently (e.g., building pad, tower pad). Typical equipment includes large bulldozers and excavators.

No clearing and grading activities are anticipated for this Project.

Minor Grading

Minor grading activities consist of the removal of surface vegetation, where necessary, and blading to remove potholes, ruts, and other surface irregularities, leaving a relatively flat site. Vegetation clearing is avoided to the extent feasible. Where vegetation must be removed, care is taken to retain the root structure to the extent feasible. With minor grading, no slope engineering occurs. Rather, the original slopes and contours of the site are retained to the extent feasible, but the site is "smoothed out." The hydrology of the site is not altered or obstructed. Example equipment used to perform minor grading includes skid steers. Typically, the depth of soil disturbance is limited to topsoil, although some subsoil may be mixed in. This practice is typical for sites where small equipment is sufficient to complete the work and the topography is not dynamic.

Minor grading would be required at select Project work areas, such as structure work areas and wire setup sites. At these sites, cranes, bucket trucks, and other equipment would be required.

Overland Travel

With overland travel, minor vegetation trimming may be required, but the root structures of existing vegetation are retained. Site preparation using grading equipment is not required; no blading or grading occurs. Rather, the equipment required to perform the task (e.g., crane, pulling machine, pickup truck) drives over and sets up on the native vegetation and soils. The original grade, contours, and hydrology are retained.

To the extent feasible, SCE would implement overland travel methods for the Project.

Foot Traffic Only

For the entire length and width of the project ROW, crews may be required to access sites via foot traffic to perform a variety of project activities because of terrain and to reduce overall Project impacts. At sites only disturbed by foot traffic, vehicles and equipment are parked on nearby existing disturbed areas (e.g., access roads, O&M work areas [see below for definition]) and personnel access and perform work within

the site on foot. If feasible, construction vehicles and equipment would be parked within the access roads and/or existing disturbed areas such that the structures can be reached without overland travel.

3.5.3.2.2 Disturbance Areas

Structure Replacement Work Area

The removal and replacement of existing structures would occur within structure replacement work areas. To the extent feasible, overland travel would be favored over minor grading (i.e., leveling) because it preserves the vegetation. To the extent feasible, equipment would be positioned within the roadway, O&M work areas, or other previously disturbed areas. If vegetation trimming is needed, the root structures would remain intact.

Existing Structure Work Areas

For the existing structure locations where structure replacement would not occur, the existing hardware that holds the conductors in suspension would be replaced. To the extent feasible, equipment would be limited to the O&M work area (e.g., an approximately 80-foot radius around each structure footprint limited to the ROW) and other disturbed areas (e.g., access roads). It is important to note that these disturbance areas are considered existing permanent disturbance and, therefore, are not included in the calculations of new project impacts. However, for clarity, these areas are included in the Project mapping (see Appendix A).

Wire Setup Sites

Wire setup sites are locations where equipment would be set up to assist with wire stringing. Once the new structures have been erected and hardware replaced on the existing structures, the new conductors can be installed (i.e., reconductoring or wire stringing). These locations may also be used for splicing and other aspects of wire stringing. Approximately 46 wire setup sites have been designated and are included in the Project mapping in Appendix A. Wire setup sites would be located primarily within the ROW, although a few would be located outside the ROW on privately-owned land. Wire setup sites would be accessed from existing roads via overland travel to the extent feasible, although minor grading may be required at some sites.

Guard Structure Sites

Guard structure sites are located where temporary facilities would be installed at transportation, flood control, and utility crossings for wire stringing/removal activities. These structures are designed to prevent a conductor from sagging below conventional stringing height. To the extent feasible, overland travel would be employed at guard structure sites, especially where parked boom trucks would be used as temporary guard structures.

Ancillary Sites

Ancillary sites, such as splicing, sagging, and anchor sites, are for Project activities associated with wire stringing that would not occur within the construction work areas for specific wire setup site. The exact locations would be determined during construction based on the final pull plans and field conditions. These activities would be limited to the disturbance areas described above or the limits of the existing access roads.

Laydown Yards

SCE proposes to use the Blythe, Chuckwalla, Desert Center and Mirage Laydown Yards during construction. The Blythe Laydown Yard is located in the City of Blythe immediately south of I-10 and at the southeastern corner of South Lovekin Boulevard and West 14th Avenue. The Chuckwalla Laydown Yard is located south of I-10 and immediately south of Chuckwalla Valley Road near its intersection with Augustine Pass Road. The Desert Center Laydown Yard is located immediately north of I-10 northeast of the intersection of I-10 and Rice Road in Desert Center. The Mirage Laydown Yard is located at SCE's existing Mirage Substation east of the intersection of Ramon Road and Vista De Oro in Thousand Palms. The yards would be used for staging equipment and materials and as locations for construction personnel to meet. Two of the laydown yards (Mirage Yard and Desert Center Laydown Yards) are established; therefore, only minor repairs may be required for their use for the Project. Two of the laydown yards (Chuckwalla and Blythe Laydown Yards) are not yet established and would require minor grading, fencing, and rocking in order to be used for the Project.

Access Roads

The Project work areas would be accessed via existing access roads that follow the alignment, inside and outside the ROW and through the structures in some locations. The access roads extend toward the ROW from Kaiser Truck Road, Eagle Mountain Road, Chuckwalla Valley Road, Ford Dry Lake Road, and Hobsonway. Several public roads also provide access to SCE-maintained roads or the ROW directly. No new permanent roads would be constructed for the Project.

The access roads proposed for use during Project execution are identified in the mapping for the Project included in Appendix A.

3.5.3.2.3 Dimensions of Each Work Area

The dimensions of each work area described above, including the maximum area that would be disturbed during construction, is shown in Table 3-4.

Table 3-4 Work Area Disturbance Areas

	Approximate Number	Typical Approximate Size (Feet)	Approximate Disturbance (Acres)[1, 2, 3]	
			Temporary	Permanent
Laydown Yards/Staging Areas	4	N/A	5.0	0
Temporary Work Pads/Permanent O&M Areas for Facility Installation, Modification, or Removal				
Install TSP	17	120 by 60	1.5	1.6
Install TSP Three-Pole	16	120 by 60		
Install LWS H-frame	11	120 by 60		
Remove Existing Structure	53	120 by 60		
Modify Existing Structure	339	160 by 100	0	0
Temporary Guard Structures	41	100 by 20	2.3	0
Wire Setup Sites	51	280 by 100	14.9	0
Total Temporary/Permanent Disturbance Area			23.7	1.6
Existing Permanent Disturbance Area to be Abandoned and Considered No Longer Permanently Disturbed[4]				4.8
Net Permanent Disturbance				-3.2

Notes:

(1) Existing maintained O&M areas associated with existing structures were considered to have no impact.

(2) Overlap between work areas has been removed

(3) All of the laydown yards, with the exception of the Chuckwalla Yard, are previously disturbed and were considered to have no impact.

(4) Existing maintained O&M areas associated with structures that would be permanently removed would be abandoned and allowed to naturally restore.

3.5.3.2.4 Temporary and Permanent Disturbance at each Work Area

Table 3-4 provides the temporary and permanent disturbance at each work area type including permanently cleared O&M work areas around structures (in acres), and the total area of temporary and permanent disturbance for the entire Project (in acres).

Table 3-5 presents the approximate permanent disturbance associated with each structure type footprint, andapproximate maximum permanent disturbance area (in acres).

Table 3-5 Permanent Disturbance Associated with Structures

	Project (approximate metrics)
Pole Diameter	
▪ LWS H-frame	36 inches
▪ TSP	96 inches
▪ Three-Pole TSP	96 inches
Auger Hole Depth	
▪ LWS H-frame	7 to 14 feet
▪ TSP	18 to 32 feet
▪ Three-Pole TSP	18 to 32 feet
Permanent Footprint per Pole	
▪ LWS H-frame	< 0.001 acre
▪ TSP	0.001 acre
▪ Three-Pole TSP	0.003 acre
Number of Poles	
▪ LWS H-frame	11
▪ TSP	17
▪ Three-Pole TSP	16
Total Permanent Footprint for Poles/Foundations[1]	**Approximately 0.08 acre**

[1]Note: This acreage represents only the permanent footprint of the poles and foundations of structures.

3.5.3.3 Temporary Power

Temporary power would be determined based on the type of equipment/facilities being used at the staging yards. If existing distribution facilities are available, a temporary service and meter may be used for electrical power at one or more of the yards. If it is determined that temporary power is not needed or available at the staging yards full time, a portable generator may be used intermittently for electrical power at one or more of the yards.

3.5.4 Site Preparation

3.5.4.1 Surveying and Staking

Prior to the start of structure installation activities, the location of each structure to be installed would be surveyed and staked. Conventional surveying techniques and equipment would be utilized.

3.5.4.2 Utilities

3.5.4.2.1 Underground Utility Identification Process

Prior to the start of Project activities that require excavation, SCE or its construction contractor would identify underground utilities by contacting DigAlert, conducting visual observations, conducting exploratory excavations (potholing), and/or using buried line locating equipment.

3.5.4.2.2 Relocating Existing Utilities

No existing underground utilities would be relocated as part of the Project. Existing third-party overhead utilities, that are not directly connected to the Project system, and that are installed on poles to be replaced, would be transferred to replacement poles as part of the Project, or would be left in-place on existing poles.

3.5.4.2.3 Installing Temporary Power

Temporary power or other utility lines may be installed at one or more staging area(s) as part of theProject. The process for installing temporary power would be determined by the service provider, but would generally include the installation of a temporary meter on a temporary structure, the temporary installation of one or more wood poles (to be installed in the same manner as guard structure poles), and the installation of temporary electrical cable from the meter to the load source(s) at the staging area(s).

3.5.4.3 Vegetation Clearing

3.5.4.3.1 Vegetation Clearing: Types Required

Vegetation and trees would be trimmed or removed as needed at or adjacent to construction work areas to facilitate the safe construction of the Project, and to reduce fire hazards associated with construction activities. Only the minimum amount of vegetation necessary for the safe construction and operation of structures and facilities would be removed. Where feasible, construction work areas have been preferentially selected to minimize the trimming or removal of vegetation and/or trees. During road rehabilitation activities, vegetation would be trimmed and/or removed within the access or spur road as necessary.

3.5.4.3.2 Vegetation Clearing: Temporary and Permanent Disturbance

The area of temporary and permanent disturbance of each vegetation community found along the Project Alignment is presented in Table 5.4-2. The data in this table distinguish between disturbance that would occur in previously developed areas (i.e., paved, graveled, or otherwise urbanized), and naturally vegetated areas.

3.5.4.3.3 Vegetation Clearing: Description and Types of Equipment

Vegetation removal would consist of “brushing” (i.e., shrubs and other low-lying vegetation would be trimmed and/or removed within the construction work area). Vegetation removal would generally be accomplished using a mower-type attachment mounted to a tractor; in some instances, areas would be brushed by individuals using heavy-duty “weed whacker” type equipment. Vegetation growing on the road surface would be removed by a motor grader during the blade-grading of roads to remove potholes, ruts, and other surface irregularities.

3.5.4.4 Tree Trimming and Removal

3.5.4.4.1 Tree Removal and Trimming: General Order 95

No tree trimming pursuant to General Order (GO) 95 would be performed as part of the construction of the Project; such tree trimming (as necessary) is currently performed along the Project Alignment as partof the O&M activities associated with the subtransmission lines. Any tree removal performed as part of the Project

would be conducted solely to facilitate the safe construction of the Project or to reduce the fire hazards associated with construction activities.

3.5.4.4.2 Tree Removal and Trimming: Types, Locations, Numbers, and Sizes

Trees or portions of trees that encroach upon the access and spur road prism may be removed to facilitate the safe movement of construction equipment. Similarly, trees or portions of trees within or adjacent to laydown yards and temporary work pads may be trimmed and/or removed; staging areas have been preferentially selected to minimize the trimming or removal of trees. There are no protected trees located in the Project Site that would be removed or substantially trimmed by the Project.

SCE has recently performed tree and vegetation trimming and removal activities along portions of the Project Alignment as part of the implementation of its Wildfire Mitigation Plan (SCE 2023). Because of this, tree trimming or removal activities are anticipated to be limited in scope.

3.5.4.4.3 Tree Removal and Trimming: Potentially Protected Trees

There are no protected trees located in the Project Site that would be removed or substantially trimmed by the Project.

3.5.4.4.4 Tree Removal and Trimming: Types of Equipment

Tree removal or trimming, if necessary, would be accomplished utilizing such equipment as a dump truck, pick-up truck, chipper, stump grinder, and a bucket truck, among others. Hand tools used during tree removal would include chain saws and/or hand saws.

3.5.4.5 Work Area Stabilization

Work areas would be stabilized utilizing BMPs described in the SWPPP developed and implemented for the Project; typical BMPs that may be used for work area stabilization are presented in Section 3.5.11.

Generally level areas are selected for laydown yards; therefore, no slope stabilization issues are anticipated. Laydown yards would be compacted to at least 90 percent relative density and would be capable of supporting heavy vehicles. Rock could be placed on the surface of staging areas, where appropriate, to stabilize the soils.

3.5.4.6 Grading

Because the subtransmission lines included in the Project already exist, cleared or graded work pads are located adjacent to many structures along the lines. Where present, SCE would use these existing work pads during construction of the Project.

Where there are no existing work pads, SCE would delineate temporary work pads adjacent to each structure at which work would occur as part of the Project. Where the surface and vegetation conditions permit, construction crews would utilize overland travel approaches within these temporary work pads.

Where overland travel is not feasible, the temporary work pads would be graded and/or cleared of vegetation as required to provide a reasonably level and vegetation-free surface. Sites would be graded such that water would run toward the direction of the natural drainage and as directed by the SWPPP requirements. In addition, drainage would be designed to prevent ponding and erosive water flows that

could cause damage to new structure foundations or poles. The graded area would be compacted to at least 90 percent relative density and would be capable of supporting heavy vehicles.

3.5.4.6.1 Earth Moving or Substantial Grading Activities Description

The new LWS H-frame structures and TSP locations would first be graded and/or cleared to provide an adequately level and vegetation-free surface for footing construction. An approximately 80-foot by 80-foot area around each new structure would be cleared of vegetation to provide a safe working area and laydown area needed for structure assembly.

Depending on the location, the assembly and erection of some structures may require that a new crane pad, approximately 50 feet by 50 feet, be prepared to allow a crane to set up. The locations that would require a crane pad cannot be determined until preconstruction activities commence and, therefore, crane pads could be required anywhere within the mapped Structure Work Areas.

3.5.4.6.2 Estimated Volumes of Grading

No earth moving or substantial grading activities (i.e., grading below a 6-inch depth) would be required as part of the Project; therefore, no cut or fill volumes would be reused or hauled away, and no clean fill would be hauled to the site.

3.5.5 Transmission Line Construction (Above Ground)

3.5.5.1 Poles/Towers

3.5.5.1.1 Process and Equipment for Removing Poles, Towers, and Associated Foundations

Pole Removal

Wood poles, and the wood poles that comprise the vertical members of an H-frame structure or a three-pole structure would generally be removed utilizing a line truck or similar equipment with an attached boom. The above-ground and below-ground portions of each pole would be removed. A ground crew would excavate around the base of the wood pole and hydraulic jacks would then be placed around the base of the pole; a boom would be attached to the pole, and the pole would then be jacked and lifted out and placed within the temporary work pad area or on a trailer. The wood pole would be transported by truck to a staging area, and then to an SCE facility for reuse or recycling. The hole left from removing the pole would be backfilled and compacted with soils that may be available as a result of the excavation for a new structure at that location, with excess soil from the area, or using imported fill as needed.

Steel Pole Removal

Steel poles would be removed either whole or in pieces. If the topography and land use(s) surrounding the steel poles are suitable, a crane would be positioned proximate to the pole within the temporary work pad area, and the crane would place the pole in tension. The pole would then be unbolted or cut from its foundations, and lifted clear of its location, set down within the temporary work pad area or in another cleared or previously-disturbed area, and then dismantled by hand. If a crane cannot be used in a given location, a steel pole may be dismantled in-place by hand. In these instances, crews may work from bucket trucks or man-lifts located within the temporary work pad area rather than climbing the structures. The steel components of the pole would be transported to a staging area where they would be cut and prepared for recycling.

Foundation Removal

To remove steel pole foundations, crews would excavate around each of the foundations, and the foundations would then be demolished, generally with the use of concrete breaking equipment. The demolished concrete would be removed from the site and transported to a staging area prior to final disposal. Foundations would typically be removed 2 to 3 feet below grade; the holes left from removing the foundations would be backfilled and compacted with soils that may be available as a result of the excavation for a new structure at that location, with excess soil from the area, or using imported fill as needed. Foundations may be left in-place in locations where their removal may cause slope or soil instability and thus could contribute to localized erosion. Foundations may also be removed completely if leaving a portion of the foundations in the ground is not compatible with land use in the area.

Foundations would be sampled for the presence of asbestos prior to the start of removal activities; sampling would be performed in accordance with American Society for Testing Methods (ASTM) standard E2356-09, Standard Practice for Comprehensive Building Surveys. If asbestos-containing materials are identified, response actions would be performed in compliance with 8 California Code of Regulations (CCR) 1529, and overseen and monitored per ASTM standard E1368-05, Standard Practice for Visual Inspection of Asbestos Abatement Projects and ASTM standard D7201-06, Standard Practice for Sampling and Counting Airborne Fibers, Including Asbestos Fibers, in the Workplace, by Phase Contrast Microscopy (with an Option of Transmission Electron Microscopy).

If a foundation is found to be an asbestos-containing material, it would be properly abated and disposed of in a California Department of Toxic Substances Control-approved landfill that accepts asbestos-containing wastes. Notification to the local air quality management district having jurisdiction over the particular location would be made at least 10 business days prior to any demolition activities.

3.5.5.1.2 Process and Equipment for Installing or Otherwise Modifying Poles and Towers

The proposed LWS H-frame poles would be installed in holes bored into soil that are approximately 3 feet in diameter and 7 feet to 14 feet deep. H-frame structures are composed of two LWS poles spaced approximately 12 feet apart. LWS poles would be direct buried—installed into the ground without a foundation or footings. While on the ground at the laydown area, the poles would be configured, if not preconfigured, with the necessary crossarms, insulators, and wire-stringing hardware. LWS poles are typically shipped to a laydown yard in sections with slip joints and then jacked together. The poles would be installed using a line truck or crane. Once the poles are set in place, 2-sac slurry would be poured into the hole, and excavated dirt from the holes may be used to backfill the remaining void. If the excavated material is not suitable for backfill, clean fill material, such as clean dirt and/or base material, would be imported. Excess excavated material would be used to backfill the holes or dispose of it off site in accordance with all applicable laws.

The TSPs and three-pole TSPs would be attached to concrete foundations approximately 5 feet to 8 feet in diameter that extend 18 to 32 feet below ground and 1 to 3 feet above ground. A crane would be used to position each pole base section onto the foundation. When the base section is secured, the top section would be placed above the base section. The sections would be slipped together and may be spot welded together for additional stability.

3.5.5.1.3 Foundation Installation

TSPs would be installed on a drilled, poured-in-place, concrete foundation. If a single concrete foundation is used, the hole would be drilled using a low-profile drill rig, truck or track-mounted excavators.

Concrete foundations in soft or loose soil that extend below the groundwater level may require that the borehole be stabilized with mud slurry during drilling. If this is the case, mud slurry would be mixed and pumped into the borehole after drilling to prevent the sidewalls from sloughing. The concrete for the foundation would then be pumped to the bottom of the hole, displacing the mud slurry. The mud slurry that is brought to the surface would typically be collected in a pit adjacent to the foundation and then pumped out of the pit to be reused or discarded at an off-site disposal facility.

Concrete samples would be drawn at the time of pour and tested to ensure engineered strengths were achieved. According to SCE's specification, the concrete mix used typically takes 20 days to cure to an engineered strength. This strength is verified by controlled testing of sampled concrete. Once this strength has been achieved, crews would be permitted to commence with erection of the TSPs. SCE would obtain the concrete from an existing local concrete supply facility.

3.5.5.1.4 Delivery and Assembly

TSPs and LWS H-frames and associated hardware would generally be delivered to each temporary work pad by truck. Depending on conditions at the time of construction, the top sections may come pre-configured (i.e., assembled at a staging area), may be configured on the ground, or configured after pole installation with the necessary cross arms, insulators, and wire stringing hardware.

3.5.5.1.5 Pole Topping

No poles are anticipated to be topped as part of the Project.

3.5.5.2 Above-Ground and Underground Conductor/Cable

3.5.5.2.1 Process-Based Description

Wire stringing activities would be performed in accordance with SCE common practices and similar to process methods detailed in the Institute of Electrical and Electronics Engineers Standard 524-2003, Guide to the Installation of Overhead Transmission Line Conductors. The activities listed below may be performed in an order different than presented, and may be performed more than once depending upon the construction sequencing chosen.

3.5.5.2.2 Conductor and Overhead Ground Wire Installation: Activity Locations

Conductor, OHGW, and FRC installation activities would occur in those portions of the Project Alignment so-identified in Appendix A. Conductor stringing and installation activities would occur at every wire setup site, at every existing structure that would be modified, and at every newly installed structure. Figure 3-3 provides a diagram of a typical wire setup site.

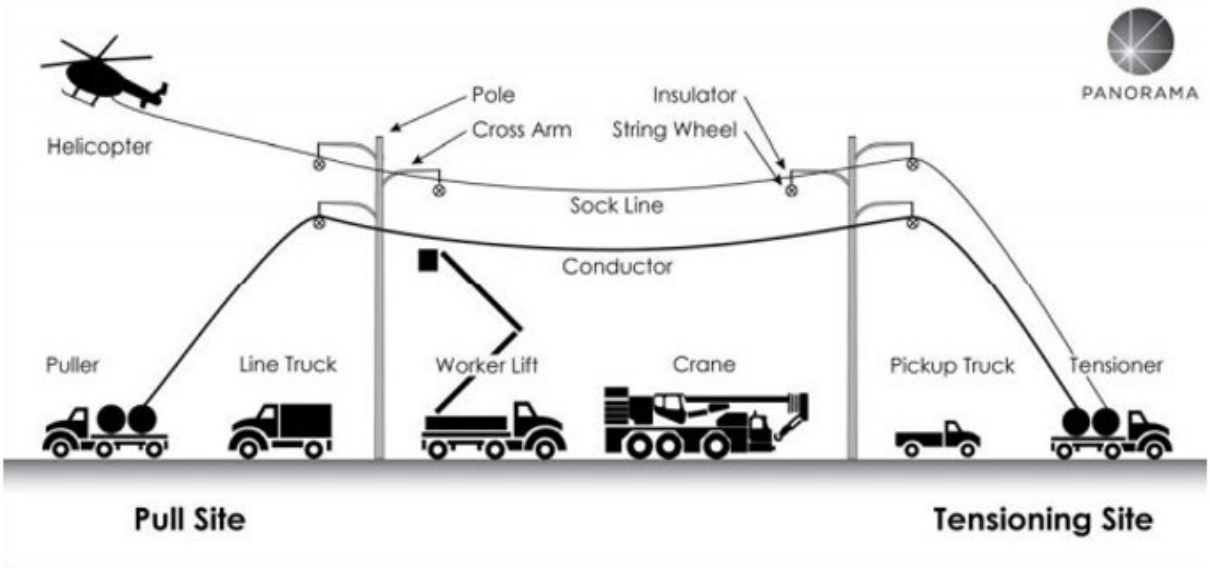
3.5.5.2.3 Conductor and Overhead Ground Wire Installation: Diagram of General Sequencing and Equipment Used

A diagram of the general equipment that would be used during the conductor installation process is presented in Figure 3.5-1.

3.5.5.2.4 Conductor/Cable Splicing Process

Conductor, OHGW, and FRC would be spliced using compression splices applied per manufacturer's instructions and specifications.

Figure 3.5-1 Typical Wire Setup Site Diagram



Source: CPUC 2017

3.5.5.2.5 Conductor and Overhead Ground Wire Installation: Pull-and-Tension/Stringing Site Locations

The average distance between wire setup sites along the Project Alignment would be approximately 1.75 miles, with distances between any two wire setup sites ranging from approximately 150 feet to 20,590 feet. The dimensions of each wire setup site would be approximately 150 feet by 400 feet. Wire setup sites may be located at existing dead-end structures, at points of inflection in the subtransmission line alignment, and according to the capacity of conductor reels. Generally, wire setup sites would be in direct line with the direction of the overhead conductors being installedand established at a distance equal to approximately three times the height of the adjacent structure. The equipment that would be required at wire setup sites includes a puller set-up positioned in a wire setup site located at one end of a wire pull, and a tensioner set-up with wire reel stand truck positioned in a wire setup site at the other end of a wire pull.

3.5.5.2.6 Conductor and Overhead Ground Wire Installation: Underground Installation

No conductor or OPGW would be installed underground for the Project.

3.5.5.2.7 Conductor and Overhead Ground Wire Installation: Safety Precautions

Where conductor or OHGW are to be removed or installed across a public roadway or a railroad,SCE would install guard structures on either side of the roadway or railroad, or would make alternate arrangements as described in Section 3.5.5.4. Guard structures would be installed at all electrical structures and roads where required.

3.5.5.3 Telecommunications

The Project does not include a telecommunications scope.

3.5.5.4 Guard Structures

Guard structures are temporary facilities that would typically be installed at transportation, flood control, and utility crossings prior to conductor, OHGW, or FRC removal or installation activities. Guard structures would be installed at all electrical structures and roads where required. These structures are designed to stop the movement of a conductor, OHGW, or FRC should it momentarily drop below a conventional stringing height. Guard structures may be required at 40 locations along the Project Alignment.

Typical guard structures are standard wood poles with diameters of 12 to 18 inches at the base and burial depths of 4 to 10 feet. Depending on the overall spacing of the conductors being installed, approximately three to five guard poles would be required on either side of a crossing. Guard structure wood poles would be installed using a direct-buried approach. Direct-buried wood poles would require a hole to be excavated using either an auger or a backhoe, or with the use of hydraulic or pneumatic equipment (e.g., jackhammers, drills, etc.). In some locations, corrugated steel or plastic forms may be placed to stabilize the excavation walls prior to installation of the pole.

Following excavation of the pole hole, the wood pole would then be installed in the excavated or augured holes, typically by a line truck with an attached boom; the base would be secured by backfilling with the excavated material in the interstitial space between the wall of the excavated or augured hole and the pole.

In some cases, the wood poles could be substituted with the use of specifically equipped boom trucks or, at highway crossings, temporary netting could be installed if required. The guard structures would be removed after the conductor is secured into place.

For crossings of highways, SCE would work closely with the applicable agency to secure the necessary permits to string conductor over the applicable infrastructure.

3.5.5.5 Blasting

Blasting is not anticipated to be required to construct the Project.

3.5.6 Transmission Line Construction (Below Ground)

3.5.6.1 Trenching

No subtransmission infrastructure would be installed below ground as part of the Project.

3.5.6.2 Trenchless Techniques (Microtunnel, Jack and Bore, Horizontal Directional Drilling)

The Project does not include below ground subtransmission line construction.

3.5.7 Substation, Switching Stations, Gas Compressor Stations

No switching stations or gas compressor stations are included as part of the Project.

3.5.7.1 Installation or Facility Modification

3.5.7.1.1 Transformers/Electric Components

At the existing Eagle Mountain and Blythe Substations, existing conductor would be removed from the existing subtransmission racks, and new conductor would be connected to the existing racks. Minor modifications to the existing racks at Eagle Mountain Substation may be required so that OHGW can be installed between the racks and the getaway structures. These minor modifications could include installation of new fittings to which the OHGW would be attached, or structural reinforcement of the existing racks.

3.5.7.1.2 Gas Components

No gas components would be installed or modified as part of the Project.

3.5.7.1.3 Control and Operation Buildings

No control and operation buildings would be constructed or modified as part of the Project.

3.5.7.1.4 Driveways

No driveways would be constructed or modified as part of the Project.

3.5.7.1.5 Fences

No fences would be constructed or modified as part of the Project.

3.5.7.1.6 Gates

No gates would be constructed or modified as part of the Project.

3.5.7.1.7 Communication Systems (SCADA)

No SCADA would be constructed or modified as part of the Project.

3.5.7.1.8 Grounding Systems

No grounding systems would be constructed or modified as part of the Project.

3.5.7.2 Civil Works

The Project would not require slope stabilization, drainage, retention basins, or spill containment facilities to be constructed atany substation.

3.5.8 Gas Pipelines

The Project does not include gas pipelines.

3.5.9 Gas Storage Facilities

The Project does not include gas storage facilities.

3.5.10 Public Safety and Traffic Control

3.5.10.1 Public Safety

3.5.10.1.1 Public Safety Considerations

The Project would address the following public safety considerations; these are described throughout Chapter 5, Environmental Analysis, and include, for example:

- Development and implementation of one or more SWPPPs to ensure, in part, to ensure efficient and effective response to spills.
- Development and implementation, if necessary, of a Spill Prevention, Control, and Countermeasures (SPCC) Plan to ensure that fuels are stored appropriately and to ensure efficient and effective response to spills
- Development and implementation of a Hazardous Materials Management Plan (HMMP) to ensure that that fuels and hazardous materials are used and handled according to applicable regulations.
- Development and implementation of a Traffic Control/Management Plan, as may be required under a ministerial permit, to mitigate public safety impacts from construction along public roadways and to ameliorate potential impacts from the movement of construction equipment along public roadways.
- Development and implementation of a Construction Fire Prevention Plan to mitigate the risk of construction activities triggering a wildfire.
- Installation of guard structures or use of specially equipped trucks during wire stringing activities where public roadways are crossed by the Project Alignment. Guard structures would be installed at all electrical structures and roads where required.

3.5.10.1.2 Procedures for Managing Work Sites in Urban Areas

A minimal portion of the Project Alignment is located within the City of Blythe, California; the public safety practices and measures employed across the Project Alignment would be employed in this urban area.

3.5.10.1.3 Public Access Restrictions

To ensure public safety during construction of the Project, the public would be restricted from entering or transiting construction work areas and staging areas, and would also be excluded from those areas of the alignment where overhead cable removal or installation activities are underway. Public access restrictions would be maintained during the duration of construction activities at a given location.

3.5.10.2 Traffic Control

3.5.10.2.1 Traffic Control Procedures

During construction, SCE would implement applicant proposed measure (APM) TRA-1 (see Section 3.11). SCE would follow its standard safety practices, including installing appropriate traffic control devices between work zones and transportation facilities, posting adequate signs, and using proper construction techniques. SCE would follow the recommendations in the California Temporary Traffic Control Handbook regarding basic standards for the safe movement of traffic on highways and streets in accordance with Section 21400 of the California Vehicle Code.

3.5.10.2.2 Location, Process, and Timing for Closing Sidewalks, Lanes, Roads, Trails, Paths, or Driveways

The locations, process, and timing for the closing of sidewalks, lanes, roads, trails, paths, or driveways to manage public access are presented in Section 5.17, Transportation. Overhead cable removal and installation activities would require the temporary closures of roads, lanes of roads (if the entire road does not need to be closed), and associated sidewalks or pedestrian paths. SCE would obtain encroachment permits from the local jurisdictions and Caltrans, as appropriate, for lane or roadway closures. Private driveway closures would be coordinated with the individual landowners.

3.5.10.2.3 Temporary Detour Routes

No temporary detour routes or locations would be necessary to facilitate construction of the Project.

3.5.10.2.4 Traffic Control Plan

3.5.10.3 Security

Laydown yards, as described above, would be fenced and may be illuminated for security purposes. Security personnel may either patrol the staging areas periodically or may be stationed at staging areas. Security at staging areas would be emplaced for the duration that a given staging area is in-use. Security measures would not be employed at construction work areas.

3.5.10.4 Livestock

No livestock fencing or guards would be installed as part of the Project to prevent livestock from entering Project Areas.

3.5.11 Dust, Erosion, and Runoff Controls

3.5.11.1 Dust

During construction, migration of fugitive dust from the construction sites would be limited by control measures set forth by the South Coast Air Quality Management District and the Mojave Desert Air Quality

Management District. Such measures include, but are not limited to, the following BMPs[5] that may be implemented to manage fugitive dust:

- **BMP-WE-1, Wind Erosion Control.** The construction team will apply water as necessary to prevent or alleviate dust nuisance generated by construction activities. Covering small stockpiles or areas is an alternative to applying water.

3.5.11.2 Erosion

In addition to BMP-WE-1 described in Section 3.5.11.1 above, the following BMPs may be implemented to manage erosion:

- **BMP-EC-1, Scheduling.** The construction team shall reduce the discharge of pollutants to storm drain facilities caused by construction activities by scheduling activities in a manner that will limit exposure of disturbed soils to wind, rain, non-storm water run-off, and storm water run-on and run-off.
- **BMP-EC-2, Preservation of Existing Vegetation.** The construction team will protect and preserve existing vegetation in work areas as long as practicable before disturbing them. The construction team shall also preserve and protect existing vegetation adjacent to work areas. This protection and preservation of such vegetation will serve to control erosion and filter out sediment.
- **BMP-EC-3, Hydraulic Mulch.** The construction team will implement this BMP, if necessary, to disturbed soil areas requiring temporary protection until permanent stabilization is established, and disturbed areas that will be re-disturbed following an extended period of inactivity.
- **BMP-EC-4, Hydroseeding.** The construction team will implement this BMP, if necessary, to disturbed soil areas requiring temporary protection until permanent stabilization is established.
- **BMP-EC-6, Straw Mulch.** The construction team will implement this BMP, if necessary, to disturbed soil areas requiring temporary protection until permanent stabilization is established, and disturbed areas that will be re-disturbed following an extended period of inactivity. Straw mulch will be certified weed free.
- **BMP-EC-7, Geotextiles and Mats.** The construction team will implement one or more of these measures to stabilize disturbed soil areas (stockpiles, slopes, embankments, conveyances, etc.) and protect these soils from erosion by rain, wind or storm water run-on and run-off where applicable to reduce soil erosion from wind and rain. Plastic micro-filament matting will not be used, only natural fiber mats to prevent trapping of birds and reptiles.
- **BMP-EC-8, Wood Mulch.** The construction team will implement this BMP, if necessary, to disturbed soil areas requiring temporary protection until permanent stabilization is established, and disturbed areas that will be re-disturbed following an extended period of inactivity. Wood mulch shall be untreated.
- **BMP-EC-15, Soil Preparation and Roughening.** The construction team will implement this BMP to assess and prepare surface soils for other BMP installation. This can include soil testing (for seed base, soil characteristics, or nutrients), as well as roughening surface soils by mechanical methods (including sheepsfoot rolling, track walking, scarifying, stair stepping, and imprinting) to prepare soil for additional BMPs, or to break up sheet flow. Soil preparation can also involve tilling topsoil to prepare a seed bed and/or incorporation of soil amendments, to enhance vegetative establishment.

[5] BMPs included herein are based on California Stormwater Quality Association's 2019 California Stormwater Best Management Practices Handbook.

- **BMP-EC-16, Non-Vegetative Stabilization.** The construction team will utilize non-vegetative stabilization methods for temporary or permanent stabilization of areas prone to erosion; this would be used only where vegetative options are not feasible.

3.5.11.3 Runoff

The following BMPs may be implemented to manage storm water run off and sediment:

- **BMP-SE-4, Check Dam.** The construction team will implement this BMP to reduce scour and channel erosion by reducing flow velocity and increasing residence time within the channel, allowing sediment to settle.
- **BMP-SE-5, Fiber Rolls**. The construction team will implement this BMP to eliminate the erosion of slopes. The rolls are widely used to prevent sediment from running off site.
- **BMP-SE-6, Gravel Bag Berm.** The construction team will implement this BMP to eliminate erosion of slopes. This BMP is particularly useful with steep slopes and a high potential for runoff.
- **BMP-SE-7, Street Sweeping and Vacuuming.** The construction team will implement this BMP when soils and miscellaneous debris are tracked from the construction site to areas outside the site. This measure prevents sediments from reaching the drop inlets and stormwater system, and prevents unsafe driving conditions.
- **BMP-SE-10, Storm Drain Inlet Protection.** The construction team will implement this BMP if any run off from the construction site drains directly into a drop inlet. The protection will prevent debris and soils from clogging drop inlets and storm drain systems.
- **BMP-TC-1, Stabilized Construction Entrances.** The construction team will implement this BMP to remove all construction site soil and miscellaneous debris prior to leaving the site. The BMP will depend on the soil, site, and type of surface outside the staging area.
- **BMP-TC-2, Stabilized Construction Roadway.** A stabilized construction roadway is a temporary access road. It is designed for the control of dust and erosion created by vehicular tracking.
- **BMP-WM-3, Stockpile Management.** The construction team will implement this BMP whenever there are stockpiles of asphalt, concrete, wood, or soil. This includes temporary stockpiles and stockpiles existing for periods longer than 1 working day.

3.5.12 Water Use and Dewatering

3.5.12.1 Water Use

Water use is estimated at 14,038 gallons per day on average which, over the 8-month construction period, would amount to a total of 9.6 acre-feet (Appendix M). Water would be used for dust control, for restoration activities, and in the construction of structure foundations.

SCE would preferentially utilize recycled or reclaimed water if and when such water is available; at this time, the volume of recycled or reclaimed water that would be available for purchase is unknown. However, if the full volume of water needed for the Project is available for purchase at competitive rates, SCE would solely utilize recycled or reclaimed water for the Project.

If recycled or reclaimed water is not available in sufficient quantities to supply the entirety of the Project's water demand, SCE would purchase water from commercial purveyors to supplement the volumes of recycled or reclaimed water available. Given the nature of water resources in the Project Area, water purchased from commercial purveyors could be sourced from either surface water orgroundwater resources.

3.5.12.2 Dewatering

During installation of TSPs or LWS H-frames, shallow groundwater may be encountered. In these instances, excavations would be dewatered using one or more pumps and the water would be either discharged on-site to the surface (if so permitted) or would be stored in Baker tanks or similar equipment prior to disposal off-site; Baker tanks or similar equipment would be emplaced on the temporary work pad established for new structure installation. Dewatering water may also be used for dust control.

3.5.13 Hazardous Materials and Management

3.5.13.1 Hazardous Materials

3.5.13.1.1 Types, Uses, and Volumes

Construction of the Project would require the limited use of hazardous materials, such as fuels, lubricants, and cleaning solvents. These would be used to power internal combustion engines, to lubricate internal combustion engines and other construction equipment and hardware, and for cleaning purposes. The estimated volumes of these materials that would be consumed or used during construction are presented in Table 3-6. Based on the anticipated volume of hazardous liquid materials, such as fuel, that would be stored and dispensed at one or more staging areas, an SPCC Plan could be required (in accordance with 40 Code of Federal Regulations [CFR] Parts 112.1-112.7 [Riverside County 2024]) depending on contractor requirements.

Table 3-6 Types, Uses and Volumes of Hazardous Materials

Hazardous Material Type	Use	Approximate Volume (gallons)
Diesel	Engine fuel	335,137
Gasoline	Engine fuel	612,750
Lubricants/Hydraulic Fluids	Engine and equipment lubrication/ Powering hydraulic equipment	47,394
Miscellaneous Construction Fluids (solvents, etc.)	Cleaning/lubricating hardware, etc.	2,370

Notes:
Diesel and gasoline volumes developed through EMFAC2021.
Lubricants/hydraulic fluids consumption assumed at 5 percent of non-aviation fuel consumption.
Miscellaneous construction fluid volumes assumed at 5 percent of Lubricants/Hydraulic Fluids volume.

3.5.13.1.2 Herbicides or Pesticides

No herbicides or pesticides are planned to be used during construction.

3.5.13.1.3 Pre-Existing Hazardous Waste

If pre-existing hazardous waste is encountered during construction, it would be removed, managed, and disposed as described in the HMMP developed and implemented per APM HAZ-1 or as described in the Soil Management Plan developed and implemented per APM HAZ-3.

3.5.13.2 Hazardous Materials Management

3.5.13.2.1 BMPs: Transporting, Storing, and Handling

The following BMPs would be followed for transporting, storing, and handling hazardous materials:

- **NS-9, Vehicle and Equipment Fueling.** The construction team will implement this BMP when fueling of equipment occurs on site. The equipment should be monitored before and after fueling. This will prevent any fuel from reaching the construction site soils and possible groundwater. Diapers, pans or tarps will be used under fueling areas. Spill kits will be on site atfueling locations. Fueling areas will be located at least 100 feet from drainages.
- **WM-1, Material Delivery and Storage.** The construction team will implement this BMP to prevent, reduce, or eliminate the discharge of pollutants from material delivery and storage to the storm water system or watercourses by minimizing the storage of hazardous materials on site, storing materials in watertight containers and/or a completely enclosed designated area, installing secondary containment, conducting regular inspections, and training employees and subcontractors.
- **WM-2, Material Use.** The construction team will implement this BMP to prevent or reduce the discharge of pollutants to the storm drain system or watercourses from material use by using alternative products, minimizing hazardous material use on site, and training employees and subcontractors.
- **WM-4, Spill Prevention and Control.** The construction team will implement this BMP to prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills byreducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

3.5.13.2.2 BMPs: Incidental Leak or Spill

The following BMPs would be followed in the event of an incidental leak or spill of hazardous materials:

- WM-4, Spill Prevention and Control. The construction team will implement this BMP to prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills byreducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.
- **WM-6, Hazardous Waste Management.** The construction team will implement this BMP to prevent or reduce the discharge of pollutants to storm water from hazardous waste through propermaterial use, waste disposal, and training of employees and subcontractors.
- **WM-7, Contaminated Soil Management.** The construction team will implement this BMP to prevent or reduce the discharge of pollutants to storm water from contaminated soil and highly acidic or alkaline soils by conducting pre-construction surveys, inspecting excavations regularly, and remediating contaminated soil promptly.

3.5.13.2.3 Hazardous Substance Control and Emergency Response Plan/Hazardous Waste and Spill Prevention Plan

Hazardous materials management during construction of the Project would be guided by an HMMP, which would be developed prior to construction as specified in APM HAZ-1 (see Section 3.11).

3.5.14 Waste Generation and Management

3.5.14.1 Solid Waste

3.5.14.1.1 Solid Waste Streams

Construction of the Project would result in generation of various solid wastes including metals (from the removed conductor and associated fittings), wood poles, wood pallets, cardboards/papers (e.g., from material packaging), and worker-generated solid waste (e.g., food and food packaging).

3.5.14.1.2 Solid Waste Management

Solid waste generated during construction of the Project would be collected at the point of creation, transported to a staging area, and then temporarily stored at a staging area as the solid waste awaits salvage, recycling, and/or disposal. Solid wastes would be sorted, and recyclable and non-recyclable materials would be stored separately at the staging areas. No treatment of solid wastes would occur at any Project construction work area or staging area. Solid wastes would be transported off-site using SCE-approved transporters and disposed of at an SCE-approved disposal facility. Empty cable reels and spools would be returned to the vendor or the staging yard for reuse, and wiring would be recycled. Materials would be recycled to the greatest extent possible, however some materials may require disposal, which would occur in accordance with federal, State, and local statutes and regulations. Organic waste would be removed from the Project Alignment and disposed off-site.

3.5.14.1.3 Estimated Mass of Solid Waste

Approximately 570 tons of construction waste would be generated by the Project and would be temporarily stored in staging yards prior to disposal.

3.5.14.1.4 Solid Waste Recycling Potential

Given the very large mass and recyclable content of the waste streams that would be generated during construction of the Project, it is anticipated that the steel from the removed steel poles, conductor, and steel hardware and fittings would be transported to industrial-scale recycling facilities.

3.5.14.1.5 Solid Waste Disposal and Recycling Facilities

The final disposition site of recyclable materials is not known at this time as the selection of such site may depend upon market conditions at the time of construction. SCE-approved appropriate disposal facilities for non-metallic recyclable materials and non-recyclable materials would be provided to the construction contractor.

3.5.14.2 Liquid Waste

3.5.14.2.1 Liquid Waste Streams

Sanitary waste is the only liquid waste planned to be generated during construction of the Project. No other liquid wastes (e.g., drilling muds, contaminated waters) are expected to be generated by the Project.

3.5.14.2.2 Liquid Waste Management

Portable toilets would be provided for on-site use by construction workers; sanitary waste would be collected, contained, and stored in these portable toilets prior to disposal by a licensed sanitation contractor. Sanitary waste would be treated at a wastewater treatment plant.

3.5.14.2.3 Liquid Waste Volume

The volumes of liquid waste generated across the Project Alignment would be commensurate withthe number of workers on site during construction (i.e., a maximum of approximately 80 workers). It is estimated that approximately 11,020 gallons of liquid waste would be generated during construction of the Project.[6]

3.5.14.2.4 Liquid Waste Disposal Facilities

It is anticipated that sanitary waste would be transported to and treated at one of the nearby wastewater treatment plants:

- Blythe Wastewater Treatment located at 15901 South Broadway, Blythe, CA 92225
- Coachella Valley Water District Mid-Valley Water Reclamation Plant #1, 2 & 4 located at 62510 Fillmore Street, Thermal, CA 92274.
- Coachella Sanitary District located at 87075 Avenue 54, Coachella, CA 92236
- Valley Sanitary District located at 45500 Van Buren Street, Indio, CA 92201
- Coachella Valley Water located at 80609 Avenue 38, Indio, CA 92203

3.5.14.3 Hazardous Waste

3.5.14.3.1 Potentially Hazardous Waste Streams and Management

Only small volumes of hazardous waste are anticipated to be generated during construction of the Project. These hazardous wastes would generally include empty fuel, lubricant, or cleaning solvent containers and materials contaminated with fuels, lubricants, or cleaning solvents (e.g., rags, drip pans, etc.). A low potential exists for contaminated soil or groundwater to be encountered during excavation or other ground-disturbing activities.

The existing wood poles or portions of wood poles removed for the Project would be returned to a staging area, and either reused by SCE, returned to the manufacturer, disposed of in a Class I hazardous waste landfill, and/or disposed of in the lined portion of a Regional Water Quality Board- (RWQCB-) certified landfill. Approximately 71 wood poles (accounting for approximately 22 H-frames, 16 three-pole installations, and 1 single pole), weighing in total approximately 142 tons, would be removed and disposed as part of the Project.

All hazardous waste would be stored, handled, and used in accordance with applicable regulations. SCE crews and/or SCE's construction contractor would implement proper hazardous waste management activities, which would include preparation and implementation of a Project-specific HMMP as specified in APM HAZ-1. The plan would include safety information regarding the transport, use, and disposal of

[6] Assume 2 liters (0.52 gallons) per construction worker per day; approximately 22,000 worker-days during the 18-month construction window.

hazardous waste. In addition, all transport, use, and disposal of hazardous waste would be in compliance with applicable laws, rules, and regulations.

To address contaminated soil or groundwater, SCE would develop and implement a Soil Management Plan per APM HAZ-3. The Plan would direct that, if encountered, contaminated soil would be segregated, sampled, and tested to determine appropriate disposal options. If the soil is classified as hazardous, it would be properly managed on location and transported in accordance with the United States (U.S.) Department of Transportation regulations using a Uniform Hazardous Waste Manifest to a Class I Landfill orother appropriate soil treatment or recycling facility, as approved by SCE. If potentially contaminated groundwater is encountered, then groundwater samples would be collected and tested to determine appropriate treatment and disposal. Hazardous waste would be transported and disposed of in accordance with applicable rules, regulations, and SCE standard protocols designed to protect the environment, workers, and the public.

3.5.14.3.2 Volumes of Hazardous Waste

Only small volumes of hazardous waste are anticipated to be generated during construction of the Project.

3.5.14.3.3 Locations of Appropriate Disposal Facilities

The final disposition location of hazardous wastes would be determined by the construction contractor immediately prior to or during construction to SCE-approved facility. SCE-approved appropriate disposal facilities for hazardous waste would be provided to the construction contractor.

3.5.15 Fire Prevention and Response

3.5.15.1 Fire Prevention and Response Procedures

During construction, SCE would implement standard fire prevention protocols during construction activities and comply with applicable laws and regulations, would implement the CPUC Draft Environment Measure: Construction Fire Prevention Plan, and would develop and implement a Fire Prevention and Emergency Response Plan per APM HAZ-4.

Construction areas would be grubbed/trimmed of vegetation and graded before the staging of equipment, and in construction areas where overland travel may occur, dry vegetation would also be trimmed; such activities would minimize the potential for vehicles or equipment to start a fire.

If the National Weather Service issues a Red Flag Warning during construction of the Project, additional measures would be implemented to address smoking and fire rules, storage and parking areas, the use of gasoline-powered tools, the use of spark arresters on construction equipment, road closures, the use of a fire guard, fire suppression tools, fire suppression equipment, and training requirements.

3.5.15.2 Fire Breaks

No new permanent fire breaks (i.e., areas cleared of vegetation) would be developed as part of the Project. Areas around new structures would be maintained per the applicable standards in CPUC GO 128.

No areas would be cleared of vegetation solely for the purposes of creating a temporary fire break. In areas where hot work (e.g., welding) would be performed, or where equipment would be staged and operated where hot surfaces (e.g., exhaust systems) could come in contact with extant vegetation, such vegetation

would be cleared or trimmed. This vegetation clearing or trimming would be contained within the construction work area identified for that given location.

3.6 Construction Workforce, Equipment, Traffic, and Schedule

3.6.1 Construction Workforce

3.6.1.1 Number of Construction Crew Members

SCE anticipates a total of approximately 80 construction personnel working on any given day.

3.6.1.2 Crew Deployment

SCE anticipates that up to three reconductoring crews, one foundation crew, one structure crew, and various ancillary crews would work concurrently. The estimated deployment and number of crew members would vary depending on factors such as material availability, resource availability, and construction scheduling. In general, construction efforts would occur in accordance with accepted construction industry standards. Construction would be performed by SCE construction crews and/or contractors. If SCE construction crews are used, they typically would be based at SCE's local facilities, (e.g., service centers, substations, etc.) or temporary staging areas set up for the Project. Contractor construction personnel would be managed by SCE construction management personnel and based out of the contractor's existing yard or temporary staging areas set up for the Project.

3.6.1.3 Activities to be Undertaken

The different types of activities to be undertaken during construction, the number of crew members for each activity, and number and types of equipment expected to be used for each activity are presented in Table 3-7.

3.6.2 Construction Equipment

The following is a list of the construction equipment SCE anticipates using during Project execution:

- Auger
- Backhoe
- Boom truck
- Bucket truck
- Bulldozer
- Concrete trucks
- Conductor puller, tensioner, stringing equipment(s)
- Conductor reel stands
- Crane
- Dump trucks
- Flatbed trucks
- Forklifts
- Generators

- Haul trucks
- Line trucks
- LoDrill
- Moto-grader
- Pickup/Tool trucks
- Sag cat
- Skid steer
- Water trucks

Table 3-7 Construction Equipment and Workforce

Primary Equipment Description	Estimated Equipment Horsepower (HP)	Probable Fuel Type	Primary Equipment Quantity	Estimated Workforce	Estimated Schedule (Days)		Duration of Use (Hrs/Day
					SCAQMD	MDAQMD	
TSP Foundation							
LoDrill	221	Diesel	1	12	96	99	10
Crane	231	Diesel	1		96	99	6
Flatbed Truck	402	Diesel	1		96	99	2
Concrete Truck	96	Diesel	3		96	99	4
Haul Truck	N/A	Diesel	1		32	33	N/A
Ready Mix Truck	N/A	Diesel	3		32	33	N/A
Pickup Truck	N/A	Gasoline	1		96	99	N/A
TSP Installation							
Flatbed Truck	402	Diesel	1	16	96	99	2
Crane	231	Diesel	1		96	99	10
Bucket or Boom Truck	402	Diesel	1		96	99	10
Haul Truck	N/A	Diesel	1		32	33	N/A
Pickup Truck	N/A	Gasoline	1		96	99	N/A
LWS Pole Installation							
Line Truck	402	Diesel	1	8	14	0	1
Boom Truck	402	Diesel	1		14	0	6
Bucket Truck	402	Diesel	1		14	0	10
Haul Truck	N/A	Diesel	1		14	0	N/A
Pickup Truck	N/A	Gasoline	1		14	0	N/A
Structure Removal (TSP Foundation Only)							
Crane	231	Diesel	1	12	50	0	3
Flatbed Truck	402	Diesel	1		50	0	3
Dump Truck	402	Diesel	1		50	0	10
Backhoe with Breaker	97	Diesel	1		50	0	10

Primary Equipment Description	Estimated Equipment Horsepower (HP)	Probable Fuel Type	Primary Equipment Quantity	Estimated Workforce	Estimated Schedule (Days)		Duration of Use (Hrs/Day
					SCAQMD	MDAQMD	
Haul Truck	N/A	Diesel	1		14	0	N/A
Pickup Truck	N/A	Gasoline	1		14	0	N/A
Reconductor (Clipping/Unclipping)							
Bucket Truck	402	Diesel	1	10	174	132	4
Haul Truck	N/A	Diesel	1		174	132	N/A
Pickup Truck	N/A	Gasoline	1		174	132	N/A
Line Sleeves							
Bucket Truck	402	Diesel	1	12	4	4	1
Haul Truck	N/A	Diesel	1		4	4	N/A
Pickup Truck	N/A	Gasoline	1		4	4	N/A
Guard Site Installation							
Line Truck with Auger	402	Diesel	1	8	6	15	6
Boom Truck	402	Diesel	1		6	15	6
Haul Truck	N/A	Diesel	1		6	15	N/A
Pickup Truck	N/A	Gasoline	1		6	15	N/A
Guard Site Removal							
Line Truck with Auger	402	Diesel	1	8	3	7	3
Boom Truck	402	Diesel	1		3	7	3
Haul Truck	N/A	Diesel	1		3	7	N/A
Pickup Truck	N/A	Gasoline	1		3	7	N/A
Pulling							
V-Groove	172	Diesel	1	22	160	232	10
Crane	231	Diesel	1		160	232	10
Tensioner	172	Diesel	1		160	232	10
Forklift	89	Diesel	1		160	232	10
Boom Truck	402	Diesel	2		160	232	10

Primary Equipment Description	Estimated Equipment Horsepower (HP)	Probable Fuel Type	Primary Equipment Quantity	Estimated Workforce	Estimated Schedule (Days)		Duration of Use (Hrs/Day
					SCAQMD	MDAQMD	
Sagging Cat	97	Diesel	1		160	232	10
Flatbed Truck	402	Diesel	1		160	232	10
Haul Truck	N/A	Diesel	1		160	232	N/A
Ready Mix Truck	N/A	Diesel	0		0	0	N/A
Pickup Truck	N/A	Gasoline	1		160	232	N/A
Splicing							
Bucket Truck	402	Diesel	1		2	3	1
Haul Truck	N/A	Diesel	1	6	2	3	N/A
Pickup Truck	N/A	Gasoline	1		2	3	N/A
SWPPP Implementation							
Water Truck	402	Diesel	2		257	257	8
Haul Truck	N/A	Diesel	0	4	257	257	N/A
Pickup Truck	N/A	Gasoline	2		257	257	N/A
Access Road Improvement							
Motor Grader	148	Diesel	1		36	36	8
Water Truck	402	Diesel	1	2	36	36	8
Pickup Truck	N/A	Gasoline	1		36	36	N/A
Skid Steer	71	Diesel	1		36	36	8
Laydown Yards							
Pickup Truck	NA	Gasoline	1		192	192	NA
Forklift	89	Diesel	1	4	192	192	4
Generator	45	Diesel	1		192	192	8

3.6.3 Construction Traffic

3.6.3.1 Transportation of Crews and Equipment

Construction equipment would be transported to and from construction work areas along the Project Alignment by being driven (in the case of self-propelled vehicles) or towed (in the case of equipment that is not self-propelled) along public roadways and along the existing network of access roads.

Construction crews would be transported to and from construction work areas along the Project Alignment in construction vehicles (pick-up trucks or other self-propelled vehicles).

Along the Project Alignment, it is likely that many pieces of construction equipment would be left at work areas overnight and on off-days (e.g. holidays, etc.) rather than being driven to and from construction work areas each day.

3.6.3.2 Vehicle Types, Numbers, and Hours of Operation

Information on the vehicle type, number of vehicles, and estimated hours of operation per day, week, and month for each construction activity are presented in Table 3-7.

3.6.3.3 Vehicle Miles Traveled

The estimated number of vehicle trips and vehicle miles traveled for each construction activity is presented in Section 5.17, Transportation.

3.6.4 Construction Schedule

3.6.4.1 Proposed Construction Schedule

SCE anticipates that construction of the Project would begin in the fourth quarter of 2025 and would continue for approximately four months. Project activities would shut down for approximately four months in the summer, when utility loading is at peak demand, and to minimize impacts to special-status species that become active in the area during the summer months (e.g., desert tortoise, fringe-toed lizards, nesting birds). Project activities would resume in the fourth quarter of 2026 and continue for approximately four months. The schedule is primarily driven by the potential for line outages, which is regulated by the California Independent System Operator (CAISO). Construction would commence following approval and receipt of all applicable permits.

3.6.4.2 Construction Sequencing

Each of the work activities would be performed as described throughout Section 3.5. Some activities may be performed concurrently; for instance, wire setup sites may be established at the same time as guard structures are being installed, and the restoration of disturbed areas may occur at the same time as staging area demobilization and restoration is occurring.

3.6.4.3 Total Duration of Construction Activities

SCE anticipates that construction of the Project would begin in the fourth quarter 2025 and would take approximately 8 months within an 18-month window.

3.6.4.4 Seasonal Considerations

Seasonal considerations may affect SCE's ability to perform construction activities along the Project Alignment. These considerations include variable winter weather which could force halts to construction during rain events; construction halts during nesting bird season; and species-specific disturbance restrictions. SCE has taken these considerations into account to the extent that future actions outside of SCE's control can be addressed.

3.6.5 Work Schedule

3.6.5.1 Anticipated Work Schedule

To the extent feasible, construction activities would occur between 6:00 a.m. and 5:00 p.m., Monday through Saturday or during the hours established in local ordinances and/or in any ministerial permits obtained. Construction is not anticipated to occur on holidays. However, at limited times, Project construction may be required or finished outside of these hours. The dates and locations of such work are not known at this time.

3.6.5.2 Construction Durations

The duration of construction activities at a given type of work area would vary; however, approximate durations are presented below.

3.6.5.2.1 Helicopter Landing Zones and Touchdown Areas

No helicopter landing zones or touchdown areas would be required for the Project.

3.6.5.2.2 Temporary Work Pads Duration

For all activities at a temporary work pad, the work pad would be established, including vegetation clearing/trimming as necessary; this activity would generally be performed in 1 day. The specific construction activities at any given temporary work pad would vary depending on the activity to be performed, as described below.

3.6.5.2.3 Hardware Replacement

On any given day, crews would install sheaves and other conductor removal/installation hardware and would transfer the existing conductors into the sheaves, which would require crews visiting the work pad; this would be performed in less than 1 day.

3.6.5.2.4 Structure Clipping

On any given day, crews would clip the new conductor into the new shoes, which would require crews visiting the work pad; this would be performed in less than 1 day.

3.6.5.2.5 Structure Removal

Removal of an existing steel pole and associated foundations may require several days of work at any given location. Removal of an existing wood pole or H-frame would generally be completed in 1 day.

3.6.5.2.6 Tubular Steel Pole Installation

Installing a TSP foundation would generally be performed over 2 or 3 consecutive days. The concrete foundation would then be allowed to set for a period of time. Installation of the TSP on the foundation would require several consecutive days of work at any given location.

3.6.5.2.7 Lightweight Steel Pole Installation

LWS H-frames would generally be installed over a period of 1 to 3 consecutive days at any given location.

3.6.5.2.8 Conductor Installation

Conductor installation would generally occur over a period of 3 non-consecutive days. On any given day, crews would connect the one phase of the new conductor to the existing conductor sitting in sheaves previously installed on structures. The new conductor would be pulled through the sheaves using the old conductor. Once the new conductor is in place, crews would sag and dead-end the new conductor. Each wire pull would consist of three phases; these activities would be repeated for each phase. Note that the approximately 3 working-days on a temporary work pad would not be performed consecutively. These 3 days of work would occur over an approximately 5-day period.

3.6.5.2.9 Structure Modification

Modifications to an existing structure (i.e., to replace hardware) would generally be performed over a 1- or 2-day period.

3.6.5.2.10 Temporary Guard Structures Duration

Construction activities at any temporary guard structure location would occur on 2 non-consecutive days. On 1 day, crews would install the temporary guard structure at a given location. This guard structure would then remain in place until reconductoring activities in that area are completed. At that time, crews would remove the temporary guard structure at the given location; this activity would occurgenerally in a single day.

3.6.5.2.11 Wire Setup Sites Duration

The construction duration at a wire setup site located at the end of a portion of subtransmission line to be reconductored would be approximately 10 days. The construction duration at a wire setup site not located at the end of a portion of subtransmission line to be reconductored would be approximately 20 days; this accounts for the durations to complete wire pulls on both sides of the wire setup site. These durations do not include any site preparation work (e.g., clearing vegetation, preparing the surface, etc.) that may be needed; such site preparation work is estimated to require 2 days per wire setup site.

3.6.5.2.12 Laydown Yard Activity Duration

Work at a given staging area would occur during the period when that staging area is necessary to support construction in the area. The duration of use for a given staging area could run more than 8 months, depending upon final construction sequencing.

3.7 Post-Construction

3.7.1 Configuring and Testing

As part of the Project, conductor would not be re-configured. Relays would be reprogrammed and tested at all substations. Along the Project Alignment, the newly-installed conductor would be cut over per SCE standards, and the phasing would be checked.

3.7.2 Landscaping

No landscaping would be installed as part of the Project.

3.7.3 Demobilization and Site Restoration

3.7.3.1 Demobilization

Demobilization activities would vary for staging areas and construction work areas. For construction work areas where no stationary equipment or materials would be located and where no intensive surface preparation occurred, mobile equipment would be removed from the construction work area, construction-related materials (e.g., packaging, trash, etc.) would be removed, and construction-related temporary BMPs would be removed if they are not necessary for planned restoration work. The construction work area would then be subject to restoration and final stabilization as described below.

At staging areas, all stationary equipment (e.g., office trailers, generators, etc.) and remaining construction-related material would be removed, as would all mobile equipment not needed for demobilization of the staging area. The staging area would then be returned to its pre-construction condition or would be subject to restoration as described below.

3.7.3.2 Site Restoration

Site restoration activities would vary across the Project Alignment. Site restoration activities would be guided by federal, State, and local requirements and by the conditions attached to Project approvals from federal and State regulators. These requirements and conditions would be reflected in the SWPPP, in the Habitat Restoration and Revegetation Plan (HRRP) developed per APM BIO-9, and in the Invasive Plant Management Plan (IPMP) developed per APM BIO-10.

3.7.3.2.1 Restoring Natural Drainage Patterns

Natural drainages, if impacted during construction of the Project, would be returned to pre-existing contours upon completion of the work as described in APM BIO-13. Recontouring would restore the pre- existing hydrological function to the system. Further, SCE would obtain all necessary permits and authorizations, including those from the U.S. Army Corps of Engineers (USACE), the RWQCB, and California Department of Fish and Wildlife (CDFW) prior to construction in drainages. SCE would comply with all conditions of approval identified in permits and authorizations.

Restoration of natural drainage patterns outside of drainages would be accomplished by restoring, in- place, temporarily disturbed areas to pre-project contours.

3.7.3.2.2 Recontouring Disturbed Soil

Temporarily disturbed areas would be restored to their approximate pre-project contours.

3.7.3.2.3 Removing Construction Debris

Construction debris (e.g., removed conductor, packaging materials, etc.) would be removed from Project construction work areas and staging areas throughout the duration of the Project. Construction debris would be removed in light-duty vehicles (e.g., pick-up trucks) and heavy-duty vehicles (e.g., in dump trucks, on flatbed trailers, etc.).

3.7.3.2.4 Vegetation

As would be described in the SWPPP(s) to be developed for the Project, construction work areas and staging areas would be stabilized following construction; such stabilization could include seeding disturbed areas.

Where construction of the Project would disturb sensitive habitats, restoration and/or revegetation would be performed in those areas as described in the HRRP developed per APM BIO-9. This Plan would be developed by SCE with the appropriate resource agencies and implemented after construction is complete. Additional information pertaining to the habitat restoration and/or revegetation plan(s) can be found in Section 5.4, Biological Resources.

3.7.3.2.5 Permanent and Semi-Permanent Erosion Control Measures

No permanent erosion control measures would be installed as part of the Project. Final stabilization erosion control measures would be emplaced following demobilization and as part of site restoration activities; typical BMPs that may be installed during the restoration phase are those presented in Section 3.5.11.

3.7.3.2.6 Restoration of All Disturbed Areas and Access Roads

As would be described in the SWPPP that would be developed for the Project, construction workareas and staging areas would be stabilized following construction.

Where construction of the Project disturbs sensitive habitats, restoration and/or revegetation would be performed in those areas as described in the HRRP developed per APM BIO-9. This Plan would be developed by SCE with the appropriate resource agencies and implemented after construction is complete. Additional information pertaining to the habitat restoration and/or revegetation plan(s) can be found in Section 5.4, Biological Resources.

Existing access and spur roads would not be restored; these features represent existing permanent disturbance, and these access and spur roads are, and would continue to be, utilized during O&M-related activities.

No damage to sidewalks is anticipated as part of the Project. Few sidewalks are crossed by the Project Alignment; where sidewalks are located, any guard structures installed in these areas would be set back from the roadway for, among other purposes, avoiding damage to sidewalks.

No damage to agricultural infrastructure is anticipated as part of the Project. Where present, SCE would coordinate with landowners to either avoid agricultural infrastructure or to have such infrastructure relocated by the landowner to avoid damage.

Landscaping located on private parcels within SCE's easement may be trimmed or removed per the terms of SCE's easements over said parcels if such trimming or removal is authorized under the easements.

Any landscaping located outside of SCE's easements that is damaged during construction of the Project would be restored, or suitable compensation for the damage made, as determined during negotiations between SCE and the landowner.

No public trails would be used for access during construction of the Project. Some of SCE's existing access roads may be used by the public as trails. As stated above, no access roads would be restored.

3.7.3.2.7 Road Repaving and Striping

No road repaving or striping would be required as part of the Project.

3.8 Operation and Maintenance

SCE currently performs O&M activities as described below along the subtransmission lines that are included as part of the Project. No material changes in the O&M activities described below, or the locations of these activities, are anticipated with implementation of the Project.

In addition to regular O&M activities, SCE conducts a wide variety of emergency repairs in response to emergency situations such as damage resulting from high winds, storms, fires, and other natural disasters, and accidents. Such repairs could include replacement of downed structures or lines, or re-stringing of conductors. Emergency repairs could be needed at any time.

Ongoing O&M activities are necessary to ensure reliable service, as well as the safety of the utility worker and the general public as mandated by the CPUC. SCE facilities are subject to Federal Energy Regulatory Commission jurisdiction. SCE transmission facilities are under operational control of the CAISO.

3.8.1 Regulations and Standards

The subtransmission lines included as part of the Project would be maintained in a manner consistent with GO 95 and GO 128 as applicable along with federal, State, and local regulations. These GOs contain the ruling standards for the O&M of subtransmission and transmission lines in California.

SCE's 2023-2025 Wildfire Mitigation Plan (SCE 2023) is available online. No special procedures for wildfire management, beyond those addressed in the plan or required by regulation, are included as part of the Project.

3.8.2 System Controls and Operation Staff

3.8.2.1 Systems and Methods

The systems and methods used for monitoring and control of the subtransmission lines included as part of the Project would not be changed as a result of the Project. Normal operation of the lines would be controlled remotely through SCE control systems, and manually in the field as required.

3.8.2.2 New Full-Time Staff

No additional personnel would be required for O&M activities.

3.8.3 Inspection Programs

3.8.3.1 Existing and Proposed Inspection Programs

The existing inspection programs implemented for the subtransmission lines included as part of the Project would not be changed as a result of the Project. SCE inspects the subtransmission overhead facilities in a manner consistent with GO 165 a minimum of once per year, but inspections usually occur more frequently based on system reliability.

3.8.3.2 Enhanced Inspections

No portions of the Project Alignment are located in a High Fire Threat District. Enhanced inspections as described in Section 5.3.4, Asset Management and Inspections, of SCE's 2023-2025 Wildfire Mitigation Plan (SCE 2023) would not be applicable.

3.8.3.3 Inspection Processes

GO 165 inspections are performed via ground and/or aerial observation. No new access would be required for future inspections; ground-based inspections would be performed using the existing network of access and spur roads.

3.8.4 Maintenance Programs

3.8.4.1 Existing and Proposed Maintenance Programs

The existing maintenance activities performed along the subtransmission lines included as part of the Project would be unchanged as a result of the construction of the project. Maintenance would occur as needed and could include activities such as repairing conductors, washing or replacing insulators, repairing or replacing other hardware components, replacing poles and towers, tree trimming, brush andweed control, and access road maintenance.

Most regular O&M activities for overhead facilities are performed from existing access roads with no surface disturbance. Repairs done to existing facilities, such as repairing or replacing existing poles and towers, could occur in undisturbed areas.

Conductor could require re-stringing to repair damage. Some wire setup site locations could be in previously undisturbed areas and at times, conductors could be passed through existing vegetation during re-stringing activities.

Insulators could require periodic washing with water to prevent the buildup of contaminants (dust, salts, animal droppings, smog, condensation, etc.) and to reduce the possibility of electrical arcing which can result in circuit outages and potential fire. Frequency of insulator washing is region specific and based on local conditions and build-up of contaminants. Replacement of insulators, hardware, and other components is performed as needed to maintain circuit reliability.

Some structure locations and/or laydown areas could be in previously undisturbed areas and could result in ground and/or vegetation disturbance, though attempts would be made to utilize previously disturbed areas to the greatest extent possible. In some cases, new temporary access is created to remove and replace an existing structure.

3.8.4.2 Scheduled Maintenance or Facility Replacement

With the exception of the maintenance discussed above in Section 3.8.4.1, there is no scheduled maintenance associated with the subtransmission lines included as part of the Project. Replacement of the conductor to be installed as part of the Project at the end of its useful life would be performed generally as described in this section.

3.8.4.3 Parts and Materials Requiring Regular Maintenance

No parts or materials installed as part of the Project would require regular maintenance; maintenance would be performed on an as-needed basis.

3.8.4.4 Access Road Maintenance

Routine access road maintenance is conducted on an annual and/or as-needed basis. Road maintenance includes maintaining a vegetation-free corridor (to facilitate access and for fire prevention) and blading to smooth over washouts, eroded areas, and washboard surfaces as needed. Access road maintenance could include brushing (i.e., trimming or removal of vegetation) approximately 2 to 5 feet beyond berms or the road edge when necessary to keep vegetation from intruding into the roadway. Road maintenance would also include cleaning ditches, moving, and establishing berms, clearing, and making functional drain inlets to culverts, culvert repair, clearing and establishing water bars, and cleaning and repairing over-sidedrains. Access road maintenance includes the repair, replacement, and installation of storm water diversion devices on an as-needed basis.

3.8.4.5 Maintenance for Surface or Color Treatment

No existing structures along the Project Alignment have surface or color treatments, and no new structures installed as part of the Project would have surface or color treatments. Therefore, no maintenancefor surface or color treatment is currently, or would be, performed.

3.8.4.6 Cathodic Protection Maintenance

No cathodic protection systems are installed on or for the existing structures along the Project Alignment, and no new cathodic protection system would be installed as part of the Project. Therefore, no maintenance of cathodic protection systems is currently, or would be, performed.

3.8.4.7 Landscape Maintenance

No landscaping would be installed as part of the Project; therefore, no new landscaping maintenance would result from construction of the Project. Any existing landscape maintenance activities would continue.

3.8.5 Vegetation Management Programs

3.8.5.1 Vegetation Management Programs

Regular tree pruning must be performed to be in compliance with existing state and federal laws, rules, and regulations and is crucial for maintaining reliable service, especially during severe weather or disasters. Tree pruning standards for distances from overhead lines have been set by the CPUC (GO 95, Rule 35), Public Resources Code (PRC) Section 4293, CCR Title 14, Article 4, and other government and regulatory agencies.

SCE's standard approach to tree pruning during O&M is to remove at least the minimum required by law plus 1 years' growth (species dependent).

SCE maintains vegetation-free access roads, helipads, and clearances around electrical lines. Further, clearance of brush and weeds around structures as may be required by applicable regulations on ROWs is necessary for fire protection. A 10-foot radial clearance around non-exempt poles (as defined by CCR Title 14, Article 4) and a 25 to 50-foot radial clearance around non-exempt towers (as defined by CCR Title 14, Article 4) are maintained in accordance with PRC Section 4292.

3.8.5.2 Enhanced Vegetation Management

No enhanced vegetation management activities are planned to occur after construction of the Project.

3.9 Decommissioning

SCE presently has no plans to abandon the subtransmission lines included as part of the Project, and there are no reasonably foreseeable plans for the disposal, recycling, or future abandonment of any of the facilities included as part of the Project.

3.10 Anticipated Permits and Approvals

3.10.1 Anticipated Permits and Approvals

The necessary federal, State, regional, and local discretionary permits that may be required for the Project are listed in Table 3-8. Ministerial permits, including encroachment permits from localagencies that are not anticipated to require environmental review, are not listed in Table 3-8.

3.10.2 Right-of-Way or Easement Applications

No applications for additional permanent ROWs or easements from federal or State agencies are anticipated for the Project. SCE currently holds valid rights over public lands sufficient for the replacement of existing infrastructure.

No applications for additional permanent ROWs or easements from private lands owners are anticipated for the Project. SCE would apply for and obtain temporary rights over public lands for construction work areas located outside its existing ROW; such temporary rights would be applied for and obtained prior to construction.

3.11 Applicant Proposed Measures

SCE would implement the APMs listed in Table 3-9 during construction of the Project. Within Chapter 5, Environmental Analysis, the basis for selecting a particular APM and how the APM would reduce the impacts of the Project are described. SCE has carefully considered each CPUC Draft Environmental Measure identified in Chapter 5, Environmental Analysis of this Proponent's Environmental Assessment (PEA) Checklist and has indicated that CPUC Draft Environmental Measures would be applied where applicable.

3.12 Project Description Graphics, Mapbook, and GIS Requirements

3.12.1 Graphics

Diagrams as detailed in the CPUC Guidelines are found in this chapter, Chapter 5, Environmental Analysis, and in Appendix A of this PEA document.

3.12.2 Mapbook

A mapbook as detailed in the CPUC Guidelines is presented in Appendix A to this PEA document.

3.12.3 GIS Data

GIS data are provided under separate electronic cover.

3.12.4 GIS Requirements

The requested information for each pole/tower that would be installed or removed is included in the GIS provided under separate electronic cover.

3.12.5 Natural Gas Facilities GIS Data

The Project is not a natural gas facility.

Table 3-8 Anticipated Permits and Approvals

Agency	Permit/ Approval	Regulation	Protected Resource	Trigger	Application Process	Timing
BLM	Notice to Proceed (NTP) and/or Temporary Use Permit	Federal Land and Policy Management Act	Federal Lands	Use of federal lands managed by the BLM for a subtransmission line.	NTP Authorization: Contact the BLM office with management responsibility. Obtain an application form "Application for Transportation, Utility Systems, Telecommunications and Facilities on Federal Lands and Property" (Standard Form 299). Arrange a pre-application meeting with a BLM Realty Specialist or appropriate staff member. Submit completed application to the appropriate BLM office.	NTP issued by BLM on May 27, 2022. National Environmental Policy Act (NEPA) review not required. Changes to Project scope may require revisions to/reissuance of NTP.
U.S. Fish and Wildlife Service (USFWS)	Programmatic Biological Opinion (BO) (*Biological Opinion for Activities in the California Desert Conservation Area [FWS-KRN/SBD/INY/LA/IMP/RIV-17B0532-17F1029]*) coverage	Federal Endangered Species Act	Federally Listed Species	Potential impact to a federally listed threatened or endangered species	Activity Request Form prepared and submitted to the BLM on March 24, 2022. The report includes description of the Project, acres of habitat anticipated to be affected, and a list of proposed conservation and management actions that would be implemented. Results of habitat assessment and focused desert tortoise protocol surveys appended to the Activity Request Form.	For projects affecting more than 10 acres of habitat or that would involve ongoing impacts to desert tortoises associated with transportation, the USFWS's Division Chief would respond within 30 days by signing and returning the Activity Request Form. The BLM would not authorize or implement such projects until it receives notification from the USFWS. Activity Request Form approved by USFWS Division Chief on April 27, 2022. Changes to Project scope may require revisions to/reissuance of Activity Request Form.

Agency	Permit/ Approval	Regulation	Protected Resource	Trigger	Application Process	Timing
CDFW	Section 1600-1617, Lake and Streambed Alteration Agreement (LSAA)	California Fish and Game Code	All perennial, intermittent, and ephemeral rivers, streams, and lakes in the state	Required if a project would: 1) substantially obstruct or divert the natural flow of a river, stream, or lake; 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream or lake.	The information required for the LSAA application generally consists of a project description, description of proposed activities within CDFW jurisdictional features, location and acreage of impacts to CDFW jurisdictional features, grading/earth moving quantities, anticipated restoration activities, and avoidance and minimization measures that would be implemented by the project.	The typical timeline for issuance of an LSAA is approximately 3 to 6 months from the time the application is deemed complete and depending upon the level of impact to CDFW jurisdiction. The initial review period for CDFW is 30 days, in which time the application would be deemed complete of incomplete. If the application is deemed incomplete, CDFW would request additional information necessary to complete the application. Once the application has been deemed complete, CDFW has 60 days to review the information and prepare the draft agreement. Once the draft agreement is issued, the project applicant must review, sign, and return it to CDFW for the agreement to be valid. Application submitted to CDFW and deemed complete on April 28, 2022. However, CDFW is required to review the California Environmental Quality Act (CEQA) document for consistency and therefore the Notice of Determination must be filed before the LSAA would be issued.
	California Fish and Game Code 2080.1 Consistency Determination	California Fish and Game Code	State and Federally Listed Species	Required if the project may result in take of species that are both federally and state-listed (e.g., desert tortoise)	Applicant requests that CDFW review the programmatic BO issued by the USFWS to the BLM to determine if conservation measures listed in the BO also meet state policies	CDFW has 30 days from the receipt of the request to review the BO and issue a determination.

Agency	Permit/ Approval	Regulation	Protected Resource	Trigger	Application Process	Timing
					for the protection of state-listed species.	
	California Fish and Game Code 2081 Take Permit	California Fish and Game Code	State Listed Species	Required if the project may result in take of a state-only listed endangered or threatened species, or if 2080.1 Consistency Determination is not pursued	Submit application to CDFW and identify mitigation measures to reduce, avoid, and minimize the potential for take	Timeline for authorization is approximately 30 to 90 days depending on the species involved and the complexity of the project. Application submitted December 21, 2021 and deemed complete January 25, 2022. Permit issuance pending completion of the CEQA process.
State Water Resources Control Board (SWRCB)/ RWQCB	Section 402 National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) Coverage	Clean Water Act, Order 2009-0009-DWQ as amended by Order 2010-0014-DWQ	Waters of the U.S.	Required if a project would disturb 1 acre or more of soil	The SWRCB CGP process requires project proponents to notify the SWRCB of the construction activity by providing a Notice of Intent, developing a SWPPP, and implementing water quality monitoring activities as required.	Once the Permit Registration Documents have been submitted to the SWRCB and the permit fee payment has been made, it takes approximately 1 week to obtain the Waste Discharger Identification Number (WDID). Soil disturbing activities may not commence until the WDID is obtained.
	Waste Discharge Requirement (WDR)	Title 27 CCR section 20005 et seq.	Non-federally jurisdictional wetlands and waterways	Dredge and fill activities in non-federally jurisdictional wetlands and waterways	The WDR application requires similar information to that required for the LSAA application, including a project description. At the request of the RWQCB, a restoration plan may be required.	Preparation of the WDR application may occur concurrently with preparation of the LSAA application. Issuance of the WDR occurs approximately 3 to 6 months from the time the application is deemed complete, depending on the level of impacts to waters of the state. Since RWQCB is also required to review the CEQA document for consistency, permits cannot be issued until the Notice of Determination is filed.

Agency	Permit/ Approval	Regulation	Protected Resource	Trigger	Application Process	Timing
Caltrans	Encroachment Permit	Section 670 of the California Streets and Highways Code	Roadways, highways, and interstates under Caltrans jurisdiction	Project components or work occurring within I-10 and/or State Route 177 ROW	Submit Standard Encroachment Permit Application with applicable fees to Caltrans District 8 Encroachment Permit Office.	Caltrans must approve or deny an Encroachment Permit Application submittal within 60 calendar days, upon determination that the submittal is complete (including all statutory requirements such as CEQA). Caltrans may request supporting biological resources, cultural resources, hazardous materials, or other technical studies in support of the permit application.
MWD	Project Plan Review and Approval		Facilities and ROWs owned/operated by MWD	Project components or work occurring in vicinity of Eagle Mountain Substation, where MWD holds rights	Submit Project plans/utilities for proposed activities that may impact MWD's facilities or ROWs to MWD's Substructures Team, Engineering Services. Plans must include all pertinent utilities, street improvements, grading, site development, landscaping, irrigation, tract and parcel maps, and all necessary state and federal environmental documentation. MWD reviews plans and must provide written approval prior to work occurring within MWD facilities of ROW. MWD may impose conditions on activities in accordance with *Guidelines for Improvements and Construction Projects Proposed in the Area of Metropolitan's Facilities and Rights-of-Way* (July 2018).	MWD generally requires 30 days to review and prepare a detailed written response upon submittal of complete Project plans and supporting documentation. Complex projects often require more time. Based on coordination with MWD regarding the Project, approval is anticipated approximately 4 months following identification of CEQA Lead Agency.

Table 3-9 Applicant Proposed Measures

APM Number	Description	Justification
AES-1	**Glare and Color Contrast Reduction for Subtransmission Structures and Conductors.** To reduce potential significant impacts associated with glare and color contrast for components of the proposed project, the finish on all new subtransmission structures will be non-reflective, such as steel that has been galvanized and treated to create a dulled finish or color treated or other functionally equivalent product/process. These types of finishes are designed to reduce light reflection and color contrast and help blend the structures into the landscape setting. All new subtransmission conductors shall be non-specular and non-reflective, and the insulators shall be non-reflective and non-refractive to help reduce glare and minimize contrast with the surrounding environment.	Reduce impacts to glare and color contrast
AES-2	**Night Lighting During Construction of Facilities.** Night lighting for construction activities, staging areas, and other areas used for construction shall be the minimum necessary to ensure safety and security for nighttime activities. All night lighting used for construction shall orient lights downward and be shielded to eliminate off-site light spill at times when the lighting is in use.	Reduce impacts to nighttime skies
AIR-1	**Tier 4 Construction Equipment.** All construction equipment with rating between 100 and 750 horsepower will be required to use engines compliant with United States Environmental Protection Agency (U.S. EPA) Tier 4 non-road engine standards. In the event a Tier 4 engine is not available for any off-road construction equipment with rating at or higher than 100 horsepower, that documentation of the unavailability will be provided.	Reduce NOx emissions.
AIR-2	**Dust Control.** During construction, fugitive dust be controlled by implementing the following measures: ▪ Surfaces disturbed by construction activities will be covered or treated with a dust suppressant or water until the completion of activities at each site of disturbance. ▪ Inactive, disturbed (e.g., excavated or graded areas) soil and soil piles will be sufficiently watered or sprayed with a soil stabilizer to create a surface crust, or will be covered. ▪ Drop heights from excavators and loaders will be minimized to a distance of no more than 5 feet. Vehicles hauling soil and other loose material will be covered with tarps or maintain at least 6 inches of freeboard. ▪ Vehicles will maintain speeds of 15 mph or less on unpaved public roads that do not have a posted speed limit, Proposed Project-specific access routes, and within temporary work areas.	Reduce impacts to air quality
BIO-1	**Worker Environmental Awareness Program.** All workers on the Project Site shall be required to attend a Worker's Environmental Awareness Training Program (WEAP). Training shall inform all construction personnel of the resource protection and avoidance measures as well as procedures to be followed upon the discovery of environmental resources. The WEAP training will include, at a minimum, the following topics so crews will understand their obligations: ▪ Environmentally Sensitive Areas boundaries ▪ Housekeeping (trash and equipment cleaning) ▪ Safety ▪ Work stoppage ▪ Communication Protocol ▪ Consequences of non-compliance	Reduce impacts to natural and cultural resources generally

APM Number	Description	Justification
BIO-2	**Pre-Construction Biological Clearance Surveys and Monitoring.** Pre-construction clearance surveys will be performed by a qualified biologist (i.e., a biologist with the requisite education and experience to address specific resources), who may be chosen from biologists previously approved by the California Department of Fish and Wildlife (CDFW), to avoid or minimize impacts on special-status plants and wildlife species, habitat, nesting birds and other sensitive biological resources in areas with the potential for resources to be present. Sensitive resources identified during the clearance survey will be: ▪ Flagged for avoidance ▪ Moved to outside impact areas ▪ Avoided by implementing procedures to avoid impacts to individuals while impacting habitat (e.g., burrows, dens, etc.); or ▪ Documented based on permit authorizations Specific details on the pre-construction survey requirements may be found within measures for each individual species. ▪ Where special-status species (e.g., reptiles, birds, mammals, and bat roosts) or unique resources (defined by regulations and local conservation plans) are known to occur and there is a potential for significant impacts, qualified biologists will monitor construction activities to ensure that impacts to special-status species, sensitive vegetation types, wildlife habitat, and unique resources are avoided and minimized.	Reduce impacts to biological resources generally
BIO-3	**Nesting Bird Management Plan.** **Prepare Nesting Bird Management Plan.** SCE will prepare and implement a Nesting Bird Management Plan (NBMP) to address nesting birds undertaken in collaboration with CDFW and United States Fish and Wildlife Service (USFWS). The Plan will be an adaptive management plan that may be updated as needed if improvements are identified or conditions in the field change. The Plan will include the following: ▪ Nest management and avoidance ▪ Field approach (survey methodology, reporting, and monitoring) ▪ Communication protocols ▪ The Project's avian biologist's qualifications **Prepare and Implement a Nesting Bird Management Plan.** SCE shall prepare a NBMP in coordination with CDFW, BLM, and USFWS. The NBMP shall describe methods to minimize potential Project effects to nesting birds and avoid any potential for unauthorized take. 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 until approval of the NBMP by CDFW and BLM in consultation with USFWS. ▪ Surveys shall cover all potential nesting habitat within the ROW or other work areas within 500 feet of these areas for raptors and 300 feet for non-raptors.	Reduce impacts to nesting birds

APM Number	Description	Justification
	▪ Pre-construction surveys shall be conducted for each work area, no longer than 10 days prior to the start of construction activity. On the first day of construction at any given site, a qualified avian biologist will perform a pre-construction "sweep" to identify any bird nests or other resources that may have appeared since the 10-day survey. ▪ SCE shall provide the CDFW and BLM a report describing the findings of the pre-construction nest surveys, including the time, date, and duration of the survey; identity of the surveyor(s); a list of species observed; and electronic data identifying nest locations and the boundaries of buffer zones. The electronic data set will be updated following each preconstruction nest survey throughout the nesting season. The format and contents of this report will be described in the draft NBMP and will be subject to review and approval by CDFW and BLM. **Nest Buffers and Acceptable Activities.** The NBMP shall specify measures to delineate buffers on the work site, to consist of clearly visible marking and signage. Buffer locations shall be communicated to the construction contractor and shall remain in effect until formally discontinued (when each nest is no longer active). In addition, the NBMP shall specify measures to ensure the buffers are observed, including a direct communication and decision protocol to stop work within buffer areas. In some cases, active nests may be found while work is underway. Therefore, the NBMP shall include a protocol for stopping ongoing work within the buffer area, securing the work site, and removing personnel and equipment from the buffer. The NBMP shall describe proposed measures to avoid take or adverse effects to nests, such as buffer distances from active nests. These measures shall be based on the specific nature of the bird species and conservation status, and other pertinent factors. The NBMP will identify bird species (or groups of species) that are relatively tolerant or intolerant of human activities and specify smaller or larger buffer distances as appropriate for each species. If no information is available to specify a buffer distance for a species, then the NBMP shall specify 300 feet as a standard buffer distance, and 500 feet for raptors and, special-status species. Nest management for listed threatened or endangered species will be prescribed in a USFWS Biological Opinion, CDFW Incidental Take Permit, or both. All applicable avoidance measures, including buffer distances, must be continued until nest monitoring (below) confirms that the nestlings have fledged and dispersed, or the nest is no longer active. For each special-status species potentially nesting within or near Project work areas, the NBMP shall specify applicable buffers and any additional nest protection measures, specialty monitoring, or restrictions on work activities, if needed. The NBMP shall identify acceptable work activities within nest buffers (e.g., pedestrian access for inspection or BMP repair) including conditions and restrictions, and any monitoring required. The NBMP shall include pictorial representation showing buffer distances for ground buffers, vertical helicopter buffers, and horizontal helicopter buffers for nests near the ground and nests in towers. **Nest Buffer Modification or Reduction.** At times, SCE or its contractor may propose buffer distances different from those approved in the NBMP. Buffer adjustments shall be reviewed and recommended by a qualified avian biologist, who has been approved by CDFW and BLM in consultation with the USFWS. The NBMP shall provide a procedure and timing requirements for notifying CDFW, BLM, and USFWS of any planned adjustments to nest buffers. Separate and distinct procedures will be provided for special-status birds. The NBMP will list the information to be included in buffer reduction notifications in a standardized format.	

APM Number	Description	Justification
	Nest Deterrents. 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. **Communication**. The NBMP shall specify the responsibilities of construction monitors in 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 and approval process prior to removal. **Monitoring.** SCE shall be responsible for monitoring the implementation, conformance, and efficacy of the avoidance measures (above). The NBMP shall include specific monitoring measures to track any active bird nest within or adjacent to Project work areas, bird nesting activity, Project-related disturbance, and outcome of each nest. For nests with reduced buffers, SCE shall monitor each nest until nestlings have fledged and dispersed or until the nest becomes inactive. Nests with default buffers do not require further monitoring once construction work is completed in the area. New nests discovered after work completion in an area will not require monitoring. In addition, monitoring shall include pre-construction surveys, daily sweeps of work areas and equipment, and any special monitoring requirements for particular activities (tree trimming, vegetation removal, etc.) or particular species (noise monitoring, etc.). Nest monitoring shall continue throughout the breeding season during each year of the Project's construction activities. **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 CDFW on a daily basis in the Field Reporting Environmental Database. All buffer reduction notifications and prompt notifications of nest-related non-compliance and corrective actions will be made via email to CDFW. 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 CDFW, BLM, and USFWS.	

APM Number	Description	Justification
BIO-4	**Burrowing Owl** **Pre-Construction Survey.** A pre-construction, focused burrowing owl (*Athene cunicularia*) survey will be conducted no more than 30 days prior to initial start of construction within habitat to determine if any occupied burrows are present. If occupied burrows are found, adequate buffers shall be established around burrows. Adequate buffers will be determined by a Project avian biologist based upon field conditions and resource agency guidelines for wintering burrows and breeding season burrows. **Prepare Burrowing Owl Management Plan.** SCE will develop a Burrowing Owl Management Plan for the Project. The Plan will include information related to: ▪ Assessment of burrow suitability ▪ Replacement burrows ▪ Methods for relocation ▪ Monitoring and reporting ▪ Implementation locations **Conduct Surveys and Avoidance for Burrowing Owl**. Burrowing owl surveys shall be conducted in accordance with the most current CDFW guidelines (CDFW 2012 or updated guidelines as they become available). 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. The NBMP 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 only when SCE has made reasonable attempts to obtain permission to enter the property for survey work but was unable to obtain such permission. 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 CDFW prior to the start of any ground-disturbing activities. No passive relocation of burrowing owls shall be permitted during breeding season, unless a qualified biologist verifies through noninvasive methods that an occupied burrow is not occupied by a mated pair, and only upon authorization by CDFW. The Plan shall include, but not be limited to, the following elements: **Assessment of Suitable Burrow Availability.** The Plan shall include an inventory of existing, suitable, and unoccupied burrow sites within 300 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. **Replacement Burrows.** For each burrowing owl that will be passively relocated, if fewer than two suitable unoccupied burrows are available within 300 feet of the affected Project work site, then SCE shall construct at least two replacement burrows within 300 feet of the affected Project work site, or in suitable locations within 0.25 mile when suitable locations within 300 feet are not available. Burrow replacement sites shall be in areas of suitable habitat for burrowing owl nesting	Reduce impacts to burrowing owl individuals and habitat

APM Number	Description	Justification
	and subject to minimal human disturbance and access. The Plan shall describe measures to ensure that burrow installation or improvements will 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 (CDFW 2012 or more current guidance as it becomes available) and shall be approved by CDFW. **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 will include installation of one-way doors on burrow entrances that will let owls out of the burrow but will 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. **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 CDFW on a weekly basis.	
BIO-5	**Desert Tortoise** **Pre-Construction Surveys/Construction Monitoring**. Prior to initial ground-disturbing activities, a biological monitor under the supervision of a USFWS- or CDFW-approved biologist—with experience monitoring and handling desert tortoise—will conduct a pre-activity survey in all work areas within potential desert tortoise habitat, plus an approximately 100-foot buffer. All desert tortoise burrows within the pre-activity survey area (including desert tortoise pallets) will be prominently flagged at that time so that they may be avoided during work activities. An approved biologist will be on-site to monitor vegetation removal and grading and provide regular inspections of all other construction activities within desert tortoise habitat. The approved biologist will have the authority to halt all non-emergency actions (as soon as safely possible) that may result in harm to desert tortoise and will assist in the overall implementation of APMs for the tortoise. In the event a desert tortoise is encountered in the work area, all work will cease, and the approved biologist will be contacted. Work will not commence until the animal has voluntarily moved to a safe distance away from the work area. No tortoise will be handled except under authorization from the USFWS and CDFW. Encounters with desert tortoise will be documented and provided to the appropriate wildlife resource agencies. In the event a dead or injured desert tortoise is observed, the approved biologist will be responsible for notifying SCE's herpetologist and reporting the incident to the wildlife resource agencies. **Coordinate with agencies.** If desert tortoise is observed in the Project Area, and avoidance cannot be ensured through Project design, SCE will obtain the necessary permits or authorizations in consultation with USFWS, CDFW, and/or land management agencies.	Reduce impacts to Mojave Desert Tortoise individuals and habitat

APM Number	Description	Justification
BIO-6	**Mojave Fringe-Toed Lizard.** Pre-construction surveys for Mojave fringe-toed lizards (Uma scoparia) shall be conducted by qualified biologist(s) in suitable habitat (sand dunes/partially stabilized dunes) within 14 days prior to the start of construction. The survey area shall include disturbance areas, plus a 100-foot buffer. Qualified biologist(s) shall walk transects at 5-meter (16-foot) intervals. Biological monitor(s) shall be present in each area of active construction in occupied Mojave fringe-toed lizard habitat. Biological monitor(s) shall examine the disturbance areas periodically for the presence of Mojave fringe-toed lizards and shall inspect all trenches, holes, or excavations for the presence of lizards prior to backfilling. If a lizard is found trapped in an excavation, the biological monitor(s) shall capture the lizard by hand, if feasible, and immediately release it to suitable habitat outside of the disturbance area, placed in the shade of a shrub.	Reduce impacts to Mojave fringe-toed lizards individuals and habitat
BIO-7	**Desert Kit Fox and Other Special-Status Mammal Species.** Pre-construction surveys for special-status mammals shall be conducted within 14 days prior to the start of construction. The survey area shall include the Project disturbance areas, plus a 300-foot buffer during the breeding season (March 1 through August 31) and a 100-foot buffer outside the breeding season. Potentially occupied burrows in Project disturbance areas and the survey buffer shall be mapped and qualified biologist(s) shall utilize tracking stations and/or wildlife cameras to determine whether the burrows are occupied. If a burrow is determined to be occupied by desert kit fox or other special-status mammal species during the breeding season, the burrow shall be demarcated with a 300-foot buffer. If a burrow is determined to be occupied outside the breeding season, it shall be demarcated with a 100-foot buffer. Burrows determined to be unoccupied shall be demarcated with a 50-foot buffer. If occupied burrows are found in Project disturbance areas and cannot be avoided, qualified biologist(s) shall passively relocate the occupying animals through the use of one-way doors at burrow entrances that allow the animals to leave on their own. Once vacant, burrows shall be excavated by hand and collapsed. Passive relocation will be avoided from March 1 through August 31 and shall not occur while young are in the burrow and still dependent upon their parents. CDFW shall be consulted prior to any relocation of desert kit fox.	Reduce impacts to desert kit fox individuals and habitat
BIO-8	**Bats, Common and Sensitive Species** **Pre-Construction Surveys**. A qualified bat biologist will conduct surveys before the start of construction to identify active bat roosting or maternity colonies within or adjacent to Project impact areas. Trees, rock outcrops, and man-made structures with bat roost potential will be assessed for the presence of bats during the maternity season (April 15 to August 15) or winter torpor season (October 31 to February 15). For the maternity season, a one-night visual emergence survey during acceptable weather conditions (e.g., no rain or high winds, night temperatures >45F) may be employed to determine presence. Alternatively, the roost can be physically examined if conditions permit (e.g., remote cameras or lift equipment). High-value habitat features (large tree cavities, crevices, bark fissures, basal hollows, loose or peeling bark, larger snags, palm trees with intact thatch, rock outcrops, buildings, etc.) will be identified and the area around these features searched for bats and bat sign (guano, culled insect parts, staining, etc.). If no roosts (maternity, wintering, or otherwise) are present, tree trimming/removal or building/structure removal may continue as planned. If an active roost has been identified or lasiurine bats are present, removal of trees/structures around the roost will be conducted between September 15 to October 30, and February 15 to April 15, which corresponds to time periods when bats are active, not in torpor, and not caring for non-mobile young.	Reduce impacts to bat individuals and habitat

APM Number	Description	Justification
	Removal of trees requires the following two-step process prior to trimming/removal: ▪ On Day 1 under the supervision of a qualified bat biologist, Step 1 will include branches and limbs with no cavities removed by hand (e.g., using chainsaws). This will create a disturbance (noise and vibration) and physically alter the tree. Bats roosting in the tree will either abandon the roost immediately (rarely) or, after emergence, will avoid returning to the roost. ▪ On Day 2, Step 2 of the tree removal may occur, which will be removal of the remainder of the tree. Trees that are only to be trimmed and not removed will be processed in the same manner; if a branch with a potential roost must be removed, all surrounding branches will be trimmed on Day 1 under supervision of a qualified bat biologist and then the limb with the potential roost will be removed on Day 2. Removal of structures requires the following process: ▪ Removal of structures containing or suspected to contain active bat roosts shall be partially dismantled (e.g., create holes in roof, remove windows) under the supervision of the qualified biologist in the evening prior to the emergence of bats. Structures shall be partially dismantled to significantly change the roost conditions (i.e., temperature, air currents), causing adult bats to abandon the roost and seek new roosting locations. Structure removal shall be completed the subsequent day. **Construction Monitoring.** If a colonial or solitary maternity roost was located, tree/structure removal will be avoided between April 15 and August 15 (the maternity period) to avoid impacts to active maternity roosts (reproductively active females and dependent young). A qualified biologist will determine the appropriate buffer area around active nest(s) and provisions for buffer exclusion areas. Unless restricted by the qualified biologist, construction vehicles will be allowed to move through a buffer area with no stopping or idling. The qualified biologist will determine, evaluate, and modify buffers as appropriate based on species tolerance and behavior, the potential disruptiveness of construction activities, and existing conditions. Furthermore, the roost will be monitored to determine activity. Roost monitoring will be conducted by qualified biological monitors with knowledge of bat behavior under the direction of a CDFW-qualified bat biologist. The qualified biological monitor will observe and document implementation of appropriate buffer areas around active roosts(s) during Project activities.	
BIO-9	**Habitat Restoration and Revegetation Plan.** Temporary impacts to regulated species' habitats, plant species, and vegetation communities shall be restored or revegetated. Regulated species and vegetation communities include all species designated as threatened, endangered or rare, sensitive, or of concern by resource or land agencies. Species and vegetation communities that require restoration and revegetation will be determined by the resource agencies through the permitting process. SCE shall develop and implement a Habitat Restoration and Revegetation Plan (HRRP). SCE will consult with appropriate agencies during development of the HRRP and implement the HRRP in conjunction with applicable permit conditions and mitigation measures. The HRRP shall be submitted to CDFW for review and approval prior to the start of construction. Invasive plant management will be performed in conjunction with the HRRP per the Invasive Plant Management Plan (IPMP; APM BIO-12).	Restore native habitat

APM Number	Description	Justification
	For all revegetation or restoration sites, the HRRP shall include: ▪ Revegetation and restoration goals and objectives based on vegetation type and jurisdictional status of each site ▪ Quantitative restoration success criteria ▪ Implementation details as applicable. Details may include 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 ability to produce from suppliers, fall or other suitable season-season planting or seeding dates ▪ Maintenance details, which may include irrigation or hand-watering schedule and equipment, and erosion control ▪ Monitoring and reporting, specifying monitoring schedule and data collection methods throughout establishment of vegetation with key indicators of successful or unsuccessful progress, and quantitative criteria values to objectively determine success or failure at the conclusion of the monitoring period ▪ Adaptive management procedures such as reseeding, re-planting, drainage repairs, adjustments to irrigation schedule, and repair or remediation of sites to meet success criteria on schedule. For temporary disturbance in common vegetation or habitat (e.g., creosote bush scrub) or in disturbed areas such as roads or agricultural lands, the goal of the HRRP will be revegetation to minimize spread of invasive plants, dust generation, and soil erosion. For revegetation sites the goals, objectives, and success criteria specified in the HRRP will be limited to requirements of the Stormwater Pollution Prevention Plan (SWPPP) and the IPMP (APM BIO-12). No additional goals, objectives, or success criteria regarding habitat condition are required for revegetation sites. For species and vegetation communities with permit requirements, including wetlands and riparian habitats, the goal of the HRRP will be to restore plant species, habitat values, or vegetation communities. For restoration sites the goals, objectives, and success criteria specified in the HRRP will include native species cover and species richness compatible with the specific vegetation and habitat type. For all revegetation or restoration areas, if a fire, flood, or other disturbance beyond the control of SCE, CDFW, and BLM damages the area within the monitoring period, SCE will be responsible for one reseeding or replanting event, as applicable. If a second event occurs, no replacement is required. For all revegetation (per SWPPP requirements) or restoration (per the HRRP) areas, seed and/or potted nursery stock of locally native species will be used. The list of plants observed during botanical surveys of the Project Area will be used as a guide to site-specific plant selection, additional appropriate species may be included. Monitoring of the revegetation sites will be conducted according to requirements of the SWPPP, and the IPMP. Monitoring of the restoration sites will continue annually until HRRP success criteria are achieved. SCE will be responsible for implementing adaptive management as needed. Reporting of revegetation will be according to requirements of the SWPPP and the IPMP. For all restoration areas, SCE will provide annual reports to the CDFW and BLM to verify the total vegetation acreage subject to restoration, areas that have been completed, and areas still outstanding. The annual reports will also include a summary of the restoration and	

APM Number	Description	Justification
	adaptive management activities for the previous year, success criteria progress and completion, and any adjustments to planned activities, for the upcoming year.	
BIO-10	**Invasive Plant Management Plan.** SCE shall prepare and implement an IPMP. This plan shall include measures designed to avoid the introduction and spread of new nonnative invasive plant species (invasive plants) and minimize the spread of existing invasive plants resulting from Project activities. The IPMP also must meet BLM's requirements for NEPA disclosure and analysis if herbicide use is proposed for the Project. The IPMP shall be submitted to CDFW and BLM for review and approval prior to the start of construction. For the purpose of the IPMP, invasive plants shall include plants that (1) are invasive and rated high or moderate for negative ecological impact in the California Invasive Plant Inventory Database (Cal-IPC 2006), or (2) aid and promote the spread of wildfires (such as *Bromus tectorum* [cheatgrass], *Brassica tournefortii* [Sahara mustard], and *Bromus madritensis* spp. Rubens [red brome]), or (3) identified by BLM as special concern. The IPMP will be implemented throughout Project pre-construction, construction, and restoration phases. The IPMP will include the information defined in the following sections: **Assessment.** An assessment of the proposed Project's potential to cause spread or introduction of invasive plants into new areas, or to introduce new invasive plants into the ROW. This section will list known and potential invasive plants occurring on the ROW and in the Project region and identify threat rankings and potential for Project-related occurrence or spread for each species. This section will identify control goals (e.g., eradication, suppression, or containment) for invasive plants of concern with potential to occur on the ROW. **Pre-Construction Invasive Plant Inventory.** SCE shall inventory all invasive plants of concern in areas (both within and outside the ROW) subject to Project-related vegetation removal/disturbance, overland travel, and ground-disturbing activity. The invasive plants inventory area shall also include vehicle and equipment access routes within the ROW and all Project laydown yards. Invasive plants of concern shall be mapped by area of occurrence and percent cover. The map will be updated with new occurrences at least once a year. **Pre-Construction Invasive Plants Treatment.** Invasive plant infestations identified in the pre-construction invasive plants inventory shall be evaluated to identify potential for Project-related spread and potential benefits (if any) of pre-construction treatment. Pre-construction treatment will consider the specific invasive plants, potential seed banks, or other issues. The IPMP will identify any infestations to be controlled or eradicated prior to Project construction. Control and follow-up monitoring of pre-construction invasive plants treatment sites will follow methods identified in appropriate sections of the IPMP. **Prevention.** The IPMP will specify methods to minimize potential transport of new invasive plant seeds onto the ROW, or from one section of the ROW to another. The ROW may be divided into "weed zones," based on invasive plants of concern in the ROW. The IPMP will specify inspection procedures for construction equipment entering the proposed Project Area. Vehicles and equipment may be inspected and cleaned at entry points to specified sections of the ROW, and before leaving work sites where invasive plants of concern must be contained locally. Construction equipment shall be inspected to ensure it is free of any dirt or mud that could contain invasive plant seeds, roots, or rhizomes, and the tracks,	Avoid and minimize introduction of noxious and invasive weeds.

APM Number	Description	Justification
	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 will be washed off-site when possible. If off-site washing is infeasible, on-site cleaning stations (including air washing) will be set up at specified locations to clean equipment before it enters the work area. Wash stations will be located away from native 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 CDFW monitors on request. Erosion control materials (e.g., straw bales) must be certified free of invasive plant seed ("weed-free") before they are brought onto the site. The IPMP must prohibit on-site storage or disposal of mulch or green waste that may contain invasive plant 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 IPMP will 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 invasive plants to or from the proposed Project Area. **Monitoring.** The IPMP shall specify methods to survey for invasive plants of concern during pre-construction, construction, and restoration phases, and shall specify qualifications of specialists responsible for invasive plant monitoring and identification. It must include a monitoring schedule to ensure timely detection and immediate control of new invasive plant infestations to prevent further spread. Surveying and monitoring for invasive plant infestations shall occur at least two times per year, to coincide with the early detection period for early season and late season invasive plants. 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 IPMP must specify manual and chemical invasive plant control methods to be employed. The IPMP shall include only invasive plant control measures with a demonstrated record of success for target invasive plants, based on the best available information. The plan shall describe proposed methods for promptly scheduling and implementing control activity when any Project-related invasive plant infestation is located (e.g., located on a Project disturbance site), to ensure effective and timely invasive plant control. Invasive plant infestations must be controlled or eradicated as soon as possible upon discovery, and before they go to seed, or when appropriate with the goal to prevent further spread. All proposed invasive plant control methods must minimize disturbance to native vegetation, limit ingress and egress to defined routes, and avoid damage to any environmentally sensitive areas identified within or adjacent to the ROW. New infestations by invasive plants of concern will be treated at a minimum of once annually until eradication, suppression, or containment goals are met. Invasive plant occurrences can be considered eradicated when no new seedlings or resprouts are observed	

APM Number	Description	Justification
	for three consecutive years, or a single season where new seedlings or resprouts are observed in reference populations but not at the control site. Invasive plant control efforts may cease when eradication is complete. Manual control shall specify well-timed removal of invasive plants or their seed heads with hand tools; seed heads and plants must be disposed of in accordance with San Bernardino County guidelines, 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 native vegetation or special-status plants, consistent with BLM's Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States (BLM 2007) and National Invasive Species Management Plan (NISC 2008). All herbicide applications will follow United States Environmental Protection Agency label instructions and will be in accordance with federal, State, and local laws and regulations. Only State and BLM-approved herbicides may be used. Herbicide treatment will be implemented by a licensed qualified applicator. Herbicides shall be applied in accordance with product labels and applicator licenses. Herbicides shall not be applied during or within 24 hours of high confidence 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 in high wind conditions. **Reporting Schedule and Contents.** The IPMP shall specify reporting schedule and contents of each report.	
BIO-11	**Sensitive Vegetation Communities Protective Measures and Compensatory Mitigation.** SCE shall avoid impacts to sensitive vegetation communities to the extent feasible. Work areas shall be designed to avoid sensitive vegetation communities. Sensitive vegetation communities shall be flagged for avoidance prior to the start of construction. Overland travel methods shall be implemented to the extent feasible. Care shall be taken to not cause root erosion or damage to sensitive vegetation community plant root systems. A biological monitor shall be present during construction to help direct crews where to drive and stage vehicles to minimize impacts to sensitive vegetation. Workers shall restrict activities to established work areas and access routes. SCE shall compensate for impacts to 1.38 acres of alkali weed – saltgrass playas and sinks, 0.25 acre of desert willow-smoketree wash woodland, 0.04 acre of mesquite thicket, and 0.33 acre of Mojave – Sonoran desert dunes through on-site restoration (APM-BIO-9) and land acquisition and/or preservation at a ratio of 1:1. Compensation for impacts to sensitive vegetation communities may be satisfied concurrent with mitigation for impacts to special-status species (e.g., desert tortoise) habitat and jurisdictional waters where impacts overlap.	Avoid and/or, minimize impacts to sensitive vegetation communities.
BIO-12	**Special-Status Herbaceous Plants.** SCE shall avoid, minimize or mitigate impacts to any State or federally listed or California Rare Plant Rank (CRPR) 1 or 2 herbaceous plants that may be located on the Project disturbance areas or surrounding buffer areas. **Pre-Construction Survey.** Pre-construction clearance surveys will be performed by a qualified biologist (i.e., a biologist with the requisite education and experience to address specific resources), which may be chosen from a previously approved CDFW-approved biologist, to avoid or minimize impacts on special-status plants. Disturbance-free buffers for herbaceous species shall be 25 feet from the individual and/or occurrence boundary. These buffers shall be established from the previously conducted focused surveys and preconstruction survey results. If a smaller buffer is required, SCE	Avoid and/or, minimize impacts to special-status herbaceous plants.

APM Number	Description	Justification
	shall develop and implement site-specific monitoring plan to minimize direct impacts to the species. The plan will be submitted to the CDFW for review and approval. In the event of a discovery of previously undescribed species, the boundary of the occurrence (defined by CNDDB as all individuals within a 0.25 mile of each other) will be flagged, avoided, and monitored as discussed above and the CDFW and/or BLM will be notified. **Focused Survey.** For construction areas where focused surveys have not occurred, focused surveys will take place prior to construction. Focused surveys will be conducted consistent with methodology described in the Project Biological Technical Report. **Restoration and Mitigation** SCE will implement the following activities; other conflicting permit conditions will supersede the activities below. **Coordinate with Agencies.** Agencies shall approve any impacts to special-status plants. Impacts in excess of 10 percent of any occurrence shall be restored or mitigated. ▪ **Habitat Restoration and Revegetation.** A HRRP shall address topsoil, plant or propagules salvage, and restoration. A Habitat Mitigation and Management Plan (HMMP) shall address mitigation. Approval of the HRRP by appropriate agencies is required before impacts to special-status plant occurrences are allowed. A draft HMMP will be submitted to the appropriate agencies prior to impacts to special-status plants. For more information see APM BIO-RES-1. ▪ **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 feasible, based on prior success with similar species, SCE shall include salvage methods in the HRRP. For special-status plants, the goal shall be to preserve existing populations or establish new populations. The HRRP will include at minimum: (a) species and locations of plants identified for salvage, (b) criteria for determining whether a species is appropriate for salvage, (c) the appropriate season for salvage, (d) equipment and methods for collection, transport, and re-planting plants or propagules, to retain intact soil conditions and maximize success, (e) details regarding storage of plants or propagules for each species, (f) location of the proposed recipient site, and detailed site preparation and plant introduction techniques, as applicable, (g) a description of the irrigation, and other maintenance activities, as applicable, (h) success criteria, including specific timeframe for survivorship of each species, and (i) a detailed monitoring program, commensurate with the HRRP goals. Invasive plant control for special-status plants will be addressed in the IPMP (APM BIO-12). ▪ **Off-Site Compensation.** Where restoration is not feasible, SCE shall provide compensation lands consisting of habitat occupied by the impacted CRPR 1 or 2 ranked plant occurrences at a 1:1 ratio of acreage for any occupied habitat affected by the Project. Occupied habitat will be calculated on the Project and on the compensation lands as including each special-status plant occurrence. 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. Annual construction monitoring reports shall be submitted to CDFW and BLM. Reports shall include, but not be limited to, details of plants or propagules salvaged, stored, and transplanted (salvage and transplanting locations, species, number,	

APM Number	Description	Justification
	size, condition, etc.), adaptive management efforts implemented (date, location, type of treatment, results, etc.), and evaluation of success of transplantation. After construction, salvage status will be described in the HRRP annual report.	
BIO-13	**Jurisdictional Waters, Wetlands, and Riparian Habitats.** The Project shall avoid and/or minimize impacts to all State and federally jurisdictional waters, wetlands, and riparian habitat that occur within the Project Area to the maximum extent feasible. All grading, fill, staging of equipment, infrastructure construction or removal, and all other construction activities shall be designed, sited, and conducted outside of State and federally jurisdictional waters, wetlands, and riparian habitat to the maximum extent feasible. The implementation of appropriate BMPs (e.g., silt fencing, straw wattles, secondary containment, avoiding fueling in close proximity to waters, etc.) shall be utilized to ensure that indirect impacts to jurisdictional waters, wetlands and riparian areas are avoided or minimized to the maximum extent feasible. BMPs are also necessary to reduce the risk of an unintended release of sediment or other material into jurisdictional waters. New and upgraded roadways will use at-grade type stream crossings, where possible. Stockpiled and bermed sediment will be redistributed or removed from the site so as not to alter flows. New poles will be sited outside stream channels to the extent possible. If permanent impacts to waters, wetlands, and riparian habitats are unavoidable, they shall be mitigated for at a minimum of a 1:1 ratio, or at a ratio determined by the applicable resource agencies (i.e., United States Army Corps of Engineers [USACE], the State Water Resources Control Board/RWQCBs, and CDFW). Temporary impacts to jurisdictional waters shall be returned to pre-existing contours upon completion of the work.	Avoid and/or, minimize impacts to jurisdictional waters, wetlands, and riparian habitats.
BIO-14	**Disturbance Area.** Project disturbance areas and access routes shall be limited to existing access roads and previously disturbed areas (such as spur roads, pads, etc.) to the greatest extent feasible. The boundaries of all disturbance areas shall be clearly demarcated with stakes and flagging prior to the initiation of construction activities, and no work shall extend outside of the delineated areas. No paint or permanent discoloring agents will be applied to rocks or vegetation. All temporary fencing and flagging shall be removed at the conclusion of Project activities. Crushing/removal of perennial, native vegetation in disturbance areas shall be avoided, and SCE shall limit ground disturbance to overland travel rather than vegetation removal and grading to the maximum extent feasible. Spoils shall be stockpiled in either disturbed areas lacking native vegetation or areas that do not contain special-status plant species, sensitive vegetation communities, or jurisdictional waters. Where minor grading is needed, the grade shall match surrounding contours and allow for surface flows through the area. Adequate measures shall be taken to prevent any potential runoff from entering areas containing special-status plant species, sensitive vegetation communities, or jurisdictional waters. Parking areas and staging areas shall be located in previously disturbed areas without native vegetation, special-status species habitat, or jurisdictional waters (such as along access roads, spur roads, and pads) to the extent feasible, and conspicuously delineated.	Reduce impact to biological resources generally
BIO-15	**Wildlife Pitfalls and Entrapment.** All trenches, pipes, and culverts shall be inspected at the end of each workday to ensure that all potential wildlife pitfalls have been backfilled, sloped at a 3:1 ratio at the ends to provide wildlife escape ramps, or completely covered to prevent wildlife access. All trenches, pits, or other excavations shall be inspected to ensure no wildlife, including special-status species, are present prior to backfilling. Both ends of all pipes and culverts shall be capped to prevent entry by burrowing owl, desert kit fox, desert tortoise, herpetofauna, or other wildlife. If wildlife become entrapped, they will be relocated by authorized or qualified biologists, as appropriate.	Reduce impact to biological resources generally

APM Number	Description	Justification
BIO-16	**Standing Water.** Water applied for dust abatement shall be the minimal amount needed to meet safety and air quality standards to avoid the formation of puddles, which may attract wildlife to Project work areas. In particular, desert tortoises and other special-status wildlife species may be attracted to Project work areas and access roads if they are sprayed with water. A qualified biologist shall be present after water application to ensure that no special-status wildlife species (or nuisance predators such as common ravens or coyotes) are attracted to the water. No standing water shall be allowed to persist.	Reduce impact to biological resources generally
BIO-17	**Pets and Firearms.** SCE shall prohibit firearms and domestic dogs from the Project Area during Project construction, except those in the possession of authorized security personnel or local, state, or federal law enforcement officials, or persons with disabilities (in the case of service dogs).	Reduce impact to biological resources generally
BIO-18	**Vehicle Travel.** Motor vehicle speeds along Project routes and existing access roads shall not exceed 15 miles per hour and Project personnel shall exercise care to observe and avoid wildlife, including desert tortoises. SCE shall restrict Project-related vehicle traffic to the established Project work areas, including existing roads, staging and parking areas, and established construction areas. Project personnel shall not cross native species habitat outside of or in route to the Project work areas and vehicular travel in washes shall be avoided. SCE shall clearly mark speed limits and inform all Project personnel of these limits. Engines of stopped vehicles shall be turned off if the vehicle is not required for immediate use for Project activities. If additional routes are needed, they shall be surveyed by the qualified biologist(s).	Reduce impact to biological resources generally
CUL-1	**Develop a Cultural Resources Management Plan (CRMP).** SCE shall prepare and submit for approval a Cultural Resource Management Plan (CRMP) to guide all cultural resource management activities during project construction. Management of cultural resources shall follow all applicable federal and State standards and guidelines for the management of historic properties/historical resources. The CRMP shall be submitted to the CPUC and BLM for review and approval at least 60 days prior to the start of construction. The CRMP shall be prepared by a qualified archaeologist who meets the Secretary of Interior's standards for archaeology and include, but not be limited to, the following sections: ▪ **Cultural Resources Management Plan:** The CRMP shall define and map all known National Register of Historic Places- (NRHP) and California Register of Historical Resources (CRHR)-eligible properties in or within 100 feet (30.5 meters) of the proposed Project Area of Potential Effect. A cultural resources protection plan shall be included that details how NRHP- and CRHR-eligible properties will be avoided and protected during construction. Measures shall include, at a minimum, designation and marking of Environmentally Sensitive Areas (ESAs), archaeological monitoring, personnel training, and reporting. The plan shall also detail which avoidance measures will be used, where and when they will be implemented, and how avoidance measures and enforcement of ESAs will be coordinated with construction personnel. ▪ **Cultural Resource Monitoring and Field Reporting:** The CRMP shall detail procedures for archaeological monitoring and Tribal participation, define the reporting matrix, and establish criteria for when the monitoring effort should increase or decrease if monitoring results indicate that a change is warranted. The CRMP shall also include guidelines for monitoring in areas of high sensitivity for the discovery of buried NRHP- and/or CRHR-eligible cultural resources, burials, cremations, tribal cultural resources, or sacred sites.	Reduce impacts to cultural resources generally.

APM Number	Description	Justification
	▪ **Unanticipated Discovery Protocol:** The CRMP shall detail procedures for temporarily halting construction, defining work stoppage zones, notifying stakeholders (e.g., agencies, Native Americans, utilities), and assessing NRHP and/or CRHR eligibility in the event unanticipated discoveries are encountered during construction. It shall include methods, timelines for assessing NRHP and/or CRHR eligibility, formulating mitigation plans, and implementing treatment. Mitigation and treatment plans for unanticipated discoveries shall be reviewed by tribal stakeholders and approved by the CPUC and BLM prior to implementation. ▪ **Data Analysis and Reporting:** The CRMP shall detail methods for data analysis in a regional context, reporting of results within one year of completion of field studies, curation of artifacts and data (maps, field notes, archival materials, recordings, reports, photographs, and analysts' data) at a facility that is approved by the CPUC and BLM and dissemination of reports to appropriate repositories.	
CUL-2	**Avoid Environmentally Sensitive Areas (ESA).** SCE shall perform cultural resource surveys for any portion of the proposed Project Area of Potential Effect not yet surveyed (e.g., new or modified staging areas, wire setup sites, existing access roads requiring improvements, or other work areas). Cultural resources discovered during surveys will be subject to APM CUL-1 (Develop CRMP). Where operationally feasible, all NRHP- and CRHR-eligible resources shall be protected from direct project impacts by project redesign (i.e., relocation of the line, ancillary facilities, or temporary facilities or work areas). In addition, all historic properties/historical resources shall be avoided by all project construction, operation and maintenance, and restoration activities, where feasible. Avoidance measures shall include, but not be limited to, fencing off ESAs for the duration of the proposed Project or as outlined in the CRMP.	Reduce impacts to ESAs.
CUL-3	**Train Construction Personnel.** Prior to initiating construction, all construction personnel shall be trained by a qualified archaeologist regarding the recognition of possible buried cultural resources (i.e., prehistoric and/or historical artifacts, objects, or features) and protection of these resources during construction. Training shall also inform all construction personnel of the procedures to be followed upon the discovery of cultural materials. All personnel shall be instructed that unauthorized removal or collection of artifacts is a violation of federal and State laws. Any excavation contract (or contracts for other activities that may have subsurface soil impacts) shall include clauses that require construction personnel to attend a Worker's Environmental Awareness Training Program (WEAP). The WEAP shall include the project's potential for the post-discovery review of archaeological deposits, how to operate adjacent to and avoid all ESAs, and procedures to treat post-discovery reviews.	Reduce any impacts to potentially eligible cultural resources.
CUL-4	**Conduct Cultural Resources Construction Monitoring.** Archaeological monitoring shall occur as outlined in the CRMP. Archaeological monitoring shall be conducted by a qualified archaeologist familiar with the types of historic and prehistoric resources that could occur within the Project Areas. The qualifications of the principal archaeologist and monitors shall be approved by the CPUC and BLM (when appropriate). Monitoring reports shall be submitted to the CPUC and BLM on a monthly basis. A Tribal Participant may be required at culturally sensitive locations in consultation with CPUC, BLM, and/or as outlined in the CRMP.	Reduce any impacts to potentially eligible cultural resources.

APM Number	Description	Justification
CUL-5	**Properly Treat Human Remains.** SCE shall follow all federal and state laws, statutes, and regulations that govern the treatment of human remains. All work in the vicinity of a find shall cease within a 200-foot radius of the remains, the area will be protected to ensure that no additional disturbance occurs. Should inadvertent discovery of human remains be made on federal lands, the CPUC, BLM, and County Coroner (California Health and Safety Code 7050.5[b]) shall be notified immediately. If the remains are determined to be Native American or if Native American cultural items pursuant to the Native American Graves Protection and Repatriation Act (NAGPRA) are uncovered, the remains shall be treated in accordance with the provisions of NAGPRA (43 Code of Federal Regulations [CFR] 10) and the Archaeological Resources Protection Act (43 CFR 7). If the remains are not on federal land, the CPUC shall be notified immediately and the remains shall be treated in accordance with Health and Safety Code Section 7050.5, CEQA Section 15064.5(e), and Public Resources Code Section 5097.98. SCE shall assist and support the CPUC and BLM, as appropriate, in all required Archeological Resources Protection Act (ARPA) (16 United States Code 470 & 43 CFR 70), NAGPRA (25 United States Code 3001 and 43 CFR 100), and Public Lands (Interior 43 CFR 8365.1-7) actions, government to-government and consultations with Native Americans, agencies, and consulting parties as requested by the CPUC and BLM. SCE shall comply with and implement all required actions and studies that result from such consultations.	Reduce any impacts to human remains.
PAL-1	**Paleontological Resource Mitigation and Monitoring Plan.** SCE shall prepare a Paleontological Resources Mitigation and Monitoring Plan (PRMMP) to guide all paleontological management activities during Project construction. The PRMMP shall be submitted to the California Department of Fish and Wildlife for review and approval at least one month prior to the start of construction. The PRMMP shall be prepared by a qualified paleontologist based on Society of Vertebrate Paleontology (SVP) 2010 guidelines and meet all regulatory requirements. The qualified paleontologist shall have a Master's Degree or Ph.D. in paleontology, have local paleontology knowledge, and shall be familiar with paleontological procedures and techniques. The PRMMP will include, but not be limited to, the following sections: 1. Paleontological Resource Monitoring and Reporting: Detail monitoring procedures and methodologies, which shall require a qualified paleontological monitor for all construction-related ground disturbance that reach approximate depths for significant paleontological resources in geologic units with a high paleontological sensitivity (i.e, Quaternary older alluvium and Tropico Group [lower], granitic fanglomerate and sandstone). Sediments with no paleontological sensitivity (i.e., Saddleback Basalt and quartz monzonite) will not require monitoring. Paleontological monitors shall meet standard qualifications per the SVP (2010). 2. Unanticipated Discovery Protocol: Detail procedures for temporarily halting construction, defining work stoppage zones, notifying stakeholders, and assessing the paleontological find for scientific significance. If indicators of potential microvertebrate fossils are found, screening of a test sample shall be carried out as outlined in SVP (2010). 3. Data Analysis and Reporting: Detail methods for data recovery analysis in a regional context, reporting of results within one year of completion of field studies, curation of all fossil specimens in an accredited museum repository approved by the CPUC and BLM, and dissemination of reports to appropriate repositories.	Reduce or avoid any impacts to paleontological resources.

APM Number	Description	Justification
PAL-2	**Train Construction Personnel**. Prior to the initiation of construction, all construction personnel shall be trained regarding the recognition of possible buried paleontological resources (i.e., fossils) and protection of all paleontological resources during construction. Training shall inform all construction personnel of the procedures to be followed upon the discovery of paleontological materials. All personnel shall be instructed that unauthorized removal or collection of fossils is a violation of Federal and State laws. Any excavation contract (or contracts for other activities that may have subsurface soil impacts) shall include clauses that require construction personnel to attend a Worker's Environmental Awareness Program (WEAP) training. The WEAP will include the Project's potential for inadvertently exposing buried paleontological resources, how to operate adjacent to and avoid any potential Environmentally Sensitive Area, and procedures to treat unanticipated discoveries.	Reduce or avoid any impacts to paleontological resources.
PAL-3	**Conduct Paleontology Resources Construction Monitoring.** Paleontological monitoring shall be conducted by a qualified paleontologist familiar with the types of resources that could occur within the Project Area. Paleontological monitoring would be limited to areas of high paleontological sensitivity, as determined by the qualified paleontologist. Monitoring reports shall be submitted to the CPUC and BLM on a monthly basis.	Reduce or avoid impacts to paleontological resources.
HAZ-1	**Hazardous Materials Management Plan.** SCE shall prepare and implement a Hazardous Materials Management Plan during Project construction. The plan shall outline proper hazardous materials handling, use, storage and disposal requirements as well as hazardous waste management procedures. This plan shall be developed to ensure that all hazardous materials and wastes would be handled and disposed of according to applicable rules and regulations. The Hazardous Materials Management Plan shall address the types of hazardous materials to be used during the project, hazardous materials storage, employee training requirements, hazard recognition, fire safety, first aid/emergency medical procedures, hazardous materials release containment/control procedures, hazard communication training, PPE training, and release reporting requirements.	Reduce hazardous materials and hydrology related impacts.
HAZ-2	**U.S. EPA Identification Number.** SCE shall obtain a U.S. EPA Identification Number prior to transport of hazardous waste offsite for disposal. Prior to the start of construction, SCE shall also determine whether the treatment or the handling or the storing of hazardous materials will require authorization of the local Certified Unified Program Agency.	Reduce hazardous materials-related impacts
HAZ-3	**Soil Management Plan**. A Soil Management Plan shall be developed and implemented for the Project. The Soil Management Plan shall provide guidance for the proper handling, on-site management, and disposal of impacted soil that may be encountered during construction activities.	Reduce hazardous materials-related impacts
HAZ-4	**Construction Fire Prevention and Emergency Response Plan.** A Construction Fire Prevention and Emergency Response Plan shall be developed to ensure the health and safety of construction workers, SCE personnel, and the public during Project construction. The Plan shall cover: ▪ The purpose and applicability of the plan ▪ Responsibilities and duties ▪ Project Areas where the plan applies ▪ Procedures for incorporating Red Flag Warnings, Fire Potential Index (FPI), Project Activity Level (PAL), and equivalent indicators in determining fire weather related work restrictions.	Reduce hazards related to fire.

APM Number	Description	Justification
	▪ Procedures for fire reporting, response, prevention, and evacuation routes ▪ Coordination procedures with federal and local fire officials ▪ Crew training, including fire safety practices and restrictions ▪ Fire suppression and communication equipment required to be on hand during construction ▪ Method for verification that Plan protocols and requirements are being followed The Project-specific Construction Fire Management Plan for construction of the project shall be prepared by SCE and submitted to the CPUC and BLM as well the Riverside County Fire Department and Blythe Fire Department for review at least 30-days prior to the initiation of construction. SCE shall address all comments received from reviewing agencies and provide the final Construction Fire Prevention and Emergency Response Plan to reviewing agencies for approval prior to initiating construction activities.	
NOI-1	**Noise Control.** SCE shall employ the following noise-control techniques, at a minimum, to reduce construction noise exposure at noise-sensitive receptors during construction: ▪ Construction activities shall be confined to daytime, weekday and weekend hours established by Section 9.52.020(h) of the Riverside County Code of Ordinances, which restricts temporary construction noise to between 6:00 a.m. and 6:00 p.m. during the months of June through September and 7:00 a.m. and 6:00 p.m. during the months of October through May. In the event construction is required beyond those hours, SCE will notify the appropriate local agency or agencies regarding the description of the work, location, and anticipated construction hours. ▪ Construction equipment shall use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. ▪ Stationary noise sources (e.g., generators, pumps) and staging areas shall be shielded by an enclosure, temporary sound walls, acoustic blankets, or other barrier where noise levels are above 80 A-weighted decibels (dBA) at sensitive receiver locations. Heights and specifications of noise barriers will be designed to reduce construction noise to below 80 dBA (Federal Transit Administration 2018). ▪ Construction traffic and helicopter flight shall be routed away from residences and schools. ▪ Unnecessary construction vehicle use and idling time shall be minimized. If a vehicle is not required for use immediately or continuously for construction activities, its engine shall be shut off.	Reduce impacts to air quality, energy, greenhouse gases, and noise.
REC-1	When temporary closures to recreational areas are necessary for construction activities, SCE will coordinate those closures with recreational facility owners.	Reduce impacts to recreational users
TRA-1	**Construction Traffic Management Plan.** SCE shall prepare and implement a Construction Traffic Management Plan subject to approval of CPUC, the County of Riverside, and the City of Blythe. The approved Traffic Management Plan and documentation of agency approvals shall be submitted to CPUC prior to the commencement of construction activities. The plan shall: ▪ Include a discussion of work hours, haul routes, work area delineation, traffic control and flagging; ▪ Identify all access and parking restriction and signage requirements;	Reduce or avoid any impacts to traffic.

APM Number	Description	Justification
	▪ Require workers to park personal vehicles at the approved staging area and take only necessary Project vehicles to the work sites; ▪ Lay out plans for notifications and a process for communication with affected residents and landowners prior to the start of construction. Advance public notification shall include posting of notices and appropriate signage of construction activities. The written notification shall include the construction schedule, the exact location and duration of activities within each street (i.e., which road/lanes and access point/driveways will be blocked on which days and for how long), and a toll-free telephone number for receiving questions or complaints; ▪ Include plans to coordinate all construction activities with emergency service providers in the area. Emergency service providers will be notified of the timing, location, and duration of construction activities. All roads will remain passable to emergency service vehicles at all times; and ▪ Identify all roadway locations where special construction techniques (e.g., night construction) will be used to minimize impacts to traffic flow. ▪ Construction activities completed within public street rights-of-way will require the use of a traffic control service, and all lane closures will be conducted in accordance with applicable requirements. These traffic control measures will be consistent with those published in the Manual on Uniform Traffic Control Devices, as written and amended by Caltrans for the State of California (CA MUTCD) and using standard templates from the California Temporary Traffic Control Handbook (CATTCH) (California Inter-Utility Coordinating Committee 2018) as applicable.	
TCR-1	**Tribal Monitoring.** An archaeological monitor, and tribal monitor that is culturally affiliated with the Project Area, may be present for ground-disturbing activities within or directly adjacent to identified tribal cultural resources. The archaeological and tribal monitors will consult the Cultural Resource Management Plan (CRMP; APM CUL-1) to determine when to increase or decrease the monitoring effort should the monitoring results indicate a change is warranted. Monitoring reports shall be prepared and submitted to the CPUC on a monthly basis.	Reduce or avoid any impacts to tribal cultural resources.
TCR-2	**Tribal Engagement Plan.** A tribal engagement plan shall be prepared, which will detail how Native American tribes will be engaged and informed throughout the Project. The tribal engagement plan will be included in the CRMP (APM CUL-1).	Reduce or avoid any impacts to tribal cultural resources.