3. Introduction to the Initial Study

3.1 Proposed Project Overview

On May 2, 2018, Southern California Edison (SCE) a regulated California utility, filed an application (A.1805007) with the California Public Utilities Commission (CPUC) for a Permit to Construct (PTC) the Eldorado-Lugo-Mohave Series Capacitor Project (Proposed Project). Following submission of additional information requested by CPUC, the application was deemed complete for review under the California Environmental Quality Act (CEQA) on October 10, 2018. On January 9, 2019, Commissioner Picker, the Commissioner assigned to the Proceeding, ruled that the Application for a PTC was improper and ordered SCE to file an amended Application to seek a Certificate of Public Convenience and Necessity (CPCN) rather than a PTC. On April 19, 2019, SCE submitted its amended Application for a CPCN.

The Proposed Project would:

- Construct 2 new 500 kV mid-line series capacitors (i.e., the proposed Newberry Springs Series Capacitor and Ludlow Series Capacitor) and associated equipment.

- Provide 2 communication paths between the series capacitor sites.
  - Install approximately 2 miles of overhead and 500 feet of underground telecommunications facilities as one path to connect the proposed series capacitors to SCE’s existing communication system.
  - Install approximately 2 miles of underground telecommunications facilities as a second communication path to connect the series capacitors to SCE’s existing communication system.

- Provide station light and power to the proposed series capacitors by extending and/or rerouting existing lines to create approximately 2 miles of overhead and 700 feet of underground 12 kV distribution circuits. (The new distribution poles would support overhead telecommunication facilities as well as the electric distribution lines.)

- Construct 3 new fiber optic repeater facilities (Barstow, Kelbaker, and Lanfair) within the Lugo-Mohave ROW.

- Install distribution lines for light and power at the 3 proposed fiber optic repeater sites.

- Install underground telecommunications facilities from existing transmission structures to the Barstow, Kelbaker, and Lanfair fiber optic repeater sites.

- Address 16 potential overhead clearance discrepancies at 14 locations by:
  - Relocating, replacing, or modifying existing transmission, subtransmission, and distribution facilities at approximately 12 locations along the Eldorado-Lugo, Eldorado-Mohave, and Lugo-Mohave 500 kV Transmission Lines to address 14 of the overhead clearance discrepancies. Tower modifications would include raising 9 towers approximately 18.5 feet by inserting new lattice-steel sections in tower bodies.
  - Performing minor grading at 2 locations along the Lugo-Mohave 500 kV Transmission Line to address 2 of the overhead clearance discrepancies.

- Install approximately 235 miles of optical ground wire (OPGW) (approximately 59 miles on the Eldorado-Mohave Transmission Line and approximately 173 miles on the Lugo-Mohave Transmission Line, including approximately 3 miles of underground telecommunications facilities in the vicinity of the Mohave Substation).
Modify and strengthen the ground wire peak of existing suspension towers where OPGW splices would occur (some of these towers would also require minor modifications to the steel in the tower body).

Install approximately 2,000 feet of underground telecommunications facilities within the existing Lugo, Mohave, and Eldorado Substations.

Within Lugo Substation, perform modifications on the existing series capacitors and install new terminating equipment and remove 2 existing tubular steel poles (TSPs) and install 2 new TSPs on the Eldorado-Lugo and Lugo-Mohave 500 kV Transmission Lines.

Within the Eldorado Substation, perform modifications on the existing series capacitors and upgrade the terminal equipment on the Eldorado-Lugo 500 kV Transmission Line.

Within the Mohave Substation, replace existing series capacitors on the Lugo-Mohave 500 kV Transmission Line and install new terminal equipment on the Eldorado-Mohave and Lugo-Mohave 500 kV Transmission Lines.

Within LADWP’s McCullough Substation, replace 5 existing 500 kV 50 kA circuit breakers with 5 new 500 kV 63 kA circuit breakers.

Install (if necessary) cathodic protection on approximately 60 miles of SoCalGas’s natural gas pipelines parallel to SCE’s Lugo-Mohave 500 kV Transmission Line and on other pipelines as needed.

The Proposed Project is located in San Bernardino County CA and Clark County NV and would occur mostly within existing 500 kV transmission line ROWs and at existing substations. At some new facility locations, additional ROW would be required as follows: at the Newberry Springs mid-line capacitor site and for the distribution and telecommunications link between the Newberry Springs and Ludlow capacitor facilities; on the Mojave National Reserve, an additional 20-ft ROW width would be needed adjacent to the existing ROW to accommodate distribution lines between existing distribution circuits along nearby roads and the Kelbaker and Lanfair repeater sites. The project would increase the amount of power delivered on the existing Eldorado-Lugo and Lugo-Mohave 500 kV Transmission Lines, address line clearance discrepancies, facilitate communications between substations, and modify substations to accommodate the Proposed Project. SCE anticipates construction to occur between March 2020 and June 2021.

### 3.2 Environmental Analysis

#### 3.2.1 CEQA Process

This Initial Study (IS) has been prepared pursuant to the California Environmental Quality Act (CEQA), the current amended State CEQA Guidelines (14 CCR 15000 et seq.), and the CPUC CEQA rules (Rule 2.4). The purpose of the IS is to inform the decision-makers, responsible agencies, and the public of the Proposed Project, the existing environment that would be affected by the project, the environmental effects that would occur if the project is approved, and the proposed mitigation measures that would avoid or reduce environmental effects.

A Mitigated Negative Declaration (MND) has been prepared based on the assessment of potential environmental impacts identified in the IS. All potentially significant impacts associated with the project can be mitigated to a less than significant level; therefore, an MND can be adopted by the CPUC in accordance with Public Resources Code Section 21080.
3.2.2 CEQA Lead Agency/Scope of CEQA Review

The CPUC is the lead agency for review of the project under CEQA because it is the public agency with the greatest responsibility for supervising or approving the project as a whole and will act first on the project in question (CEQA Guidelines Section 15051). SCE is a regulated investor-owned utility whose projects are subject to the jurisdiction of the CPUC, which must evaluate the whole of the proposed action. The CPUC’s jurisdiction over the project preempts the authority of local jurisdictions in California with respect to the project.

The project crosses federally-administered lands in both California and Nevada, primarily Bureau of Land Management (BLM) and National Park Service (NPS) lands. The BLM is the lead agency for compliance with the federal National Environmental Policy Act (NEPA) and will evaluate the project based on Department of the Interior and NEPA guidance and issue its independent evaluation. On non-federal lands in Nevada, the project must comply with applicable Nevada laws and regulations. The BLM is preparing an environmental assessment document under NEPA. In evaluating direct, indirect and cumulative effects of the Proposed Project, the NEPA document will cover all elements of the project spanning California and Nevada, including both federal and non-federal lands.

CEQA does not apply to elements of a project located in another state that will be subject to environmental review under NEPA or by virtue of a law of that state requiring preparation of a document containing similar analysis as an environmental impact statement under NEPA. (See specifically CEQA Section 21080(b)(14) and CEQA Guidelines Section 15277.) Public Utilities Code 1002(a)(4) echoes this scheme by providing that the CPUC need not consider “influence on the environment” in granting a CPCN “in the case of any line, plant, or system or extension thereof located in another state which will be subject to environmental impact review pursuant to [NEPA] or similar state laws in the other state . . . unless any emissions or discharges therefrom would have a significant influence on the environment of this state.” Thus, CEQA does not apply to the parts of the Proposed Project in Nevada because they are subject to environmental review under NEPA. CEQA also does not apply to such project elements because they are subject to Nevada’s Utility Environmental Protection Act (Nevada Revised Statues Sections 704.820 through 704.900), which does require the same type of analysis as under NEPA. In this case, the Public Utilities Commission of Nevada on January 9, 2019 issued an order (following public notice, opportunity for comment and a public hearing) finding the Proposed Project exempt from the Nevada Utility Environmental Protection Act since most of the work in Nevada is replacement of existing facilities. Although on either of these two bases the parts of the Proposed Project in Nevada are not subject to CEQA, for informational purposes, such elements are evaluated in this IS. Any pertinent mitigation measures identified in this IS can be considered by the federal and other agencies that must approve the parts of the Proposed Project in Nevada.

All mitigation measures in this IS have been agreed to by the Applicant. If the Proposed Project is approved by the CPUC, the CPUC would impose as conditions of project approval and would monitor implementation of the mitigation measures in this IS pertaining to actions on non-federal lands within California. The CPUC would also require that for actions on federal lands within California, SCE must implement the mitigation measures in this IS or equivalent or more effective measures, recognizing that the federal approval bodies may impose the same mitigation measures as identified in this document, or may instead formulate their own mitigation requirements. Drawing upon CEQA Guidelines section 15074.1 (d) concerning substitute mitigation measures, “equivalent or more effective” means that the substitute or revised measure will avoid or reduce the significant effect to at least the same degree as, or to a greater degree than, the original measure and will create no more adverse effect of its own than would have the original measure. The CPUC will ensure the implementation of mitigation measures over federal land.
within California by securing appropriate verification that the mitigation measures imposed by the CPUC are implemented or that the mitigation measures imposed by the federal agencies are (i) equivalent or more effective and (ii) implemented.

### 3.2.3 Initial Study

This IS presents an analysis of potential effects of the Proposed Project on the environment. The IS is based on information from SCE’s Proponent’s Environmental Assessment (PEA) and associated submittals, site visits, responses to CPUC data requests to SCE, and additional research.

Construction activities and subsequent project operation could have direct and indirect physical impacts on the environment. Environmental effects that may be associated with future generation facilities (solar or otherwise) that may use Proposed Project facilities to transmit electricity are not evaluated in this IS because such generation projects: (i) are speculative; (ii) are not the result of, or made more likely by, the Proposed Project (which identifies that, as it relates to transmission, the Proposed Project is in response to analyses by the CAISO, including CAISO’s identification of proposed generation projects that would require deliverability); and (iii) will themselves be subject to full CEQA and NEPA review processes.

The following environmental topics are analyzed with regard to the potential effects of the Proposed Project on the environment and potential growth-inducing or cumulative effects of the project in combination with other projects. As discussed in Chapter 5, mitigation measures would be required to reduce impacts to a less than significant level for the following:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire
- Mandatory Findings of Significance

Chapter 5 also demonstrates that no impacts requiring mitigation measures will result from the project in the following environmental topics:

- Agricultural and Forestry Resources
- Energy
- Greenhouse Gas Emissions
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation

### Initial Study Organization

The IS has been organized into the following chapters:

- **Chapter 1**: Mitigated Negative Declaration
- **Chapter 2**: Environmental Determination
- **Chapter 3**: Introduction. Provides an introduction and overview describing the Proposed Project and the CEQA process and identifies key areas of environmental concern.
- **Chapter 4**: Project Description. Presents the project objectives and provides an in-depth description of the Proposed Project, including construction details and methods.
- **Chapter 5**: Environmental Analysis and Mitigation. Includes a description of the existing conditions and analysis of the Proposed Project’s potential environmental impacts and identifies mitigation measures to reduce potentially significant impacts to less than significant levels.

- **Chapter 6**: Mitigation Monitoring Plan. Includes applicant proposed measures (APMs) and mitigation measures that SCE must implement as part of the project, actions required to implement these measures, monitoring requirements, and timing of implementation for each measure.

- **Appendix A**: List of Preparers. Lists the preparers of the Initial Study.

- **Appendix B**: Air Quality/Greenhouse Gas Data. Provides data used for Air Quality and GHG analyses.

- **Appendix C**: Local California Regulations. Lists local regulations that are superseded by CPUC authority.

- **Appendix D**: Biological Resources. Provides information on affected or potentially affected biological resources.