INTRODUCTION

Pacific Gas and Electric Company (PG&E) proposes to construct and operate a three-bank, 115-12 kilovolt (kV) distribution substation in the Fulton-Fitch Mountain Distribution Planning Area (DPA), known as the Windsor Substation Project (project). The project is needed to relieve the electric system deficiency projected to occur in the Town of Windsor, Sonoma County, and to ensure safe and reliable electric service to existing and approved development. The site of the proposed substation is located 0.25 mile west of the intersection of Conde Lane and Mitchell Lane in the Town of Windsor, and is bounded by Mitchell Lane to the north and the Northwestern Pacific Railroad (NWPRR) right-of-way to the west (see Figure 1-1 in Chapter 1: Project Description for an overview map of the project area.)

The project consists of:

- installing a new three-bank, 115-12 kV distribution substation, initially constructed as a 60-12 kV substation,
- connecting the new substation to an existing 60 kV power line that is rated for 115 kV operation and will eventually be converted to 115 kV, and
- installing new 12 kV distribution lines and upgrading existing distribution lines.

The substation and two new 12 kV distribution circuits will be needed by summer 2012 to relieve the projected electric system deficiency and to prevent interruptions or emergency conditions that could otherwise result from the deficiency. An additional ten 12 kV circuits, for a total of twelve 12 kV distribution circuits, will be installed at ultimate build-out.

This Proponent's Environmental Assessment (PEA) evaluates the potential impacts that could result from construction and operation of the project. Key environmental issues evaluated include:

- Potential impacts to biological resources (e.g., nearby wetlands, California red-legged frog (*Rana aurora draytonii*), California tiger salamander (*Ambystoma californiense*), California linderiella (*Linderiella occidentalis*), Blenosperma vernal pool andrenid bee (*Adrena blennospermatis*), and Northwestern pond turtle (*Actinemys marmorata marmorata*)
- Potential impacts to cultural resources (e.g., through ground-disturbing construction activities)
- Potential noise impacts from construction and operation of the substation
- Potential visual impacts
- Potential air quality impacts from construction and operation of the substation

• Potential impacts to hydrological resources (e.g., nearby wetlands and water bodies)

However, as detailed in Chapter 1: Project Description, PG&E's project design includes avoidance and protection measures to avoid project impacts or reduce impacts to a less than significant level.

As required by the California Public Utilities Commission (CPUC), the California Environmental Quality Act (CEQA) Initial Study Checklist from Appendix G of the CEQA Guidelines was used as the format for describing potential project impacts. Chapter 1: Project Description provides a detailed discussion of the project, its purpose, and need. Chapter 2: Alternatives Analysis 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 3: Environmental Impact Assessment Summary provides a summary of all potential impacts likely to result from the project. Chapters 4 through 15 of this PEA demonstrate how all project impacts can either be avoided or are less than significant through implementation of PG&E's avoidance and protection measures.

In accordance with CPUC General Order 131-D (GO 131-D), PG&E is submitting this PEA in support of its application for a Permit to Construct (PTC) for the project. The CPUC's PEA "Working Draft Proponent's Environmental Assessment (PEA) Checklist for Transmission Line and Substation Projects" was used to produce this report. Because all project impacts are less than significant, it is anticipated that the CPUC will be able to prepare a Mitigated Negative Declaration for its review of this project pursuant to CEQA. After permits are obtained, construction is expected to take approximately 12 consecutive months to complete, although weather delays may extend the construction schedule. PG&E seeks to have the project in operation by June 2012.