

# D.1 Introduction to Environmental Analysis

## D.1.1 Organization of Each Section

Section D of this EIR/EIS examines the environmental consequences associated with the Proposed Project and the alternatives to it. Section D includes analyses of the 13 environmental issue areas listed below:

D.2 Biological Resources	D.9 Transportation and Traffic
D.3 Visual Resources	D.10 Public Health and Safety
D.4 Land Use	D.11 Air Quality
D.5 Wilderness and Recreation	D.12 Hydrology and Water Quality
D.6 Agriculture	D.13 Geology, Soils, and Mineral Resources
D.7 Cultural Resources	D.14 Socioeconomics
D.8 Noise	

Within each issue area, discussions are presented in the following order:

- Environmental Setting for the Proposed Project – Devers-Harquahala
- Environmental Setting for the Proposed Project – West of Devers
- Applicable Regulations, Plans, and Standards
- Significance Criteria and Approach to Impact Assessment
- Environmental Impacts and Mitigation Measures for the Proposed Project – Devers-Harquahala
- Environmental Impacts and Mitigation Measures for the Proposed Project – West of Devers
- Alternatives for Devers-Harquahala
- Alternatives for West of Devers
- Environmental Impacts of the No Project Alternative
- Mitigation Monitoring, Compliance, and Reporting

By identifying the impacts associated with each issue area and the offsetting mitigation measures, the regulatory agencies and the general public are offered a discussion and full disclosure of the significant environmental impacts of this Proposed Project and its alternatives, including the No Project/No Action Alternative.

Analysis within each issue area includes consideration of the following components and segments of the Devers-Harquahala 500 kV portion of the Proposed Project:

### Harquahala Switchyard to Kofa National Wildlife Refuge

- Construction of 500 kV transmission line and optical ground wire from Harquahala Generating Station switchyard to Kofa National Wildlife Refuge (continuing to Devers Substation)
- Installation of 500 kV line shunt reactor, dead-end structure, circuit breakers, and disconnect switches at Harquahala switchyard
- Installation of Special Protection Scheme relays at Palo Verde Nuclear Generating Station, Hassayampa, and Harquahala Switchyards
- Construction and installation of new telecommunications facility on Harquahala Mountain
- Construction of series capacitor bank, approximately 55 miles west of the Harquahala switchyard

### Kofa National Wildlife Refuge

- Construction of 500 kV transmission line and optical ground wire across the Kofa National Wildlife Refuge

### Kofa National Wildlife Refuge to Colorado River

- Construction of 500 kV transmission line and optical ground wire from Kofa National Wildlife Refuge to the Colorado River (continuing to Devers Substation)

### Colorado River to Midpoint Substation

- Construction of 500 kV transmission line and new optical ground wire from the Colorado River to Midpoint Substation (continuing to Devers Substation)
- Construction of a fiber optic repeater site in the right-of-way at Milepost E105.4

### Midpoint Substation to Cactus City Rest Area

- Construction of Midpoint Substation and switching facilities
- Construction of telecommunications facility
- Construction of mechanical-electrical equipment room

### Cactus City Rest Area to Devers Substation

- Construction of 500 kV transmission line from Cactus City Rest Area to Devers Substation
- Construction and installation of new optical ground wire on Devers-Harquahala transmission line towers
- Installation of 500 kV line shunt reactor, dead-end structure, circuit breakers, and disconnect switches at Devers Substation
- Upgrades and replacement of circuit breakers, disconnects, relays, and switchrack conductors at Devers Substation
- Installation of Special Protection Scheme relays at Devers Substation

Analysis within each issue area includes consideration of the following components and segments of the **West of Devers (230 kV upgrade) portion of the Proposed Project**:

- Removal of two existing 230 kV single-circuit transmission lines from Devers to San Bernardino Junction
- Construction of a new double-circuit 230 kV transmission line from Devers to San Bernardino Junction
- Upgrade of an existing double-circuit 230 kV transmission line from Devers to San Bernardino Junction
- Upgrade of double-circuit 230 kV transmission line between San Bernardino Junction and Vista Substation
- Upgrades and replacement of circuit breakers, disconnects, relays, and switchrack conductors at Vista Substation
- Installation of Special Protection Scheme relays at Vista Substation
- Upgrade of 230 kV transmission line between San Bernardino Junction and San Bernardino Substation
- Upgrades and replacement of circuit breakers, disconnects, relays, and switchrack conductors at San Bernardino Substation.

The following alternatives are evaluated in each section:

- SCE Harquahala-West Alternative
- SCE Palo Verde Alternative
- Harquahala Junction Alternative
- Desert Southwest Transmission Line Alternative
- Three alternatives in the area of Alligator Rock
- Devers-Valley No. 2 Alternative
- No Project/No Action Alternative

## D.1.2 Environmental Assessment Methodology

For the purpose of this document, and pursuant to CEQA Guidelines (Section 15125(a)), the environmental setting used for the impact analysis reflects conditions at the time of issuance of the Notice of Preparation (November 2005).

The EIR/EIS evaluates the environmental consequences and potential impacts that the Proposed Project and the alternatives would create. The impacts identified were compared with predetermined, specific significance criteria, and were classified according to significance categories listed in each issue area. The cumulative impacts of the project taken together with the related cumulative projects (listed in Section F) were assessed next, and mitigation measures for each impact were identified, if applicable. The focus in the cumulative impact analyses was to identify those project impacts that might not be significant when considered alone, but contribute to a significant impact when viewed in conjunction with future planned projects. The same methodology was applied systematically to each alternative project and alternative route alignment. A comparative analysis of the Proposed Project and the alternatives is provided in Section E of this document.

Once an impact was identified, diligent effort was taken to identify mitigation measures that would reduce the impact to a level that is not significant. Further, under NEPA, mitigation measures would be considered even for impacts that are not found to be significant. The federal Council on Environmental Quality's (CEQ) *Forty Most Asked Questions Concerning CEQ's NEPA Regulations* (Forty Questions). Question No. 19a asks about the scope of mitigation measures that must be discussed. The response states:

*The mitigation measures discussed in an EIS must cover the range of impacts of the proposal. The measures must include such things as design alternatives that would decrease pollution emissions, construction impacts, esthetic intrusion, as well as relocation assistance, possible land use controls that could be enacted, and other possible efforts. **Mitigation measures must be considered even for impacts that by themselves would not be considered "significant."** [emphasis added] Once the proposal itself is considered as a whole to have significant effects, all of its specific effects on the environment (whether or not "significant") must be considered, and mitigation measures must be developed where it is feasible to do so. Sections 1502.14(f), 1502.16(h), 1508.14.*

Because CEQ's NEPA guidelines require a demonstration of reduction of impacts to the maximum extent possible, mitigation measures were identified for all classes of impacts (except beneficial impacts). The mitigation measures recommended by this study have been identified in the impact assessment sections and presented in a Mitigation Monitoring, Compliance, and Reporting Table at the end of the analysis for each issue area (also see Section G for discussion of the Mitigation Monitoring Program).

**Applicant Proposed Measures (APMs).** The Applicant has incorporated a substantial number of measures and procedures to avoid or reduce impacts into the description of its Proposed Project. In the assessment of the impacts, these measures have been assumed to be part of the Proposed Project, and are not included as CPUC-recommended mitigation measures; however, implementation of each APM will be monitored by the CPUC. The APMs that are intended to reduce the potential impacts in a particular issue area (such as air quality, biology, etc.) are listed in the section addressing that issue area.

**Impact Significance Criteria.** While the criteria for determining significant impacts are unique to each issue area, the classification of the impacts was uniformly applied in accordance with the following definitions:

- Class I:** Significant; cannot be mitigated to a level that is less than significant
- Class II:** Significant; can be mitigated to a level that is less than significant
- Class III:** Adverse, less than significant
- Class IV:** Beneficial impact