

## CHAPTER 1 – EXECUTIVE SUMMARY

This Proponent's Environmental Assessment (PEA) evaluates the potential environmental impacts of Southern California Edison Company's (SCE) proposed Viejo System Project in South Orange County. This Project is required to improve electric system reliability and meet projected electric load requirements in the South Orange County area. The Viejo System Project includes:

- Construction of a new 220/66/12 kilovolt (kV) substation (Viejo Substation). The proposed Viejo Substation would be constructed on a 12.5-acre site in the City of Lake Forest, California. The Viejo Substation would be an unmanned, automated, low-profile 560 MVA 220/66 kV and 56 MVA 66/12 kV enclosed substation with landscaping.
- Modification of 3.1 miles of the existing 66 kV subtransmission lines located within an existing SCE right-of-way containing 220 kV transmission and 66 kV subtransmission lines, to allow for an additional overhead 66 kV circuit. The existing 66 kV lines are located on tubular steel poles in the right-of-way between the proposed Viejo Substation in the City of Lake Forest and the existing Chiquita Substation in the City of Mission Viejo. The tubular steel poles would be replaced with metal H-frame structures within the existing right-of-way.
- Minor modification of the Chino-San Onofre 220 kV transmission line and the San Onofre-Serrano 220 kV transmission line consisting of the replacement of three 220 kV lattice steel towers and the installation of 10 tubular steel poles to loop the Chino-San Onofre 220 kV circuit into the Viejo Substation and create a by-pass for the San Onofre-Serrano 220 kV circuit.
- Construction of four 12 kV underground circuits.
- Modification of equipment at the existing Chiquita Substation.
- Installation of two Optical Ground Wires (OPGW).

Limestone, Chiquita, and O'Neill Substations located within the south and southeast regions of the Santiago System have become heavily loaded due to growth in recent years. The region's natural and SCE's service area boundaries limit SCE's ability to shift load from these substations to other SCE facilities. Construction of the proposed Viejo System Project is required by 2005 to ensure that safe and reliable electric service is provided to meet customer electrical demand without overloading the existing electric facilities that supply South Orange County. Construction is scheduled to begin in February 2004 and needs to be completed by June 2005.

This PEA includes the information required by the California Public Utilities Commission's (CPUC) PEA Guidelines (*State of California Public Utilities Commission Information and Criteria List*, Appendix B, Section V), as well as the CPUC's requirements for a Permit to Construct (PTC) pursuant to General Order 131-D (*D.94-06-014*, Appendix A, as modified by *D. 95-08-038*). The CPUC requires applicants to provide this information for review in compliance with the mandates of the California Environmental Quality Act (CEQA). This PEA is designed to meet the above-mentioned CPUC requirements.

Following a discussion of the purpose and need for the project (Chapter 2), the project description (Chapter 3), and the environmental setting (Chapter 4), this PEA evaluates the potential environmental impacts of the proposed project and project alternatives. Potential impacts are assessed for all environmental factors contained in the most recent CEQA Environmental Checklist Form (CEQA Guidelines, Appendix A). The PEA concludes that the proposed project will have less than significant or no impact on agriculture resources, aesthetics, air quality, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, and transportation/traffic.

Potentially significant impacts to biological and cultural resources were identified along the proposed and alternative routes for the new 66 kV circuit. All of the potentially significant impacts can be mitigated to less than significant levels. Detailed discussion of the impacts and proposed mitigation measures are presented in Chapter 5.

A comparison of alternatives is described in Chapter 6

No cumulative impacts (Chapter 7), growth-inducing impacts (Chapter 8), or indirect effects (Chapter 9) were identified for the proposed project. A list of references (Chapter 10) and a list of those who prepared the PEA (Chapter 11) complete the document.

The PEA demonstrates that the project qualifies for a Mitigated Negative Declaration under CEQA.