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?	☐	■	☐	☐
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?	☐	■	☐	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	■	☐
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?	☐	■	☐	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two 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?	☐	☐	■	☐
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?	☐	☐	☐	■
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐
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?	☐	■	☐	☐

Existing Conditions

Hazardous Materials Use at Substations. Electrical equipment at the four substations contains hazardous materials. These materials include oils, compressed gas, diesel fuel, and acid-containing batteries. Hazardous material business plan inventories (HMBPI) for the four substations have been

prepared and submitted to the Environmental Health Division of San Mateo County in accordance with Chapter 6.95 of the California Health and Safety Code and Title 22 of the California Code of Regulations. However, except for the San Mateo Substation, which has one empty aboveground oil tank, none of the substations has underground or aboveground storage tanks or has generated hazardous waste exceeding San Mateo County limits. The four substations operate in compliance with the County's Environmental Health Division regulations, as well as State laws and regulations to comply with federal Spill Prevention, Control, and Countermeasure Plan (SPCC Plan) requirements, as outlined in Title 40 of the Code of Federal Regulations, Part 112. The SPCC Plan, which is certified by a professional engineer, aims to prevent discharge of oil into navigable waters or adjoining shorelines of the United States, and includes response guidelines for accidental spills at the substations. More specifically, the purpose of these plans is to promote effective response to potential oil spills, fires, explosions, and hazardous materials releases to air, soil, or surface water that could occur at the substations. These plans have been prepared according to the guidelines of the National Response Team Hazardous Materials Emergency Planning Guide (NRT, 2001) pursuant to the State of California Code of Regulations (CCR), Title 22 and Title 19, and the Environmental Protection Agency regulations on oil pollution prevention, 40 CFR, Part 112, 100, 109, and 761. The plans contain emergency contact telephone numbers and procedures to implement emergency actions in the event of an incident. PG&E's Environmental Specialist is responsible for reporting hazardous incidents to the California Office of Emergency Services (within 30 days), the California Department of Toxic Substances Control (within 15 days), the Environmental Protection Agency (within 60 days), the Regional Water Quality Control Board, and the San Mateo County Environmental Health Division as required.

The following subsections describe the types and amounts of hazardous materials present at the substations or within or directly adjacent to the right-of-way.

San Mateo. The San Mateo Substation was constructed in 1930. Oils and potentially hazardous materials onsite include approximately 280,000 gallons of insulating (non-polychlorinated biphenyl [PCB] mineral) oil, 7,000 cubic feet of compressed nitrogen gas, 8,000 cubic feet of sulfur hexafluoride gas, 60 pounds of sealed lead acid battery, 174 gallons of open lead acid batteries, 15,000 cubic feet of hydrogen gas, 100 gallons of diesel fuel, 100 gallons of battery acid, 100 gallons of turbine oil, 800 cubic feet of compressed argon gas, 50 gallons of aircraft hydraulic oil, 300 cubic feet of argon and carbon dioxide gas, 800 cubic feet of compressed air, and 55 gallons of paint thinner. No spill incidents have been reported at this substation. PG&E has an approved SPCC Plan for the San Mateo Substation (December 2001) in order to minimize the potential for oil spills, prevent accidentally spilled oil from leaving the property, and to provide for cleanup of spilled oil.

Burlingame. The Burlingame Substation was constructed in 1942. Oils and potentially hazardous materials in use in the substation's equipment include approximately 10 gallons of battery acid, 40 cubic feet of sulfur hexafluoride gas, 6,500 gallons of non-PCB insulating oil, and 200 cubic feet of nitrogen gas. No spill incidents have been reported at this substation. PG&E has an approved SPCC Plan for the Burlingame Substation (December 2001) in order to minimize the potential for oil spills, to

prevent accidentally spilled oil from leaving the property, and to provide maximum efficiency cleanup of spilled oil.

Millbrae. The Millbrae Substation was constructed in 1937. Oils and potentially hazardous materials in use in the substation's equipment include approximately 150 gallons of battery acid, 25,000 gallons of non-PCB insulating oil, and 450 cubic feet of nitrogen gas. No spill incidents have been reported at this substation. PG&E has an approved SPCC Plan for the Millbrae Substation (October 2000) in order to minimize the potential for oil spills, prevent accidentally spilled oil from leaving the property, and to provide maximum efficiency cleanup of spilled oil.

Martin. The Martin Substation was constructed in 1925. Oils and potentially hazardous materials in use include approximately 600 pounds of battery acid, 200,000 gallons of non-PCB insulating oil, 2,800 pounds of concrete mix, 4,000 cubic feet of nitrogen gas, 9,000 cubic feet of refrigerated liquid nitrogen, 120 gallons of diesel fuel, 6,600 cubic feet of sulfur hexafluoride gas, 300 cubic feet of acetylene gas, and 250 cubic feet of oxygen gas. PG&E has an approved SPCC Plan for the Martin Substation (July 2002) in order to minimize the potential for oil spills, prevent accidentally spilled oil from leaving the property, and to provide maximum efficiency cleanup of spilled oil.

Contaminated Sites (Cortese List). According to the HMBPI and Cortese List, there are no hazardous waste sites directly adjacent to or within the transmission line right-of-way; however, as described below, there are three listed sites near the Martin Substations.

PG&E Martin Service Area and Daly City Yard. PG&E's Martin Service Center, located adjacent to the Martin Substation, appears on the *San Mateo County General Plan* Contaminated Toxic Chemical Sites List. The Martin Service Area and the neighboring Daly City Yard are on the California Department of Toxic Substances Control (DTSC) Hazardous Waste and Substances Site List (Cortese List). The service center has soil contamination that includes naphthalene, anthrazene, and benzene, and potentially contaminated groundwater.

From the 1890s to 1915, a gas manufacturing plant, which used coal and oil as feedstock, occupied the Martin Service Center site. Oil and tar residues of the gas-manufacturing process found at the service center and substation contain polycyclic aromatic hydrocarbons and benzene. The site has been divided into two operable units. Unit 1 includes the Daly City Yard, a berm separating the yard from Bayshore Park and Midway Village (which are the other two sites on the Cortese List), and the Schwerin Street strip. Unit 2 is the drainage and flood control project site.

At Unit 1, a partial removal of contaminated soil was conducted in 1980 and a concrete cap was installed on the Daly City Yard. PG&E completed installation of a cap over the berm and Schwerin Street strip in December 1994. An Enforceable Agreement between PG&E and the California DTSC was signed in January 1995 to implement an Operations and Maintenance Plan that prevents public and environmental exposure to soil contaminated with polynuclear aromatic hydrocarbons (PNAs) associated with this site. A deed restriction, recorded in March 1995, limits the property to industrial, utility, commercial or office space use and provides for monitoring and preservation of the cap. The DTSC certified the site remedy in April 1995. In March 2001, the DTSC approved a five-year review,

which found that the remedy remains protective of human health and the environment. An amended Operations and Maintenance Plan adopted in 2002 requires a strip of land between Schwerin Street and the Martin Service Center property be covered with a concrete cap with accommodations for the existing trees. Additionally, the berm along the southern boundary of the Martin Service Center Daly City Yard was covered with a shotcrete cap, with landscaping and drainage provided.

In July 1998, a Remedial Action Plan for Unit 2 was approved. It required installation of a groundwater interceptor trench on the eastern property boundary to prevent groundwater from moving off-site. It also addressed handling of soils excavated for the Bayshore Storm Drain Improvement Project. Some soils were to be treated using a cold emulsion process to stabilize the soil. Work began on the Bayshore Storm Drain Improvement Project in October 1999. Final grading and startup of the interceptor trench began in spring 2001 and was completed by August 2001. The site has been partially capped and poses no threat to on-site workers.

Soil sample analyses by PG&E of the area proposed to be excavated for the Martin Substation modifications were completed in June 2003. The laboratory results for PCBs, petroleum, hydrocarbons, and carcinogenic poly-aromatic hydrocarbons (PAHs) and BTEX compounds (benzene, toluene, ethylbenzene, and xylenes), were all below levels for protection of construction workers. There does not appear to be any worker exposure health and safety impacts, unless PG&E excavates outside the area tested.

Bayshore Park and Midway Village. These two sites on the Cortese List are located adjacent to the Martin Service Center to the southwest. These sites contain soil contaminated with manufactured gas plant residues. The most recent soils investigations, performed in June 2000 at the Bayshore Park site, and in July 2001 at the Midway Village site, confirmed the presence of contaminated soil and recommended its removal. In July 2001, the DTSC ordered the removal of the top two feet of soil across the entire Bayshore Park. The resulting removal action plan, initiated in August 2001, is still underway. Soil removal actions have only been directed for the Midway and Bayshore Park sites.

Southern Pacific – Brisbane Property. One additional Cortese site located greater than 1000 feet from the project has been identified as the Southern Pacific – Brisbane (North Area) property. The Cortese List identifies this site in Brisbane, located adjacent to the Martin Substation to the east beyond Bayshore Boulevard (Geneva Avenue and Bayshore Boulevard). The Southern Pacific Transportation Company used this site for major railcar rehabilitation and locomotive maintenance operations from about 1914 to 1960. Subsurface investigations conducted in 1980 identified volatile-organic-compound contamination of the groundwater in the northern section of the property and contamination of the groundwater with petroleum hydrocarbons in the southern section. From 1994 through 1999, a groundwater extraction and treatment system was conducted in the northern section. Upon the request of DTSC, the two property owners, Sunquest and Ingersoll Rand, are preparing a regional groundwater remedial investigation.

Proximity to Schools. No schools are located within 0.25 mile of the area directly adjacent to substations. Five schools were identified within a 0.25-mile radius of the right-of-way. One school, Lomita Park Elementary, lies approximately 200 feet west of the right-of-way in Millbrae. Belle Air

Elementary is located approximately 600 feet east of the right-of-way in San Bruno. In Daly City, Bayshore Elementary School lies approximately 300 feet west of the Martin Substation, and Robertson Garnet Intermediate School is located approximately 300 feet west of the right-of-way.

Proximity to Airports. San Francisco International Airport (SFO) is adjacent to the right-of-way east of US 101. The power line passes through the West of Bayshore parcel, which is within SFO property in an unincorporated area of San Mateo County. According to the *San Mateo County General Plan*, the Airport Land Use Commission (ALUC) requires that "approach zones" be kept free of structures. The commission defines "approach zone" as the area of high accident potential located at the ends of the aviation runway. Non-structural uses are permitted in approach zones if they do not cause a concentration of more than ten people per acre on a regular basis. The SFO Airport Land Use Plan (ALUP) and ALUC specify height restrictions for approach zones that are based primarily on Federal Aviation Regulation Part 77, Objects Affecting Navigable Airspaces. The regulations establish standards for determining obstructions in navigable airspace, as well as construction or alterations that require FAA notification. As it relates to the proposed project, obstructions, alterations, or construction that violate the ALUP and/or require FAA notification would include an object height of 500 feet above ground level at the site of the object; or an object height of 200 feet above ground level or above the established airport elevation, whichever is higher, within three nautical miles of the established reference point of an airport.

Emergency Service Providers and Emergency/Evacuation Routes. There are numerous fire and police stations and emergency medical service providers located throughout the service area (see Section B.13, Public Services). However, none is located immediately adjacent to the substations or reconductoring alignment.

The following emergency evacuation routes have been designated in the project area: Geneva Avenue in Daly City; Bayshore Boulevard, Guadalupe Canyon Parkway, Mission Blue Street, and Valley Street in Brisbane; San Bruno Avenue in San Bruno; East Millbrae Avenue in Millbrae; and Broadway Boulevard and Peninsula Avenue in Burlingame. Gateway Boulevard, Sister Cities Boulevard, South Airport Boulevard, and East Grand Avenue in South San Francisco are not designated routes but can be used for emergency evacuation. The transmission line passes over all designated and anticipated routes listed above except Geneva Avenue.

Fire Hazard. The project route is one of three sets of power lines within an existing electric power line corridor. This power line corridor passes through a variety of urban, park, and open space land uses. The project area typically has long, dry summers and high winds, variables that increase the potential for fire hazards. The potential fire hazard is greatest at locations within the corridor characterized by grasslands and trees, which occur primarily in the West of Bayshore parcel (Towers 4/33 to 6/49) and San Bruno Mountain (Tower 8/68 to Martin Substation) segments. PG&E has developed a Best Management Plan to address fire prevention and suppression measures (see Appendix D). Adherence with this plan would minimize the risk of fire when crews are working in high danger areas.

Significance Criteria

The significance criteria for this analysis is based on Appendix G of the CEQA Guidelines. The proposed project would result in a significant hazard impact if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
- Create a significant hazard to the public or the environment through reasonably foreseeable upset
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school
- 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 create a significant hazard to the public or the environment
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area
- For a project within the vicinity of a private airstrip, 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 plan or emergency evacuation plan
- 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.

Explanation of Hazards and Hazardous Materials Checklist

a,b. Routine Transport, Use, or Disposal of Hazardous Materials; Release of Hazardous Materials through Upset or Accident Conditions — **Less-than-Significant with Mitigation Incorporated**

Construction and operation of the project would involve the use, transport, and/or disposal of products containing hazardous materials. During construction, typical products used on a routine basis would be vehicle fuels and lubricants, welding compounds, and various items such as solvents, cements, and paint. Four old oil-containing transformers would be removed from the Burlingame Substation. PG&E would test the banks for PCBs. When last tested by PG&E in 1981, there were less than 5 ppm of PCB content. Assuming less than 5 ppm PCB content at the time of their removal, PG&E would remove the oil from the banks and ship the oil to Evergreen in Newark, California, for recycling. PG&E would sell the remaining banks to Sims Metal in Richmond, California. Because PG&E would break the banks down, they could be loaded onto Sims trucks at the Burlingame Substation. Sims would be responsible for transporting the banks from Burlingame to Richmond. The sizes, types, and weights of materials to be shipped are not expected to require special permits to move on city streets or on state highways. If the PCB content tests greater than 5 PPM or the regulatory agency determines

that the transformers need to be disposed of at special facilities designed to handle hazardous wastes, the transformers would be transported by truck or rail for disposal at a waste facility permitted to accept such wastes and in accordance with all applicable Federal (Code of Federal Regulations (CFR) Title 49), State (California Code of Regulations (CCR) Title 22), and County of San Mateo (Environmental Health Division) regulations and permits. California law requires that hazardous waste (as defined in California Health and Safety Code Division 20, Chapter 6.5) be transported by a California registered hazardous waste transporter that meets specific registration requirements (Title 22 CCR, Chapter 13).

As the substation modifications are performed, sulfahexafluoride (SF6) gas would be stored and used for high-voltage circuit breaker insulation at the four substations. The amount of material used at each station would be 25 pounds at the Burlingame Substation and 49 pounds each at the San Mateo, Millbrae, and Martin Substations. Approximately 12,000 gallons of non-PCB containing mineral oil for transformer winding insulation would be stored and used at the Burlingame and Millbrae Substations. All hazardous materials storage would occur within the substation site, as occurs currently.

To prevent an inadvertent release of SF6 gas during routine use, containment measures at each substation would include a pressure-tested, welded steel containment vessel, bolted and gasketed at every junction with pressure monitors and low-pressure alarms. The insulating oil containers would be stored in an area surrounded by a concrete berm that includes a conveyance system to direct spills to a containment structure, should an inadvertent leak occur.

A Best Management Practices Plan has been developed for the project that describes measures to be taken by PG&E and its contractors during and after construction to protect human health and the environment. The plan includes measures to minimize hazardous materials upset/accident conditions. PG&E's general construction crews or licensed contractors are required to be trained and certified in the proper storage, handling, and disposal of hazardous materials, in accordance with the plan. Project-specific Best Management Practices are contained in Appendix C.

As indicated above, all spills would be immediately controlled and contained according to PG&E's standard practices and the SPCC Plans for each substation. Any spilled oil would be properly characterized, removed, and transported to an approved disposal site according to State (Title 22 CCR) and San Mateo County Environmental Health Division regulations.

As discussed in greater detail below under item e, helicopters would be used, where feasible, for reconductoring. To minimize the potential for fuel releases at helicopter staging areas, vehicles would be fueled only in designated areas with secondary containment. Mitigation measures described in Section B.4, Biological Resources, require PG&E to submit staging areas to the CPUC for review and approval (MM BIO-3). To minimize the risk of soil and groundwater contamination during refueling operations, the following mitigation measure is recommended:

MM HAZ-1 Helicopter refueling operations shall be accomplished over graded surfaces with secondary containment in place.

The proposed project would not cause any substantial increase in the volume or frequency with which hazardous materials are used, transported, stored, or disposed of as a result of the project. As such, and with implementation of the mitigation measures described above and the Best Management Practices in Appendix C, hazardous materials impacts would be less than significant.

c. Hazardous Air Emissions near Schools **Less-than-Significant Impact**

No schools are located within 0.25 mile of the power line in the cities of San Mateo, Burlingame, and South San Francisco. Five schools were identified within a 0.25-mile radius of the right-of-way. Construction activities would involve the use of several hazardous materials that could accidentally be released during staging or substation modification activities. The types of materials that could be released include diesel, gasoline, lubrication oil, hydraulic fluid, antifreeze, transmission fluid, and lubricating grease from a vehicle or other motorized equipment. Additionally, operations could result in elevated levels of ozone, carbon monoxide and fugitive dust (PM_{10}), as described in Section B.3, Air Quality. APM 1-10 would ensure minimal risk from release of airborne pollutants near schools. Compliance with the Best Management Practices (Appendix C), and implementation of APMs would ensure that potential hazardous emissions impacts to schools are less than significant.

The substations do not emit hazardous air emissions. As previously discussed, spills from PG&E's substations are extremely rare and usually associated with nonhazardous mineral oil. Any oil spills from transformer failures or other equipment leaks would have minimal impacts (non-VOCs) to air quality and would be handled according to PG&E's site-specific SPCC Plans. In addition, schools are located a sufficient distance from substations to ensure that they would not have direct impact with spilled materials. As a result, impacts would be less than significant.

d. Contaminated Site (Cortese List) **Less-than-Significant with Mitigation Incorporated**

The substation sites have been investigated for the presence of soil contamination. According to the HMBPI and Cortese List, there are no sites directly adjacent to or within the transmission line right-of-way. However, the Cortese List identifies PG&E's Martin Service Center/Daly City Yard as having soil and groundwater contamination. A review of the remedial status by Marcus H. Bole & Associates for the CPUC confirmed that proposed grading at the Martin Substation site could pose a potential threat to the on-site workers or to the environment. Grading for substation modifications would result in soil disturbance. The spoils would be stockpiled at each site and then tested for toxicity. After testing, the spoils would be disposed of in accordance with applicable Environmental Health Division (Soil Handling, Disposal and Reuse, Chapters 1.0 through 4.0) and DTSC regulations (California Heath and Safety Code Division 20, Chapter 6.5 and California Code of Regulations, Title 22, Division 4.5), as well as the provisions set forth in the Guidelines for Excavations at Former Manufactured Gas Plant Sites, dated September 1991.

Hazardous materials sites located adjacent to the Martin Substation and within SFO would not be affected because the project would not involve excavation in these areas. The rest of the identified hazardous material sites are all located outside of the right-of-way and substation sites and would not be affected by project construction or operation.

In addition to grading at the Martin Substation where soil contamination is known to exist, minor grading and foundation work would be required at the San Mateo, Burlingame, and Millbrae Substations to accommodate improvements and upgrades. Spoils from grading would be stockpiled at each site and tested for toxicity. After testing, the spoils would be disposed of in accordance with all applicable federal, state and County of San Mateo Environmental Health Division regulations. The following mitigation measure would protect the health and safety of personnel working around potentially contaminated soils associated with the grading and excavation of substation soils. While soil sampling results for the Martin Substation indicate no health risk for construction workers from excavation, the risks may be different if PG&E needs to excavate elsewhere. Furthermore, the mitigation measure below would be applicable in the event that previously unknown contamination is encountered. With implementation of the mitigation measure described below, and the Best Management Practices in Appendix C, contaminated site impacts would be less than significant.

MM HAZ-2 If field evidence of contamination is observed during grading or excavation, sampling and direct laboratory testing shall be conducted. Personnel conducting soil sampling and field analysis shall meet the Federal OSHA requirement for 40-Hour Training for Hazardous Waste Operations and Emergency Response and be familiar with the calibration and operation of testing equipment. The monitoring personnel shall have the authority to implement a health and safety plan that complies with applicable OSHA requirements and is approved by a certified industrial hygienist. The health and safety plan shall present specific alternatives for action to be taken in the event contaminated soils are encountered. The plan shall specify procedures for monitoring, identifying, handling, and disposing of hazardous waste.

e. Public Use Airport Safety Hazard **Less-than-Significant Impact**

Helicopters would be used on a temporary and intermittent basis for tower and line work along the project route where feasible and would occur only when weather and SFO air security restrictions permit their use. Helicopter construction activities would be based from two or three locations to be determined before construction. Helicopter use during construction would be coordinated with the FAA before construction to ensure that helicopter flights would not interfere with or pose a hazard to regular airport traffic. The temporary wood poles/guard structures that would be used during conductor stringing in the West of Bayshore parcel near the airport are shorter than the existing towers and, thus, should pose no hazard to air traffic. During operation, because the height of the modified towers and new tubular steel poles would not be greater than 200 feet above ground level, the project would be consistent with the SFO ALUP. Therefore, the project would not pose a safety hazard to people working or residing in the area, and impacts would be less than significant.

f. Private Airstrip Safety Hazard **No Impact**

There are no private airstrips located in the vicinity (2-mile radius) of the project, so that there would be no safety hazards for people residing or working in the project area and no hazards to aircraft using airstrips in the wider region.

g. Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan **Less-than-Significant Impact**

There are numerous fire and police stations and emergency medical service providers located throughout the service area. However, none is located immediately adjacent to the substations or reconductoring alignment. Therefore, no fire protection, police protection, and/or emergency service providers would be directly affected by construction activities such that implementation of emergency response plans would be adversely affected.

During the construction period, generally all streets would remain open to emergency vehicles. The only indirect impact would result from construction vehicles using roadways to access construction sites. Because the number of vehicles would represent a minimal contribution to average daily traffic flow (see Section B.15, Transportation/Traffic), these vehicles would not impair traffic flow. Only one traffic lane of Nerli Lane, located in Burlingame, would be temporarily closed for three to five days. However, this 200-foot-long road is not a thoroughfare. Therefore, the project would not block any of the designated emergency roads, and, consequently, would have a less-than-significant impact on the city's emergency plans.

h. Wildland Fire Hazard **Less-than-Significant with Mitigation Incorporated**

The project would involve the installation of new power lines or substations in areas where such facilities already exist. However, there is a potential that construction activities could start a fire, and there are existing operational characteristics related to power lines that would continue to result in (but not increase) potential fire hazards during construction or operation.

A project-specific Best Management Practices Plan has been developed that describes measures to be taken by PG&E and its contractors during and after construction to protect human health and the environment (see Appendix C). The plan includes fire prevention/suppression measures that describe how dead vegetation would be removed, smoking restrictions, fire suppression equipment present at the work site, use of fire-resistant mats in areas where welding and splicing would occur, and construction foreman and biological monitor responsibilities. Implementation of these procedures would be adequate to ensure minimal risk of wildland fire hazard.

Small electric currents can be induced by electric fields in metallic objects close to transmission lines (induced current). A vehicle driven or parked under a transmission line would not generate a spark with enough energy to ignite gasoline vapors, but if a vehicle were to be refueled under a transmission line, a possible safety concern could be the potential for accidental fuel ignition, which could cause a fire. Very large vehicles (necessary to collect larger amounts of electric charge) are often diesel-powered, and diesel fuel is less volatile and more difficult to ignite. To minimize the risk to personnel and potential for fire, the following mitigation measure is recommended:

MM HAZ-3 All gasoline powered light duty trucks and mobile equipment requiring infield refueling shall be re-fueled no less than 200 feet lateral separation from the area directly beneath transmission lines.

Power lines may also pose a fire hazard when a conducting object, such as a tree limb, comes in contact with a power line. To minimize such hazards, PG&E maintains clearance during the life of the power line to reduce the fire hazard potential. Conductors can also be a fire hazard if they fall to the ground and create an electrical arc that ignites combustible material.

Operation of the substations would not represent a new use but the continuation of an existing use. The potential for fire hazard at the four substations is low because vegetation has been cleared. Furthermore, in accordance with State Fire Marshal Code, and PG&E standard operating procedures, a minimum distance of 25 feet would be maintained between transformers and circuit breakers, and a minimum distance of 50 feet would be maintained between oil-filled equipment. This buffer would prevent fire from spreading quickly and would enable the operation crew to control it. Also, substation crews would follow the PG&E *Emergency Response Plan* in the event of an accidental fire.

With the implementation of the mitigation measures described above, and the Best Management Practices in Appendix C, wildland fire hazard impacts would be less than significant.