4.0 ENVIRONMENTAL IMPACT ASSESSMENT

This section of the PEA presents an evaluation of the potential impacts associated with the Proposed Project for identified environmental resource areas derived from CPUC requirements, PUC Section 1001-1013, and CEQA requirements, Public Resources Code Section 21080 et seq.

For each resource area, the analysis includes a description of the existing environment and an evaluation of potential adverse and beneficial environmental consequences (also referred to as environmental impacts or effects) associated with the construction, operation and maintenance of the Proposed Project. To the extent operation and maintenance of the Proposed Project will occur in the same location as existing facilities and would have the same or substantially the same impacts, frequency and duration as operation and maintenance activities of the existing facilities, such activities are incorporated into the existing environmental setting and baseline for assessing impacts. Cumulative impacts are considered to account for other activities in the area which, when considered together with the Proposed Project, could potentially compound or increase environmental impacts.

The analyses presented in this section are based on the following: (1) details of the Proposed Project as presented in Section 3.0, Proposed Project Description; (2) requirements under CEQA and the *CEQA Guidelines;* (3) CPUC requirements, including G.O. 131-D and guidance materials; and (4) consideration of input from responsible and reviewing agencies.

Potential impacts are identified and evaluated based upon the significance criteria outlined in Appendix G of the *CEQA Guidelines*. A completed CEQA checklist for each resource area is provided at the beginning of each resource chapter. For example, the completed aesthetics CEQA checklist is provided on Page 4.1-1 of the Aesthetics Section of the PEA. Furthermore, applicant proposed minimization and avoidance measures or APMs are outlined at the end of each impact assessment section and have been incorporated into the design of the Proposed Project where potentially significant impacts are found to be present for a particular resource area. The complete list of APMs included as part of the Proposed Project is provided in Table 3-18, Applicant Proposed Measures.

The individual impact assessments for each of the resource areas are organized within Section 4 of this PEA as follows:

- 4.1 Aesthetics
- 4.2 Agriculture and Forestry Resources
- 4.3 Air Quality and Greenhouse Gases
- 4.4 Biological Resources
- 4.5 Cultural Resources
- 4.6 Geology, Soils, and Minerals

- 4.7 Hazards and Hazardous Materials
- 4.8 Hydrology and Water Quality
- 4.9 Land Use and Planning
- 4.10 Noise
- 4.11 Population and Housing
- 4.12 Public Services
- 4.13 Recreation
- 4.14 Transportation and Traffic
- 4.15 Utilities and Service Systems
- 4.16 Cumulative Impacts

Technical support and reference for the impact assessments are provided in the following technical appendices:

- Appendix 4.3-A: Emissions Calculations
- Appendix 4.4-A: Biological Resources Assessment
- Appendix 4-5-A: Cultural Resources Assessment Report
- Appendix 4-5-B: Historic Property Evaluation
- Appendix 4.5-C: Paleontological Resources Record Search
- Appendix 4.7-A: EDR Corridor Study
- Appendix 4.7-B: Historic Aerial Photographs of the Capistrano Substation Site
- Appendix 4.7-C: MSDS for Sulfur Hexafluoride
- Appendix 4.10-A: Basics of Noise and Vibration
- Appendix 4.10-B: Ambient Noise Survey Report