

4.0 Environmental Analysis

Introduction

This chapter evaluates environmental impacts that would result from construction and operation of the Mesa 500-kilovolt (kV) Substation Project (proposed project) proposed by Southern California Edison Company (SCE, or the applicant) and alternatives to the proposed project. The chapter includes sections for each of the following resource areas:

4.1	Aesthetics	4.8	Hydrology and Water Quality
4.2	Air Quality	4.9	Land Use and Planning
4.3	Biological Resources	4.10	Noise and Vibration
4.4	Cultural and Paleontological Resources	4.11	Population and Housing
4.5	Geology, Soils, and Mineral Resources	4.12	Public Services and Utilities
4.6	Greenhouse Gases	4.13	Recreation
4.7	Hazards and Hazardous Materials	4.14	Traffic and Transportation

Agriculture and forestry resources are not analyzed in this Environmental Impact Report. There are no agriculture or forestry resources in the project area. The proposed project would not directly or indirectly impact agricultural land or forest land by converting it to non-agricultural or non-forestry use, respectively. The proposed project would therefore have no impacts to agriculture and forestry resources.

Resource Area Format

Each resource area section is organized under the following headings:

- Environmental Setting;
- Regulatory Setting;
- Impact Analysis; and
- Mitigation Measures.

Cumulative impacts of the proposed projects are presented in Chapter 6, “Cumulative Impacts and Other CEQA Considerations.” Information contained under each heading is described below.

Environmental Setting

Each resource area section contains a discussion of the environmental setting (the existing environmental conditions in the vicinity of the entire proposed project [project area]) and identifies the baseline physical conditions by which the significance of the project’s environmental impacts will be assessed. The baseline physical conditions for the proposed project are the existing environmental conditions in the project area at the time of the publication of the Notice of Preparation (NOP) (June 2015). The discussion of the environmental setting in each resource area section contains information necessary to understand the potential impacts of the proposed project

1 and the alternatives to the proposed project (California Environmental Quality Act Guidelines
2 §15125(a)).
3

4 **Regulatory Setting**

5 Laws, ordinances, regulations, standards, and policies applicable to the proposed project and
6 resource areas are discussed in the regulatory setting sections for each resource area. Laws and
7 regulations may also specify permits and approvals necessary for authorization or evaluation and
8 require agency consultation. Table 2-10 in Chapter 2, "Project Description," identifies the permits,
9 approvals, and consultations for the project.
10

11 **Impact Analysis**

12 A discussion of environmental impacts and mitigation measures for the proposed project is
13 presented for each environmental resource area.
14

15 **Significance Criteria**

16 Significance criteria serve as a benchmark for determining if the proposed project would result in
17 significant impacts when evaluated against the baseline conditions established in the
18 environmental setting and regulatory setting sections for each resource area. The significance
19 criteria used are from the checklist presented in the California Environmental Quality Act
20 Guidelines (Appendix G).
21

22 **Applicant Proposed Measures**

23 To avoid and mitigate potential significant impacts to environmental resources, the applicant has
24 committed to implementing the applicant proposed measures (APMs) listed in Section 2.6,
25 "Applicant Proposed Measures." The section provides a list of APMs that, when implemented, would
26 reduce impacts for each resource area.
27

28 **Environmental Impacts**

29 The impacts analyses presented in this chapter evaluate impacts that may occur from construction
30 and operation of the proposed project. The discussion evaluates the significance of impacts prior to
31 and after implementation of APMs, identifies mitigation measure(s) for significant impacts, and
32 provides a determination of significance after mitigation.
33

34 **Mitigation Measures**

35 This section provides the text of mitigation measures specific to the resource area that would be
36 implemented to reduce significant impacts of the proposed project.