

Chapter 1—Executive Summary

The Pacific Gas and Electric Company (PG&E) Jefferson-Martin 230 kilovolt (kV) Transmission Project (Project) will ensure reliable service for meeting customer electric demand without overloading the existing electric facilities that supply San Francisco and northern San Mateo County. The Project Area runs from PG&E's Jefferson Substation (in San Mateo County near Cañada Road east of I-280) to the PG&E Martin Substation in the City of Brisbane (28 miles to the northeast, near Bayshore Boulevard and Geneva Avenue).

The Project consists of two parts: the first portion entails replacing an existing overhead 60 kV transmission line with an overhead double-circuit 230/60 kV transmission line from Jefferson Substation to a transition station on San Bruno Avenue; the second part of the Project is an underground line within existing streets and the new San Francisco Bay Area Rapid Transit (BART) right-of-way (ROW) to the Martin Substation. The overhead portion of the transmission line follows the existing 60 kV transmission line alignment, replacing the existing 60 kV transmission line and existing towers with a new 230 kV transmission line and new towers in the same alignment and at approximately the same locations; these new towers will support the new single-circuit 230 kV line and a single-circuit 60 kV line.

The Project includes:

- Installation of a new, approximately 27-mile-long 230 kV transmission line with overhead and underground segments, with the first 14.7 miles of this line to be installed on a rebuilt version of PG&E's existing Jefferson-Martin 60 kV double-circuit transmission line, and the remaining 12.4 miles to be installed in a new underground duct bank, as further described in this Proponent's Environmental Assessment (PEA).
- Rebuilding the existing Jefferson-Martin 60 kV double-circuit tower line to enable the east side to operate at 60 kV and the west side at 230 kV.
- 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 14.7-mile overhead 230 kV transmission line to the 13-mile 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 as described in Section 2.3.5.
- Modification of Hillsdale Junction switching station for new 60 kV arrangement as described in Section 2.3.5.

The Project is needed by September 2005 to ensure reliable service for meeting customers' electric demand without overloading the existing electric facilities. In April 2002, California Independent System Operator (ISO) confirmed the need for the Project by September 2005 and granted its final approval for construction and addition to the ISO-controlled grid of the Jefferson-Martin Project.

This PEA evaluates potential environmental impacts that could result from construction and operation of the Project. The primary potential Project impacts are the following:

- Visual impacts from replacement of an existing 60 kV transmission line and towers with a 230/60 kV transmission line in the same alignment.
- Temporary construction impacts such as noise and traffic disruption during overhead and underground transmission line construction.
- Temporary impacts to biological resources, including serpentine grasslands and associated special status species.

PG&E performed a siting and alternatives analysis, before selecting the Proposed Project, to ensure that development of the Project components was feasible and would have the lowest potential for environmental impacts. As required by California Public Utilities Commission (CPUC) guidelines, the California Environmental Quality Act (CEQA) Initial Study Checklist was used as the format for describing potential impacts. However, the level of research and analysis provided in this PEA far exceeds that for a typical Initial Study and is intended to provide the information needed to satisfy the requirements for an Environmental Impact Report (EIR) pursuant to CEQA. The CPUC, as lead agency, will review this information and is responsible for preparing the EIR and providing public review of the EIR.

Chapter 2, Project Description, provides a detailed description of the Project, its purpose, and need. Chapter 3, Alternatives to the Proposed Project, provides an explanation of the siting study and an analysis of the alternatives that were considered before selecting the proposed Project. The CEQA checklist in Chapter 4, Impact Assessment Summary, provides a summary of all potential impacts likely to result from the Project. All impacts identified in this PEA would be less than significant with the incorporation of mitigation measures. Chapters 5 through 15 provide a full analysis of all potential impacts to resource categories (land use, biological resources, water quality, aesthetics, etc.) that might result from implementing the Project. Each chapter includes a description of the existing setting, analysis of potential impacts resulting from construction and operation of the Project, and recommended mitigation measures.

Chapter 16, Corona and Induced Current Effects, discusses possible corona and induced current effects from operation of 230 kV transmission lines. Chapters 17, Cumulative Impacts, and 18, Growth-Inducing Effects, discuss the potential growth-inducing and cumulative impacts of the Project. Chapter 19 contains a Mitigation Monitoring Plan, required under CEQA, to ensure implementation of mitigation measures proposed for the Project.

- Appendix A contains additional data on Project description and engineering information.
- Appendix B provides information concerning biological resources.
- Appendix C provides information concerning cultural resources.
- Appendix D provides information concerning visual resources.
- Appendix E provides information concerning hazards and hazardous materials.
- Appendix F contains information on corona and induced-current effects associated with operation of the proposed high-voltage transmission lines.
- Appendix G provides information on cumulative impacts
- Appendix H contains a list of the authors and contributors of each chapter of this PEA.
- Appendix I provides a glossary.
- Appendix J contains a list of affected property owners.