

PUBLIC UTILITIES COMMISSION505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

Final Mitigated Negative Declaration

Pacific Gas & Electric Company's Seventh Standard Substation Project Application No. A.09-03-004

Introduction

Pursuant to California Public Utilities Commission's (CPUC) General Order 131-D, Pacific Gas & Electric Company (PG&E) has filed an application (A.09-03-004) with the CPUC for a Permit to Construct for the Seventh Standard Substation Project ("Proposed Project"). The application was filed on March 2, 2009 and includes the Proponent's Environmental Assessment (PEA), prepared by PG&E pursuant to the CPUC's Rules of Practice and Procedure Rule 2.4 (CEQA Compliance). The Proposed Project includes a new 4.9-acre 115/21 kilovolt (kV) low-profile substation, including 115 kV bus structures, six 115 kV circuit breakers, three 115/21 kV power transformers, three 45 megavolt-ampere (MVA) transformers, and up to nine distribution circuits at full build out. The Proposed Project would also include approximately 1,000 feet of 115 kV power line on tubular steel poles. The proposed site would be located approximately 2.5 miles west of State Route (SR) 99 within the City of Bakersfield and on land currently used as an almond orchard. PG&E has stated that the project is necessary to sustain the current electric service demands of the Urban Bakersfield Northwest Distribution Planning Area (DPA).¹ Construction would begin as early as fall 2009 to meet an in-service date of June 1, 2010, depending on CPUC approval. In accordance with the CPUC's General Order 131-D, approval of this project must comply with the California Environmental Quality Act (CEQA).

Pursuant to CEQA, the CPUC must prepare an Initial Study (IS) for the Proposed Project to determine if any significant adverse effects on the environment would result from project implementation. The IS utilizes the significance criteria outlined in Appendix G of the CEQA *Guidelines*. If the IS for the project indicates that a significant adverse impact could occur, the CPUC would be required to prepare an Environmental Impact Report.

¹ The Urban Bakersfield Northwest Distribution Planning Area includes the City of Shafter, a northwestern portion of the City of Bakersfield, and portions of rural Kern County.

According to Article 6 (Negative Declaration Process) and Section 15070 (Decision to Prepare a Negative Declaration or Mitigated Negative Declaration) of the CEQA *Guidelines*, a public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

- (a) *The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or*
- (b) *The initial study identifies potentially significant effects, but:*
 - (1) *Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and*
 - (2) *There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.*

Based on the analysis in the Initial Study, it has been determined that all project-related environmental impacts could be reduced to a less than significant level with the incorporation of feasible mitigation measures. Therefore, adoption of a Mitigated Negative Declaration (MND) will satisfy the requirements of CEQA. The mitigation measures included in this MND are designed to reduce or eliminate the potentially significant environmental impacts described in the Initial Study. Where a measure described in this document has been previously incorporated into the project, either as a specific project design feature or as an Applicant-Proposed Measure, this is noted in the discussion. Mitigation measures are structured in accordance with the criteria in Section 15370 of the CEQA *Guidelines*.

Project Description

The Proposed Project would include the following components:

- Construction of a new three-bank 115/21 kV low-profile substation. The substation would be constructed on an approximately 4.9-acre site in the City of Bakersfield, California (see Figures B-1 and B-2 in Section B.1). The substation site would be looped into the Rio Bravo–Kern Oil 115 kV Power Line paralleling the south side of Seventh Standard Road. It would contain three 45-megavolt-ampere (MVA) transformers with two to three distribution circuits per transformer and up to nine distribution circuits in underground conduit and transitioning to the overhead position or remaining underground at full build-out. One transformer bank and three of the distribution circuits would be built initially.²
- Installation of approximately 1,000 feet of overhead double-circuit 115 kV subtransmission line starting at the Rio Bravo–Kern Oil 115 kV power line located along Seventh Standard Road and ending at the substation. The subtransmission line would be located on ~~three~~ one tubular steel poles (TSP) and two TSP dead-end/drop-down structures within the substation access road area. Figure B-12 in Section B.3.1 depicts the existing view of the proposed substation site along Seventh Standard Road as well as a photo simulation showing the proposed project facilities.
- Construction of a 700-foot paved access road from Seventh Standard Road to the substation site.

² Distribution lines do not require formal approval from the CPUC under General Order 131-D. They are included in the project description of this CEQA document for informational purposes. These future circuits are not considered part of the project and are not analyzed.

Alternatives

The purpose of an alternatives analysis pursuant to CEQA is to identify options that would feasibly attain the project's objectives while reducing the significant environmental impacts resulting from the Proposed Project. CEQA does not require the inclusion of an alternatives analysis in MNDs because the Initial Study concludes that, with incorporation of mitigation measures, there would be no significant adverse impacts resulting from the Proposed Project. Therefore, no alternatives analysis needs to be provided in the Initial Study. However, pursuant to Section IX.B.1.c of CPUC General Order 131-D, PG&E's application did consider six site alternatives. The application generally discussed advantages and disadvantages of different options, and includes brief description of the criteria for choosing the substation site in the Proponent's Environmental Assessment.

Environmental Determination

The Initial Study was prepared to identify the potential environmental effects resulting from Proposed Project implementation, and to evaluate the level of significance of these effects. The Initial Study relies on information in PG&E's PEA filed on March 2, 2009, project site reconnaissance by the CPUC environmental team in May 2009, and other environmental analyses. PG&E's PEA identified measures to address potentially significant impacts — the Applicant-Proposed Measures (APMs) — and these APMs are considered to be part of the description of the Proposed Project.

In addition, the Proposed Project was addressed in the negative declarations adopted in conjunction with the Metropolitan Bakersfield General Plan Amendment No. 06-1968 and Zone Change No. 06-1968. Pursuant to CEQA, the conditions of project approval in Bakersfield City Council Resolution No. 102-07 (conditions 1-4) and Bakersfield City Council Ordinance No. 4498 (conditions 1-5) must be adhered to for construction of the Seventh Standard Substation where applicable.

Based on the Initial Study analysis, additional mitigation measures are identified for adoption to ensure that impacts of the Proposed Project would be less than significant. The additional mitigation measures either supplement, or supersede the APMs. PG&E has agreed to implement all of the additional recommended mitigation measures as part of the Proposed Project.

Implementation of the following mitigation measures would avoid potentially significant impacts identified in the Initial Study or reduce them to less than significant levels.

Mitigation Measures for Impacts to Existing Visual Character

V-1 Establish landscape plan and permanent vegetative screen. PG&E shall coordinate with the City of Bakersfield to establish a landscape plan and permanent vegetative screen of sufficient height and density to provide for visual screening around the substation, consistent with safety, feasibility, security, and engineering requirements. PG&E shall consult the Bakersfield Planning Department to ensure compatibility of the Seventh Standard Road landscape elements at the discretion of the City of Bakersfield. In the future when the proposed residential subdivisions have been constructed adjacent to the substation, PG&E shall provide a water supply as necessary for landscaping survival. Plant materials selected for screening shall be acclimated to the environment of Bakersfield. Landscape screening shall be consistent with a landscape and maintenance plan developed by PG&E and submitted for review and approval by the City of Bakersfield. PG&E shall implement the landscape plan at a future date when new subdivisions have been constructed adjacent to the substation.

V-2 Construct visually opaque gate at substation entrance. PG&E shall install a visually opaque gate at the entrance road in order to obscure views through the gate down the entrance road to the substation site. Entrance gate design shall be consistent with the landscaping plan developed by PG&E and submitted for review and approval by the City of Bakersfield.

Mitigation Measure for Light and Glare

V-3 Shroud and minimize unnecessary sources of light. PG&E shall design and install new permanent substation lighting such that light bulbs, lenses, and reflectors are not visible from public viewing areas; that lighting does not cause reflected glare; and that illumination of the project, vicinity, and nighttime sky is minimized. To achieve this, PG&E shall ensure that:

- Lighting shall be designed so exterior light fixtures are hooded where possible, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light source is shielded to prevent light trespass outside the project boundary.
- All lighting shall be of minimum necessary brightness consistent with worker safety.
- Where feasible and safe, lighting shall be kept off when the site is unoccupied in order to minimize nighttime sky illumination, and shall only be switched on during the nighttime in order to perform maintenance or outage repairs.

Mitigation Measures for Construction-Phase Air Quality

AQ-1 Implement enhanced dust control measures in the event that occupied homes occur nearby. PG&E shall implement enhanced dust control measures for construction of the proposed substation if new residential development includes homes within 200 feet of the substation site during any phase of substation construction. The enhanced dust control measures shall incorporate the applicant-proposed measure (APM Air-1) and the following additional measures:

- limit the speeds of construction vehicles on unpaved surfaces to 15 miles per hour,
- install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than 1 percent,
- increase watering or use a dust suppressant, as appropriate ~~given for~~ surrounding uses, to control dust to less than 20 percent opacity when winds exceed 20 miles per hour,
- limit size of area subject to excavation, grading, or other construction disturbance at any one time to avoid excessive dust, and
- expeditiously remove the accumulation of mud or dirt from adjacent public streets when construction activities are occurring.

AQ-2 Minimize construction equipment exhaust by using Tier 1 engines. All diesel fueled off-road construction equipment with engines 50 hp or larger shall at a minimum meet U.S. Environmental Protection Agency/California Air Resources Board (CARB) Tier 1 engine standards to the extent feasible. Records of equipment compliance shall be kept by the general construction contractor. This measure does not apply to equipment permitted by the local air quality district or certified through the CARB's Statewide Portable Equipment Registration Program. This also does not apply to any single specialized equipment items that will be used for less than five days total during the project construction.

Mitigation Measures for Operation-Phase Air Quality

AQ-3 Avoid sulfur hexafluoride emissions. PG&E shall ensure that project equipment, specifically the circuit breakers at the Seventh Standard Substation, maintains a leakage rate of 0.5 percent per year or less for sulfur hexafluoride (SF₆). To accomplish this, PG&E shall include this limit as a performance specification for the circuit breakers that would be installed as part of the project. Maintenance, repair, and replacement of all circuit breakers shall be consistent with manufacturer's recommendations for achieving this performance specification, in accordance with PG&E's company-wide SF₆ reduction best management practices.

Mitigation Measure for Special-Status Animal Species

B-1 Eliminate injury or mortality to kit foxes during construction. PG&E shall implement the U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the San Joaquin kit fox Prior to or During Ground Disturbance (USFWS, 1999). PG&E shall provide the results of the surveys to the CPUC, U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Game (CDFG) prior to ground disturbance.

B-2 Eliminate injury or mortality to burrowing owl during construction. PG&E shall implement the survey protocol and impact avoidance and mitigation measures presented in CDFG Staff Report on Burrowing Owl Mitigation (CDFG, 1995). PG&E shall provide the results of the surveys to the CPUC and CDFG prior to ground disturbance.

Mitigation Measure for Other Protected Animal Species

B-3 Comply with MBTA/Protect nesting birds. In order to comply with the Migratory Bird Treaty Act (MBTA) and relevant sections of the CDFG Code, any vegetation clearing would take place prior to February 1 and after August 31. If this is not feasible, a survey shall be conducted for nesting birds within the project area. Should an active nest be discovered, a qualified biologist shall establish an appropriate buffer zone (in which construction activities are not allowed) to avoid disturbance in the vicinity of the nest.

- Construction activities shall not commence until the biologist or monitor has determined that the nestlings have fledged or that construction activities will not affect adults or newly fledged young; OR
- The biologist or monitor shall develop a monitoring plan that permits the activity to continue in the vicinity of the nest while monitoring nesting activities to ensure that nesting birds are not disturbed.

B-4 Incorporate APLIC design guidelines for raptor protection. Design, install, and maintain distribution lines and all electrical components in accordance with the *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* to reduce the likelihood of electrocutions of large birds. Specifically, the phase conductors should be separated by a minimum of 60 inches. Where adequate separation is not feasible, bird perch diverters and/or specifically designed avian protection materials should be used to cover electrical equipment (APLIC, 2006).

Mitigation Measure for MBHCP Compliance

B-5 Provide Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) mitigation fees for permanent loss of San Joaquin kit fox habitat. PG&E shall purchase compensatory habitat for permanent impacts to 4.9 acres of San Joaquin kit fox habitat. Payment shall be made to the County Building Inspection Division at the time the grading permit is issued. PG&E shall provide proof of payment to the CPUC prior to the start of construction.

B-6 Conduct environmental clearance surveys for San Joaquin kit fox dens. Pursuant to the requirements of the MBHCP, PG&E shall conduct a San Joaquin kit fox clearance survey to determine whether any San Joaquin kit fox dens are on site prior to construction and the results submitted to USFWS, CDFG, and CPUC for review. If a den is identified, PG&E shall adhere to the monitoring and excavation provisions in the MBHCP ~~shall be adhered to~~. Copies of any survey results and forms submitted to USFWS and CDFG shall be submitted to the CPUC prior to the start of construction.

Mitigation for Previously-Unidentified Archaeological Resources

C-1 Avoid previously unidentified archaeological resources. If previously unidentified archaeological resources are unearthed during construction activities, construction would be halted in that area and directed away from the discovery until a qualified archaeologist assesses the significance of the resource. The archaeologist would recommend appropriate measures to record, preserve, or recover the resources.

Mitigation Measure for Hazards and Hazardous Materials

H-1 Control release of residual herbicides, pesticides, and/or fumigants. PG&E shall analyze soil samples in construction areas where the land has historically or is currently being farmed to verify and delineate the possibility of and extent of herbicide, pesticide, and/or fumigant contamination of the underlying soils. Samples shall be collected by properly trained personnel and submitted to a State-approved laboratory for analysis. Any soil with pesticide, herbicide, or fumigant concentration levels that exceed California State Title 26 threshold limits would be classified as hazardous material. PG&E shall implement appropriate handling and disposal procedures for any excavated materials containing elevated levels of contaminants. Prior to disturbing additional contaminated soil, PG&E shall prepare and submit a health and safety plan that is approved by a certified industrial hygienist to address handling, treatment, and/or disposal options. Personnel working around, handling, and disposing of contaminated soil shall meet the federal Occupational Safety and Health Administration (OSHA) requirement for the 40-hour Hazardous Waste Operations and Emergency Response Standard. The investigation results, and health and safety plan if needed, shall be submitted for review and approval by the appropriate regulatory agencies (i.e., Department of Toxic Substances Control and/or Regional Water Quality Control Board). PG&E shall submit to the CPUC copies of correspondence with regulatory agencies including the health and safety plan and any approvals.

Mitigation Measure for Construction Noise

N-1 Avoid unnecessary construction traffic noise. Where feasible, construction traffic shall be routed to avoid noise-sensitive areas, such as residences, schools, religious facilities, hospitals, and parks.

Mitigation Measure for Noise Impacts to Planned Residences

N-2 Construct wall to obstruct noise. PG&E shall design and construct an eight-foot-high prefabricated concrete perimeter wall enclosing the western side of the substation site to shield noise-sensitive areas, such as residences. The wall shall be built and completed before occupancy of residences within 1,000 feet of the site.

Mitigation Measures for Construction Traffic

- T-1 Reduce impacts during periods of peak traffic.** To the extent feasible, truck traffic would be scheduled for off-peak hours to reduce impacts during periods of peak traffic on Seventh Standard Road.
- T-2 Stagger truck traffic during grading and site-preparation.** To the extent feasible, truck traffic would be staggered throughout the 40-day grading and site preparation construction phase.

A Mitigation Monitoring Plan located in Section C of this document has been prepared to ensure that the APMs and the conditions of approval, as well as the mitigation measures presented above are properly implemented. The plan describes specific actions required to implement each measure, including information on timing of implementation and monitoring requirements.

Based on the analysis and conclusions of the Initial Study, the impacts of the project as proposed by PG&E would be mitigated to less than significant levels with the implementation of the mitigation measures presented herein, which have been incorporated into the Proposed Project.