

Chapter 19—Mitigation Monitoring Plan

19.1 Introduction

PG&E has identified and discussed in this PEA several potentially significant environmental impacts that could result from construction and operation of the proposed project. PG&E has also developed a variety of mitigation measures that will be implemented to reduce, avoid, or otherwise mitigate these impacts to less than significant levels.

This Mitigation Monitoring Plan is intended to be used by the CPUC to ensure that each mitigation measure, adopted as a condition of project approval, is implemented. This monitoring plan meets current CEQA requirements, as amended, which mandate that mitigation monitoring be assigned as part of project approval.

19.2 Mitigation Monitoring

Mitigation measures associated with project development could be implemented by PG&E, the construction contractor, or a designated resource professional. Mitigation implementation for several resources will be assigned to resource professionals, but it is recognized that PG&E has the ultimate responsibility for implementing those assigned mitigation measures. The CPUC will be responsible for monitoring the implementation of most of the mitigation measures.

The CPUC will retain primary responsibility for ensuring that project activities meet the mitigation program requirements and other permit conditions imposed by participating regulatory agencies. The CPUC is responsible for mitigation monitoring that will occur during project construction and operation. PG&E will be responsible for submitting all documentation and reports to CPUC in a timely manner to demonstrate compliance with specified mitigation requirements. The CPUC has the authority to require implementation of mitigation requirements and will be capable of terminating project construction and operation activities found to be inconsistent with mitigation objectives or project approval conditions.

Table 19-1 identifies each potentially significant impact identified in this PEA and the associated mitigation measure(s).

19.3 Mitigation Enforcement

The CPUC will be responsible for enforcing mitigation measures implemented by PG&E. Work specification and performance standards necessary for the implementation of required mitigation will be included as part of contract terms with PG&E's construction contractors. Damage clauses in the contract will be served to enforce mitigation implementation. If alternative mitigation measures are identified that would be equally effective in mitigating the impacts identified in this PEA, these alternative measures would not be implemented until agreed to by the CPUC.

TABLE 19-1.
Mitigation Monitoring Plan for the Jefferson-Martin 230kV Transmission Line Project

Impact	Mitigation Measure (MM)	Responsible Party
Land Use, Recreation, and Agricultural Resources		
Impact 5.1: Land Use – Overhead Segment (Segment 1)	Mitigation Measure 5.1: Lift Plan. Should a change in construction temporarily vacate any residence, Mitigation Measure 11.7, Lift Plan, will be implemented, including advance notification and coordination with potentially affected residents.	CPUC/PG&E
Impact 5.1: Land Use – Overhead Segment (Segment 1) Impact 5.3: Adverse Effects to Existing Recreational Uses (Segment 1)	Mitigation Measure 5.2: Public Information Program. A public-liaison representative will be provided to provide the public with advance notification of construction activities. Concerns related to dust, noise, odor, and access restrictions associated with construction activities will be addressed within this program.	CPUC/PG&E
Impact 5.3: Adverse Effects to Existing Recreational Uses (Segment 1)	Mitigation Measure 5.3. No construction that affects trail use will be conducted on holidays.	CPUC/PG&E
Impact 5.3: Adverse Effects to Existing Recreational Uses (Segment 1)	Mitigation Measure 5.4. All construction activities, including temporary trail closures, affecting the parklands and trail systems of the Peninsula Watershed Lands and Edgewood County Park Preserve will be coordinated, respectively, with the SFPUC and San Mateo County Parks and Recreation Department at least 30 days before construction begins in these areas.	CPUC/PG&E
Impact 5.3: Adverse Effects to Existing Recreational Uses (Segment 1)	Mitigation Measure 5.5. Signs directing vehicles to alternative park access and parking will be posted in the event construction temporarily obstructs parking areas near trailheads.	CPUC/PG&E
Impact 5.3: Adverse Effects to Existing Recreational Uses (Segment 1) Impact 5.7: Adverse Affects to Existing Recreational Uses (Segment 2) Impact 5.11: Conflicts with Planned and Proposed Development (Segment 3)	Mitigation Measure 5.6. PG&E will coordinate with city officials with jurisdiction over local parks near the route at least 30 days prior to construction. PG&E will also post signs alerting park users to construction activities at least a week in advance of construction near parks.	CPUC/PG&E
Impact 5.3: Adverse Effects to Existing Recreational Uses (Segment 1)	Mitigation Measure 5.7. Signs advising recreation users of construction activities and directing them to alternative trails or bikeways will be posted on both sides of all trail intersections or as determined through PG&E coordination with the respective jurisdictional agencies.	CPUC/PG&E
Impact 5.3: Adverse Effects to Existing Recreational Uses (Segment 1)	Mitigation Measure 5.8. Where helicopters are used for construction, signage advising equestrians of construction timeframes with helicopter use will be posted at all equestrian trail-access points within the vicinity of the flight paths. These signs will be checked and maintained daily.	CPUC/PG&E

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Impact	Mitigation Measure (MM)	Responsible Party
<p>Impact 5.3: Adverse Effects to Existing Recreational Uses (Segment 1) Impact 5.6: Land Use – BART South Underground Segment (Segment 2) Impact 5.9: Land Use – McLellan/Hillside Underground Segment (Segment 3) Impact 5.12: Land Use – Hoffman/Orange Underground Segment (Segment 4) Impact 5.15: Land Use – Guadalupe Canyon Underground Segment (Segment 5)</p>	<p>Mitigation Measure 5.9. PG&E will coordinate with nearby schools and provide notification of construction timing, access issues, and any potential construction-safety issues that may arise at least 30 days prior to beginning construction.</p>	CPUC/PG&E
<p>Impact 5.6: Land Use – BART South Underground Segment (Segment 2)</p>	<p>Mitigation Measure 5.10. PG&E will coordinate with BART and the Chestnut Avenue car dealership to relocate the vehicles parked in the ROW and to minimize impacts to the business during construction.</p>	CPUC/PG&E
<p>Impact 5.15: Land Use – Guadalupe Canyon Underground Segment (Segment 5)</p>	<p>Mitigation Measure 5.11. PG&E will schedule construction directly in front of school-access points for school holidays, breaks, weekends, or after-school hours. PG&E will inform schools of the construction schedule at least 30 days before construction begins. No construction will occur in front of school driveways during school hours.</p>	CPUC/PG&E
Biological Resources		
<p>Impact 6.1: Tree Removal and Tree Trimming.</p>	<p>MM 6.1: Pre-Construction Tree Surveys. Standards for maintenance, management, and preservation of native and indigenous trees are established in the San Mateo County Heritage Tree Ordinance and the San Mateo County Significant Tree Ordinance.</p>	CPUC/PG&E
	<p>Tree removal permits or approvals for lost heritage or significant trees will be obtained and mitigation will be coordinated, as required, with the appropriate public and resource agencies. Mitigation for lost trees may not be implemented within the ROW due to fire safety concerns, and instead may be implemented in an alternative, agency-approved location.</p>	
<p>Impact 6.4: Impacts to Rare Plants.</p>	<p>Mitigation Measure 6.2: Environmentally Sensitive Areas. Environmentally sensitive areas, such as the rare plant population in the vicinity of the Ralston Substation, will be identified in the field to minimize the possibility of inadvertent encroachment.</p>	CPUC/PG&E
<p>Impact 6.2: Impacts to Serpentine Grassland Habitat. Impact 6.3: Clearing of Other Vegetation Types.</p>	<p>Mitigation Measure 6.3: Topsoil Salvage. The topsoil from the new footing locations in serpentine grasslands will be salvaged and stockpiled in identified upland work areas within the ROW or other project elements such as substations. After construction is complete, the salvaged topsoil will be spread over the disturbed area. The area will be graded to match the pre-construction natural grade. Once the salvaged topsoil has been spread and the area returned to the pre-existing topography, the area will be revegetated</p>	CPUC/PG&E

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Impact	Mitigation Measure (MM)	Responsible Party
with locally collected, native grass species.		
Impact 6.2: Impacts to Serpentine Grassland Habitat.	Mitigation 6.4: Restricted Tower Access at Edgewood County Park. Towers that are located in the sensitive serpentine grassland habitat at Edgewood County Park and Preserve will be accessed during construction only by helicopter or by foot from existing access roads, except in the event of an emergency. Helicopters will be used to move construction equipment and workers to and from the site to minimize construction-related impacts to this sensitive habitat. No new access roads will be constructed. In addition, construction activities will be restricted or minimized during the rainy season and spring, when the Bay checkerspot butterfly is feeding and in flight, and sensitive arachnid species are active (See Mitigation Measure 6.10).	CPUC/PG&E
Impact 6.2: Impacts to Serpentine Grassland Habitat.	Mitigation Measure 6.5: Erosion Control and Revegetation Plan. Following the completion of construction, all affected habitats will be restored, using a mixture of custom-collected native grass species appropriate to the area, as detailed in the preliminary revegetation plan.	CPUC/PG&E
Impact 6.3: Clearing of Other Vegetation Types.		
Impact 6.6: Disturbance to or Loss of Wetlands and Aquatic Resources.		
Impact 6.5: Introduction of New Invasive Plants or the Spread of Existing Invasive Species or the Sudden Oak Death Pathogen.	Mitigation Measure 6.6: Invasive Species and Sudden Oak Death Control. BMPs will include measures to reduce the potential introduction or spread of noxious weeds or pathogens, such as sudden oak death. Sudden oak death management protocols are currently being developed for the San Francisco Watershed lands. Coordination with the San Francisco Watershed and resource and public agencies regarding sudden oak pathogen management and invasive plant species will be conducted prior to construction. For example, BMPs could include the establishment of tire wash stations at the main entry points so that vehicle tires can be washed before entering the construction area.	CPUC/PG&E
Impact 6.6: Disturbance to or Loss of Wetlands and Aquatic Resources.	Mitigation Measure 6.7: Wetlands Avoidance and Restoration. A wetland delineation per the US Army Corps of Engineers (Corps) Wetlands Delineation Manual (USACE, 1987) will be conducted prior to construction. The delineation will use a three-parameter approach that includes an examination of vegetation, soils and hydrology to determine the presence of wetlands. A wetland report will be prepared and submitted to the USACE for verification. Through this process, final calculations of wetland area present in the Project Area will be obtained for project permitting.	CPUC/PG&E
	Wetlands and aquatic resources such as intermittent and perennial creeks, drainages, and swales that occur within the ROW will be denoted as environmentally sensitive areas and will be avoided during construction to the degree practicable. Many of the larger creeks flow through culverts beneath existing roads and they will not be directly impacted. However, smaller creeks and resources flow across the ROW and could be affected. If the existing wetland or aquatic resource topography is altered by construction, the topography of the area will be restored to match the preexisting condition. For herbaceous and grass-	

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	<p>dominated wetlands, it is expected that revegetation will naturally occur once the topography is restored. However, if mixed willow riparian vegetation is lost during construction, this habitat would not be expected to naturally revegetate. A mitigation plan will be prepared detailing riparian restoration activities and this plan will be submitted to the resource agencies for their review and approval before restoration activities are initiated. In addition to planting details, the restoration plan will include information on performance criteria and monitoring.</p>	
<p>Impact 6.22: Bird Electrocutions.</p>	<p>Mitigation Measure 6.8: Construction of Bird-Safe Towers. PG&E will construct the new overhead portion of the electric transmission line to ensure that it is bird-safe. The configuration for each tower will meet or exceed APLIC guidelines.</p>	<p>CPUC/PG&E</p>
<p>Impact 6.8: Impacts to Special Status Harvestman Species.</p>	<p>Mitigation Measure 6.9: Mitigation For Impacts to Special Status Harvestman Species. Restrict work from December through April in Edgewood Park to avoid work when the species are active.</p> <p>Areas that were not surveyed because they are outside the survey corridor (e.g., cable pull sites, staging areas) will be surveyed prior to construction and similar mitigation measures will be applied for any potentially suitable habitat that is found.</p> <p>Top soil from new footing locations in serpentine habitats will be stockpiled and used as backfill at the existing footing locations, after the existing towers are removed.</p> <p>Affected serpentine grassland habitats will be revegetated using plants grown from native and locally collected seeds, as detailed in the Revegetation and Erosion Control Plan.</p>	<p>CPUC/PG&E</p>
<p>Impact 6.9: Impacts to the Bay Checkerspot Butterfly.</p>	<p>Mitigation Measure 6.10: Mitigation For Impacts to the Bay Checkerspot Butterfly. Consultation with the USFWS will be conducted to address potential impacts and mitigation measures for the Bay Checkerspot butterfly. During consultation, mitigation measures, as discussed in this table, will be further refined and will likely include measures such as:</p> <ul style="list-style-type: none"> • Implementation of a work restriction in Edgewood Park from December 1 to June 30; • Revegetation of affected habitat with locally grown native grass species; • Top soil from new footing locations in serpentine habitats will be stockpiled and used as backfill at the existing footing locations, after the existing towers are removed; • Construction will occur between July 1 and November 30; • Flagging the limits of work areas to minimize the area disturbed during construction; and • Implementation of a worker training program to provide information regarding sensitive species and protective measures. 	<p>CPUC/PG&E</p>
<p>Impact 6.11: Impacts to Special-Status Butterfly Species.</p>	<p>Mitigation Measure 6.11: Mitigation For Impacts to Special-Status Butterflies. The BMPs included in the SWPPP will be implemented during construction to minimize impacts associated with erosion to potentially suitable habitat.</p>	<p>CPUC/PG&E</p>

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Impact	Mitigation Measure (MM)	Responsible Party
	PG&E will comply with the requirements of the San Bruno Mountain HCP for construction along Guadalupe Canyon Parkway.	
Impact 6.13: Impacts to the California Tiger Salamander.	Mitigation Measure 6.12: Mitigation For Impacts to the California Tiger Salamander. Preconstruction surveys will be conducted, and will include an investigation of potential burrow locations in the areas that are within dispersal distance of breeding areas, and that will be disturbed by construction. Any individuals found will be relocated by a qualified biologist to suitable habitat.	CPUC/PG&E
Impact 6.14: Impacts to the California Red-Legged Frog.	Mitigation Measure 6.13: Mitigation For Impacts to the California Red-Legged Frog. Consultation with the USFWS will be initiated, and mitigation measures, as discussed in this table will be further refined and may include the following: <ul style="list-style-type: none"> • Any work between the onset of heavy fall rains and June 1 will be done with a qualified biological monitor present; • Immediately prior to construction, surveys will be performed by a biological monitor in construction areas where the CRLF could potentially occur. If any California red legged frogs are found, the frogs will be located to an agency-approved alternative location outside the area of impact (as determined during consultation); • BMPs, as included in the SWPPP, will be implemented during construction to minimize impacts associated with erosion in the proximity of any identified breeding sites. 	CPUC/PG&E
Impact 6.15: Impacts to the Western Pond Turtle.	Mitigation Measure 6.14: Mitigation For Impacts to the Western Pond Turtle. Immediately prior to construction, preconstruction surveys will be performed by a qualified biologist in areas where pond turtles could occur. If any turtles are found, they will be relocated to an agency-approved alternative location. BMPs, as included in the SWPPP, will be implemented during construction to minimize impacts associated with erosion and sedimentation to aquatic turtle habitat.	CPUC/PG&E
Impact 6.16: Impacts to the San Francisco Garter Snake.	Mitigation Measure 6.15: Mitigation For Impacts to the San Francisco Garter Snake. Consultation with the USFWS and CDFG will be initiated and mitigation for potential impacts to SFGS will be developed, and may include measures such as: <ul style="list-style-type: none"> • Seasonal restrictions on tower construction. • Tower construction (foundation construction and tower replacement activities) in the vicinity of existing populations will be done between August 1 and November 1. • If work must be done outside this timeframe, additional mitigation measures could include temporary exclusion fencing and/or biological monitoring as approved by USFWS, CDFG and species expert Dr. Sam McGinnis. • Flag limits of work areas to minimize area disturbed during construction • Working training will be provided regarding sensitive species and protective measures 	CPUC/PG&E

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Impact	Mitigation Measure (MM)	Responsible Party
Impact 6.17: Impacts to Special-Status Raptor Species.	<p>Project activities in potential dispersal and overwintering habitat will be avoided and/or minimized to the greatest degree possible.</p> <p>Additional trapping and visual surveys will be conducted in the vicinity of existing populations during the Spring 2003 activity period (March through May) to determine the type and extent of mitigation measures needed:</p>	CPUC/PG&E
Impact 6.18: Impacts to Other Special-Status Avian Species.	<p>Mitigation Measure 6.16: Mitigation For Impacts to Special-Status Raptor Species. Pre-construction surveys for raptors will be conducted prior to the start of construction (for each year that construction occurs).</p> <p>If the results of the pre-construction surveys indicate that a nesting raptor is present within or near work areas, mitigation measures will be developed during consultation with resources agencies and one or more of the following measures will be implemented:</p> <ul style="list-style-type: none"> • Enforcement of work restrictions, such that construction activities occur outside of the applicable nesting/fledging period (typically March 1 to August 1); • Establishment of an avoidance buffer (the distance of the buffer will be developed in consultation with the agencies and will vary depending on species sensitivity, topography, tree cover, terrain, proximity to roads/highways, etc.); and/or • Use of an on-site biological monitor to monitor for signs of disturbance. If the monitor determines that a disturbance is occurring, construction will be halted, and one of the above measures will be implemented. <p>If these measures cannot be feasibly accommodated, PG&E will discuss other measures with resource agencies, including potentially obtaining a permit from USFWS to move the nest and/or fledglings.</p> <p>Mitigation Measure 6.17: Mitigation For Impacts to Other Special-Status Avian Species. Pre-construction surveys for special-status avian species will be conducted within and near the work areas prior to the start of construction (for each year that construction occurs).</p> <p>If the results of the pre-construction surveys indicate that a nesting avian species of concern is present, one or more of the following measures will be implemented:</p> <ul style="list-style-type: none"> • Enforcement of work restrictions, such that construction activities occur outside of the nesting/fledging period; • Establishment of an avoidance buffer (the distance of the buffer will be developed in consultation with the agencies and will vary depending on species sensitivity, topography, tree cover, terrain, proximity to roads/highways, etc.); and/or 	CPUC/PG&E

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Impact	Mitigation Measure (MM)	Responsible Party
<p>Impact 6.19: Impacts to Special-Status Mammal Species.</p>	<ul style="list-style-type: none"> Use of an on-site biological monitor to monitor for signs of disturbance. If the monitor determines that a disturbance is occurring, construction will be halted, and one of the above measures will be implemented. 	
<p>Impact 6.19: Impacts to Special-Status Mammal Species.</p>	<p>Mitigation Measure 6.18: Mitigation For Impacts to Special-Status Mammal Species. Potential roost trees that must be removed will be surveyed and identified in the field for application of the following procedures:</p> <p>Before felling the tree:</p> <ul style="list-style-type: none"> Trees should be removed under the warmest possible conditions. Peel any sections of the exfoliating bark off the tree gently and search for any roosting bats underneath. Create noise and vibrations on the tree itself. Noise and vibrations include: <ol style="list-style-type: none"> Running chain saw and making shallow cuts in the trunk (where bark has been peeled off). Striking the tree base with fallen limbs or tools such as hammers. <p>When felling the tree:</p> <ul style="list-style-type: none"> Disturbance should be near-continuous for ten minutes, and then another ten minutes should pass, before the tree is felled. When cutting sections of the bole, if any hollows or cavities (such as woodpecker holes) are discovered, be especially careful to check for the presence of bats in those areas. Cut slowly and carefully at all times. If possible, section bole near cavities to focus noise and vibrations, and open hollows by sectioning off a side. 	CPUC/PG&E
<p>Impact 6.20: Impacts to the Dusky-Footed Woodrat.</p>	<p>Mitigation Measure 6.19: Mitigation For Impacts to the Dusky-Footed Woodrat. Pre-construction surveys shall be conducted prior to construction during each construction year and nests in stick houses shall be marked in the field and denoted as an Environmentally Sensitive Area and avoided if possible.</p>	CPUC/PG&E
Cultural Resources		
<p>Impact 7.1: Potential Effect On Resource in Segment 2.</p>	<p>Mitigation Measure 7.1: Cultural Resources Treatment Plan (CRTP). PG&E Co. shall develop a Cultural Resources Treatment Plan (CRTP) for High-Probability Areas identified in subsection 7.3.2, including procedures for protection and avoidance of Environmentally Sensitive Areas (ESAs) located within archaeological High-Probability Areas, evaluation and treatment of the unexpected discovery of cultural resources including Native American burials; detailed reporting requirements by the Project archaeologist; curation of any cultural materials collected during the Project; and requirements to specify</p>	CPUC/PG&E
<p>Impact 7.2: Inadvertent Impacts to Recorded, Reported, Known Resources.</p>		
<p>Impact 7.3: Inadvertent Impacts to Unrecorded</p>		

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Resources.	<p>that archaeologists and other discipline specialists meet the Professional Qualifications Standards mandated by the California Office of Historic Preservation (OHP).</p> <p>Current Project design ensures that known and recorded cultural resources will be avoided during construction, and operation and maintenance. Specific protective measures shall be defined in the CRTP to reduce the potential adverse impacts on any presently undetected cultural resources to a less-than-significant level. The CRTP shall be submitted to the CPUC for review and approval at least 30 days before the start of construction.</p> <p>The CRTP shall define construction procedures for areas near known/recorded cultural sites. Wherever a tower, access road, equipment, etc., must be placed or accessed within 100 feet of a recorded, reported, or known archaeological site eligible or potentially eligible for the CRHR, the site will be flagged on the ground as an ESA (without disclosure of the exact nature of the environmental sensitivity [i.e., the ESA is <i>not</i> identified as an archaeological site]). Construction equipment shall then be directed away from the ESA, and construction personnel shall be directed not to enter the ESA. Archaeological monitoring of Project construction will be focused in the immediate vicinity of the designated ESAs.</p>	
<p>Impact 7.1: Potential Effect On Resource in Segment 2.</p> <p>Impact 7.2: Inadvertent Impacts to Recorded, Reported, Known Resources.</p> <p>Impact 7.3: Inadvertent Impacts to Unrecorded Resources.</p>	<p>Mitigation Measure 7.2: Construction Personnel Training. All construction personnel shall be trained regarding the recognition of possible buried cultural remains, including prehistoric and historic resources during construction, prior to the initiation of construction or ground-disturbing activities. PG&E Co. shall complete training for all construction personnel. Training shall inform all construction personnel of the procedures to be followed upon the discovery of archaeological materials, including Native American burials. The following issues shall be addressed in training or in preparation for construction:</p> <p>Any excavation contract (or contracts for other activities that may have subsurface soil impacts) shall include clauses that require construction personnel to attend training so they are aware of the potential for inadvertently exposing buried archaeological deposits.</p> <p>PG&E Co. shall provide a background briefing for supervisory construction personnel describing the potential for exposing cultural resources, the location of any potential ESA and anticipated procedures to treat unexpected discoveries.</p> <p>Upon discovery of potential buried cultural materials, work in the immediate area of the find shall be halted and PG&E Co.'s archaeologist notified. Once the find has been identified, PG&E Co.'s archaeologist will make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are found to be important according to CEQA.</p>	CPUC/PG&E
<p>Impact 7.1: Potential Effect On Resource in Segment 2.</p> <p>Impact 7.2: Inadvertent Impacts to Recorded, Reported, Known Resources.</p>	<p>Mitigation Measure 7.3: Archaeological Monitoring. PG&E Co. shall implement archaeological monitoring by a professional archaeologist during subsurface construction disturbance at all locations identified in the CRTP. These locations will include the archaeological High-Probability Areas described above and any ESAs to be designated within these High-Probability Areas. These locations and their</p>	CPUC/PG&E

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Impact	Mitigation Measure (MM)	Responsible Party
Impact 7.3: Inadvertent Impacts to Unrecorded Resources.	protection boundaries will be defined and mapped in the CRTP.	
Impact 7.2: Inadvertent Impacts to Recorded, Reported, Known Resources.	Mitigation Measure 7.4: Pre-Construction Survey. PG&E shall perform pre-construction surveys for any Project areas not yet surveyed (i.e., new or modified staging areas). Resources discovered during those surveys will be subject to mitigation measures M-7.1 to 7.3.	CPUC/PG&E
Impact 7.3: Inadvertent Impacts to Unrecorded Resources.		
Visual Resources		
	Mitigation Measure 8.1: Storage and Site Cleanup. Mileposts 0 to 14.7. PG&E will keep construction-related activity as clean and inconspicuous as practical by storing building materials and equipment within the proposed construction staging areas or generally away from public view and removing construction debris promptly at regular intervals.	CPUC/PG&E
	Mitigation Measure 8.2: Recontouring. Mileposts 0 to 14.7. Recontouring of disturbed, graded areas at the structure, substation and tap locations will be implemented to provide a natural appearing landform upon completion of construction.	CPUC/PG&E
	Mitigation Measure 8.3: Revegetation. Mileposts 0 to 14.7. Revegetation at the structure, substation and tap locations using methods that are consistent with Edgewood County Park or SFPUC Watershed resource management practices as appropriate will be implemented to restore the landscape's natural appearance. See also Biological Resources Mitigation Measure 6.5.	CPUC/PG&E
Impact 8.4: Edgewood County Park Trail Views. MP 0- MP 1.5	Mitigation Measure 8.4: Edgewood Park. Mileposts 0 to 1. In order to reduce their potential to appear visually prominent from locations along Edgewood Park recreation trails, PG&E shall, in consultation with San Mateo County Parks and Recreation, install site specific plantings of native tree and/or shrub plantings as appropriate at key locations between the trails and those proposed replacement towers located in the immediate foreground of views from trails to partially screen views of the Project. Selected plant material shall be appropriate to the Edgewood Park setting and shall conform to the County's vegetation management policies for the Park.	CPUC/PG&E
Impact 8.3: Watershed recreational trail views. MP1.5–MP5, MP11.5–MP14	Mitigation Measure 8.5: Watershed Trails. Mileposts 3.3 to 4.3 and 11 to 14.1. In order to reduce the Project's potential to appear visually prominent as seen from the San Francisco Watershed public recreation trails, PG&E shall, in consultation with the San Francisco PUC Resource Management staff, install site specific native tree and/or shrub plantings at key locations between the trails and those proposed replacement towers located in the immediate foreground of views from trails to partially screen views of the Project. Selected plant material shall be appropriate to the Watershed setting and shall conform to the SFPUC Watershed vegetation management policies.	CPUC/PG&E

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Impact	Mitigation Measure (MM)	Responsible Party
Impact 8.1: I-280 Motorists' Views. MP 0-MP 13	Mitigation Measure 8.6: Views from I-80. In consultation with the SFPUC Resource Management staff, PG&E shall install site-specific plantings to partially screen views of the proposed replacement towers that would be seen along the skyline in foreground views from I-280. The plant material will be native species appropriate to the Watershed lands and shall conform to the SFPUC Watershed vegetation management policies. The trees shall be placed so as to maximize screening effect and to generally preserve existing open landscape vistas.	CPUC/PG&E
Impact 8.3: Watershed recreational trail views. MP1.5–MP5, MP11.5–MP14	Mitigation Measure 8.7: Enhancement of Views from I-280 and Watershed Trails. In consultation with the SF PUC Resource Management staff, PG&E shall selectively prune trees and shrubs and/or remove trees in order to enhance views and vistas seen from the I-280 corridor and key Watershed recreation trails. Pruning and tree removal implemented under this measure shall be consistent with existing SF PUC Watershed resource management plans and shall conform to SF PUC Watershed vegetation management policies.	CPUC/PG&E
Impact 8.13: Skyline Boulevard Views. MP 11–MP 14	Mitigation Measure 8.8: Skyline Boulevard. Mileposts 14.0 to 14.7. Informal plantings of small trees and/or shrubs shall be installed intermittently at key locations along the west side of Skyline Boulevard in order to partially screen views of the proposed replacement poles. The plantings shall be spaced at sufficient intervals so as to allow intermittent open vistas toward the distant mountains. The plant material will be native species appropriate to the Watershed lands and shall conform to the SFPUC Watershed vegetation management policies. The plantings shall also be consistent with CPUC and PG&E regulatory and technical requirements for landscaping in proximity to transmission lines.	CPUC/PG&E
Impact 8.6: Crystal Springs Golf Course Views. MP 9–MP 11	Mitigation Measure 8.9: Crystal Springs Golf Course. Milepost 9.2. A tubular steel pole rather than a lattice tower shall be installed at the edge of the putting green and parking lot in Crystal Springs Golf Course.	CPUC/PG&E
Impact 8.10: Hillside Residential Views near Black Mountain Road in Hillsborough. MP 7–MP 8.5	Mitigation Measure 8.10: Black Mountain Road Area. Mileposts 7.5 to 8.5. In order to reduce the proposed replacement poles' visibility as seen from the residential area near Black Mountain Road in Hillsborough, PG&E shall use replacement poles with a narrower diameter "slim profile" design to minimize their apparent mass. In addition, PG&E shall, in consultation with the SF PUC Resource Management staff, install site specific plantings within the utility easement or off-site at key locations in order to partially screen views of the replacement poles. Plant material shall be appropriate to the local landscape setting and shall conform to Hillsborough planning and design guidelines.	CPUC/PG&E
Impact 8.9: Hillside Residential Views near Lexington Avenue in San Mateo. MP 5.3 – MP 6	Mitigation Measure 8.11: Lexington Avenue Area. Mileposts 5.3 to 6.0. In order to reduce the proposed replacement towers' overall visual impact as seen from the residential area near Lexington Avenue, PG&E shall install site specific plantings within the utility easement or off-site at key locations in order partially screen views of the replacement poles. Plantings may include street trees along Lexington Avenue or at specific residential properties. Selected plant material shall be appropriate to the local landscape setting	CPUC/PG&E

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	and shall conform to local/County planning and design guidelines.	
Impact 8.17: Motorists', Pedestrian and Bicyclists' Views from Cañada Road and trail. MP 0	Mitigation Measure 8.12: Substation and Transition Station Glare. To minimize potential glare from the substations and the transition station, proposed structures at these sites, including fences, will be painted or finished with a non-reflective treatment.	CPUC/PG&E
Impact 8.18: Southbound I-280 Motorists' Views. MP 0	Mitigation Measure 8.12.A: Substation and Transition Station Lighting. Exterior lighting at substations will include the use of non-glare light bulbs. Lighting fixtures will be located and designed to avoid casting light or glare on off-site locations.	CPUC/PG&E
Impact 8.15: Motorists', Pedestrian and Bicyclists' Views from Skyline, San Bruno Avenue and Glenview Avenue. MP 14.7	Mitigation Measure 8.13: Transition Station Landscaping. MP 14.7. Transition Station: In addition to the transition station landscaping proposed as part of the Project, PG&E shall install informal tree and shrub grouping intermittently along the west and north sides of the block wall in order to visually integrate the facility with the surrounding landscape and to screen potential views from Skyline Boulevard and the existing residences located to the north. Plant material shall be appropriate to the local landscape setting, shall conform to San Bruno planning and design guidelines and shall be consistent with CPUC and PG&E regulatory and technical requirements for landscaping in proximity to transmission lines.	CPUC/PG&E
Impact 8.17: Motorists', Pedestrian and Bicyclists' Views from Cañada Road and trail. MP 0	Mitigation Measure 8.14: Jefferson Substation. Milepost 0. PG&E shall install informal native plantings in order to reduce the visibility of the proposed modifications at the Jefferson Substation as seen from recreation trails and from Cañada Road. Plant material shall be appropriate to the local and Edgewood Park landscape setting and shall be consistent with CPUC and PG&E regulatory and technical requirements for landscaping in proximity to transmission lines. Recontouring of disturbed, graded areas will be implemented to provide a natural appearing landform upon completion of construction.	CPUC/PG&E
Impact 8.18: Southbound I-280 Motorists' Views. MP 0		
Impact 8.1: I-280 Motorists' Views. MP 0-MP 13	Mitigation Measure 8.15: Transmission Tower and Pole Finish. To minimize potential Project-related glare effects and to better integrate the Project's appearance with respect to the surrounding landscape during the initial period of 1 to 2 years following construction, PG&E shall specify a special flat or dull finish for all transmission poles and towers to be installed along Segment 1 of the Project route.	CPUC/PG&E
Impact 8.3: Watershed recreational trail views. MP1.5–MP5, MP11.5–MP14		
Impact 8.4: Edgewood County Park Trail Views. MP 0–MP 1.5		
Impact 8.13: Skyline Boulevard Views. MP 11–MP 14		

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Mitigation Monitoring Plan for the Jefferson-Martin 230kV Transmission Line Project

Impact	Mitigation Measure (MM)	Responsible Party
Hydrology and Water Quality		
<p>Impact 9.1: Accelerated Soil Erosion, Downstream Sedimentation, and Reduced Surface Water Quality.</p>	<p>Mitigation Measure 9.1: Implementation of Erosion Control and Sediment Transport Plan. An erosion control and sediment transport control plan will be prepared in association with the SWPPP and the revegetation plan. This plan will be prepared in accordance with RWQCB guidelines and other applicable BMPs.</p>	CPUC/PG&E
<p>Impact 9.2: Water-Quality Degradation Caused by Accidental Release of Environmentally Deleterious Materials During Construction.</p>	<p>Implementation of the plan will help stabilize graded areas and waterways, and reduce erosion and sedimentation. The plan will designate BMPs that will be followed during construction activities. Erosion-minimizing efforts may include measures such as avoiding excessive disturbance of steep slopes; using drainage control structures (e.g., coir rolls or silt fences) to direct surface runoff away from disturbed areas; strictly controlling vehicular traffic; implementing a dust-control program during construction; restricting access to sensitive areas; using vehicle mats in wet areas; and revegetating disturbed areas following construction. Erosion-control measures will be installed before extensive clearing and grading begins, and before the onset of winter rains. Concrete washout stations will be established to avoid direct release to surface water or to areas where groundwater could become contaminated.</p>	
<p>Impact 9.1: Accelerated Soil Erosion, Downstream Sedimentation, and Reduced Surface Water Quality.</p>	<p>Mitigation Measure 9.2: Environmental Training and Monitoring Program. An environmental-training program will be established to communicate environmental concerns and appropriate work practices, including spill prevention and response measures and proper BMP implementation, to all field personnel. The training program will emphasize site-specific physical conditions to improve hazard prevention (e.g., identification of flow paths to nearest water bodies) and will include a review of all site-specific plans, including but not limited to the Project's SWPPP, Erosion Control and Sediment Transport Plan, Health and Safety Plan, and Hazardous Substances Control and Emergency Response Plan.</p>	CPUC/PG&E
<p>Impact 9.2: Water-Quality Degradation Caused by Accidental Release of Environmentally Deleterious Materials During Construction.</p>	<p>A monitoring program will also be implemented to ensure that the plans are followed throughout the construction period. BMPs, as identified in the Project SWPPP and Erosion Control and Sediment Transport Plan, will also be implemented during the Project to minimize the risk of an accidental release and provide the necessary information for emergency response.</p>	
<p>Impact 9.3: Groundwater Quality Degradation Caused by Construction of Underground Transmission Line.</p>		
<p>Impact 9.1: Accelerated Soil Erosion, Downstream Sedimentation, and Reduced Surface Water Quality.</p>	<p>Mitigation Measure 9.3: Hazardous Substance Control and Emergency Response Plan. PG&E will prepare a Hazardous Substance Control and Emergency Response Plan that will include preparations for quick and safe cleanup of accidental spills. This plan will be submitted with the grading-permit application. It will prescribe hazardous-materials handling procedures to reduce the potential for a spill during construction, and will include an emergency response program to ensure quick and safe cleanup of accidental spills. The plan will identify areas where refueling and vehicle-maintenance activities and storage of hazardous materials, if any, will be permitted. These directions and requirements will also be reiterated in the Project SWPPP.</p>	CPUC/PG&E
<p>Impact 9.2: Water-Quality Degradation Caused by Accidental Release of Environmentally Deleterious Materials During Construction.</p>		
<p>Impact 9.3: Groundwater Quality Degradation Caused by Construction of Underground Transmission Line.</p>		

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Mitigation Monitoring Plan for the Jefferson-Martin 230kV Transmission Line Project

Impact	Mitigation Measure (MM)	Responsible Party
<p>Impact 9.2: Water-Quality Degradation Caused by Accidental Release of Environmentally Deleterious Materials During Construction.</p>	<p>Mitigation Measure 9.4: Emergency Spill Supplies and Equipment. Oil-absorbent material, tarps, and storage drums will be used to contain and control any minor releases of transformer oil. In the event that excess water and liquid concrete escapes from tower foundations during pouring, it will be directed to lined and bermed areas adjacent to the borings, where the water will evaporate and the concrete will begin to set. Once the excess concrete has been allowed to set up, it will be removed and transported for disposal, according to applicable regulations.</p>	CPUC/PG&E
<p>Impact 9.1: Accelerated Soil Erosion, Downstream Sedimentation, and Reduced Surface Water Quality.</p>	<p>Mitigation Measure 9.5: Soil Sampling/Waste and Groundwater Characterization. Soil sampling and potholing will be conducted before construction begins, and soil information will be provided to construction crews to inform them about soil conditions and potential hazards. If hazardous substances are unexpectedly encountered during trenching, work will be stopped until the material is properly characterized and appropriate measures are taken to protect human health and the environment. If excavation of hazardous materials is required, they will be handled in accordance with applicable regulations.</p>	CPUC/PG&E
<p>Impact 9.3: Groundwater Quality Degradation Caused by Construction of Underground Transmission Line.</p>	<p>Prior to initiating excavation activities at tower locations and along the underground transmission-line routes, soil borings will be advanced to identify areas where contaminated groundwater may be contacted. The location, distribution, or frequency of such tests will give adequate representation of the conditions in the construction area. If suspected contaminated groundwater is encountered in the depths of the proposed construction areas, samples will be collected and submitted for laboratory analysis of petroleum hydrocarbons, metals, volatile organic compounds, and semi-volatile organic compounds. If necessary, groundwater will be collected during construction, contained, and disposed of in accordance with all applicable regulations. Appropriate personal protective equipment will be used and waste management will be performed in accordance with applicable regulations. Non-contaminated groundwater will be released to one of the cities' stormwater drainage systems (with prior approval) or contained, tested, and disposed of by methods described above.</p>	
<p>Impact 9.7: Water Quality Degradation Caused by Accidental Releases of Mineral Oil.</p>	<p>Mitigation Measure 9.6: Spill Prevention, Countermeasure, and Control Plans. PG&E will prepare or modify existing Spill Prevention, Countermeasure, and Control (SPCC) plans for the proposed transition station and substations as required by applicable regulations. The plan will include engineered and operational methods for preventing, containing, and controlling potential releases (e.g., construction of retention pond, moats, or berms), and provisions for quick and safe cleanup. The plan will be submitted to the appropriate agency for review. Existing SPCC plans for the substations mentioned above will be revised to include new equipment. Incorporation of SPCC measures in the Project design will reduce impacts to a less-than-significant level.</p>	CPUC/PG&E
Geology and Mineral Resources		
<p>Impact 10.3: Paleontologic Resources.</p>	<p>Mitigation Measure 10.1: Paleontologic Resources. If fossils are encountered during construction, a qualified paleontologist will be contacted to examine the find and to determine its significance. If the find is</p>	CPUC/PG&E

TABLE 19-1.
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Impact	Mitigation Measure (MM)	Responsible Party
Impact 10.7: Fault Surface Rupture.	<p>qualified paleontologist will be contacted to examine the find and to determine its significance. If the find is deemed to have scientific value, the paleontologist and PG&E will devise a plan to either avoid impacts or to continue construction without disturbing the integrity of the find (e.g., by carefully excavating the material containing the resources).</p>	CPUC/PG&E
	<p>Mitigation Measure 10.2: Fault Surface Rupture.</p> <p><u>Overhead Transmission Lines.</u> For overhead transmission lines, site-specific geotechnical investigations will be performed at proposed tower locations to evaluate the potential for fault surface rupture. Where significant potential for fault surface rupture exists, tower locations will be adjusted as possible. Incorporation of standard engineering practices as part of the Project will ensure that people or structures are not exposed to fault rupture hazards.</p> <p><u>Underground Transmission Lines.</u> Site-specific geotechnical investigations will be performed at locations where underground portions of the proposed transmission line cross mapped fault zones and intersect individual fault traces. Where significant potential for fault surface rupture is identified, appropriate engineering measures, such as installing breakaway connections and strategically locating splice boxes outside of the fault zone, will be implemented to protect sensitive equipment and limit the extent of potential repairs. Appropriate operation and maintenance measures will be implemented to prepare for potential fault-rupture scenarios and facilitate timely repair of facilities, if necessary. Preparation measures may include storage and maintenance of spare parts and equipment that may be needed to repair or temporarily bypass portions of the transmission line damaged as a result of fault surface rupture. Spare parts and equipment will be stored at the transition station or nearby PG&E facilities.</p> <p><u>Overhead-Underground Transition Station.</u> A geotechnical investigation will be performed at the proposed overhead-underground transition station location to identify primary and subsidiary traces of the San Andreas fault. Critical transition station facilities, including transmission-line support structures, the overhead-underground transition structure, and the control building, will not be sited over active or potentially active traces of the fault. To the extent feasible, station structures will be designed to accommodate anticipated displacement and distortion of the ground surface during a major earthquake along the San Andreas fault zone.</p> <p>As with design of underground transmission lines, transition station facilities will be designed for ductility and strength using reinforced components and flexible connections. Overhead transmission-line spans will be designed to accommodate potential fault displacement between support structures.</p>	CPUC/PG&E
Hazards and Hazardous Materials		
Impact 11.1: Potential to Encounter Hazardous Substances.	Mitigation Measure 11.1: Environmental Training and Monitoring Program. An environmental training program will be established to communicate environmental concerns and appropriate work practices,	CPUC/PG&E

TABLE 19-1.
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Impact	Mitigation Measure (MM)	Responsible Party
	<p>including spill prevention, emergency response measures, and proper Best Management Practice (BMP) implementation, to all field personnel. The training program will emphasize site-specific physical conditions to improve hazard prevention (e.g. identification of potentially hazardous substances) and will include a review of all site-specific plans, including but not limited to, the Project's SWPPP, Erosion Control and Sediment Transport Plan, Health and Safety Plan, Waste Characterization and Management Plan, Fire Response Plan, and Hazardous Substances Control and Emergency Response Plan.</p> <p>A monitoring program will also be implemented to ensure that the plans are followed throughout the period of construction. Best Management Practices, as identified in the Project SWPPP and Erosion Control and Sediment Transport Plan, will also be implemented during the Project to minimize the risk of an accidental release and provide the necessary information for emergency response.</p>	
<p>Impact 11.1: Potential to Encounter Hazardous Substances.</p>	<p>Mitigation Measure 11.2: Hazardous Substance Control and Emergency Response Plan. PG&E will prepare a Hazardous Substance Control and Emergency Response Plan, which will include preparations for quick and safe cleanup of accidental spills. This plan will be submitted with the grading permit application. It will prescribe hazardous-materials handling procedures for reducing the potential for a spill during construction, and will include an emergency response program to ensure quick and safe cleanup of accidental spills. The plan will identify areas where refueling and vehicle maintenance activities and storage of hazardous materials, if any, will be permitted. These directions and requirements will also be reiterated in the Project SWPPP.</p>	<p>CPUC/PG&E</p>
<p>Impact 11.1: Potential to Encounter Hazardous Substances.</p>	<p>Mitigation Measure 11.3: Emergency Spill Supplies and Equipment. Oil-absorbent material, tarps, and storage drums will be used to contain and control any minor releases. Emergency-spill supplies and equipment will be kept adjacent to all areas of work and in staging areas, and will be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials will be provided in the Project's Hazardous Substances Control and Emergency Response Plan.</p>	<p>CPUC/PG&E</p>
<p>Impact 11.1: Potential to Encounter Hazardous Substances.</p>	<p>Mitigation Measure 11.4: Phase II Soil Sampling/Waste Characterization. Soil sampling and potholing will be conducted along the Project route and in substations, as needed, before construction begins, and soil information will be provided to construction crews to inform them about soil conditions and potential hazards. If hazardous substances are unexpectedly encountered during trenching, grading, or excavating work, work will be stopped until the material is properly characterized and appropriate measures are taken to protect human health and the environment. If excavation of hazardous materials is required, they will be handled, transported, and disposed of in accordance with federal, state, and local regulations.</p> <p>Prior to initiating excavation activities and along the underground transmission-line routes, soil borings will be advanced to ensure that groundwater will not be encountered. The location, distribution, or frequency of such tests shall be determined to give adequate representation of the conditions in the construction area.</p> <p>All soil sampling and hazardous waste-removal and handling will be conducted in accordance with the</p>	<p>CPUC/PG&E</p>

TABLE 19-1.
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Impact	Mitigation Measure (MM)	Responsible Party
Project's Health and Safety Plan.		
Impact 11.1: Potential to Encounter Hazardous Substances.	<p>Mitigation Measure 11.5: Groundwater Characterization. If suspected contaminated groundwater is encountered in the depths of the proposed construction areas, samples will be collected and submitted for laboratory analysis of petroleum hydrocarbons, metals, volatile organic compounds, and semi-volatile organic compounds. If necessary, groundwater will be collected during construction, contained, and disposed of in accordance with all applicable regulations. Appropriate personal protective equipment will be used and waste management will be performed in accordance with applicable regulations. Non-contaminated groundwater will be released to one of the cities' stormwater drainage systems (with prior approval) or contained, tested, and disposed of by methods described above.</p> <p>Appropriate personal protective equipment will be used during groundwater testing and dewater removal, and waste management and disposal will be performed in accordance with local, state, and federal regulations and per the Project's Health and Safety Plan and Waste Management Plan.</p>	CPUC/PG&E
Impact 11.2: Potential Fire Hazard During Construction.	<p>Mitigation Measure 11.6: Fire Risk Management. Prior to initiating construction, the Company will prepare a Fire Risk Management Plan to outline the potential for fires occurring as a result of Project construction, and to outline measures necessary to prevent fires. Additionally, fire suppression materials and equipment will be kept adjacent to all areas of work and in staging areas, and will be clearly marked. Detailed information for responding to fires will be provided in the Project's Fire Risk Management Plan.</p> <p>Information contained in the Fire Risk Management Plan and the location of fire-suppression materials and equipment will be included as part of the employee environmental training discussed in Mitigation Measure 11.1.</p>	CPUC/PG&E
Impact 11.3: Operation of "Skycrane" Helicopters in Populated Areas.	<p>Mitigation Measure 11.7: Helicopter Lift Plan. A Lift Plan will be prepared and approved by the FAA prior to all "skycrane" construction helicopter operations. As noted above, PG&E does not presently anticipate that residents will be required to temporarily vacate their homes. In the unlikely event that final construction plans and Lift Plan require otherwise, PG&E will coordinate with potentially affected residents (providing a minimum of 30 days notice) to minimize the duration of the necessary work and any resultant inconvenience.</p> <p>The need for highway, roadway, and trail closures will be identified in the Lift Plan and will be coordinated with the appropriate jurisdictions as described in Chapter 13, Traffic/Transportation. Notification to the public of those temporary closures will be provided as described in Mitigation Measures 13.3 and 13.8.</p>	CPUC/PG&E

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Impact	Mitigation Measure (MM)	Responsible Party
Impact 11.4: Potential Hazardous Substances Spills.	<p>Mitigation Measure 11.8: Spill Prevention, Control, and Countermeasures. PG&E will prepare or update current Spill Prevention, Control, and Countermeasures (SPCC) plans for the transition station and each substation as appropriate, as outlined in Title 40 of the Code of Federal Regulations, Part 112.</p> <p>With respect to the substations, PG&E will also update, as needed, and submit a revised Hazardous Materials Business Plan in accordance with Chapter 6.95 of the California Health and Safety Code and Title 22, California Code of Regulations. The plan and forms will be submitted to the appropriate Certified Unified Protection Agency (CUPA). The transition station, along with the existing substations, will be operated in compliance with all applicable federal, state, and local regulations.</p>	CPUC/PG&E
Transportation/Traffic		
Impact 13.1: Traffic Flow and Access Impacts to Segment 1.	<p>Mitigation 13.1: Roadway Capacity Maintenance. PG&E will maintain the maximum possible amount of travel lane capacity on roads during non-construction periods and will provide traffic control (using flags) at all construction sites.</p>	CPUC/PG&E
Impact 13.7: Traffic Flow and Access Impacts to Segment 2.		
Impact 13.13: Traffic Flow and Access Impacts to Segment 3.		
Impact 13.19: Traffic Flow and Access Impacts to Segment 4.		
Impact 13.25: Traffic Flow and Access Impacts to Segment 5.		
Impact 13.7: Traffic Flow and Access Impacts to Segment 2.	<p>Mitigation 13.2: Work Zone Minimization. During construction, PG&E will limit the work zone to a width that, at a minimum, maintains alternate one-way traffic flow past the construction zone. Alternatively, PG&E will post detour signs on alternate access streets, where available, in the event that complete temporary street closures are required. Detour plans would be submitted to the cities and Caltrans as part of the permit requirements.</p>	CPUC/PG&E
Impact 13.13: Traffic Flow and Access Impacts to Segment 3.		
Impact 13.19: Traffic Flow and Access Impacts to Segment 4.		
Impact 13.25: Traffic Flow and Access Impacts to Segment 5.		

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Impact	Mitigation Measure (MM)	Responsible Party
<p>Impact 13.1: Traffic Flow and Access Impacts to Segment 1.</p> <p>Impact 13.7: Traffic Flow and Access Impacts to Segment 2.</p> <p>Impact 13.13: Traffic Flow and Access Impacts to Segment 3.</p> <p>Impact 13.19: Traffic Flow and Access Impacts to Segment 4.</p> <p>Impact 13.23: Parking in Segment 4.</p> <p>Impact 13.25: Traffic Flow and Access Impacts to Segment 5.</p>	<p>Mitigation 13.3: Traffic Control During Lane Closures. Required permits for temporary lane closures will be obtained from the City of San Bruno, Town of Colma, Daly City, City of South San Francisco, City of Hillsborough, San Mateo County, and Caltrans. Before obtaining roadway encroachment permits from the cities and counties, PG&E will submit a TMP, subject to the local jurisdiction’s review and approval. As part of the TMP, traffic control measures and construction vehicle access routes will be identified. The TMP will also include discussion of haul routes, limits on the length of open cuts, and resurfacing requirements. The TMP will address work zone hours; construction of the underground portion of the transmission line will occur between 8:00 a.m. and 5:00 p.m., Monday through Friday, unless otherwise permitted by the local jurisdiction.</p> <p>All property owners and residents on streets where construction will occur will be notified prior to the start of construction. Advance public notification will include postings of notices and appropriate signs.</p>	CPUC/PG&E
<p>Impact 13.4: Emergency Access in Segment 1.</p> <p>Impact 13.7: Traffic Flow and Access Impacts to Segment 2.</p> <p>Impact 13.10: Emergency Access in Segment 2.</p> <p>Impact 13.13: Traffic Flow and Access Impacts to Segment 3.</p> <p>Impact 13.16: Emergency Access in Segment 3.</p> <p>Impact 13.19: Traffic Flow and Access Impacts to Segment 4.</p> <p>Impact 13.22: Emergency Access in Segment 4.</p> <p>Impact 13.25: Traffic Flow and Access Impacts to Segment 5.</p> <p>Impact 13.28: Emergency Access in Segment 5.</p>	<p>Mitigation 13.4: Emergency Service Provisions. All construction activities will be coordinated with local law enforcement and fire protection agencies. Emergency service providers will be notified of the timing, location, and duration of construction activities.</p>	CPUC/PG&E

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Impact	Mitigation Measure (MM)	Responsible Party
Impact 13.1: Traffic Flow and Access Impacts to Segment 1.	Mitigation 13.5: Coordination With School Bus Routes and Transit Services. PG&E will consult with the San Mateo County Unified School District at least one month prior to construction to coordinate construction activities adjacent to school bus stops. If necessary, school bus stops will be temporarily relocated or buses will be rerouted until construction in the vicinity is complete. PG&E will also consult with SamTrans and Caltrain at least one month prior to construction to reduce potential interruption of transit services.	CPUC/PG&E
Impact 13.6: Alternative Transportation in Segment 1.		
Impact 13.7: Traffic Flow and Access Impacts to Segment 2.		
Impact 13.12: Alternative Transportation in Segment 2.		
Impact 13.13: Traffic Flow and Access Impacts to Segment 3.		
Impact 13.19: Traffic Flow and Access Impacts to Segment 4.		
Impact 13.24: Alternative Transportation in Segment 4.		
Impact 13.25: Traffic Flow and Access Impacts to Segment 5.		
Impact 13.30: Alternative Transportation in Segment 5.	Mitigation 13.6: Access Restriction Provisions. As part of a TMP for the project, PG&E will identify all access restrictions expected to occur during construction. PG&E will develop a plan for notifying the affected businesses, homes, and other facilities, and prepare a plan to ensure adequate access at all times. This plan may involve alternate access, detours, or other temporary mitigations.	CPUC/PG&E
Impact 13.1: Traffic Flow and Access Impacts to Segment 1.		
Impact 13.7: Traffic Flow and Access Impacts to Segment 2.		
Impact 13.13: Traffic Flow and Access Impacts to Segment 3.		
Impact 13.19: Traffic Flow and Access Impacts to Segment 4.		
Impact 13.25: Traffic Flow and Access Impacts to Segment 5.		

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Impact	Mitigation Measure (MM)	Responsible Party
Impact 13.23: Parking in Segment 4.	Mitigation 13.7: Parking Impact Provisions. As part of the TMP, PG&E will develop for residential areas a notification process for temporary parking impacts and appropriate sign postings. PG&E will minimize the length of any temporary parking restrictions, develop appropriate sign postings, and specify the process for communicating with affected residents.	CPUC/PG&E
<p>Impact 13.6: Alternative Transportation in Segment 1.</p> <p>Impact 13.12: Alternative Transportation in Segment 2.</p> <p>Impact 13.18: Alternative Transportation in Segment 3.</p> <p>Impact 13.24: Alternative Transportation in Segment 4.</p> <p>Impact 13.30: Alternative Transportation in Segment 5.</p>	Mitigation 13.8: Pedestrian Facility Provisions. Where construction will result in temporary closures of sidewalks and other pedestrian facilities, PG&E will provide temporary pedestrian access, through detours or safe areas along the construction zone. Any affected pedestrian facilities and the alternative facilities or detours that will be provided will be identified in the TMP. Where construction activity will result in bike lane closures, appropriate detours and signs will be provided. Where trenching will affect bicycle travel on streets without bicycle facilities, requirements for plates to cover trenches will be in accordance with the permit requirements of the local jurisdiction.	CPUC/PG&E
Air Quality		
Impact 14.1: Impacts to Air Quality Due to Construction.	Mitigation Measure 14.1: All personnel working on the Project will be trained prior to starting construction on methods for minimizing air-quality impacts during construction.	CPUC/PG&E
Impact 14.1: Impacts to Air Quality Due to Construction.	<p>Mitigation Measure 14.2: Although the release of PM₁₀ associated with Project construction is insignificant relative to ambient PM₁₀ levels, the mitigation measures shown below will be implemented to minimize PM₁₀ emissions.</p> <p><u>Basic Control Measures (to be implemented at all sites):</u></p> <ul style="list-style-type: none"> • Water all active construction areas at least twice daily • Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and the staging area at construction sites • Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites • Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets <p><u>Enhanced Control Measures (to be implemented at construction sites greater than four acres in area):</u></p> <ul style="list-style-type: none"> • Hydroseed or apply (non-toxic) soil stabilizers to inactive construction area (previously graded areas inactive for ten days or more) 	CPUC/PG&E

TABLE 19-1.
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Impact	Mitigation Measure (MM)	Responsible Party
	<ul style="list-style-type: none"> • Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (e.g., dirt, sand) • Limit traffic speeds on unpaved roads to 15 mph • Install sandbags or other erosion-control measures to prevent silt runoff to public roadways • Replant vegetation in disturbed areas as quickly as possible <p>According to the BAAQMD CEQA Guidelines, implementation of the above mitigation measures during construction will further reduce air-quality impacts associated with PM₁₀ emissions to less-than-significant levels.</p>	
<p>Impact 14.1: Impacts to Air Quality Due to Construction.</p>	<p>Mitigation Measure 14.3: Although short-term construction vehicle emissions will be minimal relative to ambient emission levels, the following mitigation measures will be implemented:</p> <ul style="list-style-type: none"> • Construction workers will carpool when possible • Vehicle idling time will be minimized 	<p>CPUC/PG&E</p>
<p>Noise</p>		
<p>Impact 15.1: Temporary Noise Associated with Transmission Line Construction.</p>	<p>Mitigation Measure 15.1: Noise Suppression Techniques. The following noise-suppression techniques will be employed to minimize the impact of temporary construction noise on nearby sensitive receptors:</p>	<p>CPUC/PG&E</p>
<p>Impact 15.2: Temporary Noise Associated with Modifications to Martin Substation.</p>	<ul style="list-style-type: none"> • Compressors and other small stationary equipment will be shielded with portable barriers. • “Quiet” equipment (i.e., equipment that incorporates noise-control elements into the design; compressors and jackhammers have “quiet” models) will be used during construction whenever possible. • Equipment exhaust stacks and vents will be directed away from buildings. • Truck traffic will be routed away from noise-sensitive areas where feasible. • PG&E will coordinate with Daly City and the City of San Mateo with regard to the construction activities (including pile driving) that will take place at the Martin and San Mateo substations. PG&E will coordinate with Daly City and the City of San Mateo to notify residents that are located near the perimeter of the substation properties of the timeframe for the construction activities. 	
<p>Impact 15.3: Temporary Noise Associated with Modifications to Jefferson Substation.</p>		
<p>Impact 15.4: Temporary Noise Associated with Modifications to Ralston Substation.</p>		
<p>Impact 15.5: Temporary Noise Associated with Modifications to Hillsdale Junction Switchyard.</p>		
<p>Impact 15.7: Temporary Noise Associated with Modifications to San Mateo Substation.</p>		
<p>Impact 15.8: Temporary Noise Associated with Transition Station.</p>		