1 8.0 Mitigation Monitoring and Reporting Plan

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3 Pursuant to Public Resources Code Section 21081.6 and Section 15097 of the California 4 Environmental Quality Act (CEQA) Guidelines, when an agency finds that Mitigation Measures 5 (MMs) have been required in, or incorporated into, a project to avoid or substantially lessen its 6 significant environmental effects, the agency must adopt a program for monitoring or reporting on 7 such mitigation measures. The purpose of this Mitigation Monitoring and Reporting Plan (MMRP) is 8 to ensure effective implementation of the applicant proposed measures (APMs) and mitigation 9 measures required by the California Public Utilities Commission (CPUC) that Southern California Edison (the applicant) has agreed to implement as part of the proposed Mesa 500-kilovolt (kV) 10 Substation Project (proposed project). The MMRP, which is outlined in Table 8-1, includes: 11 12 13 • Each significant impact identified in the Environmental Impact Report (EIR) 14 • APMs and MMs that the applicant is required to implement as part of the proposed project 15 Monitoring requirements • 16 Timing for implementation of APMs and mitigation measures • 17 Indicators for determining the effectiveness of implementation of APMs and MMs • 18 • **Reporting requirements** 19 20 This MMRP is a draft program. The CPUC will formalize this MMRP for the Final EIR, prior to 21 construction, to include specific protocols that will be followed prior to, during, and after 22 construction by the CPUC's and the applicant's designated environmental monitors and project staff 23 (as described in Section 8.3, "Final Mitigation Monitoring and Reporting Plan." The Final MMRP will 24 include, but not be limited to, protocols and timelines for the following topics: 25 26 Agency Jurisdiction • 27 **Roles/Responsibilities** • 28 Communication • 29 **Compliance Verification and Reporting** • 30 Project Changes, including Minor Project Refinements • 31 **Dispute Resolution** • 32 33 A CPUC-designated environmental monitor (or monitors) will monitor construction of the 34 proposed projects to ensure full implementation of each APM and MM. In all instances of non-35 compliance, the CPUC's designated environmental monitor will issue a written warning to the 36 construction supervisor and the applicant's project manager. Continued non-compliance will be

37 reported to the CPUC's designated Project Manager. Any decisions to halt work due to non-

38 compliance will be made by the CPUC (either the designated environmental monitor or the CPUC

39 Project Manager). The CPUC-designated environmental monitor will keep a daily record of any

40 incidents of non-compliance with MMs, APMs, or other conditions of project approval. Copies of

41 these documents will be supplied to the applicant and the CPUC monthly.

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APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
Aesthetics			
MM AES-1: Staging Area Screening. For Staging Yards 1, 2, 6, and 7, the applicant shall at a minimum screen most views of the interiors of these areas using perimeter screening fences or other effective screening. Perimeter screening fences will be a minimum of 6 feet high and covered with a dark-colored (e.g., dark green, brown, or black) fabric or other material that provides at least 50 percent screening and covers the fence exterior.	The CPUC shall verify that SCE installs screening fences at Staging Yards 1, 2, 6, and 7.	During Construction	Staging Yards 1, 2, 6, and 7.
MM AES-2: Minimize Clearing and Ground Disturbance and Restore Disturbed Areas to Pre-Project Conditions. Clearing and ground disturbance required for construction, including but not limited to, access roads, pulling sites, construction and maintenance pads, and construction laydown areas, shall be the minimum required, and the applicant shall restore all disturbed areas not required for operation and maintenance to pre-construction conditions to the extent feasible. Restoration would not be feasible if, for example, a landowner other than SCE does not wish the area to be restored. Areas around new or rebuilt transmission structures that must be cleared during the construction process or other areas of ground disturbance shall be regraded and revegetated to be restored to an appearance that would replicate pre-construction conditions. The CPUC shall verify appropriate restoration of disturbed areas. For all paved areas (e.g., streets, sidewalks, and parking areas) disturbed by construction, the applicant shall restore these areas to pre-project conditions in compliance with permits for work within these areas.	The CPUC shall verify whether the restoration of disturbed areas proposed by SCE is to pre-project conditions. For disturbance covered by local permits (e.g., streets, sidewalks, and parking areas), the applicant shall restore these areas to pre-project conditions in compliance with permits for work within these areas.	During Construction – Clearing and ground disturbance shall be the minimum required. Post-construction – Areas that need to be cleared during construction shall be regraded and revegetated.	Any area where clearing and ground disturbance are required.
MM AES-3: Landscape and Aesthetic Treatment along Potrero Grande Drive. Prior to construction, the applicant shall prepare a Landscape and Aesthetic Treatment Plan that will, at a minimum, provide vegetative screening and other aesthetic treatments along Potrero Grande Drive and in the vicinity of the new entry drive at the substation, and provide aesthetic treatment of the operations and test and maintenance buildings and their immediate surroundings. The Landscape and Aesthetic Treatment Plan shall not conflict with NERC CIP requirements in CIP-014-2 (Physical Security) or related NERC findings. Aesthetic treatments along Potrero Grande Drive shall include design enhancements for the masonry screening wall, adjacent walkway, pavement surfaces, and planting areas and may include raised and median planters or other design enhancements. Aesthetic treatment of the operations and test and maintenance buildings and their immediate surroundings shall include improved color selection and design for the buildings and landscaping of their surroundings that will help screen views of the buildings and blend them with their surroundings. All color finishes for built elements shall be flat and non-reflective. The final Landscape and Aesthetic Treatment Plan along Potrero Grande Drive shall be prepared by a professional landscape architect licensed to work in California. The applicant shall consult with the City of Monterey Park in development of the Landscape and Aesthetic Treatment Plan and both this plan and the final designs for the buildings shall be subject to design review and approval by the City. The Landscape and Aesthetic Treatment Plan shall be provided to the CPUC for final review and receive final approval from the CPUC prior to construction of these buildings and aesthetic treatments along Potrero Grande Drive. The final approved Landscape and Aesthetic Treatment Plan shall be fully implemented within four months of beginning operation of the new substation.	The applicant shall consult with the City of Monterey Park in development of the Landscape and Aesthetic Treatment Plan and both this plan and the final designs for the buildings shall be subject to design review and approval by the City. The Landscape and Aesthetic Treatment Plan shall be provided to the CPUC for final review and receive final approval from the CPUC prior to construction of these buildings and aesthetic treatments along Potrero Grande Drive.	Prior to Construction – Prepare a Landscape and Aesthetic Treatment Plan. Post-construction – The Landscape and Aesthetic Treatment Plan shall be implemented within four months of beginning operation of the new substation.	Potrero Grande Drive and in the vicinity of the new entry drive at the substation, and operations and test and maintenance buildings and their immediate surroundings.
MM AES-4: Graffiti Deterrence. Prior to construction, the applicant shall prepare a Graffiti Prevention and Abatement Plan that will, at a minimum, provide measures for the installation of vegetative screening and the removal of graffiti within 48 hours of report or implement other measures to screen or substantially reduce aesthetic impacts associated with graffiti on the new 12-foot-high perimeter wall facing SR 60 along the southeast edge of the proposed Mesa Substation site, such as vegetative screening or other measures intended to fully or mostly screen views from SR 60 of the southeast-facing portion of the wall that is likely to provide a surface that attracts graffiti generally considered unattractive or offensive. The Graffiti Prevention and Abatement Plan shall be provided to the CPUC for final review and approval prior to beginning construction. The final approved Graffiti Prevention and Abatement Plan shall be fully implemented, including installation of all plants for vegetative screening, within four months of beginning operation of the new substation.	The Graffiti Prevention and Abatement Plan shall be provided to the CPUC for final review and approval prior to beginning construction.	Prior to Construction – Prepare a Graffiti Prevention and Abatement Plan. Post-construction – Implement the Graffiti Prevention and Abatement Plan.	The new 12-foot-high perimeter wall facing State Route 60 along the southeast edge of the proposed Mesa Substation site.
MM AES-5: Glare Reduction. To reduce potential glare from components of the proposed project and help blend them into the landscape setting, the finishes on all new transmission and other structures with metal surfaces shall be non-reflective and new conductors shall be non-specular. With the exception of LSTs, TSPs, and switchracks, all metal structures up to 35 feet high and visible from the vicinity of KOP 7 shall have finishes that are dark in color or otherwise colored to help blend the structures with their surroundings.	CPUC verifies that all new transmission and other structures with metal surfaces installed by SCE be non-reflective and new conductors non- specular.	During Construction	All new transmission and other structures with metal surfaces.

Table 8-1 Draft Mitigation Monitoring and Reporting Plan		1	
APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
MM AES-6: Night Lighting. To minimize the effect on any nearby sensitive receptors, night lighting for construction activities, staging areas and other areas used for construction, and nighttime facility operations shall be the minimum necessary to ensure safety and security for nighttime activities and operations. All night lighting used for construction or operations and maintenance shall orient lights downward and be shielded to eliminate off-site light spill at times when the lighting is in use. Lighting at the proposed Mesa Substation shall consist of light-emitting diode lights in all areas where nighttime operations or maintenance activities would occur and be either motion-activated or use timers to the maximum extent feasible to ensure safety and security and reduce the impact of additional light pollution at night.	CPUC verifies that SCE uses the minimum lighting necessary to safety and security for nighttime activities and operations, orients downwards and shields all lighting, and ensures that lighting proposed at the Mesa Substation shall consist of light-emitting diode lights in all areas where operations or maintenance activities would occur.	During Construction	All locations with nighttime lighting.
Air Quality	1	1	
APM-AIR-01: Fugitive Dust. During construction, surfaces disturbed by construction activities would be covered or treated with a dust suppressant until completion of activities at each site of disturbance. On-site unpaved roads and off-site unpaved access roads utilized during construction within the proposed project area would be effectively stabilized to control dust emissions (e.g., using water or chemical stabilizer/suppressant). On-road vehicle speeds on unpaved roadways would be restricted to 15 miles per hour.	CPUC verifies that SCE applies dust suppressant to surfaces disturbed by construction activities, and all unpaved roads would be stabilized using a water/chemical suppressant.	During Construction	Entire project area.
APM-AIR-02: Tier 3 Engines. Off-road diesel construction equipment with a rating between 100 and 750 horsepower (hp) would be required to use engines compliant with EPA Tier 3 non-road engine standards. In the event that a Tier 3 engine is not available, the equipment would be equipped with a Tier 2 engine, and documentation would be provided from a local rental company stating that the rental company does not currently have the required diesel-fueled off-road construction equipment or that the vehicle is specialized and is not available to rent. Similarly, if a Tier 2 engine is not available, that equipment would be equipped with a Tier 1 engine and documentation of unavailability would be provided.	CPUC verifies that all off-road diesel equipment between 100 and 750 horsepower us engines compliant with Tier 3 non-road engine standards. CPUC will verify if a Tier 3 engine is not available per proper documentation, and a Tier 2 or Tier 1 engine must be used.	Prior to Construction	Any area where off-road diesel construction equipment is being utilized.
 MM AQ-1: Construction Emission Reduction Measures. SCE shall implement the following emission reduction measures for all construction activities: All off-road diesel-powered construction equipment with engines greater than 100 horsepower (hp) shall be compliant with Tier 4 off-road emissions standards where available. In the event that equipment with a Tier 4 engine is not available for any off-road engine larger than 100 hp, that engine shall be operated with tailpipe retrofit controls that reduce exhaust emissions of NO_x to no more than Tier 4 emission levels. All off-road diesel-powered construction equipment with a Tier 3 engine is not available for any off-road engine larger than 50 hp, that engine shall be operated with tailpipe retrofit controls that reduce exhaust emissions of NO_x to no more than Tier 3 off-road emissions standards where available. In the event that equipment with a Tier 3 engine is not available for any off-road engine larger than 50 hp, that engine shall be operated with tailpipe retrofit controls that reduce exhaust emissions of NO_x to no more than Tier 3 emission levels. Equipment with an engine not compliant with the Tier 3 or Tier 4 standards, as applicable, will be allowed on a case-by-case basis only when the applicant has documented that no Tier 3 or Tier 4 equipment (or emissions equivalent retrofit equipment) is available for a particular equipment type. Each case shall be documented with signed written correspondence by the appropriate construction contractor, along with documented correspondence from at least two construction equipment retrofit for review before equipment is used on the project. Submit to CPUC staff and/or construction monitors a copy of each piece of construction equipment's certified tier specification, best 	SCE shall submit to CPUC staff and/or construction monitors a copy of each piece of construction equipment's certified tier specification, BACT documentation, and/or CARB or SCAQMD operating permit, as applicable, at least 15 days prior to mobilization of each applicable unit of equipment.	Prior to Construction	Entire project area.
4. Submit to CPUC staff and/or construction monitors a copy of each piece of construction equipment's certified tier specification, best available control technology (BACT) documentation, and/or CARB or SCAQMD operating permit, as applicable, at least 15 days prior to mobilization of each applicable unit of equipment.		<u> </u>	

APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
MM AQ-2: Volatile Organic Compounds Credits. The remaining emissions of VOC/ ROG resulting from construction of the proposed Mesa Substation Project shall be mitigated through the purchase of Emissions Trading Credits (ETCs) for every pound of VOC/ROG in excess of the SCAQMD regional significance threshold of 100 pounds per day, as measured. The total amount of VOC/ROG ETCs to be purchased shall be calculated once the construction schedule is finalized. The applicant shall purchase and submit documentation of purchase of the required ETC to the SCAQMD prior to the start of construction. The applicant shall also track actual daily ROG emissions during construction according to a monitoring plan that includes records of equipment and vehicle usage and submit the results of this tracking to CPUC staff on a monthly basis. If monthly reports indicate that too few credits have been purchased to compensate for ROG emissions after implementation of all applicable mitigation measures, the applicant shall purchase additional ROG credits within 6 months of the end of construction. The applicant shall submit proof of the purchase of credits within 7 months of the end of construction.	CPUC verifies that SCE has purchased and submitted documentation of the required ETC to the SCAQMD, and that SCE submits the results of a monitoring plan tracking to CPUC staff. If monthly reports indicate that too few credits have been purchased to compensate for ROG emissions after implementation of all applicable mitigation measures, the applicant shall purchase additional ROG credits within 6 months of the end of construction. The applicant shall submit proof of the purchase of credits within 7 months of the end of construction.	 Prior to Construction – Calculate the total amount of VOC/ROG ETCs to be purchased. During Construction – Adhere to monitoring plan and submit reports to CPUC on a monthly basis. Post-construction – Submit proof of the purchase of credits within 7 months of the end of construction. 	Entire project area.
 MM AQ-3: Measures to Reduce NO_x Emissions. Prior to construction, the applicant and SCE will submit proposed additional measures to reduce daily emissions of NO_x to CPUC staff for review and approval, with the measures implemented depending on the amount of Tier III and Tier IV engines available at the time of construction. Measures may include the following: 1. The use of 2010 and newer haul trucks (e.g., material delivery trucks and soil import/export) or the use of trucks that meet EPA 2007 model year NO_x emissions requirements if 2010 model year or newer diesel trucks cannot be obtained. 2. A requirement that, during project construction, all construction equipment shall be outfitted with BACT devices certified by CARB and that achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. 3. Other measures as determined appropriate by the applicant and SCE in consultation with the SCAQMD. 	Prior to construction. Prior to construction, the applicant and SCE will submit proposed additional measures to reduce daily emissions of NO _X to CPUC staff for review and approval, with the measures implemented depending on the amount of Tier III and Tier IV engines available at the time of construction.	Prior to Construction – Verify measures have been identified for implementation. During Construction – Implement proposed additional measures.	Entire project area.
MM AQ-4: Mitigation Agreement for Purchase of Oxides of Nitrogen (NO _x) Credits. Twenty days prior to the start of project construction, the applicant shall provide CPUC staff with an estimate of the total construction -related NO _x emissions after implementation of all applicable mitigation measures, broken down by individual construction day. All NO _x emissions that would exceed the daily threshold of 100 pounds per day shall be offset through the purchase of either Regional Clean Air Incentive Market Trading Credits (RTCs), Mobile Source Emission Reduction Credits (MSERCs), or a combination of RTCs and MSERCs. For each day that estimated NO _x emissions are less than 100 pounds per day, the purchase of NO _x offset credits is not required. The total amount of NO _x RTCs and/or MSERCs to be purchased shall be determined by the CPUC after the construction schedule and operating conditions are finalized, based on estimates provided by the applicant as described above. The NO _x emission credits shall be purchased and submitted to the CPUC prior to the start of project construction. Credits must be current for the time the project takes place. The applicant shall also track actual daily NO _x emissions during construction according to a monitoring plan that includes records of equipment and vehicle usage and submit the results of this tracking to CPUC staff on a monthly basis. If monthly reports indicate that too few credits have been purchased to compensate for NO _x emissions after implementation of all applicable mitigation measures, the applicant shall purchase additional NO _x credits within 6 months of the end of construction. The applicant shall submit proof of the purchase of credits within 7 months of the end of construction.	Twenty days prior to the start of project construction, the applicant shall provide CPUC staff with an estimate of the total construction-related NO _X emissions. The NO _X emission credits shall be purchased and submitted to CPUC prior to the start of project construction. SCE shall submit results of monitoring plan tracking to CPUC on a monthly basis. The applicant shall submit proof of the additional credits purchased during construction, within 7 months of the end of	 Prior to Construction – Provide CPUC staff with estimate of total construction-related NO_X emissions and purchase the credits. During Construction – Implement monitoring plan tracking equipment and vehicle use. If needed, purchase additional credits within 6 months of the end of construction. Post-construction – Submit proof of additional credits purchased during construction within 7 months from the end of construction. 	Entire project area.

APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
Biological Resources			
APM-BIO-01: Special Status Plant Species. During the appropriate phenological periods, formal pre-construction surveys for rare plants would be conducted in areas where special-status plants have the potential to occur within the construction areas. Prior to construction, the locations of special-status plants identified during the surveys would be marked or flagged for avoidance. This boundary would be maintained during work at these locations and would be avoided during all construction activities to the extent possible. Impacts to Nevin's barberry would be avoided. Where disturbance to these areas cannot be avoided, SCE would develop and implement a Revegetation Plan. The Revegetation Plan would include measures for transplanting and replacing special-status plant species that may be impacted by construction of the proposed project. This plan would also include general measures in the event that special-status plant species are encountered prior to construction of the proposed project, as well as post-construction invasive weed management measures, where necessary, to ensure successful revegetation back to pre-construction conditions or to equivalent conditions of representative habitat immediately adjacent to the affected area.	CPUC shall verify pre- construction surveys for rare plants are conducted and the locations of special-status plants have been marked for avoidance. CPUC shall verify that a Revegetation Plan has been developed and implemented.	Prior to Construction – Conduct pre-construction surveys and mark special-status plants. During Construction – Avoidance of Nevin's barberry and special- status plants located during preconstruction surveys. Post-construction – Implement the Revegetation Plan.	All areas that may support special-status plant species.
APM-BIO-02: Revegetation Plan. To the extent feasible, SCE would minimize impacts and permanent loss to riparian habitat, native trees, and other vegetation that is regulated by federal, State, or local agencies, and/or that provides suitable habitat for special-status species. Impacts would be minimized at construction sites by flagging native vegetation to be avoided. If unable to avoid impacts to protected vegetation, a Revegetation Plan would be prepared in coordination with the appropriate agencies for areas of native habitat temporarily and/or permanently impacted during construction. The Revegetation Plan would describe, at a minimum, which vegetation restoration method (e.g., natural revegetation, planting, or reseeding with native seed stock in compliance with the proposed project's Stormwater Pollution Prevention Plan) would be implemented in the proposed project area. The Revegetation Plan would also include the species or habitats that could be impacted, the replacement or restoration ratios (as appropriate), the restoration methods and techniques, and the monitoring periods and success criteria, as identified in each measure.	CPUC shall verify that a Revegetation Plan has been developed and implemented, in coordination with the appropriate agencies.	Prior to Construction – Prepare a Revegetation Plan. Post-construction – Implement the Revegetation Plan.	Entire project area.
APM-BIO-03: Biological Monitoring. To the extent feasible, biological monitors would monitor construction activities in areas with special- status species, native vegetation, wildlife habitat, or unique resources to ensure such resources are avoided.	CPUC verifies that biological monitors are present when construction occurs in areas with special-status species, native vegetation, wildlife habitat, or unique resources.	During Construction	All areas where special-status species, native vegetation, wildlife habitat, or unique resources may occur.
APM-BIO-04: Coastal California Gnatcatcher Protection. A USFWS-approved biologist would conduct pre-construction surveys for coastal California gnatcatcher no more than seven days prior to the start of ground-disturbing activities, if this would commence between February 1 and August 30. Surveys for coastal California gnatcatcher would be conducted in suitable habitat within 500 feet of the proposed project area. If a breeding territory or nest is confirmed, the USFWS would be notified and, in coordination with the USFWS, an exclusionary buffer would be established around the nest. Construction activities in occupied coastal California gnatcatcher habitat would be monitored by a full-time USFWS-approved biologist. Unless otherwise authorized by the USFWS, no proposed activities would occur within the established buffer until it is determined by the biologist that the young have left the nest. Temporary and permanent impacts to coastal California gnatcatcher and their habitat would be mitigated as required by the USFWS.	CPUC verifies that a USFWS- approved biologist conducts pre- construction surveys for the coastal California gnatcatcher within suitable habitat, and construction activities occurring in occupied habitat would be monitored by a full-time USFWS- approved biologist. CPUC also verifies that appropriate mitigation, as required by USFWS, would be implemented in areas of temporary and permanent impacts to the coastal California gnatcatcher and their habitat.	Prior to Construction – Conduct pre-construction surveys. During Construction – Perform construction monitoring.	Suitable habitat within 500 feet of the project area.

APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
APM-BIO-05: Least Bell's Vireo Protection. SCE would avoid ground-disturbing activities within suitable habitat for least Bell's vireo during the nesting season to the extent possible. In the event that activities within least Bell's vireo nesting habitat are unavoidable, a USFWS-approved biologist would conduct pre-construction surveys for least Bell's vireo no more than seven days prior to the start of ground-disturbing activities, if this work would commence between March 15 and September 30. Surveys for least Bell's vireo would be conducted in suitable nesting habitat within 500 feet of the proposed project area. If a breeding territory or nest is confirmed, the USFWS and CDFW would be notified and, in coordination with the USFWS and CDFW, an exclusion buffer would be established around the nest. Construction activities in occupied least Bell's vireo habitat would be monitored by a full-time USFWS- and CDFW-approved biologist. Unless otherwise authorized by the USFWS and CDFW, no proposed project activities would occur within the established buffer until it is determined by the biologist that the young have left the nest. Temporary and permanent impacts to least Bell's vireo, and their habitat, would be mitigated as required by the USFWS and CDFW.	CPUC verifies that a USFWS- approved biologist conducts pre- construction surveys for least Bell's vireo within suitable habitat, and construction activities occurring in occupied habitat would be monitored by a full-time USFWS-approved biologist. CPUC also verifies that appropriate mitigation, as required by USFWS, would be implemented in areas of temporary and permanent impacts to least Bell's vireo and their habitat.	Prior to Construction – Conduct pre-construction surveys. During Construction – Perform construction monitoring.	Suitable habitat within 500 of the project area.
APM-BIO-06 : Nesting Birds. SCE would conduct pre-construction clearance surveys no more than seven days prior to construction, to determine the location of nesting birds and territories during the nesting bird season (typically February 1 to August 31, earlier for species such as raptors). An avian biologist would establish a buffer area around active nest(s) and would monitor the effects of construction activities to prevent failure of the active nest(s). The buffer would be established based on construction activities, potential noise disturbance levels, and behavior of the species. Monitoring of construction activities that have the potential to affect active nests would continue until the adjacent construction activities are completed or until the nests are no longer active.	CPUC verifies that SCE conducts pre-construction clearance surveys no more than 7 days prior to construction, establishes buffers around active nests, and monitors construction activities around active nests.	Prior to Construction – Conduct pre-construction surveys. During Construction – Perform construction monitoring and establish buffer areas around nests.	Entire project area.
APM-BIO-07: Avian Protection. Electrical facilities would be designed in accordance with Avian Power Line Interaction Committee's Suggested Practices for Avian Protection on Power Lines: the State of the Art in 2006 (APLIC 2006).	CPUC verifies that SCE has implemented applicable design measures.	Prior to Construction	Power line components.
APM-BIO-08: Compensation for Permanent Impacts. Permanent impacts to all jurisdictional water resources would be compensated at a 1- to-1 ratio, or as required by the USACE, CDFW, and RWQCB.	CPUC verifies that SCE consults with the appropriate agency (USACE, CDFW, or RWQCB) and mitigates all permanent impacts to jurisdictional waters.	Post-construction	All areas where permanent impacts to jurisdictional waters occurs.
MM BR-1: Pre-construction Surveys. Prior to construction and activities that may include vegetation clearing, staging, and stockpiling, or other activities with the potential to directly or indirectly affect wildlife, the applicant shall retain a qualified biologist approved by the CPUC to conduct pre-construction surveys for sensitive biological resources, including special-status plant species and special-status wildlife, and nesting birds in all areas of temporary and permanent disturbance. Preconstruction surveys shall be species and resource appropriate and typically conducted a maximum of 14 days prior to construction, as approved by the CPUC; nesting bird and burrowing owl pre-construction surveys shall be consistent with the timing specified in the Nesting Bird Management Plan required by MM BR-11. The information gathered from these surveys shall be used to develop site- and resource- specific actions to minimize impacts on sensitive resources from project-related activities.	CPUC verifies that pre- construction surveys are completed.	Prior to Construction	All areas of temporary and permanent disturbance.
Additionally, a CPUC-approved qualified biologist shall conduct pre-construction clearance sweeps for special-status species at all access, staging, and laydown/work areas where suitable habitat is present within approximately 24 hours of construction activities each day.			

APMs and Mitigation Measures	Monitoring Requirements	1
MM BR-2: Limits of Construction Activities: Project Boundaries and Sensitive Areas Clearly Marked. In all locations of the project, construction activities, vehicular traffic (including movement of all equipment), and storage of construction materials shall be restricted to approved access roads and established construction areas indicated by flagging, fencing, and/or signage. The applicant shall ensure that exclusionary fencing is installed prior to the start of construction activities around laydown and work and staging areas, where necessary, to prevent inadvertent encroachment into the habitat adjacent to areas of impact. Identified sensitive resources such as aquatic features, special- status plants and natural communities, and known wildlife habitat of special-status species (e.g., nests, burrows, or dens) shall be assigned a puffer as appropriate and clearly marked (e.g., with signs, flagging, ropes, and/or fencing) to ensure they are avoided unless disturbance was previously approved. A CPUC-approved qualified biologist shall determine the appropriate buffer depending on the species and the construction activity. The CPUC-approved qualified biologist shall perform or supervise flagging and fencing to ensure that these activities are conducted without harm to sensitive species or habitat.	CPUC verifies that construction activities are limited to approved work areas and access roads, and are indicated with flagging, fencing, and/or signage.	Prior to Const
 appropriate surveys of vegetation are completed by a qualified botanist familiar with these vegetation associations. SCE shall develop a Habitat Restoration and Mitigation Plan that shall include an estimate of the total area of sensitive natural communities, including all coastal California matcatcher habitat and riparian habitat. With the consultation and review of the USFWS, CDFW, and CPUC, SCE shall prepare the plan to ensure estoration of all temporary impact areas and to ensure mitigation for permanent impacts on sensitive natural communities and coastal California gnatcatcher habitat. The plan must be submitted 60 days prior to the planned start of construction. CPUC approval is required before he plan is implemented. Required plan details include but are not limited to: All temporarily impacted areas shall be restored. All temporary disturbances to sensitive natural communities shall be restored with the pre-disturbance natural community. All other temporarily impacted areas shall be restored with coastal California gnatcatcher, other special-status species, or sensitive resources may be restored to the conditions agreed upon between the landowner and the applicant. The restoration plan shall specify how each type of vegetation community, including sensitive natural communities, shall be addressed in terms of the following restoration details: topsoil segregation and conservation; vegetation treatment and removal; revegetation methods, including seed mixes, rates, and transplants; criteria to monitor and evaluate revegetation success (minimum of 4 years of monitoring and evaluate revegetation success (minimum of 4 years of monitoring and evaluate revegetation success (minimum of 4 years of monitoring and evaluate revegetation success (minimum of a verse of dedeed) 	The plan must be submitted 60 days prior to the planned start of construction. CPUC approval is required before the plan is implemented. CPUC shall verify that USFWS and CDFW have reviewed the plan. With CPUC approval, requirements described in this mitigation measure and the Habitat Restoration and Mitigation Plan may be satisfied through compliance with permit conditions, if these requirements are equally or more effective.	Prior to Const seasonally ap of vegetation a Habitat Rest Mitigation Pla During Constr the removal o or other suita California gna Post-construct temporarily in mitigate for p on sensitive n and coastal Ca gnatcatcher h

Timing	Location
nstruction	All locations of the project,
	construction activities, vehicular
	traffic, and storage of
	construction materials.
nstruction – Ensure	Entire project area.
appropriate surveys	
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Plan is prepared.	
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APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
SCE shall also minimize the removal of coastal sage scrub or other suitable coastal California gnatcatcher habitat, particularly within designated critical habitat for the coastal California gnatcatcher. To minimize the removal of vegetation in habitat areas of the coastal California gnatcatcher, SCE shall ensure that trimming of all native vegetation, riparian vegetation, and vegetation that provides potential habitat for coastal California gnatcatcher is monitored by a qualified biologist approved by the CPUC. Trimming of native trees and native arborescent shrubs shall be completed outside of the nesting bird season and shall be monitored by a qualified biologist.			
MM BR-4: Noxious and Invasive Weed Control Plan. Prior to construction, the applicant shall submit a Noxious and Invasive Weed Control Plan that shall be implemented before, during, and after construction, including during the project restoration phase. This plan shall include measures designed to avoid the introduction and spread of noxious weeds and invasive plant species designated by the state, the counties, and local weed control boards. This plan shall be developed in consultation with CDFW and CPUC and shall be provided to these agencies for review and comment. The plan must be submitted to the CPUC 60 days prior to the planned start of construction. CPUC approval is required before the plan is implemented.	This plan shall be developed in consultation with CDFW and CPUC and shall be provided to these agencies for review and comment. The plan must be submitted to the CPUC 60 days prior to the planned start of construction. CPUC approval is	Prior to Construction – Prepare and submit a Noxious and Invasive Weed Control Plan and perform pre-construction surveys for special-status plant species. During Construction – Implement	Entire project area.
 Pre-construction surveys for special-status plant species (APM BIO-01 and MM BR-1) shall include surveys for state-,county-, and locally- designated noxious weed species. The applicant shall coordinate with the appropriate agencies, including the CPUC, to determine appropriate species-specific measures to implement, or whether control or treatment of a species is feasible and preferable. 	required before the plan is implemented.	the Noxious and Invasive Weed Control Plan. Post-construction – Monitor of all	
• All vehicles and equipment shall be clean and free of dirt, mud, and any debris that may carry invasive plant seeds or parts prior to arrival at the project location, including prior to use of access roads.		restored work areas for the presence of invasive weeds.	
 Vehicle and equipment wash stations (mobile or built in place) shall be erected at strategic locations on the ROW where designated weed species have been detected, and where doing so would help prevent the spread of these species. 			
• Straw, hay, gravel, soil, or other construction or erosion control materials that could inadvertently contain unwanted plant propagules shall come from state-cleared sources that are free of invasive weeds.			
All seeds to be used in revegetation and reclamation activities shall come from weed-free sources.			
• All temporary disturbance areas that will be restored post-construction shall be monitored for invasive species establishment on a monthly basis for at least one year after project restoration is completed. If evidence of the expansion or increase in abundance of a known invasive species or introduction of a new invasive species is found, the applicant shall initiate appropriate control measures, which may include mowing or trimming of weeds prior to seed set, as outlined in the plan.			
MM BR-5: Worker Environmental Awareness Program. The applicant shall develop and implement a WEAP for all project personnel. The program must be submitted to the CPUC at least 30 days prior to the start of construction for review. CPUC approval is required before the program is implemented. All project personnel shall undergo training prior to entering the ROW. The training shall include a description of the species of concern and their habitats, the general provisions of applicable environmental regulations, the need to adhere to the provisions of the regulations, the penalties associated with violating the provisions of the regulations, the general measures that are being implemented to conserve the species of concern as they relate to the project, the access routes to the project, and project boundaries within which the project-related activities must be accomplished. This training shall include a detailed review of how project personnel can identify sensitive biological resources in the project area which need to be avoided or where work activities will be restricted.	SCE shall submit sign-in sheets for those who attended WEAP training.	Prior to Construction	Entire project area.
MM BR-6: Avoidance of Nevin's barberry. The project shall be designed to avoid impacts on occurrences of Nevin's barberry during construction and operation and maintenance. Prior to the start of construction, the applicant's CPUC-approved qualified biologist shall complete pre-construction surveys in suitable habitat during the appropriate blooming period to identify any occurrences. Where Nevin's barberry occurs, all construction and operation and maintenance activities shall occur outside a restrictive buffer, which shall be established by a CPUC-approved qualified biologist. Vehicles and crew members shall be prohibited from coming within 200 feet of identified Nevin's barberry unless a buffer reduction is approved by the CPUC after consultation with USFWS. A reduced buffer shall be a minimum of 25 feet or greater from a Nevin's barberry plant. A qualified biologist approved by the CPUC shall monitor crew members and the Nevin's barberry to ensure all project activities stay away from Nevin's barberry within the buffer. The biologist shall have the authority to halt work if it is determined that Nevin's barberry could be impacted.	SCE shall submit preconstruction survey results to the CPUC, report any previously unknown occurrences found during pre- construction surveys or construction, and submit a monitoring report.	Prior to Construction – Conduct pre-construction surveys in suitable habitat to identify any occurrences and establish a buffer around any occurrences. During Construction – Monitor construction around buffers.	Areas of suitable habitat for Nevin's barberry and around known occurrences.
In the event that previously unknown occurrences of Nevin's barberry are discovered during pre-construction surveys or during construction or operations, a 200-foot buffer shall be established and the USFWS and CPUC shall be contacted within 24 hours.			

Table 8-1 Draft Mitigation Monitoring and Reporting Plan APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
APMs and Mitigation Measures MM BR-7: Restoration of Southern California Black Walnut. SCE shall take measures to avoid and minimize impacts on Southern California black walnut resulting from project construction activities, and shall plant replacement trees for any impacted or removed specimens. Prior to construction (after completion of final engineering design of project features), black walnut tree evaluation surveys shall be completed by a qualified arborist (an arborist with extensive local or regional expertise in the planting, care, and maintenance of black walnut trees). The arborist must be approved by the CPUC. The arborist shall record a brief description (e.g., location, height, diameter at breast height, condition) of each black walnut tree with a dripline within 25 feet of construction activities. All construction activities that take place within the driplines of black walnut trees (i.e., the outermost extent of the canopy) that are not being intentionally removed shall be monitored by a qualified arborist to reduce, to the extent feasible, impacts on the tree, including roots. California black walnut trees that are impacted within the drip line or intentionally removed shall be replaced at a 3:1 ratio. If the diameter at breast height of the tree to be removed is 24 inches or less, it shall be replaced with a 24-inch box tree. If the diameter at breast height of the tree to be removed is greater than 24 inches, it shall be replaced with a 36-inch box tree. Replacement trees shall be planted on site as near to the original location as feasible and biologically appropriate, and shall be monitored by a qualified arborist who will ensure the replacement trees are placed in a suitable area. Replacement trees shall be monitored for seven years after the initial planting or until the arborist determine thet 20 parcement after are not determined for seven years after the initial planting or until the arborist trees are placed in a suitable area. Replacement trees shall be monitored for s	Monitoring Requirements CPUC shall approve a detailed plan for restoration, including identification of planting location, in consultation with USFWS and CDFW.	TimingPrior to Construction – Completeblack walnut tree evaluationsurveys.During Construction – Monitorconstruction activities that takeplace within the driplines ofblack walnut trees.Post-construction – Replacethose black walnut treesimpacted or removed byconstruction activities.	Location All project locations where black walnut trees occur.
determines that 80 percent of trees are successfully established. Tree removal shall not be permitted until a detailed plan for restoration, including identification of planting location, is approved by the CPUC, and in consultation with USFWS and CDFW. Replacement trees shall be planted before tree removal, or if not feasible or if potentially harmful to the replacement trees, as soon as possible after removal.			
MM BR-8: Restoration of Special-status Plants. The applicant shall complete pre-construction surveys during the appropriate blooming period to identify special-status plants, including Plummer's mariposa lily, intermediate mariposa lily, and Southern California tarplant populations in the proposed project component areas where suitable habitat is present. Special-status plants shall be identified by a qualified biologist and flagged or surrounded with fencing in such a way that disturbance of the populations or individuals shall be avoided. In the event that populations or individuals cannot be avoided, the applicant shall develop and implement a restoration plan for each plant, which will be submitted to CPUC and CDFW for review and comment no less than 60 days prior to construction activities within the work area where impacts would occur. CPUC approval is required before the plan is implemented.	CPUC shall verify that pre- construction surveys occur during the appropriate blooming period and that any special – status plants are flagged or fenced for avoidance.	Prior to Construction – Conduct pre-construction surveys. Develop restoration for each special-status plant that cannot be avoided.	All project areas where suitable habitat is present for Plummer's mariposa lily, intermediate mariposa lily, and Southern California tarplant.
For temporary impacts to special-status plants, restoration shall occur after construction and to an extent such that "no net loss" is ensured for all special-status plants in the proposed project component areas. The number of plants at seven years will be equal to or greater than the number destroyed.	In the event that populations or individuals cannot be avoided, the applicant shall develop and implement a restoration plan for each plant, which will be		
Mitigation for permanent impacts shall be completed by:	submitted to CPUC and CDFW for review and comment no less than		
1. Establishing individual plants within the proposed project areas (onsite);	60 days prior to construction		
2. Establishing individual plants outside the project areas (offsite); or	activities within the work area where impacts would occur.		
3. Purchase of credits and/or mitigation lands at a ratio of 2:1 from an entity approved by CDFW.	CPUC approval is required before the plan is implemented.		
For Options 1 and 2 (establishing plants onsite or offsite), the plan shall include the following elements: planting/seeding palettes; monitoring and contingency program; monitoring schedule, including duration (seven years) and performance criteria (no net loss); and any specific measures that will be required to ensure success of the restoration effort.			
MM BR-9: Construction Monitoring . The applicant shall ensure that a qualified biologist approved by the CPUC serves as a construction monitor during periods when construction activities occur near active nest areas, or within 100 feet of native vegetation or vegetation that has the potential, or is known, to provide habitat for special-status species. The monitor shall have the authority to temporarily stop work that they determine threatens a special-status species or sensitive resource. The monitor shall determine what appropriate action to take, and work will resume once the monitor determines there is no longer a threat to the special-status species or sensitive resource, or consultation has occurred with the appropriate wildlife agencies which determines appropriate steps have been taken and a threat is no longer present.	CPUC shall verify that a CPUC- approved biologist is present during construction activities occurring near active nest areas, or within 100 feet of native vegetation or vegetation that has the potential, or is known, to provide habitat for special-status species.	During Construction	All project areas near active nest areas, or within 100 feet of native vegetation or vegetation that has the potential, or is known, to provide habitat for special-status species.

Table 8-1 Draft Mitigation Monitoring and Reporting Plan APMs and Mitigation Measures APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
MM BR-10: Open Trenches. To prevent entrapment of wildlife, SCE shall ensure that all steep-walled trenches, auger holes, or other excavations are covered at the end of each day or completely fenced off at night in such a way that wildlife cannot become entrapped. For open trenches only, these may instead have wildlife escape ramps within the trench maintained at intervals of no greater than 100 feet. These ramps shall have a maximum slope not to exceed 2:1. SCE's biological monitor, approved by the CPUC, shall inspect all trenches, auger holes, or other excavations a minimum of three times per day and immediately prior to backfilling. All non-special-status wildlife species found will be safely removed and relocated out of harm's way, through the use of suitable tools such as a pool net when applicable. For safety reasons, under no circumstance will biological monitors enter open excavations.	CPUC shall verify that all steep- walled trenches, auger holes, or other excavations are covered at the end of each day or completely fenced off at night in such a way that wildlife cannot become entrapped. Escape ramps are acceptable for open trenches only.	During Construction	All project areas containing steep-walled trenches, auger holes, or other excavations.
 MM BR-11: Nesting Bird Management Plan. To address potential conflicts between construction activities and the activities of nesting birds in the project component areas, SCE shall develop a nesting bird management plan in consultation with USFWS, CDFW, and CPUC, and shall submit the final plan to the CPUC no less than 60 days prior to construction. CPUC approval is required before the plan is implemented. The nesting bird management plan shall include measures and an adaptive management program to avoid and minimize impacts to special-status and MBTA- or California Fish and Game Code-protected bird species during nesting periods during project construction. Specifically, the nesting bird management plans shall contain: Appropriate survey timing, extents, methods, and surveyor qualifications; approved nest deterrent methods, including areas where vegetation will be cleared for the purpose of deterring nesting; monitoring and reporting protocols during construction areas. If preconstruction survey protocols exist for a certain species, the plan shall outline the implementation of these protocols. Guidelines for determining appropriate and effective buffer distances that will account for specific project settings, bird species, stage of 	only. SCE shall develop a Nesting Bird Management Plan in consultation with USFWS, CDFW, and CPUC, and shall submit the final plan to the CPUC no less than 60 days prior to construction. CPUC approval is required before the plan is implemented. Reporting of nesting bird activities, buffer reductions, and monitoring results shall be provided to the USFWS, CDFW, and the CPUC on a regular basis.	Prior to Construction – Conduct surveys during the appropriate nesting season. During Construction – Perform monitoring and prepare reports.	All work areas in which any construction related activities are conducted.
 construction and restoration. The plan shall describe the compensatory measures that will be undertaken to address the loss of burrowing owl burrows within the project area. This will include mitigation for permanent impacts on nesting, occupied, and satellite burrows and occupied burrowing owl habitat with (a) permanent conservation of similar vegetation communities comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals. SCE shall notify CDFW, USFWS, and the CPUC of all project-related bird injuries or mortalities within 12 hours of discovery and will follow the agencies' recommended actions, if any. Reporting of nesting bird activities, buffer reductions, and monitoring results shall be provided to the USFWS, CDFW, and the CPUC on a regular basis. 			

Table 8-1 Draft Mitigation Monitoring and Reporting Plan

Table 8-1 Draft Mitigation Monitoring and Reporting Plan APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
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MM BR-12: Gnatcatcher Surveys. Prior to the start of construction, SCE shall ensure that protocol-level pre-construction surveys are conducted by a qualified biologist approved by the CPUC for the coastal California gnatcatcher in project component areas where suitable habitat exists in accordance with the Coastal California Gnatcatcher (<i>Polioptila californica californica</i>) Presence/Absence Survey Guidelines (USFWS 1997). In the event that coastal California gnatcatchers are observed during pre-construction surveys, a qualified biologist must identify the boundaries of the pair's territory and SCE must not conduct construction activities within 500 feet of the territory, or as otherwise approved by the CPUC, in consultation with USFWS and CDFW. SCE shall notify USFWS and CDFW in the event gnatcatcher territory or nest sites are confirmed by surveys, immediately upon return from the field. If infeasible to maintain a buffer of 500 feet (or a distance otherwise approved by USFWS and CDFW), by installing temporary flagging or fencing, from an active gnatcatcher territory, construction activities within or near these areas will be performed outside the breeding and nesting season (coastal California gnatcatcher breeding/nesting season is approximately February 1 through August 30). SCE may conduct construction activities in gnatcatcher habitat during the breeding and nesting season if protocol-level surveys (conducted within one year prior to construction activities per protocol) confirm the absence of breeding gnatcatchers, or if the 500-foot protective buffer from all active gnatcatcher territories can be maintained.	CPUC shall ensure that protocol- level surveys are conducted.	Prior to Construction – Conduct protocol-level surveys. During Construction – Perform monitoring and prepare monitoring reports.	All work areas where suitable coastal California gnatcatcher habitat exists.
MM BR-13: Pre-Construction Surveys for Least Bell's Vireo. Prior to construction, SCE shall complete protocol-level surveys for least Bell's vireo in areas of suitable or potentially suitable habitat within the proposed component areas. Surveys will be conducted by a qualified biologist approved by the CPUC according to the survey protocol for least Bell's vireo (USFWS 2001). In the event that least Bell's vireo territory or nest sites are confirmed, SCE shall notify the USFWS and CDFW immediately upon return from the field. If individuals or their nests are observed, biologists will establish and maintain a minimum 500-foot (or a distance otherwise approved buffer from USFWS and CDFW) exclusionary buffer by installing temporary flagging or fencing between the nest territory and construction activities. If infeasible to maintain a buffer of 500 feet (or a distance otherwise approved by USFWS and CDFW), from an active vireo territory, construction activities within or near these areas will be performed outside the breeding and nesting season.	CPUC shall ensure that protocol- level surveys are conducted.	Prior to Construction – Conduct protocol-level surveys. During Construction – Perform monitoring and prepare monitoring reports.	All work areas where suitable least Bell's vireo habitat exists.
 MM BR-14: Minimize Impact on Riparian Habitat and Aquatic Features. SCE shall complete the following: In those areas where riparian vegetation is required to be removed, SCE shall work with a qualified botanist to determine the minimum amount of vegetation required to be removed in order to accommodate project construction, and the correct trimming procedures to employ. Temporary impacts to riparian habitat or aquatic features shall be fully restored according to the Habitat Restoration and Mitigation Plan described in MM BR-3. All permanently impacted areas shall be mitigated using methods described in MM BR-3. Where riparian vegetation or aquatic features would be impacted by project construction activities, SCE shall also consult with USACE, RWQCB, and CDFW to determine if a CWA Section 404 permit, CWA Section 401 permit, and LSAA pursuant to California Fish and Game Code Section 1600 would be necessary, respectively. If USACE, RWQCB, or CDFW determines a permit is required, the permit will be obtained prior to impacts and SCE will comply with all terms and conditions of the agreement. In addition, the USACE, RWQCB, and CDFW shall be provided the opportunity to review and comment on the Habitat Restoration and Mitigation Plan if impacts will occur in an area that may be under their jurisdiction. Mitigation requirements described under number 2 above for impacts to riparian habitat or aquatic features may be satisfied by demonstrating compliance with equal or more effective permit conditions, with approval by the CPUC. 	CPUC verifies that a qualified botanist has been consulted to determine the minimum amount of vegetation to be removed, temporary impacts are restored according to the Habitat Restoration and Monitoring Plan, and permanent impacts are mitigated according to methods described in MM BR-3. CPUC may also determine that the above mitigation requirements are satisfied by compliance with permit conditions. CPUC also verifies that USACE, RWQCB, and CDFW are consulted to determine if a permit is necessary.	Prior to Construction – Consult with botanist to determine appropriate amount of vegetation removal. Post-Construction – Restore and/or mitigate temporary and permanent impacts.	All project areas containing riparian habitat and aquatic features.
MM BR-15: Avian Protection Plan. SCE shall adhere to recommendations published by APLIC (<i>Reducing Avian Collisions with Power Lines: The State of the Art in 2012</i> (APLIC 2012). In addition, SCE shall develop and implement an Avian Protection Plan according to Avian Protection Plan Guidelines (APLIC and USFWS 2005). The plan shall include provisions to reduce impacts on avian species during operation of the proposed project, and shall provide for the adaptive management of project-related issues. The plan shall be submitted for review to CDFW, USFWS, and the CPUC at least 60 days prior to construction. CPUC approval is required before the plan is implemented.	The plan shall be submitted for review to the CDFW, USFWS, and CPUC at least 60 days prior to construction. CPUC approval is required before the plan is implemented.	Prior to Construction – Develop an Avian Protection Plan. During Construction – Implement the Avian Protection Plan.	Entire project area.

APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
Cultural and Paleontological Resources			
APM-CUL-01: Paleontological Resources Management Plan. A Paleontological Resources Management Plan would be developed for construction within areas that have been identified as having a moderate and high sensitivity for paleontological resources. The Paleontological Resources Management Plan would be prepared by a professional paleontologist in accordance with the recommendations of the Society of Vertebrate Paleontology.	CPUC verifies a Paleontological Resources Management Plan is developed by a professional paleontologist.	Prior to Construction – Develop a Paleontological Resources Management Plan. During Construction. Implement the Paleontological Resources Management Plan.	Project areas that have been identified as having a moderate or high sensitivity for paleontological resources.
MM CR-1: Flag and Avoid Known Unevaluated Historic Sites. Prior to commencement of any construction or construction-related activities within 50 feet of the mapped boundaries of (1) the historic-era debris and concrete structure at site P-19-186889 and (2) the concrete footings and shack at site SAY-S-1, a qualified CPUC-approved archaeologist shall erect flagging to create a 50-foot buffer around these resources. Flagging shall be in a bright, easily visible color, and signs shall be posted at the perimeter of the flagged areas on all sides to indicate that construction equipment, materials, and personnel shall stay out of the flagged areas. Flagging and signage shall stay in place until all construction activities within 50 feet of the resources has been completed.	CPUC verifies an archaeologist has erected flagging at appropriate locations.	Prior to Construction	All project areas where construction activities are occurring within 50 feet of the mapped boundaries of (1) the historic-era debris and concrete structure at site P-19-186889 and (2) the concrete footings and shack at site SAY-S-1.
MM CR-2: Worker Training for Cultural and Paleontological Resources. Prior to commencement of any project-related construction activities, all SCE, contractor, and subcontractor project personnel shall receive training regarding:	CPUC verifies all SCE, contractor, and subcontractor project personnel have received worker	Prior to Construction	Entire project area.
 Appropriate work practices necessary to effectively implement the APMs and mitigation measures and to comply with the applicable environmental laws and regulations. 	training for cultural and paleontological resources.		
The potential for exposing subsurface cultural resources and paleontological resources.			
How to recognize possible buried resources.			
This training shall include a presentation of:			
• Procedures to be followed upon discovery or suspected discovery of historic or archaeological materials, including Native American remains and their treatment.			
Procedures to be followed upon discovery or suspected discovery of paleontological resources.			
• Actions that may be taken in the case of violation of applicable laws.			

Table 8-1 Draft Mitigation Monitoring and Reporting Plan

	APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
	Isly Unidentified Cultural Resources. If a previously unknown cultural resource is discovered during project construc		During Construction	Entire project area.
	all be halted within 100 feet of the resource, and protective barriers shall be installed along with signage identifying the			
	tally sensitive area." Entry into the area shall be limited to authorized personnel, and the CPUC-approved cultural resou			
specialist/archaeol	logist qualified archaeologist and the CPUC shall be notified immediately.	CPUC verifies that a Data		
		Recovery Field Memo is prepared		
	ce (i.e., avoidance) is the preferred method of mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation for impacts on cultural resources and shall be required to mitigation fo			
	sly undiscovered resources unless the CPUC-approved cultural resources specialist/qualified archeologist determines t			
	ould provide superior mitigation of impacts to the resource. If the resource can be completely avoided, no additional	for review and approval. CPUC		
	sary. If the resource cannot be completely avoided, the CPUC-approved cultural resources specialist/qualified archaeol			
	ocedures delineated below for resources where it is not known whether the resource is historical. If an unanticipated re			
s avoided, it shall 1	nonetheless be recorded on DPR 523 forms, which shall be filed at the Eastern Information Center.	unanticipated resources shall be		
		recorded on DPR 523 forms that		
	n if a resource is an historical resource. The CPUC-approved cultural resources specialist/qualified archaeologist, in			
	ith the CPUC, shall determine if there is a potential for the resource to be a historical resource. If there is no potential fo			
	alify as a historical resource, work shall resume after CPUC concurrence. If there is a potential for the resource to be a	Recovery Report. If an Evaluation		
historic resour	ce, the qualified archaeologist shall prepare an Evaluation Plan.	Plan is needed, CPUC shall verify		
Fyaluation DL	an. The resource-specific Evaluation Plan shall detail the procedures to be used to determine if the discovery is an histo	it has been prepared with		
	Evaluation Plan shall include sufficient discussion of background and context to allow the evaluation of the resource aga			
	source criteria. It shall include a description of procedures to be used in the gathering of information to allow the evalua-			
	ies may include (but are not limited to): excavation, written documentation, interviews, and/or photography. For			
	resource testing, the Evaluation Plan shall describe the archaeological testing procedures, including, but not limited to:			
	ion (if surface artifacts are discovered), test excavations (including type, number, and location of test pits and/or trench			
	ods, and reporting procedure. The Evaluation Plan shall be submitted to CPUC for review. Once approved, the Evaluation			
	nented in the field. The report resulting from this work shall include evaluation of the discovery, based on the significar			
	th in the Evaluation Plan, indicating if it is an historic resource. If the discovery is not found to be an historic resource, a			
	with that determination, protective barriers may be removed, and work may proceed in the area of the discovery. If the			
	etermined to be an historic resource, SCE shall prepare a Data Recovery Plan.			
-				
Data Recovery	y Plan. Data Recovery Plans for historic resources that cannot be fully avoided shall be prepared in accordance with CE	QA		
Guidelines sect	tion 15126.4(b)(3)(C) and PRC section 21083.2, as applicable. The Data Recovery Plan shall outline how the recovery of	f data		
	rce will mitigate impacts to that resource to below a level of significance. The Data Recovery Plan shall describe the level	el of		
	g numbers and kinds of excavation units to be dug, excavation procedures, laboratory methods, samples (e.g., pollen,			
	opropriate) to be collected and analyzed, analysis techniques that will yield information relevant to the aspects of the si			
make it an hist	oric resource, and reporting procedure. This plan shall be submitted to the CPUC for review and approval. Once approv	red, the		
applicant shall	implement the approved plan. Once the data recovery field work is complete, a Data Recovery Field Memo shall be prep	pared.		
Data Decover	r Field Momo Following implementation of the Data Decovery Dian, the Data Decovery Field Mome shall be recovered '	Tho		
	y Field Memo. Following implementation of the Data Recovery Plan, the Data Recovery Field Memo shall be prepared. '			
	Field Memo shall briefly describe the data recovery procedures in the field and summarize (at a field catalog level) the			
	very. The Data Recovery Field Memo shall also identify the number and kind of samples recovered that are appropriate			
	es, including radiocarbon dating, obsidian sourcing, pollen analysis, microbotanical analysis, and others, as applicable. T			
	Field Memo shall be submitted to CPUC for review and approval. Once the Data Recovery Field Memo has been approve			
protective bari	riers may be removed, and work may proceed in the area of the discovery. A Data Recovery Report shall then be prepar	eu.		
Data Recover	y Report. Within 90 days of submittal of the Data Recovery Field Memo, a Data Recovery Report shall be prepared pres	enting		
	he data recovery program, including a description of field methods, location and size of excavation units, analysis of ma			
	luding results of any special analyses conducted), and conclusions drawn from the work. The Data Recovery Report sha			
	e artifacts, samples, and documentation resulting from the data recovery program will be curated. The curation facility s			
	rements of 36 Code of Federal Regulations 79. The Data Recovery Report shall be submitted to the CPUC for review and			
	approved, the Data Recovery Report shall be filed with the Eastern Information Center. All impacted known resources			
	ed resources shall be recorded on DPR 523 forms that shall be filed at the Eastern Information Center with the Data Rec			

APMs and Mitigation Measures	Monitoring Requirements	Timing	Location	
MM CR-4: Paleontological Resources Monitoring. Prior to the start of construction, the applicant shall retain a qualified paleontologist. The qualified paleontologist shall be approved by the CPUC and shall monitor all ground-disturbing activities that take place within areas that have a moderate to high potential to contain paleontological resources. The paleontological monitor shall have the authority to halt construction in the vicinity of any potential paleontological resource finds to begin implementation of MM CR-7.	SCE shall retain a qualified paleontologist, approved by the CPUC.	During Construction	Construction areas with a moderate to high potential to contain paleontological resources.	
MM CR-5: Follow Paleontological Resource Discovery Protocol. In the case that a previously unknown paleontological resource is discovered during construction activities, all work within 15 meters of the resource shall be stopped, and the CPUC-approved paleontologist shall determine whether the resource can be avoided. If the discovery can be avoided and no further impacts will occur, no further effort shall be required. If the resource cannot be avoided and may be subject to further impact, the paleontologist shall determine whether the resource is unique under Part V of CEQA Guidelines Appendix G. A paleontological resource shall be considered unique if it meets the definition of a significant paleontological resource under the 2010 Society of Vertebrate Paleontology <i>Standard Procedures for the Assessment of Adverse impacts to Paleontological Resources</i> definition: Significant paleontological resources are fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogentic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years).	including CPUC review and approval of the uniqueness conclusion for the resource and the methods for recovery of the resource.	During Construction	ved,	Entire project area.
ibstantiation of the uniqueness conclusion shall be provided to the CPUC for review and approval. If the resource is determined not to be nique, work may commence in the area.				
f the resource is unique, then work shall remain stopped, and the approved paleontologist shall consult with the applicant and the CPUC regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA. Preservation n place, i.e., avoidance, is the preferred method of mitigation for impacts to paleontological resources and shall be required to mitigate impacts o previously undiscovered resources unless the CPUC-approved cultural resources specialist/qualified archeologist determines that another nethod would provide superior mitigation of impacts to the resource. Other methods include ensuring that the fossils are recovered, prepared, dentified, catalogued, and analyzed according to current professional standards under the direction of a qualified paleontologist. Methods of recovery, testing, and evaluation shall adhere to current professional standards for recovery, preparation, identification, analysis, and curation, such as the 2010 Society of Vertebrate Paleontology <i>Standard Procedures for the Assessment of Adverse Impacts to Paleontological Resources</i> . Work can commence following recovery and CPUC approval.				
IN CR-6: Unanticipated Discovery of Human Remains. In the event that human remains or suspected human remains are identified, SCE hall comply with California law, including, but not limited to, the following provisions: CEQA Guidelines section 15064.5(e); PRC sections 097.94, 5097.98, and 5097.99; and California Health and Safety Code section 7050.5. These laws require Native American consultation for ative American burial sites. he area where the remains are identified shall be flagged off, and all construction activities within 165 feet (50 meters) of the find shall neediately cease. The CPUC, the CPUC-approved cultural resources specialist/archaeologist, SCE, and any other appropriate agency shall be neediately notified, and the cultural resources specialist/archaeologist shall examine the find. If the cultural resources pecialist/archaeologist determines that there may be human remains, SCE shall immediately contact the Medical Examiner at the Los Angeles ounty Coroner's office. The Medical Examiner has two working days to examine the remains after being notified by SCE. If the Medical xaminer believes the remains are Native American, he/she shall notify the NAHC within 24 hours.	In the event that human remains are identified, the CPUC, the CPUC-approved cultural resources specialist/archaeologist, SCE, and any other appropriate agency shall be immediately notified. CPUC shall verify that SCE immediately contacts the medical examiner at the Los Angeles County Coroner's Office.	During Construction	Entire project area.	
he NAHC will immediately notify the person it believes to be the most likely descendant (MLD) of the remains, and the MLD has 48 hours to take recommendations to the landowner or representative for the respectful treatment or disposition of the human remains and any sociated grave goods. If the MLD does not make recommendations within 48 hours, the area of the property shall be secured from further isturbance. If there are disputes between the landowners and the MLD, the NAHC shall mediate the dispute and attempt to find a solution. If the rediation fails to provide measures acceptable to the landowner, the landowner or their representative shall reinter the remains and associated rave goods and funerary objects in an area of the property secure from further disturbance. The location of any reburial of Native American uman remains shall not be disclosed to the public and shall not be governed by public disclosure requirements of the California Public Records ct, California Government Code § 6250 et seq., unless otherwise required by law. The Medical Examiner shall withhold public disclosure of formation related to such reburial pursuant to the specific exemption set forth in California Government Code Section 6254(r).				

Table 8-1 Draft Mitigation Monitoring and Reporting Plan					
APMs and Mitigation Measures	Monitoring Requirements	Timing	Location		
Geology, Soils, and Minerals					
MM GEO-1: Geotechnical Investigation. The applicant will conduct a geotechnical investigation for the proposed project and prepare a geotechnical report documenting the results of the investigation. The geotechnical investigation shall assess the potential for liquefaction, landslides, lateral spreading, seismic ground shaking, and expansive soil. The geotechnical report shall make recommendations of engineering and design measures to incorporate into the proposed project, determined appropriate by a California-licensed Geotechnical Engineer or Certified Engineering Geologist, to mitigate impacts associated with liquefaction, landslides, lateral spreading, seismic ground shaking, and expansive soils. Measures that may be used to minimize impacts could include, but are not limited to:	SCE shall provide documentation to the CPUC prior to construction that demonstrates these measures have been incorporated into project design.	Prior to Construction	Entire project area.		
• <i>Liquefaction:</i> stabilization of fills, retaining walls, slope coverings, removal of unstable materials, avoidance of highly unstable areas, construction of pile foundations, and/or ground improvements of liquefiable zones.					
• Landslides and lateral spreading: retaining walls, excavation of unstable materials, avoidance of highly unstable areas.					
• Seismic ground shaking: energy dissipating devices, bracing, bolting of foundations.					
• <i>Expansive soil:</i> excavation of expansive soil, draining water away from expansive soils, ground-treatment processes.					
SCE shall provide documentation to the CPUC prior to construction that demonstrates these measures have been incorporated into project design.					
Hazards and Hazardous Materials					
 MM HZ-1: Hazardous Materials Business Plan. A Hazardous Materials Business Plan (HMBP) shall be submitted to the CPUC and electronically through the California Environmental Reporting System for any hazardous materials stored on-site over threshold quantities (55 gallons, 200 cubic feet, or 500 pounds). The plan shall include information on: Hazardous materials stored at the Mesa Substation over threshold quantities. 	The Hazardous Materials Business Plan and its approval by the Los Angeles Certified Unified Program Agency must be submitted to the CPUC at least 30	Prior to Construction	Wherever hazardous materials over 55 gallons, 200 cubic feet, or 500 pounds are stored.		
• A site map with key emergency information, including internal access roads, adjacent public streets, sewer drains, emergency response equipment, and access/egress points.	days prior to storage of covered hazardous materials.				
• Emergency response plans for release and threatened release of the covered materials.					
The HMBP and its approval by the Los Angeles Certified Unified Program Agency must be submitted to the CPUC at least 30 days prior to storage of covered hazardous materials.					
MM HZ-2: Hazardous Materials Training. Prior to construction, the applicant will prepare and implement a worker environmental awareness program (WEAP) for CPUC review and approval that includes:	CPUC verifies Hazardous Materials Training has been prepared and administered, and	Prior to Construction.	Entire project area.		
 Instruction regarding the location of Material Safety Data Sheets, as well as proper labeling, storage, use, transport, and disposal of hazardous materials. 	that SCE maintains records documenting attendees at each training.				
• Information on common contaminants that could be uncovered in the proposed project area and instruction regarding appropriate procedures if potentially contaminated soil is present.					
• Procedures for spill response under the SPCC (MM HZ-3) including notification to appropriate personnel, including the Spill Response Coordinator in case of a hazardous materials spill or leak from equipment, or upon the discovery of soil or groundwater contamination.					
• Instruction on individual responsibilities under the Clean Water Act, the project SPCC, the project SWPPP, and site-specific BMPs.					
• Instruction on compliance with OSHA regulations and procedures if landfill gas is encountered during excavations.					
The applicant will maintain records documenting attendees at each training.					

Table 8-1 Draft Mitigation Monitoring and Reporting Plan APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
MM HZ-3: Spill Prevention, Control, and Countermeasure Plan. SCE shall prepare a site-specific SPCC plan that identifies spill response and prevention measures and BMPs. SCE shall indicate site-specific physical conditions that could exacerbate spills, such as drainages to the nearest water bodies. SCE shall name a representative that will be responsible for verifying that construction and operation activities adhere to the SPCC, including implementation of BMPs. SCE shall submit the SPCC to CPUC at least 30 days prior to construction for review and approval.	SCE shall name a representative that will be responsible for verifying that construction and operation activities adhere to the SPCC plan, including implementation of BMPs. SCE shall submit the SPCC to CPUC at least 30 days prior to construction for review and approval.	Prior to Construction – Prepare a SPCC plan. During and Post-construction – Implement the SPCC plan.	Entire project area.
 MH HZ-4: Contaminated Soil Contingency Plan. Prior to construction, the applicant will submit a Contaminated Soil Contingency Plan to the CPUC for review and approval. The plan will include practices that are consistent with the California Title 8 and Occupational Safety and Health Administration (Cal-OSHA) regulations and will outline steps that would be implemented if contaminated soils are encountered. The objective of the plan will be to minimize risk to the public and to the environment resulting from exposure to and disturbance of contaminated soils. At a minimum, the plan would include procedures for the following steps: Identifying potentially impacted soil; Establishing a no-work zone for potentially contaminated areas; Assessing potentially impacted soil; Notifying appropriate agencies, Cleanup procedures; Impacted soil storage; Verification sampling; and, Impacted soil characterization and disposal. During construction an appropriately trained construction personnel, under the supervision of a California licensed registered geologist or professional engineer, will be present to monitor soil conditions during all earthmoving activities. If potentially contaminated soils are encountered during construction, the applicant would implement the Contaminated Soil Contingency Plan to assess the soils and to determine appropriate disposal or treatment options.	Prior to construction, the applicant will submit a Contaminated Soil Contingency Plan to the CPUC for review and approval. During construction, CPUC shall verify that an appropriately trained construction personnel, under the supervision of a California licensed registered geologist or professional engineer, will be present to monitor soil conditions during all earthmoving activities.	Prior to Construction – Develop a Contaminated Soil Contingency Plan. During Construction – Implement the Contaminated Soil Contingency Plan.	Entire project area.
 MM HZ-5: Well Management Plan. Prior to construction, the applicant will prepare and submit to CPUC a Well Management Plan in coordination with OII Landfill and the U.S. EPA in order to prevent contamination of groundwater and subsurface soil. The plan will include procedures for well decommissioning or protection for all monitoring wells located within the footprint of the proposed project. The plan will be reviewed and approved by CPUC prior to construction. Proper well decommissioning or protection/avoidance measures would be implemented prior to beginning other ground disturbing activities within the proposed Mesa Substation site area The Well Management Plan would address the following: Identification of wells that would be avoided during construction and wells that would be decommissioned, Well decommissioning procedures, Procedures for the protection of wells that are to be avoided during construction, Procedures for granting access to OII Landfill's monitoring wells during construction activities. Procedures should address compliance to the proposed project's APMs and MMs. 	Prior to construction, the applicant will prepare and submit to CPUC a Well Management Plan in coordination with OII Landfill and the EPA. The plan will be reviewed and approved by CPUC prior to construction.	Prior to Construction	All project areas containing monitoring wells.

Table 8-1 Draft Mitigation Monitoring and Reporting Plan APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
Hydrology and Water Quality			
MM HY-1: Stormwater Pollution Prevention Plan. The applicant will obtain coverage for the project under the Construction General Permit (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ). The applicant will prepare a SWPPP to reduce the potential for water pollution and sedimentation from construction. BMPs to be included in the SWPPP that must be submitted to the SWRCB shall include, but are not limited to, the following:	Verification of Construction General Permit coverage approval and the approved SWPPP(s) will be provided to the CPUC at least 30 days prior to	Prior to Construction – Prepare an SWPPP. During Construction – Implement the SWPPP.	Entire project area.
• The applicant shall not stockpile brush, loose soils, excavation spoils, or other similar debris material within sensitive habitats.	start of construction.		
• If visible dust is present during construction activities, standard dust suppression techniques (e.g., water spraying) will be used in all ground disturbance areas.			
 During construction activities, measures would be in place to ensure that contaminants are not discharged from construction sites. The SWPPP would define areas where hazardous materials and trash would be stored; where vehicles would be parked, fueled and serviced; and where construction materials would be stored. 			
• Runoff, sedimentation, and erosion would be minimized through the use of BMPs such as water bars, silt fences, staked straw bales, wattles, and mulching and seeding of all disturbed areas. These measures will be designed to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water, and to preserve roadways and adjacent properties. BMPs would be included for areas where helicopters would be landed, fueled, and serviced or used for construction activities.			
• Equipment storage, fueling, and staging areas would be located in upland sites away from riparian areas or other sensitive habitats. These designated areas would be located in such a manner as to prevent any runoff from entering sensitive habitat. Where vehicle maintenance (excluding fueling) cannot be avoided in areas outside those previously specified, these maintenance activities shall be performed at least 150 feet from all aquatic resources or as specified by agency permits, on an impermeable bladder or tarp specified for such maintenance activities. Project-related spills of hazardous materials would be cleaned up immediately and contaminated soils removed to approved disposal areas.			
 Implement measures such as sandbags, silt screens, cleanup of spills of hazardous materials, and cleanup of sediment to prevent polluted (with sediment or hazardous materials) runoff from work areas in paved streets from entering the storm drain system 			
• Implement measures such as silt screens, cleanup of spills of hazardous materials, cleanup of sediment, secondary containment for hazardous materials, and avoidance of activities that disturb sediment or have a high potential for hazardous materials spills immediately before or during rain to prevent polluted (with sediment or hazardous materials) runoff from staging areas from draining into water ways such as washes, drainages, and ditches and from entering municipal storm drain systems.			
Verification of Construction General Permit coverage approval and the approved SWPPP(s) will be provided to the California Public Utilities Commission (CPUC) at least 30 days prior to start of construction. Updated SWPPPs will be provided to the CPUC on request during construction.			
MM HY-2: Compliance with WDRs. Work in waters of the state shall be conducted in conformance with WDRs obtained for the proposed project. Mitigation measures shall be implemented in accordance with WDRs, and they may include avoidance, reduction, or compensatory measures.	CPUC verifies that all work within waters of the state are conducted in conformance with WDRs, and that appropriate	During Construction	All areas where construction would occur within waters of the state.
Groundwater extracted as a result of dewatering during construction shall not be discharged to Waters of the State unless such activities are covered by a WDR. Extracted groundwater shall be disposed of in one of the following manners in the absence of a WDR:	mitigation measures are implemented in accordance with WDRs.		
Discharge to an upland area where it will not enter Waters of the State but would instead evaporate or infiltrate.			
• Use for dust control.			
• Use for irrigation water.			
• Use for other construction needs.			
• Dispose of at a licensed facility if water is suspected of being contaminated or degraded.			

APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
MM HY-3: Construction Drainage Plan. SCE shall prepare and implement a Drainage Plan that ensures runoff during construction activities at the Mesa Substation site will not exceed drainage capacity of the storm water system and other drainage facilities. Measures that can be employed can include:	SCE shall submit the plan to Monterey Park and CPUC for review and approval prior to beginning construction activities	Prior to Construction – Prepare a Drainage Plan. During Construction – Implement	Mesa Substation site
Constructing the detention basin earlier in construction.	at the substation site.	the Drainage Plan.	
Constructing temporary detention basins on site.			
Creating infiltration areas to limit runoff that enters the storm water system.			
SCE shall submit the plan to Monterey Park and CPUC for review and approval prior to beginning construction activities at the substation site.			
MM HY-4: Detention Basin Design. SCE shall design the detention basin on the proposed Mesa Substation site in accordance with the Los Angeles County Department of Public Works Hydrology Manual (LACDPW 2006). The Hydrology Manual contains techniques to calculate runoff flow rates and volumes based on Los Angeles County's historic precipitation and runoff. As applicable, the detention basin shall be designed in accordance with the Los Angeles County Department of Public Works Low Impact Development Standards Manual (LACDPW 2014).	CPUC shall verify that the detention basin is designed in accordance with the Los Angeles County Department of Public Works Hydrology Manual prior to beginning construction of the proposed project.	Prior to Construction	Mesa Substation site
MM HY-5: Dam Failure Evacuation Training. As part of the Worker Environmental Awareness Program, SCE shall train construction workers on evacuation routes in the event of dam failure. Workers to be trained shall include those located in the dam inundation areas of the Garvey Reservoir south dam, Eaton Canyon Dam, Garvey Reservoir north dam, and Santa Fe Dam.	CPUC shall verify that SCE trains all construction workers located in the dam inundation areas of the Garvey Reservoir south dam, Eaton Canyon Dam, Garvey Reservoir north dam, and Santa Fe Dam on evacuation routes in the event of dam failure prior to construction of the proposed project.	Prior to Construction	Work located within dam inundation areas of the Garvey Reservoir south dam, Eaton Canyon Dam, Garvey Reservoir north dam, and Santa Fe Dam.
MM HY-6: Dam Inundation Substation Protection. SCE shall incorporate dam inundation measures into its substation at the design phase to reduce the potential for widespread outages and equipment damages in the event of failure of the south dam at Garvey Reservoir. Measures could include:	CPUC shall verify that dam inundation measures are incorporated in the substation at its design phase.	Prior to Construction	All project areas located within the inundation areas of the south dam at Garvey Reservoir.
Concrete perimeter wall and flood gates at entry ways;			
Elevation of key substation equipment above inundation levels; or			
• Sealing of equipment buildings.			

APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
Noise and Vibration	· · ·	· ~ ~	•
MM NS-1: Noise Control Plan. Prior to the start of construction, the applicant shall prepare a Noise Control Plan to ensure that project construction noise does not:	Verify identification of a Construction Relations Officer and mailing of notices at least 30	Prior to Construction – Prepare a Noise Control Plan.	Entire project area.
 Increase ambient noise levels by more than 10 dBA (8-hour L_{eq}), or 	days prior construction. Review	During Construction – Implement	
• Exceed the noise level specified in the applicable jurisdiction's noise ordinance.	monthly reports to the CPUC.	the Noise Control Plan.	
The Noise Control Plan measures shall be selected based on equipment used and activity conducted in specific locations, once known. The applicant shall submit the Noise Control Plan to the CPUC at least 30 days prior to the start of construction for review and approval. The Noise Control Plan shall include, but not be limited to, the following noise reduction and control measures:	Verify implementation of noise control measures.		
• Temporarily install and maintain an absorptive noise control barrier in the perimeter of construction sites located within 200 feet of noise- intensive equipment operating more than 4 hours a day. The applicant shall notify all residents located within 50 feet of the absorptive barriers and ensure such barriers are installed in a safely manner.			
• Limit heavy equipment activity adjacent to residences or other sensitive receptors to the shortest possible period required to complete the work activity.			
• Ensure that proper mufflers, intake silencers, and other noise reduction equipment are in place and in good working condition.			
Maintain construction equipment according to manufacturer recommendations.			
Minimize construction equipment idling.			
 Reduce noise from back-up alarms (alarms that signal vehicle travel in reverse) in construction vehicles and equipment by providing a layout of construction sites that minimizes the need for back-up alarms and use flagmen to minimize the time needed to back up vehicles. 			
• When possible, use construction equipment specifically designed for low noise emissions (i.e., equipment that is powered by electric or natural gas engines instead of diesel or gasoline reciprocating engines). Electric engines have been reported to have lower noise levels than internal combustion engines.			
• Where practical, locate stationary equipment such as compressors, generators, and welding machines away from sensitive receptors or behind barriers.			
The Noise Control Plan shall detail the frequency, location, and methodology for noise monitoring prior to and during various construction and restoration activities to ensure that generated noise levels do not exceed 10 dBA above existing ambient noise levels, or the applicable jurisdiction noise standards. The Noise Control Plan shall detail the actions and procedures that the applicant shall implement to mitigate impacts in the event that monitoring detects noise levels that have exceeded the criteria specified in this EIR. Noise level measurements shall be conducted in compliance with the City of Monterrey Park, City of Montebello, City of Commerce, City of Bell Gardens, City of Pasadena, and Los Angeles County requirements.			
The Noise Control Plan shall designate a Construction Relations Officer who is readily available to answer questions or respond to complaints during any hours or days that construction or restoration is occurring. The applicant shall send pre-construction notifications to sensitive receptors located within 100 feet of construction activities at least 30 days prior construction. The notification shall include a phone number for the public to contact the Construction Relations Officer. Additionally, each construction site shall include clearly visible signs with the Construction Relations Officer. The applicant shall submit monthly reports to the CPUC summarizing the complaints submitted to the Construction Relations Officer. The summary reports shall describe how each complaint was addressed, if and when it was resolved, and contact information for the member of the public who submitted the complaint.			

APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
MM NS-2: Compliance with Monterey Park Ordinance. As soon as Mesa Substation is fully operational, the applicant shall conduct noise measurements to ensure that the operational noise levels from the substation transformers do not exceed the City of Monterey Park's 50-dBA nighttime noise standard at the closest receptor. If the threshold is exceeded, the applicant shall implement engineering solutions, including, but not limited to, barrier walls around the transformer, sound absorbing panels, and/or noise cancellation methods until the project does not exceed the threshold. SCE must submit the noise measurements in the form of a memorandum to the CPUC within two weeks of measurement. Reports shall be submitted until the CPUC verifies that operation noise does not exceed the City of Monterey Parks' 50-dBA nighttime threshold.	SCE must submit the noise measurements in the form of a memorandum to the CPUC within two weeks of measurement. Reports shall be submitted until the CPUC verifies that operation noise does not exceed the City of Monterey Parks' 50-dBA nighttime threshold.	Post-construction	Mesa Substation site
MM NS-3: Noise from Helicopter Operations. For all construction activities that would include helicopter operations, SCE shall provide at least one week's advance notice to all property owners within 660 feet of the proposed helicopter operation areas. The announcement would state that the use of helicopters is anticipated and would provide the start date, anticipated completion dates, hours of helicopter usage, and a telephone contact number for questions or complaints during construction. In addition, helicopters would maintain a height of at least 500 feet when passing over residential areas, as well as a lateral distance of at least 500 feet from all schools and hospital buildings, except when they are at construction areas or actively assisting with construction activities.	The CPUC shall verify that notice to all property owners within 660 feet of the proposed helicopter operation areas is provided at least one week prior to helicopter operation.	Prior to Construction – provide notice at least 7 days prior to helicopter operation.	All project areas in which helicopter operations would occur.
MM NS-4: Positioning of Helicopter Landing and Takeoff Areas. SCE shall position helicopter landing and takeoff areas in Staging Yards 1, 2, 3, and 4 as far away as feasible from sensitive receptors, while not sacrificing the safety of helicopter operations due to hazards (e.g., transmission lines) in and around the staging yards. SCE must submit helicopter locations to the CPUC for review and approval at least 30 days prior to use of the helicopter location.	SCE must submit helicopter locations to the CPUC for review and approval at least 30 days prior to use of the helicopter location.	Prior to Construction	Helicopter take-off and landing areas.
MM NS-5: Noise Notification and Coordination for Whittier Narrows Natural Area. The applicant shall provide notice to the Whittier Narrows Natural Area at least 30 days prior to construction activities occurring in that area to alert nearby users of the construction activities and give them the opportunity to avoid the noise. The notice shall include dates, times, and descriptions of construction activities, in addition to directions to at least two comparable alternative nearby recreational facilities. The applicant shall also coordinate with the Whittier Narrows Natural Area to ensure that activities causing an increase in noise of over 10 dBA above ambient noise levels do not occur in the Whittier Narrows Natural Area during any planned special events. SCE shall provide documentation of the notice and coordination to the CPUC at least 20 days prior to construction.	SCE shall provide documentation of the notice and coordination to the CPUC at least 20 days prior to construction. The CPUC shall verify that notice has been provided to Whittier Narrows at least 30 days prior to construction and that coordination has occurred such that noise levels do not violate identified maximums.	Prior to Construction	Whittier Narrow Natural Area
Public Services and Utilities			
MM PS-1: Relocation Agreement with Municipal Water District. Prior to construction that would take the MWD's 72-inch Middle Feeder Pipeline out of service, the applicant shall reach an agreement with the MWD that will identify an alternate alignment that crosses the project site. This relocation agreement will enable the MWD to maintain reliable deliveries of treated water to its member agencies during relocation of the pipeline. SCE shall submit to the CPUC information from the MWD confirming that relocation of the pipeline will not result in inability to adequately serve customers. SCE shall submit this documentation at least 30 days prior to the pipeline being taken out of service.	SCE shall submit to the CPUC information from the MWD confirming that relocation of the pipeline will not result in inability to adequately serve customers. SCE shall submit this documentation at least 30 days prior to the pipeline being taken out of service.	Prior to Construction	Main project area.

APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
raffic and Transportation			
IM TT-1: Peak Period Traffic Management Plan. SCE shall prepare and implement a Peak Period Traffic Management Plan, which may be ncluded in a larger Transportation Management Plan for the project, and shall submit the Plan for CPUC review and approval at least 60 days prior to the start of construction. The Plan shall identify specific measures that would reduce significant impacts to significantly affected intersections during the AM or PM peak ours (and during the specified phase) to less than significant levels, i.e., reduce the V/C increase resulting from the proposed project at each dentified intersection to at or below the applicable threshold.	A project-specific Traffic Management Plan is prepared by SCE according to provisions identified in this mitigation measure. SCE shall submit the plan for CPUC review and approval at least 60 days prior to the start of construction.	Prior to Construction – Prepare a Peak Period Traffic Management Plan. During Construction – Implement the Peak Period Traffic Management Plan.	Entire project area.
rimary measures may include:			
Limiting project-related heavy truck trips during peak hours (e.g., through scheduling deliveries outside of peak hours) so as to reduce trips occurring during peak hours; and			
Limiting project construction worker vehicle trips during peak hours (e.g., through requiring carpooling) so as to reduce trips occurring during peak hours.			
pecific measures would be dependent on the final construction schedule and residing location of construction workers. Measures implemented s part of the plan shall not result in exceedance of applicable thresholds as described in this document at other impacted intersections. The lan shall also demonstrate that mitigation would not result in V/C to exceed thresholds at significantly impacted and non-significantly mpacted roads and intersections.			
IM TT-2: Road and Lane Closure Plan. SCE shall develop a Road and Lane Closure Plan for the proposed project that outlines how SCE will andle road and lane closures to allow for safe vehicle, bicyclist, and pedestrian passage when road and lane closures occur. The Plan shall be repared in coordination with local jurisdictions where road and lane closures would occur. Upon determination of the final construction chedule and precise locations and durations of road and lane closures, the Plan shall describe locations and durations of: Full road closures	CPUC verifies that a Road and Lane Closure Plan is developed, and SCE coordinates with local jurisdictions where road and lane closures would occur.	Prior to Construction – Prepare a Road and Lane Closure Plan. During Construction – Implement the Road and Lane Closure Plan.	Roads or lanes that would be closed due to construction.
Lane closures			
Bicycle lane closures			
Sidewalk or pedestrian path closures			
leasures to be included in the Plan that would allow for safe vehicle, bicyclist, and pedestrian passage shall adhere to the California Manual on Iniform Traffic Control Devices. Potential measures include:			
Signage directing motorists, pedestrians, and bicyclists to an efficient, safe detour around the closure			
Flaggers and/or signage to halt traffic at road closures or direct traffic at lane closures and to allow traffic to pass when construction is halted			
Requirements for notifications and a process for communication with affected residents and landowners prior to the start of construction.			
Emergency service providers would be notified of the timing, location, and duration of construction activities.			
Requirement that emergency vehicle access is maintained at all times.			
he Road and Lane Closure Plan can be included as part of a Transportation Management Plan for the project.			

APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
MM TT-3: Highway Closure Plan. SCE shall prepare a Highway Closure Plan to include in its encroachment permit application for crossings of SR-60 that require closure or partial closure of SR-60. The Highway Closure Plan shall:	The CPUC shall verify that the measures in the Highway Closure	Prior to Construction – Prepare a Highway Closure Plan.	Crossings of SR-60 that require closure or partial closure of SR-
• Specify that partial and complete closures of SR-60 are prohibited during peak and daytime (5 a.m. to 10 p.m.) hours.	Plan are adhered to and that no work shall occur in the Caltrans	During Construction – Implement	60.
Require that SCE adhere to Caltrans' requirements regarding signage to notify motorists of the impending closure.	ROW until Caltrans issues the encroachment permit.	the Highway Closure Plan.	
Map potential detours for SR-60 traffic.			
The measures in the plan shall minimize delays to SR-60 traffic. No work shall occur in Caltrans right-of-way until Caltrans issues the encroachment permit and approves the Highway Closure Plan.			
MM TT-4: Helicopter Lift Plan. SCE's helicopter contractor shall coordinate with FAA and obtain FAA-required approvals for helicopter operations. SCE's contractor's submittal shall include a Helicopter Lift Plan for operations within 1,500 feet (457 meters) of a congested area or within 1,500 feet (457 meters) of residences in compliance with 14 CFR 133.33, which requires that flights be conducted so emergency landings and release of external load can be accomplished without safety risks to people or property when operating over congested areas. Measures may include:	The Plan and record of FAA approval shall be provided to the CPUC prior to commencing helicopter operations.	Prior to Construction	Areas where helicopters will be used within 1,500 feet of residences.
Designating who is responsible for equipment inspections			
Communication procedures			
Establishment of exclusion zones where pedestrians will not be allowed			
Training of personnel in safety requirements and procedures			
The Plan and record of FAA approval shall be provided to the CPUC prior to commencing helicopter operations.			
MM TT-5: FAA No-Hazard Determination. SCE shall obtain a determination of no-hazard from the FAA when notification under 14 CFR 77 is required for:	SCE shall provide documentation of the FAA finding to the CPUC prior to the use of equipment or	Prior to Construction	All project areas where construction equipment, such as cranes, and structures, such as
 Use of construction equipment, such as cranes; and Installation of structures, such as lattice steel towers. 	installation of structures that require notification under 14 CFR 77.		steel lattice towers, are being installed.
SCE shall provide documentation of the FAA finding to the CPUC prior to the use of equipment or installation of structures that require notification under 14 CFR 77.			
MM TT-6: Slow Truck Warnings. During truck delivery and exit hours, SCE shall post signage at appropriate locations (e.g., along Potrero Grande Drive) when there is a possibility for slow trucks to exit the substation site to warn drivers of slow trucks exiting the Substation site onto East Markland Drive and Potrero Grande Drive. Signage shall adhere to the California Manual on Uniform Traffic Control Devices.	CPUC shall ensure that SCE posts signage at appropriate locations.	During Construction	Any work area where there is a possibility for slow trucks to exit the substation site.
MM TT-7: Road Damage Repair. SCE shall repair to pre-project conditions any roads damaged by project vehicle traffic within 60 days of completion of construction. SCE shall document roadway conditions with photographs prior to the project along roads identified for heavy vehicle use in the project's Traffic Impact Analysis. SCE shall also take photographs after the project and after any repairs that document restoration of pre-project pavement conditions. Documentation of original conditions and repair shall be submitted to the CPUC for review and meridication provide the project of the project of the project of the project of the completion.	Documentation of original conditions and repair shall be submitted to the CPUC for review and verification within 30 days of	Prior to Construction – Document pre-project conditions. Post-construction – Repair	Any roads damaged by project vehicle traffic.
verification within 30 days of repair completion. MM TT-8: Emergency Service Provider Notification. SCE shall notify local emergency service providers (i.e., police departments, ambulance services, and fire departments) of road closures at least 1 week prior to the closure. SCE shall notify the provider of the location, date, time, and duration of closure. SCE would also make provisions to maintain emergency vehicle access at all times in coordination with local emergency service providers, such as keeping metal plates available to cover open trenches.	repair completion. The CPUC verifies that SCE has notified all local emergency service providers or road closures at least one week prior to the closure. CPUC also verifies that emergency vehicle access is maintained at all times.	roadway damage. During Construction	All project areas where road closures would occur.

Table 8-1 Draft Mitigation Monitoring and Reporting Plan			
APMs and Mitigation Measures	Monitoring Requirements	Timing	Location
MM TT-9: Public Transit, Pedestrian, and Bicyclist Plan. SCE shall develop and implement a Public Transit, Pedestrian, and Bicyclist Plan with the goal of maintaining safe conditions for pedestrians and bicyclists during construction of the proposed project. Safe conditions include detours for closed sidewalks and closed bicycle lanes as well as relocation of transit stops to areas not affected by construction activities. The control measures included in the Plan shall be based on final plans for closures of sidewalks and bicycle lanes and transit stops. The measures shall be consistent with those published in the California Joint Utility Traffic Control Manual (California Inter-Utility Coordinating Committee 2010).The Plan should include, at a minimum, the measures listed below:	The CPUC verifies that SCE develops and implements the Public Transit, Pedestrian, and Bicyclist Plan, and the control measures in the Plan are consistent with the California Utility Traffic Control Manual.	Prior to Construction – Develop a Public Transit, Pedestrian, and Bicyclist Plan. During Construction – Implement the Public Transit, Pedestrian, and Bicyclist Plan.	Entire project area.
• Notify LA Metro and other public transit providers of construction along existing public transit routes. The applicant would work with transit providers to temporarily relocate transit stops during construction, if needed.			
• Provide pedestrians with reasonably safe, convenient, and accessible paths that replicate as nearly as possible the most desirable characteristics of the existing paths (i.e., maintaining sidewalk and bicycle access on at least one side of affected streets during construction).			
• Layout plans for notifications and a process for communication with affected transit riders, pedestrians, and bicyclists 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 transit routes, bus stops, sidewalks, and bicycle routes would be affected on which days and for how long), and a toll-free telephone number for receiving questions or complaints.			
Post detour signs during construction of alternative routes for pedestrians and bicyclists.			
• Install steel plates over open trenches in inactive construction areas to maintain existing bicycle and pedestrian access after construction hours.			
MM TT-10: Whittier Narrows Park-and-Ride Lot. If proposed project work on Telecommunications Route 3 would result in temporary closure of the Whittier Narrows park-and-ride lot exit to Durfee Avenue, SCE shall coordinate with Los Angeles County and the Whitter Narrows Recreation Area so that SCE can provide traffic control for two-way traffic at the Santa Anita Avenue entrance to the Whittier Narrows park-and-ride lot during the Durfee Avenue exit closure.	CPUC verifies that SCE coordinates with Los Angeles County and the Whittier Narrows Recreation Area to provide traffic control during the Durfee Avenue exit closure.	During Construction	Whittier Narrows park-and-ride lot
 MM TT-11: Community Education Center Parking. If proposed project work at the Goodrich Substation would result in parking spot closures at the Community Education Center parking lot, SCE shall coordinate scheduled closures with the Community Education Center and shall obtain a letter from the Community Education Center that states: The dates of parking spot closures; 	SCE shall submit the letter to the CPUC 30 days prior to Community Education Center parking spot closure.	During Construction	Community Education Center parking lot
The number of parking spots that would be closed; and			
• That the Community Education Center concurs that there will be sufficient parking spots to accommodate SCE's work and the Community Education Center's parking needs.			
SCE shall submit the letter to the CPUC 30 days prior to Community Education Center parking spot closure.			

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1 8.1 Minor Project Refinements

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This section describes the CPUC's process for staff approval of minor project refinements

4 (refinements) that may be necessary due to changes needed after the applicant's final engineering

5 of elements of the proposed project. During the course of construction, circumstances may arise

- 6 that require minor deviations from the project as approved. The CPUC, along with their
- 7 environmental monitors, would evaluate any proposed deviations from the approved project to
- 8 ensure they are consistent with CEQA requirements. Depending on its nature, a requested deviation
- would be processed as a Minor Project Change (MPC) or be the subject of a Petition for Modification
 (PFM) submitted by the applicant.
- 10 11

12 MPCs would be strictly limited to minor project changes that do not trigger additional permit 13 requirements, do not increase the severity of an impact or create a new impact, and are within the

- requirements, do not increasegeographic scope of the EIR.
- 15

If a project change would create or have the potential to create a new significant impact, increase the severity of an impact, or occur outside the geographic area evaluated in the EIR, SCE would be required to submit a PFM. The CPUC would evaluate the PFM under CEQA, as appropriate, to

- 19 determine what form of supplemental environmental review would be required.
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8.2 Dispute Resolution

The following procedure will be observed for dispute resolution:

- **Step 1.** Disputes and complaints (including those of the public) should be directed first to the CPUC-designated Project Manager for resolution. The CPUC Project Manager will attempt to resolve the dispute.
- Step 2. Should this informal process fail, the CPUC Project Manager may initiate
 enforcement or compliance action to address deviations from the proposed project or
 adopted MMRP.
- 31 **Step 3.** If a dispute or complaint regarding the implementation or evaluation of the MMRP • 32 cannot be resolved informally or through enforcement or compliance action by the CPUC, 33 any affected participant in the dispute or complaint may file a written "notice of dispute" 34 with the CPUC Executive Director or his/her designee. This notice should be filed in order to 35 resolve the dispute in a timely manner, with copies concurrently served on other affected participants. Within 10 days of receipt, the CPUC Executive Director or designee(s) shall 36 37 meet or confer with the filer and other affected participants for the purposes of resolving 38 the dispute. The CPUC Executive Director shall issue an Executive Resolution describing 39 his/her decision, and serve it on the filer and other affected participants.
- Step 4. If one or more of the affected parties is not satisfied with the decision as described
 in the resolution, such party(ies) may appeal it to the CPUC via a procedure to be specified
 by the CPUC.
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Parties may also seek review by the CPUC through existing procedures specified in the CPUC Rules
of Practice and Procedure for formal and expedited dispute resolution, although a good faith effort
should first be made to use the foregoing procedure.

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1 8.3 Final Mitigation Monitoring and Reporting Plan

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A Final MMRP will be prepared for the Final EIR that incorporates any changes to the proposed

4 project or mitigation measures that are made as a result of public review of the Draft EIR and

5 further consideration of the proposed projects by the CPUC.