Pacific Gas and Electric Company (PG&E) is proposing to build new infrastructure for the Tri-Valley 2002 Capacity Increase Project. The major components of the project include construction of the following:

- Two new distribution substations to serve the Dublin and North Livermore areas
- Approximately 18 miles of new 230 kilovolt (kV) overhead transmission line along PG&E's vacant existing easement from the Tesla Substation to serve the new substations
- A new 5.5-mile 230 kV overhead/underground transmission line to serve the Vineyard Substation in the City of Pleasanton
- Modifications to PG&E's Vineyard Substation

The proposed project is located primarily in unincorporated Alameda County and in portions of Contra Costa County and the City of Pleasanton. Open space grasslands characterize most of the project area. The present land uses in the North Area are designated as Resource Management and Large Parcel Agriculture by Alameda and Contra Costa Counties. The South Area is in Alameda County and is zoned Resource Management, Public Health and Safety, Rural Density Residential, Low and Medium Density Residential, and Major Commercial. The proposed overhead transmission line, portions of the underground transmission line, and the new substations are located in lands that are presently used for cattle grazing. Project components would not be located on any federal or state owned lands.

This Proponent's Environmental Assessment (PEA) evaluates potential environmental impacts that could result from construction and operation of the project. The primary potential project impacts are the following:

- Impacts to biological resources, particularly special status aquatic species found in ponds and drainages.
- Visual impacts from overhead transmission towers or poles.
- Temporary construction impacts such as noise and traffic disruption during overhead and underground transmission line construction.

PG&E performed an in-depth siting and alternatives analysis before selecting the preferred 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 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, 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 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 16 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 17 discusses possible corona and induced current effects from operation of 230 kV transmission lines. Chapter 18 discusses 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 PG&E's Guide for Planning Area Distribution Facilities.
- Appendix B provides a table that lists anticipated residential and commercial development in the Tri-Valley area and includes the number of units associated with each project over the next several years.
- Appendix C provides information concerning PG&E's public outreach efforts.
- Appendix D contains a summary of the Local Integrated Resource Planning (LIRP) study conducted by PG&E's independent consultant to determine whether distributed resources could replace or defer the need for the proposed project.
- Appendix E contains the Example Native American Burial Protection Plan for the PG&E Tri-Valley Project.
- Appendix F contains information on electric and magnetic field (EMF) issues.
- Appendix G contains a list of the authors and contributors of each chapter of this PEA.
- Appendix H contains a glossary.