BEFORE THE PUBLIC UTILITIES COMMISSION OF THE

STATE OF CALIFORNIA

In the Matter of the Application of SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) for a Permit to Construct Electrical Facilities: Eldorado-Lugo-Mohave Series Capacitor Project.	Application No. 18-05-xxx

PROPONENT'S ENVIRONMENTAL ASSESSMENT (PEA)

ELDORADO-LUGO-MOHAVE SERIES CAPACITOR PROJECT

VOLUME 5 OF 8

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Appendices (Volume 5)

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APPENDIX A: CALIFORNIA ENVIRONMENTAL QUALITY ACT CHECKLIST

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Appendix A: California Environmental Quality Act Checklist

1. Project Title

Eldorado-Lugo-Mohave Series Capacitor Project (Proposed Project[1])

2. Lead Agency Name and Address

California Public Utilities Commission (CPUC)
505 Van Ness Avenue
San Francisco, California 94102-3298

3. Contact Person and Phone Number

Thomas Diaz
Southern California Edison Company (SCE)
Regulatory Affairs
2244 Walnut Grove Avenue, General Office 4 – 235G
Rosemead, CA 91770

4. Project Location

The Proposed Project is located in California and Nevada, within the Mojave Basin and Range (Mojave). Federal lands constitute a majority of the land area in the Mojave, including lands under the jurisdiction of the Bureau of Land Management (BLM), National Park Service (NPS), Bureau of Reclamation (BOR), and Department of Defense (DoD). The Proposed Project would modify three existing transmission lines that extend northeast from Lugo Substation (located in San Bernardino County, California) to Eldorado Substation (located in the City of Boulder City, Nevada) and Mohave Substation (located in Clark County, Nevada), and from Mohave Substation northwest to Eldorado Substation. Portions of the Proposed Project would also cross the City of Hesperia, California, the unincorporated community of Lucerne Valley in California, as well as the unincorporated communities of Searchlight and Laughlin in Nevada.

5. Project Sponsor's Name and Address

SCE
2244 Walnut Grove Avenue
Rosemead, CA 91770

6. General Plan Designation

The CPUC has sole and exclusive jurisdiction over the siting and design of the Proposed Project components located in the State of California.[2] Pursuant to CPUC General Order (G.O.) 131-D, Section XIV.B, "Local jurisdictions acting pursuant to local authority are preempted from

[1] The term "Proposed Project" is inclusive of all components of the Eldorado-Lugo-Mohave Series Capacitor Project. Where the discussion in this appendix focuses on a particular component, that component is called out by its individual work area (e.g., "Ludlow Series Capacitor").
[2] The Proposed Project is subject to local regulations in the State of Nevada.

regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the county and cities' regulations are not applicable as the county and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local land use designations and zoning is provided for informational purposes only. A summary of the planned land use designations of the Proposed Project is provided in Table A-1: Planned Land Use Designations and Zoning by Proposed Project Component.

Table A-1: Planned Land Use Designations and Zoning by Proposed Project Component

Proposed Project Component Location	Jurisdiction	General Plan Land Use Designation	Zoning
Eldorado-Lugo 500 Kilovolt (kV) Transmission Line			
The Proposed Project would extend southwest from Eldorado Substation (located in the City of Boulder City, Nevada) to Lugo Substation (located in San Bernardino County, California).	County of San Bernardino, and City of Hesperia	County of San Bernardino: ▪ Agricultural and Resource Management ▪ Residential ▪ Special Purpose City of Hesperia ▪ Utilities Corridor	County of San Bernardino: ▪ Agricultural and Resource Management ▪ Special Purpose ▪ Residential City of Hesperia ▪ Utilities Corridor
Eldorado-Mohave 500 kV Transmission Line			
The Proposed Project would extend southeast from Eldorado Substation to Mohave Substation (located in Clark County, Nevada).	Clark County, and City of Boulder City	Clark County: ▪ Major Development Projects ▪ Open Lands ▪ Public Facility ▪ Residential Agricultural ▪ Residential Suburban ▪ Right-of-Way (ROW) City of Boulder City: ▪ Open Lands (Multi-Species Conservation Easement)	Clark County ▪ Special Districts ▪ Manufacturing Design Districts (Industrial District) ▪ Residential Districts (Rural Open Land District, Medium Density Residential District) City of Boulder City: ▪ Government Open Space/Boulder City Conservation Easement

Proposed Project Component Location	Jurisdiction	General Plan Land Use Designation	Zoning
Lugo-Mohave 500 kV Transmission Line			
The Proposed Project would extend northeast from Lugo Substation to Mohave Substation.	County of San Bernardino, City of Hesperia, and Clark County	County of San Bernardino: ▪ Agricultural and Resource Management ▪ Special Purpose ▪ Residential City of Hesperia: ▪ Utilities Corridor Clark County: ▪ Major Development Projects ▪ Open Lands ▪ Public Facility ▪ Residential Suburban ▪ ROW	County of San Bernardino: ▪ Agricultural and Resource Management ▪ Special Purpose ▪ Residential City of Hesperia: ▪ Utilities Corridor Clark County: ▪ Special Districts ▪ Manufacturing districts ▪ Residential districts

Sources: Armantrout (2015), City of Hesperia (2015b), Clark County (2015a), County of San Bernardino (2007a, 2007b)

7. Zoning

A summary of the zoning designations of the Proposed Project is provided in Table A-1: Planned Land Use Designations and Zoning by Proposed Project Component.

8. Project Description

The Proposed Project includes the following components:

- Construction of two new 500 kV mid-line series capacitors—the proposed Newberry Springs Series Capacitor and Ludlow Series Capacitor—under the Eldorado-Lugo and Lugo-Mohave 500 kV Transmission Lines, respectively, near Pisgah Substation in unincorporated San Bernardino County, California

- Correction of 16 overhead clearance discrepancies[3] caused by the increase in megawatt capacity associated with the Proposed Project will require the relocation, replacement, or modification of existing transmission, subtransmission, and distribution facilities including minor grading along the Eldorado-Lugo, Eldorado-Mohave, and Lugo-Mohave 500 kV Transmission Lines within San Bernardino County, California, and Clark County, Nevada

- Installation of distribution facilities in the vicinity of the proposed Newberry Springs Series Capacitor and Ludlow Series Capacitor sites to provide station light and power in unincorporated San Bernardino County, California

- Installation of distribution facilities to provide station light and power to three proposed fiber optic repeater sites in unincorporated San Bernardino County, California

- Installation of telecommunications facilities to connect the Proposed Project to SCE's existing telecommunications system, including the following:

  – Installation of overhead and underground fiber optic cable would be installed to connect the proposed Newberry Springs Series Capacitor and Ludlow Series Capacitor, including installation of three fiber optic repeater sites adjacent to the Lugo-Mohave 500 kV Transmission Line right-of-way, within unincorporated San Bernardino County, California

  – Removal of an existing overhead ground wire, modification of existing towers to support optical ground wire (OPGW), and the installation of approximately 235 miles of overhead OPGW, which includes approximately 3 miles of underground fiber optic on SCE's existing Eldorado-Mohave and Lugo-Mohave 500 kV Transmission Lines

[3] SCE has defined "discrepancies" as potential clearance problems between an energized conductor and its surroundings, such as the structure, another energized conductor on the same structure, a different line, or the ground. SCE has identified approximately 16 discrepancies along the Eldorado-Lugo, Eldorado-Mohave, and Lugo-Mohave 500 kV Transmission Lines where minor grading or relocation, replacement, or modification of transmission, subtransmission, or distribution facilities are needed to address CPUC G.O. 95 and National Electrical Safety Code overhead clearance requirements.

  - Installation of fiber optic cable within the existing Eldorado, Lugo, and Mohave Substations

- Modifications within the existing Eldorado, Lugo, and Mohave Substations within San Bernardino County, California; Clark County, Nevada; and the City of Boulder City, Nevada, including the following:

  - Upgrade of the existing series capacitor banks at Eldorado and Lugo Substations
  - Installation of new terminal equipment at Eldorado, Lugo, and Mohave Substations
  - Replacement of the existing series capacitor bank at Mohave Substation
  - Removal of two existing tubular steel poles (TSPs) and installation of two new TSPs at Lugo Substation

9. Surrounding Land Uses and Setting

The Proposed Project is located in California and Nevada, within the Mojave. Federal lands constitute a majority of the land area in the Mojave, including lands under the jurisdiction of the BLM, NPS, BOR, and DoD. The Proposed Project would modify three existing transmission lines that extend northeast from Lugo Substation (located in San Bernardino County, California) to Mohave Substation (located in Clark County, Nevada), and would extend northwest from Mohave Substation to Eldorado Substation (located in the City of Boulder City, Nevada). Portions of the Proposed Project would also cross the City of Hesperia, California, the unincorporated community of Lucerne Valley in California, as well as the unincorporated communities of Searchlight and Laughlin in Nevada. The Proposed Project area is characterized by mostly undeveloped and open lands, utilities and infrastructure, and some low-density residential land uses in San Bernardino and Clark Counties. Surrounding land uses are described further in Section 3.1, Project Location in Chapter 3, Project Description, and in Section 4.10, Land Use and Planning.

ENVIRONMENTAL RESOURCES POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by the Proposed Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology and Soils
☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials	☐ Hydrology and Water Quality
☐ Land Use and Planning	☐ Mineral Resources	☐ Noise
☐ Population and Housing	☐ Public Services	☐ Recreation
☐ Transportation and Traffic	☐ Utilities and Service Systems	☐ Mandatory Findings of Significance

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project Could Not have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Title	Agency

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a Lead Agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the Lead Agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The Lead Agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced as discussed below).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other California Environmental Quality Act (CEQA) process, an affect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

    a. the significance criteria or threshold, if any, used to evaluate each question; and
    b. the mitigation measure identified, if any, to reduce the impact to less than significant

CEQA ENVIRONMENTAL CHECKLIST

Please note: explanatory text that accompanies these checkbox findings is provided at the end of this table.

Issues	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less-than-Significant Impact	No Impact
I. <u>AESTHETICS</u>: Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Issues	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less-than-Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒

Issues	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less-than-Significant Impact	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒
III. <u>AIR QUALITY</u>: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project**:**				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Issues	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less-than-Significant Impact	No Impact
IV. <u>BIOLOGICAL RESOURCES</u>: Would the project**:**				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

Issues	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less-than-Significant Impact	No Impact
V. CULTURAL RESOURCES: Would the project**:**				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐
d) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code section 21074?[4]	☐	☐	☐	☐
e) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☒	☐
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐

[4] This significance determination is pending completion of Tribal consultation.

Issues	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less-than-Significant Impact	No Impact
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
VII. GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒
VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment	☐	☐	☒	☐

Issues	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less-than-Significant Impact	No Impact
through the routine transport, use, or disposal of hazardous materials?				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands	☐	☐	☒	☐

Issues	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less-than-Significant Impact	No Impact
are adjacent to urbanized areas or where residences are intermixed with wildlands?				
IX. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒

Issues	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less-than-Significant Impact	No Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐
X. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☒	☐
XI. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒

Issues	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less-than-Significant Impact	No Impact
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
XII. NOISE: Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Issues	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less-than-Significant Impact	No Impact
XIII. <u>POPULATION AND HOUSING</u>: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XIV. <u>PUBLIC SERVICES</u>: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire Protection?	☐	☐	☐	☒
b) Police Protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other Public Facilities?	☐	☐	☐	☒

Issues	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less-than-Significant Impact	No Impact
XV. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
XVI. TRANSPORTATION/TRAFFIC: Would the project**:**				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including by not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☒	☐

Issues	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less-than-Significant Impact	No Impact
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐
XVII. UTILITIES AND SERVICE SYSTEMS: Would the project**:**				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐

Issues	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less-than-Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE:				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Sources and Explanation of Answers

This section summarizes the environmental impacts described in the Proponent's Environmental Assessment for the Proposed Project.

Aesthetics

As discussed in Section 4.1, Aesthetics, there are no officially designated scenic vistas in the Proposed Project area. However, there are scenic views throughout the Proposed Project vicinity, due to the undeveloped desert open spaces and unimpeded views of the surrounding mountains. The proposed facilities would be relatively small compared to the mountains in the background, and views of the mountains would remain unimpeded. In addition, the facilities do not contrast substantially with the existing landscape, and are relatively consistent with the BLM's Visual Resource Management (VRM) classes and objectives. Therefore, construction of the Proposed Project would result in less-than-significant impacts on scenic vistas.

Construction of the Proposed Project would have no impact on State Scenic Highways because none of the roadways within the Proposed Project area are designated as such. In the Proposed Project area, there are several locally designated scenic roadways—particularly within San Bernardino County—and the National Trails Highway is nominated as a National Scenic Byway. However, the Proposed Project's construction activities would be temporary, and would last weeks or months for the mid-line series capacitors and fiber optic repeaters and a day or two along the linear components before work moves onto the next segment.

During construction of the Proposed Project, construction crews, trucks, and equipment would be visible from public roadways and a few residences located close to the existing ROWs. In some locations, staging yards and pulling and tensioning sites may also be visible. Additional construction activities, including removal of overhead ground wire and installation of OPGW, would take place on existing lattice steel towers (LSTs) along the Eldorado-Mohave and Lugo-Mohave 500 kV Transmission Lines. Construction activities associated with the installation of goat peaks on LSTs would be temporary, lasting a day or two before moving onto the next LST. Views of the activities—as well the as trucks, equipment, cranes, helicopters, staging yards, and pulling and tensioning sites—would be temporary. Areas used for staging yards and pulling and tensioning sites would be restored to previously existing conditions where feasible. Therefore, impacts would be less than significant.

The Proposed Project would result in the construction of five new facilities—the proposed Newberry Springs and Ludlow Series Capacitors and the proposed Barstow, Kelbaker, and Lanfair Fiber Optic Repeater facilities. Construction of these permanent facilities would have incremental visual impacts on the existing viewshed, due to the presence of existing substations and LSTs associated with the existing Eldorado-Lugo, Eldorado-Mohave, and Lugo-Mohave 500 kV Transmission Lines. The VRM class associated with the proposed facilities would be weak to moderate for the mid-line series capacitors and weak for the fiber optic repeater sites. Because of the distance from public viewpoints, as well as viewsheds that include existing transmission facilities, the Proposed Project facilities would be relatively well integrated into the visual surroundings. In addition, the weak to moderate visual contrast with the surroundings are consistent with the VRM Class III objective. Therefore, impacts would be less than significant.

Construction of the Proposed Project would generally occur during daytime hours. However, for some construction activities, work may be required at night. Construction activities conducted at night would require the use of floodlights, which have the potential to illuminate properties in the vicinity of construction areas. To reduce the impact of nighttime lighting on neighboring properties, lighting would be directed on the Proposed Project site and away from surrounding areas during construction. As described in Chapter 3, Project Description, the lighting would be controlled by a manual switch and would normally be in the "off" position. The lights would be directed downward to reduce glare outside of the facility. Because the lighting would normally not be in use and would be directed within the facility, impacts would be less than significant.

Operation and Maintenance (O&M) of the Proposed Project would be similar to activities currently performed by SCE for existing facilities, and generally include repairing conductors, washing or replacing insulators, repairing or replacing other hardware components, repairing or replacing poles and towers, tree trimming, brush and weed control, and access road maintenance, among other things. O&M practices would also include routine inspections and emergency repair within substations and ROWs, which would require the use of vehicles and equipment. SCE also inspects the transmission and subtransmission ROWs, which would require the use of vehicles and equipment. SCE also inspects the transmission and subtransmission overhead facilities in a manner consistent with CPUC G.O. 165, which requires observation at least once per year, but inspection typically occurs more frequently to ensure system reliability. Following construction of the mid-line series capacitors, additional O&M activities would consist of monthly and annual inspections, as well as equipment testing and maintenance of emergency generators, ranging from once a year to once every five years. Additional testing, inspections, and maintenance of the building, site, generator, and fuel tank would also be required at the new fiber optic repeater facilities every six months to once a year. Activities associated with O&M would be temporary, and limited views of equipment, trucks, and personnel may be available for short periods of time. Therefore, impacts associated with O&M on scenic vistas and the visual character of the Proposed Project area would be less than significant.

As previously described, occasional O&M activities may be necessary during evening hours for emergency or scheduled work; however, the lighting would be manually controlled and directed downward to avoid glare. Therefore, impacts would be less than significant. In addition, because none of the roadways in the vicinity of the Proposed Project are State Scenic Highways, there would be no impact.

Agriculture and Forestry Resources

Construction of the Proposed Project would not be located on, nor would it span any land designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance. As a result, no impact would occur.

The existing transmission lines cross approximately 2.5 miles of land zoned for agricultural use. However, because the Proposed Project would modify existing facilities within existing or to-be-acquired franchise areas and SCE ROWs and no acquisition of existing agricultural lands would occur, the Proposed Project would not result in conflicts with agricultural zoning or result in any change of existing land uses, and no impact would occur. Less than 0.1 mile of land under a Williamson Act contract is crossed by the Lugo-Mohave 500 kV Transmission Line. In addition,

the Lugo-Mohave 500 kV Transmission Line is within 30 feet of another Williamson Act contract within unincorporated San Bernardino County. No permanent aboveground facilities would be constructed within lands under a Williamson Act contract, and no permanent conflicts with agricultural activities would result; therefore, the Proposed Project would not require the cancellation of any Williamson Act contract, and impacts would be less than significant.

The Proposed Project would not cross any area zoned for forest land, timberland, or Timberland Production Zones. Therefore, the Proposed Project would not conflict with or cause rezoning of these lands, and no impacts would result from construction of the Proposed Project.

Similarly, construction of the Proposed Project would not result in the conversion of forest land to non-forest use. While the existing Eldorado-Lugo and Lugo-Mohave 500 kV Transmission Lines span approximately 0.4 mile of mapped forest land and two proposed landing zones would be located within mapped forest land, construction on of the Proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. Following construction, the proposed landing zones would be restored to pre-construction conditions. Therefore, less-than-significant impacts would occur.

In addition, construction of the Proposed Project would not involve changes to the existing environment that would have the potential to convert farmland to non-agricultural use or forest land to non-forest use. The Proposed Project would modify existing facilities within existing and to-be-acquired franchise areas and SCE ROWs, and no expansion of ROW is proposed within agricultural or forest lands that could lead to future conversion of these lands. Therefore, there would be no impact.

As previously described, O&M activities associated with the Proposed Project would be similar to those currently performed for existing facilities. Therefore, O&M of the Proposed Project would not impact farmland or Williamson Act lands, conflict with zoning of forest lands, or result in a conversion of forest or farmland. As such, no impacts from O&M activities would result.

Air Quality

As described in Section 4.3, Air Quality, the Proposed Project's uncontrolled emissions would exceed the applicable Mojave Desert Air Quality Management District (MDAQMD) annual emission thresholds for particulate matter (PM) less than 10 microns in diameter (PM_{10}). The Proposed Project would be below the applicable MDAQMD annual emission thresholds for nitrogen oxides (NO_x), carbon monoxide (CO), and PM less than 2.5 microns in diameter ($PM_{2.5}$). To reduce emissions during construction, Applicant-Proposed Measure (APM-) AIR-01, APM-AIR-02, APM-AIR-03, APM-AIR-04, and APM-AIR-05 would be implemented. With the implementation of the APMs, the Proposed Project's controlled emissions would be below the MDAQMD and United States Environmental Protection Agency annual emission thresholds for NO_x, CO, PM_{10}, and $PM_{2.5}$. The Proposed Project's controlled emissions would also be below the applicable MDAQMD and Clark County Department of Air Quality annual thresholds for all emissions. As a result, impacts would be less than significant.

As described in Section 4.3.1, Environmental Setting, the Proposed Project site is currently designated as nonattainment under the California Ambient Air Quality Standards for ozone, PM_{10}, and $PM_{2.5}$. This location is also classified as nonattainment under the Nevada standards for PM_{10} and CO, as well as nonattainment under the National Ambient Air Quality Standards for PM_{10} and $PM_{2.5}$. However, with the implementation of APM-AIR-01, APM-AIR-02, APM-AIR-03, APM-AIR-04, and APM-AIR-05, the Proposed Project would be below applicable thresholds for all emissions. As a result, emissions from the Proposed Project would not be considered a cumulatively considerable net increase, and impacts would be less than significant.

Sensitive receptors in the Proposed Project vicinity could be exposed to increases in criteria air pollutants (CAPs) as a result of the fugitive dust released during excavation activities and vehicle travel on unpaved roads. Six sensitive receptors (occupied residences) are located within 500 feet of the Proposed Project. The nearest residence is located approximately 300 feet from the Lugo-Mohave 500 kV Transmission Line. As described previously, the Proposed Project emissions would be below all applicable emissions thresholds, and the construction schedule calls for multiple crews working simultaneously across the entire approximately 240-mile-long Proposed Project. As a result, the actual emissions that would be created at a single site, and thus at a single sensitive receptor, would be dramatically lower than the overall Proposed Project emissions. In addition, the following APMs would be implemented:

- APM-AIR-01 and APM-AIR-02 would be implemented to control fugitive dust and reduce CAP emissions from off-road equipment use
- APM-AIR-03 would be implemented to reduce equipment idling time
- APM-AIR-04 would be implemented to maintain equipment in good working order
- APM-AIR-05 would be implemented to encourage workers to carpool and/or utilize public transportation to travel to work sites

Exposure impacts to sensitive receptors would be less than significant due to the separation between construction activities and sensitive receptors, the APMs that would be implemented to reduce emissions, and because sensitive receptors would only be exposed to a single crew during construction for short periods of time.

Due to the nature of the Proposed Project, odor impacts are unlikely. Typical odor nuisances include hydrogen sulfide, ammonia, chlorine, and other sulfide-related emissions. No significant sources of these pollutants would exist during construction. An additional potential source of Proposed Project-related odor is diesel engine emissions. These emissions would be temporary in nature, would disperse quickly, and would be limited by the relatively small number of vehicles on site (i.e., an average of five off-road vehicles per construction location). In addition, most sensitive receptors are located far enough from the Proposed Project that they would not be affected by any odors caused by construction. Therefore, construction would not create objectionable odors that would affect a substantial number of people, and the impact would be less than significant.

O&M activities would continue to be conducted at a similar frequency and intensity as they are for the existing facilities in the Proposed Project area, with a minor amount of additional maintenance associated with the new mid-line series capacitors and fiber optic repeater sites. A minor increase in emissions would occur due to the regular, periodic inspections of the mid-line

series capacitors and fiber optic repeater sites. Therefore, due to the minor increase in emissions, the Proposed Project would not conflict with or obstruct implementation of the applicable air quality plans, and the Proposed Project would have no impact with regard to plan consistency. In addition, the minor increase in emissions would not violate any air quality standard or contribute substantially to an existing or projected air quality violation, nor would it result in a cumulatively considerable net increase of any CAP. As such, the O&M activities related to the Proposed Project would have less-than-significant impacts.

The Proposed Project's O&M activities are unlikely to result in odor impacts, as no significant sources of odor nuisances would exist during O&M activities. However, due to the minor increase in O&M activities associated with the new mid-line series capacitors and fiber optic repeater sites, minor increases in odors may occur at these locations, and impacts would be less than significant.

Biological Resources

As discussed in Section 4.4, Biological Resources, construction of the Proposed Project would result in temporary and permanent land disturbance. It is estimated that the Proposed Project would permanently disturb approximately 8.8 acres and temporarily disturb approximately 385.2 acres. Construction activities associated with the Proposed Project (i.e., earth-moving/grading, vegetation removal, and vehicle travel) have the potential to result in the mortality of special-status plant species that occur within temporary construction areas.

In accordance with APM-BIO-01, SCE would develop and implement a revegetation plan for special-status plants that may be impacted by construction activities. The revegetation plan would include measures for avoiding and minimizing impacts to special-status plants, to the maximum extent possible. SCE would also implement APM-BIO-02 by conducting pre-construction special-status plant surveys in accordance with the California Department of Fish and Wildlife (CDFW) (2009), United States (U.S.) Fish and Wildlife Service (USFWS) (1996), and California Native Plant Society (2001) guidelines. The locations of any special-status plants identified during the surveys would be marked or flagged for avoidance. These boundaries would be maintained during work at these locations and would be avoided during all construction activities to the extent possible. In addition, biological monitors would be present during vegetation removal and initial ground-disturbing activities to verify that activities are conducted within demarcated work areas. In accordance with APM-BIO-03, SCE would also establish a Noxious and Invasive Weed Management Plan (NIWMP) to minimize the spread of noxious and invasive weeds during construction. The NIWMP would require all equipment to be clean and weed-free prior to entering the ROW. It also would require that weed-free straw waddles are used and that the extent of noxious and invasive weeds are documented prior to construction. In accordance with APM-AIR-01, as described in Section 4.3, Air Quality, all areas disturbed by construction would be stabilized with a dust suppressant to minimize fugitive dust. As a result, the implementation of APM-AIR-01, APM-BIO-01, APM-BIO-02, APM-BIO-03, and biological monitoring would reduce impacts to special-status plant species to a less-than-significant level.

No special-status invertebrate, fish, or amphibian species are anticipated to occur in the Proposed Project area. Therefore, no impacts to such special-status species are anticipated. One special-status reptile species—desert tortoise (*Gopherus agassizii*)—was observed in the Biological

Resources Survey Area (BRSA). While not observed, Mojave fringe-toed lizard (*Uma scoparia*) and banded Gila monster (*Heloderma suspectum cinctum*) are likely to occur in the BRSA. To ensure special-status reptile species would not be impacted as a result of the Proposed Project, SCE would implement additional protection for general and special-status wildlife species, requiring that open trenches and excavations are covered and secured, and that construction materials are inspected for local wildlife. In addition, SCE would implement APM-BIO-04, which provides specific desert tortoise protection measures, including pre-activity surveys and construction monitoring. The implementation of APM-BIO-04 and the additional protections for general and special-status wildlife species would reduce the impacts to special-status reptile species to a less-than-significant level.

The Proposed Project activities would result in approximately 45.8 acres of temporary impacts to suitable desert tortoise critical habitat and 0.2 acre of permanent impacts to suitable desert tortoise critical habitat. To minimize impacts to suitable desert tortoise critical habitat, and in accordance with APM-BIO-01, a revegetation plan would be prepared and implemented to ensure that construction areas would be demarcated and restored. In addition, SCE would compensate for impacts to desert tortoise critical habitat at a 5-to-1 ratio and non-critical habitat at a one-to-one ratio, or as agreed upon in consultation with the USFWS, in accordance with APM-BIO-05. With the implementation of APM-BIO-01 and APM-BIO-05, impacts to desert tortoise and desert tortoise critical habitat would be less than significant.

No special-status avian species were observed during surveys. Three special-status avian species—golden eagle (*Aquila chrysaetos*), Bendire's thrasher (*Toxostoma bendirei*), and western burrowing owl (*Athena cunicularia*)—are likely to occur. To reduce temporary impacts to nesting bird species, SCE would implement APM-BIO-06 and APM-BIO-07, which would require construction activities avoid the nesting season to the extent feasible; require pre-construction nesting bird surveys; and implement no-work buffers, as appropriate, if nesting birds are found. While approximately 8.8 acres of permanent impacts to bird foraging habitat are anticipated due to the construction of the Proposed Project, permanent impacts to foraging habitat for all avian species would be limited, because the percentage of suitable foraging habitat that would be removed is extremely small in comparison to the total amount of available habitat for these species in the area. Therefore, permanent construction impacts to foraging avian species would be less than significant.

One special-status mammal species—desert bighorn sheep (*Ovis canadensis nelsoni*)—was observed within the BRSA. In addition, two special-status mammal species are likely to occur. To reduce potential impacts to special-status mammal species, Proposed Project personnel would be required to attend a Worker Environmental Awareness Program (WEAP) training that details the wildlife species that may occur within the construction area prior to starting work. Also, in accordance with additional protection for general and special-status wildlife species, all excavated, steep-walled holes or trenches deeper than 6 inches would either be covered at the end of each workday, or a ramp would be built to provide a means of escape for trapped animals. Before the holes or trenches are filled, they would be thoroughly inspected. In addition, all construction vehicles and equipment would adhere to a speed limit of 15 miles per hour on all unpaved surfaces to prevent wildlife mortality from vehicle collisions. Implementation of the

additional protections for general and special-status wildlife species would reduce the impacts to special-status mammal species to a less-than-significant level.

Construction of the Proposed Project would not impact riparian habitat under the jurisdiction of the CDFW. Construction activities associated with the Proposed Project are anticipated to result in temporary impacts to approximately 0.8 acre of previously disturbed sensitive natural communities and approximately 7.6 acres of undisturbed sensitive natural communities. No permanent impacts to sensitive natural communities are anticipated. SCE would implement APM-BIO-01, which would minimize impacts and permanent loss to sensitive natural vegetation communities. If impacts are unavoidable, SCE would implement a revegetation plan to restore vegetation to its pre-construction conditions, in accordance with APM-BIO-01. Implementation of APM-BIO-01 would reduce impacts to sensitive natural vegetation communities to a less-than-significant level.

To mitigate direct permanent impacts to federally protected wetlands, SCE would implement APM-BIO-08, which stipulates that authorizations must be obtained from the applicable jurisdictional agencies and mitigation must be implemented for permanent impacts to jurisdictional waters. With the implementation of APM-BIO-08, impacts to aquatic resources would be reduced to less-than-significant levels.

Potential indirect impacts to wetlands—as a result of spilling hazardous materials, erosion, and sedimentation—would be avoided and minimized through implementation of the Proposed Project's Storm Water Pollution Prevention Plans (SWPPPs), which are required by law. The SWPPPs would require that vehicles must be checked daily and maintained in accordance with manufacturer's specifications to minimize the potential for leaks, and refueling and maintenance of vehicles would occur at least 50 feet from the edge of any aquatic feature. As such, indirect impacts from the spillage of hazardous materials on aquatic resources would be less than significant.

The proposed facilities would be constructed in areas that are disturbed and do not have the potential to be used as a wildlife migration corridor. In addition, the Proposed Project would not impact riparian areas, which may serve as wildlife migration corridors. In accordance with APM-BIO-01, sensitive riparian habitat would be avoided to the maximum extent possible. If impacts cannot be avoided, a revegetation plan would be implemented that would restore all disturbed areas to pre-construction conditions. Implementation of APM-BIO-01 would reduce impacts to wildlife migration corridors to a less-than-significant level.

Local discretionary permits are preempted for projects under the jurisdiction of the CPUC. However, conflicts with local policies or ordinances protecting biological resources would be reduced to a less-than-significant level following implementation of APM-BIO-01. The Proposed Project within Clark County would occur within the Clark County Multiple Species Habitat Conservation Plan (MSHCP) area, although SCE's ROWs are within the BLM utility corridor, which is not regulated by the MSHCP. In accordance with APM-BIO-01, any potential conflicts with the Clark County MSHCP would be reduced by avoiding snags to the maximum extent possible. In addition, a revegetation plan would be implemented for all trees removed, in accordance with APM-BIO-01. With the implementation of APM-BIO-01, conflicts with the Clark County MSHCP would be less than significant.

Further modifications to habitats or impacts to species are not anticipated to occur due to O&M. Minor increases in ambient noise would be associated with the operation of the proposed Newberry Springs and Ludlow Series Capacitors. As a result, O&M impacts to special-status species and habitat would be less than significant.

Maintenance of structures within the transmission line ROW could involve minor clearing of vegetation and grading in previously disturbed areas. During these activities, sensitive natural vegetation communities would be avoided to the maximum extent practical. Therefore, O&M impacts to sensitive communities and the MSHCP would be less than significant.

O&M activities typically do not impact water quality nor result in discharges to waters as ground-disturbing activities are not usually required for O&M. However, if ground disturbance would be necessary, best management practices (BMPs) would be implemented to protect resources from any discharges. With the implementation of BMPs, the O&M for the new Proposed Project components is not expected to result in the impact of federally protected waters and drainages. In addition, if it is necessary to conduct any work within a channel or to remove riparian vegetation, the work would require approval from the U.S. Army Corps of Engineers (USACE) and the CDFW or the Nevada Department of Environmental Protection (NDEP), as well as adherence to any permit conditions associated with that approval. Therefore, impacts would be less than significant.

Cultural Resources

As discussed in Section 4.5, Cultural Resources, construction activities requiring ground disturbance could potentially disturb subsurface soils and affect buried cultural deposits or archaeological sites within the Proposed Project area. A 1-mile-buffer records search has recently been conducted for the Area of Potential Effect (APE) for the Proposed Project. A Class III pedestrian survey was also conducted for the APE, and the results are currently under review by the BLM. The results of the records search and survey would identify historical and archaeological resources in the Proposed Project area and determine their National Register of Historic Places (NRHP), California Register of Historic Resources (CRHR), and/or Nevada State Register of Historic Places (NSRHP) eligibility. The results of the records search and survey would be considered during the final design of the Proposed Project to minimize impacts on cultural resources during construction.

All potentially NRHP-eligible or archaeologically and historically sensitive sites identified during records searches and field surveys would be evaluated to determine eligibility for listing under the NRHP, CRHR, and/or the NSRHP. All potentially NRHP-eligible or archaeologically and historically sensitive sites identified within the APE would be considered Environmentally Sensitive Areas (ESAs) and avoided per APM-CUL-01. Per APM-CUL-02, SCE would perform cultural resource surveys prior to construction within any Proposed Project areas that were not previously surveyed, which may include new or modified staging areas, pull sites, or other work areas. Cultural resources discovered during these surveys would be subject to the mitigation measures and requirements specified in the Cultural Resource Management Plan (CRMP). Prior to construction, SCE would implement APM-CUL-03, which includes the preparation of a CRMP. The primary objectives of the CRMP would be the management, avoidance, and/or minimization of potential adverse effects on cultural resources. The CRMP would require the

demarcation of all ESAs with proper signage prior to construction. Signage would include protective fencing, flagging, or other markers to protect ESAs from inadvertent trespass during construction within 50 feet of ground-disturbing activities.

The CRMP would also specify monitoring requirements for the identification of cultural resources during construction and would outline procedures for the inadvertent discovery of cultural resources during construction. The CRMP would also specify roles and responsibilities of jurisdictional agencies for the long-term management of identified cultural resources in the APE.

As described in Section 3.9.2, Worker Environmental Awareness Training, SCE would implement the WEAP to train workers and establish procedures for treating previously unidentified resources. The WEAP would provide construction personnel with instruction on compliance with APMs and mitigation measures developed after pre-construction surveys. Additional objectives of the WEAP include instruction on the roles of cultural resource monitors and the appropriate treatment of areas designated as ESAs.

Based on the consideration of historical resources in the Proposed Project area during the final design of the Proposed Project, as well as the implementation of APMs and SCE's WEAP, no substantial adverse changes related to a historical or archaeological resource are anticipated. Therefore, impacts would be less than significant.

Although SCE is not the CEQA Lead Agency responsible for tribal consultations per Public Resource Code (PRC) Section 21080.3.1, SCE would submit a request to the Native American Heritage Commission (NAHC) for a search of its Sacred Lands File and a list of Native American individuals and organizations that might have knowledge of cultural resources in the Proposed Project area. Upon receipt of this information, SCE would contact the individuals and organizations listed by the NAHC. Tribal consultation is still in progress, and tribal resources may be identified as a result of the consultation process. Therefore, the impacts associated with tribal cultural resources have not been determined.

Construction activities requiring ground disturbance could potentially disturb or destroy significant paleontological resources. No fossil localities were identified within the boundaries of the Proposed Project area. However, several geologic units designated with a high paleontological sensitivity underlie the Proposed Project area. Therefore, SCE would implement APM-CUL-04 prior to construction of the Proposed Project, which includes the preparation of a Paleontological Resource Mitigation and Monitoring Plan (PRMMP). The PRMMP would outline procedures for monitoring in areas that contain sensitive paleontological resources, as well as recovery and treatment protocols to implement upon the discovery of sensitive paleontological resources during ground-disturbing construction activities. Implementation of the mitigation protocols outlined in the PRMMP would reduce impacts to a less-than-significant level.

O&M of the Proposed Project would involve minimal ground disturbance (if any) within previously disturbed areas. Therefore, O&M activities would not cause a substantial adverse change in the significance of a historical resource nor disturb human remains, and no impact would occur. In addition, as a standard BMP, the WEAP would provide training to O&M

personnel and establish procedures for handling previously unidentified paleontological resources or geological features. Therefore, O&M activities would not directly or indirectly destroy a unique paleontological resource, and no impact would occur.

Geology and Soils

As discussed in Section 4.6, Geology and Soils, Proposed Project components involving the installation of new structures—including the mid-line series capacitors, fiber optic repeaters, and improvements at the existing Eldorado, Lugo, and Mohave Substations—do not span any active faults in the Proposed Project area. The most active faults are crossed by portions of the existing Eldorado-Lugo and Lugo-Mohave 500 kV Transmission Lines to the west of Pisgah Substation. Geotechnical investigations would be conducted for the mid-line series capacitor sites and fiber optic repeater sites to ensure that new facilities installed during construction of the Proposed Project would be able to withstand seismic shaking and seismic-induced hazards. In addition, modifications to existing transmission, subtransmission, distribution, and telecommunications facilities would be designed in accordance with the standards provided in CPUC G.O. 95 and G.O. 128, and would be consistent with any relevant International Building Code (IBC) standards. As a result, the Proposed Project would be able to withstand reasonably foreseeable seismic events. Incorporation of these standard engineering practices would ensure that people or structures would not be exposed to hazards associated with strong seismic ground shaking. As a result, potential impacts are anticipated to be less than significant.

Several active faults—many of which are estimated to be capable of producing earthquakes with a maximum magnitude in excess of 6.7—are located within 25 miles of the Proposed Project components requiring new structures. Strong earthquakes, particularly near active faults, can result in liquefaction and collapse of soils if certain conditions are present. However, no new Proposed Project structures would be installed where active faults are crossed by existing transmission facilities. In addition, the proposed mid-line series capacitors, fiber optic repeaters, and modifications to existing substations are not located within mapped California Geological Survey- (CGS-) designated liquefaction or landslide areas. SCE would ensure that the final Proposed Project design would address site-specific soil conditions and implement recommendations from the geotechnical investigations for Proposed Project components requiring the installation of new facilities. Therefore, the Proposed Project would not subject construction personnel or proposed structures to geologic hazards, and impacts resulting from seismic-related ground failure would be less than significant.

Ground-disturbing activities would expose soil to erosion by removing the vegetative cover and potentially compromising the soil structure. Rain and wind may potentially further detach soil particles and transport them off site. The majority of the Proposed Project components involving ground disturbance are located within existing or to-be-acquired franchise areas and SCE ROWs where soil has been previously disturbed due to past and current construction and O&M activities. With the exception of certain portions of the existing 500 kV transmission lines, the majority of the Proposed Project is underlain by relatively flat terrain. Proposed Project components requiring the installation of new structures are located primarily within flat areas with slopes ranging from zero to 15 percent. Furthermore, geotechnical investigations would be conducted primarily for the mid-line series capacitor sites and fiber optic repeater sites to ensure that new structures installed during construction of the Proposed Project would be able to

withstand seismic-induced hazards and potential geologic instability. New access roads adjacent to the mid-line series capacitors would also be assessed during geotechnical investigations. Based on the relatively minor slopes underlying the majority of the Proposed Project, as well as the Proposed Project components requiring the installation of new structures, the potential for landslides or other forms of slope failure during construction would be low. As a result, impacts from unstable geologic units would be considered less than significant.

In addition, no CGS-designated liquefaction or landslide areas are mapped in the vicinity of Proposed Project components located in California. Based on the absence of CGS-designated liquefaction or landslide areas in the vicinity of Proposed Project components in Nevada, soil and groundwater conditions prone to liquefaction were examined in the Proposed Project area in Nevada. The majority of the soil types underlying Proposed Project components in Nevada are moderately well-drained, well-drained, somewhat excessively drained, or excessively drained. Shallow groundwater, which increases the potential for liquefaction, has not been reported in the vicinity of the Proposed Project components located in Nevada. In addition, the geologic setting underlying Proposed Project components in Nevada consists primarily of Quaternary alluvium and is similar to several areas in California with no mapped liquefaction areas. Based on the absence of shallow groundwater and the drainage characteristics of soil types underlying the Proposed Project, geologic characteristics prone to landslides, lateral spreading, subsidence, liquefaction, or collapse do not likely exist in the vicinity of Proposed Project components located in Nevada. Therefore, impacts resulting from unstable geologic units would be less than significant.

Most soil types underlying the Proposed Project contain little to no clays with swelling potential. In addition, geotechnical investigations would be conducted for work areas where new facilities are proposed to be installed. Data acquired during geotechnical investigations would be used to design the final grading plans to ensure that the soil composition, compaction, and grade mitigates the risk of damage from potentially expansive soils. Based on the implementation of recommendations provided in the geotechnical investigations, impacts resulting from expansive soils would be less than significant.

Soil permeability is a consideration for projects that require septic system installation. Because the Proposed Project would not involve the installation of a septic tank or an alternative wastewater disposal system, no impact would occur.

Following construction of the Proposed Project, SCE would design proposed aboveground and underground infrastructure in accordance with CPUC G.O. 95 and G.O. 128. The infrastructure would also be consistent with relevant IBC and California Building Code (CBC) design standards, which would allow structures to withstand reasonably foreseeable seismic events. Therefore, O&M of the Proposed Project is not expected to expose people or structures to hazards associated with strong seismic ground shaking. As a result, impacts would be less than significant.

O&M associated with the Proposed Project would not typically involve ground-disturbing activities or grading, and loss of topsoil is not anticipated. If ground-disturbing activities are required, SCE would implement BMPs to minimize erosion and control sedimentation within the work areas. Therefore, impacts to soil erosion or topsoil would be less than significant.

O&M activities are not expected to result in the increase or relocation of soils that would increase the probability of slope movement, lateral spreading, subsidence, or collapse as the O&M activities are generally limited to work in existing developed areas. O&M activities are also not anticipated to result in new, expansive soil conditions, and new soils imported for O&M activities would meet the requirements of Table 18-1-B of the Uniform Building Code and Section 1803.5.3 of the CBC. Therefore, O&M of the Proposed Project is not expected to result in substantial risks to life or property due to soil expansion or shrinkage. Finally, O&M of the Proposed Project would not involve the use of a septic tank or an alternative wastewater disposal system, as O&M of the Proposed Project is not anticipated to generate wastewater. As a result, no impact would occur.

Greenhouse Gas Emissions

As described in Section 4.7, Greenhouse Gas Emissions, the main source of greenhouse gas (GHG) emissions associated with the Proposed Project would be fossil fuel combustion in vehicles and equipment used during construction. Fossil fuel combustion during periodic maintenance and repair activities, as well as employees' on-road vehicle travel to and from the site, would be an additional source of GHG emissions during O&M. As shown in Table 4.7-3: Total Annual Greenhouse Gas Emissions in Section 4.7 Greenhouse Gas Emissions, the amortized construction emissions and increase in fugitive sulfur hexafluoride emissions would result in approximately 744.90 tons of carbon dioxide equivalent (CO_2e) annually. Because these emissions would be below the 100,000-ton CO_2e annual threshold, impacts would be less than significant. In addition, construction and O&M of the Proposed Project would not conflict with the policies, plans, and regulations that have been established to reduce GHG emissions.

Hazards and Hazardous Materials

As presented in Section 4.8, Hazards and Hazardous Materials, construction of the Proposed Project would involve the transport, use, and disposal of hazardous materials (e.g., fuels, lubricating oil, and hydraulic fluid), which could result in an inadvertent release or spill. To reduce the likelihood of spills, SCE would implement a Proposed Project-specific Hazardous Materials Management Plan (HMMP) that would include safety information regarding the transport, use, and disposal of hazardous materials in compliance with applicable laws, rules, and regulations. In addition, SCE would provide Proposed Project-specific BMPs in a SWPPPs to ensure that the transport, use, and disposal of hazardous materials are conducted in accordance with applicable regulations. Therefore, implementation of the HMMP and SCE's BMPs provided in the SWPPPs would reduce the likelihood of inadvertent spills originating from hazardous substances during construction. This would result in less-than-significant impacts from the routine transport, use, or disposal of hazardous materials.

In accordance with the Proposed Project's SWPPPs, minor spills or releases of hazardous materials that result from construction activities would be cleaned up immediately, thereby minimizing impacts. The SWPPPs would provide the locations for the storage of hazardous materials during construction, as well as protective measures, notifications, and cleanup requirements for any incidental spills or other potential releases of hazardous materials. With implementation of the SWPPPs, impacts due to accidental spills or releases would be less than significant. SCE would also develop a WEAP training, which would provide site personnel with

instruction regarding the SWPPPs and Proposed Project-specific BMPs, as described in Section 3.9.2, Worker Environmental Awareness Training in Chapter 3, Project Description.

Construction of the Proposed Project could encounter subsurface gas, water, or power utilities during excavation activities, which could result in a release of hazardous substances. However, subsurface utilities and structures would be avoided by screening for such structures prior to any trenching or excavation activities. Screening activities would include the use of Underground Service Alert, visual observations, and buried line-locating equipment. Therefore, the Proposed Project would not create a significant hazard to the public or the environment, and any potential impacts would be less than significant.

As described in Section 4.14, Public Services, no schools are located within 0.25 mile of the Proposed Project and only three schools were identified within 1 mile of the Proposed Project. Based on the distance and location of the three schools identified within 1 mile of the Proposed Project, it is not anticipated that vehicles transporting hazardous materials would utilize roads adjacent to these schools. If the transport of hazardous materials is required in the vicinity of schools, SCE would avoid the usage of roads adjacent to schools in the Proposed Project area. In addition, if hazardous materials are released and/or emitted during construction or the transport of hazardous materials, the impacted media would be contained and managed through implementation of the BMPs provided in the SWPPPs. Based on the absence of schools within 0.25 mile of the Proposed Project, hazardous emissions or handling hazardous substances would result in no impact to schools.

As presented in Table 4.8-1: Hazardous Sites Within 1 Mile of the Proposed Project and Figure 4.8-1: Hazardous Sites Within 1 Mile of the Proposed Project in Section 4.8, Hazards and Hazardous Materials, 11 contaminated sites are located within 1 mile of the Proposed Project. However, based on the relative distance of these sites to the Proposed Project, available topographic data, and a review of applicable historical documentation, it is unlikely that contaminated media associated with these sites would be encountered during construction of the Proposed Project. In the event that construction personnel encounter or are exposed to hazardous material, SCE would implement standard practices governing the handling and disposal of waste. A SWPPPs containing BMPs and an HMMP would also be implemented during construction. Therefore, impacts resulting from the discovery of contaminated materials during excavation activities would be less than significant.

The Proposed Project area is located within 2 miles of five public or private airports. The nearest public airport to the Proposed Project—the Hesperia Airport—is located approximately 0.9 mile northwest of the Proposed Project. SCE would file Federal Aviation Administration (FAA) notifications for Proposed Project structures, as required. However, the majority of the Proposed Project area would be built within existing or to-be-acquired franchise areas and SCE ROWs, and all construction activities would be performed at a distance from airport activity that would be sufficient to minimize safety concerns to construction personnel. There is a very low probability that a safety hazard to nearby residents or personnel would exist. Therefore, the impact would be less than significant.

The majority of the Proposed Project is located within the California Department of Forestry and Fire Protection (CAL FIRE) moderate fire hazard severity zone. Portions of the Proposed Project

are also located within the high and very high fire hazard severity zone, as well as some areas designated as non-wildland/non-urban land. Proposed Project activities would generally be located within existing or to-be-acquired franchise areas and SCE ROWs where vegetation has been previously cleared. Vehicles and equipment would primarily use existing roads, and would also use a drive and crush method for temporary construction areas containing vegetation. In addition, SCE would implement standard fire prevention protocols during construction activities and would comply with applicable laws and regulations. Prior to construction, contractors would be required to submit a fire prevention plan to SCE for review and approval. In the event that the National Weather Service issues a Red Flag Warning during construction of the Proposed Project, additional measures would be implemented. The portions of the Proposed Project area that are located within moderate to very high fire hazard severity zones would be grubbed of vegetation and graded before the staging of equipment, thereby minimizing the potential for vehicles or equipment to start a fire. As a result of these measures, construction of the Proposed Project would have a less-than-significant impact to the risk of loss, injury, or death involving wildland fires.

SCE participates with CAL FIRE, the California Governor's Office of Emergency Services (OES), the U.S. Forest Service (USFS), and various city and county fire agencies in the Red Flag Fire Prevention Program, and also complies with California PRC Sections 4292 and 4293 related to vegetation management in transmission line corridors. Therefore, with SCE's participation in the Red Flag Fire Prevention Program and compliance with applicable State and federal laws and regulations during construction, impacts resulting from wildland fire would be less than significant.

As previously described, O&M activities associated with the Proposed Project would be similar to those currently performed for the existing facilities, with additional O&M activities associated with the proposed mid-line series capacitors and fiber optic repeater facilities. The majority of the chemicals used for O&M activities are similar to those used in the construction phase and are listed in Table 4.8-2: Hazardous Materials Typically Used for Construction in Section 4.8, Hazards and Hazardous Materials. In addition, the removal of wood poles treated with hazardous substances (e.g., pentachlorophenol, creosote, or arsenicals) may be necessary during O&M activities. The existing wood poles removed for the Proposed Project would be returned to a staging yard and either reused by SCE, returned to the manufacturer, disposed of in a Class I hazardous waste landfill, and/or disposed of in the lined portion of a Regional Water Quality Control Board- (RWQCB-) certified municipal landfill. Hazardous materials are typically transported to and removed from the site by maintenance personnel, rather than being stored on site for extended periods of time. In addition, should a discharge occur, O&M personnel are trained and equipped to respond appropriately. Therefore, the Proposed Project would not create a significant hazard to the public or the environment, and impacts would be less than significant.

All hazardous materials would be transported, used, and disposed of in accordance with applicable rules, regulations, and SCE protocols designed to protect the environment, workers, and the public. Work would continue at a location only when clearance is given by the Safety and Environmental Specialist. Therefore, with the implementation of SCE's standard practices, the potential for exposing hazardous materials to Proposed Project personnel or the environment during O&M is unlikely. As a result, impacts would be less than significant.

O&M activities requiring the use of a helicopter would be coordinated with the FAA and local air traffic control prior to the commencement of activities and in the same or a similar manner as is done currently. In addition, helicopter use would be infrequent and in accordance with applicable federal, State, and local aviation rules and regulations. Because the height of proposed structures would be similar to existing structures, the Proposed Project would not result in a change to current flight patterns, and no additional safety hazards would occur for people residing or working in the Proposed Project area. As a result, any potential impacts would be less than significant.

O&M associated with the Proposed Project may infrequently require temporary lane closures to facilitate access to the Proposed Project. If O&M activities require lane closures, SCE personnel would coordinate emergency and evacuation routes with local responders implementing the Emergency Operations Plan to ensure that emergency evacuation routes specified in the plan are available, should an evacuation be necessary. Therefore, O&M activities would result in no impact to emergency evacuation and response plans.

Consistent with CPUC G.O. 95 and other applicable federal and State laws, SCE would conduct regular vegetation clearing during O&M and maintain an area of cleared brush around equipment to minimize the potential for fire. As previously discussed, SCE participates with CAL FIRE, the California Governor's OES, the USFS, and various city and county fire agencies in the Red Flag Fire Prevention Program and complies with California PRC Sections 4292 and 4293 related to vegetation management in transmission line corridors. As a result, O&M associated with the Proposed Project would result in no impact to the risk of loss, injury, or death involving wildland fires.

Hydrology and Water Quality

Construction of the Proposed Project would comply with the wastewater requirements of the Lahontan and Colorado River RWQCBs, as well as the NDEP. The Proposed Project does not cross any 303(d)-listed waterbodies; thus, the Proposed Project would not contribute to the impairment of any 303(d)-listed waterbodies. However, construction of the Proposed Project would result in ground-disturbing activities that could expose soil to erosion and subsequent sedimentation. To minimize the potential for adverse effects to water quality from erosion and sedimentation, SWPPPs would be prepared and implemented. In addition, hazardous materials would also be used during construction; the handling, storage, and disposal of these materials would be addressed in the SWPPPs and HMMP, thereby reducing impacts to a less-than-significant level. With implementation of the Proposed Project-specific BMPs provided in the SWPPPs and adherence to the Construction General Permit, the Proposed Project is not expected to violate water quality standards or waste discharge requirements. Therefore, no wastewater treatment requirements established by the RWQCBs would be exceeded, and impacts would be less than significant.

The Proposed Project would use water as a dust suppressant at construction sites, at LST locations where OPGW is installed, and at discrepancy work areas where grading is necessary. It is anticipated that approximately 124,200 gallons of water per day would typically be used during construction of the Proposed Project, and approximately 146,000 gallons of water per day would be used during peak grading activities. Water would be obtained from local municipal

sources. Because the amount of water utilized for the Proposed Project is minor compared to the amount of water available from purveyors (as described in Section 4.17, Utilities and Service Systems), the Proposed Project would not substantially deplete groundwater supplies such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. In addition, the Proposed Project is unlikely to negatively affect groundwater recharge capacity in the vicinity. The Proposed Project would result in the addition of approximately 2.1 acres of impervious surface, which accounts for less than 0.01 percent of the total acreage of land in the groundwater basins in the Proposed Project area. As a result, impacts to groundwater recharge would be less than significant.

Construction of the Proposed Project would result in permanent disturbance of less than 0.1 to USACE-, RWQCB-, and NDEP-jurisdictional resources and less than 0.1 acre to CDFW-jurisdictional resources. In addition, the Proposed Project would result in the temporary disturbance to approximately 9.2 acres of USACE-, RWQCB-, and NDEP-jurisdictional drainage features and 11.9 acres to CDFW-jurisdictional features. SCE would mitigate for permanent impacts as required by the permitting agencies, and would restore temporarily impacted areas to pre-construction conditions. Outside of the permanent facilities, areas with soil and vegetation disturbance would be returned to near pre-construction conditions in accordance with the Proposed Project's SWPPPs. The overall drainage patterns in the Proposed Project area would remain unchanged; thus, flow directions and rates would not change. SCE would construct drainage channels and culverts around the mid-line series capacitors to divert storm water runoff from the capacitor sites and follow the natural drainage patterns in the area to prevent any flooding on or off site. As a result, potential impacts to the existing drainage patterns would be less than significant.

As previously described, the Proposed Project would not substantially increase impervious surfaces resulting in a substantial increase in runoff. In addition, permanent cut and fill slopes associated with the proposed Newberry Springs Series Capacitor and Ludlow Series Capacitor sites would be stabilized during construction by utilizing BMPs described in the Proposed Project's SWPPPs. The Proposed Project would contribute only minor amounts of polluted runoff during construction, which would be controlled and minimized through the implementation of the erosion and sediment control measures in the SWPPPs. Therefore, impacts would be less than significant.

The Proposed Project would not involve the construction of new housing. As a result, no new housing would occur within a mapped flood hazard, and no impact would occur. While the Proposed Project would be located within a 100-year flood hazard area, all new structures would be designed to accommodate the flow of floodwaters through or around the facilities, and flow would not be impeded or redirected. As a result, proposed structures would not impede or redirect flows, and no impact would occur.

The Proposed Project would not cross any levees, but would cross a designated dam inundation zone associated with the Mojave Dam. However, because the Proposed Project would have no impacts on the dam and would be designed to withstand the effects of dam failure, the impacts due to flooding as a result of dam or levee failure would be less than significant. In addition, the Proposed Project would not result in a significant risk of loss, injury, or death involving

inundation by seiche, tsunami, or mudflow. The Proposed Project would be too far from a lake to be at risk of a seiche and would not be located within a tsunami inundation area. Furthermore, the Proposed Project would not be located on soils susceptible to catastrophic slope movement, lateral spreading, subsidence, or collapse. As result, impacts to people or structures resulting from construction of the Proposed Project would be less than significant.

O&M activities would not involve the creation of any additional impervious surfaces, nor would they utilize large amounts of water; therefore, O&M would not deplete groundwater supplies such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Thus, no impact to groundwater supplies would occur. In addition, O&M activities would not substantially change drainage patterns, provide an increase in polluted runoff, or increase impervious surfaces. As a result, impacts to drainage patterns would be less than significant. O&M of the Proposed Project would not impede or redirect flood flows, and would have no impact. Lastly, because O&M activities associated with the Proposed Project would generally be similar to those currently performed for the existing facilities, O&M activities would not result in an increased exposure to risk associated with flooding or inundation by seiche, tsunami, or mudflow.

Land Use and Planning

As described in Section 4.10, Land Use, the nearest residential communities are located approximately 0.7 mile north of the Lugo-Mohave 500 kV Transmission Line in San Bernardino County and adjacent to the Lugo-Mohave 500 kV Transmission Line in Clark County. However, these neighborhoods would not be physically divided as a result of the Proposed Project because none of the residential neighborhoods would be crossed by the Proposed Project, and the construction activities would occur within existing or to-be-acquired franchise areas and ROWs. In addition, access to businesses and other uses in the area surrounding the Proposed Project would generally be maintained during the construction phase. Any lane closures required during construction of the Proposed Project would be temporary and are not anticipated to create a division between area land uses or within the larger community, because alternative routes would be available. Therefore, construction of the Proposed Project would not physically divide an established community, and no impact would result.

As previously discussed, the CPUC's jurisdiction over electric power line projects and substations exempts the Proposed Project under G.O. 131-D from local land use regulations. Therefore, local jurisdictions are pre-empted from regulating the Proposed Project pursuant to G.O. 131-D. Construction of the Proposed Project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the Proposed Project. While the Proposed Project is subject to local regulations in the State of Nevada, construction activities would generally occur in an existing transmission line corridor and would not conflict with relevant land use plans, policies, or regulations. As a result, no impact would occur.

Construction of the Proposed Project would be consistent with the conservation policies established in the Desert Renewable Energy Conservation Plan and the West Mojave Route Network Project and Plan Amendment/West Mojave Plan. Portions of the Proposed Project within Clark County would occur within the Clark County MSHCP area, although SCE's ROWs are within the BLM utility corridor, which is not regulated by the MSHCP. As discussed in

Section 4.4, Biological Resources, for any areas outside the ROW, the Clark County MSHCP provides protection for snags as an ecologically important feature, especially in stands of the *Juniperus californica* woodland alliance, *Psorothamnus spinosus* woodland alliance, *Salix exigua* woodland alliance, and *Yucca brevifolia* woodland alliance. Impacts to each of these alliances are detailed in Section 4.4, Biological Resources. With the implementation of APM-BIO-01, which avoids snags to the extent possible and implements a revegetation plan for all trees removed, conflicts with the Clark County MSHCP would be less than significant.

O&M activities associated with the Proposed Project would occur within existing or to-be-acquired franchise areas and ROWs. Such activities do not currently divide an established community, nor would they be anticipated to do so as a result of the Proposed Project; therefore, no impact would occur as a result of the Proposed Project's O&M activities. In addition, O&M of the Proposed Project would not conflict with existing and proposed nearby residential, open space, recreation, public institutional schools, religious facilities, commercial, retail, and industrial uses because O&M of the Proposed Project would not facilitate any changes or modifications to the existing land uses. Therefore, O&M activities associated with the Proposed Project would have no impact on any land use plan, policy, or regulation.

Mineral Resources

There are no active mining and/or mineral plant sites reported in the State databases within 1 mile of the Proposed Project in the States of California or Nevada. There are 48 mineral resource producers, past producers, or prospects within 1 mile of the Proposed Project; however, none are located within the ROW for the Proposed Project. Construction would occur primarily on existing or to-be-acquired franchise areas and ROWs. Therefore, the Proposed Project would not prevent future extraction of any of these mineral resources, and no impact would occur. Furthermore, the Proposed Project does not cross any designated sectors; and construction activities would occur within existing or to-be-acquired franchise areas and ROWs. The Proposed Project would not prevent the mineral resources in the surrounding areas from being extracted. Therefore, there would be no loss of availability of regionally valuable aggregate resources, and no impact would occur.

As previously discussed, no active mines, mineral plants, producers, or prospects are located within the ROWs for the Proposed Project. Should future extraction of aggregate resources be desired, such activities would be precluded in the ROW. As a result, there would be no impact to a locally important mineral resource recovery site delineated in a general plan, specific plan, or other land use plan due to construction of the Proposed Project.

O&M of the Proposed Project would be similar to the activities currently performed by SCE for existing facilities and would occur within existing or to-be-acquired franchise areas and ROWs. As a result, O&M activities would not reduce the availability of known mineral resources and the availability of locally important mineral resource recovery sites, and no impact would occur.

Noise

As discussed in Section 4.12, Noise, construction activities would require the temporary use of noise-generating construction equipment, including helicopters. The local jurisdictions in the Proposed Project area restrict the hours of construction, but not the construction noise levels

produced. By complying with local noise ordinances or providing notice prior to construction activities that would occur outside of the exempted construction hours, impacts from excessive noise generation would be less than significant.

Construction activities can generate varying degrees of groundborne vibration and noise levels, depending on the construction procedures and the construction equipment used. Worst-case groundborne vibration impacts would be expected to result from the installation or modification of transmission line towers. However, the installation or modification of transmission line towers would be brief, lasting a few days at each location, and would not occur in close enough proximity to sensitive receptors to cause annoyance or damage. Therefore, impacts from excessive ground vibration would be less than significant.

Construction of the Proposed Project would be temporary, lasting approximately 15 months for the entire Proposed Project and less at any given location. No permanent ambient noise would be created as a result of the construction phase of the Proposed Project, and a permanent increase in ambient noise levels would not occur. Therefore, there would be no impact.

Temporary increases in ambient noise levels would result from construction activities associated with the Proposed Project. To reduce noise levels, APM-NOI-01 would be implemented, which would restrict helicopter use to two hours per day at landing zones within 700 feet of occupied residences. With APM-NOI-01 implemented, noise levels at these residential receptors would range between 69 and 75 A-weighted decibels (dBA). To further reduce noise levels from helicopter use at sensitive receptors in the vicinity of the Proposed Project, SCE would implement APM-NOI-02, which would ensure that helicopters maintain a minimum elevation of 500 feet when not working at a tower work area or assisting with conductor stringing activities, and would restrict flight paths from within 500 lateral feet of all schools. Based on the anticipated construction schedule and the assumption that the Proposed Project equipment would be maintained in proper operating condition and with appropriate mufflers, and with the implementation of APM-NOI-01 and APM-NOI-02, noise from temporary construction activities is expected to be less than significant.

The nearest public airport is the Hesperia Airport, which is located approximately 0.9 mile northwest of the discrepancy work area between Tower M4-T2 and Tower M4-T3 on the Lugo-Mohave 500 kV Transmission Line. However, the Proposed Project is not located within any noise contours specified in the Comprehensive Land Use Plan for the Hesperia Airport. Additional public airport facilities within 2 miles of the Proposed Project include the Laughlin/Bullhead International Airport, Kidwell Airport, and Searchlight Airport. All planned construction in the vicinity of Laughlin/Bullhead International Airport is located outside of the 65 dBA noise impact zone, and Kidwell and Searchlight Airports do not have existing airport land use compatibility plans that overlap with the Proposed Project. As a result, construction crews working on the Proposed Project would not be exposed to excessive airport noise levels, and no impact would result. In addition, the Proposed Project would not be located within the vicinity of an active private airstrip, and no impacts would occur.

O&M activities associated with the overhead transmission and subtransmission lines would be similar to those currently performed by SCE for existing facilities. Operational noise generated by the Proposed Project would not exceed any local noise regulations, and there would be no

impact. In addition, anticipated noise levels would comply with all applicable noise ordinances. Ambient noise generated by the Proposed Project's facilities would not represent a significant increase in ambient noise levels, nor would it expose persons to generation of excessive groundborne vibration or groundborne noise levels. Therefore, impacts would be less than significant. Lastly, because the Proposed Project is not located within the airport noise compatibility contours for the Hesperia Airport or in the vicinity of an active private airport, operation of the Proposed Project would have no impact.

Population and Housing

As discussed in Section 4.13, Population and Housing, construction of the Proposed Project would not result in a permanent increase in the area's population because construction would be temporary and last approximately 15 months, and because the workforce would be relatively small (i.e., 15 to 346 construction personnel at any given time) and would likely commute from the surrounding areas. Furthermore, the Proposed Project would not directly induce any permanent population growth because it does not involve the construction of any new homes or businesses, and it would not indirectly induce population growth by extending infrastructure into previously unserved areas. Therefore, no permanent or long-term population growth in the area would occur due to construction of the Proposed Project, and there would be no impact.

Construction of the Proposed Project would not require displacement of any existing housing units or people. As a result, no houses would be displaced, thereby necessitating construction or replacement housing elsewhere; and no people would be displaced as a result of construction of the Proposed Project.

O&M activities associated with the Proposed Project would be similar to those currently performed by SCE for existing facilities. As a result, the Proposed Project is not expected to cause a direct or indirect increase in population growth, nor would it displace housing units or people.

Public Services

As presented in Section 4.14, Population and Housing, construction of the Proposed Project would be temporary and short term in nature and would not affect the provision of existing emergency services or require the provision of public services beyond existing capabilities. As a result, impacts to fire and police protective services and other emergency services would be less than significant. Proposed Project construction activities would not require the expansion of or result in an adverse impact to schools and other types of public facilities, including parks, hospitals, and libraries. Construction of the Proposed Project would not create a significant new workforce that would result in a new or increased demand for school services or other existing public services. Therefore, no impacts would occur.

O&M activities associated with the Proposed Project would be similar to those currently performed by SCE for existing facilities. Therefore, O&M activities would not cause an increase in the use of existing public services nor would they result in a need for new or physically altered schools, hospitals, fire, law enforcement, or other services. As a result, O&M activities would not impact public services.

Recreation

As discussed in Section 4.15, Recreation, SCE anticipates that 15 to 346 construction personnel (or an average of 159) would be working on the Proposed Project at any given time during the approximately 15 months of Proposed Project construction. Crewmembers would likely commute from the San Bernardino and Clark County area and are not anticipated to permanently relocate to the area. The minor increase in daily worker population would be temporary and would not put additional demand on existing recreational facilities. Parks and recreational facilities crossed by or adjacent to the Proposed Project may be temporarily affected by construction-generated noise, traffic congestion, or access limitations. Because these closures would be temporary, short in duration (i.e., lasting several hours to several days), and coordinated with local agencies through the permitting process, the Proposed Project would not cause significant impacts to transportation and traffic in the area. Access to various recreational facilities would be temporarily restricted and could increase the use of surrounding recreational facilities. However, given the limited duration of construction and the availability of other recreational facilities in the vicinity of the Proposed Project, any resulting increase in the use of nearby recreational facilities would be brief and temporary, and would have a negligible effect on the condition of the nearby parks. Additionally, advance notice of temporary trail or access closures would be provided at the affected facilities before periods of active construction and during temporary closures. As a result, potential impacts to nearby recreation areas would be less than significant.

The Proposed Project does not include or require the construction of recreational facilities. As previously described, the impacts to any existing facilities would be temporary and less than significant, and the Proposed Project would not induce population growth in the area directly or indirectly. Therefore, the Proposed Project would not promote new growth or development that would increase the use of existing recreational facilities. As a result, the Proposed Project would not require the construction or expansion of recreational facilities, and no impact would occur.

O&M activities associated with the Proposed Project would be similar to those currently performed by SCE for existing facilities. Because the number of new personnel in the Proposed Project area would not increase, no additional park and recreational facility usage is expected, and no impact would occur. As described in Section 4.13, Population and Housing, the Proposed Project would not create a need for additional housing or a long-term population increase that would result in a permanent increase in park or recreational facility use. The Proposed Project would accommodate existing and planned growth within the SCE service area and would not alter the location, distribution, density, or growth rate of the population.

Transportation and Traffic

Construction and temporary lane closures associated with the Proposed Project may intermittently disrupt traffic on local streets. Temporary lane closures may be necessary in areas where existing or proposed structures are located adjacent to roadways and during conductor stringing operations. These temporary lane closures could result in delays to traffic and bus travel; however, because these closures would be temporary, short in duration, and coordinated with local agencies through the permitting process, potential impacts to transportation and traffic would be less than significant. Temporary construction activities may intermittently reduce,

disrupt, or temporarily eliminate access to portions of a Class II bikeway, pedestrian sidewalks, and trails. However, impacts to bikeways and sidewalks affected by temporary road or lane closures would be addressed within the encroachment permits obtained for the Proposed Project. In addition, the Proposed Project would span the BNSF Railway twice and Union Pacific Railroad twice. However, SCE would obtain the required pipeline/wire line crossing permits from the BNSF Railway and Union Pacific Railroad prior to the initiation of construction activities in the vicinity of railroad facilities. Therefore, the Proposed Project would not result in conflicts with relevant circulation plans or policies established to ensure the performance of the circulation system, and impacts would be less than significant.

Construction activities would occur over approximately 15 months, and small increases in traffic resulting from personal vehicle trips and truck trips would be periodic and temporary. Crews would be spread out and assigned to several different Proposed Project components on any given day, which would prevent traffic congestion at any one location. Vehicle access would primarily occur along existing local roads, access roads, and service roads within existing SCE ROWs. In addition, vehicle trips generated by construction personnel would generally occur with workers arriving at the site in the morning and leaving the site at the end of the day, with limited worker-related trips to or from the work site during the course of the day. SCE would also encourage carpooling to further reduce the potential number of daily worker-related vehicle trips. Therefore, roadways would be subjected to negligible increases in traffic, and applicable Congestion Management Program or Level of Service (LOS) standards would not be exceeded. The existing LOS designations for roadways with available data do not exceed LOS standards provided for the Proposed Project area. Based on the dispersal of construction crews over a largely undeveloped region during construction, the existing traffic volumes in the Proposed Project vicinity, and the relatively minor number vehicle trips associated with the Proposed Project in any given location, impacts would be less than significant.

SCE would file FAA notifications for Proposed Project structures as required. As a result, the Proposed Project would not result in impacts that are related to a change in air traffic patterns that would cause substantial safety risks. Thus, the impact would be less than significant. In addition, the Proposed Project would not substantially increase hazards due to a design feature or potentially disrupt emergency access. SCE would coordinate with the local agencies and/or the California Department of Transportation, and would employ traffic control measures described within required encroachment permits and the California Joint Utility Traffic Control Manual. Therefore, any potential impacts would be less than significant.

O&M activities associated with the Proposed Project would be similar to those currently performed by SCE for existing facilities. O&M activities would generate a negligible increase in vehicles trips associated with the mid-line series capacitor sites and fiber optic repeater sites that would be conducted intermittently and consist primarily of monthly and annual inspections. Therefore, O&M would not conflict with applicable traffic plans and policies and a less-than-significant impact would occur. Similarly, this negligible increase in vehicle trips would not affect LOS standards on major roadways, increase transportation-related design hazards, or restrict emergency access in the Proposed Project vicinity. As a result, no impact would occur.

As with construction, O&M of the Proposed Project would not result in an increase in air traffic, nor would it include design features that would impact air traffic patterns. SCE would continue to inspect the transmission and subtransmission overhead facilities in a manner consistent with CPUC G.O. 165, which requires at least an annual inspection via ground and/or aerial (helicopter) observation, but the inspections can occur more frequently based on field conditions and system reliability. For aerial inspections, SCE would continue to consult with the FAA on helicopter flight plans. Therefore, O&M requiring helicopter inspections would not change following the construction of the Proposed Project, and no impact would occur.

Utilities and Service Systems

As described in Section 4.17, Utilities and Service Systems, construction of the Proposed Project would comply with the wastewater requirements of the Lahontan and Colorado River RWQCBs. Portable toilets would be used in accordance with applicable sanitation regulations established by the Occupational Safety and Health Administration, and waste would be disposed of in compliance with standards established by the RWQCBs. No new point sources of water pollution would result from construction, and no dewatering is anticipated during construction. Therefore, there would not be any exceedance of wastewater treatment requirements, and there would be no impact as a result of construction of the Proposed Project.

Because the Proposed Project involves upgrades to existing transmission lines, construction would not directly or indirectly result in new or expanded development. As a result, no new extension of sewer or water lines would be required to serve the Proposed Project, and no new or expanded water or wastewater treatment facilities would be needed. Construction of the Proposed Project would typically require approximately 124,200 gallons of water per day, and approximately 146,000 gallons of water per day would be used during peak construction. SCE would confirm with the water service purveyor that adequate water is available for the Proposed Project prior to construction; therefore, any potential impacts would be less than significant.

Construction-related activities would not result in a substantial increase in impervious surfaces that would increase storm water runoff from the Proposed Project area, and it is expected that rates of storm water runoff during construction would be similar to pre-construction conditions. Additionally, impacts resulting from the use of water for dust suppression would be addressed through the implementation of the SWPPPs, BMPs, and National Pollutant Discharge Elimination System permit requirements. Therefore, the modification of existing drainage features during construction would not substantially increase the existing velocity or volume of storm water flows either on site or in off-site areas. Because construction activities would not result in significant increases in runoff, the Proposed Project would not require the construction of new storm water drainage facilities or the expansion of existing facilities. As a result, no impact would occur due to construction of the Proposed Project.

Water would be required during site grading and construction activities to control dust on non-paved portions of the Proposed Project area. Water purveyors that would be utilized during construction are projected to have at least 111.6 billion gallons of water available. Therefore, a sufficient water supply should be available to meet water demands for construction needs. However, SCE would confirm with the water service purveyor that adequate water is available for the Proposed Project prior to construction. Where possible, SCE would also utilize soil

binders, reclaimed water, and other measures to conserve water usage. A less-than-significant impact would occur as a result of construction of the Proposed Project.

There are two facilities in close proximity to the Proposed Project that can provide approximately 57.6 million gallons of wastewater treatment capacity per day, and the Proposed Project is anticipated to generate 1,380 to 1,610 gallons of wastewater from portable restrooms per week during peak construction. Therefore, construction of the Proposed Project is not expected to generate substantial new levels of wastewater that would result in significant impacts to the wastewater treatment system capacity. The Proposed Project would not result in an increase in the existing population and would neither create nor increase the demand on the existing wastewater systems in the area. As a result, no impact associated with the production of the excess wastewater would occur as a result of construction of the Proposed Project.

Construction of the Proposed Project would generate a limited amount of solid waste during construction (i.e., green waste, refuse, spoils, and trash). In total, the landfills near the Proposed Project have a combined capacity to accept approximately 234.9 million cubic yards of additional waste. Because the local landfills have sufficient capacity, any potential impacts would be less than significant as a result of construction of the Proposed Project. Furthermore, solid waste generated during construction of the Proposed Project would be properly stored in a designated area of the laydown yard and would be disposed of in a manner that is consistent with the applicable federal, State, and local statutes and regulations related to solid waste. As such, there would be no impact to applicable statutes and regulations as a result of construction of the Proposed Project.

O&M activities associated with the Proposed Project would be similar to those currently performed for the existing facilities. Therefore, no new storm water drainage facilities would be required nor would the expansion of existing facilities be required. No additional water beyond the current water usage is anticipated to be required, and water supplies from existing entitlements and resources would be sufficient to continue accommodating O&M activities. Although one permanent restroom would be required for O&M activities, a negligible volume of wastewater would be generated. O&M activities are not expected exceed current waste volumes and contracted landfill facilities have sufficient capacity. Waste would be disposed of in a manner that complies with federal, State, and local regulations. As a result, no impacts to O&M are anticipated.

Mandatory Findings of Significance

As presented in Chapter 4, Environmental Impact Assessment Summary, construction and O&M of the Proposed Project would not significantly degrade the quality of the environment. As discussed in Chapter 3, Project Description, construction of the Proposed Project would temporarily disturb approximately 385.2 acres and permanently disturb approximately 8.8 acres. As discussed in Section 4.4, Biological Resources, construction activities would result temporary impacts to approximately 0.8 acre of previously disturbed sensitive natural communities and approximately 7.6 acres of undisturbed sensitive natural communities. Approximately 8.8 acres of nesting bird foraging habitat—including habitat for western burrowing owl and golden eagle—would also be permanently impacted. The Proposed Project would also temporarily impact approximately 45.8 acres of desert tortoise critical habitat and permanently impact

approximately 0.2 acre of desert tortoise critical habitat. In addition, construction of the Proposed Project would result in direct temporary impacts to approximately 9.2 acres of water features potentially under the jurisdiction of the USACE, RWQCB, and NDEP. Construction of the Proposed Project would result in less than 0.1 acre of permanent impacts to water features under the jurisdiction of the USACE, RWQCB, and NDEP. Construction of the Proposed Project would also result in direct temporary impacts to approximately 11.9 acres and direct permanent impacts to less than 0.1 acre of areas potentially under the jurisdiction of the CDFW. Construction of the Proposed Project would not impact any wetlands under the jurisdiction of the USACE, RWQCB, NDEP, or CDFW.

Impacts would be minimized through the implementation of proposed APMs, which include the preparation of a revegetation plan to restore vegetation communities and replace special-status plants. Desert tortoises would be protected through pre-activity surveys and monitoring, as well as other preventative measures. Nesting birds would be protected through pre-construction surveys. Impacts to desert tortoise critical habitat compensated for at a five-to-one ratio, and impacts to non-critical habitat would be compensated at a one-to-one ratio, or as required by regulatory agencies. Permanent impacts to jurisdictional waters would be compensated at a one-to-one ratio, or as required by regulatory agencies. Because the Proposed Project is located almost exclusively within the existing and previously disturbed ROW, it would not substantially reduce the habitat of a fish or wildlife species. Because habitat that is impacted would be restored or replaced as required, wildlife populations would not drop below self-sustaining levels due to habitat loss, and fish populations would not be affected at all. Because vegetation communities and rare plants would be restored or replaced, the Proposed Project would not threaten to eliminate a plant or wildlife community. Finally, because the Proposed Project is located within an existing ROW with existing transmission facilities, the Proposed Project would not reduce the number or restrict the range of rare or endangered plants or wildlife.

As discussed in Section 4.5, Cultural Resources, cultural resources surveys have not been conducted for the Proposed Project to date due to the lack of federal agency approval, and therefore, most cultural resources within the Proposed Project area are unknown. However, the Proposed Project would not require the modification or demolition of any historic-era buildings. Further, cultural resource surveys would be conducted prior to Proposed Project construction, and APMs would be implemented to protect cultural resources in construction areas. SCE would also develop a CRMP and a PRMMP, both of which would provide for further monitoring and resource protection, as needed.

As discussed in Chapter 2, Project Purpose and Need and Objectives, SCE has specifically designed the Proposed Project to respond to reliability needs of the Electrical Needs Area. The Proposed Project would reduce the electrical load demands on the existing systems, which would in turn increase the safety and reliability of the systems. This increased safety and reliability would benefit public service for the existing and anticipated consumers in the vicinity. While the Proposed Project would result in potentially significant impacts to air quality due to the exposure of sensitive receptors to substantial pollutant concentrations during construction, this impact would be temporary in nature and localized, and would not cause long-term, substantial adverse effects on human beings. Therefore, the Proposed Project would not be expected to substantially

alter the physical environment in a way that could cause substantial adverse effects on human beings, either directly or indirectly.

Resources that are irreversibly or irretrievably committed to a project are those that are used on a long-term or permanent basis. This includes the use of non-renewable resources, such as metal and fuel, and other natural or cultural resources. These resources are irretrievable in that they would be used for the Proposed Project when they could have been used for other purposes. However, as discussed in Section 4.17, Utilities and Service Systems, SCE would recycle waste materials (e.g., metals) as appropriate. It is estimated that the Proposed Project would permanently disturb approximately 8.8 acres of land, resulting in the permanent loss of suitable habitat for several species, including desert tortoise. The construction of the proposed Kelbaker and Lanfair Fiber Optic Repeaters and new access road construction would result in approximately 0.2 acre of permanent impacts to desert tortoise critical habitat. Additional analysis and discussion regarding permanent land disturbance is provided in Section 4.4, Biological Resources. Human labor is also considered an irretrievable resource. The unavoidable destruction of natural resources that could limit the range of potential uses of that particular environment is another factor that should be considered when evaluating a project's irreversible and irretrievable commitment of resources.

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