D.1 Introduction to Environmental Analysis

D.1.1 Introduction/Background

Section D of this EIR 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 Land Use
- D.3 Visual Resources
- D.4 Biological Resources
- D.5 Cultural Resources
- D.6 Geology, Soils, and Paleontology
- D.7 Hydrology and Water Quality
- D.8 Public Health and Safety

- D.9 Recreation
- D.10 Air Quality
- D.11 Noise and Vibration
- D.12 Transportation and Traffic
- D.13 Socioeconomics
- D.14 Public Services and Utilities

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

- Environmental Setting for the Proposed Project
- Applicable Regulations, Plans, and Standards
- Environmental Impacts and Mitigation Measures for the Proposed Project
- Environmental Impacts and Mitigation Measures of Southern Area Alternatives
- Environmental Impacts and Mitigation Measures of Northern Area Alternatives
- 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 Alternative.

Analysis within each issue area includes consideration of the following components of the Proposed Project:

- Installation of a new approximately 27-mile 230 kV transmission line with overhead and underground segments; the southern 14.7 miles of this line would be installed on a rebuilt version of PG&E's existing Jefferson-Martin 60 kV double-circuit transmission line and the northern 12.4 miles would be installed underground in city streets and in the BART right-of-way.
- Dismantling the existing Jefferson-Martin overhead 60 kV double-circuit power line and re-building the towers to enable the east side to operate at 60 kV and the west side at 230 kV. Approximately 100 structures would be removed and subsequently replaced.
- Construction of a new transition station near the intersection of San Bruno Avenue and Glenview Drive just east of Skyline Boulevard/Highway 35 to transition from the overhead 230 kV transmission line to the underground 230 kV transmission line.
- Modification of the existing Jefferson and Martin Substations to accommodate the new 230 kV transmission line.
- Modifications to equipment at the existing San Mateo, Ralston, Millbrae, and Monta Vista Substations and the Hillsdale Junction switching station.

Each discipline in Section D also considers each of the following alternatives as well as the No Project Alternative:

Transmission Line Route Alternatives — Southern Segment

- PG&E Underground Route Option 1B
- Partial Underground Alternative

Transmission Line Route Alternatives — Northern Segment

- West of Skyline Boulevard Transition Station Alternative (with proposed underground route, Sneath Lane, or Westborough Boulevard)
- Sneath Lane Transition Station (with proposed underground route, Sneath Lane, or Westborough Boulevard)
- Cherry Avenue Alternative
- Modified Underground Existing 230 kV Collocation Alternative and New South San Francisco Segment
- PG&E's Route Option 4B: East Market Street Alternative
- Junipero Serra Alternative

D.1.2 Environmental Assessment Methodology

D.1.2.1 Environmental Baseline

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 (January 2003).

D.1.2.2 Environmental Consequences

The EIR 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. Since some reviewing agencies 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