

EXHIBIT G

Pacific Gas and Electric Company

**MOSS LANDING BUS UPGRADE AND AUTOMATION
PROJECT**

APPLICANT PREPARED ENVIRONMENTAL ASSESSMENT

DECEMBER 2010

PREPARED BY:



PREPARED FOR:



EXECUTIVE SUMMARY

INTRODUCTION

Pacific Gas and Electric Company (PG&E) is proposing to enhance their system reliability by expanding the existing 26-acre Moss Landing Substation and reconfiguring the associated transmission lines and towers adjacent to the substation. The Moss Landing Bus Upgrade and Automation Project (project) would involve an approximate 5.2-acre expansion of the substation footprint; removal and replacement of the existing, aging 230 kilovolt (kV) and 115 kV substation equipment; and installation of new equipment which is more efficient, compact, and lower in profile. The transmission towers located to the north of the substation would be removed and replaced to support the more efficient substation layout. The project is being implemented to increase PG&E's control and reliability of the substation, which would result in increased reliability of the overall transmission system in the area.

PROJECT COMPONENTS

The project includes the following components:

- An approximately 5.2-acre expansion of the existing 26-acre substation footprint
- Removal of the existing 115 kV and 230 kV substation equipment
- Installation of new, more efficient 115 kV and 230 kV substation equipment
- Removal or relocation of lattice towers and tubular steel poles within the tower yard and the expanded substation
- Relocation of the existing microwave telecommunications tower and building
- Relocation of the existing outdoor materials testing facility

IMPACT ASSESSMENT

The Applicant-Prepared Environmental Analysis evaluates the potential for impacts associated with the project components discussed herein. It includes a completed checklist that was prepared in accordance with Appendix G of the California Environmental Quality Act Guidelines. These guidelines identify the potential impacts by significance level (e.g., no impact, less-than-significant impact, less-than-significant impact with mitigation, and potentially significant impact) and by resource area. Through this Applicant-Prepared Environmental Analysis, PG&E has demonstrated that they would expand the existing substation, reconfigure the existing transmission towers, and maintain and operate these facilities with minimal impact to environmental resources.

As described in Section 2 Impact Analysis of this document, potentially significant impacts have been identified for Biological Resources, Cultural Resources, and Geology and Soils. PG&E would reduce these temporary and permanent impacts to the less-than-significant level through the implementation of project-specific plans, best management practices, and applicant-proposed measures, as described herein. With the implementation of these plans, practices, and measures, all impacts would be less than significant.

TABLE OF CONTENTS

1. PROJECT DESCRIPTION 1

 1.0 Introduction.....1

 1.1 Purpose and Need1

 1.2 Location1

 1.3 Components1

 1.4 Land Requirements8

 1.5 Project Construction.....10

 1.6 Required Approvals and Authorization15

2. ENVIRONMENTAL IMPACT ASSESSMENT 17

 2.0 Aesthetics.....17

 2.1 Agriculture and Forestry Resources.....19

 2.2 Air Quality21

 2.3 Biological Resources24

 2.4 Cultural Resources34

 2.5 Geology and Soils.....39

 2.6 Greenhouse Gas Emissions.....44

 2.7 Hazards and Hazardous Materials46

 2.8 Hyrdology and Water Quality.....54

 2.9 Land Use and Planning59

 2.10 Mineral Resources61

 2.11 Noise62

 2.12 Population and Housing.....66

 2.13 Public Services.....68

 2.14 Recreation70

 2.15 Transportation and Traffic.....71

 2.16 Utilities and Service Systems.....74

 2.17 Mandatory Findings of Significance.....77

 2.18 References.....79

LIST OF FIGURES

Figure 1-1: Project Vicinity Map 3

Figure 1-2: Substation and Transmission Tower Yard Site Plan..... 5

LIST OF TABLES

Table 1-1: Permanent Aboveground Facility Land Requirements 9

Table 1-2: Typical Construction Equipment..... 13

Table 1-3: Potential Permits and Authorizations 16

Table 2-4: Attainment Status for the North Central Coast Air Basin 22

Table 2-5: Hazardous Materials Typically Used for Construction..... 50

Table 2-6: Noise Levels of Typical Construction Equipment 63



1. PROJECT DESCRIPTION

1.0 INTRODUCTION

Pacific Gas and Electric Company (PG&E) is proposing the Moss Landing Bus Upgrade and Automation Project (project) to increase substation control and enhance electrical system reliability. The project involves an approximate 5.2-acre expansion of the existing Moss Landing Substation; removal of the existing 230 kilovolt (kV) and 115 kV substation equipment; and installation of new, more efficient substation equipment that would increase the control and reliability of the substation and transmission system. In addition, the transmission lines and towers located to the north of the substation outside of the existing fence line (hereby referred to as the transmission tower yard) would be reconfigured. Specifically, ten existing lattice towers and one tubular steel pole (TSP) would be removed and would be replaced with five new lattice towers and seven TSPs of similar height.

1.1 PURPOSE AND NEED

The project would enhance PG&E's control and reliability of the substation and transmission system. The substation system controls are currently located within the Dynegy-owned Moss Landing Power Plant, which is located adjacent to the southern boundary of the Moss Landing Substation. Because PG&E originally built, owned, and operated the power plant, the substation controls are located inside the power plant. Now that the power plant is owned by Dynegy, PG&E substation operators have limited access to substation controls inside the power plant because of Dynegy's security protocols. With the implementation of the project, the substation controls would be relocated to the PG&E-owned substation property.

Additionally, the existing substation equipment is aging. The new substation equipment would increase the reliability and efficiency of PG&E's electrical transmission system.

1.2 LOCATION

The project is located in unincorporated Monterey County, California, as shown on Figure 1-1: Project Vicinity Map. The substation is located approximately 7 miles south of the City of Watsonville. Elkhorn Slough is located approximately 240 feet north of the project.

1.3 COMPONENTS

The project includes the following components:

- An approximately 5.2-acre expansion of the existing 26-acre substation footprint
- Removal of the existing 115 kV and 230 kV substation equipment
- Installation of new, more efficient 115 kV and 230 kV substation equipment
- Removal and replacement of lattice towers and TSPs in the transmission tower yard and the expanded substation
- Relocation of an existing microwave telecommunications tower and building
- Relocation of an existing outdoor materials testing facility

1.3.0 Substation Expansion and Reconfiguration of the 115 kV and 230 kV Transformer Banks

The Moss Landing Substation currently occupies approximately 26 acres and would be expanded by approximately 5.2 acres (150 feet by 1,500 feet). To accommodate the substation expansion, while still maintaining electrical service to areas served by the substation, the project would be phased. During the first phase, the existing 230 kV substation equipment would be removed and replaced with the new substation equipment in the new configuration.

The second phase involves the removal and replacement of the 115 kV equipment. Demolition and construction at the 115 kV yard would not begin until construction at the 230 kV yard is complete. Phasing the 115 kV and 230 kV yards would ensure that portions of the substation can remain energized during construction to serve customers.

The height of the new substation equipment would range from 20 to 30 feet, which is approximately 10 feet lower than the existing equipment. Three existing 90-foot to 100-foot-tall lattice towers located within the substation fenceline would be removed and replaced with several 60-foot-tall TSPs. The major equipment to be installed includes 230/115 kV transformer banks, circuit breaker reactors, two modular protection automation and control buildings (each measuring 98 feet long, by 16 feet wide, and 11 feet tall), and a battery building (measuring 34 feet long, by 16 feet wide, and 11 feet tall).

The substation expansion area and new substation equipment is depicted in Figure 1-2: Substation and Transmission Tower Yard Site Plan.

The total amount of oil required to operate the transformers at the Moss Landing Substation would be reduced because the existing single-phase banks would be replaced with new three-phase banks, which require less oil. Additionally, the existing oil-filled circuit breakers would be replaced with gas circuit breakers. Under the substation equipment, one new retention basin would be installed and the existing basin would be modified. Stormwater would be managed by a series of drainage ditches and pipes connecting to the drainage system for the adjacent power plant.

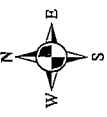


Figure 1-1: Project Vicinity Map

Moss Landing Bus Upgrade and Automation Project



Pacific Gas and Electric Company



1:24,000





MOSS LANDING BUS UPGRADE AND AUTOMATION PROJECT
 TOWER YARD SITE PLAN

PROJECT NO.	DATE	REVISION
PROJECT TITLE	DESIGNED BY	CHECKED BY
PROJECT LOCATION	DATE	SCALE
PROJECT NUMBER	PROJECT SHEET	PROJECT TOTAL SHEETS

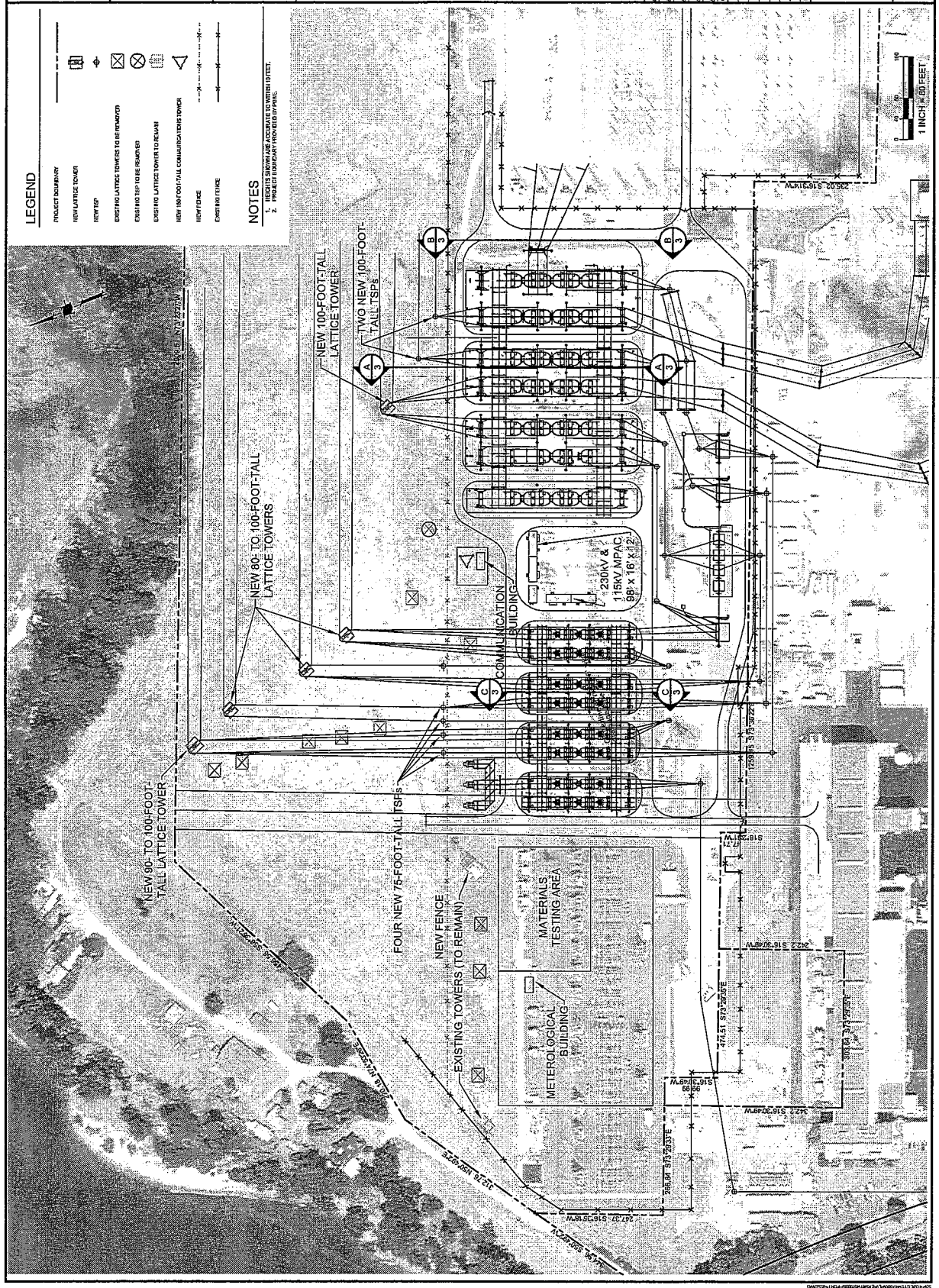
FIGURE 1-2

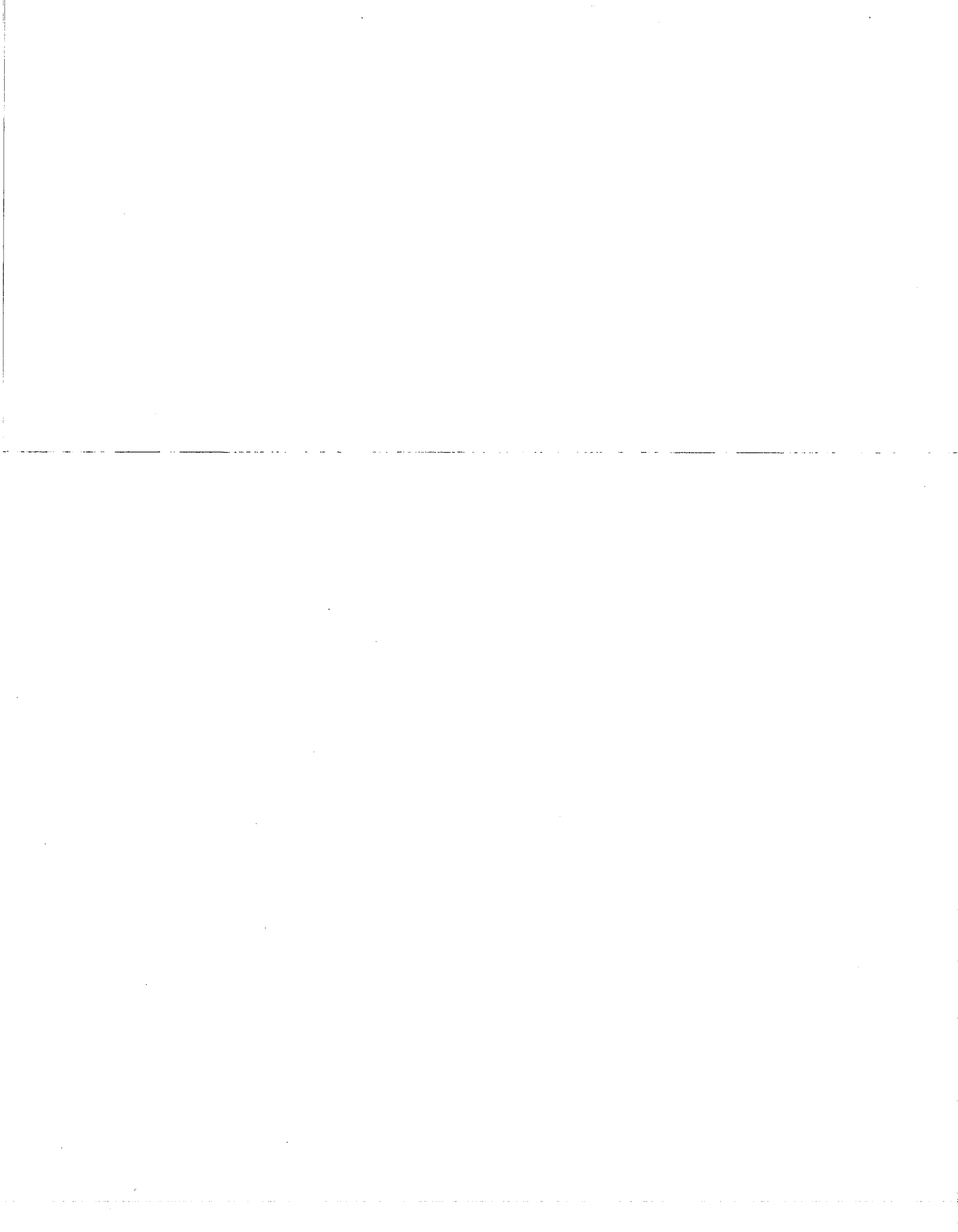
LEGEND

- PROJECT BOUNDARY
- NEW LATTICE TOWER
- REINVENT
- EXISTING LATTICE TOWERS TO BE REMOVED
- EXISTING TSP TO BE REMOVED
- EXISTING LATTICE TOWER TO REMAIN
- NEW 100-FOOT-TALL COMMUNICATIONS TOWER
- NEW FENCE
- EXISTING FENCE

NOTES

1. HEIGHTS SHOWN ARE ACCURATE TO WITHIN 0.1 FEET.
2. PROJECT BOUNDARY PROVIDED APPROX.





Substation lighting would be provided by 100 and 150 watt high-pressure sodium luminaires that would be mounted to the substation structures and to poles ranging in height from 10 feet to 14 feet. The substation lights would normally be turned off and would only be used intermittently at night for security and safety reasons. The lights would be oriented downward to minimize glare onto surrounding property and habitat.

A 6-foot-tall chain-link fence topped with barbed wire (consistent with PG&E standards for security fences) would enclose the entire substation, which would include the 115 kV yard, 230 kV yard, and the outdoor materials testing facility. All entrance gates would be locked and monitored remotely to limit access to qualified personnel. Warning signs would be posted on the substation fence, in accordance with federal, state, and local safety regulations. A substation ground grid would also be installed, in accordance with applicable PG&E safety guidelines and standards.

1.3.1 Pole Removal and Installation

The existing transmission lines, located within the transmission tower yard, would be reoriented to accommodate the substation expansion, as shown in Figure 1-2: Substation and Transmission Tower Yard Site Plan.

The new transmission line-related lattice towers to be installed in the tower yard would be between 80 and 100 feet tall along the 115 kV lines and 90 to 100 feet tall along the 230 kV lines. The new TSPs to be installed along the 115 kV lines would be approximately 75 feet tall and the TSPs along the 230 kV lines would be approximately 100 feet tall. All new lattice towers and TSPs would be designed to conform to those practices described in the Suggested Practices for Avian Protection on Power Lines Manual developed by the Avian Power Line Interaction Committee.

New conductor would also be installed to connect the new lattice towers and TSPs to the reconfigured substation transformer banks.

1.3.2 Relocation of the Microwave Communications Tower

Prior to the substation reconfiguration and replacement of the transformer banks, the existing microwave communications tower and control building must be relocated. The microwave communications tower is essential for substation operation and communication. The existing microwave communications tower and control building would be demolished only after the new equipment is operational.

The new microwave communications tower and control building would be constructed approximately 300 feet northwest of the existing tower and control building, as shown in Figure 1-2: Substation and Transmission Tower Yard Site Plan. The existing 150-foot-tall microwave tower would be removed and a new 150-foot-tall microwave tower would be installed. The tower would have 8-foot microwave antennas placed at 105 feet and 145 feet on the tower. The microwave communications tower, with associated ground systems, control building, and cable-bridge from the communication tower to the control building, would be installed within the substation fenceline. The new control building would be 32 feet by 12 feet, which is similar in size to the existing building.

1.3.3 Relocation of the Existing Outdoor Test Yard

The project would require the relocation of the existing materials testing yard and meteorological tower in order to accommodate the new 230 kV substation equipment. The materials testing yard would be moved approximately 1,000 feet to the west and would occupy an area measuring approximately 130,000 square feet. The entire area would be graded and graveled to create a flat, drivable surface, and the perimeter of the facility would be fenced. The yard would be used for testing utility equipment including transformers, switching equipment, poles, insulators, and overvoltage protection devices.

The test facility would also contain a new meteorological tower. The tower would be 60 feet tall and would be located in the northeast corner of the test facility, away from obstructions.

1.4 LAND REQUIREMENTS

This project would include locating TSPs on Dynegy's property within a new right-of-way. During construction, a temporary access easement would be obtained from the adjacent property owner to the northwest for use of the existing private road leading to the transmission tower yard.

1.4.0 Temporary Work Areas (Construction)

Substation Expansion

Access

During construction at the substation, temporary access for equipment and vehicles would be provided via Dolan Road and California State Route 1 (Highway 1). Construction vehicles and equipment would utilize existing paved roadways and existing dirt roads within the PG&E-owned property.

Staging Areas

Staging of substation materials would occur in Fresno, California. All materials would be trucked into the site and would be delivered via Dolan Road and Highway 1. Construction staging would occur within the existing substation site and no additional land is required. Construction trailers would also be located within the existing substation site and would obtain power from the substation.

Work Areas

Because each substation bus¹ would be encircled by 16-foot-wide access roads, additional work areas, beyond the approximate 5.2 acres being developed as part of the substation expansion, would not be required. The work areas include all of the access roads between the substation busses.

¹ A substation bus is an electrical connection between multiple electrical devices.

Transmission Line and Structures

Access

Access to the transmission lattice towers/TSPs located outside of the existing substation fence line would be from the existing PG&E maintenance facility just east of the substation or an existing private road that is located northwest of the project site. To access each of the transmission tower locations from the private road, a series of 16-foot-wide dirt access roads would be required. All temporary access roads would be restored to pre-construction conditions following completion of the project.

Staging Areas

Lattice tower steel and TSPs would be delivered to the project site from Davis, California via Dolan Road and Highway 1. Construction staging would occur within the larger work area described in the following section.

Work Areas

An approximately 350,000-square-foot (8-acre) temporary work area would be utilized within the transmission tower yard during construction. This area would be used for lattice tower demolition, equipment and materials staging, site access, and working space for placing equipment and materials. All work areas would be restored to pre-construction conditions upon completion of construction.

1.4.1 Permanent (Operation and Maintenance)

The expanded substation and lattice towers would occupy approximately 5.2 additional acres of land upon completion of the project, as shown in Table 1-1: Permanent Aboveground Facility Land Requirements. Within the transmission tower yard, nine lattice towers and one TSP would be removed and would be replaced in new locations with four lattice towers and six TSPs. Therefore, there is no additional permanent land impact as a result of the lattice tower component of the project.

Table 1-1: Permanent Aboveground Facility Land Requirements

Aboveground Facility	Permanent Land Requirements	
	Dimensions/Square Footage	Acreage
Expanded substation	1,500 feet by 150 feet	5.2
Lattice towers (4 footings per lattice tower)	116 square feet per tower (29 square feet per footing)	0.01-0.02=-0.01*
TSPs	29 square feet per TSP	0.01

*Demolition of the nine existing towers within the transmission tower yard would result in the removal of 0.02 acre of permanent impacts, while the installation of the new towers would result in 0.01 acre of impact.

1.5 PROJECT CONSTRUCTION

1.5.0 Construction Methods

Substation Expansion

Clearing and Grading and Demolition

The existing substation equipment would be removed from the site in phases. First, the existing 230 kV equipment would be demolished, removed, and then reconstructed in the new configuration. Then, the 115 kV equipment would be demolished, removed, and reconstructed. The existing substation equipment would be reused on site or recycled, to the maximum extent practicable. Any remaining materials and equipment would be sent to appropriate landfill facilities (such as the Altamont Landfill). Any hazardous materials would be appropriately disposed of at the nearest hazardous materials disposal facility.

Once the existing substation equipment has been demolished and removed, the site clearing and grading would ensue. Existing vegetation in the expansion area would be cleared and the area would be graded to create a level surface for the new equipment. Some cut and fill would be required to create a level surface. The grading would be based on a grading plan that emphasizes balanced cut and fill to the extent possible. In addition, on-site material would be reused to the extent possible. Approximately 3,072 cubic yards of cut and 30,377 cubic yards of fill would be required to develop the substation structure pads. The entire expansion area would then be graveled. Imported Class II Aggregate base would be required to provide a 4- to 12-inch surface cap for the two substation switchyards. Site grading would be accomplished with bulldozers and scrapers, which would cut and fill native soil to the desired pad elevations.

Foundation Installation

Following site preparation, construction of the station equipment foundations (consisting of drilled pier, mat, and pad type foundations) and the grounding grid would begin. Foundation construction would commence with excavation activities that would be accomplished primarily by backhoes and drill rigs. Forms, reinforcing steel, and concrete would then be installed, as appropriate, to build the foundations.

Approximately 6,000 gallons of water would normally be required daily for dust control. Up to 15,000 gallons per day would be required during grading and foundation construction. Water would be obtained from the shared PG&E and Dynegey well.

Dewatering may be necessary during construction given the high groundwater table at the project site. Water would be pumped into tanks and tested for contaminants. Whenever possible, the pumped water would be recycled and reused during construction (e.g., dust control).

Aboveground Substation Equipment Installation

Once the foundation work has been completed, placement of major substation equipment on their respective foundations or structures, inclusive of anchoring in their final positions and wiring of the equipment controls and protection devices, would be completed. This work would be accomplished by delivering equipment to the site on flatbed trucks and lifting it into place using forklifts and cranes.

Cleanup and Post-Construction Restoration

Because the entire substation and work areas would be located within the substation property, on asphalted or graveled roads, there would be no post-construction restoration required.

Transmission Lines and Structures

Clearing and Grading

Once the access route to each transmission tower has been established, work would begin. No tree removal would be required. More detailed information regarding the vegetation and habitat communities to be impacted by clearing is provided in Section 2.3 Biological Resources.

The transmission tower yard is relatively flat and minimal (if any) grading would be required for the installation of the new lattice towers. However, excavations would be required for the new lattice tower foundations, as described in the following section.

Water for dust control would be obtained from the shared PG&E and Dynegy well or from dewatering activities (once the water is tested and is determined to be free of contaminants).

Lattice Tower Installation

Lattice tower foundations would typically be drilled concrete piers. The foundation process would begin with the boring of four holes (approximately 4 to 6 feet in diameter and 12 to 15 feet in depth) for the lattice towers. The holes would be bored using truck-mounted excavators and augers to match the diameter and depth requirements of the foundations. Following excavation of the foundation holes, reinforcing steel would be installed and concrete would be poured. Concrete would be delivered directly to the lattice tower locations in concrete trucks. In cases where access is limited, concrete may be pumped from a work area located several hundred feet away from the structure location.

Lattice tower segments would be assembled at each installation site within the transmission tower yard work area. Steel parts for each structure would be delivered to each location by flatbed truck. The lattice tower segments would be bolted together and assembled on the ground. The lattice towers would be lifted onto their foundations by use of a crane.

PG&E would notify the Underground Service Alert a minimum of 48 hours in advance of excavating or conducting other ground-disturbing activities in order to identify buried utilities. PG&E would also conduct exploratory excavations (potholing) to verify the locations of existing facilities in the field.

TSP Installation

Crews would initiate TSP construction by excavating an approximate 20-foot-deep foundation to accommodate the rebar cage in order to reinforce the concrete foundations. When the concrete foundation is cured, the TSP base is lifted onto the foundation by a crane. Once the TSP base is secured, the next section of the TSP is slipped onto the base by a crane and secured in place. Similar to the lattice tower installation, concrete would be delivered directly to the TSP locations in concrete trucks. In cases where access is limited, concrete may be pumped from a work area located several hundred feet away from the structure location.

Conductor Installation

Conductor stringing operations would be facilitated with the installation of travelers or “rollers” on the structure cross-arms during structure installation, using aerial manlifts (bucket-trucks). The travelers would allow the conductor to be pulled through each structure until the entire line is ready to be pulled up to the final tension position. Following installation of the travelers, a sock line (a small cable used to pull the conductor) rope would be pulled onto the travelers. Once the rope is in place, it would be attached to a steel cable and pulled back through the travelers. The conductor would then be attached to the cable and pulled back through the travelers using conventional tractor-trailer pulling equipment located at pull and tension sites.

After the conductor is pulled into place, the sags between the structures would be adjusted to a pre-calculated level. The line would be installed with a minimum ground clearance of 30 feet. The conductor would then be clipped into the end of each insulator, the travelers would be removed, and as required vibration dampers and other accessories would be installed.

Cleanup and Post-Construction Restoration

All areas that are temporarily disturbed around each lattice tower and TSP, as well as areas used for conductor pulling, tensioning, and staging, would be restored to pre-construction conditions, to the extent practicable, following construction. This would include removal of all construction materials and debris, and returning areas to their original contours. The areas would be allowed to naturally revegetate.

1.5.1 Construction Personnel and Equipment

Because the substation must remain operational to maintain electrical service to PG&E customers, the project must be constructed in phases. It is anticipated that construction of the entire project would take approximately 5 years to complete (including initial site clearing and demolition) and that there would be approximately 16 personnel on site during peak construction times. The majority of work would be conducted by two crews of up to eight people working 10-hour days, 4 days per week. Short and sporadic periods of night or weekend construction may occur during reconductoring activities.

The type, quantity, and use of equipment that is anticipated to be on site during peak construction conditions for each project component are shown in Table 1-2: Typical Construction Equipment.

Table 1-2: Typical Construction Equipment

Project Component	Equipment	Use	Approximate Quantity
Substation Civil Engineering Activities	¾-ton or 1-ton pickup truck	Transport and support construction personnel	5
	Bulldozer	Grade pads and access roads	2
	Scraper	Grade pads and access roads	2
	Compactor	Grade pads and access roads	2
	Loader	Load dump trucks and stockpile	1
	Backhoe	Excavate	2
	Water truck	Suppress dust	1
	Haul truck	Transport Class II import material	1
	Asphalt paver	Pave access roads	1
	Vibrating roller	Compact soil and asphalt	1
	Asphalt haul trucks	Transport asphalt	1
	Concrete truck	Pour concrete	2
	Drill rig	Drill pier foundations	1
	Fork lift/skid steer	Move rebar, equipment, masonry, and other materials	1
Dump Truck	Move rock & spoils	2	
Tower and Line Installation (within the transmission tower yard)	¾-ton or 1-ton pickup truck	Transport construction personnel	5
	Concrete truck	Pour concrete	1
	Drill rig	Drill foundations	1
	Backhoe	Excavate foundations	1
	Large crane	Erect towers	1
	Bucket truck	Erect towers and install conductors	2
	Puller and tensioner	Install conductors	1
	Reel trailer	Install conductors	1

Project Component	Equipment	Use	Approximate Quantity
Tower and Line Installation (within the transmission tower yard)	Dump Truck, 10 yard	Haul rock and spoil	1
	Truck and 48-foot trailer	Haul materials	1
	Crew Truck Ford F550 4X4	Transport crew	2
	Line truck	Transport and store conductor	1
	Fuel truck	Fuel on-site vehicles	1
	Water truck	Suppress dust	1
	Material Van	Move store small materials	2
	Fork lift	Move materials	2
Substation Construction	Vibrating compactor	Compact soils around foundations	1
	Light-duty crane	Place material and set steel	1
	Bucket truck/manlift	Set steel and install equipment	4
	Crane	Place material and set steel	1
	Boom Truck	Place material and set steel	2
	Fork lift/skid steer	Move rebar, equipment, masonry, and other materials	2
	Haul truck	Transport Class II import material	1
¾-ton or 1-ton pickup truck	Transport and support construction personnel	5	

1.5.2 Operation and Maintenance

No substantial change to operation and maintenance procedures would occur as a result of the project. Daily substation monitoring and control functions would be performed on site utilizing the upgraded Supervisory Control and Data Acquisition system that would be installed as a part of the project. Unauthorized entry into all substations is prevented with the provision of fencing and locked gates. Warning signs would be posted and entry to the new substation would be restricted to authorized personnel. As a result, no new personnel would be required for the operation and maintenance of the substation.

Routine operation and maintenance would occur at the substation monthly. Maintenance activities would include equipment testing, equipment monitoring and repair, emergency and routine procedures for service continuity, and preventive maintenance. Gauges and meters would be read and recorded. A visual inspection of the entire facility would be conducted to look for problems and identified issues would be addressed or scheduled for repair. Routine operation and maintenance practices are expected to require approximately 12 trips per year by one PG&E maintenance person.

Transmission lines and structures are inspected annually. The inspector drives or walks the line to look for any indication of breakage or damage. If appropriate, the inspector would climb the tower for closer inspection. Any required repairs are scheduled and completed once the appropriate crews, equipment and materials are available.

1.6 REQUIRED APPROVALS AND AUTHORIZATION

PG&E would obtain all relevant permits for the project from federal, state, and local agencies. Table 1-3: Potential Permits and Authorizations lists the potential permits and approvals that are expected to be required for project construction.

Table 1-3: Potential Permits and Authorizations

Agency	Permit/Authorization	Jurisdiction/Purpose
State		
Central Coast Regional Water Quality Board	General Permit for Discharges of Storm Water Associated With Construction Activities	Stormwater discharges associated with construction activities disturbing 1 acre of land or more
California Public Utility Commission	Notice of Construction	Expansion of facility within PG&E-owned land
Local		
Monterey County	Coastal Development Permit/California Environmental Quality Act Compliance	New construction within a designated coastal zone
Monterey County	Grading Permit	Permit for grading activities at the project site
Monterey County	Building/Foundation Permit	Building/foundation permit for on-site structures with permanent foundations

2. ENVIRONMENTAL IMPACT ASSESSMENT

2.0 AESTHETICS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.0.0 Impact Discussion

Question 2.0.0a – Would the project have a substantial adverse effect on a scenic vista?

Moss Landing Bus Upgrade and Automation Project (project) is not located along a county-designated scenic highway or within or adjacent to a county-designated scenic corridor or vista. However, State Route 1 (Highway 1), located to the west of the project site as shown in Figure 1-1: Project Vicinity Map, is an Eligible State Scenic Highway, though not officially designated as such. There are limited views of the project site from Highway 1. As shown in the visual simulations prepared for the project entitled Moss Landing Bus Upgrade and Automation Project Visual Simulations and dated October 2010, the overall visual change to the project site as a result of the substation expansion and lattice tower and tubular steel pole (TSP) reorientation would be minimal when viewed from Highway 1. Therefore, the impact to scenic vistas would be less than significant.

Question 2.0.0b – Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Though Highway 1 is an Eligible State Scenic Highway, there are no scenic resources such as trees, outcroppings, or historic buildings within the project area that would be damaged as part of the project. Additionally, no trees would be removed as part of a project. Therefore, there would be no impact to scenic resources within a state scenic highway.

Question 2.0.0c – Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

As shown in the visual simulations prepared for the project, the overall visual change to the project site as a result of the project would be minimal. The project area is located in an industrial area adjacent to a large power plant. Lattice towers, TSPs, and substation equipment already exist at the site and the project will represent a minimal visual change. The visual character and quality of the site would not be impacted as a result of the expansion of the existing industrial substation use.

Question 2.0.0d – Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

While new substation lighting would be provided as part of the project, the new lighting is not expected to cause additional, substantial light or glare. The substation lights would normally be turned off and would only be used intermittently at night for security and safety reasons. The lights would be oriented downward to minimize glare onto surrounding property and habitat. Furthermore, there is existing lighting at the substation site and new lighting will be similar to the existing lighting. Thus, there would be no new substantial light or glare impacts adversely affecting day or nighttime views and there would be no impact.

2.0.1 Applicant-Proposed Measures

Because the project would not cause any significant impacts to aesthetics, no applicant-proposed measures (APMs) are required.

2.1 AGRICULTURE AND FORESTRY RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.1.0 Impact Discussion

Question 2.1.0a – Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The project site is designated Heavy Industrial (HI) per the Monterey County General Plan and is zoned HI-Coastal Dependant (CZ) per the Monterey County Code. These designations allow for a variety of industrial and coastal-dependant commercial uses. Agriculture is not an allowed use at the site. The site is not considered Prime Farmland, Unique Farmland, or Farmland of

Statewide Importance under the California Resources Agency Farmland Mapping and Monitoring Program. As a result, no impact would occur.

Question 2.1.0b – Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

According to the Monterey County 2007 Williamson Act Lands Map and the Monterey County General Plan, there are no Williamson Act parcels or designated agricultural preserves in the project area. Additionally, the project is not located in an area zoned for agricultural uses; therefore, no impact would occur.

Question 2.1.0c – Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

The project site is not zoned forest land, timberland, or Timberland Production; therefore, the project would not cause a rezoning of these lands and no impact would occur.

Question 2.1.0d – Would the project result in the loss of forest land or conversion of forest land to non-forest use?

As described in the response to Question 2.1.0c, there is no forest land located at the project site. Therefore, forest land would not be converted to a non-forest use and there would be no impact.

Question 2.1.0e – Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

The project will not result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use because there is none located on the project site. While occasional, limited grazing by adjacent livestock herds occurs within portions of the tower yard, grazing will be allowed to continue once construction of the project is complete. Livestock owners would be given notice prior to construction activities to allow them to make alternative grazing arrangements. Therefore, the impact to occasional grazing activities would be minor and temporary and the impact would be less than significant.

2.1.1 Applicant-Proposed Measures

Because the project would not cause any significant impacts agriculture or forest lands, no APMs are proposed.

2.2 AIR QUALITY

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.2.0 Impact Discussion

Question 2.2.0a – Would the project conflict with or obstruct implementation of the applicable air quality plan?

The project area is located within the North Central Coast Air Basin and is subject to the jurisdictional regulations of the Monterey Bay Unified Air Pollution Control District (MBUAPCD) and, to a lesser extent, the California Air Resources Board. It is anticipated that particulate matter (PM₁₀) would be the primary air pollutant resulting from project construction activities. The project would result in a significant air quality impact if direct emissions of more than 82 pounds/day (lbs/day) of PM₁₀ were to occur. Because construction activities would occur over a 5-year period, would involve relatively small crews of up to eight people working 10-hour days, 4 days per week, and would involve limited construction equipment, as described in Table 1-2: Typical Construction Equipment, the project is not anticipated to emit more than 82 lbs/day of PM₁₀. Additionally, construction of the project would not conflict with any applicable air quality plans as the emissions would be negligible when compared to the existing air quality levels and would be short-term in nature.

In addition to emissions from heavy equipment use, construction would involve a relatively small amount of daily ground disturbance, which would contribute to an increase of fugitive dust

in the project area. However, the project area is limited in size and the project would be phased over 5 years; therefore, the amount of daily ground disturbance would also be limited. As part of Pacific Gas and Electric Company (PG&E) standard construction practices, disturbed areas would be watered or treated with an appropriate dust palliative; therefore, fugitive dust emissions would be limited and impacts from PM₁₀ resulting from fugitive dust emissions are anticipated to be minor. Thus, the impact would be less than significant.

Once operational, the project would not create any air emissions beyond those associated with maintenance and repair of the project. Because operations and maintenance activities would not change after construction, there would be no impact.

Question 2.2.0b – Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The project is located within the North Central Coast Air Basin (NCCAB). As shown in Table 2-4: Attainment Status for the North Central Coast Air Basin, the project air basin is in Nonattainment for Ozone (O₃) and PM₁₀. However, the project is anticipated to have minimal daily pollutant emissions during construction as a result of the limited construction crew size, limited ground disturbance, and limited equipment to be utilized. Because of the long duration of construction (approximately 5 years) pollutant emissions will not be concentrated, contributing to the violation of an air quality standard for any pollutant. Additionally, construction vehicles and equipment are not anticipated to exceed the MBUAPCD-established limit of 82 lbs/day of PM₁₀. The project will also not disturb more than 8.1 acres per day, the threshold established by the MBUAPCD above which the project could have a significant impact for PM₁₀. Therefore, the project will not violate an air quality standard nor contribute substantially to an existing or projected air quality violation. Thus, the impact is less than significant.

Table 2-4: Attainment Status for the North Central Coast Air Basin

Pollutant	State Standards	National Standards
O ₃	Nonattainment	Attainment
PM ₁₀	Nonattainment	Attainment
Fine Particulates (PM _{2.5})	Attainment	Unclassified/Attainment
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (NO ₂)	Attainment	Attainment
Sulfur Dioxide (SO ₂)	Attainment	Attainment
Lead	Attainment	Unclassified/Attainment

Source: NCCAB, 2010

Once operational, the project would not create any air emissions beyond those associated with current operations and maintenance practices for the substation and transmission towers. Because operations and maintenance activities would not change as a result of the project, there would be no impact.

Question 2.2.0c – Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

As discussed in the response to Question 2.2.0a and Question 2.2.0b, the project will involve a maximum of two construction crews of up to eight people, would involve only limited daily ground disturbance, and emissions would be spread throughout the project's 5-year construction timeframe. Therefore, the project's construction emissions would not cause a significant cumulative increase in ozone, ozone precursors, or PM₁₀ and the impact would be less than significant.

Once operational, the project would not create any air emissions beyond those associated with maintenance and repair of the project. Because operations and maintenance would not change after construction of the project, there would be no impact.

Question 2.2.0d – Would the project expose sensitive receptors to substantial pollutant concentrations?

The nearest schools to the project site are the North Monterey Middle School and the North Monterey County High School, which are located approximately 3 miles southeast of the project. Because of the significant distance between the schools and the project site, it is not anticipated that the project would impact these sensitive receptors. There are three residences located approximately 200, 320, and 350 feet northwest of the project site, respectively. These sensitive receptors could be impacted by PM₁₀ (dust) impacts during construction activities. However, the dust effects would be localized and limited because there would be a small amount of daily ground disturbance associated with the project over the phased 5-year construction term. As described previously, PG&E would implement dust control measures during construction. Therefore, impacts would be less than significant.

Once operational, the project would not create any air emissions beyond those associated with the existing maintenance and repair of the existing facilities. Because there would be no change in operations and maintenance, there would be no impact to sensitive receptors.

Question 2.2.0e – Would the project create objectionable odors affecting a substantial number of people?

Operation of construction vehicles could generate airborne odors (i.e., diesel exhaust). Such emissions would be localized to the immediate area under construction and would be short in duration. In addition, the project area where ground disturbance would be concentrated (the expanded substation and the existing and proposed tower locations) is separated from the adjacent residences by a minimum of 200 feet. As a result, there would be no impact.

Operations and maintenance activities would not change because of the project. As a result, there would be no impact.

2.2.1 Applicant-Proposed Measures

Because the project would not cause any significant impacts to air quality, no APMs are proposed.

2.3 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.3.0 Existing Conditions

Biological Setting

The project area is located within an annual non-native grassland pasture, currently utilized as a utility corridor for several high-voltage transmission lines. There are no shrubs or trees within the project boundaries, and small mammal burrows are scattered throughout the area. Along the northern boundary of the project area, a large grove of eucalyptus (*Eucalyptus* spp.) and pine (*Pinus* spp.) trees are present. The Elkhorn Slough State Wildlife Area, one of the largest tracts of tidal salt marsh in California, is located north of the eucalyptus and pine trees. Similar annual non-native grassland habitat continues to the east of the project beneath the transmission line corridor. A series of accessory buildings, several residences, and the southern portion of Moss Landing Harbor are located west of the project area. The Moss Landing Power Plant is located south of the project area.

Natural Plant Communities

Only one vegetation community—annual non-native grassland—is found within the project area. This vegetation community is composed of non-native annual grasses, including several non-native species of brome (*Bromus* spp.), wild oats (*Avena* spp.), barley (*Hordeum* spp.), mustard (*Brassica* spp.), and thistle (*Centaurea* spp.). This plant community tends to have a pronounced growing season, beginning with the first rains of winter and accelerating through spring, before producing seed and dying back during the summer. As is the case with this project area, annual grasslands are often used as grazing pastures for livestock.

Environmentally Sensitive Habitat Areas

The habitat in the project area is composed of annual grassland habitat and previously developed land. The annual grassland contains a number of non-native species and is already subject to disturbance due to grazing and ongoing electrical transmission line maintenance activities. Areas in northern Monterey County that are designated as Environmentally Sensitive Habitat Areas (ESHAs) include riparian corridors, sloughs, saltwater and freshwater marshes, dunes, and maritime chaparral. Annual grassland is a very common habitat type that is not easily degraded by human development. Thus, the habitat within the project area would not be considered an ESHA. Elkhorn Slough, which is located approximately 400 feet north of the project area, would be considered an ESHA; however, the project area does not immediately abut the slough and would not impact this area.

Sensitive Plant Species

All sensitive plant species identified in the literature search, including status, habitat association, blooming period, elevation range, and potential to occur are included in the Biological Resources Technical Report for the project. Only one special-status plant species has a moderate potential to occur within the project area—Choris' popcornflower (*Plagiobothrys chorisianus* var. *chorisianus*), a California Native Plant Society (CNPS) List 1B.2² species. Choris' popcornflower is a wetland/riparian-associated plant that occurs on coastal terraces. It inhabits

² CNPS List 1B.2 species are rare, threatened, or endangered in California or elsewhere and fairly threatened in California.

coastal prairies, coastal scrub, and chaparral habitats in mesic conditions, at elevations between 0 and 328 feet. This California endemic blooms from March through June and is distributed locally within Alameda, Santa Cruz, San Mateo, and Monterey counties. This species was observed in a vernal swale between Towers 264 and 265 of the Metcalf to Moss Landing transmission line in 2006, just east of the project area. Although habitat for this species is present within close proximity to the project area, only poor habitat for the species is located within the project area. Due to the project's proximity to a past occurrence of Choris' popcornflower, as well as the habitat type within the project area, this species is considered to have a moderate potential to occur within the project area.

Sensitive Wildlife Species

All sensitive wildlife species identified in the literature search, including status, habitat association, potential to occur, survey results, and known occurrences are included in the Biological Resources Technical Report for the project. Five special-status wildlife species—California red-legged frog, silvery legless lizard, black legless lizard, white-tailed kite, and burrowing owl—have moderate or high potential to occur in the project area. California tiger salamander (*Ambystoma californiense*), which is federally and state-listed as threatened, was also considered during the analysis of biological resources. Protocol-level surveys for this species are being conducted, and no California tiger salamander individuals have yet been detected and none are expected to be detected. Thus, this species has a low potential to occur in the project area. The wildlife species with moderate or high potential to occur are discussed in the following paragraphs.

Amphibians

One special-status amphibian species—California red-legged frog (*Rana draytonii*)—has a moderate potential to occur within the work area. One dispersing, juvenile California red-legged frog was discovered in the southeastern portion of the project site during the ongoing surveys for California tiger salamanders. California red-legged frog is a California Department of Fish and Game (CDFG) Species of Special Concern and has been federally protected as a threatened species since 1996. California red-legged frogs can inhabit perennial ponds, marshes, bogs, reservoirs, and slow-moving streams and can be found in a wide range of habitat types from grassland to forested areas. California Natural Diversity Database (CNDDB) records document 20 occurrences within 5 miles, three occurrences within 1 mile, and two occurrences within 0.25 mile of the project area. Suitable breeding habitat is located approximately 0.75 mile east of the project area within a series of freshwater marshes and ponds. Although one juvenile frog was found at the project site, suitable breeding habitat is not located within the project area. The project area contains only marginal upland habitat for California red-legged frog. Thus, there is a moderate potential for California red-legged frog to occur on site during the rainy season.

Reptiles

Silvery Legless Lizard

Silvery legless lizard (*Anniella pulchra pulchra*) is a CDFG Species of Special Concern. The species occurs from sea level to 4,500 feet in elevation. Silvery legless lizards are fossorial animals that construct burrows and occur primarily in areas with sandy or loose loamy soils, such as under sparse vegetation of beaches, chaparral, or pine-oak woodland. They can also occur

near sycamores (*Platanus* sp.), cottonwoods (*Populus* sp.), or oaks (*Quercus* sp.) that grow on stream terraces. The species is often found under or in the close vicinity of logs, rocks, old boards, and the compacted debris of wood rat nests. Soil moisture is essential for legless lizards to conserve energy at high temperatures. Legless lizards appear to be active mostly during the morning and evening, but may also be active on the surface at night. CNDDDB records document one occurrence within 1 mile and one occurrence within 0.25 mile of the project area. Only marginal habitat exists within the project area; thus, this species has a moderate potential to occur within the project area.

Black Legless Lizard

Black legless lizard (*Anniella pulchra nigra*) is considered by regulatory agencies to be a separate subspecies from the silvery legless lizard; however, recent genetic analysis has shown that the black legless lizard is a dark morph or melanistic form of the silvery legless lizard. Habitat requirements and life history characteristics are identical to that of the silvery legless lizard. CNDDDB records document multiple occurrences of this species within 5 miles, nine occurrences within 1 mile, and nine occurrences within 0.25 mile of the project area. However, only marginal habitat exists within the project area; thus, this species has a moderate potential to occur within the project area.

Birds

White-tailed Kite

White-tailed kite (*Elanus leucurus*) is a CDFG Fully Protected species. It is found in grasslands, oak savannas, agricultural areas, and other openly wooded areas. They typically nest in trees, but are also known to nest in other prominent features, such as transmission towers or other structures. Marginal nesting habitat is located in the project area within a stand of eucalyptus trees and in transmission towers. Nests are located along Elkhorn Slough, and suitable habitat is located within the project area. There is a high potential for this species to occur within the project area.

Burrowing Owl

Burrowing owl (*Athene cunicularia*) is a CDFG Species of Special Concern. Burrowing owls are small raptors typically found in grasslands, deserts, or other loose-soil areas with low vegetation. They rely on the presence of mammals that dig burrows, which the owls then appropriate and occupy. California ground squirrel (*Spermophilus beecheyi*) burrows are the most commonly used burrow type, although these owls are also known to take up residence in a variety of unusual spaces, including narrow culvert pipes and crevices within rock piles. Burrowing owls typically breed underground within burrows from March to August, but continue to utilize the underground refugia for cover once breeding is complete. CNDDDB records document two occurrences of this species within 5 miles and one occurrence within 1 mile of the project area. Suitable habitat exists within the project area. There is a high potential for this species to occur within the project area.

Critical Habitat

There is no United States (U.S.) Fish and Wildlife Service (USFWS)-designated critical habitat located within the project area. However, critical habitat for the following species is located near the project area:

- Monterey spineflower: Critical habitat for Monterey spineflower is located in the coastal dunes northwest of the project area.
- Tidewater goby: Critical habitat for tidewater goby is located in the northern portion of Moss Landing Harbor.
- Western snowy plover: Critical habitat for western snowy plover is located in the northern portion of Elkhorn Slough.
- Steelhead (*Oncorhynchus mykiss irideus*)—south/central California coast evolutionary significant unit: Critical habitat for steelhead is located in the southern portion of Moss Landing Harbor and the Moro Cojo Slough.

Waters of the United States

There are no wetlands, drainages, or other potential waters of the U.S. located within the project area. The nearest waters of the U.S. are Elkhorn Slough and Moss Landing Harbor, which are located approximately 400 feet to the north and west, respectively.

2.3.1 Impact Discussion

Significance Criteria

Standards of impact significance were derived from Appendix G of the California Environmental Quality Act (CEQA) Guidelines. As defined by these Guidelines, the Project may have a potentially significant impact if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFG or USFWS
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (CWA) (including, but not limited to, marsh, vernal pool, coastal, or other wetland areas) through direct removal, filling, hydrological interruption, or other means
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state HCP

Question 2.3.0a – Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS?

Sensitive Plant Species

Only one special-status plant species has a moderate potential to occur within the project area—Choris' popcornflower. This species is considered to have a moderate potential to occur within the project area due to the project's proximity to a past occurrence of Choris' popcornflower, despite the presence of only poor habitat for the species in the project area. Thus, there is potential for some Choris' popcornflower individuals to be affected by the project, either through direct mortality due to the new permanent footprint of the substation, crushing by project vehicles and equipment, trampling by foot traffic, or disruption or destruction of the seed bank by excavation and construction activities. With the implementation of APM-BIO-01, which includes conducting a rare plant survey and avoidance of Choris' popcornflower individuals, impacts to sensitive plant species would be less-than-significant.

Sensitive Wildlife Species

Project activities may impact several special-status wildlife species as a result of potential mortality from construction activities and vehicle movement, as well as loss of upland habitat. Species-specific impacts are described in greater detail as follows.

Amphibians

One special-status amphibian species—California red-legged frog—has a moderate potential to occur in the project area. The project has the potential to impact this species by impacting marginal upland habitat. As discussed previously, one California juvenile red-legged frog was discovered during the California tiger salamander surveys conducted at the project site. PG&E discussed this discovery during a conference call with USFWS staffperson Doug Cooper on November 30, 2010. The biological APMs in Section 2.3.2 Applicant-Proposed Measures, which include conducting pre-construction surveys, environmental training, the covering of excavations overnight or construction of escape ramps in excavations, and other relevant measures, were discussed and the USFWS agreed to their implementation to avoid potential impacts to California red-legged frog during construction. Therefore, the impact would be less-than-significant.

Reptiles

Two special-status reptile species—silvery legless lizard and black legless lizard—have a moderate potential to occur within the work area. The project has the potential to impact these species through direct mortality during construction activities and the loss of marginal habitat for this species. Implementation of the APMs in Section 2.3.2 Applicant-Proposed Measures, which

include conducting preconstruction surveys, environmental training, the covering of excavations overnight or construction of escape ramps in excavations, and other relevant measures, would reduce impacts to these species to less-than-significant.

Birds

Two special-status bird species—white-tailed kite and burrowing owl—have a high potential to occur within the project area. Only marginal nesting habitat—transmission towers and nearby trees—for white-tailed kite may be temporarily impacted by project activities. The potential of impacting this species as a result of project activities is very low. However, suitable nesting habitat for burrowing owl would be impacted by project activities, and a portion of the potential burrowing owl nesting habitat would be removed. The implementation of the APMs in Section 2.3.2 Applicant-Proposed Measures, which include conducting protocol-level burrowing owl surveys as well as preconstruction surveys for all sensitive species, would reduce impacts to these species to less-than-significant.

Question 2.3.0b – Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS?

No sensitive habitat communities, riparian areas, or ESHAs are located within the project area. Several sensitive habitat communities—including northern coastal salt marsh, coastal brackish marsh, central dune scrub, coastal and valley freshwater marsh, and central maritime chaparral—are located within 5 miles of the project area. However, no impacts to any of these communities are anticipated as a result of the project.

Question 2.3.0c – Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No protected wetlands or tributaries leading to protected wetlands are located within the project area. Thus, no direct removal, filling, or hydrologic interruption to wetlands features is anticipated. As a result, there would be no impact as a result of the project.

Question 2.3.0d – Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The project is not anticipated to interfere with wildlife movement. The existing Moss Landing Substation to the south, Moss Landing Harbor to the west, and Elkhorn Slough to the north are existing barriers to terrestrial wildlife. Thus, the project area is likely not an established migratory corridor for terrestrial species. In addition, no streams are located within the project area; thus, the project would not cause adverse impacts to migratory fish species. The project area could potentially be located along migratory routes for avian species. However, the project would result in structures and uses that are very similar to the existing structures and uses within the project area. Thus, impacts to wildlife corridors as a result of the project are anticipated to be less-than-significant.

Question 2.3.0e – Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The project is not known to conflict with any local policies. The Monterey County Code does not contain biological regulations that are applicable to this project. The Monterey County Local Coastal Plan (LCP) protects resources such as ESHAs, and no ESHAs or other resources protected by the Monterey County LCP are located within the project area. Thus, the project is in compliance with local policies and ordinances and there is no impact.

Question 2.3.0f – Would the project conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan?

No habitat HCP, NCCP, or other local, regional, or state habitat conservation plans are known to have been developed for the project area. Thus, the project does not conflict with any habitat or natural community conservation plans and there is no impact.

2.3.2 Applicant-Proposed Measures

Implementation of the following APMs would reduce the potential project-related impacts to biological resources to a less-than-significant level:

- APM-BIO-01: Rare plant surveys would be conducted prior to the commencement of construction during the appropriate phenological period (March through June for Choris' popcornflower). If special-status plants are discovered in the project area, they would be flagged for avoidance. If avoidance is not feasible, PG&E would consult with the appropriate agencies.
- APM-BIO-02: A qualified biologist would conduct a protocol-level survey for burrowing owl prior to the commencement of construction. The survey buffers and on-site mitigation in the event that burrowing owl individuals are discovered within or near the project area would be implemented in accordance with the Burrowing Owl Consortium's Survey Protocol and Mitigation Guidelines. If an occupied burrow is discovered within or in close proximity to the work area, then a qualified biologist would identify any additional measures necessary to prevent negative impacts to the burrowing owl, which could potentially include the establishment of an appropriate exclusion zone around the burrow and/or biological monitoring.
- APM-BIO-03: When construction activities would occur within the tower yard, a qualified biologist would conduct nesting raptor surveys of the eucalyptus grove along the northern portion of the project area during nesting season (February through August). Surveys would be conducted a maximum of 7 days prior to the start of construction. If a nest is identified, a 250-foot exclusionary buffer zone would be observed around the nest tree until the young have fledged. If no construction activities occur within the tower yard over a 60 day period during the nesting season, the surveys will need to be performed again prior to the recommencement of construction in that area.
- APM-BIO-04: For ground-disturbing construction activities occurring between October and April, a qualified biologist would conduct a survey for potentially dispersing juvenile California red-legged frogs in areas where they may occur. The surveys would be

performed if there is greater than a 70 percent chance of rain based on National Oceanic and Atmospheric Administration's National Weather Service forecast or within 48 hours following a rain event of greater than 0.25 inches, unless approved by the PG&E biologist. The survey would be conducted along the southeastern portion of the project site, prior to the start of construction activities. If a frog is discovered, the PG&E biologist and appropriate agencies would be notified immediately. The frog would be monitored by the qualified biologist and allowed to leave the site. No construction activities would occur within 100 feet of a frog, until it has been confirmed that the frog is out of the project area.

- APM-BIO-05: A qualified biologist would conduct an environmental training for all crewmembers prior to the commencement of construction. The training would describe sensitive species that could occur on site, as well as avoidance and minimization measures. Crewmembers would be informed about the potential presence of species, their habitats, and the penalties associated with unlawful take of species or destruction of habitat.
- APM-BIO-06: A qualified biologist would conduct a pre-construction survey for special-status wildlife species a maximum of 3 days prior to the commencement of construction activities.
- APM-BIO-07: If a special-status wildlife species are identified during pre-construction surveys, appropriate agencies would be contacted and a qualified biologist would be present on site during all ground-disturbing and vegetation-removal activities until the biologist determines that construction activities would not impact the observed species.
- APM-BIO-08: The boundary of all work areas would be staked in order to delineate the extent of work impacts and to ensure that crews avoid impacts to potential resources.
- APM-BIO-09: If special-status wildlife species are found on site, crews would immediately stop work and contact the PG&E biologist.
- APM-BIO-10: Open excavations would be covered overnight, or an escape ramp would be constructed within the excavation. If a trapped animal is discovered, the animal would be allowed to escape, or a qualified biologist would assist in moving the animal.
- APM-BIO-11: Personnel would inspect the project area for wildlife before moving materials.
- APM-BIO-12: Work crews would maintain a clean work area, including removing all food trash from the site daily, to prevent attracting wildlife to the work areas.
- APM-BIO-13: Refueling of all vehicles and construction equipment would be conducted on paved surfaces or within secondary containment, and any spills would be cleaned up immediately. Appropriate Best Management Practices (BMPs) would be implemented for handling and storing fuel, oil, and hazardous wastes.

- APM-BIO-14: If work at night (between 0.5 hour before sunset and 0.5 hour after sunrise) is necessary, the crews would consult with the PG&E biologist prior to proceeding.
- APM-BIO-15: After the completion of construction activities, any temporary fill and construction debris would be removed and, wherever feasible, temporarily disturbed areas would be restored to pre-project conditions.

2.4 CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.4.0 Existing Conditions

Cultural Resources

Historic Setting

The project site is located in an area that was historically occupied by the Costanoan people of California. Based on linguistic evidence, the proto-Costanoan people likely came through the Santa Clara Valley and settled in the Monterey Bay area about 2000 B.C. The Costanoans inhabited land from San Francisco Bay east to the Coast Ranges, and along the coast to the southern end of Monterey Bay. Before the arrival of European settlers, Native Americans (including the Costanoan people) occupied the land around Monterey Bay for hundreds of years as seasonal hunter-gatherers. The first European to arrive in Monterey Bay was Sebastian Vizcaino in 1602. From 1770 onwards, Gaspar de Portola and other Spaniards began to initiate long-term contact with local Native Americans in Monterey Bay.

The first Spanish mission was created in 1770, with seven subsequent missions established in the Costanoan territory between 1770 and 1797. By 1810, most Costanoan people had left their native settlements and lifestyles to move into the missions. After the Mexican government secularized the missions in 1832, the Costanoan people left the missions to work on ranches established in the surrounding areas, subsequently creating multi-ethnic Native American communities in the region.

The completion of the transcontinental railroad in 1869 connected Monterey to the rest of the country. Whaling was a major part of commerce in the 1850s and 1860s, as well as from 1919 through the 1920s. Moss Landing Harbor was created in 1946 by dredging out a section of the

old Salinas River channel and digging a new entrance. The Moss Landing Power Plant was constructed in 1950 on the south side of Elkhorn Slough. The Elkhorn Slough National Estuarine Sanctuary was established in 1979.

Three prehistoric archaeological sites are located near the project site. Each of the three archaeological sites is a significant historical resource according to the CEQA. CA-MNT-229 contains historic resources such as shell midden, flaked stone, ground stone, bone tools, shell ornaments, and animal remains and is listed on the National Register of Historic Places. CA-MNT-277/278 contains large quantities of marine shell, chert, agate, lithics, and quartzite artifacts. CA-MNT-277/278 has not been evaluated previously for inclusion in either the California or National Register, but it is considered to be significant under California Register Criterion 4 and eligible for listing on the California Register of Historic Resources (CRHR).

Paleontological Resources

The project site lies on the south bank of Elkhorn Slough on a marine terrace. The terrace at the site was created about 105,000 years before present, and was then overlaid by wind-blown sand dunes 11,000 to 8,000 years before present. Although Quaternary tectonic uplift has been an important process in the surrounding Santa Cruz area and south on the Monterey Peninsula, the Moss Landing area is a relatively tectonically static coast. In this location, geological features are exposed more as a result of sea level change than by tectonic movement.

2.4.1 Significance Criteria

To determine impact significance according to the CEQA criteria, the significance of the resource itself must first be determined. Generally, under the CEQA guidelines, a historical resource is considered significant if it meets the criteria for listing on the CRHR. These criteria are set forth in CEQA Section 15064.5 and define a historical resource as any object, building, structure, site, area, place, record, or manuscript that meets one of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the U.S.;
- Is associated with the lives of persons important to local, California, or national history;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic value; or
- Has yielded or has the potential to yield information important in the prehistory or history of the local area, California, or the U.S.

Section 15064.5 of the CEQA also assigns special importance to human remains and specifies procedures to be followed when Native American remains are discovered. These procedures are detailed under Public Resources Code (PRC) Section 5097.98.

Impacts to “unique archaeological resources” and “unique paleontological resources” also are considered under the CEQA, described under Section 21083.2 of the PRC. A unique archaeological resource is an archaeological artifact, object, or site in which it can be clearly

demonstrated that, without merely adding to the current body of knowledge, a high probability exists that it meets one of the following criteria:

- Contains information needed to answer important scientific questions, and a demonstrable public interest in that information exists;
- Has a special and particular quality, such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

A non-unique archaeological resource is an archaeological artifact, object, or site that does not meet the previously listed criteria. Impacts to non-unique archaeological resources and resources that do not qualify for listing on the CRHR receive no further consideration under the CEQA.

Impacts to paleontological resources are considered significant if they directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

2.4.2 Impact Discussion

Question 2.4.2a – Would the project cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

Because CA-MNT-229 is located to the west of the project site, it would not be impacted during construction. CA-MNT-277/278 could possibly be impacted as a result of the project. However, with the implementation of APM-CUL-01, which would entail strictly adhering to established work area boundaries, and APM-CUL-02, which would include designating the significant portions of CA-MNT-277/278 as an Environmentally Sensitive Area (ESA), impacts would be reduced to less-than-significant levels. In addition, PG&E would implement monitoring, as discussed in APM-CUL-03. Furthermore, APM-CUL-04 would include contacting an archaeologist or paleontologist if historical resources were encountered, and halting work to allow for the recovery of sensitive resources. With the implementation of these APMs, impacts to CA-MNT-277/278 would be less than significant.

Question 2.4.2b – Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

As previously discussed in the response to Question 2.4.2a, CA-MNT-229 would not be affected by the project. However, CA-MNT-277/278 is a significant archaeological resource that has the potential to provide new information on local and regional prehistory. Potential impacts to CA-MNT-277/278 would include the removal or destruction of intact archaeological deposits within the work area caused by grading or site preparation, vegetation removal, use of access roads, tower removal or construction, or any other such project related activities that might disturb intact archaeological remains.

As currently designed, the project's work area would exclude the portion of CA-MNT-277/278 that contains the significant qualities of the site. Strict adherence to the established work area

boundaries and the use of protective buffer zones as discussed in APM-CUL-01 and APM-CUL-02, along with implementation of APM-CUL-03, which would include monitoring by an archaeologist and a Native American tribal representative, would reduce impacts to CA-MNT-277/278 to a less-than-significant level.

Question 2.4.2c – Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No significant fossil resources have been reported within a 10-mile-radius of the project site. Because of the geologic origin of the marine terrace and the project site, and its cover of dune sand, it is highly unlikely that significant fossils exist. Based on the area's geologic origin and the relatively minor extent of excavation that would be required by the project, the project site has been assigned a Class 2: Low paleontological sensitivity, based on the Federal Potential Fossil Yield Classification system. The planned excavation depths of the project during construction and operation would most likely not penetrate below the marine terrace and dune deposits, and the impact would be less than significant. However, if vertebrate fossils were encountered during construction, PG&E would implement APM-CUL-04, which would include halting construction until a qualified paleontologist could examine the site and make recommendations as how to best preserve or remove the fossils.

Question 2.4.2d – Would the project disturb any human remains, including those interred outside of formal cemeteries?

As previously discussed in the response to Question 2.4.2a, CA-MNT-229 would not be affected by the project. However, human remains were found in CA-MNT-277/278, which could potentially be disturbed by project activities. Should more human remains be encountered, State Health and Safety Code Section 7050.5 would require that no further disturbance occur within at least 100 feet of the human remains or in areas reasonably assumed to overlie burials until the county coroner determined that no investigation of the cause of death was required, pursuant to Section 5097.98 of the PRC. If the remains were determined to be of Native American descent, the coroner would have 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC then would contact the most likely descendent of the deceased Native American, who also would have 48 hours to respond. The most likely descendent of the deceased then might make recommendations to the landowner or the person responsible for the excavation work, and suggest a reasonable manner of treating or disposing of the deceased, pursuant to Section 5097.8 of the PRC.

To reduce potential impacts to CA-MNT-277/278, PG&E would implement APM-CUL-01, APM-CUL-02, and APM-CUL-03 in the vicinity of CA-MNT-277/278. Furthermore, if human remains were found, APM-CUL-04 would be implemented, which would include halting work until an archaeologist, paleontologist, or Native American tribal representative could examine the find and make recommendations. Therefore, with the implementation of these APMs, impacts would be less than significant.

2.4.3 Applicant-Proposed Measures

Implementation of the following APMs would reduce the potential project-related impacts to cultural resources to a less-than-significant level:

- APM-CUL-01: As currently designed, the project's work area would exclude the portion of CA-MNT-277/278 in which the significant qualities of the site have been found. To protect the historical resources found in the intact portions of CA-MNT-277/278 and reduce the impacts of the project to less-than-significant levels, PG&E would strictly adhere to the established work area boundaries.
- APM-CUL-02: The area east of the work area would be designated as an ESA and avoided during construction. Protective fencing or other markers would be erected and maintained to protect the ESA from inadvertent trespass for the duration of construction in the vicinity. Construction personnel and equipment would be instructed on how to avoid the ESA, which would not be identified specifically as an archaeological site. A monitoring program would be developed and implemented by PG&E to ensure the effectiveness of the ESA.
- APM-CUL-03: A qualified archaeologist and a Native American tribal representative would monitor all subsurface construction disturbances in the work area.
- APM-CUL-04: If construction exposed historical, paleontological, or archaeological features or other remains in greater quantity and variety than currently anticipated, then work in the vicinity would be halted temporarily while the archaeologist, Principal Paleontologist, or Native American tribal representative and PG&E's representative examined the find and made recommendations. These materials would include, but would not be limited to, shell midden, lithics, human and animal remains, funerary artifacts, flaked and ground stone, and bone tools. Additional testing and/or data recovery excavation of the deposit might be required upon discovery.

2.5 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.5.0 Existing Conditions

Geologic Setting

The ground surface within the project area is relatively flat. The project area elevation is approximately 30 feet above mean sea level. The Elkhorn Slough channel area and the low lying zones surrounding the slough contain soils of unconsolidated plastic clay and silty clay containing organic material and thin layers of silt and silty sand. These types of soils tend to have relatively low susceptibility to flooding and liquefaction. The eastern portion of the project area is underlain by older coastal dunes, which are weakly consolidated sand deposits with poorly or medially developed soil profiles. The upper 35 feet of subsurface materials at the project site consist primarily of sands and silty sands with thin layers of clayey silts and lean clay. Below 35 feet, subsurface materials consist primarily of sands, and in one geotechnical boring location, a layer of firm fat clay was encountered at a depth of 45 feet. The clay layers encountered during the investigation generally exhibited low plasticity.

Groundshaking, Surface Rupture, Liquefaction, and Subsidence

The site is not located within an Earthquake Fault Zone, in accordance with the Alquist-Priolo Earthquake Fault Zone Act of 1972. The nearest Type A fault is the San Andreas (Pajaro) Fault, located approximately 11 miles northeast of the site. The San Andreas Fault is capable of producing a maximum moment magnitude event of a magnitude of 7.9, which would be expected to cause strong ground shaking at the project site. Strong ground shaking can also be expected from moderate to major earthquakes generated on other faults in the region such as the Rinconada Fault (approximately 8 miles from the project site), the Zayante-Vergeles Fault (approximately 9 miles from the project site), and the Monterey Bay-Tularcitos Fault (approximately 11 miles from the project site). Because of the distance between the project and mapped faults, the potential for fault-related surface rupture at the project site is low.

Liquefaction occurs in loose, saturated soils when unconsolidated sediments become slurry-like from a strong seismic event. The project site has been determined to have a low-potential for liquefaction and no accounts of historical liquefaction were reported within the project area during previous earthquakes.

Subsidence, a phenomenon associated with groundwater withdrawal, can occur from operations involving the removal of large amounts of groundwater from certain types of soils. Areas located in valleys are more susceptible to subsidence. Susceptible soils are predominantly filled with unconsolidated sand and silty sand that include thin layers of silt and clayey silt. Fine-grained alluvium and organic matter often underlie these areas. While historical subsidence has occurred in portions of the Elkhorn Slough, the project area is not anticipated to be susceptible to subsidence.

2.5.1 Potential Impacts

Significance Criteria

Standards of significance were derived from Appendix G of the CEQA Guidelines. These standards are summarized as follows:

Geology and Soils

Impacts to geology and soils would be considered significant if the project:

- Exposes people or structures to potential substantial adverse effects involving strong seismic ground shaking, fault rupture, liquefaction, or landslides
- Results in substantial soil erosion or the loss of topsoil
- Is located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse
- Is located on expansive soil, as defined in Table 18-1-B of the UBC (1994), creating substantial risks to life or property
- Is located on soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater

2.5.2 Impact Discussion

Question 2.5.2a.i – Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

The project site is not located within an Alquist-Priolo Earthquake Fault Zone. The nearest significant fault is the Rinconada Fault, located 8 miles from the project site. There are no known active or potentially active faults that cross the project site. Additionally, no evidence of active faulting is visible on the site. Therefore, there would be no impact.

Question 2.5.2a.ii – Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

The project area is located within a seismically active region dominated by the San Andreas Fault. Strong seismic events can be expected to occur in the project area. However, the substation would be engineered to withstand strong ground movement and moderate ground deformation. As described in APM-GEO-01, the project would be configured according to the Institute of Electrical and Electronics Engineers (IEEE) 693 Recommended Practices for Seismic Design of Substations, which contained specific requirements to mitigate substation equipment

damage as a result of strong seismic ground shaking. When these requirements are followed, very little structural damage would be anticipated. Additionally, once constructed, the substation would be unmanned during regular operation. Therefore, impacts due to seismic ground shaking would be less than significant with the incorporation of APM-GEO-01.

Question 2.5.2a.iii – Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

The project area has a low potential for liquefaction and no accounts of historical liquefaction were reported within the site area. Based on analysis of the subsurface materials, the potential for lateral movement is considered negligible. Additionally, once constructed, the substation would be unmanned during regular operation. Therefore, the potential for seismic-related ground failure—including liquefaction—as a result of the project would be less than significant.

Question 2.5.2a.iv – Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Areas along the channel of Elkhorn Slough have the highest probability for slope failures. However, the project construction activities would not trigger landslides because they would not occur immediately adjacent to the slough. Additionally, the project site is flat and there are no potential locations where landslides could occur. Therefore, there would be no impact.

Question 2.5.2b – Would the project result in substantial soil erosion or the loss of topsoil?

Site grading would be conducted to prepare foundations. Grading would expose soil to erosion by removing the vegetative cover and compromising the soil structure. Rain and wind may potentially further detach soil particles and transport them off site. The site was evaluated to have moderate potential for soil erosion. With the implementation of the project's Stormwater Pollution Prevention Plan (SWPPP) and PG&E standard Water Quality Construction BMPs, soil erosion would be minimized and the impact would be reduced to less-than-significant level. In addition, the project site is disturbed and does not contain valuable topsoil. It is also located on a flat surface. Furthermore, operation and maintenance activities would not typically involve ground-disturbing activities or grading. As a result, impacts from soil erosion would be less than significant.

Question 2.5.2c – Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

As discussed in the response to Question 2.5.2a, the project site area has a low-potential for liquefaction. The main geotechnical concern for the project site is the potential for caving during excavations for the construction of drilled piers and during excavation activities. However, the project would implement the construction practices recommended in the geotechnical report prepared for the project site—including reinforcing excavations and having a geotechnical representative present to observe drilled holes, as described in APM-GEO-01—thus reducing impacts to a less-than-significant level.

Where trenches or other excavations are extended deeper than 5 feet, the excavation may become unstable and potentially prone to collapse. However, APM-GEO-01 would be implemented requiring that the recommendations contained within the Geotechnical Investigation be incorporated into the project, including the recommendation that excavations be evaluated to ensure stability prior entry by personnel. Additionally, AMP-GEO-01 would require that trenches conform to the current Occupational Safety and Health Act requirements for work safety. With the implementation of APM-GEO-01, impacts due to soil instability would be reduced to a less-than-significant level.

Question 2.5.2d – Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

The near-surface soils encountered in the project area were found to be generally non-expansive. Soil expansion was found to have a low-potential for occurrence in the project vicinity. Therefore, impacts associated with soil expansion would be less than significant.

Question 2.5.2e – Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Soil permeability would be a consideration for projects that require septic system installation. Because the project would not involve the installation of a septic tank or alternative wastewater disposals system, no impact would occur.

2.5.3 Applicant-Proposed Measures

Implementation of the following applicant-proposed measure would reduce potential project-related impacts with regard to geology and soils to a less-than-significant level:

- APM-GEO-01: PG&E would implement the recommendations and findings of the Geotechnical Investigation prepared by Kleinfelder in the final design of project components to ensure that the potential for caving soil at excavation locations is compensated for in the final design and construction techniques. PG&E would comply with all applicable codes and seismic standards. In addition, the project would be configured according to the IEEE 693 “Recommended Practices for Seismic Design of Substations” in order to withstand anticipated ground motion. The final design would be reviewed and approved by a Professional Engineer registered in the State of California prior to construction.

2.6 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.6.0 Impact Discussion

Question 2.6.0a – Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The Office of Planning and Research (OPR) is the state-wide, comprehensive planning agency that is responsible for making policy recommendations and coordinating land use planning efforts. The OPR also coordinates the state-level review of environmental documents pursuant to the CEQA. Currently, the OPR's stance on greenhouse gases (GHG) significance thresholds has been to allow each lead agency to determine their own level of significance. At this time, the MBUAPCD has not finalized specific GHG thresholds of significance. On October 24, 2008, the California Air Resources Board (CARB) released their interim CEQA significance thresholds for GHG impacts dictating that a project would be considered less than significant if it meets minimum performance standards during construction and if the project, with mitigation, would emit no more than approximately 7,000 million metric tons of carbon dioxide per year during operation.

The primary source of criteria air pollutant and GHG emissions would stem from the use of heavy equipment, including crew trucks, bull dozers, and cranes. However, heavy equipment use is anticipated to be intermittent and limited to demolition, site preparation, and some construction activities. Further, the project involves a relatively long-term construction duration—approximately 5 years—during which time the two crews of up to eight people would work 4 days per week. Pollutant emissions resulting from heavy equipment use during construction are not anticipated to exceed significance thresholds established by the CARB for GHG because the duration of use is expected to be very limited. As a result, the impact would be less than significant.

Sulfur hexafluoride (SF₆) in transformers and circuit breakers poses a GHG concern because of its extremely high global warming potential. SF₆ is present in the existing substation equipment and will be present in the new substation equipment. However, older equipment has been found

to have a higher rate of SF₆ leakage, while newer equipment is often guaranteed minimal to zero leak rates by equipment manufacturers. Additionally, PG&E currently has an SF₆ monitoring plan for the substation, which includes carefully measuring the level of SF₆ in equipment, identifying and repairing or replacing leaky equipment in a timely fashion, and training employees on the effects of SF₆. This plan will continue to be implemented by PG&E as part of the proposed project. Thus, the project will result in a reduced overall potential for SF₆ emissions and a less than significant impact.

Once operational, the project would not create any air emissions beyond those associated with current operations and maintenance. Because operations and maintenance activities would not change as a result of the project, there would be no impact

Question 2.6.0b – Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As described previously, the project's construction and operation emissions are below the applicable GHG significance thresholds established by CARB and the MBUAPCD has no established GHG thresholds. The project would not conflict with any local or state GHG plans or goals. Therefore, there would be no impact.

2.6.1 Applicant-Proposed Measures

Because the project would not cause any significant impacts as a result of GHG emissions, no APMs are proposed.

2.7 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.7.0 Existing Conditions

Existing Hazardous Sites

The following subsections describe the types and amounts of hazardous materials known to be present within 0.25 mile of the project. The project is located on and adjacent to an industrial facility where hazardous materials or potentially hazardous materials are used. These uses do carry some potential for an accidental spill or release.

According to the California Department of Toxic Substances Control (DTSC) List (Cortese List); State Water Resources Control Board (SWRCB) Geotracker database, Superfund Sites list; and Internet searches of federal, state, and local hazardous materials databases, two sites with past or current hazardous materials cases were identified within 0.25 mile of the project. One of the two sites identified—Dynergy Moss Landing Power Plant—is located directly adjacent to southern boundary of the project and is identified on the DTSC Cortese List and on the SWRCB Geotracker database. The Dynergy Moss Landing Power Plant has been issued a Hazardous Waste Operating Permit and is a permitted Resource Conservation and Recovery Act facility for the storage of hazardous liquids stored in surface impoundments. The majority of the hazardous waste that was stored in these surface impoundments was generated from boiler cleanings within the facility power buildings. The surface impoundments have triple liner leachate collection and detection systems. Since the construction of the detection systems there has been no leaks detected beyond the first liner. The facility permit was renewed on April 6, 2006 and will expire on April 6, 2016. This site is also listed in the SWRCB Geotracker database as a Cleanup Program Site. As of November 17, 2005 the remediation phase for the site was complete and a monitoring/sampling program is currently in progress to confirm successful completion of cleanup at the site.

The second site—the Former National Refractories—is located directly south of the project site across Dolan Road. The site is listed in the SWRCB Geotracker database as a Cleanup Program Site. This site was previously used as a refractory materials manufacturer and contains several onsite landfills, and had historic releases resulting in chromium 6, metals, solvents and fuels in the groundwater. As of January 1, 2005 the site has had an open site assessment cleanup status. Currently, site characterization, investigation, risk evaluation, and/or site conceptual model development are occurring at the site.

Contaminated Soil and Groundwater

Contaminated soil and groundwater has been previously identified at the Moss Landing Power Plant, which is located adjacent to the southern boundary of the project area. In 1997, a Phase II Environmental Site Assessment for performed at the site for soil and groundwater contamination from past practices implemented during operation of the facility. The Phase II Environmental Site Assessment identified potential locations of soil and groundwater impact. As documented in the Phase II Reports, the constituents of concern at the Moss Landing Power Plant include total petroleum hydrocarbons, total extractable hydrocarbons, volatile organic compounds, polyaromatic hydrocarbons, metals (inorganics), polychlorinated biphenyls, and asbestos. These chemical constituents have migrated or may migrate from the Moss Landing Power Plant into the soil or groundwater. As of 2000, interim measures and additional investigations have been conducted at eight locations.

Fire Hazards

According the North Monterey County Land Use Plan, the project is located in an area of low fire potential because a majority of the surrounding area is intensely developed with industrial and commercial uses.

Schools

There are no schools within 0.25 mile of the project. The nearest schools—North Monterey County High School and North Monterey Middle School—are located approximately 3 miles southeast of the project.

Airports and Airstrips

The nearest private airstrip—Monterey Bay Academy—is located approximately 8 miles north of the project. The nearest public airport—Marina Municipal Airport—is located approximately 9 miles south of the project. The Marina Municipal Airport is a general aviation facility and a former U.S. Army airfield located near Fort Ord. The airport has been a public facility since 1995 and is located on approximately 845 acres.

Emergency/Evacuation Plans

Monterey County has designated emergency evacuation routes throughout the county, with emergency response activities coordinated by the Monterey County Office of Emergency Services (OES). The evacuation routes are designated and maintained to ensure the safe and efficient movement of people, belongings, and emergency personnel including their support services during times of declared emergencies. Designated evacuation routes include Highway 1, U.S. Highway 101, state highways, several numbered county roads, and various other county roads. These routes are considered “Pre-designated Emergency Evacuation Routes” and may be deployed when necessary. Highway 1 is located directly west of the project area and is a designated evacuation route.

In addition, the Monterey County OES plans to establish an effective community notification or alert system for tsunami evacuations. This system would be implemented in coordination with the West Coast and Alaska tsunami warning system, which is the primary alert system in the region.

2.7.1 Impact Discussion

Significance Criteria

Standards of significance were derived from Appendix G of the CEQA Guidelines. Project impacts would be considered significant if they:

- Create a hazard to public health or the environment by the routine transport, use, or disposal of hazardous materials
- Create a hazard to the public or the environment by reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Emit hazardous emissions or handle hazardous materials within 0.25 mile of a school
- Are located at a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will create a hazard to the public or the environment
- Are located within 2 miles of a public or private airport and will result in a safety hazard for people residing or working in the project area
- Impair implementation of, or physically interfere with, an adopted emergency response or evacuation plan
- Expose people or structures to a risk of loss, injury, or death related to wildland fires

Question 2.7.1a – Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

A general listing of types of chemicals used during construction is provided in Table 2-5: Hazardous Materials Typically Used for Construction. Use of hazardous materials during construction may pose potential health and safety hazards to construction workers, nearby residents, and the environment surrounding the project. Potential impacts from the use of hazardous materials are generally associated with spills or other unauthorized releases during demolition; ground clearing; steel pole erection, including foundation excavation and construction; trenching, and conductor pulling, splicing, and tensioning that would occur during the installation of new lattice towers and TSPs, as well as the expansion of the Moss Landing Substation and reconfiguration of the transformer banks. Other potential impacts involving the use of hazardous materials during construction are associated with temporary storage sites, transportation to worksites, and refueling and servicing of equipment. Because the Moss Landing Substation is an existing facility and because project activities would involve small volumes of materials, impacts would be less than significant. Use of PG&E's existing Spill Prevention and Control and Countermeasure (SPCC) Plan, which includes information regarding proper storage, handling, and disposal of hazardous materials, is required by the CWA. In addition, PG&E would conduct a worker training prior to construction. With the implementation of the required SPCC Plan and the worker training, potential impacts associated with the transport, use, and disposal of hazardous materials would be less than significant.

Table 2-5: Hazardous Materials Typically Used for Construction

Hazardous Materials	
ABC fire extinguisher	Ammonium hydroxide
Air tool oil	Battery acid (in vehicles and in the meter house of the substations)
Automatic transmission fluid	NCCP approved pesticide
Bottled oxygen	Puncture seal tire inflator
Canned spray paint	Chain lubricant (contains methylene chloride)
Diesel de-icer	Connector grease (penotox)
Diesel fuel	Diesel fuel additive
Eye glass cleaner (contains methylene chloride)	Contact cleaner 2000
Gasoline	Gasoline treatment
Hot stick cleaner (cloth treated with polydimethylsiloxane)	Lubricating grease
Hydraulic fluid	Starter fluid
Insulating oil (inhibited, non-PCB)	Methyl alcohol
Mastic coating	Paint thinner
Propane	WD-40
Safety fuses	ZIP (1,1,1-trichloroethane)
Sulfur hexafluoride (within the circuit breakers in the substations)	Brake fluid
Two-cycle oil (contains distillates and hydro-treated heavy paraffinic)	Acetylene gas
Pesticides	Antifreeze (ethylene glycol)
ZEP (safety solvent)	Motor oils

Use of hazardous materials during operation and maintenance of the project would pose potential health and safety hazards to workers, residents, and the environment adjacent to the new towers and expanded Moss Landing Substation site. These potential hazardous material impacts are associated with possible spills during routine or emergency maintenance or normal operation within the expanded substation. However, operations and maintenance activities for the new towers and expanded substation would continue in the same manner as they did prior to the project.

As part of the substation expansion, the single-phase transformer banks would be replaced with new three-phase banks and the existing oil-filled circuit breakers would be replaced with gas circuit breakers, which would reduce the total amount of mineral oil required for the Moss

Landing Substation. One new retention basin would be installed and the existing retention basin at the substation would be modified. However, the potential still exists for a transformer to leak mineral oil due to age, major natural events, or collisions from operation and maintenance equipment. Storage and use of hazardous materials, including mineral oil, in amounts exceeding 1,320 gallons is regulated under the CWA. PG&E would use their existing SPCC Plan to comply with CWA requirements. With the installation of the oil-retention basins and implementation of a SPCC Plan, the potential impact would be less than significant.

Question 2.7.1b – Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The project would include the demolition of the existing Moss Landing Substation and the removal of all existing equipment. Fuel residues, such as gasoline, diesel, and mineral oil may exist at the substation site and could be encountered in the soil during the dismantling of the substation and/or associated ground-disturbing activities. Therefore, the demolition of the substation poses a potential risk of releasing existing hazardous substances and exposing people to potential health hazards. Implementation of APM-HAZ-01 and APM-HAZ-02, including conducting a Phase I and Phase II ESA for hazardous materials at the Moss Landing Substation, would reduce the impact to a less-than-significant level.

Additionally, as discussed in response to Question 2.7.1.a, a potential exists for hazardous materials that would be used in construction vehicles and equipment to inadvertently be released through spills or leaks. Implementation of a SPCC Plan, a worker training, as well as adherence to state and federal regulations concerning hazardous materials handling and transport, would reduce the potential for spills and the associated impact.

Use of hazardous materials during operation and maintenance of the project has the potential to cause an impact as a result of spills or accidental releases of materials during normal operation or routine or emergency maintenance activities. However, chemical use would normally be considerably less than during construction. In addition, because the project involves expanding an existing facility, the operation and maintenance activities would not differ substantially from those already taking place at these facilities. As discussed in the response to Question 2.7.1a, PG&E would implement their existing SPCC Plan for the Moss Landing Substation to prevent and address any accidental release of hazardous materials, thereby reducing the impact from operation and maintenance to a less-than-significant level.

Question 2.7.1c – Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

The project would not be located within 0.25 mile of an existing or proposed school location. Therefore, no impact would occur.

Question 2.7.1d – Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The project is not located on a hazardous materials site; however, the Moss Landing Power Plant is located directly adjacent to southern boundary of the project site. This site is located on both the Cortese List and the Geotracker database for the storage of hazardous liquids in surface impoundments. As previously discussed, the remediation phase for the site was completed in 2005 and a monitoring/sampling program is currently in progress to confirm successful completion of cleanup at the site. According to the DTSC, contaminated soil and groundwater was previously identified at the Moss Landing Power Plant. As of 2000, interim measures and additional investigations have been conducted at eight locations.

APM-HAZ-01, which includes performing a Phase I and Phase II ESA, would identify any known contamination and source (e.g. the Moss Landing Power Plant or the demolished Moss Landing Substation). With the implementation of APM-HAZ-01, impacts would be less than significant.

Question 2.7.1e – For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The project would not be located within close proximity to a public airport. As previously discussed, the nearest public airport is located approximately 9 miles south of the project. Thus, no impact would occur.

Question 2.7.1f – For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

The project would not be located within close proximity to a private airstrip. As previously discussed, the nearest airstrip is located approximately 8 miles north of the project. Thus, no impact would occur.

Question 2.7.1g – Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The project would not be constructed within public roadways. Roadways in the project area would continue to remain open to emergency vehicles at all times. In addition, in the event of an emergency requiring evacuation, PG&E would ensure that all potential routes are open and accessible for public use. Thus, no impact would occur.

Question 2.7.1h – Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

As previously discussed, the project is located in an area of low fire potential. However, heat or sparks from vehicles or equipment have the potential to ignite dry vegetation and cause a fire. In general, project activities would be largely confined to non-vegetated areas, including cleared access roads and work pads. Therefore, the potential to start a fire from these activities would be less than significant.

2.7.2 Applicant-Proposed Measures

As required by regulation, PG&E would adhere to the SPCC Plan that has been previously completed for the substation. This plan would be updated upon completion of project construction and contain the proper procedures for storage, handling, spill response, and disposal of hazardous materials for the operation of the modified substations. In addition, the following measures are proposed to reduce impacts to a less-than-significant level:

- APM-HAZ-01: A Phase I and Phase II ESA would be conducted on the existing Moss Landing Substation parcel to determine if there is any surface or subsurface contamination. If contamination is found to be present, remediation would occur in accordance with recommendations of the Phase II ESA and all applicable federal, state, and local regulations.
- APM-HAZ-02: During the Moss Landing Substation demolition process, the existing equipment to be removed would be tested in accordance with federal, state, and local standards to determine appropriate recycle, reuse, or disposal alternatives.

2.8 HYRDOLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Increase the risk of inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.8.0 Impact Discussion

Question 2.8.0a – Would the project violate any water quality standards or waste discharge requirements?

Construction of the project would not fill or permanently impact any drainages or wetlands that may fall under the jurisdiction of the U.S. Army Corp of Engineers, Central Coast Regional Water Quality Control Board (RWQCB), or CDFG. Thus, permanent impacts are not anticipated.

While construction activities would avoid direct impacts to drainages and wetlands, grading, access road construction, and other ground-disturbing activities in the temporary work area have the potential to temporarily degrade water quality through increased sedimentation resulting from runoff or erosion from destabilized areas; however this potential impact is unlikely, as the project area is relatively flat.

Accidental releases of hazardous materials used during construction, such as diesel fuel, hydraulic fluid, oils and grease, and concrete, also have the potential to occur, as discussed further in Section 2.7 Hazards and Hazardous Materials. Because the project is greater than 1 acre in size, PG&E would be required to comply with the General Permit Discharges of Storm Water (Order No. 2009-0009-DWQ) and submit Permit Registration Documents, including a SWPPP, to the SWRCB. The SWPPP would include measures to avoid and minimize impacts to water quality and would be implemented during project construction. The SWPPP would provide BMPs to contain hazardous materials and prevent off-site sedimentation. Furthermore, with implementation of the SWPPP, construction of the project would not contribute to the pollutant load for 303(d)-listed water resources located within the vicinity of the project—including Elkhorn Slough, Moro Cojo Slough, and Moss Landing Harbor. Therefore, no violation of water quality standards or waste discharge requirements is anticipated. As a result, impacts would be less than significant.

Question 2.8.0b – Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge, causing a net deficit in aquifer volume or a lowering of the local groundwater table level?

An existing well would be used as the primary source of water during construction of the project. Approximately 6,000 gallons of water would normally be required daily for dust control during construction, and up to 15,000 gallons per day would be required during grading and foundation construction. Water would be obtained from the shared PG&E and Dynegy well. Because construction activities requiring water would be limited and short term, and water needs would be fairly sporadic during the 5-year construction term, the project is not anticipated to result in a net deficit in the aquifer volume or result in a significant lowering of the groundwater table. Thus, the impact is less than significant.

Due to the relatively high water table in the area, groundwater intrusion is possible within excavations. Any groundwater that collects in excavations would be removed, stored in a storage tank, and tested for contamination. If it is determined that collected groundwater is uncontaminated, it would either be used to control dust or would be discharged overland into a vegetated upland area and allowed to permeate into the ground. Due to the relatively low amount of groundwater to be dewatered from construction excavations, and because this water would be reapplied to the landscape as either a dust control measure or an overland discharge—if determined to be free of contaminants—no impacts to groundwater as a result of groundwater withdrawal are anticipated.

The project would result in the addition of approximately 5.2 acres of new impermeable surfaces within the substation expansion area. Because the new expansion area would be connected to the Moss Landing Power Plant stormwater drainage system, precipitation would be carried off-site and discharged into nearby waters rather than recharging the groundwater basin. Due to the relatively small size of the expansion area, impacts to groundwater recharge and anticipated to be less than significant.

Operations and maintenance of the new facility components would utilize the existing well as a water source. However, limited water is required for operation and maintenance activities because the facilities are unmanned. Additionally, the facility operation and maintenance activities would not significantly change from their current activities, which do not result in impacts to groundwater levels. As a result, no impacts to groundwater levels or recharge are anticipated as a result of operations and maintenance.

Question 2.8.0c – Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial on- or off-site erosion or siltation?

The additional 5.2 acres to be added to the existing substation would be recontoured in a way that utilizes the existing drainage and retention basin system within the existing substation and power plant. This system would prevent any run-off from within the substation from causing on-site or off-site erosion or siltation. In addition, work areas located outside of the final substation fence line are in flat areas with no rivers, streams, or other drainages; thus, there is limited potential for run-off to accumulate or cause on-site or off-site erosion or siltation. Following the completion of the project, these areas would be allowed to revegetate with the surrounding non-

native grassland habitat, which would help to further minimize siltation or erosion. Because the project would not significantly alter the drainage pattern of any drainages, rivers, or streams, or result in on-site or off-site erosion or siltation, no impacts are anticipated.

Because operations and maintenance activities would be primarily conducted from within the final substation fence line, no impacts to drainage patterns, erosion, or siltation are anticipated.

Question 2.8.0d – Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or a substantial increase to the rate or amount of surface runoff in a manner that would result in on- or off-site flooding?

As discussed in response to Question 2.8.0c, the project area is flat with no rivers, streams, or other drainages; thus, there is no potential for the project to cause flooding within temporary work areas. In addition, the final substation expansion area would be connected to an existing drainage system that would contain and remove water from the substation. As a result, impacts would be less than significant.

Question 2.8.0e – Would the project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Areas within the final substation fence line would be contoured in a way that connects them to the existing retention basin system and stormdrain system used by the Moss Landing Power Plant and existing Moss Landing Substation. It has been determined that this existing retention system has capacity to accommodate the additional on-site stormwater. Because PG&E would be combining stormwater with that from the existing substation and Moss Landing Power Plant, it would be treated and managed under the existing National Pollutant Discharge Elimination System (NPDES) permits used currently. As part of this permit, Dynegy—operator of the Moss Landing Power Plant—is required to conduct regular testing of the this stormwater to ensure that polluted run-off is not discharged. As a result, impacts resulting from the discharge of polluted run-off are anticipated to be less than significant.

Question 2.8.0f – Would the project otherwise substantially degrade water quality?

No potential sources of water degradation have been identified with the exception of those discussed in Questions 2.8.0a –2.8.0e.

Question 2.8.0g – Would the project place housing within a 100-year-flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The project area is not located within a 100-year flood zone, though 100-year flood zones exist west and north of the project along Elkhorn Slough and Moss Landing. Because no structures, including housing, are being constructed within a flood zone, no impacts are anticipated as a result of the project.

Question 2.8.0h – Would the project place within a 100-year-flood hazard area structures which would impede or redirect flood flows?

As discussed in response to Question 2.8.0g, no structures would be placed within a 100-year flood zone.

Question 2.8.0i – Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No existing flood-control devices are present within the project area. As specified in Question 2.8.0h, no structures or work would occur within a 100-year flood zone. In addition, the project would not generate circumstances that would increase the potential for loss or injury due to flooding. As a result, no impacts are anticipated.

Question 2.8.0j – Would the project increase the possibility of inundation by seiche, tsunami, or mudflow?

Because the project is located in a relatively flat area and no major grading or other activities that could undermine the stability of the area, the project would have no impact on the possibility of inundation resulting from seiche, tsunami, or mudflow.

2.8.1 Applicant-Proposed Measures

Because the project would not cause any significant impacts to hydrology and water quality, no APMs are proposed.

2.9 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.9.0 Impact Discussion

Question 2.9.0a – Would the project physically divide an established community?

The approximately 5.2-acre proposed substation expansion area would be immediately adjacent to the existing substation and Moss Landing Power Plant. The new substation equipment would be the same height or lower in height as compared to the existing substation; therefore, the new equipment would not result in an increased physical or aesthetic barrier. The replacement lattice towers and TSPs would be of similar height as the existing lattice towers. They would be installed in similar locations as the existing towers and would not create an additional barrier dividing the community. As a result, no impact would occur.

Question 2.9.0b – Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The project site is General Plan-designated and zoned for Heavy Industrial uses. The substation is an allowed use with a Coastal Development Permit under the Monterey County General Plan, the Monterey County Zoning Ordinance, and the Moss Landing Power Plant Master Plan. Therefore, the project would not conflict with any applicable land use plans, zoning ordinances, policies, or regulations adopted by Monterey County. Furthermore, replacement of aging substation equipment with new equipment and replacement of the lattice structures and TSPs would not conflict with plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental impact because there are none that apply to this project. Therefore, no impact would occur.

Question 2.9.0c – Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

The project is not subject to, nor in conflict with, any habitat conservation plans because there are currently none that are applicable to the project site. Therefore, no impact would occur.

2.9.1 Applicant-Proposed Measures

Because the project would not cause any significant impacts to land use and planning, no APMs are proposed.

2.10 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.10.0 Impact Discussion

Question 2.10.0a – Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

There are no active mining operations located within or adjacent to the project area. Similarly, there are no known areas designated or delineated for mineral resource recovery within or adjacent to the project. Additionally, there are no known mineral resources within or adjacent to the project that have noted value to the region or the residents of the state. The nearest mineral-related facility is located on the south side of Dolan Road at the Moss Landing Business Park. The business park facilities have the capacity to refine metals, such as magnesium. However, no mineral refining activities currently occur on the site and mineral refining activities have not occurred at the site for the last 10 years. As a result, no impact to mineral resources is anticipated.

Question 2.10.0b – Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The project is not located within a delineated mineral resource area. Therefore, no impact would occur.

2.10.1 Applicant-Proposed Measures

Because the project would not cause any significant impacts to mineral resources, no APMs are proposed.

2.11 NOISE

Would the project result in:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.11.0 Impact Discussion

Question 2.11.0a – Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Because the project is located in unincorporated Monterey County, it is subject to the Noise Element of the Monterey County General Plan, which contains the applicable regulations and policies that govern noise levels. The General Plan stipulates that the normally acceptable noise

range for industrial areas is from 50 to 70 A-weighted decibels (dBA- L_{dn}) and the conditionally acceptable noise level ranges from 70 to 80 dBA- L_{dn} . The General Plan also states that construction activities are not allowed within 500 feet of a noise-sensitive land use during the evening hours of Monday through Saturday, or anytime on Sunday or holidays.

Title 10, Section 10.60.030 of the Monterey County Code states: "No person shall, within the unincorporated limits of the County of Monterey, operate any machine, mechanism, device, or contrivance which produces a noise level exceeding eighty-five (85) dBA measured fifty (50) feet therefrom. The prohibition in this Section shall not apply to aircraft nor to any such machine, mechanism, device, or contrivance which is operated in excess of two thousand five hundred (2,500) feet from any occupied dwelling unit." The municipal code does not place any restriction on the allowable hours of construction.

The nearest residences to the project are located near Highway 1, approximately 200, 320, and 350 feet northwest of the project site, respectively. Construction activities would not usually occur during the evening hours or on Sundays or holidays; therefore, the project would be in compliance with the Noise Element of the Monterey County General Plan. The major noise generating equipment to be used at the project site and typical noise levels for the equipment is shown in Table 2-6: Noise Levels of Typical Construction Equipment. The construction equipment noise levels will be below the 85 dBA noise limit established within the Monterey County Code. Because construction of the project would be conducted in compliance with local noise regulations impacts would be less than significant.

Table 2-6: Noise Levels of Typical Construction Equipment

Equipment	Range of Noise Level (dBA) at 50 feet
Backhoe	78-80
Trucks	55-75
Crane	81-85
Scraper	84-85
Compactor	80-83
Loader	79-80
Paver	77-85
Roller	80-85
Drill rig	79-84
Dump Truck	76-84
Concrete Truck	79-85
Compactor	80-83

Source: U.S. Department of Transportation (DOT), 2010

Question 2.11.0b – Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Although there are three residences, the nearest of which is located approximately 200 feet from the project area, no major vibration-inducing activities, such as pile driving or blasting, would be conducted during construction of the project. Some of the equipment may cause minor groundborne vibrations and groundborne noise; however, this equipment would be used intermittently throughout the 5-year duration of construction. It is unlikely that groundborne noise or vibration from the project area would not be detected by the general public due to the project's location near Highway 1 and distance from recreational areas within the Elkhorn Slough. Therefore, due to the temporary and intermittent nature of project construction, the project's distance from residences and recreationists, impacts due to groundborne vibration or noise would be less than significant.

Question 2.11.0c – Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

This project would not result in any substantial permanent increases in ambient noise levels in the area. Operation and maintenance activities associated with the project would be conducted similarly to those currently performed for the existing Moss Landing Substation. Therefore, impacts would be short-term and temporary and no permanent impacts would occur.

Question 2.11.0d – Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Construction of the project would result in temporary increases in noise levels in the immediate vicinity as a result of the use of construction equipment. Equipment used to construct the project may include pickup trucks, cranes, and backhoes. Noise levels commonly associated with this equipment are shown in Table 2-6: Noise Levels of Typical Construction Equipment. As described previously in the response to Question 2.11.0a, noise generated by the project construction equipment will be below the 85 dBA limit specified in the county code. Additionally, construction would occur primarily during daylight hours, although short and sporadic periods of night or weekend construction may occasionally occur. This noise would be concentrated in short periods of activity over the 5-year period and would occur predominately during. Therefore, the project will not cause a substantial increase in ambient noise levels. Due to these factors, temporary impacts would be less than significant.

Question 2.11.0e – For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The project area is located entirely on PG&E-owned property, directly adjacent to the existing Moss Landing Substation. It is not within the vicinity of an airport land use plan, public airport, or public use airport. The nearest public airport— Marina Municipal Airport—is located 9 miles away from the project site. Therefore, no impact would occur.

Question 2.11.0f – For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The nearest private airstrip—Monterey Bay Academy—is located approximately 8 miles north of the project. Therefore, no impact would occur.

2.11.1 Applicant-Proposed Measures

Because the project would not cause any significant impacts to noise, no APMs are proposed.

2.12 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.12.0 Impact Discussion

Question 2.12.0a – Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Construction of the project would not result in a temporary influx of workers to the area. The workforce would depend on the contractor, but the peak workforce would consist of two crews of up to eight people. The majority of this workforce would be from the local Monterey County area and would either commute to the site from neighboring communities or stay in hotels in the Monterey area during the construction phase of the project. After construction has been completed, no additional personnel would be required because the project would be operated and inspected by existing PG&E personnel. There is no capacity increase associated with the project that could indirectly induce population growth. As a result, no impact would occur.

Question 2.12.0b – Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

The project would not involve the displacement of any housing. As discussed in the response to Question 2.12.0a, a relatively small workforce would be required to complete the work. Construction crews would likely commute to the site or stay in nearby hotels and would not require temporary housing. Additionally, no additional workforce would be required to operate the project. Therefore, there would be no impact to existing housing.

Question 2.12.0c – Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The project would not displace substantial numbers of people nor necessitate the construction of replacement housing. People would not need to relocate as a result of construction or operation of the project. In addition, no housing or businesses would be impacted by project construction. Therefore, no impact would occur.

2.12.1 Applicant-Proposed Measures

Because the project would not cause impacts to population and housing, no APMs are proposed.

2.13 PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.13.0 Impact Discussion

Question 2.13.0a.i – Would the project result in substantial adverse physical impacts to fire protection?

There are no fire stations located within 3 miles of the project. Additionally, roads would not be closed during construction and emergency access would be maintained at all times. No new commercial or residential development would occur as a result of this project; therefore, the project would not result in an increased need for fire protection. While the project could require fire services during construction or operations as a result of an accident, such an event is unlikely to occur and would not trigger the need for new fire protection services. As a result, no impact would occur.

Question 2.13.0a.ii – Would the project result in substantial adverse physical impacts to police protection?

There are no police or sheriff stations located within 3 miles of the project. As stated in the response to Question 2.13.0a.i, no roads would be closed to facilitate construction, so emergency access would be available at all times. No new commercial or residential development would occur as a result of this project; thus, the project would not result in an increase in need for police protection. While the project could require police services during construction or operations as a

result of an accident, such an event is unlikely to occur and would not trigger the need for new police protection services. As a result, there would be no impact.

Question 2.13.0a.iii – Would the project result in substantial adverse physical impacts to schools?

The nearest school is located approximately 3 miles from the project site. No new commercial or residential development would be constructed as part of this project. There may be a temporary influx of workers to the area, though they are not likely to relocate their families due to the short duration of construction. Thus, the project would not result in an increased need for schools and no impact would occur.

Question 2.13.0a.iv – Would the project result in substantial adverse physical impacts to parks?

The Elkhorn Slough is located approximately 150 feet north of the project. However, construction and operational activities would not impact trails, access, or recreational activities in the vicinity of the slough. Additionally, no new commercial or residential development would occur as a result of this project; therefore, the project would not result in a need for new parks and no impact would occur.

Question 2.13.0a.v – Would the project result in substantial adverse physical impacts to other public facilities?

No existing public facilities would be affected by the construction, operation, or maintenance of the project, as there are none in the vicinity. No new commercial or residential development would occur as a result of this project; therefore, new public facilities would not be needed. As a result, no impact would occur.

2.13.1 Applicant-Proposed Measures

Because the project would not cause any impacts to public services, no APMs are proposed.

2.14 RECREATION

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.14.0 Impact Discussion

Question 2.14.0a – Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No new commercial or residential development would occur as a result of this project. There would not be an increase in use or impact to existing recreational facilities. The nearest recreational facility is the Elkhorn Slough, which is located approximately 150 feet north of the project site. Boating, kayaking, and Scuba diving operations exist in the Moss Landing area to the west of the project site, across Highway 1. However, it is not anticipated that the project would impact access or operations at nearby recreational facilities because construction and future operational activities would be performed entirely within PG&E-owned land and roadways will not be blocked during construction. As a result, no impact would occur.

Question 2.14.0b – Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The project does not include construction of recreational facilities, nor does it result in a need to construct or expand such facilities. Therefore, no impact would occur.

2.14.1 Applicant-Proposed Measures

Because the project would not cause any impacts to recreational facilities, no APMs are proposed.

2.15 TRANSPORTATION AND TRAFFIC

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.15.0 Impact Discussion

Question 2.15.0a – Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

The project would not conflict with any general plans, transportation plans, or municipal codes for Monterey County. The project would be staggered over a 5-year period and construction traffic would be diluted over that length of time. In addition, the construction crew would only consist of two crews of up to eight people working 10-hour days, four days per week. Therefore, the number of truck and car trips to the project site each day would be minimal. Because the project site is located next to Highway 1, the limited additional crewmember cars, trucks, and equipment traveling to the site each day would not result in a substantial impact to highway capacity. Furthermore, operation and maintenance activities associated with the project would be conducted similarly to those currently performed for the existing Moss Landing Substation, which do not conflict with transportation policies or plans. Therefore, impacts would be less than significant.

Question 2.15.0b – Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Project-related traffic would be minimal and only result in a slight increase in the existing daily traffic on Highway 1. In addition, this increase in traffic would be temporary and short-term. The project would not conflict with any congestion management programs. It is anticipated that construction of the entire project would take approximately 5 years to complete and that there would be approximately 15 personnel on site during peak construction times. The majority of the work would be conducted by two crews of up to eight people working 10-hour days, four days per week. Due to the small size of the crew, traffic associated with construction would be minimal. In addition, no substantial change to operation and maintenance procedures would occur as a result of the project. Therefore, impacts to traffic congestion would be less than significant.

Question 2.15.0c – Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No helicopters or other forms of air transportation would be used during construction or operation and maintenance of the project. Therefore, there would be no impact to air traffic patterns or levels.

Question 2.15.0d – Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

During construction, temporary access for equipment and vehicles would be provided via Dolan Road and Highway 1. Construction vehicles and equipment would utilize existing roadways within the PG&E-owned property. No public roads would be modified during the construction of the project. All temporary access roads would be constructed and utilized consistent with PG&E standards and would be restored to pre-construction conditions following completion of the project. As a result, no design features or incompatible uses would result and no impact would occur.

Question 2.15.0e – Would the project result in inadequate emergency access?

The main entrance to the Moss Landing Substation is located on Dolan Road. This entrance would be used by employees, contractors, and visitors under normal operation and maintenance activities. The entrance on Highway 1 is reserved for emergencies and exiting purposes at specific times. Therefore, emergency access would not be impacted during construction because streets and entrances would remain open to emergency vehicles at all times throughout construction. The increase in traffic would be insignificant and would not impede or significantly delay emergency vehicles. In addition, the operation and maintenance of the project would not result in any additional traffic over current conditions or any road closures. Therefore, no impact to emergency vehicle access would occur.

Question 2.15.0f – Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The project is not located near any public transit facilities. Because no public roads would be modified or affected during the construction of the project, bicycle or pedestrian facilities would not experience a decrease in performance or safety. The project would not affect any adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Therefore, no impact would occur.

2.15.1 Applicant-Proposed Measures

Because the project would not cause any significant impacts to transportation and traffic, no APMs are proposed.

2.16 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.16.0 Impact Discussion

Question 2.16.0a – Would the project exceed wastewater treatment requirements of the applicable RWQCB?

The only wastewater generated during project construction would result from the use of portable chemical toilets. The wastes from portable chemical toilets would be transported by a contracted service to a permitted waste treatment facility. The amount of waste associated with the portable chemical toilets would be minimal and would be properly disposed of in accordance with local, state, and federal regulations. Therefore, no impact would occur to the capacity of the wastewater treatment facility. Once construction is complete, it would not require additional staff to operate the facilities, and no additional quantities of wastewater would be created. In addition, none of the expanded substation facilities would generate additional wastewater. Therefore, there would be no impact.

Question 2.16.0b – Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The project would not involve the construction of new commercial or residential developments. In addition, no wastewater would be generated by the operation of the project, as it is a substation, as described in the response to Question 2.16.0a. As a result, the project would not create the need for wastewater treatment facilities, and no impact would occur.

Question 2.16.0c – Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The project would result in approximately 5.2 acres of new graveled area. Portions of the 5.2-acre expansion area would be impervious due to the installation of footings, foundation structures, and control buildings. The stormwater in the substation area would be collected into a system of drainage ditches and catch basins. Stormwater runoff would not increase such that it would require the construction of new storm drainage facilities or the expansion of any existing public facilities. Therefore, impacts would be less than significant.

Question 2.16.0d – Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

The project would use water supplied by an on-site well for dust suppression. Because water would be obtained from an existing source, no entitlements or additional resources would be needed. Therefore, no impact would occur.

Question 2.16.0e – Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The project would not involve the construction of new commercial or residential developments. In addition, as previously described in the response to Question 2.16.0a, no wastewater would be

generated by project operations. Therefore, the project would not cause the wastewater treatment provider to increase its services beyond its existing commitments, and no impact would occur.

Question 2.16.0f – Would the project be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?

Construction and demolition materials generated by the project would be recycled when feasible. Non-hazardous waste would be disposed at a Class III landfill site, which is designated for materials such as municipal waste. The nearest landfill is the Monterey Peninsula Landfill and Recycling Facility located approximately 7 miles south of the project site in Marina, California. This landfill is anticipated to have sufficient capacity until 2017 and could handle the project’s solid waste disposal needs; therefore, no impact would occur.

Question 2.16.0g – Would the project comply with federal, state, and local statutes and regulations related to solid waste?

PG&E and its contractors would comply with all federal, state, and local regulations related to solid waste during the construction and operation of the project. Therefore, no impact would occur.

2.16.1 Applicant-Proposed Measures

Because the project would not cause any significant impacts to utilities and service systems, no APMs are proposed.

2.17 MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.17.0 Impact Discussion

Question 2.17.0a – Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

As discussed in Section 2.3 Biological Resources, construction of this project has the potential to adversely affect several sensitive plant and animal species that have moderate or high potential to occur within the project area. However, such activities would be temporary and short-term. There is no USFWS-designated critical habitat located within the project area. In addition, the applicant-proposed measures identified in Section 2.3 Biological Resources would ensure that

impacts are reduced to a less-than-significant level. As a result, the project would not result in an impact that would substantially degrade the environment and is unlikely to affect plant or animal populations to a significant degree.

No paleontological resources have been identified in the project area. However, the project is located in an area of historical and archaeological sensitivity. With implementation of the applicant-proposed measures identified in Section 2.4 Cultural Resources, potential impacts to archaeological resources would be reduced to a less-than-significant level. Therefore, the project would not eliminate important examples of the major periods of California history or prehistory.

Question 2.17.0b – Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

The project's impacts would be predominantly limited to the construction phase. Temporary impacts that could result from construction activities would be reduced to a less-than-significant level with the implementation of APMs and no residual impacts are anticipated. Furthermore, there are no other current or probable future projects in close proximity to the project. Therefore, these impacts would not be considered additive in the region.

Because the project involves the expansion and replacement of the existing substation and associated equipment, operation of the substation would not result in any new impacts. As a result, the project would not contribute to a cumulative impact during operation.

Question 2.17.0c - Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The project's impacts on the human environment would primarily occur during construction (as permanent substation facilities will be unmanned). These impacts include potential exposure to dust and air pollutants, hazardous materials, noise, and soil instability. All of these impacts would be less than significant, and would not necessitate the implementation of avoidance or measures. As a result, the project's potential impact to human beings would be less than significant.

2.17.1 Applicant-Proposed Measures

No additional APMs are required beyond what are listed in Section 2.3 Biological Resources, Section 2.4 Cultural Resources, and Section 2.5 Geology and Soils.

2.18 REFERENCES

- Alquist-Priolo - Earth Quake Fault Zones. Online.
http://www.consrv.ca.gov/CGS/rghm/ap/Map_index/F4F.htm. Site visited October 12, 2010.
- Amtrak. Amtrak. Online.
<http://www.amtrak.com/servlet/ContentServer?pagename=Amtrak/HomePage>. Site visited September 23, 2010.
- Applied EarthWorks, Inc. 2010. *Archaeological Assessment of the Moss Landing Bank Stabilization Project, Monterey County, California.*
- Association of Environmental Professionals. 2010. CEQA Appendix G: Environmental Checklist Form.
- Bioresearch Associates. 2010. California Tiger Salamander Upland Study, Moss Landing Substation Project Site, Monterey County, California.
- Brady and Associates Geological Services. 2010. *Paleontological Identification and Evaluation for the Proposed PG&E Bank Stabilization Project, Moss Landing Power Plant Site, Monterey County, California.*
- Bureau of Land Management and United States Forest Service. GeoCommunicator Land and Mineral Use Records. Online.
<http://www.geocommunicator.gov/blmMap/Map.jsp?MAP=SM>. Site visited September 18, 2010.
- California Coastal Commission. 2003. *Draft Findings of the Monterey County LCP Periodic Review.*
- California Department of Conservation. Map of Williamson Act Agricultural Preserves. Online.
<ftp://ftp.consrv.ca.gov/pub/dlrp/WA/Map%20and%20PDF/Riverside/riverside%20wa%202006.pdf>. Site visited September 21, 2010.
- California Department of Water Resources. 2006. *Bulletin 118 for the Pajaro Valley Groundwater Basin.*
- California Energy Commission. 2000. *Moss Landing Power Plant Project Final Staff Assessment.*
- California Resources Agency. 2010. Title 14 California Code of Regulations, Chapter 3 Guidelines for Implementation of the California Environmental Quality Act. CEQA Guidelines.
- Caltrans. Traffic and Vehicle Data Systems Branch Home. Online. <http://traffic-counts.dot.ca.gov/>. Site visited September 23, 2010.

CARB. "Preliminary Draft Staff Proposal: Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act." Online. http://www.opr.ca.gov/ceqa/pdfs/Prelim_Draft_Staff_Proposal_10-24-08.pdf. Site visited October 12, 2010.

CDFG. RareFind. Version 4. February 2010. State and Federally Listed Endangered and Threatened Animals of California. Wildlife and Habitat Data Analysis Branch, Habitat Conservation Division. Sacramento, CA: CNDDDB. Program used September 2010.

Central Coast RWQCB. 1994. *Basin Plan for the Central Coast RWQCB*.

City of Marina. Airport. Online. <http://www.ci.marina.ca.us/?nid=95>. Site visited October 13, 2010.

CNPS. Inventory of Rare and Endangered Plants v7-09d. Online. <http://www.cnps.org/inventory>. Site visited September 2010.

Cooper, Doug. USFWS. Conference call with Amie Ashton, Insignia Environmental, and PG&E staff. November 30, 2010.

DTSC. Envirostor. Online. <http://www.envirostor.dtsc.ca.gov/public/>. Site visited October 8, 2010.

Elkhorn Slough. Official Website of the Elkhorn Slough. Online. www.elkhornslough.org. Site visited August 20, 2009.

Federal Aviation Administration. Obstruction Evaluation/Airport Airspace Analysis (OE/AAA). Online. <https://oeaaa.faa.gov/oeaaa/external/portal.jsp>. Site visited September 10, 2007.

Federal Emergency Management Agency. 2009. FIRM — Monterey County, California: Map Number 06053C0070G.

Google. Google Earth Version 5.1. Software. Program used October 8, 2010.

Governor's Office of Planning and Research. "Preliminary Draft CEQA Guideline Amendments for Greenhouse Gas Emissions." Online. http://opr.ca.gov/ceqa/pdfs/PA_CEQA_Guidelines.pdf OPR. Site visited October 10, 2010.

Kleinfelder and Associates. 2010. *Geotechnical Investigation Moss Landing Substation Highway 1 and Dolan Road Moss Landing, California*.

MBUAPCD. 2001. "2000 Air Quality Management Plan for the Monterey Bay Region."

MBUAPCD. 2002. CEQA Air Quality Guidelines.

MBUAPCD. CEQA Air Quality Guidelines. Online. <http://www.arb.ca.gov/drdb/mbu/cur.htm>. Site visited October 14, 2010.

Monterey County. 1982. *North County Land Use Plan*.

Monterey County. 1990. Appendix B, Moss Landing Power Plant Master Plan 1994-1998, Monterey County. 2005 Monterey County Regional Transportation Plan. Online. http://www.tamcmonterey.org/programs/rtp/pdf/2005_rtp/Final_Approved_RTP_folder/Final_Approved_RTP_Linked.pdf. Site visited September 23, 2010.

Monterey County. 2007. *County of Monterey 2007 General Plan*.

Monterey County. 2010. *County Code*.

Monterey County. Monterey County Bike Routes and Paths Map. Online. <http://www.mtycounty.com/pgs-parks/bike-routes/bike-routes.html>. Site visited September 23, 2010.

Monterey County. Office of Emergency Services. Online. <http://www.co.monterey.ca.us/oes/>. Site visited October 8, 2010.

Monterey County. Officially Designated Scenic Highways. Online. http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm. Site visited October 14, 2010.

Monterey County. Scenic Highway Corridors & Visual Sensitivity Map. Online. http://www.co.monterey.ca.us/planning/gpu/2010_Draft_Monterey_Co_General_Plan/Figures/Fig14_Gr_Mty_Visual.pdf. Site visited October 14, 2010.

Monterey County. Williamson Act Lands Map. Online. <http://www.co.monterey.ca.us/planning/gpu/draftAug2007/Final%20Maps%208-1-06/AWCP-Fig4-Williamson%20Act.pdf>. Site visited October 14, 2010.

Monterey Regional Waste Management. Facts About the Monterey Regional Waste Management District. Online. <http://www.mrwmd.org/about-us.htm>. Site visited October 21, 2010.

Moss Landing Bus Upgrade and Automation Project Visual Simulations. Prepared by Environmental Vision. Dated October 2010.

Moss Landing Commercial Park. Informational Brochure. Online. <http://mosslandingcenter.com/db1/00077/mosslandingcenter.com/download/MLCPBrochure.pdf>. Site visited September 20, 2010.

North Central Coast Air Basin. Attainment Standards for January 2009. Online. http://www.mbuapcd.org/mbuapcd/pdf/Attainment_Status_January_2009.pdf. Site visited October 24, 2010.

Parham, J. F., and T. J. Papenfuss. 2008. High Genetic Diversity Among Fossorial Lizard Populations (*Anniella pulchra*) in a Rapidly Developing Landscape (Central California) Conservation Genetics DOI 10.1007/s10592-008-9544-y.

PG&E. 2010. Moss Landing Bus Upgrade and Automation Project Biological Resources Technical Report.

Sibley, D.A. *The Sibley Field Guide to Birds of Western North America*. New York: Alfred A. Knopf, 2003.

SWRCB. Geotracker Database. Online. <http://geotracker.swrcb.ca.gov/>. Site visited October 12, 2010.

Stebbins, R.C. *A Field Guide to Western Reptiles and Amphibians, Third Edition*. New York: Houghton Mifflin Company, 2003.

SWRCB. 2010. 2009-0009-DWQ Construction General Permit. Online. http://www.swrcb.ca.gov/water_issues/programs/stormwater/constpermits.shtml. Site visited July 28, 2010.

U.S. DOT. Construction Noise Handbook - Construction Equipment Noise Levels and Ranges. Online. http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm. Site visited October 26, 2010.

U.S. EPA. NPL Sites in the U.S. Online. <http://www.epa.gov/superfund/sites/query/queryhtm/nplmapsg.htm>. Site visited October 12, 2010.

USFWS. Critical Habitat Portal. Online. <http://criticalhabitat.fws.gov/>. Site visited September 2010.