PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



## FINAL MITIGATED NEGATIVE DECLARATION

# PACIFIC GAS AND ELECTRIC COMPANY'S APPLICATION NO. A.97-11-024 FMC SUBSTATION

#### **PROJECT DESCRIPTION**

In compliance with the California Public Utilities Commission (CPUC) General Order No. 131-D, Pacific Gas & Electric Company (PG&E) has applied for a Permit to Construct (PTC) to upgrade the FMC Substation and construct a 115 kV power line in San Jose, California. PG&E proposes the project to meet the load growth expected to occur in the downtown distribution area of San Jose and to ensure that PG&E can provide an adequate and reliable supply of electric power in the future.

The existing FMC Substation, located north of Interstate 880, is connected by a 115 kV power line to Substation B, located near the intersection of Coleman Avenue and the Highway 87 off-ramp. The FMC Substation project would add another 115 kV power line between the two substations and would upgrade the existing FMC Substation.

At full build out, the proposed substation would be a remote-controlled, three- transformer bank, low profile facility occupying an area of approximately 300 by 150 feet. The substation would operate without on-site personnel, but would require maintenance inspections once a month.

The site of the existing FMC Substation is located on a 4.07 acre block bounded on the south by I-880, on the north by industrial buildings fronting Newhall Street, on the east by Stockton Avenue with residences fronting on the street, and on the west by the Union Pacific Railroad/CalTrain right-of-way. The substation site is flat. The site includes the existing FMC Substation, located on the southern corner of the site, but is a mostly vacant, paved area.

The first phase project construction would include minor grading and paving of the site and construction of drainage ditches and a lined catchment pond for runoff. PG&E would install the first 30-MVA, 115 kV 12 kV transformer bank and install related substation equipment such as a high-side pull-off structure to bring the 115 kV line into the substation, air disconnect switches, bus structures, 12 kV switchgear assemblies, 115 kV-12 kV transformers, a central storage battery facility and 12 kV distribution lines. The first phase of the project would also include construction of an eight-foot high solid sound wall and perimeter landscaping between the wall and the street curb along Stockton Avenue.

In subsequent phases of project construction, PG&E would install the second and third 30-MVA, 115 kV-12 kV transformer banks at the FMC Substation. The second bank is expected to be installed in the spring of 2000, and the third is be expected to be needed in the year 2006 or 2007.

At the time the second 30-MVA transformer bank is installed at the FMC Substation, PG&E would also install a second circuit of 115 kV power lines between Substation B and the FMC Substation. This power line circuit would run approximately 7,700 feet from a tap at Substation B to the FMC Substation site. Within that length, modifications of the existing 115 kV power line and the addition of new 115 kV segments would involve several actions. From the tap at Substation B to West Taylor Street, the existing 115 kV power line along Coleman Avenue would be rebuilt by replacing the existing tubular steel poles with new double circuit, 85-foot-high, tubular steel poles. Along West Taylor Street and along Stockton Avenue, a new 115 kV power line would be added above existing distribution lines and would use 65-foot-high wood poles for linear segments and tubular steel poles for angle structures. The new 115 kV power line would join as an overhead line the existing line at the south side of I-880, and would cross the freeway and enter the FMC Substation as a double circuit line.

Construction of the new 115 kV power line would require: clearing vegetation and boring foundation holes; constructing foundations; delivering and installing the poles and hardware; and stringing the wire. Use of heavy construction equipment along roadways may require temporary closures of single lanes of traffic.

Customer electrical service interruptions are not expected during the construction of the substation or power line.

Further details on the proposed construction methods and the proposed facilities are included in the Initial Study prepared for the FMC Substation project and in PG&E's application and Proponents Environmental Assessment (PEA).

The CPUC's process for granting a Permit to Construct requires compliance with the California Environmental Quality Act (CEQA). An Initial Study was prepared for this project, specifically to examine the potential effects on the environment associated with the construction of each component of the FMC Substation project at its proposed location. A CEQA Initial Study does not study project alternatives; however, under the General Order 131-D process, the CPUC requires the applicant to include in its application the reasons for selecting the power line route or substation location, including a comparison with alternative routes or locations, and the advantages and disadvantages of each. The CPUC reviews this information before approving the Permit to Construct for that proposed site.

## **ENVIRONMENTAL DETERMINATION**

An Initial Study was prepared to assess the potential effects on the environment, and the respective significance of those effects, from the proposed FMC Substation project. Based on that Initial Study, the proposed FMC Substation project would have less than significant environmental effects or no impact in the areas of:

- Land Use and Planning
  Transportation/Circulation
  Cultural Resources
- Population and Housing
  Energy and Mineral Resources
  Utilities and Service Systems
- Biological Resources
  Hazards
  Aesthetics
- Recreation
  Cumulative Impacts

Based on the Initial Study, the proposed FMC Substation project would have potentially significant environmental effects in the areas of:

Geological Problems
 Water
 Air Quality
 Noise

Each of the identified potential impacts can be mitigated to avoid the impact or to reduce it to a less than significant level by mitigation measures. PG&E has agreed to comply with these measures and incorporate them as part of the project actions. These mitigation measures and monitoring requirements are as follows:

### **MITIGATION MEASURES AND MITIGATION MONITORING REQUIREMENTS**

#### **Geological Problems**

Impact: The project would be subject to potential damage in the event of an earthquake.

**Mitigation Measure**: The following mitigation measure would reduce the potential impact of earthquake hazards to an acceptable level of risk, to a less-than-significant level.

*Measure III.c.1.* PG&E shall undertake geotechnical studies for the sites of all new power line poles to determine the hazards of liquefaction, lateral spreading, lurching, weak soils subject to settlement, or other forms of failure under design forces for a maximum credible earthquake (MCE) in the area. The report shall summarize findings about the hazards and provide the recommendations of the certified engineering geologist to ensure that the foundations of power line poles will be designed to prevent their failure under MCE ground motions and coseismic hazards. PG&E will implement the recommendations of the engineering geologist as requirements in the design and construction of the poles.

Monitoring Action:	The CPUC mitigation monitor shall acknowledge receipt of the report of the engineering geologist.
Responsibility:	PG&E shall submit a copy of the engineering geologist's report and ensure compliance with those recommendations.
Timing:	The report's recommendations shall be incorporated in design of the power line pole foundations.

**Impact**: Expansive soils in the vicinity of the project could damage foundations and adversely affect the project.

**Mitigation Measure**: The following mitigation measure would reduce the potential impact of soil expansivity to a less-than-significant level.

*Measure III.h.1.* Foundation engineering design and construction practices should consider the impact of shallow groundwater affecting swell potential of the lean clay. This may entail removal of expansive clays and their replacement with engineered fill, or alternative foundation systems and moisture barriers, which eliminate the shrink-swell effects on the load-bearing foundations. Recommendations of a foundation engineer should be implemented to eliminate or reduce any impacts resulting from expansive soils to a less than significant level. A copy of the recommendations shall be filed with the CPUC.

Monitoring Action:	The CPUC mitigation monitor shall confirm receipt of the report of the foundation engineer.
Responsibility:	PG&E shall submit a copy of the foundation engineer's report to the CPUC and ensure compliance with those recommendations.
Timing:	The report's recommendations shall be incorporated in design of the power line pole foundations.

#### Water

**Impact**: Construction activities have the potential to create silt that could be deposited in storm drains and on road surfaces if rain occurs during the construction period.

**Mitigation Measure**: The following mitigation measure would reduce the potential impact of surface water discharge to a less-than-significant level.

*Measure IV.c.1.* If construction is scheduled during the rainy season, PG&E shall employ best construction management practices to prevent discharges of silt and other substances from construction into storm drains. PG&E shall develop and implement a plan to control excavated soils and runoff, specifying practices such as the use of detention basins, straw bales, silt fences or other deterrents, and site clean-up procedures and practices to minimize contact of construction materials with stormwater.

Monitoring Action:	The CPUC mitigation monitor shall review and approve the control plan submitted by PG&E.
	If rain occurs during construction, the CPUC mitigation monitor shall visit the site to confirm the effectiveness of mitigation measures.
	PG&E shall provide the CPUC mitigation monitor with documentation of compliance actions in regular progress reports.
Responsibility:	PG&E shall verify compliance actions and reporting by on-site work crews and supervisors.
Timing:	The CPUC review and approved of the control plan must precede starting grading or foundation borings.
	Control measures shall be in place on-site before rain occurs.
	PG&E shall submit regular progress reports to the CPUC mitigation monitor.

#### **Air Quality**

Impact: Construction activities have the potential to generate airborne dust and particulates.

**Mitigation Measure**: The following mitigation measure would reduce the potential impact of dust and particulate generation to a less-than-significant level:

*Measure V.a-1:* PG&E shall require its construction contractors or its crews to implement a dust abatement program during construction activities. The dust abatement program should include the following (as adapted from BAAQMD):

- Water exposed soils at all active construction sites at least twice daily on days without measurable rainfall at the site;
- Cover all trucks hauling soil, sand, and other loose materials *or* require all trucks to maintain at least two feet of freeboard;
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites; and
- Sweep daily (with water sweepers) the paved access road to the substation site, and paved parking and staging areas at the substation site. Sweep each paved street area used to drill foundation holes and pour foundations for power line towers.

Monitoring Action:	PG&E shall monitor activities at the site and document compliance with this measure daily.
	The CPUC mitigation monitor shall visit site during construction and observe compliance actions.
	PG&E shall provide the CPUC mitigation monitor with documentation of compliance actions in regular progress reports.
Responsibility:	PG&E shall verify compliance actions and reporting by on-site work crews and supervisors.
Timing:	PG&E shall deep daily records and shall submit copies to the CPUC mitigation monitor in regular progress reports.

#### Noise

Impact: Construction activities have the potential to generate noise that affect nearby residents.

**Mitigation Measure:** The following mitigation measures would reduce the potential noise impacts to a less-than-significant level:

*Measure X.a-1:* To reduce the construction noise effects, PG&E shall ensure that noisy construction activities at the substation site and near residences along the power line route shall be limited to the least noise-sensitive time of day and week (e.g., 7:00 a.m. to 6:00 p.m., Monday through Friday).

*Measure X.a-2:* To reduce the construction noise effects PG&E shall ensure that all construction equipment used on the substation site and for power line construction shall be adequately muffled and maintained.

*Measure X.a-3:* To reduce the construction noise effects, PG&E shall ensure that all stationary construction equipment (i.e., compressors and generators) shall be located as far as practicable from the eastern property line.

Monitoring Action:	PG&E shall monitor activities at the site and document compliance with measures X.a-1 and X.a-3.
	PG&E shall obtain certifications or shall verify that construction equipment is adequately muffled and regularly maintained.
	The CPUC mitigation monitor shall visit the site during construction and observe compliance with measure X.a-3.
	PG&E shall provide the CPUC mitigation monitor with documentation of compliance actions in regular progress reports.
Responsibility:	PG&E shall verify compliance actions and reporting by on-site work crews and supervisors.
Timing:	Before on-site work begins, PG&E shall provide the CPUC mitigation monitor with verification that construction equipment is adequately muffled and regularly maintained.
	PG&E shall keep daily records of each day's work hours for construction activities and shall keep weekly records of the locations of noisy equipment.
	PG&E shall provide copies of the compliance documentation in regular progress reports to the CPUC mitigation monitor.

# **FINDINGS**

Based on the analysis in the Initial Study and the Mitigation Measures identified within for inclusion into the project, the CPUC finds that the FMC Substation project will <u>not</u> have a significant effect on the environment.

Natalie Walsh, Program Manager Analysis Branch Energy Division California Public Utilities Commission

Date