# PACIFIC GAS AND ELECTRIC'S HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT

CPUC A.09-11-016
Initial Study/Mitigated Negative Declaration

Prepared for
California Public Utilities Commission

November 2010

ESA

**PUBLIC UTILITIES COMMISSION**
**505 VAN NESS AVENUE**
**SAN FRANCISCO, CA 94102-3298**

**To:** **State Clearinghouse, Responsible and Trustee Agencies, Property Owners & Interested Parties**

**From:** **Monisha Gangopadhyay, Environmental Project Manager**

**Subject:** **NOTICE OF INTENT TO ADOPT AN INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND) AND NOTICE OF A PUBLIC INFORMATION MEETING: Hollister 115 kV Power Line Reconductoring Project (A.09-11-016)**

**Date:** **November 16, 2010**

The California Public Utilities Commission (CPUC) has prepared a Draft Mitigated Negative Declaration (Draft MND) under the California Environmental Quality Act (CEQA) for consideration of Pacific Gas and Electric Company's (PG&E's) application to construct, operate, and maintain the Hollister 115 kV Power Line Reconductoring Project (A.09-11-016). The Draft IS/MND details the Proposed Project, evaluates and describes the potential environmental impacts associated with the construction, operation, and maintenance of the Proposed Project, identifies those impacts that could be significant, and presents mitigation measures which, if adopted by the CPUC or other responsible agencies, could avoid or minimize these impacts.

**Description of the Proposed Project.**
The Proposed Project would be located in Monterey and San Benito Counties near the cities of Hollister and San Juan Bautista. The Hollister Tower and Hollister Pole Segments would generally traverse the existing PG&E right-of-way (ROW), across open space and agricultural lands and passing a few scattered residences along the alignment. The Proposed River Crossing would be located in new ROW and would primarily traverse agricultural rangeland. PG&E requests authorization for the following activities:

- **Hollister Tower Segment:** Replacement of approximately 36 of the 38 existing towers with new lattice steel towers (LSTs) and installation of one new LST, resulting in a total of 39 LSTs in the seven-mile section of the existing double-circuit Moss Landing-Salinas-Soledad 115 kV subtransmission line, beginning at the Lagunitas Switches and extending north to a point near the Anzar Junction.

- **Hollister Pole Segment:** Replacement of the single-circuit 154 wood poles with 30 double-circuit tubular steel poles (TSPs) and 135 light-duty steel (LDS) poles along an existing nine-mile section of the Hollister No. 1 115 kV subtransmission line, with the exception of the 1.7 mile Proposed River Crossing, which would be in new right-of-way. The Hollister Pole Segment would begin near northern end of the Hollister Tower Segment and extend east to the Hollister Substation.

- **Conductors:** Installation of a 477 kcmil (circular wire gauge size = 1,000 circular mils) steel-supported aluminum conductor (SSAC) on both the Hollister Tower and Hollister Pole Segments.

- **Hollister Substation:** Upgrade of the Hollister Substation, including relocation of two existing poles, updating relay settings, and changing the 115 kV bus conductors.

The objective of the Proposed Project is to build electrical facilities necessary to maintain safe and reliable electric service to customers, and serve the forecasted electrical demand in the northeastern portion of Monterey County and northwestern portion of San Benito County.

**Public Comment on the Draft IS/MND.**
The Draft IS/MND is available for a 30-day public comment period November 17, 2010 through December 17, 2010. The public may present comments and concerns regarding the Proposed Project and the adequacy of the Draft IS/MND. Written comments on the Draft IS/MND must be postmarked or received by fax or e-mail no later than **December 17, 2010**. Please be sure to include your name, address, and telephone number in your correspondence.

Written comments on the Draft IS/MND should be sent to:

**Ms. Monisha Gangopadhyay**
**Hollister 115 kV Power Line Reconductoring Project**
**c/o Environmental Science Associates**
**225 Bush Street, Suite 1700**
**San Francisco, CA 94104-4207**
**Fax: (415) 896-0332**
**E-mail: hollister@esassoc.com**

The CPUC will also hold a public comment meeting to receive oral and written comments from interested parties. Following the end of the public comment period, responses to all comments received on the Draft IS/MND and submitted within the specified 30-day review period will be prepared by the CPUC and included in a response to comments document, which together with the Draft IS/MND, will constitute the Final IS/MND for the Proposed Project. The public meeting will be held:

**Thursday, December 2, 2010**
**6:30 pm - 8:30 pm**
**Gabilan Hills School**
**921 Santa Ana Rd. Suite 100**
**Hollister, CA 95023**
**Phone: (831) 636-4430**

**Availability of Draft MND.**
Copies of the Draft IS/MND will be available for public review at the San Juan Bautista City Library, the San Benito County Free Library, and on the project website: http://www.cpuc.ca.gov/Environment/info/esa/hollister/hollister.html. This website will be used to post all public documents during the environmental review process and to announce any upcoming public meetings. Hard copies or CD copies of the Draft IS/MND may be requested by telephone at (415) 962-8418 or by e-mail at hollister@esassoc.com.

Project information repositories include the following libraries:

| | |
|---|---|
| San Benito County Free Library<br>470 5th Street<br>Hollister, CA 95023<br>Phone : (831) 636-4107 | San Juan Bautista City Library<br>801 Second Street<br>San Juan Bautista, CA 95045<br>Phone : (831) 623-4687 |

**REMINDER: Draft IS/MND comments will be accepted by fax, e-mail, or postmark through December 17, 2010. Please be sure to include your name, address, and telephone number.**

# PACIFIC GAS AND ELECTRIC'S HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT

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Initial Study/Mitigated Negative Declaration

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ESA

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# EXECUTIVE SUMMARY

## Introduction

Pacific Gas and Electric (PG&E) filed an application (A.09-11-016) on November 23, 2009 with the California Public Utilities Commission (CPUC) pursuant to CPUC General Order (GO) 131-D, requesting to replace structures and conductors (reconductoring) on two segments of an existing 115 kV overhead electric power line system in Monterey and San Benito Counties, the Hollister Tower and Hollister Pole Segments. The application includes the Proponent's Environmental Assessment (PEA) prepared pursuant to Rule 2.4 of the CPUC's Rules of Practice and Procedure.

The Proposed Project includes replacement of approximately 36 existing towers with new lattice steel towers (LSTs) and installation of one new LST; replacement of single-circuit wood poles with double-circuit tubular steel poles (TSPs) and light-duty steel (LDS) poles; relocation of an existing 115 kV line segment out of the San Benito River floodplain; installation of steel supported aluminum conductor on both the tower and pole segments; and upgrade of the Hollister Substation. The construction period is expected to begin in March 2011, and take approximately 15 months to complete all phases of the Proposed Project.

In accordance with GO 131-D, approval of this project must comply with the California Environmental Quality Act (CEQA). Under CEQA, the CPUC must prepare an Initial Study for discretionary projects such as the Proposed Project to determine whether the project may have a significant adverse effect on the environment. If an Initial Study prepared for a project indicates that such an impact could occur, the CPUC would be required to prepare an Environmental Impact Report (EIR). If an Initial Study does not reveal substantial evidence of such an effect, or if the potential effect can be reduced to a level of insignificance through project revisions, a Negative Declaration can be adopted (Public Resources Code, Division 13, Section 21080(c)(1)).

A Mitigated Negative Declaration (MND) may be adopted when "the Initial Study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the applicant before the proposed negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur, and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment" (Public Resources Code, Division 13, Section 21064.5).

Based on the analysis in the Initial Study/Mitigated Negative Declaration (IS/MND), it has been determined that all project-related environmental impacts could be reduced to a less than significant level with the incorporation of feasible mitigation measures. Therefore, adoption of an IS/MND will satisfy the requirements of CEQA.

# Project Description

The Proposed Project consists of the following components:

- Replacement of approximately 36 of 38 existing towers with new lattice steel towers (LSTs) and installation of one new LST in the seven-mile section of the existing double-circuit Moss Landing-Salinas-Soledad 115 kV power line, beginning at the Lagunitas Switches and extending north to a point near the Anzar Junction.

- Replacement of single-circuit wood poles with double-circuit tubular steel poles (TSPs) and light-duty steel (LDS) poles along an existing nine-mile section of the Hollister No. 1 115 kV power line. This segment would begin near the northern end of the tower segment and extend east to the Hollister Substation.

- Relocation of an approximately 1.3-mile segment of the 115 kV Hollister No. 1 line out of the San Benito River floodplain (the existing river alignment) to a new river crossing approximately 3,000 feet to the north, with structures located on dry banks of the river. This would require installation of 21 new steel poles, including four 92-foot tall TSPs, and topping of existing poles within the 1.3 mile segment so that existing distribution remains to serve local users.

- Installation of a 477 kcmil (circular wire gauge size = 1,000 circular mils) steel-supported aluminum conductor (SSAC) on both the tower and pole segments.

- Upgrade of the Hollister Substation, including relocation of two existing poles, updating relay settings, and changing the 115 kV bus conductors.

# Alternatives

The purpose of an alternatives analysis pursuant to CEQA is to identify options that would feasibly attain the project's objectives while reducing the significant environmental impacts resulting from the Proposed Project. CEQA does not require the inclusion of an alternatives analysis in MNDs because the MND concludes that, with incorporation of mitigation measures, there would be no significant adverse impacts resulting from the Proposed Project. Therefore, no alternatives analysis needs to be provided in the IS/MND. However, as required by GO 131-D, Section IX.B.1(c), a brief discussion of the reasons for selecting the power line route and a comparison with other routes is included in the application.

# Environmental Determination

The IS/MND was prepared to identify the potential environmental effects resulting from implementation of the Proposed Project, and to evaluate the level of significance of these effects. The IS/MND relies on information from PG&E's Application for a Permit to Construct (PTC),

the Proponents Environmental Assessment (PEA), project site reconnaissance, and PG&E's responses to data requests by the CEQA Team. PG&E identified a number of applicant proposed measures (APMs) to avoid or reduce potential impacts associated with the Proposed Project. All APMs are considered part of the Proposed Project for the purpose of this IS/MND. The Project Description, upon adoption of the Final MND, becomes part of the Mitigation Monitoring, Reporting, and Compliance Program; therefore, implementation of these measures would be monitored by the CPUC. Based on the IS/MND analysis, additional mitigation measures are identified for adoption to ensure that impacts of the Proposed Project would be less than significant. The additional mitigation measures either supplement, or supersede the APMs. PG&E has agreed to implement all of the additional recommended mitigation measures as part of the Proposed Project.

**Table ES-1** provides a complete, condensed presentation of the environmental impacts that require mitigation measures for the Proposed Project. A full description of the Mitigation Monitoring, Reporting, and Compliance Plan is included in Section 5 of this IS/MND.

**TABLE ES-1**
**SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PG&E HOLLISTER 115KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this MND | Significance after Mitigation |
|---|---|---|
| ***Light and Glare*** | **Mitigation Measure 3.1-1:** Reduce construction night lighting impacts. PG&E shall design and install all lighting at construction and storage yards and staging areas such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project facilities, vicinity, and nighttime sky is minimized. PG&E shall submit a *Construction Lighting Mitigation Plan* to the CPUC for review and approval at least 90 days prior to the start of construction or the ordering of any exterior lighting fixtures or components, whichever comes first. PG&E shall not install or operate any exterior lighting fixtures or lighting components for the Proposed Project until the *Construction Lighting Mitigation Plan* is approved by the CPUC. The Plan shall include but is not limited to the following measures:<br>• Lighting shall be designed so exterior lighting is hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources are shielded to prevent light trespass outside the project boundary.<br>• All lighting shall be of minimum necessary brightness consistent with worker safety. | Less than Significant |
| ***Special-Status Species: California tiger salamander and California red-legged frog*** | **Mitigation Measure 3.4-1:** PG&E and/or its contractors shall implement the following measures for construction areas and maintenance areas located in suitable habitat:<br>• The project will avoid direct impacts to sensitive wetlands areas and minimize disturbances to wetland and riparian corridors, wherever possible. Ground disturbance and construction footprints shall be minimized to the greatest degree feasible.<br>• Work activities within or adjacent to suitable habitat will be completed between April 15 and October 31, when possible.<br>• If construction activities must occur during the wet season, the perimeter of pull sites, staging areas, landing zones, shoo-fly lines, and other active construction areas shall be fenced by October 15 with amphibian exclusion fencing.<br>• A qualified biological resource monitor will conduct worker awareness training for construction personnel, addressing the species' basic biology and identifying characteristics, legal status, job-specific protection measures, and penalties for non compliance.<br>• A preconstruction survey will be conducted each day by an onsite monitor immediately preceding construction activity that occurs within or adjacent to suitable habitat.<br>• Suitable habitat that is temporarily impacted by project-related activities will be restored to pre-project conditions.<br>• Temporary impacts to upland habitat will be compensated at a 0.5:1 ratio (i.e., restoration of temporarily disturbed areas, plus permanent conservation of an additional area at a 0.5:1 ratio) and permanent impacts to upland and aquatic habitat will be compensated at a 3:1 ratio or at ratios as prescribed by the U.S. Fish and Wildlife Service and California Department of Fish and Game. Compensation will be secured at an approved, off-site mitigation bank, with documentation provided to the resource agencies (i.e., U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and California Department of Fish and Game) at least 4 weeks before construction begins. | Less than Significant |

**TABLE ES-1 (continued)**
**SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PG&E HOLLISTER 115KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this MND | Significance after Mitigation |
|---|---|---|
| ***Special-Status Species: Western pond turtle*** | **Mitigation Measure 3.4-2:** PG&E and/or its contractors shall implement the following measures for construction areas located in suitable habitat within 0.3 mile of aquatic features:<br>• Include western pond turtle in the Environmental Training and Monitoring Program.<br>• Before daily activities begin near areas of suitable habitat, the onsite monitor shall perform pond turtle surveys within suitable aquatic and upland habitat. Any pond turtles located within the construction area would be relocated to the nearest safe location.<br>• To minimize the likelihood of encountering turtles in upland areas near stream crossings, construction footprints shall be restricted to the smallest area possible. | Less than Significant |
| ***Special-Status Species: American badger*** | **Mitigation Measure 3.4-3:** PG&E and/or its contractors shall implement the following measures for construction areas located in grasslands that provide potential habitat for American badger:<br>• Include American badger in the Environmental Training and Monitoring Program.<br>• Preconstruction surveys shall be conducted within 200 feet of work areas to identify potential maternal badger dens or other refugia in and surrounding work areas. A qualified biologist shall conduct the survey 14 to 30 days before construction begins. If no evidence of badger presence is detected, no further mitigation is required.<br>• Suitable, as determined by the Environmental Monitor, vacated burrows that are located within the work area and that will not be destroyed by construction activities will be temporarily covered using plywood sheets or other similar material to prevent badgers from occupying the burrows within the work areas.<br>• If active, non-maternal dens are located, badgers will be passively relocated via installation of one-way doors.<br>• If active maternal dens are located, the den will be avoided during construction by establishment of a 100-foot buffer. Smaller buffers, if required for construction, would be established in coordination with CDFG. | Less than Significant |
| ***Special-Status Species: San Joaquin kit fox*** | **Mitigation Measure 3.4-4:** PG&E and/or its contractors shall implement the following San Joaquin kit fox protection measures for construction areas located in grasslands and agricultural lands that provide potential habitat for San Joaquin kit fox.<br>• Preconstruction surveys shall be conducted within 200 feet of work areas to identify potential San Joaquin kit fox dens or other refugia in and surrounding work areas. A qualified biologist shall conduct the survey 14 to 30 days before construction begins. All potential dens shall be monitored for evidence of kit fox use by placing an inert tracking medium at den entrances and monitoring for at least three consecutive nights. If no activity is detected at these sites, they may be closed following guidance established in the 1999 USFWS Standardized Recommendations for Protection of the San Joaquin Kit Fox.<br>• If kit fox occupancy is determined at a given site, den closure activities shall immediately be halted and the USFWS contacted. Depending on the den type, reasonable and prudent measures to avoid effects to kit fox could include seasonal limitations on project construction at the site (i.e., restricting the construction period to avoid spring-summer pupping season), and/or establishing a construction exclusion zone around the identified site, or resurveying the den a week later to determine species presence or absence. | Less than Significant |

**TABLE ES-1 (continued)**
**SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PG&E HOLLISTER 115KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this MND | Significance after Mitigation |
|---|---|---|
| ***Special-Status Species: San Joaquin kit fox*** *(cont.)* | • To minimize the possibility of inadvertent kit fox mortality, project-related vehicles shall observe a maximum 20 miles per hour speed limit on private roads in kit fox habitat. Nighttime vehicle traffic shall be kept to a minimum on nonmaintained roads. Off-road traffic outside the designated project area shall be prohibited in areas of kit fox habitat.<br>• To prevent accidental entrapment of kit fox or other animals during construction, all excavated holes or trenches greater than two feet deep shall be covered at the end of each work day by suitable materials, or escape routes constructed of earthen materials or wooden planks shall be provided. Before filling, such holes shall be thoroughly inspected for trapped animals. All pipes, culverts, or similar structures with a diameter of 4 inches or greater must be capped at both ends while not in use, and otherwise inspected for kit fox presence prior to relocation or use.<br>• All food-related trash items (such as wrappers, cans, bottles, and food scraps) shall be disposed of in closed containers and removed daily from the project area.<br>• To prevent harassment and mortality of kit foxes or destruction of their dens, no pets shall be allowed in the project area.<br>• Suitable habitat that is temporarily impacted by project-related activities will be restored to pre-project conditions.<br>• Temporary impacts will be compensated at a minimum of 0.5:1 ratio (i.e., restoration of temporarily disturbed areas, plus permanent conservation of an additional area at a 0.5:1 ratio) and permanent impacts will be compensated at a minimum 3:1 ratio or at ratios as prescribed by the U.S. Fish and Wildlife Service and California Department of Fish and Game. Compensation will be implemented by participating in the San Joaquin Kit Fox Conservation Fund, which is administered via trust by the Center for Natural Lands Management. | |
| ***Special-Status Species: Raptors and Nesting Birds*** | **Mitigation Measure 3.4-5:** PG&E and/or its contractors shall implement the following measures for the protection of nesting birds and raptors:<br>• Project design, construction, and maintenance will conform with PG&E's corporate Avian Protection Plan and Avian Power Line Interaction Committee (APLIC) Guidelines.<br>• A project-specific Avian Protection Plan would be developed and would include routine ground surveys by a qualified avian biologist, ground surveys staggered over time in concert with project implementation, additional ground surveys by a qualified environmental monitor, species-specific buffers, and a minimum 1,000-foot helicopter buffer for active eagle nests.<br>• During the permitting process, the USFWS may identify the need for protocol surveys for least Bell's vireo.<br>• If active nests are not identified during the preconstruction survey, no further action is required for breeding birds.<br>• If active nests are identified during the preconstruction survey, the following measures, which shall be included in the project-specific Avian Protection Plan, will be implemented to avoid and minimize impacts. | Less than Significant |

**TABLE ES-1 (continued)**
**SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PG&E HOLLISTER 115KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this MND | Significance after Mitigation |
|---|---|---|
| ***Special-Status Species: Raptors and Nesting Birds*** *(cont.)* | – For golden eagle, construction contractors shall observe CDFG avoidance guidelines, which stipulate a minimum 500-foot buffer zone around active golden eagle nests. Buffer zones of 50 feet for passerine birds and 250 feet for raptors other than golden eagles will be established or closer as needed with resources agency permission. Buffer zones shall remain until young have fledged.<br>– Monitoring of the nest by a qualified biologist may be required if the project-related activity has potential to adversely impact the nest.<br>– CDFG may, on a case-by-case basis, allow construction activities to continue even if raptors and passerine birds nest within the buffers of the work activities during the nesting season.<br>– For activities conducted with agency approval within a raptor-nesting buffer zone, a qualified biologist shall monitor construction activities and the nest(s) to monitor reactions to activities. If activities are deemed to have a negative effect on nesting raptors, the biologist shall immediately inform the construction manager that work should be halted, and CDFG will be consulted. While the USFWS issues limited take permits for golden eagle, this species and certain other raptors are fully-protected under California law.<br>– Following construction, PG&E will comply with the PG&E company-wide Avian Protection Plan. | |
| ***Riparian and Upland Habitat*** | **Mitigation Measure 3.4-6:** PG&E and/or its contractors shall implement the following measures for the protection and restoration of riparian and upland habitat:<br>• PG&E shall complete a Habitat Management Plan to be approved by the resource agencies at least 4 weeks prior to construction in potential restoration areas.<br>• The Habitat Management Plan will include, at a minimum, quantifiable success criteria, contingency provisions, and follow-up monitoring responsibilities and schedules.<br>• Affected riparian and upland habitat shall be restored to pre-project conditions. | Less than Significant |
| ***Native Trees*** | **Mitigation Measure 3.4-7:** PG&E and/or its contractors shall implement the following additional measures for the protection and restoration of impacted native trees:<br>• The record of protected trees removed during construction and the associated plans for native tree replacement will be included in the Habitat Management Plan required under Mitigation Measure 3.4-6, above.<br>• For replacement trees, the Habitat Management Plan shall include, at a minimum, quantifiable success criteria, contingency provisions, and follow-up monitoring responsibilities and schedules. | Less than Significant |
| ***Paleontological Resources*** | **Mitigation Measure 3.5-1:** Stop work if previously unknown paleontological resources are discovered. Prior to the start of any subsurface excavations (excluding pole and tower holes) that would extend into Pleistocene to Oligocene sedimentary rock units, all construction forepersons and field supervisors shall receive training by a qualified professional paleontologist, as defined by the SVP (1995), who is experienced in teaching non-specialists, to ensure they can recognize fossil materials and will follow proper notification procedures in the event any are uncovered during construction. Procedures to be conveyed to workers include halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who will evaluate its significance. | Less than Significant |

**TABLE ES-1 (continued)**
**SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PG&E HOLLISTER 115KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this MND | Significance after Mitigation |
|---|---|---|
| ***Paleontological Resources*** *(cont.)* | Training on paleontological resources will also be provided to all other construction workers, but may involve using a videotape of the initial training and/or written materials rather than in-person training by a paleontologist. If a fossil is determined to be significant and avoidance is not feasible, the paleontologist will develop and implement an excavation and salvage plan in accordance with SVP standards (SVP, 1995; SVP, 1996). | |
| ***Hazardous Materials*** | **Mitigation Measure 3.7-1:** PG&E and/or its contractors shall implement construction best management practices, including but not limited to, the following:<br>• Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction;<br>• Avoid overtopping construction equipment fuel gas tanks;<br>• Use tarps and adsorbent pads under vehicles when refueling to contain and capture any spilled fuel;<br>• During routine maintenance of construction equipment, properly contain and remove grease and oils;<br>• Properly dispose of discarded containers of fuels and other chemicals; and<br>• If wood poles removed from the Hollister Pole Segment are not recycled or reused, they shall be disposed of at a landfill facility that is authorized to accept treated wood pole waste in accordance with HSC 25143.1.4(b). | Less than Significant |
| | **Mitigation Measure 3.7-2:** PG&E shall prepare a Hazardous Substance Control and Emergency Response Plan (Plan) and implement it during construction to ensure compliance with all applicable federal, State, and local laws and guidelines regarding the handling of hazardous materials. The Plan shall prescribe hazardous material handling procedures to reduce the potential for a spill during construction, or exposure of the workers or public to hazardous materials. The Plan shall also include a discussion of appropriate response actions in the event that hazardous materials are released or encountered during excavation activities. The Plan shall be submitted to the CPUC for review and approval prior to the commencement of construction activities. | |
| | **Mitigation Measure 3.7-3:** PG&E shall prepare and implement a Health and Safety Plan to ensure the health and safety of construction workers and the public during construction. The plan shall include information on the appropriate personal protective equipment to be used during construction. | |
| | **Mitigation Measure 3.7-4:** PG&E shall ensure that a Workers Environmental Awareness Program is established and implemented to communicate environmental concerns and appropriate work practices to all construction field personnel. The training program shall emphasize site-specific physical conditions to improve hazard prevention, and shall include a review of the Health and Safety Plan and the Hazardous Substance Control and Emergency Response Plan. The CPUC mitigation monitor shall attend the first training session. PG&E shall submit documentation to the CPUC prior to the commencement of construction activities that each worker on the project has undergone this training program. | |

**TABLE ES-1 (continued)**
**SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PG&E HOLLISTER 115KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this MND | Significance after Mitigation |
|---|---|---|
| ***Hazardous Materials*** (cont.) | **Mitigation Measure 3.7-5:** PG&E shall ensure that oil-absorbent material, tarps, and storage drums shall be used to contain and control any minor releases. Emergency spill supplies and equipment shall be kept at the project staging area and adjacent to all areas of work, and shall be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials shall be provided in the project's Hazardous Substance Control and Emergency Response Plan (see Mitigation Measure 3.7-2), which shall be implemented during construction. | |
| ***Protected Air Space*** | **Mitigation Measure 3.7-6:** PG&E shall incorporate the Federal Aviation Administration (FAA) conditions outlined in FAA Aeronautical Studies 2009-AWP-1446-OE (FAA, 2009a) and 2009-AWP-1447-OE (FAA, 2009b), including:<br>• Poles 22/00 and 22/01 shall be marked or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, red lights.<br>• Notices of Actual Construction or Alternative, shall be completed and returned to the FAA within five days after the construction reaches its greatest height.<br>• Poles 22/00 and 22/01 shall not exceed 82 feet above ground level (i.e., 381 feet above mean sea level). | Less than Significant |
| ***Water Quality*** | **Mitigation Measure 3.8-1:** For all segments of new access roads that would be within 300 feet of an existing surface water channel and traverse a ground slope greater than two percent, the following protective measures shall be installed:<br>• Permanent access roads shall be in-sloped with a rock-lined ditch on the inboard side;<br>• Water bars, or a similar drainage feature, shall be installed at 150 foot intervals (so as to reduce the effective, connected length of the access road to 150 feet). | Less than Significant |
| ***Drainage*** | **Mitigation Measure 3.8-2:** The drainage study, as proposed by PG&E in APM-HYDRO-3, shall provide sizing recommendations to ensure each culvert can pass a 10-year storm event without being submerged, and design recommendations to ensure that culvert installation would result in no net increase in erosion and sedimentation during peak flows. Sizing and design recommendations for each culvert shall consider the individual drainage characteristics of the stream (e.g., slope, watershed area, and substrate) and may include any combination of features necessary to achieve no net increase in erosion and sediment transport. Such features may include the following:<br>• Downstream armoring with gravel or gabions, coupled with appropriate roughness features or characteristics, so as to dissipate and slow flows exiting the culvert and leaving the modified stream segment;<br>• A wide culvert that retains the natural stream bed and roughness elements without notably increasing flow depth;<br>• Design length and slope of culvert to maintain existing topography | Less than Significant |
| ***Construction Noise*** | **Mitigation Measure 3.11-1:** Construction activity shall be limited to between the hours of seven a.m. and seven p.m., Monday through Saturday, except with CPUC approval and where necessary to ensure worker safety or to conduct certain work during electrical line clearances or during procedures that cannot be interrupted. | Less than Significant |

**TABLE ES-1 (continued)**
**SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PG&E HOLLISTER 115KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this MND | Significance after Mitigation |
|---|---|---|
| ***Construction Noise*** *(cont.)* | **Mitigation Measure 3.11-2:** PG&E and/or its contractors shall shield compressors and other small stationary construction equipment with portable barriers when operating within 100 feet of residences. | |
| | **Mitigation Measure 3.11-3:** In the event that nighttime (i.e., between seven p.m. and seven a.m.) construction activity is determined to be necessary within 500 feet of an occupied residential dwelling unit, a nighttime noise reduction plan shall be developed by PG&E and submitted to the CPUC for review and approval. The noise reduction plan shall include a set of site-specific noise attenuation measures that apply state of the art noise reduction technology to ensure that nighttime construction noise and levels and associated nuisance are reduced to the most extent feasible. The attenuation measures may include, but not be limited to, the control strategies and methods for implementation that are listed below. If any of the following strategies are found by PG&E to not be feasible, an explanation as to why the specific strategy is not feasible shall be included in the nighttime noise reduction plan.<br>• Plan construction activities to minimize the amount of nighttime construction.<br>• Offer temporary relocation of residents within 200 feet of nighttime construction areas.<br>Temporary noise barriers, such as shields and/or blankets, shall be installed immediately adjacent to all nighttime stationary noise sources (e.g., drilling rigs, generators, pumps, etc.) that block the line of sight between nighttime activities and the closest residences. | |
| ***Construction Traffic*** | **Mitigation Measure 3.15-1:** Traffic Management and Control Plan. PG&E shall prepare a Traffic Management and Control Plan that shall include, at a minimum, the measures listed below. The Plan shall be submitted to the CPUC for approval and shall be distributed to all construction crew members prior to commencement of construction activities. The Plan shall:<br>• Include descriptions of work hours, haul routes, work area delineation, any traffic detour routes, bicyclists and pedestrian detour routes, traffic control, and flagging;<br>• Identify all access and parking restriction and signage requirements;<br>• Require workers to park personal vehicles at the approved staging areas and take only necessary project vehicles to the work sites;<br>• Lay out plans for notifications of all lane and road closures and a process for communication with affected road users, including truckers, residents, and landowners prior to the start of construction. Advance public notification shall include posting of notices and appropriate signage of construction activities. The written notification shall include the construction schedule, the exact location and duration of activities within each street (i.e., which road/lanes and access point/driveways/parking areas would be blocked on which days and for how long), and a toll-free telephone number for receiving questions or complaints;<br>• Include plans to coordinate all construction activities with emergency service providers in the area. Emergency service providers would be notified of the timing, location, and duration of construction activities. All roads would remain passable to emergency service vehicles at all times; and<br>• Identify all roadway locations where special construction techniques (e.g., night construction) would be used to minimize impacts to traffic flow. | Less than Significant |

**TABLE ES-1 (continued)**
**SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PG&E HOLLISTER 115KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this MND | Significance after Mitigation |
|---|---|---|
| ***Construction Traffic*** *(cont.)* | **Mitigation Measure 3.15-2:** Coordination with Union Pacific Railroad. PG&E shall coordinate all construction activities with Union Pacific Railroad to avoid delays in freight train service along the Hollister Branch Line. PG&E shall implement, at a minimum, the Union Pacific Railroad safety and engineering guidelines when installing power lines over the railroad right-of-way (ROW). The Workers Environmental Awareness Program required under Mitigation Measure 3.7-4 shall require construction crews and project personnel to be trained on Union Pacific Railroad safety guidelines prior to commencing work within or over the railroad ROW. | |

# SECTION 1
# Environmental Determination

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Gretchen Dumas, Esq. — Signature

11/16/10 — Date

Gretchen Dumas — Printed Name

# SECTION 2
# Project Description

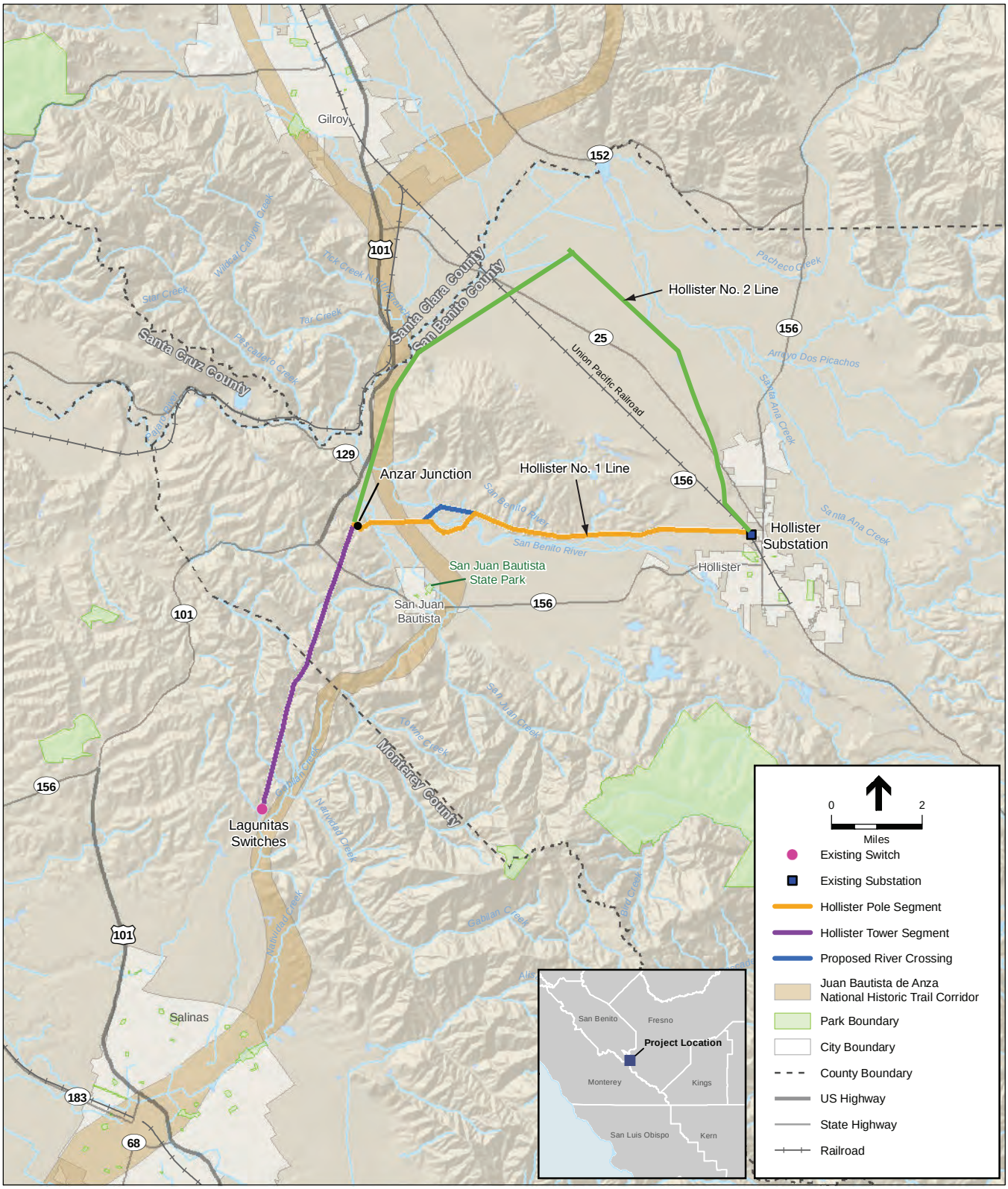
## 2.1 Introduction

Pacific Gas and Electric (PG&E), in its California Public Utilities Commission (CPUC) application (A.09-11-016), filed on November 23, 2009, requests to replace structures and conductors (reconductoring) on two segments, the Hollister Tower and Hollister Pole Segments, of an existing 115 kV overhead electric power line system in Monterey and San Benito Counties, pursuant to CPUC General Order (GO) 131-D. The application includes the Proponents Environmental Assessment (PEA) prepared pursuant to Rule 2.4 of the CPUC's Rules of Practice and Procedure.

PG&E, which currently operates the existing 115 kV overhead electric power line system in Monterey and San Benito Counties, requests to replace structures (e.g., towers and poles) and reconductor the Hollister Tower and Hollister Pole Segments, approximately seven and nine miles long, respectively (see **Figure 2-1**). The majority of the proposed alignment would be located in an existing PG&E easement on private property; an approximately 1.3-mile section of the 115 kV Hollister Pole Segment would be relocated out of the San Benito River floodplain (the existing river alignment) to a new river crossing with structures located on dry banks above the river (the Proposed River Crossing) while the existing distribution and topped poles would remain to serve local users. Approval of this project must comply with the California Environmental Quality Act (CEQA).

Under CEQA, the CPUC must prepare an Initial Study (IS) for discretionary projects such as the Proposed Project to determine whether the project may have a significant adverse effect on the environment. If an Initial Study prepared for a project indicates that such an impact could occur, the CPUC would be required to prepare an Environmental Impact Report (EIR). If an Initial Study does not reveal substantial evidence of such an effect, or if the potential effect can be reduced to a level of insignificance through project revisions, a Negative Declaration can be adopted (Public Resources Code, Division 13, Section 21080(c)(1)).

A Mitigated Negative Declaration (MND) may be adopted when "the Initial Study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the applicant before the proposed negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur, and (2) there is no




PG&E, 2010; ESRI, 2010; NPS, 2010

Hollister 115 kV Power Line Reconductoring Project . 207584.03

**Figure 2-1**

Proposed Project Location and Overview

substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment" (Public Resources Code, Division 13, Section 21064.5).

This IS/MND considers the potential environmental impacts from PG&E's Hollister 115 kilovolt (kV) Power Line Reconductoring Project (Proposed Project). The information presented here was extracted from PG&E's Application for a Permit to Construct (PTC) (PG&E, 2009a), the Proponent's Environmental Assessment (PEA) (PG&E, 2009b), and PG&E's responses to data requests by the CPUC's CEQA review team, including Environmental Science Associates (ESA), a consulting firm CPUC has retained to assist in its review (PG&E, 2009c). This information is intended to provide a detailed description of project construction, operation and maintenance, serving to provide a common understanding of the project parameters.

## 2.2 Project Location

The Proposed Project is located in Monterey and San Benito Counties near the cities of Hollister and San Juan Bautista (**Figure 2-1**). The Hollister Tower and Hollister Pole Segments would generally traverse the existing PG&E right-of-way (ROW), across open space and agricultural lands and passing a few scattered residences along the alignment. The Proposed River Crossing would be located in new ROW and would primarily traverse through agricultural rangeland.

## 2.3 Existing System

The Hollister Substation serves an Electrical Needs Area which includes both the cities of Hollister and San Juan Bautista. In the existing power line system configuration, the Hollister Substation is supplied by two115 kV power line circuits, known as the Hollister Nos. 1 and 2 115 kV lines, that begin as a section of the Moss Landing–Salinas–Soledad 115 kV power line at the Lagunitas Switches (see **Figure 2-1**). From this connection, both power lines travel north on a single tower line. Near Anzar Junction, the Hollister No. 1 line heads due east to the Hollister Substation. The Hollister No. 2 line continues to the north, then turns east and then south to reach the Hollister Substation. The existing Hollister No. 1 and No.2 115 kV power lines are comprised of 2/0 and 3/0 copper conductors.

Currently, if there is an outage on one of the 115 kV power lines serving the Hollister Substation, the entire load is served from the remaining line.

# 2.4 PG&E's Proposed Project

The Proposed Project consists of the following activities; a more detailed description of the individual project components is included in Section 2.5:

- **Hollister Tower Segment:** Replacement of approximately 36 of the 38 existing towers with new lattice steel towers (LSTs) and installation of one new LST, resulting in a total of 39 LSTs in the seven-mile section of the existing double-circuit Moss Landing-Salinas-Soledad 115 kV power line, beginning at the Lagunitas Switches and extending north to a point near the Anzar Junction.

- **Hollister Pole Segment:** Replacement of 154 single-circuit wood poles with 135 new double-circuit light-duty steel (LDS) poles and installation of 30 additional new tubular steel poles (TSPs) along an existing nine-mile section of the Hollister No. 1 115 kV power line, with the exception of the Proposed River Crossing described below, resulting in a total of 165 poles. The Hollister Pole Segment would begin at the northern end of the Hollister Tower Segment and extend east to the Hollister Substation.

  - ***Proposed River Crossing***:

    - Relocation of an approximately 1.3 mile segment of the 115 kV Hollister No. 1 line out of the San Benito River floodplain (the existing river alignment) to a new river crossing approximately 3,000 feet to the north, with structures located on dry banks of the river (the Proposed River Crossing). The Proposed River Crossing would require installation of 21 new steel poles, including four 92-foot tall TSPs outside of each bank of the river channel.

    - Topping of 17 existing poles within the 1.3 mile segment so that existing distribution remains to serve local users.

- **Conductors:** Installation of a 477 kcmil (circular wire gauge size = 1,000 circular mils) steel-supported aluminum conductor (SSAC) on both the Hollister Tower and Hollister Pole Segments.

- **Hollister Substation:** Upgrade of the Hollister Substation, including relocation of two existing poles, updating relay settings, and changing the 115 kV bus conductors.

**Figure 2-1** shows the general location and alignment of the Proposed Project relative to the existing system.

# 2.5 Project Components

A summary of the key components of the Proposed Project is provided **Table 2-1**, followed by a more detailed discussion by component.

**TABLE 2-1**
**SUMMARY OF PROJECT COMPONENTS**

**Hollister Tower Segment**

- Line length: Approximately seven miles.
- Conductor: Reconstruct both circuits of the existing double-circuit 115 kV power line with installation of two circuits of 477 thousand circular mils (kcmil) SSAC conductor, 0.846 inch in diameter. Each circuit would have three conductors. The minimum ground to conductor clearance would be 30 feet.
- Replace 36 of the 38 existing towers with new LSTs and install one new LST along the existing alignment; retain two existing towers resulting in 39 towers within the existing alignment. The towers to be removed would be replaced with new towers similar in size and design.
- Structures to be installed: 37 LSTs.
- Structure heights: Similar to existing; averaging 82 feet above ground surface (ags).
- Span lengths: Between 51 feet to 1,847 feet, averaging approximately 850 feet long.
- Footings: Each LST would be built on four drilled pier concrete footings. A typical footing would be approximately three feet aboveground; subsurface dimensions of each footing would depend on variables such as topography, tower height, span length, and soil properties.

**Hollister Pole Segment**

- Line length: Approximately nine miles.
- Conductor: Reconstruct existing single-circuit 115 kV subtransmission line as a double-circuit 115 kV subtransmission line, utilizing a 477 kcmil SSAC conductor (0.846 inch in diameter) for each circuit; each circuit would have three conductors; minimum ground to conductor clearance would be 30 feet.
- Replace 154 existing poles with a combination of 30 TSPs and 135 LDS poles (total number of poles: 165) in the same alignment, except for the Proposed River Crossing (discussed below).
- Structures: Combination of TSPs and LDS poles with a rusted brown finish.
- Pole size: Approximately 70 to 95 feet in height (approximately five to 10 feet taller than existing poles) and approximately two to seven feet in diameter at the base (existing wood poles are approximately 18 inches to 24 inches at the base).
- Span lengths: Between 94 feet to 935 feet, averaging approximately 295 feet long.
- **River Crossing:**
  - Existing River Alignment: Top 17 wood poles, 12 of which are located in the floodplain of the San Benito River and five of which are located in the agricultural field west of the river; topping refers to shortening of poles by removing the existing power line and cutting down the excess length to the level of the lower distribution line. Remove approximately eight poles within the floodplain.
  - Proposed River Crossing: Install approximately 21 new steel poles, four TSPs and 17 LDS poles, approximately 3,000 feet north of the existing river alignment.

**Hollister Substation Modifications**

- Relocate two existing poles on the substation property
- Update relay setting
- Change the 115 kV bus conductors

SOURCE: PG&E, 2009b and 2010.

## 2.5.1 Hollister Tower Segment

The Hollister Tower Segment would consist of a seven-mile section of the existing double-circuit Moss Landing-Salinas-Soledad 115 kV power line, beginning at the Lagunitas Switches near the intersection of Crazy Horse Road and San Juan Grade Road in Monterey County and extending northerly to a location near the Anzar Junction, approximately 1.5 miles northwest of the City of San Juan Bautista, in San Benito County. The Hollister Tower Segment would traverse a series of steep hills with various vegetative covers, including low-lying grasses, shrubs, and trees. The segment would also traverse through an existing residential development located along Avenida Del Piero and would cross State Route (SR) 156.

The Hollister Tower Segment would include replacement of 36 of the 38 existing LSTs with new LSTs that are similar in size and design. Two existing LSTs would be retained and one new LST would be installed, resulting in a total of 39 LSTs within the alignment described above. The segment would also include replacement of both circuits of the double-circuit 115 kV power line conductors with a 477 kcmil SSAC that is approximately 0.846 inches in diameter. The Hollister Tower Segment alignment is shown in **Figures 2-2a** through **2-2e**.

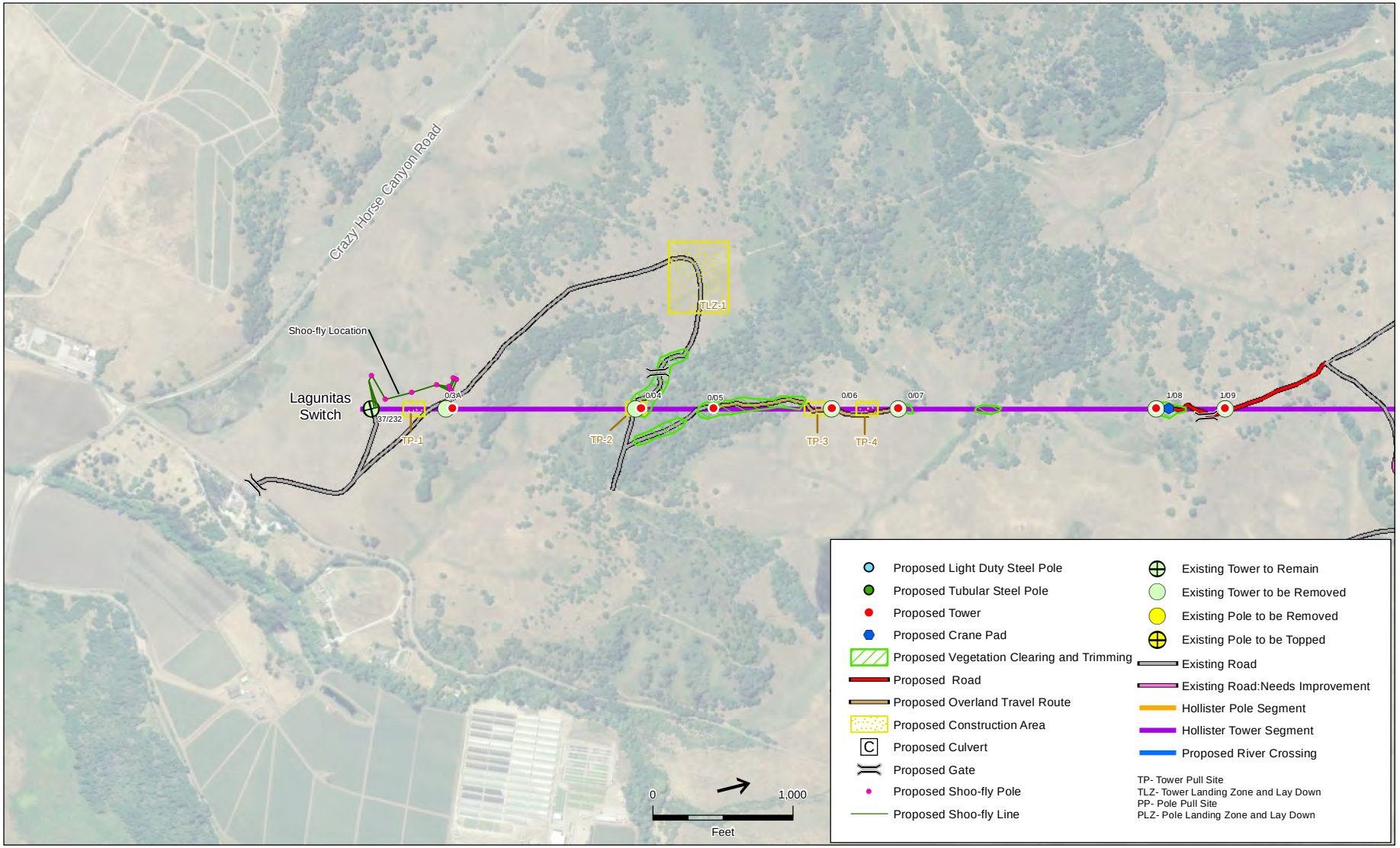
## 2.5.2 Hollister Pole Segment

The Hollister Pole Segment would consist of an approximately nine-mile section of the Hollister No. 1 115 kV power line, including the 1.3-mile Proposed River Crossing (described below). The Hollister Pole Segment would begin at the north end of the Hollister Tower Segment, and extend easterly to the Hollister Substation, located north of the City of Hollister and approximately one-quarter mile west of San Felipe Road. Heading east from the Hollister Tower Segment, the Hollister Pole Segment would cross the San Andreas Rift Zone before entering the San Juan Valley. East of the San Andres Rift zone, the segment would continue easterly through agricultural fields before crossing the San Benito River and entering the Flint Hills. The alignment would continue in the Flint Hills for several miles, then traverse agricultural fields and cross the Union Pacific Railroad before reaching the Hollister Substation.

The Hollister Pole Segment would include removal of 154 wooden poles and installation of 135 LDS poles and 30 TSPs within existing and new ROW. The existing single-circuit 115 kV power line within the Hollister Pole Segment would be reconstructed as a double-circuit 115 kV power line, utilizing 477 kcmil SSAC for each circuit. The Hollister Pole Segment alignment is shown in **Figures 2-2e** through **2.2i**.

### 2.5.2.1 Proposed River Crossing

Approximately 12 wood poles located in the floodplain of the San Benito River, as well as five poles located in an adjacent agricultural field, would be “topped” (e.g., shortened by removing the existing power line and cutting down the excess length to the level of the lower distribution line), allowing the existing distribution line to continue to serve nearby customers. In addition, approximately eight poles that do not support the existing distribution line would be removed from this segment of the proposed Hollister Pole Segment. Approximately 21 new steel poles, four TSPs and 17 LDS poles, would be installed to accommodate the Proposed River Crossing, located approximately 3,000 feet north of the existing river alignment.




Source: PG&E, 2010; Microsoft Virtual Earth, 2010

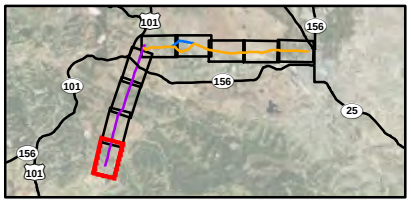



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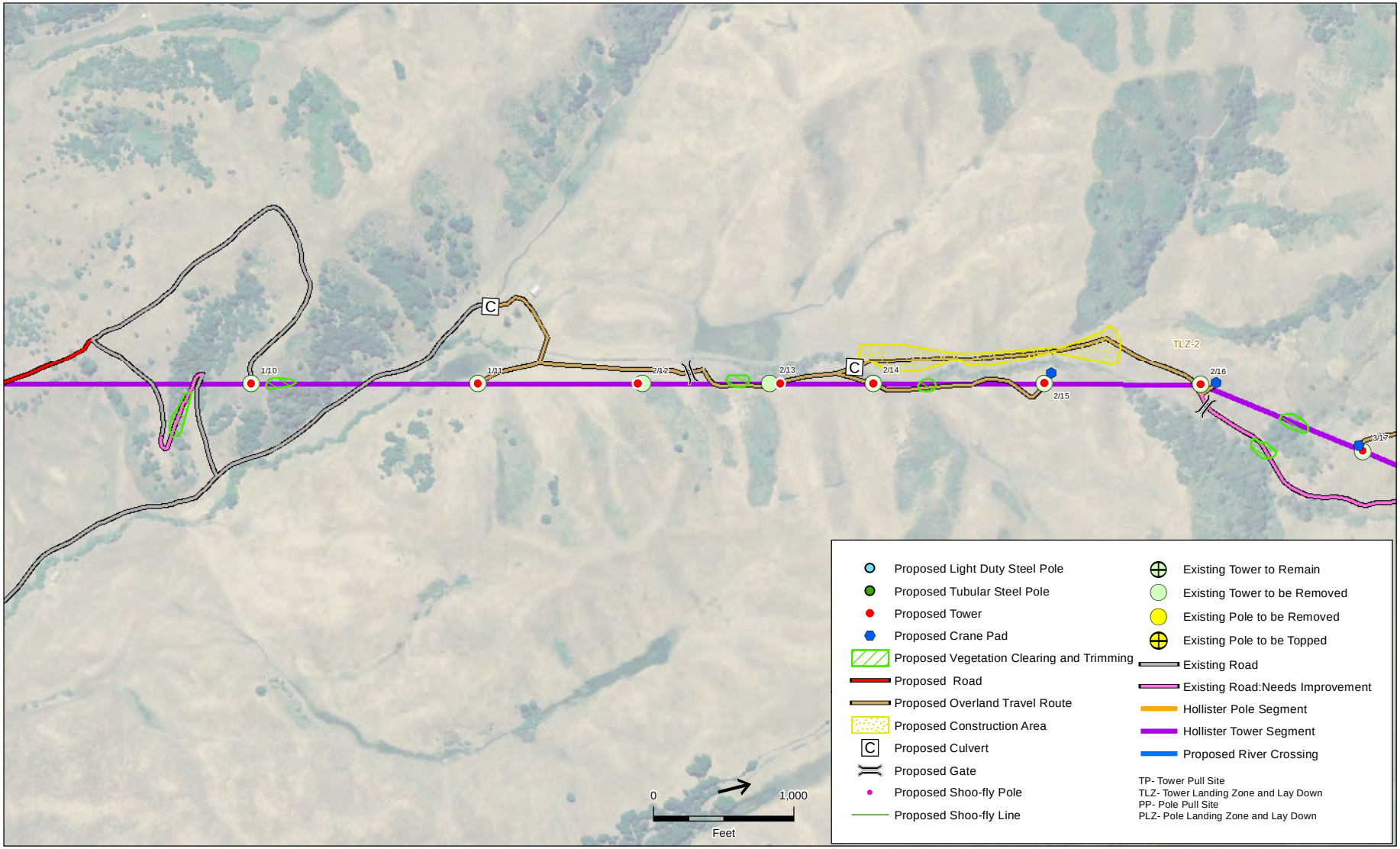
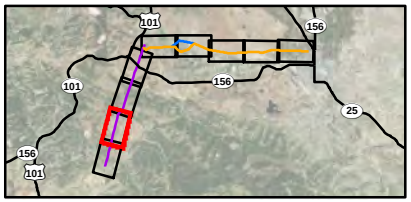
**Figure 2-2 a**

Proposed Project



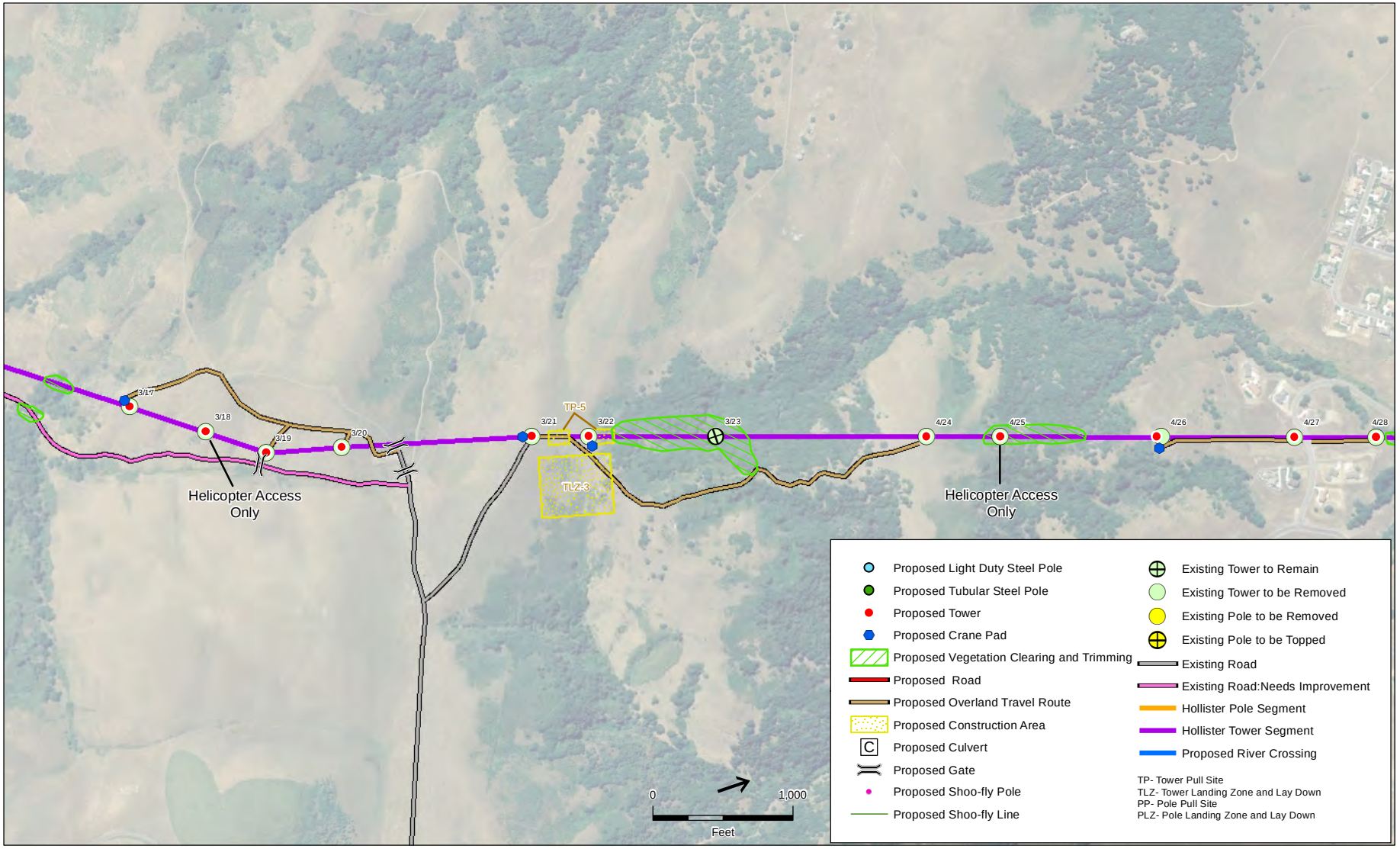

Source: PG&E, 2010; Microsoft Virtual Earth, 2010



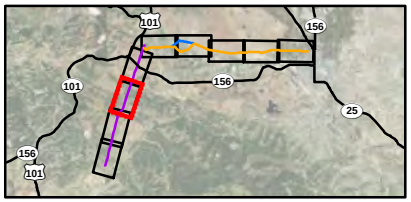

Hollister 115 kV Power Line Reconductoring Project . 207584.03

**Figure 2-2 b**

Proposed Project



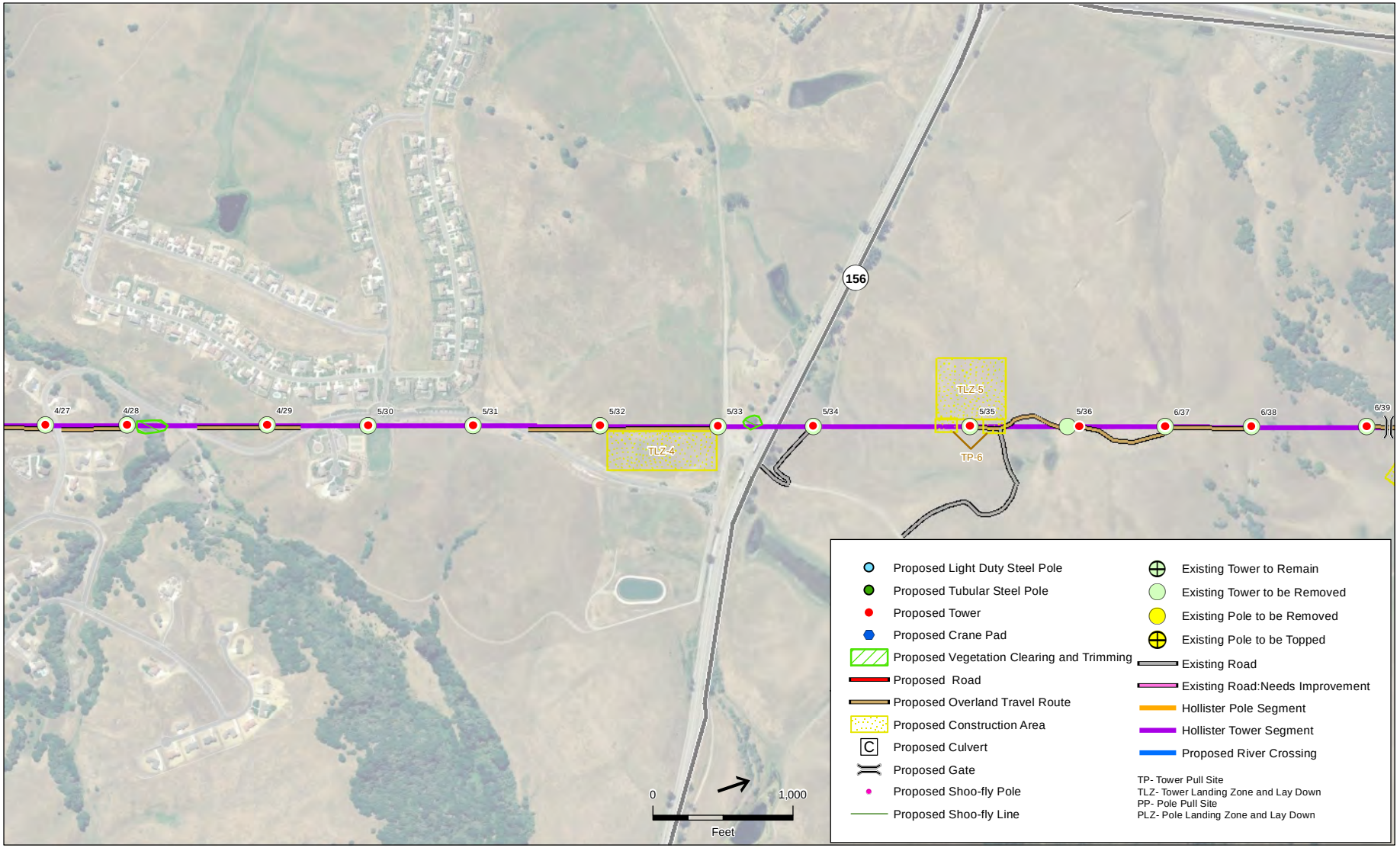

Source: PG&E, 2010; Microsoft Virtual Earth, 2010



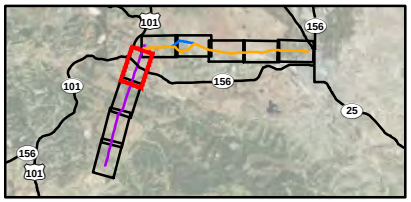

Hollister 115 kV Power Line Reconductoring Project . 207584.03

**Figure 2-2 c**

Proposed Project



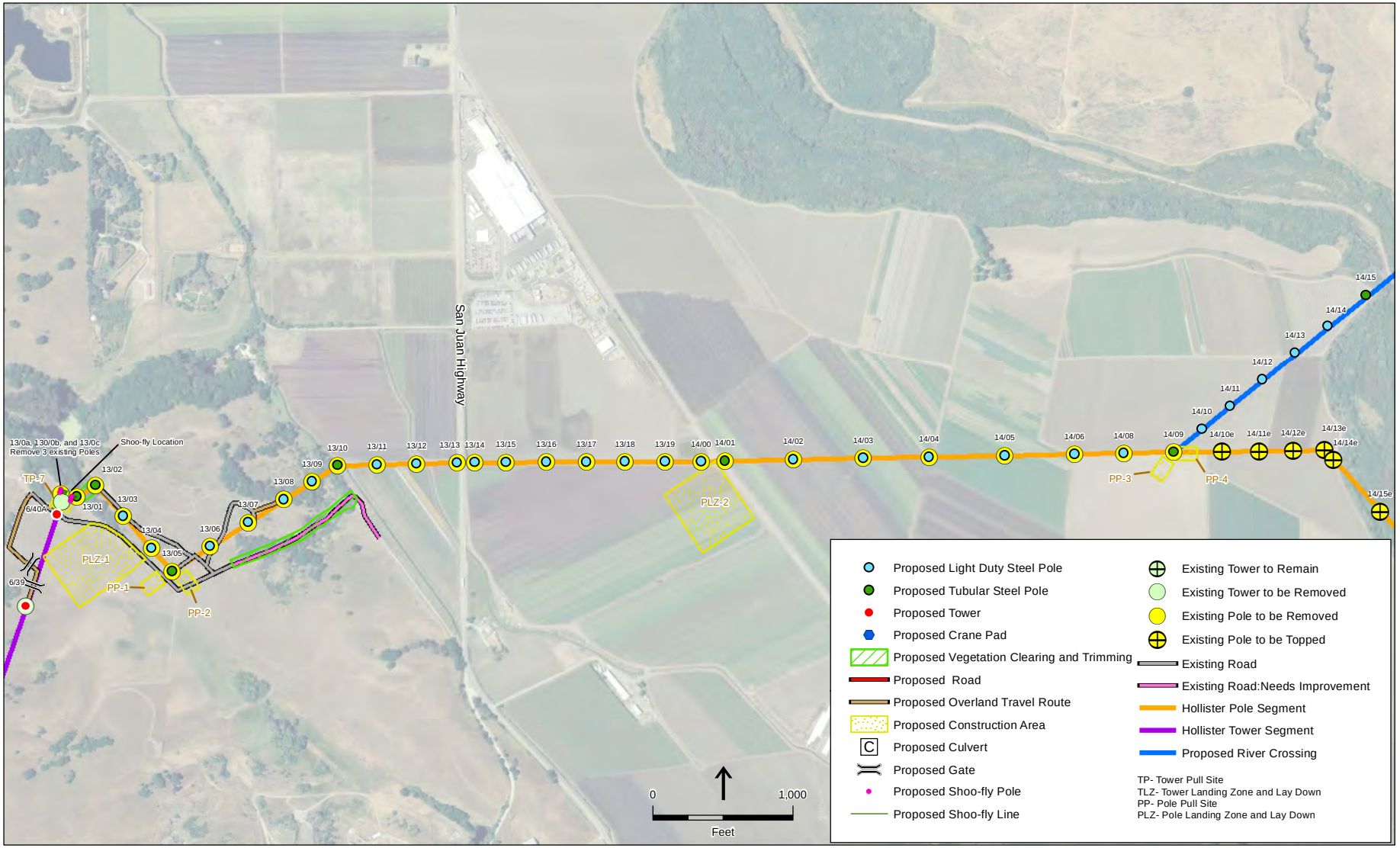

Source: PG&E, 2010; Microsoft Virtual Earth, 2010



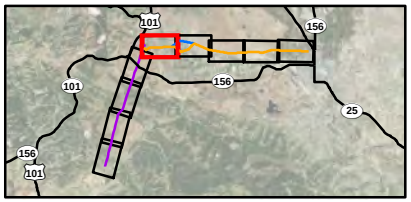

Hollister 115 kV Power Line Reconductoring Project . 207584.03

**Figure 2-2 d**

Proposed Project



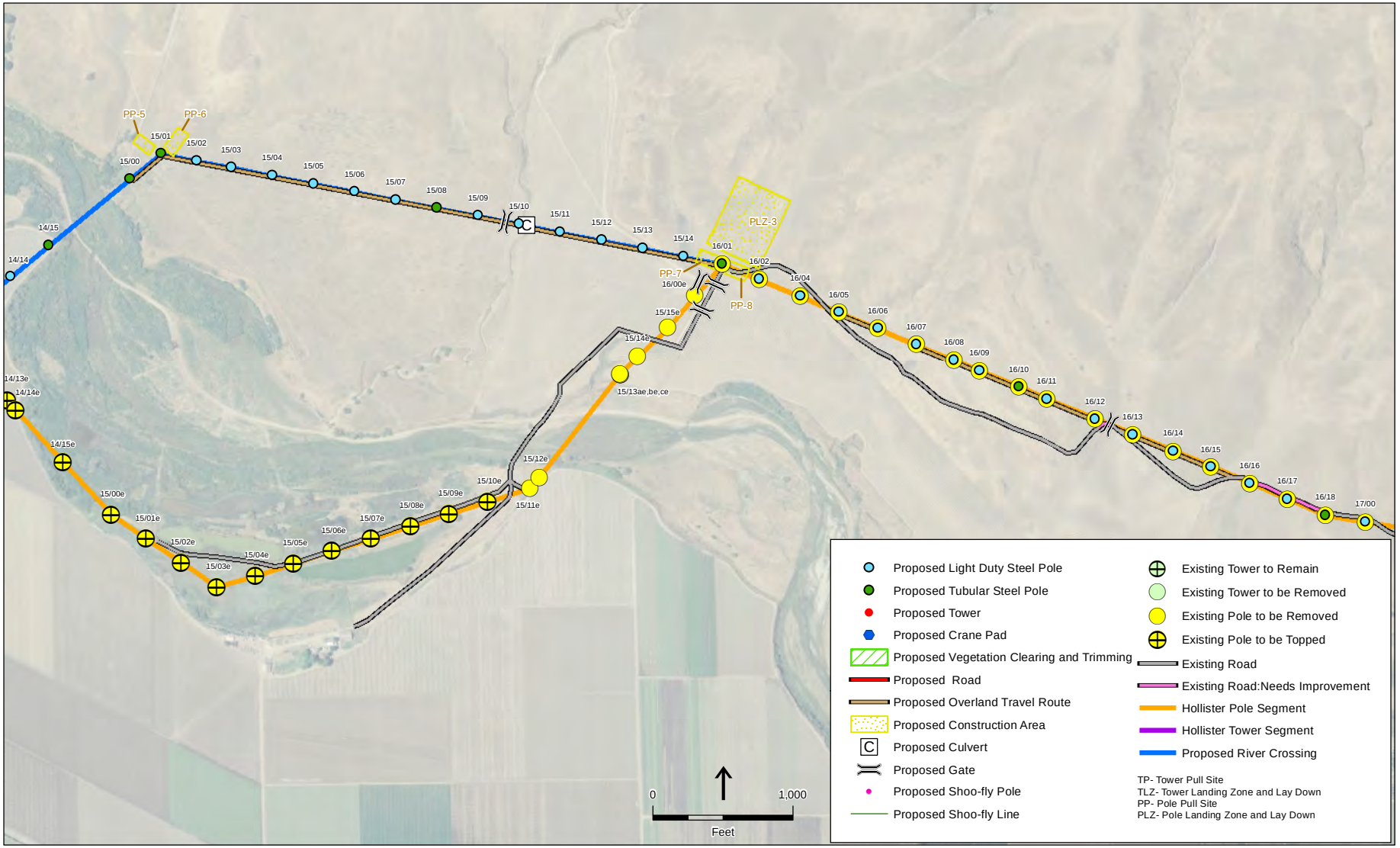

Source: PG&E, 2010; Microsoft Virtual Earth, 2010



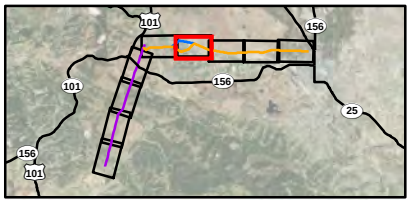

Hollister 115 kV Power Line Reconductoring Project . 207584.03

**Figure 2-2 e**

Proposed Project



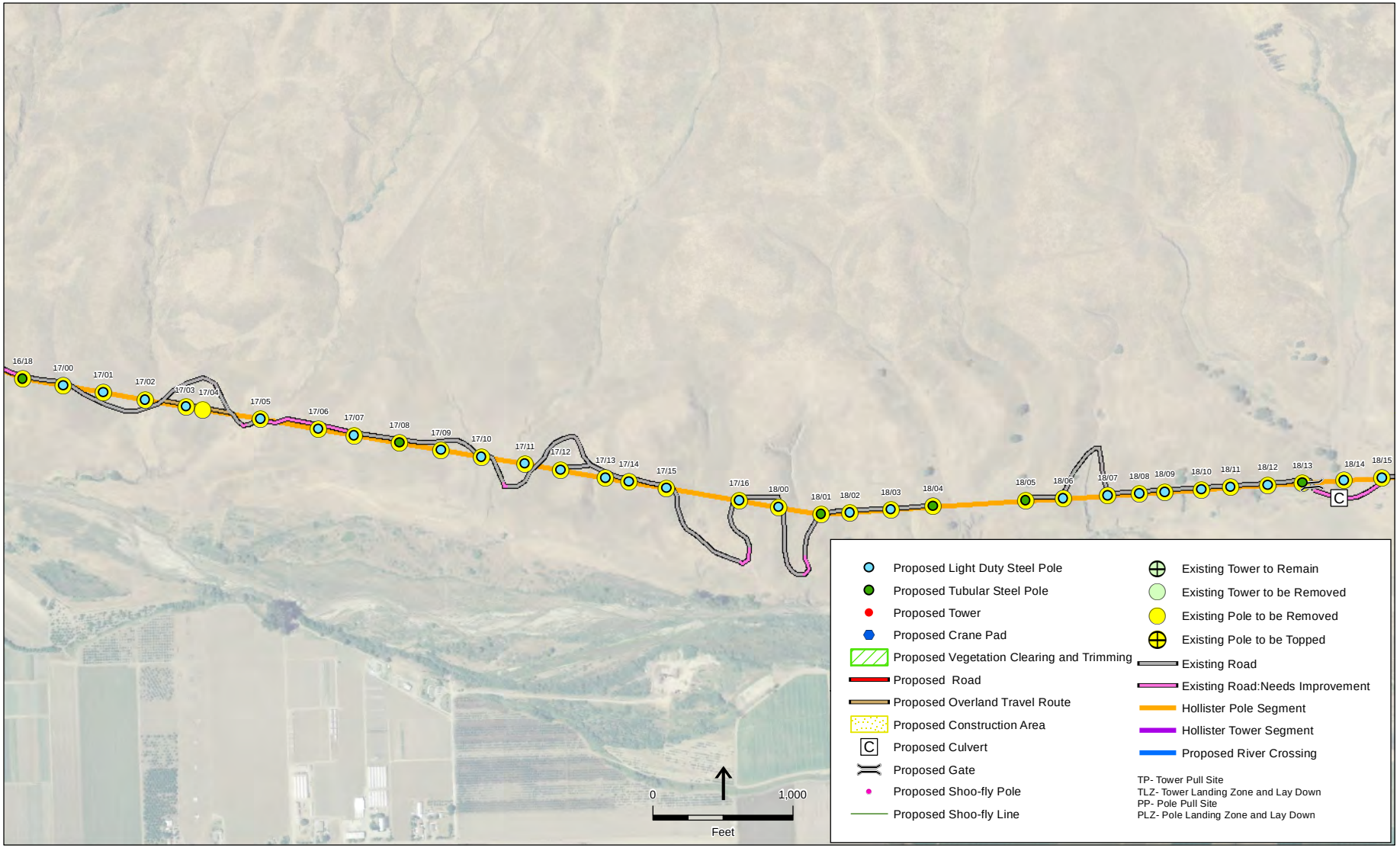

Source: PG&E, 2010; Microsoft Virtual Earth, 2010




Hollister 115 kV Power Line Reconductoring Project . 207584.03

**Figure 2-2 f**

Proposed Project




Source: PG&E, 2010; Microsoft Virtual Earth, 2010

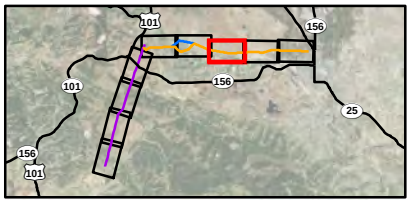



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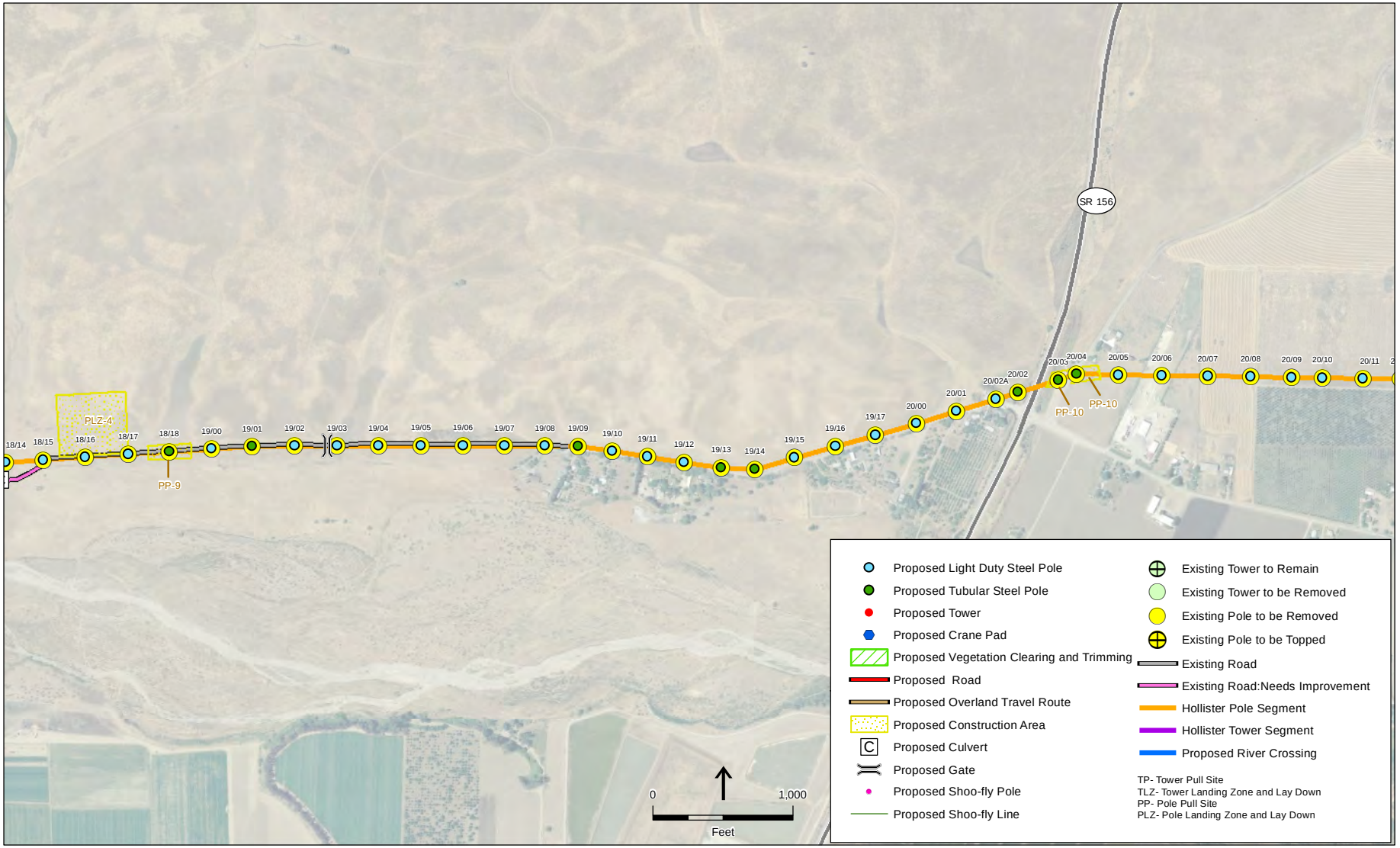
**Figure 2-2 g**

Proposed Project




Source: PG&E, 2010; Microsoft Virtual Earth, 2010

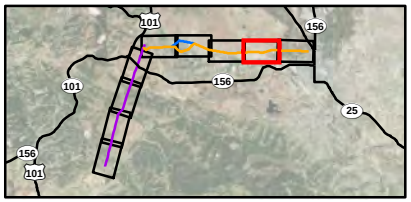



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**Figure 2-2 h**

Proposed Project

Source: PG&E, 2010; Microsoft Virtual Earth, 2010

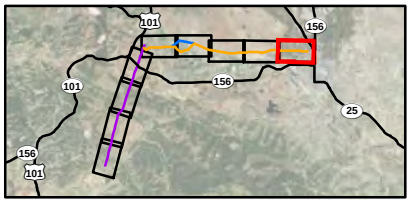


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**Figure 2-2 i**

Proposed Project

## 2.5.3 Poles and Towers

The Hollister Tower Segment would be constructed with new LSTs similar in design to the existing towers. The typical designs for these towers are shown in **Figure 2-3**. Approximately 36 of the existing 38 towers would be replaced along the existing alignment and one new tower would be installed. Two existing towers would be retained. The span length between the new LSTs would range from approximately 51 to 1,847 feet, with an average span of approximately 850 feet. Each LST would be built on four drilled pier concrete footings. On average, a typical footing would be approximately three feet aboveground; however, the subsurface dimension of each footing would be dependent on variables such as topography, tower height, span length, and soil properties.

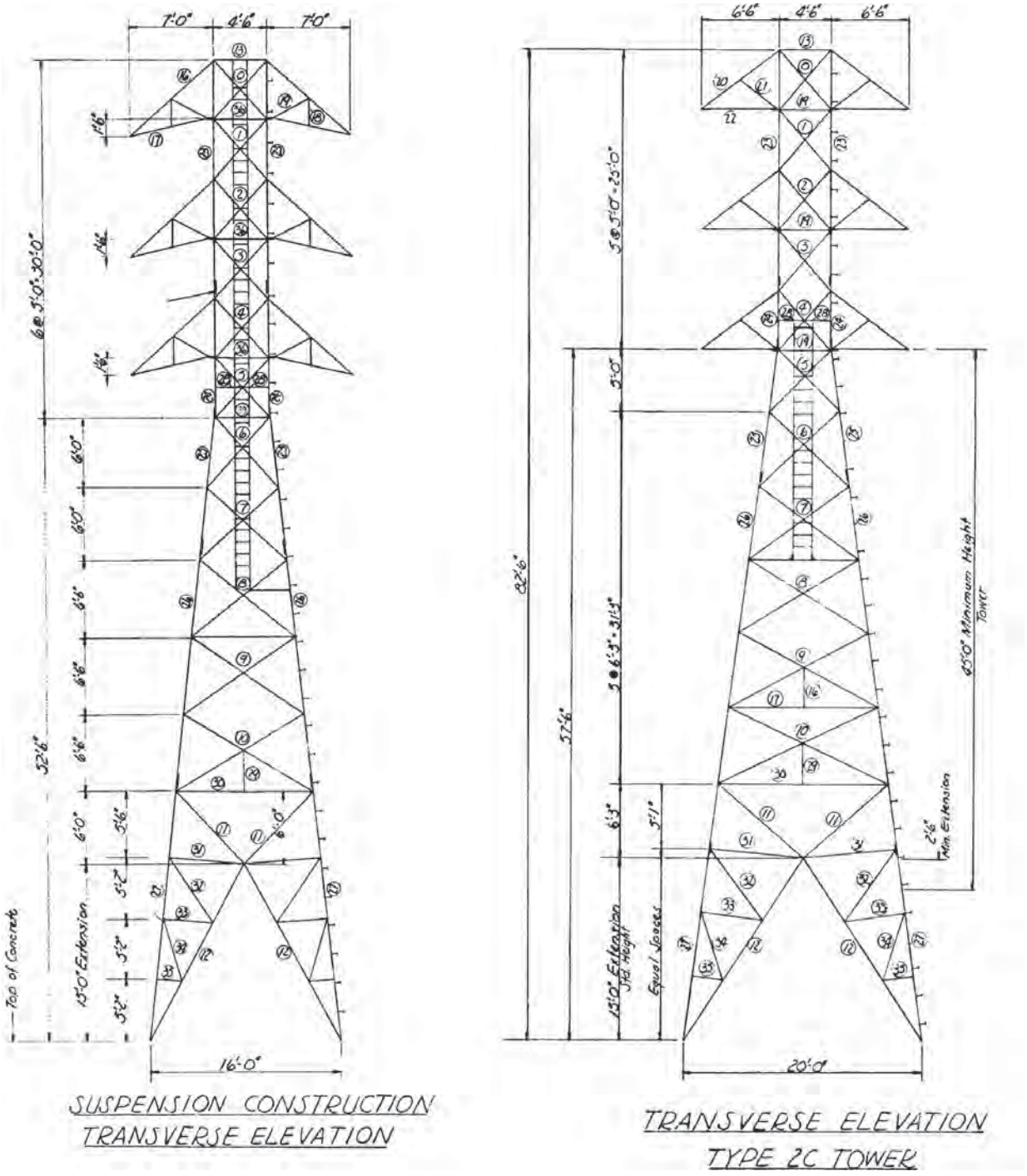
The Hollister Pole Segment would be reconstructed using a combination of both TSPs and LDS poles. The poles would consist of all steel structures with a rusted brown finish. Pole heights would range from approximately 70 feet to 95 feet ags with a base diameter ranging from approximately two to seven feet. The typical design for each type of pole is shown in **Figure 2-4**. Span lengths between the poles would range from approximately 94 to 935 feet, with the average span of approximately 295 feet.

In addition, there are four proposed temporary work line locations, or temporary shoo-fly line tie-in connections, to continue 115 kV power supply to serve the existing Hollister Substation during construction of the Hollister Tower and Hollister Pole Segments. Ten temporary wood poles, at six locations (two locations would be three-pole structures), would be located at the Lagunitas Switch shoo-fly site; three temporary wood poles would be located at the Anzar Switch site; and two new temporary poles would be constructed inside the Llagas Substation, located in Gilroy. The Sargent Switch site would require electric overhead line work and switch work only, and no temporary poles would be required.

**TABLE 2-2**
**SUMMARY OF POLE INFORMATION**

| Pole Type | Approximate Location | Typical Pole Height (ags) | Number of Poles and Towers to be Removed | Number of Poles and Towers to be Installed |
|---|---|---|---|---|
| Double Circuit Lattice Steel Towers (LST) | Throughout the Hollister Tower Segment | 82 feet | 36 Double Circuit LSTs to be removed | 37 Double Circuit LSTs (36 replacement and one new) |
| Double Circuit Poles | Throughout the Hollister Pole Segment | 70 to 95 feet | NA | 165 poles to be installed |
| Single Circuit Wood Poles | Throughout the Hollister Pole Segment | 60 to 90 feet | 154 to be removed and 17 to be topped | NA |
| Temporary wooden poles | Lagunitas Switch site<br>Anzar Switch site<br>Llagas Substation | 60 to 90 feet | NA | 15 |

SOURCE: PG&E, 2009b and 2010




Tower 2A/2B

Tower 2C/2D

Preliminary and subject to change based on California Public Utilities requirements, final engineering, and other factors.

SOURCE: PG&E, 2010

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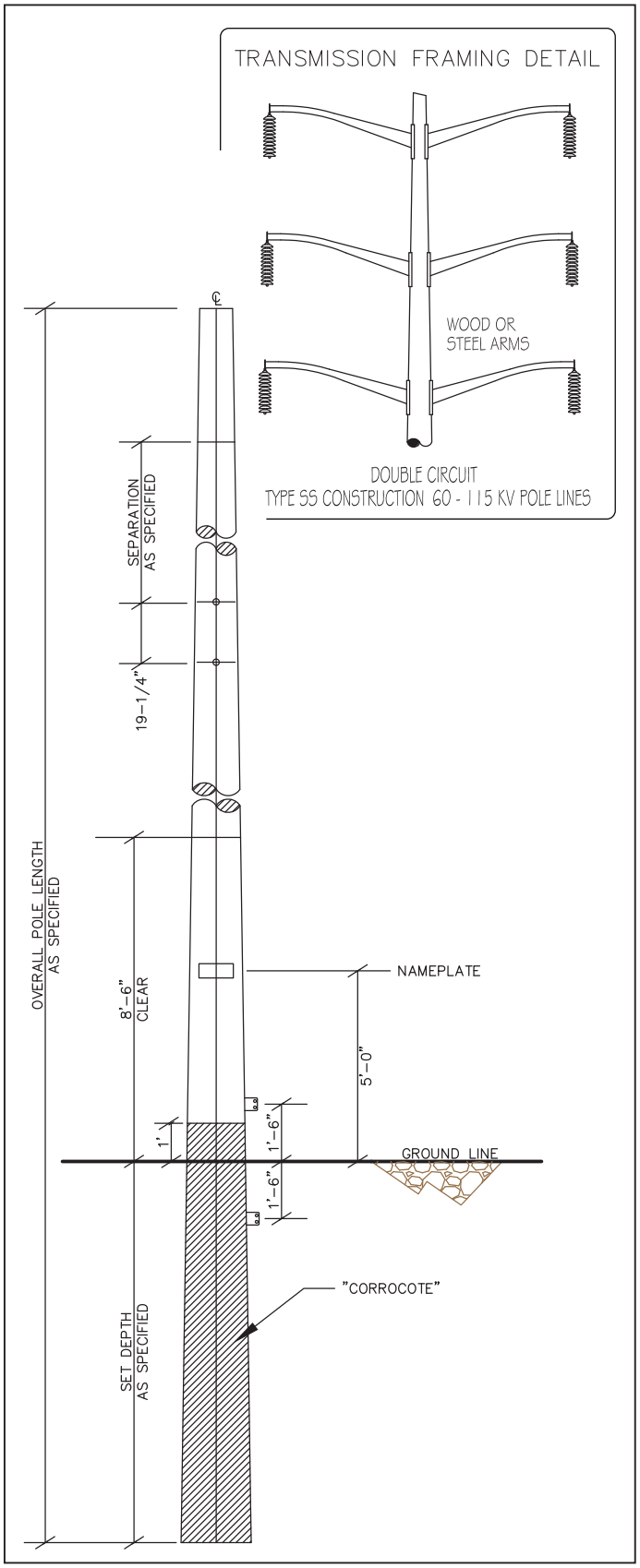
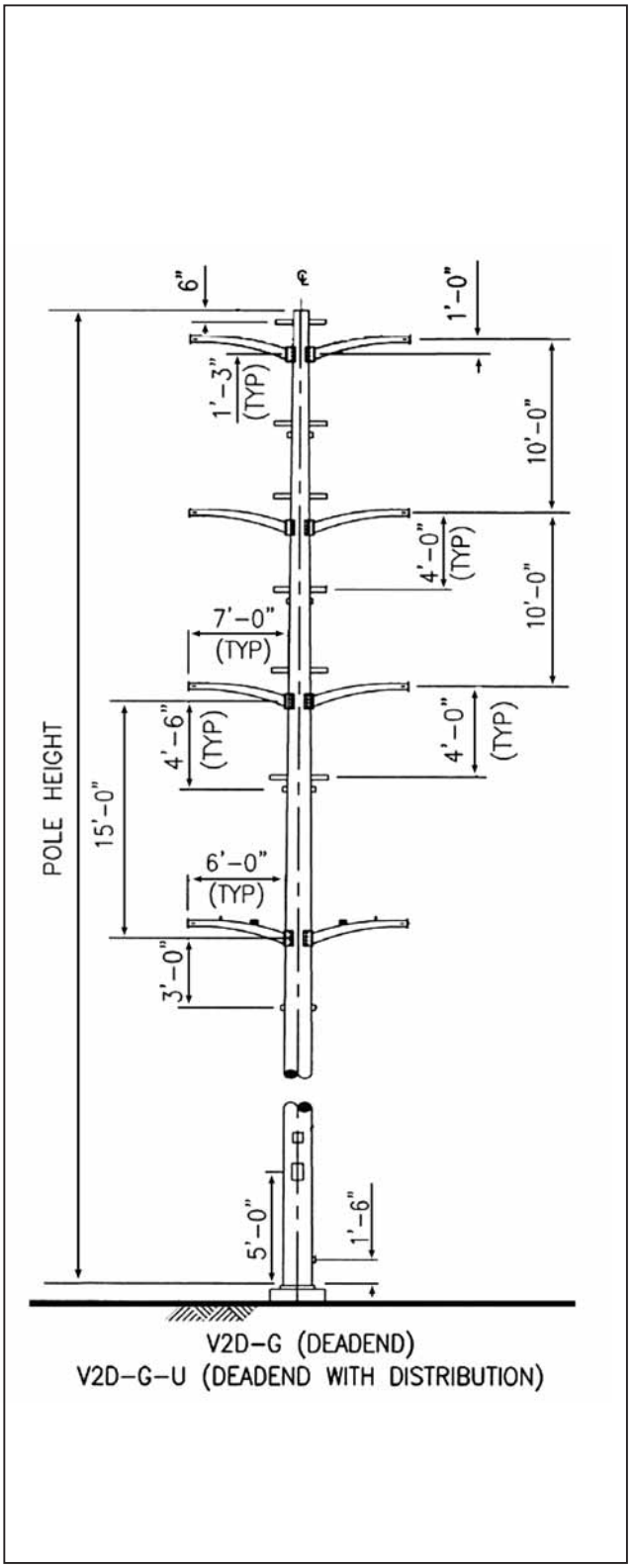
**Figure 2-3**
Typical Towers




Preliminary and subject to change based on California Public Utilities requirements, final engineering, and other factors.

SOURCE: PG&E, 2010

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**Figure 2-4**
Typical Poles

### 2.5.4 Conductor Modifications

Both the Hollister Tower and Hollister Pole Segments of the Proposed Project would require two 115 kV circuits, with each circuit consisting of three conductors. The conductors would be 477 kcmil SSAC and 0.846 inch in diameter. The minimum ground to conductor clearance would be 30 feet. As noted above, the average span length for the Hollister Tower and Hollister Pole Segments would be approximately 850 and 295 feet, respectively. No other infrastructure or facilities would be collocated on the Hollister Tower Segment. Approximately seven miles of one distribution circuit would be collocated on the Hollister Pole Segment. No other infrastructure would be collocated on the Hollister Pole Segment.

### 2.5.5 Substation Modifications

The Hollister Substation is located in San Benito County, near the City of Hollister, approximately one-quarter mile west of San Felipe Road. Modifications to the existing Hollister Substation would include the relocation of two existing poles on the substation property, updating relay settings, and changing the 115 kV bus conductors. All substation modifications would occur within the existing footprint of the substation yard.

## 2.6 Right-of-Way Requirements

PG&E currently owns ROW easements along the entire Proposed Project alignment, except for the approximately 1.3-mile Proposed River Crossing. Relocation of this portion of the Proposed Project would require acquisition of approximately eight acres of new PG&E ROW. In addition, the Proposed Project would require approximately 0.25 miles of new access roads. These roads would require the acquisition of approximately 0.43 acres of new ROW. For land that PG&E does not own, PG&E would negotiate easements and other property rights with private landowners for permanent or temporary use. The proposed alignment requiring new ROW would traverse agricultural fields, span the San Benito River, and cross open grazing lands in the Flint Hills.

## 2.7 Construction

This section describes the construction methods that would be used to complete the various components of the Proposed Project, including power line construction and replacement and substation modifications.

### 2.7.1 Power Line Construction and Replacement

Power line construction and replacement would require:

- staging areas/helicopter landing zones/pull and tension sites;
- access roads;
- removal of existing towers and poles and topping of existing wood poles;
- new structure installation (traditional and helicopter);
- vegetation clearance and removal;
- erosion and sediment control and pollution prevention; and
- site cleanup and waste disposal.

### 2.7.1.1 Staging Areas/Helicopter Landing Zones/Pull and Tension Sites

Construction of the Proposed Project would require temporary staging and storage areas to store materials and equipment during the construction process. Staging areas also would used as helicopter landing zones. Materials and equipment typically staged at these areas would include, but would not be limited to:

- Construction materials (tower steel bundles, tubular poles, anchor bolts, rebar, conductor, insulators and hardware);
- Construction vehicles and facilities (heavy equipment, light trucks, construction trailers with electrical and communications connections, and portable sanitation facilities);
- Helicopters;
- Crew vehicles;
- Material that would be removed from the existing power lines (conductor, steel, concrete, and other debris). These materials would be temporarily stored in staging areas as the material awaits salvage, recycling, or disposal; and
- Portable stations for concrete clean-up. The establishment of such stations at staging areas throughout the study project area would minimize time between the concrete pour and truck cleanout. The locations of all such stations would be approved by an environmental monitor. Each cleaning station would include dike walls and tarping to allow washed materials to be contained properly for disposal.

It is anticipated that approximately 11 staging areas (five along the Hollister Tower Segment and six along the Hollister Pole Segment), each approximately five acres in size, would be required during construction. Staging areas would be located away from general public access, and therefore not fenced. Land disturbed at the staging areas, if any, would be restored to preconstruction conditions or to the conditions agreed upon between the landowner and PG&E following the completion of construction of the Proposed Project. The site layouts would be approved by the Proposed Project's environmental monitor, and work crew activities would follow all PG&E environmental guidelines. Staging areas would be set back at least 50 feet from streams, creeks, or other water bodies to avoid impacts to riparian habitat.

In addition to staging areas, approximately 19 pull and tensions sites (hereinafter referred to as pull sites) have been identified along the Proposed Project alignment (seven along the Hollister Tower Segment and 12 along the Hollister Pole Segment). Pull sites are required to install or replace a length of conductor. Typical pull sites are approximately 100- by 300-feet in area, however the actual size may vary depending on existing terrain in the area. Typical equipment used at pull sites would include, but not be limited to, the following:

- Pullers/tensioners;
- Aerial lift trucks;
- Crew trucks; and
- Reel dollys.

**Table 2-3** identifies preliminary proposed numbers, locations, and areas of staging areas and pull sites for the Hollister Tower and Hollister Pole Segments. These areas are illustrated in Figures 2-2a though 2-2i.

**TABLE 2-3**
**PROPOSED STAGING AREAS FOR THE HOLLISTER TOWER AND POLE SEGMENTS**

| Site Identification | Type of Site | Approximate Area (acres) | Preliminary Proposed Location[a] |
|---|---|---|---|
| Hollister Tower Segment | | | |
| TP-1 | Tower pull site | 0.34 | Between Towers 37/232 and 0/3A |
| TP-2 | Tower pull site | 0.31 | Centered on Tower 0/04 |
| TLZ-1 | Tower landing zone and lay down area | 5.02 | West of Tower 0/05 |
| TP-3 | Tower pull site | 0.34 | South of Tower 0/06 |
| TP-4 | Tower pull site | 0.34 | Between Towers 0/06 and 0/07 |
| TLZ-2 | Landing zone and lay down area | 5.02 | Southwest of Tower 2/16 |
| TP-5 | Tower pull site | 0.68 | Between Towers 3/21 and 3/22 |
| TLZ-3 | Landing zone and lay down area | 5.02 | East of Tower 3/22 |
| TLZ-4 | Landing zone and lay down area | 5.00 | West of area between Towers 5/32 and 5/33 |
| TLZ-5 | Landing zone and lay down area and pull site | 5.00 | West of and centered on Tower 5/35 |
| TP-6 | Tower pull site | 0.69 | West of and centered on Tower 5/35 |
| TP-7 | Tower pull site | 0.24 | Centered on Towers 6/40B and 6/40A |
| *Subtotal Hollister Tower Segment* | | *28.00* | |
| Hollister Pole Segment | | | |
| PLZ-1 | Pole landing zone and lay down area | 5.37 | South of Pole 13/04 |
| PP-1 | Pole pull site | 0.34 | South of Pole 13/04 |
| PP-2 | Pole pull site | 0.34 | East of Pole 13/05 |
| PLZ-2 | Pole landing zone and lay down area | 5.00 | South of Pole 13/19 |
| PP-3 | Pole pull site | 0.34 | South west of Pole 14/09 |
| PP-4 | Pole pull site | 0.29 | East of Pole 14/09 |
| PP-5 | Pole pull site | 0.26 | Northwest of Pole 15/01 |
| PP-6 | Pole pull site | 0.38 | Northeast of Pole 15/01 |
| PP-7 | Pole pull site | 0.33 | West of Pole 16/01 on new alignment |
| PP-8 | Pole pull site | 0.33 | East of Pole 16/01 on old alignment |
| PLZ-3 | Pole landing zone and lay down area | 4.98 | Northeast of Pole 16/01 – end of Proposed River Crossing segment |
| PLZ-4 | Pole landing zone and lay down area | 4.90 | North of Poles 18/16 and 18/17 |
| PP-9 | Pole pull site | 0.53 | Between Poles 18/17 and 19/00. |
| PP-10 | Pole pull site | 0.44 | East of Poles 20/03 and 20/05 |
| PLZ-5 | Pole landing zone and lay down area | 4.94 | South of Poles 20/17 and 20/18 |
| PP-11 | Pole pull site | 0.26 | East of Pole 22/02 |
| PP-12 | Pole pull site | 0.32 | West of Pole 22/05 |
| PLZ-6 | Pole landing zone and lay down area | 5.00 | East of Hollister Substation – end of alignment |
| *Subtotal Hollister Tower Segment* | | *34.35* | |
| **Total project** | | **62.35** | |

[a] Refer to Figures 2-2a through 2-2i for preliminary proposed locations of towers and poles.

SOURCE: PG&E, 2009b.

### 2.7.1.2 Access Roads

The Proposed Project would be accessed via existing roads, new permanent access roads to be constructed, and overland access routes. **Table 2-4** presents estimated miles of each type of access road required for the Proposed Project. As shown, approximately 10.11 miles of existing roads that would be used for the Proposed Project would not require any substantial upgrades prior to project construction. Approximately 1.53 miles of existing roads would be upgraded to access the Proposed Project. Upgrades would occur within the existing access road corridor and would include minor grading and vegetation removal. Approximately 0.25 miles of new permanent access roads would be constructed as part of the Proposed Project. Construction of such roads would include clearing of all vegetation within the road corridor using a dozer or scraper; no placement of gravel would occur. In addition, overland travel would occur on approximately 5.58 miles of gently sloping grassy areas and rangeland without the preparation of a road during project construction.

**TABLE 2-4**
**ACCESS ROADS**

| Type of Access | Width | Miles | Temporary Impact (acres) | Permanent Impact (acres) |
|---|---|---|---|---|
| Existing dirt and paved roads | ~15 feet total (~30 feet at the corners) | 10.11 | -- | -- |
| Existing roads to be improved | ~15 feet total (~30 feet at the corners) | 1.53 | -- | -- |
| New permanent road | ~15 feet total (~30 feet at the corners) | 0.25 | -- | 0.43 |
| Overland travel | - | 5.58 | 7.71 | -- |
| **Total** | | **17.47** | **7.71** | **0.43** |

NOTE: Overland travel miles were increased by 0.19 mile to reflect overland travel that would be associated with the southern shoo-fly connection, which was not described in the PEA.

SOURCE: PG&E, 2010.

Both private and public roads would be used to access the Proposed Project. Along the Hollister Tower Segment, access via public roads is limited. One access point to the Hollister Tower Segment would be located at the intersection of the power line and SR 156, on the northerly portion of the segment. Other access points would include private dirt roads on large ranch properties adjacent to San Juan Grade Road.

Typical access roads would have a minimum drivable width of approximately 15 feet, except at corners where roads would need to have a drivable width of approximately 30 feet to accommodate necessary turning radii.

Approximately ten road crossings would be required over linear water features. These crossings would be protected with a steel plate, temporary bridge, or construction mats. One new culvert would be installed near Pole 18/14 to accommodate year-round access on an overland route. All

work in Corps jurisdictional drainages would be conducted during the dry season (i.e., May 1 through October 31). Any excavation necessary for installation of the culvert or placement of gravel would be conducted from the bank of the drainage using an excavator or backhoe. Fencing would be installed to delineate the work area and no work would occur outside of the designated work area. A biological monitor would be onsite during all work within the drainage.

Existing and proposed access roads are shown in Figures 2-2a through 2-2i.

## 2.7.1.3 Tower, Pole and Top Removal

Proposed Project construction would include removal of 36 existing LSTs, 154 existing wood poles, and topping of 17 existing wood poles.

### *Tower Removal*

The Hollister Tower Segment would include dismantling and removal of 36 existing LSTs. A crane or helicopter would be used to take down the existing towers and remove them from the project area. Where removal could otherwise cause extensive environmental impacts, towers would be partially dismantled with bases left behind. In all other cases, tops of exposed foundations would be broken up and removed. Old foundation holes would be filled with existing soil excavated from new tower foundations.

### *Pole Removal*

The Hollister Pole Segment would include removal of 154 existing wood poles. Wood poles would be removed by a line crew. The line crew would access each pole site with a line truck and trailer or a boom truck, which consists of a small crane mounted on a flatbed truck. The wood poles would be loosened from the ground with a hydraulic jack, removed from their holes using a line truck or boom truck, and transported from the site on the trailer or boom truck. If the hole is not reused, a backhoe and dump truck would backfill the hole with native soil from Proposed Project construction activities (e.g., pole excavation). If required, the surface would be seeded with an appropriate revegetation seed mix.

### *Top Removal*

The Hollister Pole Segment would include topping of 17 existing wood poles located within the San Benito River floodplain and adjacent agricultural field. Topping involves removal of the power portion of an existing pole while retaining the height necessary to carry existing distribution lines. The wood poles that would be topped as part of the Proposed Project would not be removed because they would continue to carry the lower distribution line that provides service to local costumers.

Poles to be topped would be accessed by a pole crew on foot and, where feasible, by a line truck and trailer or a boom truck. The walk-in crew would climb the pole and cut off the top. The top would then be removed, either by hand or by helicopter. If use of a line truck or book truck is feasible, the truck would be used to hold the top of the pole in place. A chainsaw would be used to cut the pole, and the top section would be removed and disposed of in an appropriate landfill.

## 2.7.1.4 New Structure Installation

### *Tower Installation*

The Hollister Tower Segment would include installation of 37 new LSTs. New tower foundation footings would be augured in place; footing depths would range between 12 to 15 feet deep. New rebar cages would be placed in the newly-drilled hole, and concrete would be poured at foundation locations. The new towers would then be erected and bolted together.

There would be seven pull sites approximately 300- feet by 100-feet in area that would require preparation. Pull sites would be located between Towers 37/232 and 0/3A, centered on Tower 0/04, south of Tower 0/06, between Towers 0/06 and 0/07, between Towers 3/21 and 3/22, west of and centered on Tower 5/35, and centered on Towers 6/40B and 6/40A. Temporary crane pads would need to be built if the terrain would not allow for safe operation of a crane. The size of the pad would vary based on site-specific conditions.

### *Pole Installation*

While the Hollister Tower Segment and the Hollister Pole Segment are being constructed, the existing Watsonville–Salinas 60 kV power line, which parallels the Hollister Tower Segment northerly to the Hollister Pole Segment, would temporarily be upgraded to 115 kV and serve as the 115 kV feed to the Hollister Substation. Consistent with PG&E's current standards for 60 kV lines, the Watsonville-Salinas 60 kV line is configured with insulators that can support 115 kV. To connect the Watsonville–Salinas 60 kV power line to the 115 kV system, temporary shoo-fly line tie-in connections would be installed that would consist of ten wood poles and conductor at the southern end of the Hollister Tower Segment and three wood poles and conductor at the northern end of the Hollister Tower Segment, as well as two wood poles at the existing Llagas Substation in Gilroy (see Figures 2-2a and 2-2e).

The Hollister Pole Segment would include installation of 135 new LDS poles and 30 new TSPs. Specific procedures for installing each pole type are described below.

Pole locations would be sited to maximize spans and avoid environmentally sensitive areas. At each pole location, the work area would be flagged by PG&E and the environmental monitor prior to construction. For pole installations near wetlands, riparian habitat, or special-status plant or wildlife habitat, a biological monitor (a trained professional biologist) would approve the type and placement of environmental protections and would monitor the area during construction activities.

An approximately 50-foot radius around each pole would be required for a work area. Some work areas may require removal of vegetation and installation of silt fencing (e.g., during the wet season, if required). Temporary work areas around poles generally would not require grading or surfacing.

There would be 12 pull sites, each approximately 300 feet by 100 feet, which would require preparation. Pull sites would be located south of Pole 13/04, east of Pole 13/05, southwest of Pole 14/09, east of Pole 14/09, northwest of Pole 15/01, northeast of Pole 15/01, west of pole

16/01, east of Pole 16/01, between Poles 18/17 and 19/00, east of Poles 20/03 and 20/05, east of Pole 22/02, and west of Pole 22/05.

Drilling and excavation of holes for all pole types would use a hole auger, backhoe, dump truck, and crew truck, all of which would access pole locations via existing or proposed roads where available and over land routes where roads do not exist. A hole auger consists of an auger mounted on a heavy truck chassis or piece of track equipment that would be used to drill holes.

Aerial lift trucks would be used to install, transfer, and remove conductors. Crew trucks would be used to transport the crew, their hand tools, and other materials to and from pole locations. Crew trucks would be used to minimize the number of vehicles accessing each site and to reduce vehicle-related impacts.

### LDS and Wood Shoo-Fly Pole Installation

LDS poles would be used to support straight spans and wood poles for the shoo-fly connections would be used to temporarily upgrade the Watsonville-Salinas line during construction of the Project. These poles would be set directly into the soil to a depth of approximately seven to 12 feet below grade. Installation of LDS and wood shoo-fly poles would involve the following steps: staking the pole location, flagging the work area, excavating the hole, installing the pole using a line truck, backfilling, transferring wire and equipment, removing the old conductor and stringing the new conductor, removing the old pole, and backfilling.

### TSP Installation

All angle poles would be TSPs, which eliminates the need for wire down guys. Installation of TSPs would involve the following steps: staking the pole location; flagging the work area; installing silt fencing (if required); preparing the crane pad (if required); excavating the hole; installing forms, rebar, and anchor bolts; pouring concrete; removing forms; placing gravel around and grooming the base area; installing the new pole; removing the old conductor and stringing the new conductor; removing the old wood pole; and spreading any excess soil onsite and trucking other construction materials offsite for disposal.

All TSPs would have concrete pier foundations that are approximately five to seven feet in diameter. TSPs would be set approximately 15 to 30 feet deep. A boom truck would be used to haul foundation forms, anchor bolts, rebar, and pole structures to the TSP locations. The boom truck would also be used to place foundation forms, anchor bolts, and rebar in place prior to pouring of concrete for the foundation and to remove the forms following completion of the foundation.

A concrete truck consisting of a four-wheel drive mixer capable of delivering eight yards of concrete would be used to deliver and pour concrete for the TSP foundations. Concrete trucks would not be washed out at pole locations, but rather would be rinsed using the portable stations established for concrete clean-up at staging areas throughout the project area. A backhoe would be used to place gravel around the TSP foundation after formwork has been removed and to groom the area immediately surrounding all pole installations. A crane would be used to place TSPs on the foundations.

PG&E would temporarily install approximately two wood poles (shoo-fly tie-in connections) at each angle of the existing Hollister Pole Segment to accommodate replacement of the existing wood pole with a new TSP.

### *Helicopter Installation*

Helicopters would be used to install towers and poles in locations where overland access is not possible or access is difficult due to topography and vegetation. Towers 3/18 and 4/25 are expected to be installed entirely by helicopter. An excavator is expected to drive to Towers 3/17, 3/19, 3/20, and 4/24 to install the foundations; and the towers are expected to be installed by helicopter. Helicopters would be used to remove and deliver tower sections, materials, equipment, concrete, and workers to these tower locations and to other locations where conventional access is difficult or as otherwise warranted. Preliminary locations for temporary helicopter landing zones (i.e., staging areas) are shown in Figures 2-2a through 2-2i. An area of approximately 200 by 200 feet would be required for helicopter clearance. Helicopters of varying size would use the temporary landing zones to pick up and drop off crew and materials, and to stage and refuel. These areas would be sprayed with water as needed for dust control.

As required by the Federal Aviation Administration (FAA), PG&E would require the helicopter vendor to develop and implement a Helicopter Lift Plan.

### *Guard Structures*

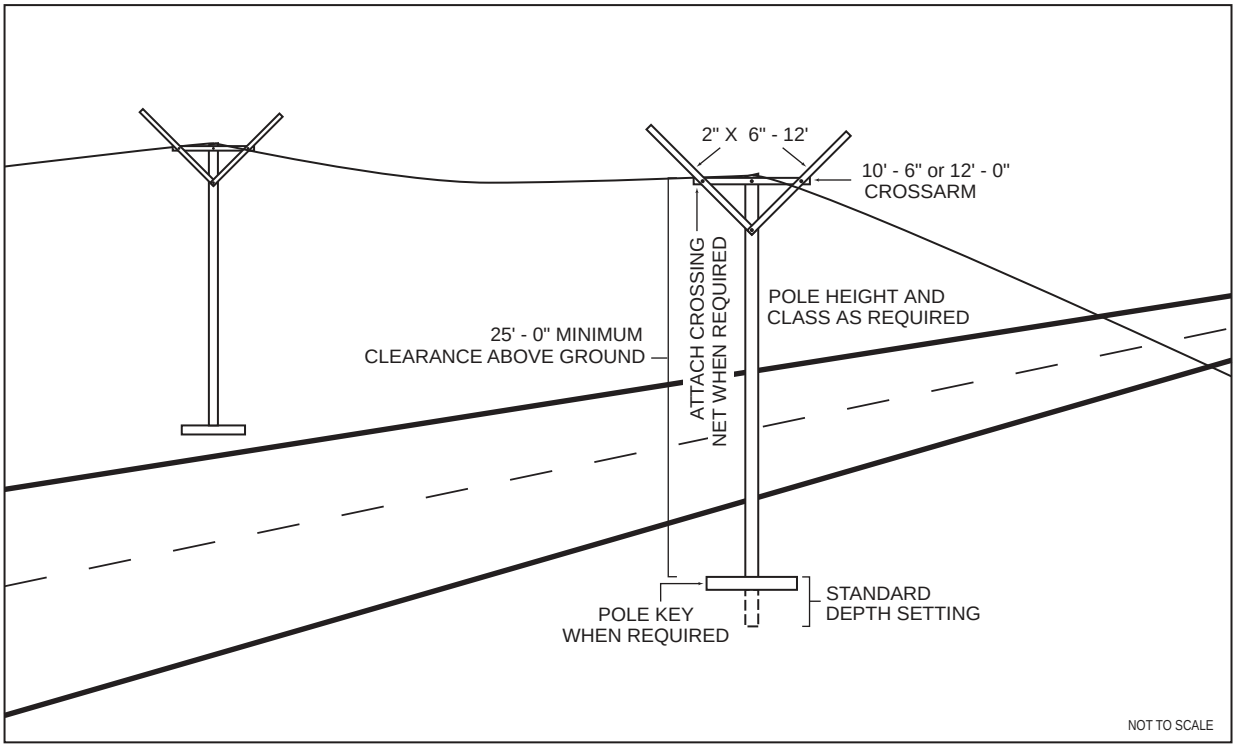
All of the old conductors would be removed under the Proposed Project, and new conductors would be installed. Prior to stringing conductors, temporary clearance structures would be installed at road crossings and other locations where the new conductors could otherwise come into contact with electrical or communication facilities, or vehicular traffic during installation. The temporary structures would be installed across SR 156, San Juan Highway, San Justo Road, and the Union Pacific Railroad crossing.

Temporary structures would consist of a wood pole with a frame at the top that resembles a “Y” or “H”. See **Figure 2-5** for examples of temporary clearance structures that would be installed under the Proposed Project. These structures would be placed on each side of the road or other location being crossed. Foundations and grading would not be required. Methods for installation and removal of clearance structures would be similar to those described for LDS poles; however, the wood poles would be installed approximately six to ten feet deep. Netting would be installed between the two Y-frame or H-frame structures as needed to avoid contact between the new conductor and an existing facility.

Where necessary, traffic control would be provided during installation and removal of these temporary clearance structures, and as specified in Caltrans, San Benito County and Monterey County encroachment permits.

### *Replacement of Existing Conductors*

To replace an existing conductor with a new conductor, the existing conductor would first be detached from its support structure and temporarily lifted. Rollers would then be installed at the




SOURCE: PG&E, 2010

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**Figure 2-5**
Examples of Temporary Clearance Structures

conductor's attachment point, and the conductor would be placed onto the rollers. Installation of rollers and detachment of the existing conductor would require aerial lift of the conductors by either a boom truck or a helicopter.

Once rollers are in place for the entire section of conductor being replaced, the existing conductor would be pulled out of place. A pulling (sock) line would be attached to the existing conductor, which would then be used to pull the new conductor into place. Removal of the existing conductor and installation of the new conductor would require establishment of pull and tension sites. Equipment at the pull sites would pull the conductor onto a reel, where it would be collected for salvage. Equipment at the tension site would feed new conductor along the rollers previously installed at each structure while maintaining tension in the line so that it would not sag to the ground. Once the new conductor is in place, the rollers would be removed, and the new conductor would be attached to the structures.

#### *Installation of New Conductors*

Prior to the installation of a new conductor, rollers would be installed at vacant positions on new structures using one helicopter lift. The helicopter would then be used to install a pulling (sock) line in the rollers. Once installed, the sock line would be used to pull the new conductor into place. When the conductor has been pulled through the rollers, an aerial lift would typically be used to remove the rollers and attach the conductor to the structures.

### 2.7.1.5 Vegetation Clearance and Tree Removal

Approximately 136 trees would be removed along the Hollister Tower Segment. However, the majority of these trees have a diameter at breast height (dbh) of 12 inches or less. Approximately 85 to 90 percent of these trees are coastal live oaks with the remaining trees consisting of valley oak, oak, bay and live oak. Approximately 30 trees to be removed have a dbh of 12 to 24 inches while six trees have a dbh of 24 to 35 inches.

For the Hollister Pole Segment approximately five trees would be removed including three coastal live oaks, one black walnut and one fruit tree. Aside from trimming, no other tree work is anticipated along the Hollister Pole Segment. Trees along Buena Vista Road are already highly maintained by distribution inspections. Orchards that parallel the power line between Poles 20/08 and 21/17 are set back from the existing ROW and are trimmed.

PG&E vegetation management policy prohibits removal of trees from riparian areas without acquiring appropriate permits. If trimming is required within a riparian area, the trim is not to exceed 10 percent of total tree.

### 2.7.1.6 Land Disturbance

A summary of land that would be temporarily and permanently disturbed during construction of the Proposed Project is provided in **Table 2-5**. An estimated 85.28 acres would be temporarily disturbed during construction and approximately 0.48 acres would be permanently disturbed.

**TABLE 2-5**
**APPROXIMATE TEMPORARY AND PERMANENT DISTURBANCE**

| Project Activity | Approximate Temporary Disturbance[a] (acres) | Approximate Permanent Disturbance[b] (acres) |
|---|---|---|
| Hollister Tower Segment (37 towers) | | |
| Landing zones, pull sites, etc. | 28.00 | |
| Roads | 5.97 | 0.43 |
| Tower work areas | 2.12 | 0.04 |
| **Tower Segment** | **36.09** | **0.47** |
| Hollister Pole Segment (165 poles) | | |
| Landing zones, pull sites, etc. | 34.35 | |
| Roads | 7.71 | |
| Pole work areas | 7.13 | 0.01 |
| **Pole Segment Total** | **49.19** | **0.01** |
| **Project total** | **85.28** | **0.48** |

NOTE: Estimated disturbance acreages for removing and installing towers and poles are based on the following assumptions: temporary disturbance for the Hollister Tower Segment is 2,500 square feet per tower, and permanent disturbance is 12.5 square feet per tower, except for the four towers that are in oak woodland or coastal scrub vegetation communities, where the permanent footprint is 400 sq. feet per tower. Temporary disturbance for the Hollister Pole Segment is 1,600 square feet, and permanent disturbance is 30 square feet per pole. Because the majority of towers and poles already exist and are being replaced in kind, the only new permanent disturbance is limited to the Proposed River Crossing and four towers to be installed in oak woodland or coastal scrub vegetation communities in the Tower Segment.

[a] Temporary disturbance represents construction activities associated with installation and removal of towers and poles.
[b] Permanent disturbance represents the footprint of the footings of each tower; access remains under each tower (e.g., for cattle grazing), including the four towers that are in oak woodland or coastal scrub vegetation communities.

SOURCE: PG&E, 2010.

### 2.7.1.7 Erosion and Sediment Control and Pollution Prevention during Construction

PG&E would prepare a Storm Water Pollution Prevention Plan (SWPPP) for the entire project, and workers would receive written and tailboard instructions on the plan. Implementation of the SWPPP would protect surface waters by minimizing construction-related erosion and the entry of related sediments into nearby waterways. As part of the SWPPP, PG&E would develop and implement a Spill Prevention Control and Countermeasure Plan (SPCCP). The SPCCP would be completed and included in the SWPPP before any construction activities begin. PG&E would routinely inspect the construction areas to verify that the control measures specified in the SWPPP are properly implemented and maintained.

### 2.7.1.8 Cleanup and Post-Construction Restoration

Crews would be required to maintain clean work areas as they proceed along the line and would be instructed to leave no debris whatsoever in the project area outside designated debris collection locations. PG&E would develop a set of post-construction restoration measures in a Habitat Mitigation Plan (HMP), to address project-specific restoration plans and species-specific mitigation plans. PG&E would reseed all areas where major ground disturbing activities occur such as pull and tension site, helicopter landing zone areas, and staging areas. The particular

components of a native species reseeding mix, along with seeding methods, would be included in the HMP to address both (1) erosion control after ground disturbing activities as well as (2) habitat restoration for temporary impacts to listed species in grassland areas (to benefit San Joaquin Kit Foxes, California Tiger Salamanders, and California Red-legged Frogs). Reseeding of major areas of ground disturbance would be implemented under appropriate conditions (for example in the fall following construction).

After restoration activities have occurred, these restored areas would be compared with reference areas to ensure that restoration was successful. Performance criteria would include target cover estimates (comparable to reference sites) as well as an invasive weed component (to ensure that invasive plants are not established beyond existing thresholds). All reseeded areas would be monitored following restoration until performance criteria are met.

Project-generated refuse, spoil, and trash would be kept onsite with compliant containers and disposal processes or transported to the nearest service center. Storage of oil and treated wood onsite would require site secondary containment, managed storage, and labeling with manifested disposal/recycling processing. Insulators would be stored separately and recovered. All steel, wire, and hardware material would be returned to the appropriate PG&E yard for sorting. Materials that are not re-usable would be separated by material type (e.g., copper and steel) and sent to a recycler.

For other areas, upon completion of the project, the areas could be left as specified in the applicable lease agreements with property owners (i.e., for nature to take its course). The site layouts would be approved by the Proposed Project's environmental monitor, and work crew activities would follow all PG&E environmental guidelines.

## 2.7.2 Substation Modifications and Construction

Construction activities at Hollister Substation would occur entirely on PG&E property. Materials and equipment would be stored on PG&E property. Each substation work crew would use a crew truck that would be located within the existing substation yard.

## 2.7.3 Construction Workforce and Equipment

It is estimated that 56 craft laborers per day would be required to construct the Proposed Project at its peak. The estimated number of personnel required for construction of the Proposed Project is summarized in **Table 2-6**.

Construction would be performed by either PG&E construction crews or contractors, depending on the availability of PG&E construction personnel at the time of construction. Contractor construction personnel would likely be from the local area or adjacent areas and would be managed by PG&E construction management personnel. **Table 2-7** summarizes crews excepted to be required during project construction and their various roles.

**Table 2-8** shows equipment expected to be used during Proposed Project construction. **Table 2-9** provides preliminary estimates of equipment usage during each phase of construction.

**TABLE 2-6**
**PRELIMINARY ESTIMATES OF CONSTRUCTION WORKERS**

| Construction Phase | Estimated Maximum Daily Workers |
|---|---|
| Hollister Tower Segment | 23[a] |
| Establish staging area<br>Road construction | 5 |
| Tower installation<br>Power line reconductoring | 23 |
| Hollister Pole Segment | 23[a] |
| Establish staging area<br>Road construction | 5 |
| Pole installation<br>Power line reconductoring | 23 |
| Hollister Substation construction | 10 |

[a] Assumes that establishment of staging areas and road construction would occur prior to tower and/or pole installation and reconductoring, therefore work crews would not overlap.

SOURCE: PG&E, 2009b.

**TABLE 2-7**
**CREWS EXPECTED TO BE REQUIRED DURING PROJECT CONSTRUCTION**

| Crew | Role |
|---|---|
| Road | The road crew would be a contract crew to PG&E responsible for development of the access roads, crane pads, and gates[a]. In addition, the road crew would perform post-construction road cleanup activities. |
| Site preparation | The site preparation crew would be a contract crew to PG&E responsible for development of the landing zones and staging areas, pull and tension sites, compliance with the Stormwater Pollution Prevention Plan, and other best management practices (BMPs). In addition, the site preparation crew would perform post-construction site cleanup activities. |
| Light-duty helicopter | The light-duty helicopter crew would be a contract crew to PG&E responsible for obtaining Federal Aviation Administration (FAA) permits, the helicopter (including maintenance and refueling), transporting work crews and materials to pole and tower sites, and removal and installation of the sock line, as needed. |
| Heavy-duty helicopter | The heavy-duty helicopter crew would be a contract crew to PG&E responsible for procuring FAA permits and the helicopter (including its maintenance and refueling), transporting new poles and towers to pole and tower sites, and installing poles and towers using a heavy-duty helicoptor, as needed. |
| Tower | The tower crew (either a PG&E or contract crew) would be responsible for the excavation contractor, the heavy-duty helicopter contractor, and the light-duty helicopter contractor. This crew would also partner with the line crew in development of pole and tower-related staging areas and installation of foundations, tubular steel poles, and towers. |
| Line | The line crew (either a PG&E or contract crew) would be responsible for managing a light-duty helicopter crew and would partner with the tower crew in development of tower staging areas, development of pole- and line-related staging areas, establishment of pull and tension sites, installation of rollers and crossbeams, contract removal/installation of the sock line, installation of light-duty steel poles and temporary wood poles, and installation of new conductor. |
| Substation | The substation crew (either a PG&E or contract crew) would be responsible for all substation site activity. |

**TABLE 2-7 (Continued)**
**CREWS EXPECTED TO BE REQUIRED DURING PROJECT CONSTRUCTION**

| Crew | Role |
|---|---|
| Environmental and biological monitors | The environmental monitor would be a contractor to PG&E responsible for inspection of all project construction activity, including inspection of work sites prior to the start of construction activity, monitoring of activities and cleanup, preparing and submitting California Public Utilities Commission (CPUC) compliance reports, and otherwise ensuring compliance with the CPUC Permit to Construct. If warranted, a qualified biological monitor would be utilized in areas with sensitive biological resources. |

[a] 16-foot wide "Powder River" gates would be installed.

SOURCE: PG&E, 2009b.

**TABLE 2-8**
**EQUIPMENT EXPECTED TO BE USED DURING PROJECT CONSTRUCTION**

| Type of Equipment | Use |
|---|---|
| Aerial lifts | Remove old conductor and install new conductors |
| Backhoe | Excavate foundations, spoil removal, backfill |
| Boom truck | Erect structures |
| Low Drill | Erect structures |
| Concrete mixer truck | Haul concrete |
| Crane | Erect structures |
| Crew-cab truck/pick-ups | Transport personnel, tools and materials |
| Dump truck | Haul Materials |
| Equipment/tool vans | Tool storage and transportation |
| Grooming/grading equipment:<br>Dozer<br>Water truck<br>Grader<br>Rock transport<br>Roller | Road construction and crane pads:<br>Move/compact soils<br>Compact soils and control dust<br>Properly pitch road for run-off<br>Deliver road base for access roads, staging areas, and pull sites<br>Compact road and surfaces |
| Helicopters (light and heavy duty) | Erect poles and towers, install sock line, haul materials, equipment, and people |
| Hole auger | Excavate holes |
| Hydraulic jack | Remove wood poles |
| Line truck and trailer | Haul conductor, poles, equipment, materials, and people, and to install pole/ conductor |
| Materials storage units | Store material/tools |
| Mobile offices | Supervision and clerical office |
| Puller | Install conductor |
| Reel dolly | Install and move conductor |
| Tensioner | Install conductor |

SOURCE: PG&E, 2009b.

**TABLE 2-9**
**PRELIMINARY ESTIMATES OF PROJECT CONSTRUCTION EQUIPMENT AND USAGE**

| Construction Phase | Equipment Type | Approximate Hours/Day | Approximate Days/Year |
|---|---|---|---|
| Hollister Tower Segment | | | |
| Establish staging area<br>Road construction | Light truck, pick-up truck, water truck | 10 | N/A |
| Tower installation<br>Power line reconductoring | Grader/cat, helicopters, line trucks, pull rigs, pick-up trucks, tension device, fuel trucks, water trucks, line dolly, cranes, rewind trailers, bucket truck, cement mixer, hole digger, light truck, flat bed truck, fork lift, backhoe, dump truck, vibrating compactor. | 10 | 180 |
| Hollister Pole Segment | | | |
| Establish staging area<br>Road construction | Light truck, pick-up truck, water truck | 10 | N/A |
| Tower installation<br>Power line reconductoring | Grader/cat, helicopters, line trucks, pull rigs, pick-up trucks, tension device, fuel trucks, water trucks, line dolly, cranes, rewind trailers, bucket truck, cement mixer, hole digger, light truck, flat bed truck, fork lift, backhoe, dump truck, vibrating compactor | 10 | 180 |
| Hollister Substation construction | Bucket truck, pick-up truck, line truck | 10 | 20 |

SOURCE: PG&E, 2009b.

Construction efforts would occur in accordance with accepted construction industry standards. Construction activities generally would be scheduled during daylight hours (6:30 am to 5:00 pm). If different hours or days are necessary, PG&E would notify affected residents and the local planning department.

## 2.7.4 Construction Schedule

**Table 2-10** summarizes the length of time anticipated to construct each phase of the Proposed Project. The construction period is expected to begin in March 2011 and take approximately 15 months to complete the Hollister Pole Segment and the Hollister Tower Segment. Construction at the Hollister Substation is expected to take approximately one month. Because the critical electrical load carried by these power lines, construction may be limited to cooler weather when electrical demand is lower, thus limiting the construction schedule.

# 2.8 Operation and Maintenance

## 2.8.1 General Systems Monitoring and Control

Monitoring and control would not change as a result of the Proposed Project. Substation and power line monitoring and control devices would be installed per PG&E design standards and connected to the existing telecommunication and protection schemes at the Hollister Substation. As is currently the case, the power systems at this substation would be monitored 24 hours a day, seven days a week by system operators at the Moss Landing Substation.

**TABLE 2-10**
**PROPOSED CONSTRUCTION TIMETABLE**

| Proposed Project Component | Length | Duration (months) | Approximate Progression Rate | Estimated Schedule |
|---|---|---|---|---|
| Hollister Tower Segment | 7 miles | | | March 2011 – June 2012[a] |
| Establish staging areas<br>Road construction | | 1 week per area | NA | |
| Tower Installation<br>Power line reconductoring | | 14 | 616 feet per week (assumes 60 weeks) | |
| Hollister Pole Segment | 9 miles | | | March 2011 – June 2012[a] |
| Establish staging areas<br>Road construction | | 1 week per area | NA | |
| Tower Installation<br>Power line reconductoring | | 14 | 792 feet per week (assumes 60 weeks) | |
| Hollister Substation Construction | NA | 1 | NA | February 2012 – May 2012 |

[a] This assumes that construction would occur continuously and would not be affected by outage constraints. Actual construction schedule may be limited by such constraints.

SOURCE: PG&E, 2010.

## 2.8.2 Facility Inspection

Facility inspections would not change as a result of the Proposed Project. The regular inspection of power lines, instrumentation, and control and support systems is critical for safe, efficient, and reliable operation of electric power line facilities. Early identification of items needing maintenance, repair, or replacement would ensure continued safe operation of the reconstructed facilities and continued reliable service.

The current process involves three types of inspections: ground inspections, aerial inspections, and climbing if ground inspections indicate a need. The frequency of inspection varies, depending on factors such as the age of the system, structure type, vegetation conditions, and other factors. For the Proposed Project power lines, it is generally assumed that PG&E "maintenance troublemen" would inspect all structures from the ground annually for corrosion, misalignment, deterioration, and foundation failures. In addition, ground inspection would occur on selected lines to check the condition of hardware, insulators, and conductors. Inspection would include checking conductors and fixtures for corrosion, breaks, broken insulators, and failing splices.

PG&E would continue (without change) its current practice of conducting inspections by driving to the poles in a pick-up truck where feasible. Maintenance troublemen would use an all-terrain vehicle or go by foot where needed to minimize surface disturbance and where access otherwise is difficult. Aerial inspection using helicopters would be conducted if needed. Any specific access requirements that may result from right-of-way negotiations with property owners would be

documented and provided to the maintenance troublemen, with instructions to comply with all such requirements.

### 2.8.3 Maintenance Procedures

Existing maintenance procedures would not change as a result of the Proposed Project. Maintenance of the power line is generally conducted on an as-needed basis, when the troublemen discover something needing repair or in response to an emergency. A benefit of using mostly lattice steel towers, TSPs, and LDS poles for this project is that they generally require less maintenance than wood poles.

As is the current practice, PG&E's vegetation management inspector would inspect and document vegetation conditions annually. Where needed, vegetation inspections may be conducted more frequently. To maintain appropriate clearance under the power line, vegetation removal would be performed on an annual basis or as needed.

Vegetation clearance, which is part of ongoing annual maintenance along the existing power lines, would not change after project construction. A Consulting Utility Forester performs annual inspections of the project facilities and determines where tree trimming work is required. Generally the inspection takes approximately two weeks to complete, and tree trimming is completed within 60 to 90 days of inspection. Weather can affect the time between inspection and the completion of clearing in the area along the Hollister Tower Segment. This portion of the alignment cannot be worked on during rains, and roads must be allowed drying time after a rain event. Vegetation clearing along the Hollister Pole Segment is not similarly restricted by weather because of the existence of all season roads. Barring rain, the average time to complete tree trimming is approximately 30 days.

Equipment modifications at the Hollister Substation are not expected to change existing maintenance procedures. Maintenance on the equipment is performed as needed. Because the power line and substation modifications are not expected to require additional employees for operation and maintenance, the project would not generate additional traffic.

## 2.9 Applicant Proposed Measures

In the PEA, PG&E identified a number of applicant proposed measures (APMs) to avoid or reduce potential impacts associated with the Proposed Project. All APMs are considered part of the Proposed Project for the purpose of this MND. The Project Description, upon adoption of the Final MND, becomes part of the Mitigation Monitoring, Reporting and Compliance Program; therefore, implementation of these measures would be monitored by the CPUC.

The PEA identified APMs for the following resource areas: aesthetics; agricultural resources; air quality; biological resources; cultural resources; geology, soils, and seismicity; hazards and hazardous materials; hydrology and water quality; noise; public services; recreation; and public utilities. Each APM is listed below.

### *Aesthetics*

**APM AES-1: Limit construction hours to daylight hours as feasible.** Construction activities that are visible to the public and scheduled to occur after 6:00 p.m. or on weekends should not continue past daylight hours (which vary according to season) unless required because of project safety concerns or clearance requirements. This will reduce the amount of construction activities visible to viewer groups because most construction activities will occur during business hours (when most viewer groups are likely at work), and daylight construction will eliminate the need to introduce high-wattage lighting sources to be able to operate in the dark.

### *Agricultural Resources*

**APM AG-1: Compensate for reduced agricultural production and loss of use.** PG&E will offer appropriate compensation for land held in private ownership as part of the acquisition of temporary construction easements or permanent utility easements. PG&E will compensate property owners for removal of any structures, crops, or agriculture-related improvements required to construct the project. PG&E will negotiate easements with private landowners for the temporary or permanent use of agricultural areas. Upon completion of the project, the areas will be left as specified in the individual agreements. In addition, PG&E will prepare a SWPPP (see APM HYDRO 1 [Prepare and implement a Storm Water Pollution Prevention Plan] in Section 4.8, "Hydrology") to ensure that areas affected by construction are restored to pre-construction conditions.

### *Air Quality and Greenhouse Gas Emissions*

**APM AIR-1: Implement Monterey Bay Unified Air Pollution Control District (MBUAPCD) mitigation measures for construction fugitive dust.** PG&E will implement all applicable and feasible fugitive dust control measures required by MBUAPCD. This requirement will be incorporated into the construction contract. These measures include:

- Water all active construction sites at least twice daily. Frequency of watering should be based on the type of operation, soil, and wind exposure.
- Prohibit all grading activities during periods of high wind (over 15 mph).
- Haul trucks will maintain at least 2'0" of freeboard.
- On-site vehicles will be limited to a speed on unpaved roads that minimizes dust emissions.
- Cover all trucks hauling dirt, sand, or loose materials.
- Cover inactive storage piles.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- Sweep streets if visible soil material is carried out from the construction site.
- Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person will respond and take corrective action within

48 hours. The phone number of the MBUAPCD also will be visible to ensure compliance with Rule 402 (Nuisance).

- Limit the area under construction at any one time as feasible.

**APM AIR-2: Implement BMPs to reduce construction tailpipe emissions.** PG&E will implement all applicable and feasible measures to reduce tailpipe emissions from diesel-powered construction equipment. This requirement will be incorporated into the construction contract. These measures include:

- Maximize use of diesel construction equipment meeting CARB's 1996 or newer certification standard for off-road heavy-duty diesel engines.

- Use emission control devices at least as effective as the original factory-installed equipment.

- Maintain all diesel-powered equipment in a manner to minimize visible soot emissions.

- Locate stationary diesel-powered equipment and haul truck staging areas as far as practicable from sensitive receptors.

- Minimize unnecessary idling time through application of a "common sense" approach to vehicle use, so that idling is reduced as far as possible below the maximum of 5 consecutive minutes required by California law—if a vehicle is not required immediately or continuously for construction activities, its engines will be shut off. Construction foremen will include briefings to crews on vehicle use as part of pre-construction conferences. Those briefings will include discussion of a "common sense" approach to vehicle use.

- Use ground equipment in place of helicopters where practicable.

**APM AIR-3: Minimize greenhouse gas emissions during construction.** PG&E or its contractors will implement the following measures during construction to reduce greenhouse gas emissions:

- Encourage construction workers carpooling to the job site to the extent feasible.

- Encourage recycling of construction waste where feasible.

- Minimize welding and cutting by using compression of mechanical applications where practical and within standards.

- Encourage use of natural gas-powered vehicles for passenger cars and light-duty trucks where feasible and available.

- Minimize construction equipment exhaust by using low-emission or electric construction equipment where feasible.

### *Biological Resources*

**APM BIO-1: Conduct an environmental training and monitoring program for construction crews before beginning construction.** An Environmental Training and Monitoring Program for construction crews will be conducted before beginning construction and will be ongoing during construction activities for new crew members. The education program will include information about the federal and state Endangered Species Acts, the consequences for noncompliance with environmental laws, identification of special-status plant and wildlife species and wetland habitats, and review of mitigation measures. (Also see APM HYDRO-2 [Develop and implement a Spill Prevention Control and Countermeasure Plan], which requires communicating environmental concerns and appropriate work practices, including spill prevention, emergency response measures, and applicable BMPs, to all construction personnel in an Environmental Training and Monitoring Program.)

**APM BIO-2: Restrict vehicles to established roadways and approved access routes and staging areas.**

**APM BIO-3: Retain an environmental monitor onsite during construction activities near sensitive habitat.** An environmental monitor will be onsite during any construction activity near sensitive habitat to ensure implementation of, and compliance with, APMs. The monitor will have authority to stop construction activities and develop alternative work practices, in consultation with construction personnel and resources agencies, if construction activities are likely to impact special-status species or other sensitive biological resources.

**APM BIO-4: Set back staging areas from waterbodies to avoid impacts on riparian habitat.** Staging areas will be set back at least 50 feet from streams, creeks, or other water bodies to avoid impacts on riparian habitat.

**APM BIO-5: Contact the environmental monitor if special-status species are located.** If construction personnel observe special-status species within the work area prior to, or during construction activities, construction personnel will contact the environmental monitor. The monitor will notify PG&E contacts via an established communication protocol that will be developed prior to the start of construction. The USFWS Biological Opinion will state agency notification protocols should a federally-listed species be observed within the work area.

**APM BIO-6: Complete photodocumentation of sensitive habitat conditions before beginning and immediately after completing construction activities.** Photodocumentation of preconstruction habitat conditions will occur at all construction locations within sensitive habitats prior to the start of construction and immediately after completing construction activities.

**APM BIO-7: Prohibit trash, firearms, and pets in the project area during construction.** Additional APMs (identified below) to avoid and minimize specific potential impacts to biological resources will be implemented as necessary to reduce potentially significant impacts. In some cases, conducting preconstruction surveys to determine the presence or absence of special-status plant and wildlife species within the project area and subsequent avoidance of identified resources will avoid significant impacts. Due to the extent of the project, however, specific project components—such as grading new access roads and digging new tower footings—will affect areas where the presence of special-

status species is presumed based on occurrence of suitable habitat, CNDDB occurrences in relation to the project area, or results of prior biological resource assessment surveys.

**APM BIO-8: Restore upland and riparian habitat types temporarily disturbed during construction.** Following construction, PG&E will restore upland and riparian habitat types temporarily disturbed during construction. As part of a Habitat Mitigation Plan (HMP) developed for the project, a list of specific actions necessary to restore habitats disturbed onsite will be prepared by a qualified biologist prior to construction. While some habitats in the project area may require minimal restoration actions, such as restoration of the topography and topsoil following construction, the HMP will detail the specific measures necessary for each habitat and area disturbed to ensure that the functions and values of the disturbed habitat are restored.

**APM BIO-9: Implement sudden oak death preventative measures when trimming or removing oak trees.** PG&E will implement BMPs to control the potential introduction or spread of sudden oak death when trimming or removing trees as part of the project. At a minimum, the BMPs will include the following measures:

- All debris from host species (wood, branches, and chips) shall be left onsite following trimming.

- All tools used to perform the work shall be disinfected before leaving infested areas.

**APM BIO-10: Avoid impacts to protected trees, track protected trees removed during construction, and mitigate for impacts to protected trees.**

- PG&E will avoid impacts to protected trees to the extent feasible. If avoidance is not feasible, PG&E will track the trees removed, including their species and size, and will replace protected trees as stipulated in applicable local regulations. To avoid removal of active nests, tree trimming, vegetation removal, and removal of towers should be conducted during the non-breeding season (August 16–March 1).

**APM BIO-11: Implement general protection measures for waters of the United States.** During construction, PG&E will implement the following measures to minimize or avoid impacts on waters of the United States:

- Establish exclusion zones and minimize the amount of area disturbed to the minimum amount necessary to complete the work. Align work areas to avoid wetland areas and margins as much as feasible.

- Delineate wetland areas, and restrict construction personnel and equipment from entering fenced protected areas.

- Conduct all fueling of vehicles, equipment, and helicopters at least 100 feet from wetlands and other waterbodies.

- To the extent feasible, complete road construction adjacent or within waters of the United States during the dry season. If it is not feasible to complete road construction work during the dry season, PG&E will use appropriate erosion control measures for the site that will be identified in the SWPPP (see APM HYDRO-1 in Section 4.8).

**APM BIO-12: Develop a wetlands mitigation plan.** PG&E will develop a wetlands mitigation plan to offset effects to waters of the United States, including wetlands. The plan will be developed in consultation with the Corps and will include, at a minimum, plans for restoration of any temporarily disturbed wetlands and other waters of the United States and methods to achieve mitigation for permanent impacts at a minimum ratio of 1:1. Mitigation may include onsite restoration and improvement of existing wetlands or other offsite compensation.

**APM BIO-13: Complete spring surveys for special-status plants in all unsurveyed disturbance areas.** Prior to construction, a qualified botanist will complete spring surveys for special-status plants at all unsurveyed staging areas, helicopter landing areas, and new access roads to determine the presence or absence of special-status plants. The surveys should be completed by qualified botanists and should be conducted during the appropriate period(s) necessary to observe special-status plants known to occur in the region.

**APM BIO-14: Avoid impacts on special-status plants.** PG&E will, under the direction of a qualified botanist and to the extent possible, adjust the location of staging areas, pull sites, helicopter landing areas, access roads, and other project components to completely avoid impacts on Pajaro manzanita and other special-status plants that are discovered prior to or during construction. If this avoidance measure is not feasible, PG&E will implement APM BIO 15 (Minimize impacts on special-status plants) and APM BIO-16 (Restore habitat for special status plants disturbed during construction).

**APM BIO-15: Minimize impacts on special-status plants.** Avoidance areas will be clearly staked and flagged in the field by a qualified botanist prior to construction. If Pajaro manzanita and other special-status plants cannot be avoided during construction, PG&E will minimize impacts by reducing the work area to the smallest area necessary to complete the work. Where temporary disturbance is necessary, PG&E will conduct project activities and necessary ground disturbance in a manner that is consistent with the successful reestablishment of the species to the extent feasible. The specific actions necessary will depend on the biology of the species in question; however, the actions will be designed to ensure successful reestablishment of the species following temporary disturbance. As part of an HMP, a list of specific actions will be prepared by a qualified botanist prior to construction that will include onsite restoration actions, or reseeding plans specific to any impacted construction areas (described below in APM BIO-16).

To minimize impacts to Pajaro manzanita, which is already known to occur in the project area, PG&E will implement the following measures:

- Vegetation clearing in occupied Pajaro manzanita habitat should be conducted after Pajaro manzanita has set seed and before flowering begins (typically between May and November).

- If mechanical brushing is conducted in occupied Pajaro manzanita habitat, mastication implements should not come within 6 inches of the ground surface to avoid disturbing the seed bank.

- Where feasible, removal of entire Pajaro manzanita plants from the ground should be avoided.

The Environmental Training and Monitoring Program (see APM BIO-1) will also include information on the location of special-status plants in the project area and the measures that will be implemented to avoid or minimize impacts on the plants.

**APM BIO-16: Restore habitat for special-status plants disturbed during construction.** If impacts on special status plants are unavoidable, PG&E will develop a special-status plant restoration plan as part of the HMP and in consultation with CDFG. The specific actions necessary will depend on the biology of the species in question and the type of impact (i.e., temporary or permanent); however, the actions will be designed to ensure successful reestablishment of the species following disturbance. The plan will be prepared by a qualified botanist prior to construction and will indicate when and where the actions will be implemented during construction.

**APM BIO-17: Implement management practices to control the introduction and spread of invasive plants.** Prior to construction, PG&E will identify the location of noxious weed species of concern within areas that will be disturbed as part of the project. Appropriate management practices will be designed by a botanist and implemented during construction to reduce the likelihood of spreading already established weeds into new areas or increasing their abundance, and of introducing new weed species to the project area. Actions to prevent noxious weed establishment will be described within the HMP and will be consistent with PG&E's practices for managing invasive plants. The project SWPPP will include BMPs such as using construction equipment that has been cleaned of soil and plant parts, including seeds, before entering the project area and using weed-free straw for erosion control. Disturbed areas will be revegetated with appropriate locally based native seed mixes. Implementing the management practices described above will reduce potentially significant impacts related to non-native invasive plants to a less-than-significant level.

**APM BIO-18: Implement avoidance and mitigation measures outlined in the USFWS biological opinion.** USFWS will specify avoidance and mitigation measures to minimize impacts to California red-legged frogs and California tiger salamanders in the biological opinion they will draft for the project. PG&E will follow and implement the measures that are outlined in the biological opinion.

**APM BIO-19: Compensate for permanent impacts on California red-legged frog and California tiger salamander upland habitat.** It was determined that the project would result in permanent impacts to suitable upland habitat for California red-legged frogs and California tiger salamanders. To compensate for anticipated permanent impacts to suitable upland habitat for California red-legged frogs and California tiger salamanders, PG&E may preserve additional upland habitat within a USFWS-approved conservation area; specific actions will be determined in coordination with USFWS. The ratio of compensation, specific mitigation acreages, and location of the conservation area will be determined through formal consultation with USFWS.

**APM BIO-20: Conduct tree trimming, vegetation removal, and, if possible, tower removal during the non-breeding season.** To avoid removal of active nests, tree trimming, vegetation removal, and removal of towers should be conducted during the non-breeding season (August 16–March 1). If this is not possible, APM BIO-21 will be implemented.

**APM BIO-21: Conduct preconstruction surveys for nesting migratory birds and raptors, and develop an Avian Protection Plan.** Construction activities are anticipated to occur mainly during the nesting season for migratory birds and raptors (generally early February through early August) (Avian Power Line Interaction Committee and USFWS 2005). PG&E will retain a qualified wildlife biologist to conduct preconstruction surveys for nesting birds, for all construction activities that occur within or near suitable breeding habitat. The surveys will be staggered so that they are conducted no more than 1 week prior to the start of construction activities in any one area. Surveys will include the power line route, staging areas, pull sites, and areas of access road improvements where ground disturbance or vegetation clearing is required, at a frequency and timing appropriate for nest detection. If no active nests are detected, no additional mitigation measures are required.

PG&E will develop a project-specific Avian Protection Plan that will outline protection measures for nesting migratory birds and raptors, in the event that nesting migratory birds or raptors are identified in areas where construction activities will occur during preconstruction surveys.

**APM BIO-22: Avoid disturbance of active nests by helicopter use.** Use of helicopters will be restricted to necessary trips to install and remove towers and poles, install power lines, and deliver and remove equipment to areas lacking vehicle access. Helicopter flight paths will be designed to minimize impacts to nests, and buffers of active nests may be greater than those stated above to avoid helicopter disturbance of active nests identified in preconstruction surveys of the project sites. If active nests occur under planned helicopter flight paths, especially those near landing areas, coordination with CDFG will be required to determine whether modification of the flight path is necessary to avoid disturbance of active nests.

**APM BIO-23: Conduct preconstruction surveys for active burrowing owl burrows.** CDFG (1995) recommends that preconstruction surveys be conducted in suitable habitat in the project study area and in a 250 foot-wide buffer zone around the construction site to locate active burrowing owl burrows. PG&E will retain a qualified biologist to conduct preconstruction surveys for active burrows according to the CDFG guidelines. The surveys will include a nesting season survey and a wintering season survey, which is the season immediately preceding construction. The surveys will cover all affected areas, including the power line route, staging areas, pull sites, and areas of access road improvements where ground disturbance is required. If no burrowing owls are detected, no further mitigation is required. If active burrowing owl burrows are detected, PG&E will implement APM BIO-24 (Implement CDFG guidelines for burrowing owl mitigation, if necessary).

**APM BIO-24: Implement CDFG (1995) guidelines for burrowing owl mitigation, if necessary.** Disturbance of occupied burrows will be avoided to the maximum extent feasible. Disturbance is generally defined as activities occurring with 250 feet of active burrowing owl nesting pairs during the breeding season (February 1 through August 31), or within 160 feet of occupied burrows in the non-breeding season (September 1–January 31).

During the non-breeding season, if direct impacts to an occupied burrow are unavoidable, passive relocation techniques may be considered after all other alternatives have been exhausted. Relocation may involve installing one-way doors at occupied burrow entrances and ensuring that alternative suitable burrows are available. Any relocation effort will be implemented in coordination with CDFG and in accordance with standard burrowing owl

guidelines. Any burrowing owl exclusion process will be coordinated by a biologist with prior burrowing owl relocation experience.

PG&E will support site-specific mitigation measures for any burrowing owls with potential to be impacted by construction activities. Measures may include onsite burrow enhancement or artificial burrow installation, in coordination with CDFG. In the event that a site-specific burrowing owl relocation is implemented, PG&E will consult with CDFG regarding suitable replacement of foraging and burrow habitat.

**APM BIO-25: Implement avoidance and mitigation measures outlined in the USFWS biological opinion.** USFWS will specify avoidance and mitigation measures to minimize impacts on San Joaquin kit foxes in the biological opinion they will draft for the project. PG&E will follow and implement the measures outlined in the biological opinion.

### *Cultural Resources*

**APM CR-1: Implement construction monitoring.** An archaeologist that meets the Secretary of the Interior's Standards and Guidelines for professional archaeologists will monitor ground-disturbing activities in areas that were documented as having high archaeological sensitivity on Figures 2a through 2d of the Historic Properties Inventory Report (ICF 2010). The monitor will be empowered to temporarily halt construction in the immediate vicinity of a discovery while it is evaluated for significance. With the archaeologist's approval, work may continue on other portions of the site. If the discovery proves to be significant, additional measures will be implemented; these may include avoidance, capping beneath a layer of sterile soil, or data recovery through archaeological excavation (PRC 21083).

**APM CR-2: Stop work if previously unknown cultural resources are discovered.** If buried cultural resources such as chipped or ground stone, historic debris, or building foundations are inadvertently discovered during site preparation or construction activities, work will stop in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with PG&E and other appropriate agencies. With the archaeologist's approval, work may continue on other portions of the site. PG&E will be responsible for ensuring that the archaeologist's recommendations for treatment are implemented.

**APM CR-3: Stop work if human remains are discovered.** If human remains are encountered during any phase of construction, work within a 100-foot radius of the remains will be suspended immediately and PG&E and/or their representative will immediately notify the respective county coroner, as required by state law (California Health and Safety Code 7050.5) and County Ordinance No. B6-18. If the remains are determined by the coroner to be Native American, the Native American Heritage Commission (NAHC) will be notified within 24 hours, and the NAHC will in turn immediately notify the Most Likely Descendent, pursuant to Section 5097.98 of the Sate Resources Code. Upon notification, the MLD has 48 hours to make recommendations as to the treatment or disposition of the remains. PG&E or its appointed representative will implement any mitigation before the resumption of activities at the site where the remains were discovered.

### *Geology, Soils and Seismicity*

**APM GEO-1: Perform Site-Specific Geologic Studies at Active Fault Crossings and Modify Siting/Design as Feasible to Reduce Damage.** For all pole or tower replacements proposed within a State-designated Earthquake Fault Zone or within 500 feet on either side of a fault considered likely to be active but not zoned by the State, PG&E will perform site-specific geologic investigations with the purpose of locating any active fault trace(s) and ensuring that project facilities are sited and designed to avoid and reduce damage due to surface fault rupture. Studies may include any appropriate combination of literature research, air photo evaluation, reconnaissance field survey, and/or subsurface investigation (fault trenching), based on the professional judgment of licensed supervising personnel (California Professional Geologist or Certified Engineering Geologist). Where significant potential for damage due to surface fault rupture is identified, facilities siting and design will be modified to the extent feasible to avoid or reduce damage.

### *Hazards and Hazardous Materials*

**APM HAZ-1: Stop work if hazardous substances are encountered during construction.** 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, the materials will be handled, transported, and disposed of in accordance with federal, state, and local regulations.

**APM HAZ-2: Conduct groundwater sampling and testing if suspected contaminated groundwater is encountered during construction.** If suspected contaminated groundwater is encountered in the proposed project construction areas, samples will be collected and submitted for 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.

**APM HAZ-3: Develop and implement a Helicopter Lift Plan.** PG&E will require the helicopter vendor to prepare a Helicopter Lift Plan for approval by the FAA prior to any construction helicopter operations. Any specific transportation needs (e.g., temporary road closures) will be identified in the plan and will be coordinated with the appropriate jurisdictions.

**APM HAZ-4: Develop and implement a Fire Risk Management Plan.** PG&E follows a standard practice of developing and implementing a Fire Risk Management Plan that addresses fire-suppression equipment and procedures to be used during construction and training of construction and maintenance crews. Additionally, fire suppression equipment and materials 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. Information contained in the plan and the locations of fire-suppression materials and equipment will be included in the employee environmental training discussed in APM BIO-1.

### *Hydrology and Water Quality*

**APM HYDRO-1: Prepare and Implement a Storm Water Pollution Prevention Plan.** PG&E or its contractor will prepare and implement a SWPPP to prevent construction-related erosion and sediments from entering nearby waterways. The SWPPP will include a list of BMPs to be implemented in areas with potential to drain to tributaries of the Salinas River in Monterey County or to the San Benito River in San Benito County. These BMPs will be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. BMPs to be implemented as part of the project-specific SWPPP may include, but are not limited to, the following control measures:

- Temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, grass buffer strips, high infiltration substrates, grassy swales, and temporary revegetation or other ground cover) will be employed to control erosion from disturbed areas.

- Drainage facilities in downstream offsite areas will be protected from sediment using BMPs consistent with Central Coast Water Board requirements.

- Vegetative cover will be established on the disturbed areas as soon as possible after disturbance.

**APM HYDRO-2: Develop and implement a Spill Prevention Control and Countermeasure Plan.** PG&E or its contractor will develop and implement an SPCCP to minimize the potential for, and effects of, spills of hazardous, toxic, or petroleum substances during all construction activities. The SPCCP will be completed and included in the SWPPP before any construction activities begin. PG&E will routinely inspect the construction areas to verify that the control measures specified in the SPCCP are properly implemented and maintained. PG&E will notify its contractors immediately if there is a noncompliance issue and will require compliance.

If an appreciable spill has occurred, a detailed analysis will be performed by a Registered Environmental Assessor to identify the likely cause of contamination. This analysis will conform to American Society for Testing and Materials (ASTM) standards and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, PG&E and its contractors will select and implement additional measures to control contamination, with a performance standard that groundwater quality and surface water quality must be returned to baseline conditions.

**APM HYDRO-3: Perform a drainage study and implement a drainage plan.** A drainage study will be performed for any area that crosses a waterway and requires a conveyance structure (culvert) for grading of new construction maintenance roads. The study will include calculations for the potential increases in stormwater runoff from related construction activities. The study also will identify critical drainage paths, and PG&E will implement drainage improvements to minimize the risk of flooding to downstream areas. The drainage plan will require that PG&E or its contractor will be responsible for proper maintenance of the drainages and any BMP associated with each drainage. Implementation of these measures will ensure that altered drainage patterns from project-related construction activities do not significantly affect erosion or sedimentation.

### *Noise*

**APM NOI-1: Implement noise control measures.** PG&E will implement the following noise abatement measures during project construction to minimize the impact of temporary construction-related noise on nearby residences:

- Notify residents near future construction zones regarding the forecast schedule for nearby construction and provide project contact information.
- Comply with manufacturers' muffler requirements on all construction equipment engines.
- Turn off construction equipment when not in use, where applicable.
- Minimize equipment use.
- Use equipment fitted with factory-installed muffling devices during construction when readily available.
- Route truck traffic away from residential areas where feasible.

**APM NOI-2: Implement noise control measures for helicopter noise.** PG&E will implement the following BMPs during project construction to minimize the impact of temporary construction-related noise generated by helicopters:

- Notify residents near future construction zones and along helicopter flight paths regarding the schedule and reasons for upcoming construction and flight operations.
- Provide project contact information to facilitate response to noise complaints during the construction activity.
- To the extent feasible, plan helicopter flight paths between construction zones and the helicopter staging areas to avoid noise-sensitive receivers. Note: All flight operations including takeoff, landing, and flight paths must comply with FAA regulations and all applicable safety concerns.

### *Public Services*

**APM PUB-1: Maintain Secured Facilities during construction activities.** PG&E will implement the following measures during construction activities:

- All equipment will be locked and secured when left unattended at the most secure locations available;
- Contract security will be used at active pull/tension sites, laydown, and storage areas outside work hours;
- All open holes will be covered and secured once activity at that location stops (after hours);
- Anchor bolts on foundations without structures will be capped; and
- Safety structures will be placed at road crossings during overhead wire installation activity to protect traffic and pedestrians.

### *Recreation*

**APM REC-1: Avoid Disruption of Recreational Facilities along the Juan Bautista de Anza National Historic Trail during Peak Use.** PG&E will limit construction activities that occur in the immediate vicinity of the Juan Bautista de Anza National Historic Trail to weekdays or as otherwise permitted by the National Park Service. PG&E will ensure that the trail is fully accessible on the weekends, as well as any holidays observed by the National Park Service.

### *Utilities and Service Systems*

**APM PU-1: Conduct a pre-construction records search/field survey to identify specific locations of water wells and well fields.** To ensure minimal disturbance or alteration of water wells or well fields within the project alignment, PG&E will conduct a pre-construction records search and field survey to identify specific locations of water wells and well fields.

**APM PU-2: Notify Underground Service Alert at least two days prior to initiation of construction activities in the underground portion of the power line.** PG&E will ensure that Underground Service Alert is notified at least two days prior to initiation of construction activities of the underground portion of the power line. Underground Service Alert verifies and physically marks the location of all existing underground utilities in the area of anticipated construction activities to prevent accidental disturbance.

# 2.10 Electric and Magnetic Fields Summary

## 2.10.1 Electric and Magnetic Fields

This IS/MND does not consider electric and magnetic fields (EMF) in the context of the CEQA analysis of potential environmental impacts because [1] there is no agreement among scientists that EMF creates a potential health risk, and [2] there are no defined or adopted CEQA standards for defining health risk from EMF. However, recognizing that there is a great deal of public interest and concern regarding potential health effects from human exposure to EMF from transmission lines, this document does provide information regarding EMF associated with electric utility facilities and human health and safety. Thus, the EMF information in this IS/MND is presented for the benefit of the public and decision makers.

Potential health effects from exposure to *electric fields* from transmission lines (i.e., the effect produced by the existence of an electric charge, such as an electron, ion, or proton, in the volume of space or medium that surrounds it) typically do not present a human health risk since electric fields are effectively shielded by materials such as trees, walls, etc. Therefore, the majority of the following information related to EMF focuses primarily on exposure to *magnetic fields* (i.e., the invisible fields created by moving charges) from transmission lines. Additional information on electric and magnetic fields generated by transmission lines is presented in Appendix A.

After several decades of study regarding potential public health risks from exposure to power line EMF, research results remains inconclusive. Several national and international panels have conducted reviews of data from multiple studies and state that there is not sufficient evidence to

conclude that EMF causes cancer. Most recently the International Agency for Research on Cancer (IARC) and the California Department of Health Services (DHS) both classified EMF as a *possible* carcinogen.

Presently, there are no applicable federal, State or local regulations related to EMF levels from power lines or related facilities, such as substations. However, the California Public Utilities Commission has implemented a decision (D.06-01-042) requiring utilities to incorporate "low-cost" or "no-cost" measures for managing EMF from power lines up to approximately four percent of total project cost. Using the four percent benchmark, PG&E has incorporated low-cost and no-cost measures to reduce magnetic field levels along the power line corridor.

## 2.10.2 EMF and the Proposed Project

PG&E has conducted a design comparison of calculated magnetic field levels for both the Hollister Tower Segment and Hollister Pole Segment. In accordance with the EMF Design Guidelines, filed with the CPUC in compliance with CPUC Decisions 93-11-013 and 06-01-042, the Proposed Project would implement the following "no-cost and low-cost" magnetic field reduction measures. The field reduction measures would include (PG&E, 2009a):

*For the Hollister Tower Segment (seven mile segment north of Lagunitas Switches, existing Moss Landing- Salinas – Soledad 115 kV ROW)*

- Raise the height of the line on four of the five towers in the residential land use area by five feet. This is to be achieved by installing horizontal post insulators on suspension towers. The fifth tower is a transposition tower and cannot be modified through this method or any other method that would not increase the massiveness of the tower.
- Given that lines are optimally phased, existing phasing would be maintained to reduce magnetic levels.

*For the Hollister Pole Segment (nine mile segment, east of the Hollister Tower Segment, existing Hollister No. 1 115 kV ROW)*

- Phases of the new Hollister 115 kV line would be arranged for minimum magnetic field at the edge of the ROW. Phases would be arranged C-B-A (Top, Middle, Bottom)
- For the Hollister No. 1 115 kV line maintain the existing configuration, A-B-C (Top, Middle, Bottom)

# 2.11 Required Permits and Approvals

The CPUC is the CEQA lead agency for the Proposed Project. PG&E would obtain permits, approval or licenses as need from, and would participate in reviews and consultation as needed with, federal, State and local agencies as show in **Table 2-11**.

**TABLE 2-11**
**SUMMARY OF PERMITS REQUIREMENTS**

| Permit/Approval/Consultation | Agency | Jurisdiction/Purpose |
|---|---|---|
| **Federal Agencies** | | |
| Section 7 Consultation, Endangered Species Act | U.S. Fish and Wildlife Service | Construction, operation, and maintenance on land that may affect a federally listed species or its habitat; incidental take authorization (if required) |
| Nationwide or Individual Permit (Section 404 of the Clean Water Act) | U.S. Army Corps of Engineers | Construction impacting Waters of the United States, including wetlands |
| Section 106 Review, National Historic Preservation Act | Advisory Council on Historic Preservation | Construction, operation, and maintenance on land that may affect cultural or historic resources |
| **State Agencies** | | |
| Permit to Construct | California Public Utilities Commission | Overall project approval and California Environmental Quality Act review |
| National Pollutant Discharge Elimination System Construction Storm water Permit | RWQCB | Storm water discharges associated with construction activities disturbing more than one acre of land |
| Section 401 Water Quality Certification (or waiver) | RWQCB | Certifies that project is consistent with state water quality standards |
| Encroachment Permit (ministerial) | California Department of Transportation | Construction, operation, and maintenance within, under, or over state highway ROW |
| Endangered Species Consultation | California Department of Fish and Game | Construction, operation, and maintenance that may affect a state-listed species or its habitat; incidental take authorization (if required) |
| Consistency Determination (ESA) (ministerial) | California Department of Fish and Game | Confirmation that the state protection measures required for duly (fed & state)-listed species or its habitat are included in the federal permits or concurrence letters. |
| Streambed Alteration Agreement | California Department of Fish and Game | Construction, operation, restoration in the bed, bank or channel of any river, stream or lake. |
| **Local Agencies** | | |
| Encroachment Permit (ministerial) | San Benito County<br>Monterey County<br>City of Hollister | Construction, operation, and maintenance within, under, or over county road ROW |
| Demolition Permit (ministerial) | Monterey Bay Unified Air Pollution Control District | Air Board permit for demolition of towers due to paint and/or concrete materials contents (e.g. lead paint). |
| Tree Removal Permit (ministerial) | San Benito County and Monterey County | Removal of oak trees greater than 6 inches in trunk diameter unless in public right of way. |

# References – Project Description

Pacific Gas and Electric Company (PG&E), 2009a. *Application of Pacific Gas and Electric Company for a Permit to Construct the Hollister 115 kV Power Line Reconductoring Project*, filed November 23, 2009.

PG&E, 2009b. *Proponent's Environmental Assessment for the Application of Pacific Gas and Electric Company for a Permit to Construct the Hollister 115 kV Power Line Reconductoring Project*, filed November 23, 2009.

PG&E, 2009c. *PG&E Responses to CPUC Data Requests 1 and 2 for the Hollister 115 kV Power Line Reconductoring Project*, submitted to the CPUC on January 12, 2010 and March 1, 2010, respectively.

PG&E, 2010. Revisions to the proposed project provided via personal electronic communication from Danielle Wilson, August 17, 2010 and August 23, 2010, respectively.

# SECTION 3
# Environmental Checklist and Discussion

# 3.1 Aesthetics

| *Issues (and Supporting Information Sources):* | | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|---|
| **1.** | **AESTHETICS—Would the project:** | | | | |
| a) | Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☒ | ☐ |
| b) | Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway corridor? | ☐ | ☐ | ☐ | ☒ |
| c) | Substantially degrade the existing visual character or quality of the site and its surroundings? | ☐ | ☐ | ☒ | ☐ |
| d) | Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area? | ☐ | ☒ | ☐ | ☐ |

## 3.1.1 Environmental Setting

Visual or aesthetic resources are generally defined as both the natural and built features of the landscape that contribute to the public's experience and appreciation of the environment. Depending on the extent to which a project's presence would alter the perceived visual character and quality of the environment, visual or aesthetic impact may occur.

This analysis of potential visual effects is based on review of a variety of data, including project maps and drawings, aerial and ground level photographs of the project area, a site visit to the project area, and a variety of data in the record including local planning documents. The study area for visual resources encompasses the landscapes directly affected by facilities planned under the Proposed Project and the surrounding areas that would be within view of the project components. The visual analysis focuses on travel route views, and views from parks and recreational areas. Visual resources consist of the landforms, vegetation, rock and water features, and cultural modifications that create the visual character and sensitivity of a landscape.

The visual sensitivity of the environmental setting is reflected according to high, moderate and low visual sensitivity ranges, and is a composite measurement of the overall susceptibility of an area or viewer group to adverse visual or aesthetic impacts, given the combined factors of:

- Landscape visual quality: the overall visual impression or attractiveness of an area as determined by the particular landscape characteristics, including landforms, rock forms, water features, and vegetation patterns.
- Viewer types: the types of use that various land uses receive. Land uses that derive value from the quality of their settings are considered potentially sensitive to changes in visual setting conditions. Land uses within the study area that may be sensitive to change in visual conditions include major transportation systems such as designated scenic highways, designated scenic roads, and designated park, recreation and natural areas.
- Viewer volumes; traffic volumes are classified as low (less than 10,000 vehicle trips per day), moderate (10,000 to 20,000) and high (over 20,000 vehicle trips per day).

- Exposure conditions: landscape visibility, viewing distance, viewing angle, extent of visibility, and duration of view.

See Appendix C for additional information on the methodology used for evaluating potential impacts of the Proposed Project on visual resources under the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

CEQA distinguishes between public and private views by focusing on whether a project will affect the environment of persons in general, not whether a project will affect particular persons. Private views, such as from individual homes, generally are not analyzed under CEQA and potential impacts on such views would not be considered to be environmentally significant. Accordingly, views from private residences are not discussed in the impact analysis. Nevertheless, for informational purposes, portions of both the Proposed Tower Segment and the Proposed Pole Segment would be visible from private residences. Specifically, the Tower Segment would be visible from residences located west of the City of San Juan Bautista, off of Avenue Del Piero in unincorporated San Benito County. A view of the existing transmission line from these residences is depicted in Figure 3.1-2a, Photo 3. The proposed river crossing would be visible from some private ranches and farms in unincorporated San Benito County, and the Proposed Pole Segment would be visible from some of the rural residences on San Juan Road in unincorporated San Benito County.

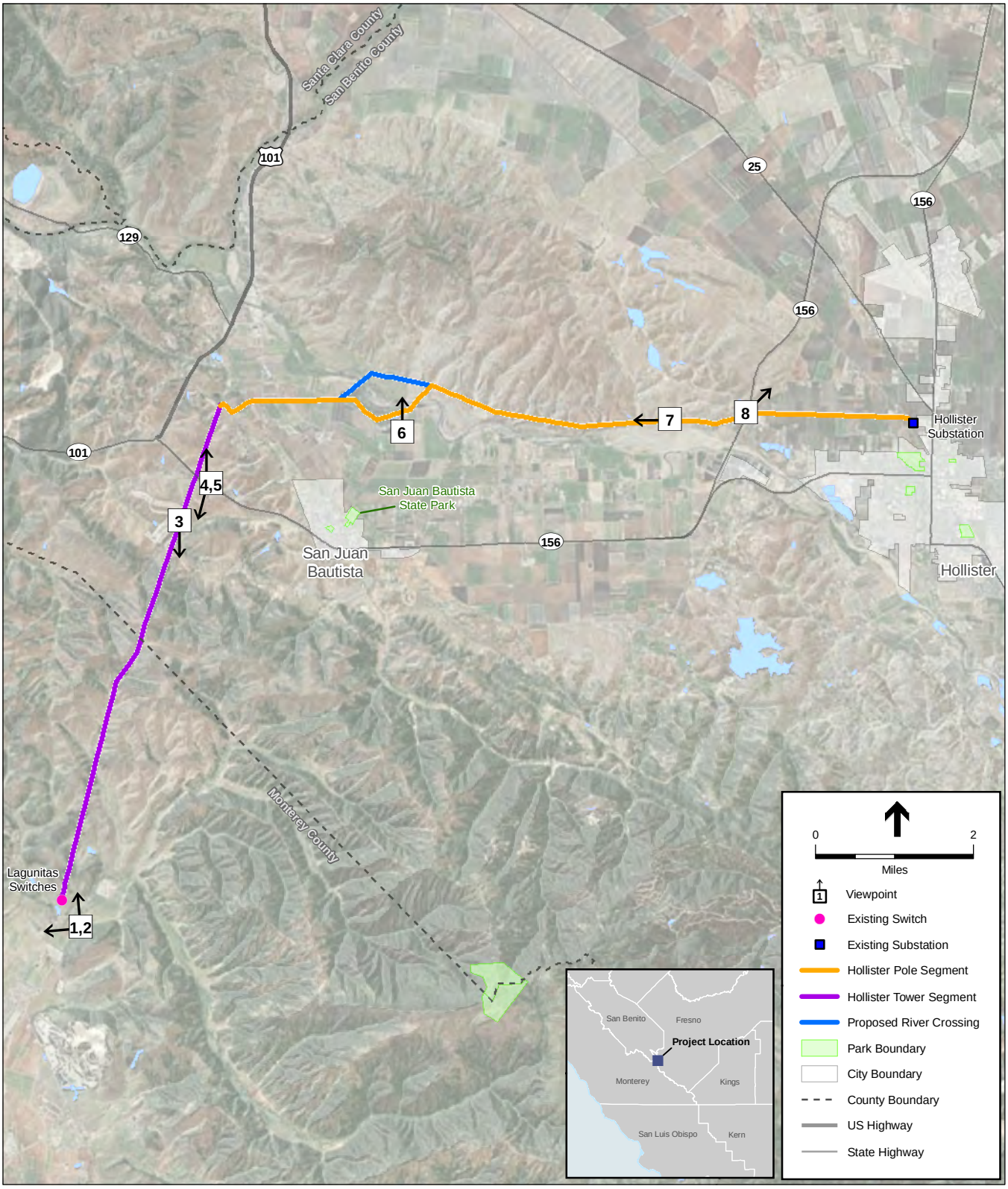
## Existing Visual Quality of the Region

The project area, consisting of portions of western Monterey County and southeastern San Benito County, is characterized by rolling hills and mountains, with vast expanses of grasslands and rural areas used for grazing of cattle and horses. The area includes a limited number of scattered ranches and residences, as well as existing infrastructure including county roadways, a State route, fences, utility lines, signs, and power lines. The area also includes the existing Pacific Gas and Electric (PG&E) 115 kV transmission line that the Proposed Project would replace. The project area is located outside of the city limits to the west and north of the City of San Juan Bautista, and just outside of the city limits to the northwest of the City of Hollister.

**Figure 3.1-1** is a viewpoint map that depicts, by photograph numbers, the location and directions from which photographs were taken. **Figures 3.1-2a** and **3.1-2b** present eight photographs taken from representative vantage points in the vicinity of the Proposed Project that portray the existing visual character of the area. The photographs were assigned numbers by order of mention in the following subsections which describe the existing visual character of the study area by component. The photographs depicting viewsheds are limited in the sense that they provide only several fixed viewpoints and cannot demonstrate all views of or from the project sites or along the site's perimeter.

### *Hollister Tower Segment*

The seven-mile Hollister Tower Segment would be located entirely within existing PG&E right-of-way (ROW), and would originate just north of the junction of Crazy Horse Canyon Road and San Juan Grade Road in unincorporated Monterey County. Both of these roads are two-lane




PG&E, 2010; ESRI, 2010; Microsoft Virtual Earth, 2010

Hollister 115 kV Power Line Reconductoring Project . 207584.03

**Figure 3.1-1**
Viewpoint Map

Photo 1: View from San Juan Grade Road near Crazy Horse Canyon Road looking north

Photo 2: View from San Juan Grade Road looking west toward Crazy Horse Canyon Road

Photo 3: View from Avenue Del Piero looking south

Photo 4: View from State Route 156 at Rocks Road looking north





SOURCE: ESA, 2010

**Figure 3.1-2a**
Existing Setting

Photo 5: View from State Route 156 at Rocks Road looking southwest

Photo 6: View from private farm off of San Justo Road looking north

Photo 7: View from Buena Vista Road looking west

Photo 8: View of State Route 156 at Buena Vista Road looking northeast



SOURCE: ESA, 2010



**Figure 3.1-2b**
Existing Setting

county roads, designated as Proposed Scenic Routes in the Monterey County General Plan (Monterey County, 2006). From the intersection of the two roads, the existing infrastructure co-dominates the visual character of the area, along with the scenic hillside and surrounding trees. Views of the existing transmission line for drivers on both roads are within foreground distance (i.e. within one-half mile). The towers along the southern-most point of the existing Hollister Tower Segment are located approximately one-quarter mile east of Crazy Horse Canyon Road. Motorists views range from fully screened to open and panoramic, for a distance of approximately three-quarters of a mile. The existing Tower Segment generally parallels San Juan Grade Road in Monterey County from a distance of 0.2 to 0.75 miles, for approximately the first 3.4 miles of the alignment. The alignment is visible to motorists from select locations on the road, but is generally screened by intervening topography and vegetation. Figure 3.1-2a, Photo 1, portrays the existing view from San Juan Grade Road near the intersection with Crazy Horse Canyon Road, looking north. As shown in the figure, the existing PG&E transmission line and towers are prominent features within the visual resource setting.

From its origination point at Crazy Horse Canyon Road and San Juan Grade Road, the alignment would head northeast, through an area designated by the Monterey County General Plan as visually *highly sensitive* (i.e., scenic) located to the east and west of San Juan Grade Road, southeast of the San Benito County line. The Proposed Project would also be located less than a quarter mile east of an area designated as visually *sensitive*, just east of Crazy Horse Canyon Road (Monterey County, 2006). Both of these areas are distinctive, and are characterized by rolling hills, grasslands used for grazing, and ranching features such as cattle and fences, in addition to the existing transmission facilities. Figure 3.1-2a, Photo 2, portrays the view from San Juan Grade Road looking east toward Crazy Horse Canyon Road and the visually sensitive area.

The Hollister Tower Segment would travel northeast for approximately seven miles over rural, mountainous areas in unincorporated Monterey and San Benito Counties. The alignment would be located on land used predominantly for cattle grazing, with limited ranches and residences. At mile 5.6, between Towers 5/33 and 5/34, the alignment would cross State Route (SR) 156, a four-lane Eligible State Scenic Highway (Caltrans, 2009; San Benito County, 1980). Traffic volumes along SR 156 in the area of the Tower Segment crossing have an annual average daily travel (ADT) level of 23,000 vehicles per day (Caltrans, 2010). As such, the number of viewers is considered high. Figure 3.1-2a, Photo 4 shows the view of the existing line where it crosses SR 156, looking north, while Figure 3.1-2b, Photo 5, shows the same viewpoint looking southwest. Motorists' views of the line from SR 156 range from open and panoramic while traveling underneath the line, to partially screened by topography and intervening trees from further distances. Assuming a travel speed of 65 miles per hour, and that the alignment would be visible for approximately three-quarters of a mile, the alignment would be visible for roughly 42 seconds. Given the temporary duration of the view and the limited length of exposure, view duration would be considered short.

The Hollister Tower Segment would end in San Benito County approximately 0.8 miles east of Interstate Highway 101, a Designated County Scenic Highway (San Benito County, 1980). The Proposed Project would be located approximately 0.8 to 3.5 miles east of Interstate Highway 101

and motorists' views would be fully screened by intervening topography and vegetation. The Hollister Tower Segment would traverse land that is characteristic of the rural, hilly, open space of southwestern San Benito County. However, as mentioned above, utility lines are an existing feature within the landscape, including the existing PG&E transmission line and towers as well as existing distribution lines.

### *Hollister Pole Segment*

The nine-mile Hollister Pole Segment would be located within existing PG&E ROW, with the exception of a 1.3 mile section of new ROW to cross the San Benito River. The alignment would originate near the northern tip of the Hollister Tower Segment, approximately 0.8 miles east of Interstate Highway 101 in unincorporated San Benito County. From this location, the alignment would travel east in existing ROW across open space land used predominantly for grazing. At mile 1.6 the alignment would turn in a northwestern and western direction to cross the San Benito River. This proposed river crossing would be located within new ROW, and would cross areas currently used for grazing and agricultural purposes, as well as the river and surrounding riparian habitat. The proposed river crossing would be visible from some locations on San Juan Road in unincorporated San Benito County. Figure 3.1-2b, Photo 6 shows the view of the existing River Crossing looking north, as seen from a private farm off of San Justo Road. The Proposed River Crossing would be located approximately 3,000 feet further north than the existing alignment.

At mile 2.9 the Hollister Pole Segment would rejoin the existing ROW, and head east across hillside and more grazing area, joining up with Buena Vista Road, a two-lane unpaved rural county road (see Figure 3.1-2b, Photo 7). This portion of the alignment would run adjacent to several rural residences and an animal adoption center, and is characterized by rural land used for agricultural purposes, open space, residential structures, and existing utility features including transmission and distribution poles and conductor.

Between Poles 20/02 and 20/03 the alignment would cross SR 156, an Eligible State Scenic Highway (see Figure 3.1-2b, Photo 8). Traffic volumes along SR 156 in the area of the Pole Segment crossing have an annual ADT level of 13,800 vehicles per day (Caltrans, 2010). As such, the number of viewers would be considered moderate. Motorists on SR 156 would have fully-screened to open and unobstructed views of the Proposed Project as it crossed the roadway. Assuming a travel speed of 65 miles per hour, and that the alignment would be visible for between one-half to three-quarters of a mile, the alignment would be visible for roughly 28 to 42 seconds. Given the temporary duration of the view and the limited length of exposure, view duration would be considered short. The alignment would continue east towards the Hollister Substation passing through land used for agriculture and crossing the Union Pacific Railroad, Hollister Branch Line, tracks before reaching the Substation (see Figure 3.1-2b, Photo 8). This line is currently used exclusively for freight, and as such would have a very low number of viewers. The visual quality of this viewshed is considered representative, as the landscape includes both open space and industrial features such as railroad tracks and the existing Hollister Substation.

## Recreation Areas

As discussed in Section 3.14, *Recreation*, the Proposed Project would be located in the vicinity of several federal, State, and local recreational resources. The Proposed Project would parallel and cross the Juan Bautista de Anza National Historic Trail, a 1,210-mile historic route that commemorates, protects, marks and interprets the route traveled by Juan Bautista de Anza between 1774 and 1776 (NPS, 2009). In the project area, the trail is an "auto tour route" that follows San Juan Grade Road in Monterey County, which turns into Salinas Road and then San Juan Highway in San Benito County (NPS, 2010). Motorists on the auto tour route would have views of the Hollister Tower Segment that would range from partially to fully screened by intervening topography and vegetation, as the auto route would be located between 0.2 and 2.4 miles from the alignment. Views of the Hollister Pole segment would range from fully screened to open and panoramic where the auto route would travel underneath the alignment on San Juan Highway in San Benito County.

The Proposed Project would be located approximately 1.5 miles south of the San Juan Bautista State Historic Park in the City of San Juan Bautista. It would also be located in the vicinity of four recreational areas in the City of Hollister, and would be approximately: 0.5 mile north of the Calaveras Community Park; one mile north of Dunne Community Park; and 0.5 mile north of Vista Park Hill and the Hollister Community Center (City of Hollister, 2009). Views of the Proposed Project from these recreational areas would be screened by intervening topography, vegetation, and structures.

# 3.1.2 Regulatory Setting

## State

### *California Scenic Highway Program*

In 1963, the California legislature created the Scenic Highway Program to protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to the highways. The State regulations and guidelines governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260 et seq. A highway may be designated as "scenic" depending on how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the travelers' enjoyment of the view.

No portion of the Proposed Project or alternatives would be visible from a designated State Scenic Highway; however, as noted above, portions of the proposed transmission line would cross SR 156 in San Benito County, which is listed by Caltrans as an eligible State Scenic Highway. The Project would also be in relatively close proximity (between 0.8 and 3.5 miles) to Interstate Highway 101, an eligible State Scenic Highway in Monterey County (Caltrans, 2009).

### *California Public Utilities Commission*

California Public Utilities Code Section 320 requires that all new or relocated electric and communication distribution facilities within 1,000 feet of an officially-designated scenic highway

and visible from that highway be buried underground where feasible and not inconsistent with sound environmental planning. General Order 131-D defines distribution as "…a line designed to operate under 50kV".[1] The Proposed Project would be within 1,000 feet of an eligible State Scenic Highway (SR 156); however, this code is not applicable as the proposed transmission line would be 115 kV, which is over the 50 kV threshold.

California Public Utilities Code Section 21658 prohibits structural hazards associated with utility poles and lines near airports. Should a transmission line be located in the vicinity of an airport or exceed 200 feet in height, a Notice of Proposed Construction or Alteration (Form 7460-1) is required by the Federal Aviation Administration (FAA) in accordance with Federal Aviation Regulation, Part 77 "Objects Affecting Navigable Airspace." The FAA process could include stipulations, such as obstruction marking and lighting, for projects where aviation safety could be affected (see Section 3.7, *Hazards and Hazardous Materials*).

## Local

### *Monterey County General Plan*

As discussed in the setting, the Proposed Project would be located within viewing distance of two Proposed County Scenic Routes (San Juan Grade Road and Crazy Horse Canyon Road), as well as areas designated as visually *highly sensitive* and visually *sensitive*. The following goals and policies identified in the Monterey County General Plan would be applicable to the Proposed Project (Monterey County, 1995):

> Area Development Element
>
> *Goal 40*: To maintain and enhance a system of scenic roads and highways through areas of scenic beauty; this without imposing undue restrictions on private property or constricting the normal flow of traffic.
>
> *Policy 40.2.1*: Additional sensitive treatment provisions shall be employed within the scenic corridor, including placement of utilities underground, where feasible; architectural and landscape controls; outdoor advertising restrictions; encouragement of area native plants, especially on public lands and dedicated open spaces; and cooperative landscape programs with adjoining public and private open space lands.
>
> *Goal 56*: To promote the efficient distribution of public utilities by reserving land uses for utility sites and access corridors which provide utilities for planned population centers.
>
> *Objective 56.2*: Ensure the aesthetic placement of utility lines.
>
> *Policy 56.2.1*: The County shall, in accordance with the Monterey County Subdivision Ordinance, require that all new utility lines be placed underground.
>
> *Policy 56.2.2*: The County shall seek to place existing utility lines underground whenever feasible.

[1] The CPUC has implemented PU Code §320 via Tariff Rule 20. While Tariff Rule 20 does not disallow the funding of undergrounding transmission lines, the specific mandate of PU Code §320 is limited to distribution lines. (CPUC, D.85497.)

### *San Benito County General Plan*

The Scenic Roads and Highways Element of the San Benito County General Plan defines Scenic Corridors as "the visible land area outside of a transportation corridor (road) right-of-way and generally described as the 'view from the road.' A Scenic Corridor shall be established adjacent to all Scenic Roads and Highways" (San Benito County, 1980). In the vicinity of the Proposed Project, Interstate Highway 101 is the only County-designated Scenic Roadway (the entire stretch of Highway 101 within San Benito County is designated scenic). The Scenic Corridor surrounding Highway 101 consists of all the land 400 feet either side of the centerline of the road. Because the Proposed Project would neither be constructed within the Highway 101 Scenic Corridor, nor be visible from the Scenic Corridor, County policies pertaining to Scenic Corridors do not apply to the Proposed Project.

Nevertheless, the following goals and policies identified in the San Benito County General Plan would be applicable to the Proposed Project (San Benito County, 1980):

> Scenic Roads and Highways Element
>
> *Goal:* The preservation of the scenic qualities of San Benito County.
>
> Open Space and Conservation Element
>
> *Goal 4:* To preserve large forms of open space areas, such as agricultural land and outdoor recreation areas, in order to serve as a means of delineating the urban/rural boundary.
>
> *Goal 5:* To protect and preserve the agricultural identity of the County.

## 3.1.3 Applicant Proposed Measures

PG&E proposes the following applicant proposed measure (APM) to minimize impacts on visual resources from the Proposed Project. The impact analysis in this MND assumes that this APM would be implemented to reduce impacts to aesthetics.

> **APM AES-1: Limit construction hours to daylight hours as feasible.** Construction activities that are visible to the public and scheduled to occur after 6:00 p.m. or on weekends should not continue past daylight hours (which vary according to season) unless required because of project safety concerns or clearance requirements. This will reduce the amount of construction activities visible to viewer groups because most construction activities will occur during business hours (when most viewer groups are likely at work), and daylight construction will eliminate the need to introduce high-wattage lighting sources to be able to operate in the dark.

## 3.1.4 Environmental Impacts and Mitigation Measures

Visual analysis focuses on two components. The first is visual sensitivity, which is a composite measurement of the overall susceptibility of an area or viewer group to adverse visual or aesthetic impacts, given the combined factors of landscape visual quality, viewer types, and exposure conditions. The second is the degree of visual change that construction, operation and maintenance of the Proposed Project would have on the site.

**a) Have a substantial adverse effect on a scenic vista: *LESS THAN SIGNIFICANT IMPACT*.**

Although many scenic vistas are located throughout the mountain ranges in both Monterey and San Benito Counties, there are no designated scenic vistas in the vicinity of the Proposed Project. However, as discussed above, the seven-mile Hollister Tower Segment would cross an area designated by the Monterey County General Plan as visually *highly sensitive*, to the east and west of San Juan Grade Road. In addition, the Tower Segment would be located less than a quarter mile east of an area designated as visually *sensitive*, just east of Crazy Horse Canyon Road (Monterey County, 2006). Nevertheless, construction-related impacts to visual quality from the presence of construction equipment, materials, and work crews along the power line alignments and on local access roads and staging areas would be relatively short-term (i.e., approximately 13 months) (see impact (c) below). Disturbed areas would be reseeded upon completion of construction and would naturalize within a short period of time. As such, temporary impacts to scenic views from construction activities would be less than significant.

Operational impacts to scenic vistas could occur because the new towers along the Hollister Tower Segment would replace towers within the viewshed of the designated visually sensitive areas. However, the new towers would be located within the existing alignment, no more than approximately 10 feet from the current location of the existing structures (except for six towers that would be placed between 30 to 100 feet from the existing structures). The new towers would be approximately the same height (i.e. averaging 82 feet above ground surface) and would have approximately the same tower base dimensions as the existing towers. They would differ from existing towers in that the existing steel cross arms would be replaced with the Horizontal-V Insulator braced line post assembly, which is the assembly that attaches the wires to the towers. However, the proposed Horizontal-V assembly has a narrower and less bulky stature than the existing assembly. The effect is a reduction in the perceived stature and width of the tower, making it appear more streamlined. Therefore, with respect to visual change, the operation and maintenance of the Proposed Project would not have a significant adverse impact on a scenic vista. Impacts would be less than significant.

**b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway corridor: *NO IMPACT*.**

The Proposed Project would not traverse any designated federal, State, County, or City scenic highway corridor; therefore, the Proposed Project would not affect scenic resources within any such corridor. There would be no impact.

**c) Substantially degrade the existing visual character or quality of the site and its surroundings: *LESS THAN SIGNIFICANT IMPACT*.**

Construction-related activities could degrade the existing visual character or quality of the site and its vicinity as a result of the presence of construction equipment, materials, and work crews along the power line alignments and on local access roads, staging areas, and at temporary shoo-

fly connection areas. Crews would be required to maintain clean work areas as they proceed along the line and would not leave any debris behind at any stage of the project. The construction impacts to visual quality would be relatively short-term (i.e., approximately 13 months) and spread out along different portions of the Proposed Project alignments. Taking into account the moderate number of viewers along the alignments, the short duration of views, and the relatively short duration of construction, potential visual impacts during construction activities would be less than significant.

Operational impacts associated with the proposed upgrades at Hollister Substation are viewed in the context of the existing substation equipment. Modifications to Hollister Substation include relocating two existing poles on the substation property, updating relay settings, and changing the 115 kV bus conductors. All of these modifications would involve minimal physical changes, occurring within the existing fence line and footprint of the substation. The new equipment would be of the same nature as the existing facilities, and would blend in with the existing character of the area, which includes not only the substation facilities, but also existing electricity infrastructure not part of the Proposed Project (i.e., the Hollister No. 2 line). Therefore, this incremental change to the existing visual quality from the proposed substation modifications would be inconsequential and would have a less than significant impact.

The proposed pole and tower replacements for the Proposed Project would generally represent an incremental change to the visual character or quality of views currently experienced by the public in the vicinity of the proposed alignments. As discussed in the setting, viewers in the study area would include motorists, residents, and recreational users of the Juan Bautista de Anza National Historic Trail in Monterey and San Benito Counties. With the exception of the 1.3-mile segment of new right of way (ROW) that would be relocated out of the San Benito River floodplain, the Proposed Project would replace existing structures in existing PG&E ROW. As discussed above, in the seven-mile Hollister Tower Segment, existing towers would be replaced with towers of approximately the same height and tower base dimension, with a horizontal-V assembly, which is a design with a narrower and less bulky stature. This would give the towers a more streamlined form. In the nine-mile Hollister Pole Segment, existing wood poles ranging in height from 60 to 90 feet would be replaced with taller tubular steel poles (TSPs) and light-duty steel (LDS) poles ranging from 70 to 95 feet that would be treated to attain a rusted brown weathered appearance. Although the new poles would appear slightly more prominent than existing poles, the new poles would represent an incremental change to the visual character of the alignment, and would not substantially degrade the existing visual character or quality of the area and its surroundings. Therefore, impacts from operation and maintenance would be less than significant.

At the San Benito River floodplain crossing, the existing power line would be moved approximately 3,000 feet to the north. In the existing alignment approximately 6 poles would be removed, and 17 wood poles no longer used for power lines would be topped (i.e. the poles would be shortened by removing the existing power line and cutting down the excess length to the level of the low voltage distribution line). The poles to be topped are located in an area that is not visible to motorists, and would be seen only from private agricultural fields. In the new 1.3-mile segment of ROW, approximately 21 new steel poles (TSPs and LDS poles) would be installed to relocate the

crossing of the San Benito River. The new poles would be visible to motorists on San Juan Road in unincorporated San Benito County. The visual quality of this location is representative of the rural, agricultural character of the area. Although the presence of the new power poles would generally be incongruous with the rural character of the area, the poles' rusted brown weathered appearance would lessen the visual impact. Because of the low number of viewers and low view duration, the visual sensitivity of the location would be considered low to moderate. Given that the overall visual change that would result from the new and topped poles would be low to moderate, impacts associated with the Proposed River Crossing would be less than significant.

**d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area: *LESS THAN SIGNIFICANT WITH MITIGATION*.**

Neither construction nor operation of the Proposed Project (including the Hollister Tower Segment, Hollister Pole Segment and Hollister Substation Modifications) would create a new source of substantial light, which would adversely affect daytime views in the area. As discussed under APM AES-1, construction activities would generally be scheduled during daylight hours (6:30 a.m. to 5:00 p.m.), and would not include the introduction of any new light source.

Construction-related lighting could adversely affect nighttime views. As noted, construction would occur primarily during daylight hours, minimizing the need to introduce high-wattage lighting sources to be able to operate in the dark. Nighttime construction would not be anticipated, except for certain construction procedures that cannot be interrupted because of safety considerations or to take advantage of line clearances during off-peak hours. If night construction would be determined to be required, temporary lighting would be needed for security, safety, and operational reasons at the project facilities, including the staging areas and pull/tensions sites. Night lighting could potentially result in impacts to visual resources by increasing ambient light to surrounding areas, creating distracting glare, and reducing sky or star visibility. Nearby land uses, including residences, businesses, and roadways provide some lighting of their own. However, the majority of the Proposed Project would be located in relatively undeveloped areas. As such, the project features would result in increased lighting contrast compared to current conditions. Therefore, nighttime lighting could have a potentially significant impact to nighttime views in the project vicinity; however, this impact would be temporary due to the relatively short duration of construction and the fact that work in any one location would be of much shorter duration (i.e., on order of several days to two weeks), and that nighttime work would not be a routine occurrence. With implementation of Mitigation Measure 3.1-1, impacts of new sources of light on nighttime views would be reduced to less than significant.

> **Mitigation Measure 3.1-1: Reduce construction night lighting impacts.** PG&E shall design and install all lighting at construction and storage yards and staging areas such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project facilities, vicinity, and nighttime sky is minimized. PG&E shall submit a *Construction Lighting Mitigation Plan* to the CPUC for review and approval at least 90 days prior to the start of construction or the ordering of any exterior lighting fixtures or components, whichever comes first. PG&E shall not install or

operate any exterior lighting fixtures or lighting components for the Proposed Project until the *Construction Lighting Mitigation Plan* is approved by the CPUC. The Plan shall include but is not limited to the following measures:

- Lighting shall be designed so exterior lighting is hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources are shielded to prevent light trespass outside the project boundary.

- All lighting shall be of minimum necessary brightness consistent with worker safety.

**Significant after Mitigation:** Less than Significant.

During operations, the Proposed Project would introduce two new sources of lighting in the study area. Red Federal Aviation Administration (FAA) lighting, required for aviation safety, would be installed on Poles 22/00 and 22/01 that would be adjacent to Buena Vista Road just west of SR 156 in unincorporated San Benito County. These lights would be most visible at night, and potential viewers include nearby rural residences and motorists on Buena Vista Road. An animal adoption center is also located within viewing distance of the new lights; however, it is unlikely that employees would be at the facility at night. The residential area currently contains several poles with lights, which would make the presence of two additional lights less noticeable. Furthermore, the installation of two red FAA lights on the top of poles would not create a substantial source of light that would adversely affect daytime or nighttime views in the area. Therefore, impacts from the new lights would be less than significant.

The Proposed Project would require a minor upgrade to the Hollister Substation. The upgrade would include relocating two existing poles on the substation property, updating relay settings, and changing the 115 kV bus conductors. The upgrade would not require installation of additional lighting. Therefore, new equipment at the Hollister Substation would not create a new source of substantial light that would adversely affect day or nighttime views in the area.

Regarding the creation of a new source of glare, during project construction and operation the replacement of wood poles with steel poles (TSPs and LDS poles) and the replacement of existing towers with new towers could result in potentially reflective surfaces, which in turn could cause glare. However, in most locations the replacement towers would be constructed of the same material as the existing towers and, as discussed above, the new steel poles would be treated to attain a rusted brown weathered appearance. This treatment would reduce the potential for glare to the extent that the new poles would not adversely affect daytime or nighttime views in the area. The new conductor on all poles and towers would be specular, however, which could result in the creation of glare. The magnitude of such an increase in glare is not anticipated to be substantial, however, given the size of the conductor cable, the angle from which viewers would be exposed to the conductor, and the short duration of exposure. Viewers would be below the line, and would view the conductor from an inferior line of site. View duration for motorists on SR 154 would be relatively short, lasting between approximately 28 to 42 seconds. Finally, the conductor is expected to oxidize to a dull finish in approximately nine to 24 months, which would

minimize glare. Therefore, temporary and permanent impacts to daytime or nighttime views in the area would be less than significant.

As discussed above, the Proposed Project would also require a minor upgrade to the Hollister Substation. However, because the new equipment to be installed would be of the same nature as the existing substation, it would blend in with the existing facilities and would not result in a new source of glare. Therefore impacts from potential glare would be less than significant.

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# 3.2 Agriculture and Forestry Resources

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **2. AGRICULTURE AND FORESTRY RESOURCES** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. **Would the project:** | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526) or timberland zoned Timberland Production (as defined by Government Code section 51104(g)? | ☐ | ☐ | ☒ | ☐ |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☒ | ☐ |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to nonforest use? | ☐ | ☐ | ☐ | ☒ |

## 3.2.1 Environmental Setting

### Important Farmland

To characterize the environmental baseline for agricultural resources, Important Farmland Maps produced by the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) were reviewed. Important Farmland maps show categories of *Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance* (if adopted by the county), *Grazing Land, Urban and Built-up Land, Other Land*, and *Water*. *Prime Farmland* and *Farmland of Statewide Importance* map categories are based on qualifying soil types, as determined by the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), as well as current land use. These map categories are defined by the Department of Conservation's FMMP as follows (Department of Conservation, 2010a):

> **Prime Farmland:** Land which has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and

moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods.

**Farmland of Statewide Importance:** Land that is similar to *Prime Farmland* but with minor shortcomings, such as greater slopes or less ability to hold and store moisture.

**Unique Farmland:** Land of lesser quality soils used for the production of specific high economic value crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality or high yields of a specific crop when treated and managed according to current farming methods. It is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Examples of crops include oranges, olives, avocados, rice, grapes, and cut flowers.

**Farmland of Local Importance:** Land of importance to the local agricultural economy, as determined by each county's board of supervisors and local advisory committees. Examples include dairies, dryland farming, aquaculture, and uncultivated areas with soils qualifying for *Prime Farmland* and *Farmland of Statewide Importance*.

**Grazing Land:** Land on which the existing vegetation, whether grown naturally or through management, is suitable for grazing or browsing of livestock.

**Urban and Built-up Land:** Land used for residential, industrial, commercial, construction, institutional, public administrative purpose, railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other development purposes. Highways, railroads, and other transportation facilities are also included in this category.

**Other Land:** Land which is not included in any of the other mapping categories. Common examples include low-density rural developments, brush, timber, wetland, and riparian areas not suitable for livestock grazing, confined livestock, poultry or aquaculture facilities, strip mines, borrow pits, and water bodies smaller than 40 acres.

**Water:** Water areas with an extent of at least 40 acres.

### *Existing Agriculture Resources*

**Table 3.2-1** shows the acres of Farmland in San Benito County and Monterey County in 2004 and 2006, as well as the amount of recent farmland conversions.

The Proposed Project would replace an existing power line in an existing utility corridor, diverting from the existing corridor only to construct the 1.3-mile Proposed River Crossing alignment, which would be constructed within new ROW to be acquired.

The Proposed Project would temporarily impact approximately 21 acres of Farmland (specifically, *Prime Farmland*) and 85 acres of *Grazing Land* and *Other Land*. Permanently, the Proposed Project would disturb less than 0.01 acre of Farmland (specifically, *Prime Farmland*) (Department of Conservation, 2010b). The Proposed Project would also temporarily impact approximately 73 acres of land under Williamson Act contract. Permanently, the Proposed Project would disturb less than one acre under Williamson Act contract.

**TABLE 3.2-1**
**FARMLAND CONVERSION FROM 2004–2006 IN SAN BENITO AND MONTEREY COUNTIES**

| | Total Acres Inventoried | | 2004–2006 Acreage Changes | | |
|---|---|---|---|---|---|
| **Land Use Category** | **2004** | **2006** | **Acres Lost** | **Acres Gained** | **Net Change** |
| San Benito County | | | | | |
| Prime Farmland | 32,085 | 30,432 | 1,918 | 265 | -1,653 |
| Farmland of Statewide Importance | 9,464 | 9,106 | 463 | 105 | -358 |
| Unique Farmland | 2,625 | 2,580 | 213 | 168 | -45 |
| Farmland of Local Importance | 27,389 | 26,482 | 3,021 | 2,114 | -907 |
| **San Benito Agricultural Land Subtotal** | **71,563** | **68,600** | **5,615** | **2,652** | **-2,963** |
| Monterey County | | | | | |
| Prime Farmland | 169,369 | 167,636 | 2,711 | 978 | -1,733 |
| Farmland of Statewide Importance | 44,546 | 43,402 | 1,585 | 441 | -1,144 |
| Unique Farmland | 26,479 | 25,104 | 2,025 | 650 | -1375 |
| Farmland of Local Importance | -- | -- | -- | -- | -- |
| **Monterey Agricultural Land Subtotal** | **240,394** | **236,142** | **6,321** | **2,069** | **-4,252** |

SOURCE: Department of Conservation, 2010c.

## Forest Land and Timberland

Public Resources Code section 12220(g) defines "Forest land" as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." In turn, "timberland" is defined by Public Resources Code section 4526 as, "land, other than land owned by the federal government. . ., which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees." Finally, "Timberland production zone" or "TPZ" is defined by Government Code section 51104(g) as "an area which has been zoned pursuant to [Government Code] Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h). With respect to the general plans of cities and counties, 'timberland preserve zone' means 'timberland production zone.'"

The Proposed Project would not traverse any land zoned for timberland production, any land used for growing of trees for commercial production of timber or other forest products. As discussed in Section 3.9, *Land Use*, the Proposed Project would be located primarily on land used for agricultural and rangeland, including grazing.

# 3.2.2 Regulatory Setting

## State

### *California Farmland Mapping and Monitoring Program*

The California Department of Conservation, under the Division of Land Resource Protection, has set up the FMMP. The FMMP monitors the conversion of the State's farmland to and from agricultural use. The map series identifies eight classifications and uses a minimum mapping unit size of ten acres. The FMMP also produces a biennial report on the amount of land converted from agricultural to non-agricultural use. The FMMP is an informational service only and does not have regulatory jurisdiction over local land use decisions. For the purpose of this environmental analysis and consistency with the Farmland Policy Act of 1981, the term "Farmland" includes Prime Farmland, Unique Farmland, and Farmland of Statewide Importance, and any conversion of land within these categories is typically considered to be an adverse impact.

### *California Land Conservation Act of 1965 (Williamson Act)*

The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) serves to preserve open spaces and agricultural land. It discourages urban sprawl and prevents landowners from developing their property for the greater land value of commercial and/or residential uses. The Williamson Act is a State program that allows agricultural landowners to pay reduced property taxes in return for their contractual agreement to retain the land in agricultural and open space uses for a period of ten years. The term of the contract automatically renews each year, so that the contract always has a ten year period left to function. The Williamson Act Program was revised by the enactment of Farmland Security Zone (FSZ) legislation during the 1998 legislative session, offering landowners greater property tax reduction in exchange for a longer contract term than under the Williamson Act Program.

## Local

### *San Benito County Zoning Ordinance*

As discussed in Section 3.9, *Land Use*, the Proposed Project would traverse parcels designated as *Agricultural Productive* (*AP*) and *Agricultural Rangeland* (*AR*) under the San Benito County Zoning Ordinance. The intent of the AP district is to provide areas within the County to be used for agricultural production of any type as set forth in the general plan (San Benito County, 1984). Public utility facilities are allowed in the AP district with a conditional use permit. The intent of the AR district is to provide areas within the County to be used for agricultural rangeland purposes as set forth in the general plan (San Benito County, 1992). As with the AP district, public utility facilities are considered conditionally acceptable within the AR district.

### *Monterey County Zoning Ordinance*

The Proposed Project would traverse parcels designated as *Permanent Grazing* in the Monterey County Zoning Ordinance. The *Permanent Grazing* designation provides a district to preserve,

protect, and enhance those productive exclusive grazing lands in the County of Monterey. Uses generally permitted in this district include all soil dependent agricultural uses including crop and tree farming, dry land farming, livestock farming, greenhouses and vineyards. Public and quasi-public land uses such as public utilities are conditionally permitted within this district (Monterey County, 1997).

## 3.2.3 Applicant Proposed Measures

PG&E proposes the following applicant proposed measure (APM) to minimize impacts on agricultural resources from the Proposed Project. The impact analysis in this MND assumes that this APM would be implemented to reduce impacts to agricultural resources discussed below.

> **APM AG-1: Compensate for reduced agricultural production and loss of use.** PG&E will offer appropriate compensation for land held in private ownership as part of the acquisition of temporary construction easements or permanent utility easements. PG&E will compensate property owners for removal of any structures, crops, or agriculture-related improvements required to construct the project. PG&E will negotiate easements with private landowners for the temporary or permanent use of agricultural areas. Upon completion of the project, the areas will be left as specified in the individual agreements. In addition, PG&E will prepare a SWPPP (see APM HYDRO 1 [Prepare and implement a Storm Water Pollution Prevention Plan] in Section 3.8, *Hydrology and Water Quality*) to ensure that areas affected by construction are restored to pre-construction conditions.

## 3.2.4 Environmental Impacts and Mitigation Measures

### a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use: *LESS THAN SIGNIFICANT IMPACT*.

The Proposed Project would result in temporary disturbance to agricultural lands in areas that would be used for staging, pull and/or tension sites, crane pads, temporary shoo-fly line tie-in connections and associated poles, and new access roads. New permanent access roads associated with the Proposed Project and new poles placed within the Proposed River Crossing alignment would result in permanent disturbance to agricultural lands. Approximately 106 acres of land designated for agricultural purposes would be temporarily disturbed during construction. Of the total agricultural acreage disturbed, approximately 21 acres are classified as Farmland (specifically, *Prime Farmland)* by the FMMP. Of the total agricultural acreage disturbed, less than 0.01 acre of Farmland (specifically, *Prime Farmland*) would be disturbed permanently. No *Unique Farmland* or *Farmland of Statewide Importance* would be disturbed by the Proposed Project either temporarily or permanently. Furthermore, with implementation of APM AG-1, PG&E would negotiate easements with private landowners for the temporary or permanent use of agricultural areas, leave areas as specified in individual agreements with landowners upon completion of the project, and prepare a SWPPP to ensure that areas affected by construction are restored to pre-construction conditions. Therefore, since all temporarily impacted Farmland would be restored following completion of construction activities and/or left as specified in individual agreements with

landowners, and less than 0.01 acres of Farmland would be permanently impacted, impacts would be less than significant.

**b) Conflict with existing zoning for agricultural use, or a Williamson Act contract: *NO IMPACT*.**

The Proposed Project would not conflict with existing zoning for agricultural uses, as it would generally replace an existing power line in an existing utility corridor with the exception of the 1.3-mile Proposed River Crossing alignment, which would be constructed within new ROW to be acquired. Although this new ROW is currently used for agricultural purposes, as discussed in Section 3.9, *Land Use, Planning, and Policies*, the Proposed Project is consistent and would not conflict with existing zoning for agricultural use.

Approximately 73 acres of land currently under Williamson Act contract would be temporarily disturbed during proposed construction activities; however, less than one acre of land would be permanently converted to a non-agricultural use. Moreover, Government Code Section 51238 states that electrical facilities are a compatible Williamson Act use. Therefore, the Proposed Project would not remove the land from Williamson Act contract status, and no impact would occur.

**c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g): *LESS THAN SIGNIFICANT IMPACT*.**

The Proposed Project would not require forest land or timberland to be rezoned, and does not cross land designated as *Timberland Production Zone* (*TPZ*). With the exception of the 1.3-mile Proposed River Crossing alignment, the Proposed Project would be located entirely within existing PG&E ROW where similar infrastructure currently exists. For these areas, the existing land use would not change, and there would be no conflict with existing zoning (*AP* and *AR* in San Benito County, and *Permanent Grazing* in Monterey County). Similarly, the 1.3-mile Proposed River Crossing alignment would traverse land designated by the San Benito County General Plan and Zoning Ordinance as *AP* and *AR*. This analysis conservatively assumes that such land meets the definition of "forest land" and/or "timberland"; however, the Proposed Project would not conflict with either type of zoning. Although CEQA does not provide a specific definition of "comply" in the context of determining a project's consistency, case law interpreting the requirement that a local government's activities be consistent with its General Plan provide that "zoning ordinance [for example] is consistent with the city's general plan where, considering all of its aspects, the ordinance furthers the objectives and policies of the general plan and does not obstruct their attainment." *City of Irvine v. Irvine Citizens Against Overdevelopment*, 25 Cal.App.4th 868, 879 (1994). The 1.3-mile Proposed River Crossing alignment is zoned the same as the other portions of the Proposed Project within San Benito County and would not obstruct the attainment of any forest or timberland policies or objectives, including Chapter 19.33 of the San Benito County Code, concerning the management and conservation of woodlands. Accordingly, the potential impact of the Proposed Project on existing forest land and timberland zoning would be less than significant.

**d) Result in the loss of forest land or conversion of forest land to non-forest use: *LESS THAN SIGNIFICANT IMPACT*.**

The loss of forest land or conversion of forest land to non-forest uses could have direct or indirect impacts on the environment. For example, forests remove greenhouse gases (GHGs) from the atmosphere rather than emit GHGs. Accordingly, the loss or conversion of forest land could remove existing carbon stock (i.e., carbon stored in vegetation) and remove existing carbon sequestration potential. Monterey County experienced an increase in carbon stock sequestered in forest land from 38,608 tons of carbon (t C) in 1987 to 39,661 t C in 1997 (a difference of 1,053 t C), while San Benito County experienced a decrease during the same timeframe from 68,232 t C to 53,259 t C (a difference of 14,973 t C). CEC, *Baseline Greenhouse Gas Emissions for Forest, Range and Agricultural Lands in California* (March 2004) Table 2-10. The loss or conversion of forestland also might have an effect on other forest resources, such as aesthetics, biological resources, and water quality.

As discussed in Section 3.4, *Biological Resources*, the Proposed Project would remove approximately 144 native oak trees, mostly coast live oaks, and three other native trees, and would trim approximately 124 native oak trees and approximately 14 other native trees including willows and California bay laurel. However, the removed trees would be spread out in various locations along the power line alignment, which would reduce the areas of converted forest land to small, fragmented patches. In addition, implementation of APM BIO-10 would track protected trees removed during construction and replace all impacted trees per local standards. Accordingly, the potential impact of the Proposed Project on the loss or conversion of existing forest land would be less than significant. Although not required for this impact, biological resources Mitigation Measure 3.4-7 also requires post-planting care to ensure survivability of replacement trees, which would strengthen the intent of APM BIO-10.

**e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use: *NO IMPACT*.**

The Proposed Project would not involve additional changes in the existing environment which, due to their location or nature, could temporarily or permanently result in conversion of Farmland to non-agricultural use or of forest land to a non-forest use. The presence of a transmission line is generally a compatible use with agriculture and forestry, and the Proposed Project does not include any features that would indirectly result in the conversion of such lands.

Further, impacts to existing water pumps and irrigation pipelines could remove farmers' ability to irrigate crops, which could effectively render previously productive agricultural land unusable. However, PG&E has committed to conducting pre-construction records searches to identify water wells and well fields in order to avoid impacts to well-related infrastructure (see also Section 3.16, *Utilities and Service Systems*). Therefore, effects on existing irrigation infrastructure would not result in the conversion of Farmland to non-agricultural use.

Accordingly, the Proposed Project would have no impact on the conversion of agricultural land or forest land resulting from other changes in the environment.

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# References

Department of Conservation, 2010a. FMMP, Important Farmland Map Categories, website (http://www.conservation.ca.gov/dlrp/fmmp/mccu/Pages/map_categories.aspx), accessed on February 12, 2010.

Department of Conservation, 2010b. FMMP, Important Farmland, GIS Data, website (ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/2008/), accessed on February 12, 2010.

Department of Conservation, 2010c. FMMP, Important Farmland, County Land Use Conversion Tables, website (http://redirect.conservation.ca.gov/dlrp/fmmp/county_info_results.asp), accessed on February 12, 2010.

Monterey County, 1997. *Monterey County Code, Chapter 21.34 – Regulations for Permanent Grazing Zoning Districts or "PG" Districts*, codified 1997.

San Benito County, 1984. *Code of Ordinances, Section 25.07.020*, codified 1984.

San Benito County, 1992. *Code of Ordinances, Section 25.07.003*, codified 1992.

# 3.3 Air Quality and Greenhouse Gas Emissions

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **3. AIR QUALITY and Greenhouse Gas Emissions** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:** | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☒ | ☐ |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | ☐ | ☐ | ☒ | ☐ |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | ☐ | ☐ | ☒ | ☐ |
| d) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☒ | ☐ |
| e) Create objectionable odors affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |
| f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?[1] | ☐ | ☐ | ☒ | ☐ |
| g) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? [1] | ☐ | ☐ | ☒ | ☐ |

This section evaluates the potential impacts on regional and local air quality that would result from sources of air emissions during construction and operation of the Proposed Project. This section is based on a review of existing documentation of air quality conditions in the region, air quality regulations from the U.S. Environmental Protection Agency (USEPA), the California Air Resources Board (CARB), and the Monterey Bay Unified Air Pollution Control District (MBUAPCD).

## 3.3.1 Environmental Setting

Air quality is a function of both the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features that influence pollutant movement and dispersal. Atmospheric conditions such as wind speed, wind direction, atmospheric stability, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants, which affects air quality. The Proposed Project is

[1] Criterion f) and g) represent Greenhouse Gas Emissions checklist items a) and b), which were approved as amendments of Appendix G of the CEQA Guidelines by the Office of Administrative Law (OAL) on February 16, 2010, and became effective on March 18, 2010.

located within the North Central Coast Air Basin (NCCAB), which falls under the jurisdiction of the MBUAPCD.

## Regional Topography, Meteorology, and Climate

Topography and meteorology greatly influence air quality. Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and/or dispersion of pollutants.

A semi-permanent high-pressure cell in the eastern Pacific Ocean is the basic controlling factor of the climate in the NCCAB. In the summer, the high-pressure cell is dominant and causes persistent west and northwest winds over the entire California coast. Air descends in the Pacific high-pressure cell (Pacific High), forming a stable temperature inversion of hot air over a cool coastal layer of air. The onshore air currents pass over cool ocean waters to bring fog and relatively cool air into the coastal valleys. The warmer air aloft can inhibit vertical air movement (MBUAPCD, 2008a).

Hollister, at the northern end of the San Benito Valley, experiences west winds nearly one-third of the time. The prevailing air flow during the summer months originates in the Monterey Bay area and enters the northern end of the San Benito Valley through a gap in the Gabilan Range occupied by the Pajaro River. In addition, a northwesterly air flow frequently transports pollutants into the San Benito Valley from the Santa Clara Valley (MBUAPCD, 2008a).

The study area typically has average maximum and minimum winter (i.e., January) temperatures of 59 ºF and 36 ºF, respectively, while average summer (i.e., July) maximum and minimum temperatures are 81 ºF and 51 ºF, respectively. The warmest month is typically September, with an average maximum high of 82 ºF (WRCC, 2010). The presence and intensity of sunlight is another important factor that affects air pollution. Typically, ozone is formed at higher temperatures. In the presence of ultraviolet sunlight and warm temperatures, reactive organic gases (ROGs) and nitrogen oxides (NOx) react to form secondary photochemical pollutants, including ozone. Since temperatures in many of the NCCAB inland valleys, including the study area, are so much higher than near the coast, the inland areas are much more prone to photochemical air pollution.

Precipitation in the study area averages approximately 13 inches per year (WRCC, 2010). Because of the moderating marine influence, which decreases with distance from the ocean, monthly and annual temperature variations are greatest inland and smallest at the coast.

## Existing Air Quality

MBUAPCD operates a regional monitoring network that measures the ambient concentrations of criteria pollutants. Existing levels of air quality in the study area can generally be inferred from ambient air quality measurements conducted by MBUAPCD at its closest station, the Hollister-Fairview Road monitoring station located approximately 2.5 miles to the southeast of the Hollister Substation. The Hollister monitoring station measures concentrations of ozone,

particulate matter equal to or less than 10 microns in diameter (PM10), and particulate matter less than 2.5 microns in diameter (PM2.5).

Background ambient concentrations of pollutants are determined by pollutant emissions in a given area as well as wind patterns and meteorological conditions for that area. As a result, background concentrations can vary among different locations within an area. However, areas located close together and exposed to similar wind conditions can be expected to have similar background pollutant concentrations. **Table 3.3-1** shows a five-year (2005 – 2009) summary of monitoring data collected at the Hollister-Fairview Road station. The data are compared with the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). As indicated in the table, the State one-hour ozone standard and the national eight-hour ozone standard were both exceeded once between 2005 and 2009. However, the State eight-hour ozone standard was exceeded a total of 12 times between 2005 and 2009. There were no violations of the State or national PM10 and PM2.5 standards recorded between 2005 and 2009. Following the table are summary descriptions of the criteria pollutants.

**TABLE 3.3-1**
**AIR QUALITY DATA SUMMARY (2005–2009) FOR THE STUDY AREA**

| | | Monitoring Data by Year | | | | |
|---|---|---|---|---|---|---|
| **Pollutant** | **Standard** | **2005** | **2006** | **2007** | **2008** | **2009** |
| Ozone | | | | | | |
| Highest 1 Hour Average (ppm) | | 0.087 | 0.099 | 0.087 | 0.090 | 0.093 |
| Days over 1 Hour State Standard | 0.09 | 0 | 1 | 0 | 0 | 0 |
| Highest 8 Hour Average (ppm) | | 0.071 | 0.088 | 0.074 | 0.073 | 0.074 |
| Days over 8 Hour National Standard | 0.075 | 0 | 1 | 0 | 0 | 0 |
| Days over 8 Hour State Standard | 0.070 | 1 | 5 | 2 | 2 | 2 |
| Particulate Matter (PM10) | | | | | | |
| Highest 24 Hour Average (µg/m$^3$) | | 37 | 46 | 40 | 40 | 38 |
| Days over State Standard [a] | 50 | 0 | 0 | 0 | 0 | 0 |
| Days over National Standard [a] | 150 | 0 | 0 | 0 | 0 | 0 |
| Annual Average (µg/m$^3$) | | 15.8 | 16.0 | 17.2 | 19.7 | ND |
| Exceed State Standard? | 20 | No | No | No | No | ND |
| Particulate Matter (PM2.5) | | | | | | |
| Highest 24 Hour Average (µg/m$^3$) | | ND | ND | 20.9 | 22.7 | 17.3 |
| Days over National Standard [a] | 35 | ND | ND | 0 | 0 | 0 |
| Annual Average (µg/m$^3$) | | ND | ND | 6.3 | 7.0 | 5.5 |
| Exceed State Standard? | 12 | ND | ND | No | No | No |

NOTES: ppm = parts per million; µg/m$^3$ = micrograms per cubic meter; ND = No data available

[a] Measurements are usually collected every six days. Days over the standard represent the estimated number of days that the standard would have been exceeded if sampling was conducted every day.

SOURCE: CARB 2010a.

**Ozone.** Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and that can cause substantial damage to vegetation and other materials. Ozone is not emitted directly into the atmosphere, but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving ROG and NOx. ROG and NOx are known as precursor compounds for ozone. Significant ozone production generally requires ozone precursors to be present in a stable atmosphere with strong sunlight for approximately three hours.

Ozone is a regional air pollutant because it is not emitted directly by sources, but is formed downwind of sources of ROG and NOx under the influence of wind and sunlight. Ozone concentrations tend to be higher in the late spring, summer, and fall, when the long sunny days combine with regional subsidence inversions to create conditions conducive to the formation and accumulation of secondary photochemical compounds, like ozone.

**Particulate Matter.** PM10 and PM2.5 represent fractions of particulate matter that can be inhaled into air passages and the lungs and can cause adverse health effects. Particulate matter in the atmosphere results from many kinds of dust- and fume-producing industrial and agricultural operations, fuel combustion, and atmospheric photochemical reactions. Some sources of particulate matter, such as demolition and construction activities, are more local in nature, while others, such as vehicular traffic, have a more regional effect. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain absorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates can also damage materials and reduce visibility.

**Other Criteria Pollutants.** Carbon monoxide (CO) is a non-reactive pollutant that is a product of incomplete combustion and is mostly associated with motor vehicle traffic. High CO concentrations develop primarily during winter when periods of light winds combine with the formation of ground level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air temperatures. When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia.

Sulfur dioxide ($SO_2$) is produced through combustion of sulfur or sulfur-containing fuels such as coal. $SO_2$ is also a precursor to the formation of atmospheric sulfate and particulate matter (PM10 and PM2.5) and contributes to potential atmospheric sulfuric acid formation that could precipitate downwind as acid rain. Lead has a range of adverse neurotoxin health effects, and was formerly released into the atmosphere primarily via leaded gasoline. The phase-out of leaded gasoline has resulted in decreasing levels of atmospheric lead.

### *Attainment Status*

The NCCAB is considered in attainment or unclassified for most of the criteria pollutants for State and federal considerations with the exception of $O_3$ and PM10, which are designated as nonattainment for the State standards. Refer to **Table 3.3-2** for the current attainment status of the NCCAB.

**TABLE 3.3-2**
**NORTH CENTRAL COAST AIR BASIN ATTAINMENT STATUS**

| Pollutant | Federal | State |
|---|---|---|
| Ozone (one-hour standard) | ---[a] | Nonattainment |
| Ozone (eight-hour standard) | Unclassified/Attainment | Nonattainment |
| Carbon Monoxide (CO) | Unclassified/Attainment | Monterey – Attainment<br>San Benito – Unclassified<br>Santa Cruz – Unclassified |
| Nitrogen Dioxides ($NO_2$) | Unclassified/Attainment | Attainment |
| Inhalable Particulates (PM10) | Unclassified | Nonattainment |
| Fine Particulates (PM2.5) | Unclassified/Attainment | Attainment |

[a] The Federal one-hour standard was revoked on June 15, 2005.

SOURCE: CARB 2010b.

## Greenhouse Gas Emissions and Climate Change

Some gases in the atmosphere affect the Earth's heat balance by absorbing infrared radiation. These gases can prevent the escape of heat in much the same way as glass in a greenhouse. This is often referred to as the "greenhouse effect," and it is responsible for maintaining a habitable climate. On Earth, the gases believed to be most responsible for the greenhouse effect are water vapor, carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride ($SF_6$). Enhancement of the greenhouse effect can occur when concentrations of these gases exceed the natural concentrations in the atmosphere. Of these gases, $CO_2$ and methane are emitted in the greatest quantities from human activities. Emissions of $CO_2$ are largely by-products of fossil fuel combustion, whereas methane primarily results from off-gassing associated with agricultural practices and landfills. $SF_6$ is a greenhouse gas (GHG) commonly used in the utility industry as an insulating gas in transformers and other electronic equipment. $SF_6$, while comprising a small fraction of the total GHGs emitted annually world-wide, is a much more potent GHG with 23,900 times the global warming potential as $CO_2$.[2] To account for the warming potential of GHG, GHG emissions are often quantified and reported as $CO_2$ equivalents ($CO_2e$). Large emission sources are reported in million metric tons of $CO_2e$ ($MMTCO_2e$).

[2] Global warming potential is the potential of a gas or aerosol to trap heat in the atmosphere. $CO_2$ is assigned a global warming potential of 1.

There is widespread international scientific agreement that human-caused increases in GHGs have contributed and will continue to contribute to global warming, although there is much uncertainty concerning the magnitude and rate of the warming. Some of the potential resulting effects in California of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC, 2001):

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal (i.e., daily) temperature range over most land areas;
- Increase of heat index over land areas; and
- More intense precipitation events.

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood, and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.

CARB estimated that in 2006, California produced 484 million gross metric tons of $CO_2e$ GHG emissions (CARB, 2009). CARB found that transportation is the source of 38 percent of the State's GHG emissions; followed by electricity generation at 22 percent, and industrial sources at 21 percent.

## Sensitive Receptors

For the purposes of air quality and public health and safety, sensitive receptors are generally defined as land uses with population concentrations that would be particularly susceptible to disturbance from dust and air pollutant concentrations, or other disruptions associated with project construction and/or operation. Sensitive receptor land uses generally include schools, day care centers, hospitals, residential areas, and parks. Some sensitive receptors are considered to be more sensitive than others to air pollutants. The reasons for greater than average sensitivity include pre-existing health problems, proximity to emission sources, or duration of exposure to air pollutants. Schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because children, elderly people, and the infirm are more susceptible to respiratory distress and other air quality-related health problems than the general public. Residential areas are considered sensitive to poor air quality because people usually stay home for extended periods of time, with associated greater exposure to ambient air quality. Recreational uses are also considered sensitive because vigorous exercise associated with recreation places a high demand on the human respiratory system.

Sensitive receptors in the study area include a residential subdivision located just off of Avenida del Piero, as well as a limited number of other residences scattered throughout the study area. The Proposed Project would also be located approximately 500 feet from Countryside Day-Care Preschool and would be within 2,000 feet of Anzar High School and Lagunita Elementary School.

## 3.3.2 Regulatory Setting

Air quality within the NCCAB is addressed through the efforts of various federal, State, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The air pollutants of concern and agencies primarily responsible for improving the air quality within the air basin and the pertinent regulations are discussed below.

### Criteria Air Pollutants

Regulation of air pollution is achieved through both national and State ambient air quality standards and emission limits for individual sources of air pollutants. As required by the federal Clean Air Act, the USEPA has identified criteria pollutants and has established NAAQS to protect public health and welfare. NAAQS have been established for ozone, CO, nitrogen dioxide ($NO_2$), $SO_2$, PM10, PM2.5, and lead (Pb). These pollutants are called "criteria" air pollutants because standards have been established for each of them to meet specific public health and welfare criteria. To protect human health and the environment, the USEPA has set "primary" and "secondary" maximum ambient thresholds for all seven criteria pollutants. Primary thresholds were set to protect human health, particularly for sensitive receptors such as children, the elderly, and individuals suffering from chronic lung conditions such as asthma and emphysema. Secondary standards were set to protect the natural environment and prevent further deterioration of animals, crops, vegetation, and buildings.

The NAAQS are defined as the maximum acceptable concentration that may be reached, but not exceeded more than once per year. California has adopted more stringent ambient air quality standards for most of the criteria air pollutants. **Table 3.3-3** presents both sets of ambient air quality standards (i.e., national and State). California has also established State ambient air quality standards for sulfates, hydrogen sulfide, and vinyl chloride; however, air emissions of these pollutants would not be expected under the Proposed Project and thus, there is no further mention of these pollutants in this IS/MND.

### Federal and State Regulations

USEPA is responsible for implementing programs established under the federal Clean Air Act, such as establishing and reviewing the NAAQS and judging the adequacy of State Implementation Plans (SIPs), but has delegated the authority to implement many of the federal programs to the states while retaining an oversight role to ensure that the programs continue to be implemented.

**TABLE 3.3-3**
**STATE AND NATIONAL CRITERIA AIR POLLUTANT STANDARDS**

| Pollutant | Averaging Time | State Standard | National Standard |
|---|---|---|---|
| Ozone | 1 Hour<br>8 Hour | 0.09 ppm<br>0.070 ppm | –<br>0.075 ppm |
| Carbon Monoxide | 1 Hour<br>8 Hour | 20 ppm<br>9.0 ppm | 35 ppm<br>9 ppm |
| Nitrogen Dioxide | 1 Hour<br>Annual | 0.18 ppm<br>0.030 ppm | 0.100 ppm [a]<br>0.053 ppm |
| Sulfur Dioxide | 1 Hour<br>3 Hour<br>24 Hour<br>Annual | 0.25 ppm<br>–<br>0.04 ppm<br>– | –<br>0.5 ppm<br>0.14 ppm<br>0.030 ppm |
| Respirable Particulate Matter (PM10) | 24 Hour<br>Annual | 50 µg/m$^3$<br>20 µg/m$^3$ | 150 µg/m$^3$<br>– |
| Fine Particulate Matter (PM2.5) | 24 Hour<br>Annual | –<br>12 µg/m$^3$ | 35 µg/m$^3$<br>15.0 µg/m$^3$ |
| Lead | Monthly<br>Quarterly | 1.5 µg/m$^3$<br>– | –<br>1.5 µg/m$^3$ |

ppm = parts per million
µg/m$^3$ = micrograms per cubic meter

[a] To attain this standard, the three year average of the 98$^{th}$ percentile of the daily maximum one-hour average at each monitor within an area must not exceed 0.100 ppm (effective January 22, 2010).

SOURCE: CARB, 2010c.

CARB is responsible for establishing and reviewing the State standards, compiling the California SIP and securing approval of that plan from USEPA, conducting research and planning, and identifying toxic air contaminants (TACs). CARB also regulates mobile sources of emissions in California, such as construction equipment, trucks, and automobiles, and oversees the activities of California's air quality management districts, which are organized at the county or regional level.

### *Regulations for Mobile Sources of Air Pollutants*

The following air quality regulations apply to mobile sources and are directly relevant to the Proposed Project. On road vehicles with a gross vehicular weight rating of 10,000 pounds or greater shall not idle for longer than five minutes at any location as required by Section 2485 of Title 13, Division 3, Chapter 10, Article 1 of the California Code of Regulations. This restriction does not apply when vehicles remain motionless during traffic or when vehicles are queuing. Off road equipment engines shall not idle for longer than five minutes per Section 2449(d)(3) of Title 13, Division 3, Chapter 9, Article 4.8 of the California Code of Regulations. Exceptions to this rule include the following: idling when queuing; idling to verify that the vehicle is in safe operating condition; idling for testing, servicing, repairing or diagnostic purposes; idling necessary to accomplish work for which the vehicle was designed (such as operating a crane); idling required to bring the machine to operating temperature as specified by the manufacturer; and idling necessary to ensure safe operation of the vehicle.

### *Executive Order S-3-05*

In 2005, in recognition of California's vulnerability to the effects of climate change, Governor Schwarzenegger established Executive Order S-3-05, which set forth a series of target dates by which statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

### *Assembly Bill 32 – California Global Warming Solutions Act*

California Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006, was enacted in 2006 and requires CARB to establish a statewide GHG emission cap for 2020 based on 1990 emission levels. AB 32 required CARB to adopt regulations by January 1, 2008, that identified and required selected sectors or categories of emitters of GHGs to report and verify their statewide GHG emissions, and CARB is authorized to enforce compliance with the program. Under AB 32, CARB was also required to adopt, by January 1, 2008, a statewide GHG emissions limit equivalent to the statewide GHG emissions levels in 1990, which must be achieved by 2020. By January 1, 2011, CARB is required to adopt rules and regulations (which shall become operative January 1, 2012), to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 permits the use of market-based compliance mechanisms to achieve those reductions. AB 32 also requires CARB to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism that it adopts.

In June 2007, CARB directed staff to pursue 37 early actions for reducing GHG emissions under AB 32. The broad spectrum of strategies to be developed – including a Low Carbon Fuel Standard, regulations for refrigerants with high global warming potentials, guidance and protocols for local governments to facilitate GHG reductions, and green ports – reflects that the serious threat of climate change requires action as soon as possible (CARB, 2007a).

In addition to approving the 37 GHG reduction strategies, CARB directed staff to further evaluate early action recommendations made at the June 2007 meeting, and to report back to CARB within six months. The general sentiment of CARB suggested a desire to try to pursue greater GHG emissions reductions in California in the near-term. Following the June 2007 CARB hearing, CARB staff evaluated all 48 recommendations submitted by stakeholders and several internally-generated staff ideas and published the *Expanded List of Early Action Measures To Reduce Greenhouse Gas Emissions In California Recommended For Board Consideration* in October 2007 (CARB, 2007b).

### *Climate Change Scoping Plan*

In December of 2008, CARB released a Scoping Plan outlining the State's strategy to achieve the 2020 GHG emissions limit (CARB, 2008a). This Scoping Plan, developed by CARB in coordination with the Climate Action Team (CAT), proposes a comprehensive set of actions

designed to reduce overall GHG emissions in California, improve the environment, reduce dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health. It was adopted by the Board at its meeting in December 2008. The measures in the Scoping Plan approved by the Board will be developed over the next two years and be in place by 2012.

The Scoping Plan expands the list of nine Early Action Measures into a list of 39 Recommended Actions contained in Appendices C and E of the Plan. These measures are presented in **Table 3.3-4** below.

#### CARB Preliminary Draft Staff Proposal, October 2008

In its Staff Proposal, CARB took the first step toward developing recommended statewide interim thresholds of significance for GHGs that may be adopted by local agencies for their own use. The proposal does not attempt to address every type of project that may be subject to CEQA, but instead focuses on common project types that, collectively, are responsible for substantial GHG emissions – specifically, industrial, residential, and commercial projects. CARB is developing these thresholds in these sectors to advance climate objectives, streamline project review, and encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout the State.

CARB's staff has developed a preliminary interim threshold concept for industrial projects (CARB, 2008b). CARB staff's objective in this proposal is to develop a threshold of significance that will result in the vast majority (~90 percent statewide) of the GHG emissions from new industrial projects that are subject to CEQA's requirement to impose feasible mitigation. CARB believes this can be accomplished with a threshold that allows small projects to be considered less than significant. CARB staff used existing data for the industrial sector to derive a proposed hybrid threshold. The threshold is 7,000 metric tons of $CO_2e$ per year for operational emissions (excluding transportation), and performance standards for construction and transportation emissions. These performance standards have not yet be developed.

### *Local Regulations and Plans*

#### Monterey Bay Unified Air Pollution Control District

CARB has established a State health-based air quality standard for ozone. Under the California Clean Air Act (CCAA), areas not in compliance with this standard must prepare an ozone reduction plan. The MBUAPCD is one out of 35 air quality management districts that have prepared Air Quality Management Plans (AQMPs) to accomplish the five-percent annual reduction goal. The 1991 AQMP for the MBUAPCD was the first plan prepared in response to the CCAA of 1988 that established specific planning requirements to meet the ozone standard. The CCAA requires that the AQMP be updated every three years. The 2008 AQMP is the fifth update to the 1991 AQMP.

**TABLE 3.3-4**
**RECOMMENDED ACTIONS OF CLIMATE CHANGE SCOPING PLAN**

| ID # | Sector | Strategy Name |
|---|---|---|
| T-1 | Transportation | Pavley I and II – Light-Duty Vehicle GHG Standards |
| T-2 | Transportation | Low Carbon Fuel Standard (Discrete Earl Action) |
| T-3 | Transportation | Regional Transportation-Related GHG Targets |
| T-4 | Transportation | Vehicle Efficiency Measures |
| T-5 | Transportation | Ship Electrification at Ports (Discrete Early Action) |
| T-6 | Transportation | Goods-movement Efficiency Measures |
| T-7 | Transportation | Heavy Duty Vehicle Greenhouse Has Emission Reduction Measure – Aerodynamic Efficiency (Discrete Early Action) |
| T-8 | Transportation | Medium and Heavy-Duty Vehicle Hybridization |
| T-9 | Transportation | High Speed Rail |
| E-1 | Electricity and Natural Gas | Increased Utility Energy efficiency programs ; More stringent Building and Appliance Standards |
| E-2 | Electricity and Natural Gas | Increase Combined Heat and Power Use by 30,000 GWh |
| E-3 | Electricity and Natural Gas | Renewables Portfolio Standard |
| E-4 | Electricity and Natural Gas | Million Solar Roofs |
| CR-1 | Electricity and Natural Gas | Energy Efficiency |
| CR-2 | Electricity and Natural Gas | Solar Water Heating |
| GB-1 | Green Buildings | Green Buildings |
| W-1 | Water | Water Use Efficiency |
| W-2 | Water | Water Recycling |
| W-3 | Water | Water System Energy Efficiency |
| W-4 | Water | Reuse Urban Runoff |
| W-5 | Water | Increase Renewable Energy Production |
| W-6 | Water | Public Goods Charge (Water) |
| I-1 | Industry | Energy Efficiency and Co-benefits Audits for Large Industrial Sources |
| I-2 | Industry | Oil and Gas Extraction GHG Emission Reduction |
| I-3 | Industry | GHG Leak Reduction from Oil and Gas Transmission |
| I-4 | Industry | Refinery Flare Recovery Process Improvements |
| I-5 | Industry | Removal of Methane Exemption from Existing Refinery Regulations |
| RW-1 | Recycling and Waste Management | Landfill Methane Control (Discrete Early Action) |
| RW-2 | Recycling and Waste Management | Additional Reductions in Landfill Methane – Capture Improvements |
| RW-3 | Recycling and Waste Management | High Recycling/Zero Waste |
| F-1 | Forestry | Sustainable Forest Target |
| H-1 | High Global Warming Potential Gases | Motor Vehicle Air Conditioning Systems (Discrete Early Action) |
| H-2 | High Global Warming Potential Gases | $SF_6$ Limits in Non-Utility and Non-Semiconductor Applications (Discrete Early Action) |
| H-3 | High Global Warming Potential Gases | Reduction in Perflourocarbons in Semiconductor Manufacturing (Discrete Early Action) |
| H-4 | High Global Warming Potential Gases | Limit High GWP Use in Consumer Products (Discrete Early Action, Adopted June 2008) |
| H-5 | High Global Warming Potential Gases | High GWP Reductions from Mobile Sources |
| H-6 | High Global Warming Potential Gases | High GWP Reductions from Stationary Sources |
| H-7 | High Global Warming Potential Gases | Mitigation Fee on High GWP Gases |
| A-1 | Agriculture | Methane Capture at Large Dairies |

SOURCE: CARB, 2008a.

The 2008 AQMP relies on a multilevel partnership of federal, State, regional, and local governmental agencies. These agencies (USEPA, CARB, local governments, Association of Monterey Bay Area Governments [AMBAG]) and the MBUAPCD are the primary agencies that implement the AQMP programs. The 2008 AQMP is a transitional plan shifting MBUAPCD's focus from achieving the one-hour component of the State AAQS to achieving the new eight-hour requirement adopted in 2006, which is more stringent. The plan includes an updated air quality trends analysis, which now reflects both the one- and eight-hour standards, as well as an updated emission inventory, which includes the latest information on stationary, area, and mobile emission sources. The AQMP represents a comprehensive strategy to reduce ozone emissions from area and mobile sources of air pollution. The AQMP includes specific measures that encourage cities and counties to develop and implement local plans, policies, and programs to reduce auto use and improve air quality (MBUAPCD, 2008b).

## 3.3.3 Applicant Proposed Measures

PG&E proposes the following applicant proposed measures (APMs) to minimize impacts to air quality from the Proposed Project. The impact analysis in this IS/MND assumes that these APMs would be implemented to reduce impacts to air quality discussed below.

**APM AIR-1: Implement Monterey Bay Unified Air Pollution Control District (MBUAPCD) mitigation measures for construction fugitive dust.** PG&E will implement all applicable and feasible fugitive dust control measures required by MBUAPCD. This requirement will be incorporated into the construction contract. These measures include:

- Water all active construction sites at least twice daily. Frequency of watering should be based on the type of operation, soil, and wind exposure.
- Prohibit all grading activities during periods of high wind (over 15 mph).
- Haul trucks will maintain at least 2'0" of freeboard.
- On-site vehicles will be limited to a speed on unpaved roads that minimizes dust emissions.
- Cover all trucks hauling dirt, sand, or loose materials.
- Cover inactive storage piles.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- Sweep streets if visible soil material is carried out from the construction site.
- Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person will respond and take corrective action within 48 hours. The phone number of the MBUAPCD also will be visible to ensure compliance with Rule 402 (Nuisance).
- Limit the area under construction at any one time as feasible.

**APM AIR-2: Implement BMPs to reduce construction tailpipe emissions.** PG&E will implement all applicable and feasible measures to reduce tailpipe emissions from diesel-powered construction equipment. This requirement will be incorporated into the construction contract. These measures include:

- Maximize use of diesel construction equipment meeting CARB's 1996 or newer certification standard for off-road heavy-duty diesel engines.
- Use emission control devices at least as effective as the original factory-installed equipment.
- Maintain all diesel-powered equipment in a manner to minimize visible soot emissions.
- Locate stationary diesel-powered equipment and haul truck staging areas as far as practicable from sensitive receptors.
- Minimize unnecessary idling time through application of a "common sense" approach to vehicle use, so that idling is reduced as far as possible below the maximum of 5 consecutive minutes required by California law—if a vehicle is not required immediately or continuously for construction activities, its engines will be shut off. Construction foremen will include briefings to crews on vehicle use as part of pre-construction conferences. Those briefings will include discussion of a "common sense" approach to vehicle use.
- Use ground equipment in place of helicopters where practicable.

**APM AIR-3: Minimize greenhouse gas emissions during construction.** PG&E or its contractors will implement the following measures during construction to reduce greenhouse gas emissions:

- Encourage construction workers carpooling to the job site to the extent feasible.
- Encourage recycling of construction waste where feasible.
- Minimize welding and cutting by using compression of mechanical applications where practical and within standards.
- Encourage use of natural gas-powered vehicles for passenger cars and light-duty trucks where feasible and available.
- Minimize construction equipment exhaust by using low-emission or electric construction equipment where feasible.

# 3.3.4 Environmental Impacts and Mitigation Measures

**a) Conflict with or obstruct implementation of the applicable air quality plan: *LESS THAN SIGNIFICANT IMPACT*.**

The Proposed Project would be located in the NCCAB under the jurisdiction of the MBUAPCD. The most recent air quality plan for the NCCAB is the 2008 AQMP which was released in August 2008.

***Construction***

Pursuant to MBUAPCD policy, construction projects in the NCCAB that use typical equipment such as dump trucks, scrapers, bulldozers, compactors, and front-end loaders that temporarily emit precursors of ozone, are accounted for in the emission inventories of State- and federally-required air plans (MBUAPCD, 2008a). Therefore, it is assumed that use of such equipment would not interfere with the applicable AQMP. However, construction of the Proposed Project would also include use of helicopters, which are not considered typical construction equipment. Therefore, the emissions from helicopters used during construction could interfere with implementation of the 2008 AQMP.

MBUAPCD has set individual project significance thresholds of 137 pounds per day for both NOx and ROG emissions. If a project would emit more than 137 pounds per day of these pollutants, the project would have the potential to conflict with the 2008 AQMP. A heavy-duty Bell 214B helicopter with a 2,020 horsepower engine would be used to install towers and poles at locations where sites could not be accessed by ground equipment. Given that the Bell 214B could operate for up to 10 hours on a given day, emissions of NOx could be up to 87 pounds per day. Furthermore, if a light-duty Bell 407 helicopter would be used on the same day as the Bell 407 for 10 hours, an additional 39 pounds of NOx could be emitted. Therefore, on the worst case day, NOx emissions from helicopters used to construct the Proposed Project could be up to 126 pounds per day, which would not exceed the MBUAPCD significance threshold and would not interfere with implementation of the 2008 AQMP. Therefore, impacts would be less than significant. Refer to Appendix B for the emission factors and other assumptions used to estimate sky crane helicopter emissions.

***Operation and Maintenance***

Generally a project is considered inconsistent with an air quality plan if it would result in population or employment growth that exceeds estimates used to formulate the applicable AQMP. Given that the Proposed Project would not induce population growth or employment growth, nor would it result in a long term increase in emissions from operations and maintenance activities, it can be assumed that it would not conflict with the applicable AQMP and impacts would be less than significant.

**b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation: *LESS THAN SIGNIFICANT IMPACT*.**

***Construction***

According to the MBUAPCD, construction activities that directly generate 82 pounds or more of fugitive PM10 emissions would result in a significant impact to local air quality when they are located upwind of sensitive receptors. Construction activities with minimal earthmoving that would disturb less than 8.1 acres per day and construction activities with more intense grading and excavation that would disturb less than 2.2 acres per day would fall below the MBUAPCD screening threshold and impacts would be considered less than significant. Preparation of staging areas would disturb up to five acres per day; however, given that minimal earthwork is expected at these sites, it can be assumed that such activities would fall below the 8.1 acres per day threshold and impacts would be less than significant. More intense earthwork would be required at tower and pole sites where excavation would be required. However, the maximum area disturbed during tower and pole site preparation would be 0.06 acres and 0.04 acres per structure, respectively. Even if it is assumed that a number of pole or tower sites would be prepared simultaneously on a given day, the maximum area disturbed would be unlikely to exceed 2.2 acres and impacts would be expected to be less than significant. In order to ensure that the fugitive PM10 threshold is not exceeded, PG&E has committed to implementing APM AIR-1, which includes a number of fugitive dust control measures as required by the MBUAPCD. With implementation of these measures, impacts from fugitive dust during construction would be less than significant.

As discussed under item a), exhaust emissions from construction projects in the NCCAB that use typical equipment are accounted for in the applicable AQMP. Therefore, exhaust emissions from such equipment would not be expected to result in a violation of an applicable air quality standard nor would they contribute significantly to an existing violation. Helicopter usage would not be considered typical construction equipment; however, as described above, under item a), maximum daily NOx emissions from helicopter operations would not exceed the MBUAPCD thresholds of 137 pounds per day for these pollutants. Therefore, impacts would be less than significant.

Construction of the Proposed Project would also result in exhaust and fugitive dust emissions of PM2.5; however, the NCCAB is currently in attainment status for PM2.5; therefore, regional emissions of PM2.5 are not a special concern in the NCCAB and the MBUAPCD has not identified a recommended significance threshold for PM2.5. Nonetheless, PG&E has committed to implementing APM AIR-1, which includes a number of fugitive dust control measures that would reduce fugitive emissions of PM2.5. With implementation of these measures, impacts from fugitive dust during construction, including PM2.5, would be less than significant.

***Operation and Maintenance***

Operation and maintenance of the Proposed Project would not noticeably differ from existing activities; therefore, no substantial change in emissions from operation and maintenance activities would occur as a result of the Proposed Project. Therefore, operations- and maintenance-related

impacts associated with violation of an air quality standard or contribution to an existing or proposed air quality violation would be less than significant.

**c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors): *LESS THAN SIGNIFICANT IMPACT*.**

Pursuant to MBUAPCD policy, projects that would be inconsistent with the applicable AQMP or induce population growth beyond that estimated in current population projections would be considered to have a significant cumulative impact with regards to criteria air pollutant emissions (MBUAPCD, 2008a). The Proposed Project would not induce population growth; rather, it would allow PG&E to serve current and projected demand in the area. However, as discussed under items a) and b) above, construction activities under the Proposed Project could contribute to increases in ozone and particulate matter levels through emissions of ozone precursors, specifically NOx, and fugitive dust. However, the Proposed Project's daily incremental contribution to ozone levels and fugitive dust would be at a level that would be less than significant. Therefore, construction emissions that would be associated with the Proposed Project would not be cumulatively considerable, and cumulative impacts would be less than significant.

**d) Expose sensitive receptors to substantial pollutant concentrations: *LESS THAN SIGNIFICANT IMPACT*.**

The Proposed Project would cross through a residential subdivision located just off of Avenida del Piero and would pass within a quarter mile of several other rural residences. The Project would also be located within 500 feet of Countryside Day-Care Preschool and within 2,000 feet of Anzar High School and Lagunita Elementary School. The primary TAC of concern associated with the Proposed Project would be diesel particulate matter (DPM). Health risk associated with exposure to DPM is typically associated with chronic exposure, in which a 70-year exposure duration is often assumed. Potential sources of DPM would include diesel fueled construction equipment and diesel fueled worker vehicles during inspection and maintenance activities. However, given that operation and maintenance of the Proposed Project would not noticeably differ from existing activities, it can be assumed that there would be little to no net increase in health risk associated with operation and maintenance of the Proposed Project.

The MBUAPCD recommends that health risk assessments be conducted for projects when construction activities would last for one year or longer at the same site. Construction of the Proposed Project would take up to 15 months; however, due to the linear nature of the power line construction activities and the relatively short construction period proposed at Hollister Substation (i.e., one month), individual receptors would not be exposed to elevated levels of DPM for an extended period of time. In fact, individual sensitive receptors would not be expected to be exposed to DPM emissions from construction equipment for more than a few days along the proposed power line segments and one month in the vicinity of Hollister Substation throughout the duration of construction. Since health risks associated with DPM are generally associated with chronic exposure, it can be assumed that emissions during construction of the Proposed Project

would have a less than significant impact on nearby receptors. Furthermore, PG&E has committed to implementing APM AIR-1, which requires the use of BMPs to reduce construction exhaust emissions, thereby limiting DPM emissions. Impacts on sensitive receptors would be less than significant.

**e) Create objectionable odors affecting a substantial number of people: *LESS THAN SIGNIFICANT IMPACT*.**

Diesel exhaust from construction activities may generate odors. However, these odors would be temporary in nature and would be unlikely to affect a substantial number of people. The Proposed Project would not generate other odors. Odor-related impacts would be less than significant.

**f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment: *LESS THAN SIGNIFICANT IMPACT*.**

The MBUAPCD currently does not have adopted GHG thresholds of significance for CEQA review projects (MBUAPCD, 2010). Therefore, as the lead agency for this project, the CPUC has elected to use an approach to the determination of significance of GHG emissions based on the GHG significance thresholds adopted by the Bay Area Air Quality Management District (BAAQMD). The BAAQMD has adopted operational significance thresholds of 10,000 metric tons $CO_2e$ per year for stationary sources and 1,100 metric tons $CO_2e$ per year for projects that are not stationary sources. Given that the Proposed Project would result almost exclusively in construction-related emissions that are not stationary sources, the CPUC believes that the BAAQMD's significance threshold for operational non-stationary source projects is the most applicable air district-adopted GHG significance threshold for the Proposed Project.

As noted above, the BAAQMD's adopted GHG significance thresholds are intended for long-term operational GHG emissions. Therefore, as the lead agency for this project, the CPUC has elected to use an approach to the determination of significance of GHG construction emissions based on guidance developed by the South Coast Air Quality Management District (SCAQMD). For construction related GHGs, SCAQMD recommends that total emissions from construction be amortized over 30 years and added to operational emissions and then compared to the applicable significance threshold. Similar to the SCAQMD's recommended approach for construction emissions, this analysis amortizes the construction emissions over a 30-year project lifetime then compares those emissions to the BAAQMD's significance threshold of 1,100 metric tons $CO_2e$ per year.

As with criteria pollutants, maintenance and operation of the Proposed Project would not result in a noticeable increase in GHG emissions from existing conditions. The primary source of GHG emission during project construction would be exhaust emissions from construction equipment and haul trucks. It is estimated that Proposed Project construction emissions would total approximately 2,086 metric tons of $CO_2$, which is equal to a 30-year amortized value of approximately 70 metric tons, and would be well below the significance threshold of 1,100 metric tons $CO_2e$ per year. Therefore, impacts from the Proposed Project would be less than significant. Refer to Appendix B for the emission factors and other assumptions used to estimate GHG emissions.

**g) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases: *LESS THAN SIGNIFICANT IMPACT*.**

Neither San Benito County nor Monterey County have adopted climate change action plans, policies, or regulations; therefore, the Proposed Project would not interfere with implementation of such documents. Furthermore, in order to be consistent with the State's GHG reduction goals under AB32, emissions must be reduced by a minimum of 30 percent by 2020 compared to business as usual conditions. Given that construction would not continue into 2020 and there would be generally no net increase in GHG emissions from operation and maintenance as a result of the Proposed Project, it can be assumed that the Proposed Project would not interfere with the State's ability to meet its goals under AB32. Impacts would be less than significant.

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# 3.4 Biological Resources

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **4. BIOLOGICAL RESOURCES— Would the project:** | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☒ | ☐ | ☐ |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☒ | ☐ | ☐ |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☒ | ☐ |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☐ | ☒ | ☐ |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☒ | ☐ | ☐ |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ☒ |

## 3.4.1 Environmental Setting

The proposed project is located in northern San Benito and Monterey Counties, within the Inner South Coast Ranges of the California Floristic Province (Hickman, 1993). This region experiences a Mediterranean climate influenced by coastal weather patterns; winters are cool and wet, while summers are hot and dry. The project area ranges in elevation from 140 feet to 580 feet, with topography varying from flat agricultural lands to rolling foothills. The project area is predominantly comprised of agricultural lands around the community of Hollister and large expanses of privately-owned livestock grazing land in the surrounding foothills; low-density residential development is present in some areas.

### Upland Habitat

The following upland habitats were identified within the study area: annual grassland, coastal scrub, coastal oak woodland, eucalyptus, irrigated row and field crop, urban, and disturbed (ICF International, 2009). Annual grassland is a common vegetation community in the project

area, used by numerous wildlife species and providing potential habitat for several special-status species, including California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana draytonii*), burrowing owl (*Athene cunicularia*), and San Joaquin kit fox (*Vulpes macrotis mutica*). Oak woodland is found on the north-facing slopes of project-area foothills, providing nesting and foraging habitat for birds, and potential summer aestivation habitat for California red-legged frog. Coastal scrub is present intermittently in the project area, providing habitat for birds, rabbits (*Sylvilagus audubonii)*, black-tailed jackrabbits (*Lepus californicus*), coyote (*Canis latrans*), and the special-status plant Pajaro manzanita (*Arctostaphylos pajaroensis*). A eucalyptus stand occurs in the project area north of Tower 06/40A, bordering a pond; eucalyptus stands occasionally support nesting raptors. Irrigated field and row crops are common in the project area, and support rodents and common birds. Low-density urban development occurs in several places throughout the project area, and is associated with adaptable wildlife species such as Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), and house sparrow (*Passer domesticus*). Disturbed habitat, characterized as mostly bare and vegetated with non-native, weedy species, is present in the project area; while California ground squirrel (*Spermophilus beecheyi*) and burrowing owl sometimes inhabit these disturbed areas, they generally offer little habitat value.

## Wetland and Riparian Habitat

The following wetland and riparian habitats have been identified within the study area: valley foothill riparian, freshwater emergent wetland, seasonal wetland, drainage, and lacustrine (ICF International, 2009). Valley foothill riparian habitat is present in the project area along San Benito Creek, providing high-quality habitat for invertebrates, amphibians, aquatic reptiles, raptors and songbirds, and mammals. Project-area riparian areas provide potential habitat for special-status animals including California red-legged frog, western pond turtle (*Actinemys marmorata*), bank swallow (*Riparia riparia*), and least Bell's vireo (*Vireo bellii pusillus*), among others. Freshwater emergent and seasonal wetlands occur in several portions of the project area, providing high-quality habitat for amphibians, reptiles, birds, and mammals, including potential habitat for special-status species such as California red-legged frog, California tiger salamander, and western spadefoot. Drainages occur throughout the project area, including natural seasonal, intermittent, and perennial drainages as well as irrigation ditches. Drainages provide foraging habitat for various reptiles, amphibians, birds, and mammals, and, depending on stream flow and other characteristics, can provide amphibian breeding habitat. Several natural and constructed ponds in the study area also provide potential habitat for California red-legged frog, California tiger salamander, and western spadefoot.

## Waters of the United States/Waters of the State

In 2008, a preliminary wetland delineation was conducted for the project (ICF International, 2009) that assessed all potential disturbance areas. A total of 6.92 acres of potential Waters of the U.S. were identified in the project study area, comprised of seasonal wetland (3.16 acres), riverine wetland (2.78 acres), freshwater emergent wetland (0.41 acre), ephemeral drainage (0.26 acre), detention basin (0.25 acre), and intermittent drainage (0.06 acre). With the exception

of a detention basin, all wetland features were considered to be potential jurisdictional Waters of the U.S., though the results of the wetland delineation have not yet been verified. If any of these isolated wetlands are not considered jurisdictional by the Corps, they are still likely to be protected under the jurisdiction of California Department of Fish and Game (CDFG) and Regional Water Quality Control Board (RWQCB) as "waters of the state", as described in the Regulatory Section, below.

## Special Status Species

Based upon a species list prepared in support of the proposed project (CDFG, 2010), and the results of focused botanical surveys within the project corridor (ICF International, 2009), a total of 23 special status wildlife and plant species were identified as occurring or having the potential to occur in the project area. Focused plant surveys considered the following special-status plants, which were found absent from the project area: Hickman's onion (*Allium hickmanii*), Santa Cruz manzanita (*Arctostaphylos andersonii*), Gabilan Hills manzanita (*A. gabilanensis*), Hooker's manzanita (*A. hookeri* ssp. *hookeri*), toro manzanita (*A. montereyensis*), sandmat manzanita (*A. pumila*), King's Mountain manzanita (*A. regismontana*), alkali milk-vetch (*Astragalus tener* var. *tener*), San Joaquin spearscale (*Atriplex joaquiniana*), round-leaved filaree (*California macrophylla*), pink creamsacs (*Castilleja rubicundula* spp. *rubicundula*), Congdon's tarplant (*Centromadia parryi* spp. *congdonii*), Hernandez spineflower (*Chorizanthe biloba* var. *immemora*), Monterey spineflower (*C. pungens* var. *pungens*), robust spineflower (*C. robusta* var. *robusta*), seaside bird's beak (*Cordylanthus rigidus* spp. *littoralis*), Hutchinson's larkspur (*Delphinium hutchinsoniae*), Eastwood's goldenbush (*Ericameria fasciculata*), Pinnacles buckwheat (*Eriogonum nortonii*), Hoover's button-celery (*Eryngium aristulatum* var. *hooveri*), sand-loving wallflower (*Erysimum ammophilum*), fragrant fritillary (*Fritillaria liliacea*), sand gilia (*Gilia tenuiflora* spp. *arenaria),* Loma Prieta hoita (*Hoita strobilina*), Santa Cruz tarplant (*Holocarpha macradenia*), Kellogg's horkelia (*Horkelia cuneata* spp. *sericea*), Contra Costa goldfields (*Lasthenia conjugens*), woolly-headed lessingia (*Lessingia hololeuca*), Indian Valley bush-mallow (*Malacothamnus aboriginum*), San Antonio Hills monardella (*Monardella antonina* spp. *antonina*), prostrate navarretia (*Navarretia prostrata*), Monterey pine (*Pinus radiata*), Santa Cruz Mountains beardtongue (*Penstemon rattanii* var. *kleei*), Yadon's rein orchid (*Piperia yadonii*), hairless popcorn flower (*Plagiobothrys glaber*), pine rose (*Rosa pinetorum*), most beautiful jewel-flower (*Streptanthus albidus* spp. *peramoenus*), Santa Cruz clover (*Trifolium buckwestiorum*), and saline clover (*T. depauperatum* var. *hydrophilum*). More information on these species can be found in the Proponent's Environmental Assessment under Special-Status Plant Species (ICF International, 2009). A focused list of special-status species considered for the project is provided in **Table 3.4-1**.

**TABLE 3.4-1**
**FOCUSED LIST OF SPECIAL-STATUS SPECIES CONSIDERED FOR THE HOLLISTER 115 kV POWER LINE RECONDUCTORING PROJECT**

| Common Name<br>*Scientific Name* | Listing Status USFWS/CDFG/ CNPS | General Habitat Requirements | Potential for Species Occurrence Within the Project Area |
|---|---|---|---|
| FEDERAL AND STATE LISTED SPECIES OR PROPOSED FOR LISTING | | | |
| **ANIMALS** | | | |
| ***Fish*** | | | |
| South-Central California Coast Steelhead<br>*Oncorhynchus mykiss* | FT/ -- | Larger rivers serve as migration pathways for adults; juvenile rear in smaller tributaries. | **Presumed present.** San Benito River is designated critical habitat for steelhead, serving as a migration pathway to the Pajaro River spawning area. Present, at least seasonally, in the project area at the river crossing. |
| ***Amphibians*** | | | |
| California tiger salamander<br>*Ambystoma californiense* | FT/CC | Wintering sites occur in grasslands; breed in fresh emergent and seasonal wetlands, and slow-moving or receding streams. | **Presumed present.** This species is presumed present based on USFWS guidance. At least 56 potential breeding locations are known within 1.2 miles of the project area. Small mammal burrows offer aestivation and foraging opportunities. |
| California red-legged frog<br>*Rana draytonii* | FT/CSC | Breeds in fresh emergent and seasonal wetlands, and slow-moving streams. Aestivation habitat includes oak woodlands and grasslands. | **Presumed present.** This species is presumed present based on USFWS guidance. At least 56 potential breeding locations are known within 1.2 miles of the project area. Seasonal wetlands provide aquatic refugia. Grasslands, small mammal burrows, and rock and debris piles offer summer habitat. |
| ***Birds*** | | | |
| Bank swallow<br>*Riparia riparia* | --/CT | Nests in bluffs or banks of soft earth, usually in riparian areas. | **Low potential.** Historically known from the San Benito River drainage northwest from the project area (1931). |
| Least Bell's vireo<br>*Vireo belli pusillas* | FE/CE | Nests and forages in dense riparian woodlands. | **Low potential.** Nearest record is about 6 miles north of the project area, along Llagas Creek. Riparian woodlands along San Benito River provide low-quality habitat. |
| ***Mammals*** | | | |
| San Joaquin kit fox<br>*Vulpes macrotis mutica* | FE/CT | Arid grasslands and open scrubland. | **Presumed present.** Documented within 1 mile of the project area. Suitable habitat is present for denning and foraging. |
| FEDERAL OR STATE SPECIES OF SPECIAL CONCERN | | | |
| **ANIMALS** | | | |
| ***Amphibians*** | | | |
| Western spadefoot<br>*Spea hammondii* | --/CSC | Found in dry grasslands, often near extensive areas of friable soil. Reproduce in seasonal wetlands, and aestivate in mammal burrows. | **Moderate.** Suitable habitat is present in the project area grasslands, with at least 56 potential breeding locations within 1.2 miles. Nearest known occurrence is 4 miles. |

**TABLE 3.4-1 (Continued)**
**FOCUSED LIST OF SPECIAL-STATUS SPECIES CONSIDERED FOR THE HOLLISTER 115 kV POWER LINE RECONDUCTORING PROJECT**

| Common Name<br>*Scientific Name* | Listing Status USFWS/CDFG/ CNPS | General Habitat Requirements | Potential for Species Occurrence Within the Project Area |
|---|---|---|---|
| FEDERAL OR STATE SPECIES OF SPECIAL CONCERN (cont.) | | | |
| **ANIMALS (CONT.)** | | | |
| ***Reptiles*** | | | |
| Western pond turtle<br>*Actinemys marmorata* | --/CSC | Lakes, ponds, reservoirs, and slow-moving streams and rivers, primarily in foothills and lowlands. | **Presumed present.** This species is known from the San Benito River. Western pond turtle may be found in ponds, drainages, riparian areas, and uplands. |
| San Joaquin coachwhip<br>*Masticophis flagellum ruddocki* | --/CSC | Open, dry habitats with minimal tree cover. Refugia and breeding locations provided by rock outcrops and small mammal burrows. | **Presumed present.** This species is documented from grasslands adjacent to the San Benito River. Project area grasslands provide suitable habitat. |
| Coast horned lizard<br>*Phyrnosoma coronatum* | --/CSC | Sandy areas and river washes, as well as riparian woodland clearings, chaparral, and alkali flats. | **Moderate potential.** This species is not documented within 5.0 miles of the project area. May be present in sandy washes of San Benito River channel or other drainages. |
| ***Birds*** | | | |
| Tricolored blackbird<br>*Agelaius tricolor* | --/CSC | A colonial nester; nests in dense freshwater emergent vegetation. | **High potential.** Breeding is known from a large tule thicket south of Tower 37/232. Emergent wetlands associated with San Benito River also provide suitable habitat. |
| Golden eagle<br>*Aquila chrysaetos* | --/CDFG fully protected | Nests in open areas on cliffs and in large trees. | **Present.** A nest is believed to be located near Tower 4/25 (ICF, pers. comm., 2009). Large trees and towers provide nesting habitat; grasslands provide foraging habitat. |
| Short-eared owl<br>*Asio flammeus* | --/CSC | Nests in grasslands, usually on the ground. | **Moderate potential.** Grasslands in the project area provide nesting habitat for short-eared owl. |
| Burrowing owl<br>*Athene cunicularia* | --/CSC | Nests and forages in low-growing grasslands that support burrowing mammals. | **High potential.** This species is documented 2 miles west of the San Benito River crossing; project area grasslands provide suitable habitat. |
| White-tailed kite (nesting)<br>*Elanus leucurus* | --/CDFG fully protected | Nests near wet meadows and open grasslands in dense oak, willow or other large tree stands. | **Moderate potential.** Potential nesting habitat is present along riparian corridors. Grasslands and agricultural areas provide suitable foraging habitat. |
| Loggerhead shrike<br>*Lanius ludovicianus* | --/CSC | Scrub, open woodlands, and grasslands. | **Moderate potential.** Shrike nesting sites may occur in grasslands and trees throughout the project area. |
| ***Mammals*** | | | |
| Pallid bat<br>*Antrozous pallidus* | --/CSC | Day roosts are mainly in caves, crevices and mines; also found in buildings and under bark. Forages in open lowland areas. | **Moderate potential.** Documented within 5 miles of the project area. Potential roosting habitat is available in large diameter oaks and cottonwoods, and rural structures such as barns. |

**TABLE 3.4-1 (Continued)**
**FOCUSED LIST OF SPECIAL-STATUS SPECIES CONSIDERED FOR THE HOLLISTER 115 kV POWER LINE RECONDUCTORING PROJECT**

| Common Name<br>*Scientific Name* | Listing Status USFWS/CDFG/ CNPS | General Habitat Requirements | Potential for Species Occurrence Within the Project Area |
|---|---|---|---|
| FEDERAL OR STATE SPECIES OF SPECIAL CONCERN (cont.) | | | |
| **ANIMALS (CONT.)** | | | |
| ***Mammals (cont.)*** | | | |
| Hoary bat<br>*Lasiurus cinereus* | --/CSC | Roosts in dense foliage of large trees; solitary rooster. | **Low-moderate potential.** Roosting habitat is available in ldense woodlands with large trees. |
| Yuma myotis<br>*Myotis yumanensis* | --/CSC | Roosts in caves, old buildings and under bark. Forms maternity colony in the spring. | **Low to moderate potential.** Roosting habitat is available in large diameter oaks and cottonwoods, and rural structures such as barns. |
| San Francisco dusky-footed woodrat<br>*Neotoma fuscipes* | --/CSC | Occur in forests with established understory. Construct nests from woody debris. | **High potential.** Riparian areas associated with the San Benito River and other drainages provide suitable habitat. |
| Brazilian free-tailed bat<br>*Tararida brasillensis* | --/CSC | Roosts in caves, mines, buildings or other human-made structures for roosting. Forages in open lowland areas. | **Low to moderate potential.** Roosting habitat is available in large diameter oaks and cottonwoods, and rural structures such as barns. |
| American badger<br>*Taxidea taxus* | --/CSC | Grasslands, savannas, deserts, timberline mountain meadows. | **High potential.** Documented within 1 mile of the project area; grasslands provide suitable habitat. |
| ***Plants*** | | | |
| Pajaro Manzanita<br>*Arctostaphylos pajaroensis* | --/--/CNPS List 1B | Grows in coastal scrub and chaparral, on sandy soils, at elevations ranging from 98 feet to 2,493 feet. | **Present.** Habitat in the project area consists of coastal scrub at an elevation of approx. 394 feet, near Tower 0/04. |

**STATUS CODES:**

FEDERAL: (U.S. Fish and Wildlife Service)

FE = Listed as Endangered (in danger of extinction) by the Federal Government.
FT = Listed as Threatened (likely to become Endangered within the foreseeable future) by the Federal Government.
FC = Candidate to become a *proposed* species.
FSC = Federal Species of Concern. May be Endangered or Threatened, but not enough biological information has been gathered to support listing at this time.

STATE: (California Department of Fish and Game)

CE = Listed as Endangered by the State of California
CT = Listed as Threatened by the State of California
CC= Candidate to become a proposed species
CSC = California Species of Special Concern

SOURCE: CDFG, 2010; USFWS, 2009; ICF, 2009

# 3.4.2 Regulatory Setting

## Federal Regulations

### *Endangered Species Act*

The United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) have jurisdiction over species listed as threatened or endangered under Section 9 of the federal Endangered Species Act (ESA). In the project area, NMFS would be responsible for protection of anadramous fish and USFWS would be responsible for the protection of other listed species. The federal Endangered Species Act protects listed species from "take", which is defined broadly as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct".

If a listed species or its habitat would be affected by the project, and the project involves a federal agency, that agency must consult with USFWS in accordance with ESA Section 7. More specifically, if another federal approval is required, ESA Section 7 consultation and issuance of a Biological Opinion (BO), and potentially also an Incidental Take Statement, would be necessary. The Endangered Species Act (16 USC § 1531 et seq.) requires federal agencies to consult with USFWS or NMFS, as appropriate, to ensure that any undertaking or action they take, including permit issuance, is not likely to jeopardize the continued existence of a listed species (plant or animal) or result in the destruction or modification of critical habitat. 50 CFR § 402.01(a).

### *Clean Water Act*

The Clean Water Act regulates discharges to waters of the U.S. and is the principal federal law protecting the nation's surface waters, including project area rivers, streams, wetlands, and natural ponds. If a project requires a federal approval and could affect state water quality, the federal agency must obtain state certification through Section 401. Section 402 regulates construction-related stormwater discharges through the National Pollutant Discharge Elimination Systems (NPDES) program. Administered by the U.S. Environmental Protection Agency (EPA), in California the State Water Resources Control Board is authorized to oversee the NPDES program. The U.S. Army Corps of Engineers (Corps) administers Section 404, and coordinates with the EPA to regulate the discharge of dredged and fill materials into waters of the U.S. via a permitting process.

### *Migratory Bird Treaty Act*

The Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds, bird parts, eggs and nests. If a project could have a negative impact on migratory birds, then Executive Order 13186 instructs federal agencies to coordinate with the USFWS in developing a Memorandum of Understanding to conserve migratory bird populations. Migratory Bird Permit Memorandum (MBPM-2) dated April 15, 2003, clarifies that destruction of most unoccupied bird nests is permissible under the MBTA, except for the nests of federally threatened or endangered migratory birds, bald eagles, and golden eagles. Most project-area bird species and their occupied nests are protected under the MBTA.

### *Bald and Golden Eagle Protection Act*

Under the Bald and Golden Eagle Protection Act, it is illegal to import, export, molest, disturb, sell, purchase or barter any bald eagle or golden eagle or part thereof. The USFWS oversees enforcement of this act. The 1978 amendment authorizes the U.S. Secretary of the Interior to permit the taking of golden eagle nests that interfere with resource development or recovery operations.

### *Eagle Permits under Code of Federal Regulations (50 CFR Sections 22.26 and 22.27)*

New regulations effective November 10, 2009 provide for issuance of permits to take bald and golden eagles. Section 22.26 provides permit issuance where the taking is incidental to the activity and cannot practicably be avoided; most take authorized under this section is in the form of disturbance, but permits may authorize non-purposeful take that is likely to result in mortality. Section 22.27 (3) establishes permits for removing eagle nests when the nest prevents use of a human-engineered structure; only inactive nests may be taken, except in the case of safety emergencies.

## State Regulations

### *Porter-Cologne Water Quality Control Act*

California retains authority to maintain water quality by regulating discharges into any waters of the State, regardless of concurrent federal jurisdiction (per State Water Code Section 13260, which requires “any person discharging waste, or proposing to discharge waste, within any region that could affect waters of the state to file a report of discharge”). The Porter-Cologne Water Quality Control Act defines “waters of the state” to be “any surface water or groundwater, including saline waters, within the boundaries of the state.” The regulatory agency with responsibility for waters of the state is the Regional Water Quality Control Board.

### *California Environmental Quality Act*

The California Environmental Quality Act is the regulatory framework by which California public agencies identify and mitigate significant environmental impacts. In addition to threatened and endangered species, a species not listed under the federal or state endangered species act may be considered rare or endangered if the species meets the criteria identified in Section 15380(b)(2).

### *California Endangered Species Act*

The California Endangered Species Act regulates the listing and “take” of state-listed threatened and endangered species. In California, “take” is defined as “hunt, pursue, catch, capture, or kill” or to attempt to do these things. The California Department of Fish and Game (CDFG) may allow take of a listed species through special permit issuance, except for fully protected species.

### *California Fish and Game Code*

#### Fully Protected Species.

CDFG code sections 3511,4700, 5050, and 5515 designate fully protected species and protection measures. Fully protected species may not be taken or possessed at any time, and no licenses or permits may be issued for their take except when collecting these species is necessary for scientific research or relocation of birds is necessary for livestock protection.

#### Protection of Nesting Birds

Nesting birds are protected under CDFG code sections 3503 and 3503.5, which make it (1) unlawful to take, possess, or destroy the nests or eggs or any such bird of prey except as otherwise provided by the code; and (2) protect the active nests of all other birds (except house sparrow (*Passer domesticus*) and European starling (*Sturnus vulgaris*)). Disturbance that causes nest abandonment and/or reproductive failure is considered a take. No take permits are issued under these statutes.

#### Streambed Alterations

Activities that would interfere with the natural flow of, or substantially alter the channel, bed, or bank of a lake, river, or stream are regulated by CDFG code sections 1600 through 1616 and require a Streambed Alteration Agreement permit.

## Local Regulations

The CPUC has exclusive jurisdiction over the siting, design, and construction of the proposed project, and is therefore not subject to local regulations governing discretionary land use. However, the CPUC strives to be in compliance with local regulations wherever possible, and a review of applicable local regulations assists with CEQA review.

### *San Benito County General Plan*

Goals and policies related to biological resources found within the San Benito County General Plan's Open Space and Conservation Element include development restrictions, preservation of wildlife corridors, wetland avoidance and mitigation, complementary mitigation measures (e.g., abating fire hazards shall not significantly degrade habitat), regeneration of oak woodlands, and minimized development within drainage basins.

### *Monterey County General Plan*

The Monterey County General Plan establishes a goal to conserve designated critical habitats for listed plant and animal species, and establishes numerous policies in support of this goal, along with other policies in support of the protection and conservation of biological resources. Policies include biological surveys and mapping, landscaping with native plants, carefully-planned development, establishing and implementing Specific Area Plans, and conservation of large areas of native habitat.

### *San Benito County Tree Ordinance*

The California Code of Ordinances, San Benito County, Chapter 19.33 provides for the Management and Conservation of Woodlands. Exhibit A identifies protected trees native to San Benito County. The ordinance applies to unincorporated areas of San Benito County and limits tree removal, establishes canopy retention standards, and describes conditions under which discretionary tree removal permits or exemptions would apply.

### *Monterey County Tree Protection*

Monterey County has policies and codes that regulate the removal of trees and native vegetation, along with a separate oak protection ordinance. Generally, a permit is required to remove or significantly trim protected trees, but specific policies differ by area, with each area having its own Tree Policy and Habitat Policy. The County also promotes the voluntary long-term conservation of oak woodlands through dissemination of the Voluntary Oak Woodland Stewardship Guidelines.

## 3.4.3 Applicant Proposed Measures

PG&E proposes the following applicant proposed measures (APMs) to minimize impacts on biological resources from the Proposed Project. The impact analysis in this MND assumes that these APMs would be implemented to reduce impacts to biological resources discussed below.

**APM BIO-1: Conduct an environmental training and monitoring program for construction crews before beginning construction.** An Environmental Training and Monitoring Program for construction crews will be conducted before beginning construction and will be ongoing during construction activities for new crew members. The education program will include information about the federal and state Endangered Species Acts, the consequences for noncompliance with environmental laws, identification of special-status plant and wildlife species and wetland habitats, and review of mitigation measures. (Also see APM HYDRO-2, which requires communicating environmental concerns and appropriate work practices, including spill prevention, emergency response measures, and applicable BMPs, to all construction personnel in an Environmental Training and Monitoring Program.)

**APM BIO-2: Restrict vehicles to established roadways and approved access routes and staging areas.**

**APM BIO-3: Retain an environmental monitor onsite during construction activities near sensitive habitat.** An environmental monitor will be onsite during any construction activity near sensitive habitat to ensure implementation of, and compliance with, APMs. The monitor will have authority to stop construction activities and develop alternative work practices, in consultation with construction personnel and resources agencies, if construction activities are likely to impact special-status species or other sensitive biological resources.

**APM BIO-4: Set back staging areas from waterbodies to avoid impacts on riparian habitat.** Staging areas will be set back at least 50 feet from streams, creeks, or other water bodies to avoid impacts on riparian habitat.

**APM BIO-5: Contact the environmental monitor if special-status species are located.** If construction personnel observe special-status species within the work area prior to, or during construction activities, construction personnel will contact the environmental monitor. The monitor will notify PG&E contacts via an established communication protocol that will be developed prior to the start of construction. The USFWS Biological Opinion will state agency notification protocols should a federally-listed species be observed within the work area.

**APM BIO-6: Complete photodocumentation of sensitive habitat conditions before beginning and immediately after completing construction activities.** Photodocumentation of preconstruction habitat conditions will occur at all construction locations within sensitive habitats prior to the start of construction and immediately after completing construction activities.

**APM BIO-7: Prohibit trash, firearms, and pets in the project area during construction.** Additional APMs (identified below) to avoid and minimize specific potential impacts to biological resources will be implemented as necessary to reduce potentially significant impacts. In some cases, conducting preconstruction surveys to determine the presence or absence of special-status plant and wildlife species within the project area and subsequent avoidance of identified resources will avoid significant impacts. Due to the extent of the project, however, specific project components—such as grading new access roads and digging new tower footings—will affect areas where the presence of special-status species is presumed based on occurrence of suitable habitat, CNDDB occurrences in relation to the project area, or results of prior biological resource assessment surveys.

**APM BIO-8: Restore upland and riparian habitat types temporarily disturbed during construction.** Following construction, PG&E will restore upland and riparian habitat types temporarily disturbed during construction. As part of a Habitat Mitigation Plan (HMP) developed for the project, a list of specific actions necessary to restore habitats disturbed onsite will be prepared by a qualified biologist prior to construction. While some habitats in the project area may require minimal restoration actions, such as restoration of the topography and topsoil following construction, the HMP will detail the specific measures necessary for each habitat and area disturbed to ensure that the functions and values of the disturbed habitat are restored.

**APM BIO-9: Implement sudden oak death preventative measures when trimming or removing oak trees.** PG&E will implement BMPs to control the potential introduction or spread of sudden oak death when trimming or removing trees as part of the project. At a minimum, the BMPs will include the following measures:

- All debris from host species (wood, branches, and chips) shall be left onsite following trimming.

- All tools used to perform the work shall be disinfected before leaving infested areas.

**APM BIO-10: Avoid impacts to protected trees, track protected trees removed during construction, and mitigate for impacts to protected trees.**

- PG&E will avoid impacts to protected trees to the extent feasible. If avoidance is not feasible, PG&E will track the trees removed, including their species and size, and will replace protected trees as stipulated in applicable local regulations. To avoid

removal of active nests, tree trimming, vegetation removal, and removal of towers should be conducted during the non-breeding season (August 16–March 1).

**APM BIO-11: Implement general protection measures for waters of the United States.** During construction, PG&E will implement the following measures to minimize or avoid impacts on waters of the United States:

- Establish exclusion zones and minimize the amount of area disturbed to the minimum amount necessary to complete the work. Align work areas to avoid wetland areas and margins as much as feasible.

- Delineate wetland areas, and restrict construction personnel and equipment from entering fenced protected areas.

- Conduct all fueling of vehicles, equipment, and helicopters at least 100 feet from wetlands and other waterbodies.

- To the extent feasible, complete road construction adjacent or within waters of the United States during the dry season. If it is not feasible to complete road construction work during the dry season, PG&E will use appropriate erosion control measures for the site that will be identified in the SWPPP (see APM HYDRO-1 in Section 4.8).

**APM BIO-12: Develop a wetlands mitigation plan.** PG&E will develop a wetlands mitigation plan to offset effects to waters of the United States, including wetlands. The plan will be developed in consultation with the Corps and will include, at a minimum, plans for restoration of any temporarily disturbed wetlands and other waters of the United States and methods to achieve mitigation for permanent impacts at a minimum ratio of 1:1. Mitigation may include onsite restoration and improvement of existing wetlands or other offsite compensation.

**APM BIO-13: Complete spring surveys for special-status plants in all unsurveyed disturbance areas.** Prior to construction, a qualified botanist will complete spring surveys for special-status plants at all unsurveyed staging areas, helicopter landing areas, and new access roads to determine the presence or absence of special-status plants. The surveys should be completed by qualified botanists and should be conducted during the appropriate period(s) necessary to observe special-status plants known to occur in the region.

**APM BIO-14: Avoid impacts on special-status plants.** PG&E will, under the direction of a qualified botanist and to the extent possible, adjust the location of staging areas, pull sites, helicopter landing areas, access roads, and other project components to completely avoid impacts on Pajaro manzanita and other special-status plants that are discovered prior to or during construction. If this avoidance measure is not feasible, PG&E will implement APM BIO-15 (Minimize impacts on special-status plants) and APM BIO-16 (Restore habitat for special status plants disturbed during construction).

**APM BIO-15: Minimize impacts on special-status plants.** Avoidance areas will be clearly staked and flagged in the field by a qualified botanist prior to construction. If Pajaro manzanita and other special-status plants cannot be avoided during construction, PG&E will minimize impacts by reducing the work area to the smallest area necessary to complete the work. Where temporary disturbance is necessary, PG&E will conduct project activities and necessary ground disturbance in a manner that is consistent with the successful

reestablishment of the species to the extent feasible. The specific actions necessary will depend on the biology of the species in question; however, the actions will be designed to ensure successful reestablishment of the species following temporary disturbance. As part of an HMP, a list of specific actions will be prepared by a qualified botanist prior to construction that will include onsite restoration actions, or reseeding plans specific to any impacted construction areas (described below in APM BIO-16).

To minimize impacts to Pajaro manzanita, which is already known to occur in the project area, PG&E will implement the following measures:

- Vegetation clearing in occupied Pajaro manzanita habitat should be conducted after Pajaro manzanita has set seed and before flowering begins (typically between May and November).

- If mechanical brushing is conducted in occupied Pajaro manzanita habitat, mastication implements should not come within 6 inches of the ground surface to avoid disturbing the seed bank.

- Where feasible, removal of entire Pajaro manzanita plants from the ground should be avoided.

The Environmental Training and Monitoring Program (see APM BIO-1) will also include information on the location of special-status plants in the project area and the measures that will be implemented to avoid or minimize impacts on the plants.

**APM BIO-16: Restore habitat for special-status plants disturbed during construction.** If impacts on special status plants are unavoidable, PG&E will develop a special-status plant restoration plan as part of the HMP and in consultation with CDFG. The specific actions necessary will depend on the biology of the species in question and the type of impact (i.e., temporary or permanent); however, the actions will be designed to ensure successful reestablishment of the species following disturbance. The plan will be prepared by a qualified botanist prior to construction and will indicate when and where the actions will be implemented during construction.

**APM BIO-17: Implement management practices to control the introduction and spread of invasive plants.** Prior to construction, PG&E will identify the location of noxious weed species of concern within areas that will be disturbed as part of the project. Appropriate management practices will be designed by a botanist and implemented during construction to reduce the likelihood of spreading already established weeds into new areas or increasing their abundance, and of introducing new weed species to the project area. Actions to prevent noxious weed establishment will be described within the HMP and will be consistent with PG&E's strategy for managing invasive plants. The project SWPPP will include BMPs such as using construction equipment that has been cleaned of soil and plant parts, including seeds, before entering the project area and using weed-free straw for erosion control. Disturbed areas will be revegetated with appropriate locally based native seed mixes. Implementing the management practices described above will reduce potentially significant impacts related to non-native invasive plants to a less-than-significant level.

**APM BIO-18: Implement avoidance and mitigation measures outlined in the USFWS biological opinion for California red-legged frog and California tiger salamander.** USFWS will specify avoidance and mitigation measures to minimize impacts to California

red-legged frogs and California tiger salamanders in the biological opinion they will draft for the project. PG&E will follow and implement the measures that are outlined in the biological opinion.

**APM BIO-19: Compensate for permanent impacts on California red-legged frog and California tiger salamander upland habitat.** It was determined that the project would result in permanent impacts to suitable upland habitat for California red-legged frogs and California tiger salamanders. To compensate for anticipated permanent impacts to suitable upland habitat for California red-legged frogs and California tiger salamanders, PG&E may preserve additional upland habitat within a USFWS-approved conservation area; specific actions will be determined in coordination with USFWS. The ratio of compensation, specific mitigation acreages, and location of the conservation area will be determined through formal consultation with USFWS.

**APM BIO-20: Conduct tree trimming, vegetation removal, and, if possible, tower removal during the non-breeding season.** To avoid removal of active nests, tree trimming, vegetation removal, and removal of towers should be conducted during the non-breeding season (August 16–March 1). If this is not possible, APM BIO-21 will be implemented.

**APM BIO-21: Conduct preconstruction surveys for nesting migratory birds and raptors, and develop an Avian Protection Plan.** Construction activities are anticipated to occur mainly during the nesting season for migratory birds and raptors (generally early February through early August) (Avian Power Line Interaction Committee and USFWS, 2005). PG&E will retain a qualified wildlife biologist to conduct preconstruction surveys for nesting birds, for all construction activities that occur within or near suitable breeding habitat. The surveys will be staggered so that they are conducted no more than 1 week prior to the start of construction activities in any one area. Surveys will include the power line route, staging areas, pull sites, and areas of access road improvements where ground disturbance or vegetation clearing is required, at a frequency and timing appropriate for nest detection. If no active nests are detected, no additional mitigation measures are required.

PG&E will develop a project-specific Avian Protection Plan that will outline protection measures for nesting migratory birds and raptors, in the event that nesting migratory birds or raptors are identified in areas where construction activities will occur during preconstruction surveys.

**APM BIO-22: Avoid disturbance of active nests by helicopter use.** Use of helicopters will be restricted to necessary trips to install and remove towers and poles, install power lines, and deliver and remove equipment to areas lacking vehicle access. Helicopter flight paths will be designed to minimize impacts to nests, and buffers of active nests may be greater than those stated above to avoid helicopter disturbance of active nests identified in preconstruction surveys of the project sites. If active nests occur under planned helicopter flight paths, especially those near landing areas, coordination with CDFG will be required to determine whether modification of the flight path is necessary to avoid disturbance of active nests.

**APM BIO-23: Conduct preconstruction surveys for active burrowing owl burrows.** CDFG (1995) recommends that preconstruction surveys be conducted in suitable habitat in the project study area (Exhibit 1) and in a 250 foot-wide buffer zone around the construction

site to locate active burrowing owl burrows. PG&E will retain a qualified biologist to conduct preconstruction surveys for active burrows according to the CDFG guidelines. The surveys will include a nesting season survey and a wintering season survey, which is the season immediately preceding construction. The surveys will cover all affected areas, including the power line route, staging areas, pull sites, and areas of access road improvements where ground disturbance is required. If no burrowing owls are detected, no further mitigation is required. If active burrowing owl burrows are detected, PG&E will implement APM BIO-24 (Implement CDFG guidelines for burrowing owl mitigation, if necessary).

**APM BIO-24: Implement CDFG (1995) guidelines for burrowing owl mitigation, if necessary.** Disturbance of occupied burrows will be avoided to the maximum extent feasible. Disturbance is generally defined as activities occurring with 250 feet of active burrowing owl nesting pairs during the breeding season (February 1 through August 31), or within 160 feet of occupied burrows in the non-breeding season (September 1–January 31).

During the non-breeding season, if direct impacts to an occupied burrow are unavoidable, passive relocation techniques may be considered after all other alternatives have been exhausted. Relocation may involve installing one-way doors at occupied burrow entrances and ensuring that alternative suitable burrows are available. Any relocation effort will be implemented in coordination with CDFG and in accordance with standard burrowing owl guidelines. Any burrowing owl exclusion process will be coordinated by a biologist with prior burrowing owl relocation experience.

PG&E will support site-specific mitigation measures for any burrowing owls with potential to be impacted by construction activities. Measures may include onsite burrow enhancement or artificial burrow installation, in coordination with CDFG. In the event that a site-specific burrowing owl relocation is implemented, PG&E will consult with CDFG regarding suitable replacement of foraging and burrow habitat.

**APM BIO-25: Implement avoidance and mitigation measures outlined in the USFWS biological opinion for San Joaquin kit fox.** USFWS will specify avoidance and mitigation measures to minimize impacts on San Joaquin kit foxes in the biological opinion they will draft for the project. PG&E will follow and implement the measures outlined in the biological opinion.

## 3.4.4 Environmental Impacts and Mitigation Measures

**a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service: *LESS THAN SIGNIFICANT WITH MITIGATION*.**

Project activities, including construction-related ground disturbance, tree-trimming, and the operation of heavy equipment, could result in adverse effects on sensitive and special-status species including Pajaro manzanita, south-central California coastal steelhead, California tiger salamander, California red-legged frog, western spadefoot, western pond turtle, California horned lizard, San Joaquin coachwhip, bank swallow, golden eagle, least Bell's vireo, loggerhead shrike, tricolored blackbird, western burrowing owl, white-tailed kite, American badger, San Joaquin kit

fox, numerous bat species, and nesting birds. Operational activities could adversely affect birds, despite design compliance with Avian Power Line Interaction Committee (APLIC) Guidelines that are designed to reduce bird collision and electrocution. Candidate species will not be affected. Most effects are temporary and construction-related; some are permanent habitat loss effects resulting from tower placement and new access roads. All effects can be mitigated to a less-than-significant level.

#### *Pajaro Manzanita*

The Applicant has performed focused botanical surveys within the project corridor, and Applicant-Proposed Measure BIO-13 commits to appropriately-timed botanical surveys in any remaining unsurveyed disturbance areas. Pajaro manzanita, a California List 1B plant, is present near PG&E Tower 0/04 within approximately 60 feet and habitat could be temporarily impacted during construction and maintenance activities. Construction and maintenance activities and/or the temporary (e.g. shoo-fly lines) and permanent placement of tower footings could also result in the permanent loss of individuals.

APMs BIO-14, BIO-15 and BIO-16 call for avoidance of Pajaro Manzanita; or, if avoidance is not feasible, reduction of the work area to the smallest area possible, implementation of specific actions to ensure the successful reestablishment of the species following temporary disturbance and limitations on the types of activities that could affect Pajaro Manzanita; or, if impacts on the species are unavoidable, restoration of Pajaro Manzanita habitat as part of a Habitat Mitigation Plan to be developed in consultation with SDFG. These measures would mitigate potential impacts to a less-than-significant level.

#### *California Tiger Salamander and California Red-legged Frog*

California tiger salamander and California red-legged frog, both federally-listed species, are presumed present in the project area, with more than 45 potential breeding locations within 1.24 miles (ICF International, 2009). The proximity of known breeding locations and the species' documented movement distances dictate a presumed presence in aquatic and upland habitat throughout the project area. During the breeding season, which coincides with the rainy season (November to May), adult California tiger salamanders are known to travel distances greater than 1.2 miles to reach breeding locations (Orloff, 2007). For the remainder of the year they retreat to small mammal burrows in adjacent uplands. California red-legged frogs can be expected year-round in any aquatic or semi-aquatic environments in or near the project area, and are expected to use ephemeral drainages as seasonal movement corridors, especially after the onset of fall rains (Tatarian, 2004). Additionally, red-legged frogs are expected to migrate intermittently through annual grasslands and other upland habitats throughout the year.

Project construction would temporarily impact approximately 66.4 acres of upland habitat, and approximately 150 permanent structures would be erected in upland grassland or riverine habitat, resulting in an estimated permanent loss of between 1 and 3 acres of habitat and risking the potential loss of individuals. Construction activities are expected to result in temporary impacts on 0.20 acre of suitable aquatic habitat, including 0.01 acre of freshwater emergent marsh, 0.13 acre of seasonal wetlands, and 0.06 acre of valley foothill riparian habitat (ICF International, 2010). At

least one structure would be erected partially within a seasonal wetland, permanently impacting approximately 0.01 acre of aquatic habitat. California tiger salamander and California red-legged frog, and their upland habitat, could also be temporarily impacted during maintenance activities.

APM BIO-19 would compensate for permanent upland habitat impacts by preserving upland habitat within a USFWS-approved conservation area and APM BIO-12 would offset wetland impacts through onsite restoration and mitigation or offsite compensation. However, implementation of these measures alone is unlikely to fully mitigate potential impacts on California tiger salamander and California red-legged frog because no habitat avoidance, impact-minimization, and species-protection measures are identified for implementation during the construction process. Accordingly, the following measure also shall be implemented to reduce potential impacts to a less-than-significant level:

**Mitigation Measure 3.4-1:** PG&E and/or its contractors shall implement the following measures for construction areas and maintenance areas located in suitable habitat:

- The project will avoid direct impacts to sensitive wetlands areas and minimize disturbances to wetland and riparian corridors, wherever possible. Ground disturbance and construction footprints shall be minimized to the greatest degree feasible.

- Work activities within or adjacent to suitable habitat will be completed between April 15 and October 31, when possible.

- If construction activities must occur during the wet season, the perimeter of pull sites, staging areas, landing zones, shoo-fly lines, and other active construction areas shall be fenced by October 15 with amphibian exclusion fencing.

- A qualified biological resource monitor will conduct worker awareness training for construction personnel, addressing the species' basic biology and identifying characteristics, legal status, job-specific protection measures, and penalties for non-compliance.

- A preconstruction survey will be conducted each day by an onsite monitor immediately preceding construction activity that occurs within or adjacent to suitable habitat.

- Suitable habitat that is temporarily impacted by project-related activities will be restored to pre-project conditions.

- Temporary impacts to upland habitat will be compensated at a 0.5:1 ratio (i.e., restoration of temporarily disturbed areas, plus permanent conservation of an additional area at a 0.5:1 ratio) and permanent impacts to upland and aquatic habitat will be compensated at a 3:1 ratio or at ratios as prescribed by the U.S. Fish and Wildlife Service and California Department of Fish and Game. Compensation will be secured at an approved, off-site mitigation bank, with documentation provided to the resource agencies (i.e., U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and California Department of Fish and Game) at least 4 weeks before construction begins.

### *Western Spadefoot*

The project site provides potential breeding and refugia habitat for western spadefoot. Western spadefoot is not specifically known to be present in the project site, but the project area is within the species' known range. They breed in seasonal wetlands and spend most of the year in underground burrows, and could experience direct injury or mortality during construction and maintenance activities.

Including western spadefoot in the implementation of APM BIO-1, along with the implementation of APMs BIO-3 and BIO-5, and Mitigation Measure 3.4-1 for the protection of California red-legged frog and California tiger salamander, would reduce direct and/or indirect impacts on western spadefoot to a less-than-significant level by designing the project to avoid and minimize habitat impacts, implementing protection measures during project construction, restricting work activities near aquatic habitats, and compensating for upland and aquatic habitat impacts.

### *Western Pond Turtle*

Western pond turtle is known to occur in the San Benito River and in drainages east of the Hollister Tower Segment. Despite declining populations, western pond turtles are widespread habitat generalists known to occur in nearly all aquatic habitats, albeit infrequently. For this reason, they are presumed present in all aquatic habitats in the project corridor, and may be present in upland habitats up to 500 meters (0.3 mile) from aquatic habitat. Hatchlings move towards aquatic habitats during early spring (e.g., March) and nesting turtles move towards upland habitats during mid-summer (e.g., June and July); these movement periods coincide with planned project construction. Western pond turtle may experience direct injury or mortality during construction and maintenance activities, especially from ground disturbance and movement of large equipment.

Western pond turtle should be included in the implementation of APM BIO-1, APM BIO-2 and APM BIO-3, which would reduce impacts by implementing protection measures during project construction and limiting areas of vehicular movement. The following mitigation measure shall reduce potential impacts on western pond turtle to a less-than-significant level by incorporating western pond turtle into the identified APMs, and requiring ongoing surveys within suitable habitat:

> **Mitigation Measure 3.4-2:** PG&E and/or its contractors shall implement the following measures for construction areas located in suitable habitat within 0.3 mile of aquatic features:
>
> - Include western pond turtle in the Environmental Training and Monitoring Program.
> - Before daily activities begin near areas of suitable habitat, the onsite monitor shall perform pond turtle surveys within suitable aquatic and upland habitat. Any pond turtles located within the construction area would be relocated to the nearest safe location.
> - To minimize the likelihood of encountering turtles in upland areas near stream crossings, construction footprints shall be restricted to the smallest area possible.

### *California Horned Lizard and San Joaquin Coachwhip*

The project area provides potential habitat for California horned lizard and San Joaquin coachwhip, and is within the species' known range. There is a single record of San Joaquin coachwhip occurrence along the San Benito River in the project vicinity, and no records for California horned lizard. Each of these species could be impacted during construction and maintenance activities.

Including California horned lizard and San Joaquin coachwhip in APMs BIO-1 and BIO-5, along with implementation of APMs BIO-2 and BIO-3 would reduce impacts on California horned lizard and San Joaquin coachwhip to a less-than-significant level by implementing protection measures during construction activities and restricting vehicles to established work areas.

### *Western Burrowing Owl*

Western burrowing owl is known to occur approximately 2 miles from the project area, and grassland portions of the project corridor provide suitable habitat. The Applicant conducted general wildlife surveys during August 2006 and no burrowing owls were observed; focused surveys were conducted in July 2009 and again no burrowing owls were observed. Protocol surveys will be conducted in Spring 2010. Nonetheless, if present, this species and its habitat could be impacted by project construction and maintenance activities including ground disturbance, equipment operation, and increased activity and noise levels.

APMs BIO-23 and BIO-24 would reduce impacts on western burrowing owl to a less-than-significant level by requiring pre-construction surveys to identify active burrows and, if present, implementing protection and mitigation procedures established by CDFG.

### *American Badger*

American badger is known to occur approximately 1 mile from the project area, and grassland portions of the project corridor provide suitable habitat. Project construction is anticipated to occur between February and August, and maternal dens, if present, would be active during this period. American badger and its habitat could be impacted during project construction and maintenance activities. The following mitigation measure shall be implemented to reduce potential impacts to a less-than-significant level.

> **Mitigation Measure 3.4-3:** PG&E and/or its contractors shall implement the following measures for construction areas located in grasslands that provide potential habitat for American badger:
>
> - Include American badger in the Environmental Training and Monitoring Program.
> - Preconstruction surveys shall be conducted within 200 feet of work areas to identify potential maternal badger dens or other refugia in and surrounding work areas. A qualified biologist shall conduct the survey 14 to 30 days before construction begins. If no evidence of badger presence is detected, no further mitigation is required.
> - Suitable, as determined by the Environmental Monitor, vacated burrows that are located within the work area and that will not be destroyed by construction activities

will be temporarily covered using plywood sheets or other similar material to prevent badgers from occupying the burrows within the work areas.

- If active, non-maternal dens are located, badgers will be passively relocated via installation of one-way doors.

- If active maternal dens are located, the den will be avoided during construction by establishment of a 100-foot buffer. Smaller buffers, if required for construction, would be established in coordination with CDFG.

### *San Joaquin Kit Fox*

San Joaquin kit fox is known to occur within 1 mile of the project area, and grassland portions of the project corridor provide suitable habitat. San Joaquin kit fox and its habitat could be impacted during project construction and maintenance activities. Reconnaissance and focused wildlife surveys were performed by the Applicant during August 2006 and July 2009, and although numerous burrows of suitable size were observed in the project corridor no evidence of kit fox presence was observed. The Applicant identified that installation of the Hollister Pole Segment from poles 15/00 to 15/09 would result in the permanent loss of 0.07 acre of potential kit fox foraging habitat, and that installation of poles 15/00 to 20/02 and towers 5/34 to 6/40A, along with installation of temporary shoo-fly lines, would result in the temporary loss of 38.22 acres of potential kit fox foraging habitat.

PG&E and/or its contractors shall implement Mitigation Measure 3.4-4 in natural and agricultural areas, and other areas that may potentially support kit fox. Implementation of Mitigation Measure 3.4-4, derived from the *USFWS Standardized Recommendations for Protection of the San Joaquin Kit Fox* (USFWS, 1999), would reduce direct and/or indirect impacts on San Joaquin kit foxes to a less-than-significant level.

**Mitigation Measure 3.4-4:** PG&E and/or its contractors shall implement the following San Joaquin kit fox protection measures for construction areas located in grasslands and agricultural lands that provide potential habitat for San Joaquin kit fox.

- Preconstruction surveys shall be conducted within 200 feet of work areas to identify potential San Joaquin kit fox dens or other refugia in and surrounding work areas. A qualified biologist shall conduct the survey 14 to 30 days before construction begins. All potential dens shall be monitored for evidence of kit fox use by placing an inert tracking medium at den entrances and monitoring for at least three consecutive nights. If no activity is detected at these sites, they may be closed following guidance established in the 1999 *USFWS Standardized Recommendations for Protection of the San Joaquin Kit Fox*.

- If kit fox occupancy is determined at a given site, den closure activities shall immediately be halted and the USFWS contacted. Depending on the den type, reasonable and prudent measures to avoid effects to kit fox could include seasonal limitations on project construction at the site (i.e., restricting the construction period to avoid spring-summer pupping season), and/or establishing a construction exclusion zone around the identified site, or resurveying the den a week later to determine species presence or absence.

- To minimize the possibility of inadvertent kit fox mortality, project-related vehicles shall observe a maximum 20 miles per hour speed limit on private roads in kit fox habitat. Nighttime vehicle traffic shall be kept to a minimum on nonmaintained roads. Off-road traffic outside the designated project area shall be prohibited in areas of kit fox habitat.

- To prevent accidental entrapment of kit fox or other animals during construction, all excavated holes or trenches greater than two feet deep shall be covered at the end of each work day by suitable materials, or escape routes constructed of earthen materials or wooden planks shall be provided. Before filling, such holes shall be thoroughly inspected for trapped animals. All pipes, culverts, or similar structures with a diameter of 4 inches or greater must be capped at both ends while not in use, and otherwise inspected for kit fox presence prior to relocation or use.

- All food-related trash items (such as wrappers, cans, bottles, and food scraps) shall be disposed of in closed containers and removed daily from the project area.

- To prevent harassment and mortality of kit foxes or destruction of their dens, no pets shall be allowed in the project area.

- Suitable habitat that is temporarily impacted by project-related activities will be restored to pre-project conditions.

- Temporary impacts will be compensated at a minimum of 0.5:1 ratio (i.e., restoration of temporarily disturbed areas, plus permanent conservation of an additional area at a 0.5:1 ratio) and permanent impacts will be compensated at a minimum 3:1 ratio or at ratios as prescribed by the U.S. Fish and Wildlife Service and California Department of Fish and Game. Compensation will be implemented by participating in the San Joaquin Kit Fox Conservation Fund, which is administered via trust by the Center for Natural Lands Management.

#### *Special-status Bats*

Pallid bats are known to occur approximately 5 miles from the project area, and the project area is within the range of several other bat species that roost under remote bridges, in barns, in tree cavities, and in rock formations (roosts are protected by CDFG regardless of the status of the bat species). A rural barn is present approximately 700 feet from tower (1/11) and approximately 80 feet from the proposed access road to this tower, and may provide habitat for bats. The access road, which is also part of the construction traffic travel route, crosses a small wooden bridge that spans a seasonal drainage. As part of the Proposed Project, a culvert will be installed at this crossing, and the bridge is likely to be widened and/or reinforced to accommodate construction equipment. While bridges can provide habitat for bats, this one is very low to the ground (approximately two feet) over a drainage that may flood during storm events and submerge the underside of the bridge; it is also easily accessible to potential predators. Further, some bat species require a drop-to-flight distance that this bridge does not offer. The potential for submergence and its proximity to the ground makes it unlikely to be used by bats. No mitigation is required.

### *Nesting Birds*

The project area provides potential habitat for nesting birds, including listed or fully-protected species such as bank swallow, golden eagle, white-tailed kite, least Bell's vireo, loggerhead shrike, and tricolored blackbird. Bank swallows are historically known (recorded in 1931) to occur along the banks of the Pajaro River approximately 2.5 miles from the nearest proposed structure, but they were not observed in the project area during reconnaissance surveys. A golden eagle is believed to nest on the hill near towers 4/25 and 4/26 (ICF biologist Steve Avery, pers. comm.). Least Bell's vireo was not identified in the project area during reconnaissance surveys, but there is a low likelihood it could be present in the riparian woodlands near the river crossing. Loggerhead shrike and white-tailed kite were observed foraging in the project area during reconnaissance surveys, but nesting was not observed. A resident tricolored blackbird colony occurs in a wetland approximately 1,000 feet from tower 37/232, but nesting activity was not observed in project corridor wetlands. The general nesting period for breeding birds is February 1 through August 31; the nesting period for golden eagle is generally between March 1 and August 15.

APMs BIO-20 through BIO-22 require tree trimming and vegetation removal to occur during the non-breeding season, along with tower removal if possible; preconstruction surveys during the breeding season and development of a project-specific Avian Protection Plan; and helicopter avoidance of active nests. However, even with these mitigation measures, the Proposed Project could have a substantial adverse effect, either directly or through habitat modifications, on nesting birds.

Accordingly, the following additional mitigation measure shall be implemented to reduce potential impacts to a less-than-significant level.

> **Mitigation Measure 3.4-5:** PG&E and/or its contractors shall implement the following measures for the protection of nesting birds and raptors:
>
> - Project design, construction, and maintenance will conform with PG&E's corporate Avian Protection Plan and Avian Power Line Interaction Committee (APLIC) Guidelines.
>
> - A project-specific Avian Protection Plan would be developed and would include routine ground surveys by a qualified avian biologist, ground surveys staggered over time in concert with project implementation, additional ground surveys by a qualified environmental monitor, species-specific buffers, and a minimum 1,000-foot helicopter buffer for active eagle nests.
>
> - During the permitting process, the USFWS may identify the need for protocol surveys for least Bell's vireo.
>
> - If active nests are not identified during the preconstruction survey, no further action is required for breeding birds.
>
> - If active nests are identified during the preconstruction survey, the following measures, which shall be included in the project-specific Avian Protection Plan, will be implemented to avoid and minimize impacts.

- For golden eagle, construction contractors shall observe CDFG avoidance guidelines, which stipulate a minimum 500-foot buffer zone around active golden eagle nests. Buffer zones of 50 feet for passerine birds and 250 feet for raptors other than golden eagles will be established or closer as needed with resources agency permission. Buffer zones shall remain until young have fledged.

- Monitoring of the nest by a qualified biologist may be required if the project-related activity has potential to adversely impact the nest.

- CDFG may, on a case-by-case basis, allow construction activities to continue even if raptors and passerine birds nest within the buffers of the work activities during the nesting season.

- For activities conducted with agency approval within a raptor-nesting buffer zone, a qualified biologist shall monitor construction activities and the nest(s) to monitor reactions to activities. If activities are deemed to have a negative effect on nesting raptors, the biologist shall immediately inform the construction manager that work should be halted, and CDFG will be consulted. While the USFWS issues limited take permits for golden eagle, this species and certain other raptors are fully-protected under California law.

- Following construction, PG&E will comply with the PG&E company-wide Avian Protection Plan.

#### *South-central California Coast Steelhead*

South-central California coast steelhead are present in the San Benito River and use the project area river segment as a migratory corridor to upstream areas of the Pajaro River; additionally, the San Benito River is designated critical habitat for the species. The proposed project does not involve any work within the river channel, and no direct impacts to the river channel are anticipated. APMs HYDRO-1, BIO-1, BIO-2, BIO-3, and BIO-4 would mitigate potential impacts on steelhead to a less-than-significant level by protecting water quality, respecting riparian setbacks, and implementing protective measures during project construction.

### b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service: *LESS THAN SIGNIFICANT WITH MITIGATION*.

The project would temporarily impact riparian habitat during construction. Eight riverine wetlands exist in the project area, totaling 2.78 acres in size and consisting of channel segments completely vegetated by cattails (*Typha* spp.), willows (*Salix* spp.), perennial pepperweed (*Lepidium latifolium*), and blackberry (*Rubus* ssp.), among other less frequent species. The construction of new access roads and the staging of pull sites and work areas may involve crossing streams and impacting riparian vegetation, although activities associated with the proposed San Benito River crossing are not anticipated to occur within the river channel. Pull sites, helicopter landing areas, and staging areas would be sited at least 50 feet from the river channel to avoid disturbing riparian vegetation.

The Proposed Project relocates an existing pole segment outside of the San Benito River flood plain, which also relocates future maintenance activities outside of this sensitive riparian corridor. The existing wooden poles would be topped and left in place, with all activities to occur by helicopter to avoid ground disturbance.

APM BIO-8 would restore any riparian and upland habitat that is disturbed during construction in accordance with a to-be-developed Habitat Mitigation Plan. This measure, in coordination with APMs BIO-2, BIO-3, BIO-4, and BIO-6, would minimize impacts by respecting riparian setbacks, implementing protection measures during project construction, and providing restoration accountability through photodocumentation. Nonetheless, potentially significant impacts on riparian habitat or other sensitive natural communities could remain. Accordingly, the following additional mitigation measure shall be implemented to reduce potential impacts to a less-than-significant level.

> **Mitigation Measure 3.4-6:** PG&E and/or its contractors shall implement the following measures for the protection and restoration of riparian and upland habitat:
>
> - PG&E shall complete a Habitat Management Plan to be approved by the resource agencies at least 4 weeks prior to construction in potential restoration areas.
> - The Habitat Management Plan will include, at a minimum, quantifiable success criteria, contingency provisions, and follow-up monitoring responsibilities and schedules.
> - Affected riparian and upland habitat shall be restored to pre-project conditions.

**c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means: *LESS THAN SIGNIFICANT IMPACT*.**

Approximately 6.92 acres of federally-protected wetlands occur in the project area, with 0.18 acre anticipated to be temporarily impacted during construction and 0.001 acre anticipated to be permanently impacted by construction. In addition to the riverine wetlands identified above, 3.16 acres of seasonal wetlands, a single 0.41-acre emergent wetland, a single 0.25-acre detention basin, a single 0.06-acre intermittent drainage, and 12 ephemeral drainages totaling 0.26 acres also exist in the project area.

APMs BIO-11 and BIO-12 would mitigate potentially significant impacts on federally protected wetlands to a less-than-significant level because they would implement general protection measures for Waters of the United States and would require development of a Wetlands Mitigation Plan and compensation at a minimum 1:1 ratio.

**d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites: *LESS THAN SIGNIFICANT IMPACT*.**

The Proposed Project could interfere with the movement of any native resident or migratory fish or wildlife species, or with established movement corridors, or impede the use of native wildlife nursery sites, but any such interference would not be substantial. The San Benito River is designated critical habitat for steelhead, and steelhead use the project-area stream segment as a migratory corridor to upstream areas of the Pajaro River. However, no in-channel work is anticipated for the proposed San Benito River crossing. No established wildlife corridors or nursery sites are known to occur in the project site, and, with the exception of the golden eagle nest near the vicinity of towers 4/15 and 4/26, no wildlife corridors or nursery sites are known to occur in the surrounding project area.

As discussed in a), above, APMs HYDRO-1, BIO-1, BIO-2, BIO-3, and BIO-4 would mitigate potential impacts on steelhead to a less-than-significant level by protecting water quality, respecting riparian setbacks, and implementing protection measures during project construction.

Similarly, implementation of APMs BIO-20, BIO-21 and BIO-22 together with Mitigation Measure 3.4-5, the previously-discussed protection measures for nesting birds, would mitigate potential impacts on the known eagle nest to a less-than-significant level.

Impacts on wildlife movement corridors, if present in the project area, would be less than significant, as the permanent construction of power structures does not significantly impede or restrict movement. Potential avoidance behavior exhibited by native wildlife in response to the noise and disturbance associated with temporary construction and maintenance activities would also be less than significant.

In sum, the Proposed Project would have a less than significant impact on native resident or migratory fish or wildlife species, established native resident or migratory wildlife corridors, and the use of native wildlife nursery sites. Thus, no mitigation is required.

**e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance: *LESS THAN SIGNIFICANT WITH MITIGATION*.**

The CPUC has exclusive jurisdiction over the Proposed Project's siting, design, and construction. However, under APM BIO-10, the Applicant would comply with local tree protection policies and ordinances by replacing protected trees as stipulated in the applicable local regulations. Mitigation Measure 3.4 -7 would further protect native trees by establishing survivability criteria and providing for post-planting tree care. Therefore, any conflicts with local policies or ordinances would be less than significant. The Proposed Project would remove approximately 144 native oak trees, mostly coast live oaks (*Quercus agrifolia*) and three other native trees, and would trim approximately 124 native oak trees and approximately 14 other native trees including willows (*Salix* spp.) and California bay laurel (*Umbellularia californica*).

APM BIO-10 would track protected trees removed during construction and minimize impacts on protected trees through tree replacement. Nonetheless, without adequate post-planting care, potentially significant impacts on native trees could remain. Accordingly, the following additional mitigation measure shall be implemented to reduce potential impacts to a less-than-significant level.

> **Mitigation Measure 3.4-7:** PG&E and/or its contractors shall implement the following additional measures for the protection and restoration of impacted native trees:
>
> - The record of protected trees removed during construction and the associated plans for native tree replacement will be included in the Habitat Management Plan required under Mitigation Measure 3.4-6, above.
>
> - For replacement trees, the Habitat Management Plan shall include, at a minimum, quantifiable success criteria, contingency provisions, and follow-up monitoring responsibilities and schedules.

**f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan: *NO IMPACT*.**

The project area does not fall within the geographic boundaries of any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. There is no impact.

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# 3.5 Cultural Resources

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **5. CULTURAL RESOURCES— Would the project:** | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | ☐ | ☐ | ☐ | ☒ |
| b) Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5? | ☐ | ☐ | ☒ | ☐ |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☒ | ☐ | ☐ |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☐ | ☒ | ☐ |

## 3.5.1 Environmental Setting

This section is based on the cultural resources assessments prepared for Pacific Gas and Electric Company (ICF International, 2010; ICF Jones and Stokes, 2009). The cultural resources study included a records search and survey of the Area of Potential Effects (APE) for the project. The APE was defined as a 500-foot-wide corridor along the work site boundary of the proposed Hollister Pole and Hollister Tower segments, which includes the existing and proposed pole and tower sites, access roads locations, the temporary shoo-fly connection sites, the staging areas, and other construction work areas.

### Records Search, Survey, and Results

Jones and Stokes conducted a records search at the Northwest Information Center of the California Historical Resources Information System, contacted Native American individuals and organizations, and completed field surveys of the APE (ICF International, 2010; ICF Jones and Stokes, 2009). An Environmental Science Associates (ESA) Registered Professional Archaeologist completed an updated records search on December 11, 2009 (File No. 09-0748).

No prehistoric archaeological sites are recorded in the APE or were located during the survey effort.

One historic-era resource (CR-H-01) was located at the southern extent of the Hollister Tower Segment outside the immediate work site boundary. This resource is a circular rock- and mortar-lined water trough that measures approximately seven feet in diameter and three feet in depth. The trough is no longer in use and is filled with refuse, including cans and bottles from the 1950s and 1960s. It was later determined that the resource is located outside of the APE and no further consideration is therefore necessary regarding the resource (Havelaar, 2010).

The Proposed Project work site also crosses one historic-era linear feature: El Camino Real en Medio (CA-SBN-143H). The segment of road east of the Hollister Tower Segment is an improved, paved road that is still utilized until it abuts Avenida del Piero. The segment of roadway west of the Hollister Tower Segment (and Avenida del Piero, which roughly follows the project alignment) has been destroyed by construction of a housing development. CA-SBN-143H has not been formally evaluated for listing on the California Register of Historical Resources (California Register) or National Register of Historic Places (National Register); however the resource has been evaluated as not eligible because it lacks integrity and is heavily impacted from construction (ICF International, 2010).

## Geoarchaeological Analysis

Although no prehistoric archaeological resources were found within the APE as a result of the field survey, analysis of regional site distribution and local geology indicates that sections of the work site and APE are highly sensitive for buried archaeological resources. Cultural resources distribution in the project area is patterned. For the analysis, broad categories were used to categorize the locational context of each resource, relying on two common constraints to human land use and occupation: type of topographic relief and proximity to water. Floodplains and low terraces, although subject to flooding, are prime locations for a variety of human activities and occupation types throughout human history. Cultural resources may have been located on the alluvial and colluvial landforms represented by plains in proximity to now-relic surface water features in order to remain above flood-prone areas, or for specific resource-extraction purposes. Plain-upland interfaces are desirable areas for human land use because springs and other water sources are common in these contexts and frequently offer access to multiple resource sets, and can provide windbreaks. Uplands have been used throughout human history for occupation and resource extraction.

Areas deemed highly sensitive for cultural resources identified by the records search, soils maps, and topographical features, include areas situated along low stream terraces or floodplains of present-day watercourses such as the Pajaro River. Previously identified cultural resources on floodplains and low stream terraces are primarily prehistoric archaeological sites, although historic-era cultural resources are present and are likely to be identified as prehistoric resources. Much of the APE is located on low terraces and floodplains, including some overlap with the plain-upland category. The majority of previously identified cultural resources on floodplains and low terraces have been recorded along the Pajaro River between the Sargent Hills and Lomerias Muertas. The second most sensitive locational context is the uplands category. Historic-era cultural resources seem to dominate the uplands category, although prehistoric resources also are likely to be identified in uplands.

Some portions of the APE have moderate potential to contain buried archaeological deposits. Cartier (2001a), for example, observed a buried A horizon (often termed paleosol) on the northern bank of the San Benito River from seven to ten feet below ground surface. This paleosol represents a relic land surface, once available for human habitation, which was later buried by fluvial sediments. The southern bank of the San Benito River within the Hollister Pole Segment

(mapped as Metz soil units) probably contains paleosols because it is located in the same depositional environment, and soil scientists have observed paleosols about five feet below ground surface in Metz series soils (Isrig, 1969). Previous archaeological research along the Pajaro River suggests that high potential for buried archaeological deposits exists on the Pajaro River floodplain/ terrace (Cartier, 2001b). In addition, paleosols may occur at depths of about seven feet below ground surface in Willow series soils, which are present in portions of the APE (Isrig, 1969). Prior to Spanish, Mexican, and American land-use practices, however, this area was probably marshland and thus not especially suited to human habitation in the late prehistoric period (Breschini et al., 1983). The Willow series soil units in the APE should therefore be regarded as moderately sensitive for the presence of paleosols and archaeological deposits rather than highly sensitive.

### Paleontological Setting

Paleontology is a multidisciplinary science that combines elements of geology, biology, chemistry, and physics in an effort to understand the history of life on earth. Paleontological resources, or fossils, are the remains, imprints, or traces of once-living organisms preserved in rocks and sediments. These include mineralized, partially mineralized, or unmineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains. The fossil record is the only evidence that life on earth has existed for more than 3.6 billion years. Fossils are considered nonrenewable resources because the organisms they represent no longer exist. Once destroyed, a fossil can never be replaced. The following subsection discusses existing conditions with respect to paleontological resources in the project area.

Project excavations are expected to occur in a very wide variety of geologic units, including Holocene alluvium on valley floors, as well as a wide variety of bedrock types in the hills along the Hollister Tower Segment and where the Hollister Pole Segment traverses the base of the Flint Hills (CGS, 2002). Much of the construction work along most of the Hollister Tower Segment and a portion of the Hollister Pole Segment would pass through Pleistocene to Oligocene (10 thousand to 33 million years old) continental and marine sedimentary rocks, which are generally known to have a high paleontological potential due to their history of yielding vertebrate fossils. According to a search of the collections database at the University of California, Museum of Paleontology, there are approximately 34 vertebrate fossil localities in Monterey and San Benito County, all of which occur within Pleistocene to Eocene sedimentary rocks (UCMP, 2010). While none of the vertebrate fossil localities can be traced to the construction disturbance areas themselves, the fact vertebrate fossils have been discovered elsewhere within similar rocks indicates Pleistocene to Oligocene continental and marine sedimentary rocks have a high paleontological resource potential.

## 3.5.2 Regulatory Setting

The State of California implements the National Historic Preservation Act of 1966, as amended, through its Statewide comprehensive cultural resource surveys and preservation programs. The California Office of Historic Preservation (OHP), as an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a Statewide level. The OHP also

maintains the California Historical Resources Inventory. The State Historic Preservation Officer is an appointed official who implements historic preservation programs within the State's jurisdiction.

## California Environmental Quality Act

CEQA, as codified in California Public Resources Code (PRC) Sections 21000 et seq., is the principal statute governing the environmental review of projects in the State. The CEQA Guidelines define a historic resource as: (1) a resource in the California Register; (2) a resource included in a local register of historic resources, as defined in PRC Section 5020.1(k) or identified as significant in a historic resource survey meeting the requirements of PRC Section 5024.1(g); or (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

The California Register is "an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historic resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). The criteria for eligibility to the California Register are based on National Register criteria (PRC Section 5024.1[b]). Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally eligible for or listed in the National Register.

To be eligible for the California Register as a historic resource, a prehistoric or historic-period resource must be significant at the local, State, and/or federal level under one or more of the following criteria:

1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2) Is associated with the lives of persons important in our past;

3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or,

4) Has yielded, or may be likely to yield, information important in prehistory or history [14 CCR Section 4852(b)].

For a resource to be eligible for the California Register, it must also retain enough integrity to be recognizable as a historic resource and to convey its significance. A resource that does not retain sufficient integrity to meet the National Register criteria may still be eligible for listing in the California Register.

CEQA requires lead agencies to determine if a proposed project would have a significant effect on important archaeological resources, either historic resources or unique archaeological resources. If a lead agency determines that an archaeological site is a historic resource, the

provisions of PRC Section 21084.1 and CEQA Guidelines Section 15064.5 would apply. If an archaeological site does not meet the CEQA Guidelines criteria for a historic resource, then the site may meet the threshold of PRC Section 21083 regarding unique archaeological resources.

A unique archaeological resource is "an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person [PRC Section 21083.2 (g)]."

The CEQA Guidelines note that if a resource is neither a unique archaeological resource nor a historic resource, the effects of the project on that resource shall not be considered a significant effect on the environment (CEQA Guidelines Section 15064[c][4]).

## Other State Laws

Several sections of the PRC protect paleontological resources. Section 5097.5 prohibits "knowing and willful" excavation, removal, destruction, injury, and defacement of any paleontologic feature on public lands (lands under State, county, city, district, or public authority jurisdiction, or the jurisdiction of a public corporation), except where the agency with jurisdiction has granted permission.

Section 7050.5 of the Health and Safety Code protects human remains by prohibiting the disinterring, disturbing, or removing human remains in a location outside a dedicated cemetery. Section 5097.98 of the PRC (and reiterated in CEQA Section 15064.5 [e]) also states that in the event of the accidental discovery or recognition of any human remains in a location outside a dedicated cemetery, the following steps should be taken:

(1) There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

   (A) The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and

   (B) If the coroner determines the remains to be Native American:

      1. The coroner shall contact the Native American Heritage Commission within 24 hours.

      2. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.

3. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or

(2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

(A) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission.

(B) The descendant identified fails to make a recommendation; or

(C) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

## 3.5.3 Applicant Proposed Measures

PG&E proposes the following applicant proposed measures (APMs) to minimize impacts on cultural resources from the Proposed Project. The impact analysis in this MND assumes that these APMs would be implemented to reduce impacts to cultural resources discussed below.

**APM CR-1: Implement construction monitoring.** An archaeologist that meets the Secretary of the Interior's Standards and Guidelines for professional archaeologists will monitor ground-disturbing activities in areas that were documented as having high archaeological sensitivity on Figures 2a through 2d of the Historic Properties Inventory Report (ICF 2010). The monitor will be empowered to temporarily halt construction in the immediate vicinity of a discovery while it is evaluated for significance. With the archaeologist's approval, work may continue on other portions of the site. If the discovery proves to be significant, additional measures will be implemented; these may include avoidance, capping beneath a layer of sterile soil, or data recovery through archaeological excavation (PRC 21083).

**APM CR-2: Stop work if previously unknown cultural resources are discovered.** If buried cultural resources such as chipped or ground stone, historic debris, or building foundations are inadvertently discovered during site preparation or construction activities, work will stop in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with PG&E and other appropriate agencies. With the archaeologist's approval, work may continue on other portions of the site. PG&E will be responsible for ensuring that the archaeologist's recommendations for treatment are implemented.

**APM CR-3: Stop work if human remains are discovered.** If human remains are encountered during any phase of construction, work within a 100-foot radius of the remains will be suspended immediately and PG&E and/or their representative will immediately notify the respective county coroner, as required by state law (California Health and Safety Code 7050.5) and County Ordinance No. B6-18. If the remains are determined by the

coroner to be Native American, the Native American Heritage Commission (NAHC) will be notified within 24 hours, and the NAHC will in turn immediately notify the Most Likely Descendent, pursuant to Section 5097.98 of the Sate Resources Code. Upon notification, the MLD has 48 hours to make recommendations as to the treatment or disposition of the remains. PG&E or its appointed representative will implement any mitigation before the resumption of activities at the site where the remains were discovered.

## 3.5.4 Environmental Impacts and Mitigation Measures

**a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5: *NO IMPACT*.**

CA-SBN-143H has not been formally evaluated for listing on the California Register of Historical Resources or National Register of Historic Places; however a preliminary evaluation has determined that it does not appear eligible. No other historical resources, as contemplated by Section 15064 of the CEQA Guidelines, would be affected by construction or operation of the Proposed Project. Proposed construction would span CA-SBN-143H, thereby avoiding this linear resource; therefore, the Proposed Project would not cause a substantial adverse change in the significance of a historical resource. No impact.

**b) Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5: *LESS THAN SIGNIFICANT IMPACT*.**

No archaeological resources were recorded in the APE during the survey effort; however, as discussed above, particular areas within the project alignments are considered moderately to highly sensitive for the presence of prehistoric, ethnohistoric, and historic-era cultural materials and/or subsurface deposits. Consequently, it is possible that undocumented unique archeological resources could be present. If present, these resources could be affected during ground-disturbing activities required for project construction. Depending on the nature of the materials involved and the extent of the disturbance and/or damage, impacts could be significant. PG&E proposes to implement APMs CR-1 and CR-2, which include measures to implement construction monitoring and to stop work if previously unknown cultural resources are discovered, respectively. With these APMs, potential Project-related impacts on the significance of unique archaeological resources would be less-than-significant.

**c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature: *LESS THAN SIGNIFICANT WITH MITIGATION*.**

As discussed in the setting, much of the Hollister Tower Segment and a portion of the Hollister Pole Segment that traverses the Flint Hills are underlain by rocks of high paleontological potential. For this reason, construction of the Proposed Project could affect paleontological resources if project-related excavation were to extend beyond surface soils into sensitive rock units. Construction activities that could disturb fossil-yielding rock units could include minor grading required for access roads, equipment lay-down areas, and work-area preparation (if such grading were to occur in hillside areas with shallow soils); as well as augered holes and ground

excavation required for tower and pole footings. While the paleontological potential of the rock units underlying some of these disturbance areas would be high, the potential impact to fossil resources depend on both the paleontological potential of the rock unit, as well as the magnitude and depth of expected soil disturbance. Because the volume of material to be disturbed during project-related grading and excavation is low, and much of that material would consist of surface soils rather than the underlying fossil-yielding rock units, the chances of actually uncovering a significant fossil would be low. Nevertheless, the potential for impacts to paleontological resources cannot be dismissed, because any level of fossil disturbance is considered significant under CEQA, if the fossil would contribute to scientific knowledge of natural history or geologic origins. Unless mitigated, potential project-related impacts on unique paleontological resources would be significant; however, such impacts would be less than significant with Mitigation Measure 3.5-1 incorporated.

There are no known unique geological features that would be affected by the proposed project. Much of the project ROW is within privately-owned land that is not publically accessible, and there are no officially-designated sites of geological interest (e.g. caves, aesthetically-distinctive rock formations, etc…).

> **Mitigation Measure 3.5-1: Stop work if previously unknown paleontological resources are discovered.** Prior to the start of any subsurface excavations (excluding pole and tower holes) that would extend into Pleistocene to Oligocene sedimentary rock units, all construction forepersons and field supervisors shall receive training by a qualified professional paleontologist, as defined by the SVP (1995), who is experienced in teaching non-specialists, to ensure they can recognize fossil materials and will follow proper notification procedures in the event any are uncovered during construction. Procedures to be conveyed to workers include halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who will evaluate its significance. Training on paleontological resources will also be provided to all other construction workers, but may involve using a videotape of the initial training and/or written materials rather than in-person training by a paleontologist. If a fossil is determined to be significant and avoidance is not feasible, the paleontologist will develop and implement an excavation and salvage plan in accordance with SVP standards (SVP, 1995; SVP, 1996).

**d) Disturb any human remains, including those interred outside of formal cemeteries: *LESS THAN SIGNIFICANT IMPACT*.**

Based on the records search and contact with Native Americans, no human remains are known to exist within the project area; however, the discovery of human remains during ground-disturbing activity cannot entirely be discounted. Implementation of APM CR-3, which would require project work to be stopped and appropriate actions to be taken in the event that human remains would be discovered, would ensure that impacts to human remains would be less than significant.

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# 3.6 Geology, Soils, and Seismicity

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **6. GEOLOGY, SOILS, AND SEISMICITY— Would the project:** | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.) | ☐ | ☐ | ☒ | ☐ |
| ii) Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| iv) Landslides? | ☐ | ☐ | ☒ | ☐ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |
| c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☐ | ☐ | ☒ | ☐ |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | ☐ | ☐ | ☒ | ☐ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | ☒ |

## 3.6.1 Environmental Setting

Located within the northern Coast Ranges geomorphic province[1] of California, the Proposed Project would cross several landscapes with a variety of geologic and soil conditions. The Hollister Tower Segment is located on the northeastern edge of the Gabilan Range, characterized by a series of steep hills, with slopes ranging from approximately 10 to 80 percent, and elevations of about 140 to 1,300 feet above mean sea level (amsl). The Hollister Pole Segment is located primarily within the San Juan Valley, characterized by level or nearly level slopes at an elevation of about 270 feet amsl. The Hollister Pole Segment would also cross the San Benito River, which features a prominent floodplain flanked on each side with steep terrace slopes. Further east, the Hollister Pole Segment crosses the foothills of the Lomerias Muertas Mountains (Flint Hills), which have moderately steep grades and would place some of the Hollister Pole Segment as high as 410 feet amsl.

[1] The Coast Ranges extend from southern California to the Oregon border and are comprised of a series of mountain ranges and intervening valleys which trend northwest, subparallel to the San Andreas fault.

Given the physiography of the Proposed Project and that it is traversed by several active faults, geologic hazards could include surface fault rupture, seismic groundshaking, landslides, localized liquefaction and lateral spreading, and soil erosion. In addition, problematic soils, with shrink/swell potential and corrosive properties may be locally present in the project area. The following sections present additional detail on geologic units, soil characteristics and associated hazards.

## Local Geology

As discussed above, the Proposed Project crosses several landscape settings. The distribution and characteristics of the geologic units for each area is discussed separately below, and is based on geologic mapping by the California Geologic Survey (CGS, 2002).

### *Gabilan Range*

The Hollister Tower Segment crosses the northeastern tip of the Gabilan Range, where a wide variety of bedrock units are juxtaposed by both active and inactive faults. The southern portion of the Hollister Tower Segment crosses rolling hills and intervening stream valleys composed of Pleistocene alluvial fan deposits overlain by relict dune sands (Aromas Sands). To the north, the Hollister Tower Segment then climbs into Gabilan Range composed of granitic rocks and unnamed volcanic rocks on its southwestern flank, and a series of well consolidated Tertiary-age sedimentary rocks (including the Vaqueros Sandstone, unnamed Red Beds, and the San Juan Bautista Formation) on its northeastern flank. The northern-most portion of the Hollister Tower Segment, before terminating at Anzar Junction, is underlain by the Gabbro of Logan Quarry—a dark, crystalline volcanic rock.

### *San Juan Valley*

Beginning at Anzar Junction, the Hollister Pole Segment is directed east across the San Juan Valley, which is underlain by Holocene (less than 10,000 yeas old) sedimentary deposits of poorly consolidated sand, silt and gravel. The San Benito River floodplain, located along the northern side of the valley, is composed of modern stream gravels, which are actively mined as a source of aggregate (ICF Jones & Stokes, 2009). In places, the Hollister Pole Segment also crosses older Pleistocene stream terrace deposits.

### *Flint Hills*

A portion of the Hollister Pole Segment crosses through the base of the Flint Hills, which has moderately steep grades, is relatively low-relief, and is underlain by unnamed Pliocene continental mudstone.

## Soils

Overlying the geologic units described above (aside from rock outcrops and portions of active floodplains) is a mantle of soil that varies in thickness and character. In general, soil characteristics are strongly governed by slope, relief, climate, vegetation and the rock type upon which they form. Soil types are important in describing engineering constrains such as erosion

and runoff potential, corrosion risks, and various behaviors that affect structures, such as expansion and settlement.

**Table 3.6-1** lists the soil units mapped for all of the construction disturbance areas, and their key physical characteristics. In the table above, it is apparent that soil conditions are highly variable across the different soil units. Soil properties and their potential constraints are further discussed below and in *Section 3.6.4, Environmental Impacts and Mitigation Measures*.

### *Expansive Soils*

Expansive soils contain significant amounts of clay particles that have the ability to give up water (shrink) or take on water (swell). When these soils swell, the change in volume can exert significant pressures on loads that are placed on them, such as buildings or underground utilities, and can result in structural distress and/or damage. Table 3.6-1 provides an estimate of the shrink/swell potential of soils within the project area. While no soils were identified as having the highest shrink/swell category ("very high"), several soils have intervals within their profiles that exhibit high shrink/swell potential.

### *Soil Corrosivity*

The corrosivity of soils is commonly related to several key parameters, including soil resistivity, the presence of chlorides and sulfates, oxygen content, and pH. Typically, the most corrosive soils are those with the lowest pH and highest concentration of chlorides and sulfates. Wet/dry conditions can result in a concentration of chlorides and sulfates as well as movement in the soil, both of which tend to break down the protective corrosion films and coatings on the surfaces of building materials. High-sulfate soils are corrosive to concrete and may prevent complete curing, reducing its strength considerably. Low pH and/or low-resistivity soils can corrode buried or partially buried metal structures. Depending on the degree of corrosivity of the subsurface soils, concrete, reinforcing steel, and bare-metal structures exposed to these soils can deteriorate, eventually leading to structural failures. As shown in Table 3.6-1, both uncoated steel and concrete are susceptible to corrosion in a number of the soils present in the disturbance areas.

### *Erosion and Runoff*

Numerous soil groups within the project area are highly susceptible to runoff and resulting erosion. Soils in hydrologic group D (see Table 3.6-1) have high runoff potential when thoroughly wet, usually because some restricting layer (e.g. bedrock or impermeable soil horizon) impedes the downward movement of water within the soil profile. In addition, if the soil has a high erosion factor, runoff could remove substantial quantities of soil and lead to the formation of rills or gullies in the landscape. The Cotati and Gloria series in the project area have the highest runoff and erosion potential, and thus are more likely to be problematic. While runoff and erosion behavior can be estimated from the mapped soil series, actual susceptibility to erosion would vary site to site and is based on factors other than the soil unit, including slope, vegetation, and human disturbances (such as rangeland uses). The possibility of substantial and accelerated erosion is further discussed in *Section 3.6.4, Environmental Impacts and Mitigation Measures.*

**TABLE 3.6-1**
**SOIL TYPES IDENTIFIED WITHIN THE PROJECT CONSTRUCTION DISTURBANCE AREAS**

| Soil Unit | Percent of Construction Disturbance Area[a] | Shrink/Swell Potential | Risk of Corrosion[b] | | Erosion and Runoff | |
|---|---|---|---|---|---|---|
| | | | Uncoated Steel | Concrete | Hydrologic Soil Group[c] | Erosion Factor (Kf)[d] |
| Hills, Mountains and Uplands | | | | | | |
| Cotati loam | 8.1 | High | High | High | D | 0.37 |
| Los Gatos clay loam | 7.6 | Moderate | Moderate | Moderate | C | 0.17 |
| Diablo clay | 5.7 | High | High | Low | D | 0.15 |
| Vista coarse sandy loam | 4.6 | Low | Moderate | Moderate | C | 0.37 |
| Soper sand loam | 3.9 | Moderate | Moderate | Moderate | C | 0.28 |
| Arnold loamy sand | 3.2 | Low | Moderate | Moderate | B | 0.15 |
| Pfeiffer-Rock outcrop complex | 2.5 | Low | Low | Low | B | 0.32 |
| Sween rocky clay loam | 1.1 | High | High | Low | D | 0.20 |
| Alluvial Fans, Valleys and Plains | | | | | | |
| Sorrento clay loam | 32.5 | Moderate | High | Low | B | 0.32 |
| Sorrento silt loam | 8.2 | Moderate | Moderate | Low | B | 0.37 |
| Rincon silty clay loam | 6.3 | High | High | Low | C | 0.37 |
| Cotati loam | 5.5 | High | High | High | D | 0.37 |
| Arnold loamy sand | 4.4 | Low | Moderate | Moderate | B | 0.15 |
| Salinas clay loam | 1.3 | Moderate | High | Low | C | 0.37 |
| Terrace escarpments | 1.3 | Not available | Not available | Not available | Not available | Not available |
| Gloria sandy loam | 1.0 | High | High | Moderate | D | 0.37 |

[a] Construction disturbance areas include tower and pole installation work areas, landing and laydown areas, new and improved access roads, vegetation clearing, and overland travel routes. Soil Units covering less than 1 percent of the disturbance areas are not included.
[b] "Risk of corrosion" pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete.
[c] Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups (A through D) according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms. Soils in Group B have a moderate infiltration rate and a moderate rate of water transmission. Soils in Group C have a slow infiltration and transmission rates and consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. Soils in Group D have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.
[d] Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

SOURCE: Soil Survey Staff, 2010a, 2010b.

### *Collapsible Soils*

Soil collapse, or hydro-consolidation, occurs when soils undergo a rearrangement of their grains and a loss of cementation, resulting in substantial and rapid settlement under relatively low loads. This phenomenon typically occurs in recently deposited Holocene soils in a dry or semiarid environment, including eolian (wind blown) sands and alluvial fan and mudflow sediments deposited during flash floods. The combination of weight from a building or other structures, and an increase in surface water infiltration (such as from irrigation or a rise in the groundwater table) can initiate settlement and cause structural foundations and walls to crack. Collapsible soils—should they be present in the study area—have a higher potential of occurring in the San Juan Valley which is underlain by relatively young, potentially loose alluvial deposits. Collapsible soils may also be present in the southern portion of the tower section, which in places is underlain by Aromas Sands and Holocene alluvium. The actual presence and extent of collapsible soils would be evaluated as part of the subsurface exploration program that would be required for the proper geotechnical design of the Proposed Project.

## Faults and Seismicity

USGS geologic maps and the USGS Quaternary Fault and Fold Database were queried to identify the active and potentially active faults in the project area (see **Table 3.6-2**). Of these faults, the San Andreas and Calaveras faults are considered more likely to generate a large earthquake when compared to other faults in the area. The San Andreas and Calaveras Faults have a 21 and a 7 percent chance, respectively, of generating one or more earthquakes of magnitude 6.7 or higher over the next 30 years (Working Group on California Earthquake Probabilities, 2008). The other faults, including the Vergas Fault and the Sargent Fault Zone, have not experienced displacement in the recent past, but are nonetheless considered potentially active, based on evidence of displacement in the Quaternary Period.

## Earthquake Hazards

### *Fault Rupture*

The Proposed Project alignments cross two faults zoned as active by the State of California pursuant to the Alquist-Priolo Act and thus recognized as hazardous with respect to surface fault rupture. These include the San Andreas fault between Tower 6/39 and Pole 13/8, and the Calaveras fault between Poles 21/15 and 22/00. The Hollister Tower Segment also crosses the Zayante-Vergeles fault between Towers 2/14 and 2/15, but this fault has not been zoned as active. Nevertheless, due to identified latest Pleistocene and possible Holocene vertical displacement along the fault (Bryant, 2000), the Zayante-Vergeles fault may also pose a surface fault rupture hazard.

### *Ground Shaking*

The primary tool that seismologists use to evaluate ground-shaking hazard and characterize statewide earthquake risks is a probabilistic seismic hazard assessment (PSHA). The PSHA for the State of California takes into consideration the range of possible earthquake sources and

**TABLE 3.6-2**
**QUATERNARY FAULTS IN THE PROJECT SITE VICINITY**

| Fault | Location | Most Recent Activity (years)[a] | Fault Classification[b] | Magnitude of Maximum Credible Earthquake |
|---|---|---|---|---|
| San Andreas, Santa Cruz Mountains Section | Trends northwest between Tower 6/39 and Pole 13/8 | < 150 | Active | 7.0 |
| Calaveras Fault, Southern Section | Trends north between Poles 21/15 and 22/00 | < 150 | Active | 6.2 |
| Vergas Fault | Trends northwest between Towers 2/14 and 2/15 | < 130,000 | Potentially Active | Not Available |
| Sargent Fault Zone, Southern Section | About 0.5 miles north of Landing Zone 4 | < 15,000 | Potentially Active | Not Available |

[a] Defines one of the four time categories in which the most recent prehistoric surface-rupturing or surface-deforming earthquake occurred based on geologically recognizable evidence of faulting, folding, or liquefaction. The categories are (1) latest Quaternary (<15 ka), (2) late Quaternary (<130 ka), (3) late and middle Quaternary (<750 ka), and (4) Quaternary (<1.6 Ma).

[b] An "active" fault is defined by the State of California as a fault that has had surface displacement within Holocene time (approximately the last 10,000 years). A "potentially active" fault is defined as a fault that has shown evidence of surface displacement during the Quaternary (last 1.6 million years), unless direct geologic evidence demonstrates inactivity for all of the Holocene or longer. This definition does not, of course, mean that faults lacking evidence of surface displacement are necessarily inactive.

SOURCES: Hart E.W. and Bryant E.J., 1997; USGS and CGS, 2010; ICF Jones and Stokes, 2009.

estimates their characteristic magnitudes to generate a probability map for ground-shaking. The PSHA maps depict values of peak ground acceleration (PGA) that have a 10 percent probability of being exceeded in 50 years (or a 1 in 475 chance). This probability level allows engineers to design structures for ground motions that have a 90 percent chance of NOT occurring in the next 50-years, making structures safer than if they were simply designed for the most likely events. The peak ground acceleration for the most vulnerable areas of the Proposed Project (those closest to faults over weak materials) would be about 0.71 g[2] (CGS, 2010). This PGA value is typically indicative of a violent earthquake, capable of causing heavy damage; including general damage to foundations; shifting of frame structures off foundation, if not bolted; possible damage to reservoirs; breakage of underground pipes; and appearance of conspicuous cracks in ground. For comparison purposes, the maximum peak acceleration value recorded during the Loma Prieta earthquake of 1989 was in the vicinity of the epicenter, near Santa Cruz, at 0.64g (ABAG, 2010).

### *Liquefaction and Lateral Spreading*

Soil liquefaction can be caused by strong vibratory motion due to earthquakes. Research and historical data indicate that loose granular soils and non-plastic silts that are saturated by relatively shallow groundwater (generally less than 50 feet) are susceptible to liquefaction. Liquefaction causes soil to lose strength and "liquefy," triggering structural distress or failure due to the dynamic settlement of the ground or a loss of strength in the soils underneath structures.

[2] PGA is expressed as the percentage of the acceleration due to gravity (g), which is approximately 980 centimeters per second squared. In terms of automobile accelerations, one "g" of acceleration is equivalent to the motion of a car traveling 328 feet from rest in 4.5 seconds.

Lateral spreading of the ground surface during an earthquake usually takes place along weak shear zones that have formed within a liquefiable soil layer. Lateral spreading has generally been observed to take place in the direction of a free-face (e.g. a retaining wall or slope).

In the project area, the liquefaction potential is typically low in upland areas, whereas valley floor areas are at moderate to high risk (Monterey County, 2007). Thus, the Hollister Tower Segment would be expected to have a low potential to experience liquefaction, while portions of the Hollister Pole Segment located near the San Benito River, including the proposed river crossing, would have a moderate to high potential for liquefaction. Observations from the 1989 Loma Prieta Earthquake along the San Benito River and San Juan Creek indicates that liquefaction or ground cracking did not occur during that event (USGS, 1998). The actual presence and extent of liquefiable soils would be evaluated as part of the subsurface exploration program that would be required for the proper geotechnical design of the Proposed Project.

### Slope Failure

Slope failures, commonly referred to as landslides, include many phenomena that involve the downslope displacement and movement of material, triggered either by static (i.e., gravity) or dynamic (i.e., earthquake) forces. Exposed rock slopes undergo rockfalls, rockslides, or rock avalanches, while soil slopes experience soil slumps, rapid debris flows, and deep-seated rotational slides. Slope stability can depend on a number of complex variables, including the geology, structure, and amount of groundwater, as well as external processes such as climate, topography, slope geometry, and human activity. The factors that contribute to slope movements include those that decrease the resistance in the slope materials and those that increase the stresses on the slope. Landslides can occur on slopes of 15 percent or less, but the probability is greater on steeper slopes that exhibit old landslide features such as scarps, slanted vegetation, and transverse ridges.

Areas susceptible to slope failure in the project area include portions of the Hollister Tower Segment located on steep slopes, and the banks of the San Benito River. A desktop evaluation of landslide hazards along the proposed tower segment concluded that no towers are located on mapped landslides and only one (Tower 36/227) is located in an area of potentially moderate to high hazard (WLA, 2008). Along the pole segment no poles are located on mapped landslides or within areas of elevated moderate to high hazard (WLA, 2010). The flint hills which the pole segment would traverse is composed of competent mudstone that is not particularly prone to slope failure.

## 3.6.2 Regulatory Setting

### Federal

#### *Occupational Safety and Health Administration (OSHA) Regulations*

Excavation and trenching are among the most hazardous construction operations. The Occupational Safety and Health Administration's (OSHA) Excavation and Trenching standard, Title 29 of the Code of Federal Regulation (CFR), Part 1926.650, covers requirements for

excavation and trenching operations. OSHA requires that all excavations in which employees could potentially be exposed to cave-ins be protected by sloping or benching the sides of the excavation, supporting the sides of the excavation, or placing a shield between the side of the excavation and the work area.

## State

### *Alquist-Priolo Earthquake Fault Zoning Act*

Surface rupture is the most easily avoided seismic hazard. The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. In accordance with this act, the State geologist established regulatory zones, called "earthquake fault zones," around the surface traces of active faults and published maps showing these zones. Within these zones, buildings for human occupancy cannot be constructed across the surface trace of active faults. Each earthquake fault zone extends approximately 200 to 500 feet on either side of the mapped fault trace, because many active faults are complex and consist of more than one branch. There is the potential for ground surface rupture along any of the branches. Although the Proposed Project crosses two of the mapped fault zones (San Andreas and Calaveras), this Act does not apply because it does not involve structures for human occupancy.

### *California Building Code*

The California Building Code (CBC) has been codified in the California Code of Regulations (CCR) as Title 24, Part 2. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under State law, all building standards must be centralized in Title 24 or they are not enforceable. The purpose of the CBC is to establish minimum standards to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, and general stability by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction. The 2007 CBC is based on the 2006 International Building Code (IBC) published by the International Code Conference. In addition, the CBC contains necessary California amendments which are based on the American Society of Civil Engineers (ASCE) Minimum Design Standards 7-05. ASCE 7-05 provides requirements for general structural design and includes means for determining earthquake loads as well as other loads (such as wind loads) for inclusion into building codes. The provisions of the CBC apply to the construction, alteration, movement, replacement, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout California.

The earthquake design requirements take into account the occupancy category of the structure, site class, soil classifications, and various seismic coefficients which are used to determine a Seismic Design Category (SDC) for a project. The SDC is a classification system that combines the occupancy categories with the level of expected ground motions at the site and ranges from SDC A (very small seismic vulnerability) to SDC E/F (very high seismic vulnerability and near a major fault). Design specifications are then determined according to the SDC.

### *Seismic Hazards Mapping Act*

The State Department of Conservation, CGS, provides guidance with regard to seismic hazards. Under the CGS Seismic Hazards Mapping Act, seismic hazard zones are to be identified and mapped to assist local governments for planning and development purposes. The intent of the Act is to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other types of ground failure, and other hazards caused by earthquakes. CGS Special Publication 117 Guidelines for Evaluating and Mitigating Seismic Hazards in California, provides guidance for evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations (CGS, 2008). This Act will not apply to the Proposed Project because seismic hazard zones have not yet been established in San Benito County.

## Engineering and Construction Codes and Standards

Design and construction of PG&E facilities are governed by a variety of codes and standards. A number of these specifically regulate topics relevant to geology and geotechnical engineering, such as earthwork standards and seismic safety, including the following:

**CPUC General Order 95** provides general standards for design and construction of overhead electric transmission and distribution lines.

**"IEEE 693"** ***Recommended Practices for Seismic Design of Substations*** contains guidelines for earthquake-resistant substation design and construction. The IEEE (Institute of Electrical and Electronics Engineers, Inc.) is an international professional organization and a widely recognized authority in the development of industry standards for electrical engineering and electric power generation and transmission.

**The International Building Code** (IBC) is voluntarily adopted by jurisdictions and agencies. PG&E adheres to the IBC's earthwork standards where they are not superseded by CPUC regulations.

# 3.6.3 Applicant Proposed Measures

PG&E proposes the following applicant proposed measure (APM) to minimize impacts related to geology, soils and seismicity. The impact analysis in this MND assumes that this APM would be implemented to reduce the impacts related to geology, soils and seismicity discussed below.

**APM GEO-1: Perform Site-Specific Geologic Studies at Active Fault Crossings and Modify Siting/Design as Feasible to Reduce Damage.** For all pole or tower replacements proposed within a State-designated Earthquake Fault Zone or within 500 feet on either side of a fault considered likely to be active but not zoned by the State, PG&E will perform site-specific geologic investigations with the purpose of locating any active fault trace(s) and ensuring that project facilities are sited and designed to avoid and reduce damage due to surface fault rupture. Studies may include any appropriate combination of literature research, air photo evaluation, reconnaissance field survey, and/or subsurface investigation (fault trenching), based on the professional judgment of licensed supervising personnel (California Professional Geologist or Certified Engineering Geologist). Where significant potential for damage due to surface fault rupture is identified, facilities siting and design will be modified to the extent feasible to avoid or reduce damage.

## 3.6.4 Environmental Impacts and Mitigation Measures

This impact analysis considers the potential geology, soils, and seismicity impacts associated with the construction, operation, and maintenance of Proposed Project. The proposed modifications at the Hollister Substation consist solely of electrical system and safety upgrades. All substation work would occur on previously disturbed areas within the existing footprint of the substations, and the associated construction, operation and maintenance activities would have no impact with respect to geology, soils, seismicity, or mineral resources. The following discussion focuses on impacts from construction and operation of the Hollister Pole Segment and Hollister Tower Segment.

**ai) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42): *LESS THAN SIGNIFICANT IMPACT.***

As discussed in the setting, the San Andreas, Calaveras and Zayante-Vergales Faults all cross the transmission line, and have the potential for ground rupture during an earthquake. The possible risks from fault rupture to the Proposed Project would result from changes in the distance between poles and towers (e.g. a reduction of slack and increased tension in the conductors), and possibly pulling or deflection of insulator strings and changes in pole and tower angles. Should fault rupture occur, the effect would be alleviated by pole/tower inspection and repair (such as splicing additional conductor wire into the conductors), and would be unlikely to cause harm or injury to the public. In addition, the existing Hollister Tower Segment and Hollister Pole Segment currently cross these faults in the same location as they would under the Proposed Project (the new river crossing would not intersect an active fault). Therefore, the existing risk due to fault rupture would not be increased by implementation of the Proposed Project.

PG&E proposes to implement several measures to ensure the safety and reliability of the power lines in the event of an earthquake fault rupture. Pursuant to APM GEO-1, for all pole and tower replacements proposed within a State-designated Earthquake Fault Zone or within 500 feet on either side of a fault considered likely to be active but not zoned by the State, PG&E would perform site-specific geologic investigations with the purpose of locating any active fault trace(s) and ensuring that Proposed Project facilities would be sited and designed to avoid and reduce damage due to surface fault rupture. Studies may include any appropriate combination of literature research, air photo evaluation, reconnaissance field survey, and/or subsurface investigation (fault trenching), based on the professional judgment of licensed supervising personnel (California Professional Geologist or Certified Engineering Geologist). Where significant potential for damage due to surface fault rupture is identified, facilities siting and design would be modified to the extent feasible to avoid or reduce damage. Because the Proposed Project would not result in increased risks from fault rupture, and because PG&E has committed to study fault traces and design their structures accordingly, this impact would be *less than significant*.

**aii) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking: *LESS THAN SIGNIFICANT IMPACT*.**

Due to the proximity of the Proposed Project to several major active faults, the Proposed Project would likely experience strong seismic ground shaking sometime during its operational lifetime. As discussed in the setting, it is possible that the most vulnerable areas of the transmission line could experience violent ground shaking from a major earthquake. However, the Proposed Project would not increase exposure to such risks because the majority of the facilities would be constructed within existing PG&E right-of-way (ROW), and most poles and towers would be placed at approximately the same or similar location as the existing structures. Where a new alignment is proposed at the San Benito River crossing, the new poles would be placed outside of the floodplain. Because floodplain deposits are typically loose and saturated, poles placed outside of the floodplain are likely to be subject to comparatively less intense ground shaking in the event of a major earthquake. In addition, for overhead power lines, wind loading design requirements are typically more stringent than requirements that address strong seismic ground shaking; therefore, overhead power lines can accommodate strong ground shaking without incurring significant damage.

PG&E would adhere to CPUC General Order 95, which provides general standards for design and construction of overhead electric power and distribution lines, as well as earthwork and foundation design requirements of the International Building Code (IBC) where they are not superseded by CPUC regulations. Site characterization, investigation, and project design requirements and standards of the IBC and CPUC would reduce the potential for damage to facilities consistent with current engineering standards of care. Because existing poles would be replaced with new poles built according to modern, up-to-date building codes, and the power line would be relocated out of the San Benito River floodplain, the potential for damage from seismic ground shaking would likely be reduced as a result of the Proposed Project. Therefore, the impact from strong seismic ground shaking would be *less than significant*.

**aiii) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction: *LESS THAN SIGNIFICANT IMPACT*.**

As discussed in the setting, the Hollister Tower Segment is in an area expected to have a low potential to experience liquefaction, while portions of the Hollister Pole Segment located near the San Benito River, including the proposed river crossing and the temporary shoo-fly connections, would have a moderate to high potential for liquefaction. For the majority of the Proposed Project, exposure to risk of liquefaction would not increase because it would occur within the existing ROW, and the poles and towers would be placed in approximately the same or similar location as the existing structures. Where the Proposed Project would be relocated at the San Benito River crossing, new poles would be relocated outside the floodplain, which would generally reduce the risk of liquefaction compared to existing conditions. For these reasons, the impact from seismic-related ground failure (i.e. liquefaction and lateral spread) would be less than significant. Note that landslides are also considered a seismic related ground failure, which is discussed in item c).

**aiv) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides: *LESS THAN SIGNIFICANT IMPACT*.**

The potential for seismically-induced landslides is discussed below under criterion c). Certain activities, such as grading and excavations associated with new access roads, construction laydown areas, temporary shoo-fly connections, and tower and pole footings, if performed in unstable sloped terrain, could increase the susceptibility of the terrain to slope failures. As discussed under item c), impacts would be less than significant.

**b) Result in substantial soil erosion or the loss of topsoil: *LESS THAN SIGNIFICANT IMPACT*.**

### *Loss of Topsoil*

Most of the proposed construction activities would take place within PG&E's existing ROWs, which has experienced repeated disturbance associated with maintenance of the existing power lines and is unlikely to preserve an intact topsoil layer. Even if topsoil is present, the existing ROWs are dedicated to utilities use and do not represent an important topsoil resource; further disturbance by Proposed Project activities would not result in significant loss of topsoil. For the proposed river crossing and staging and laydown areas not within an existing ROW, construction of the Proposed Project would potentially result in a minor loss of topsoil; however, such a loss would be comparatively small, or occur in areas that have been previously disturbed by extensive grazing activities. In addition, the general construction permit required under NPDES would require that the topsoil be preserved in areas requiring grading in order to ensure proper implementation of post-construction best management practices (BMPs) (site restoration). For these reasons, the impact of potential loss of topsoil would be less than significant.

### *Soil Erosion*

The preliminary stages of construction, especially initial pole/tower site grading, stripping, and soil stockpiles would leave loose soil exposed to the erosive forces of rainfall and high winds. As discussed in the setting, runoff and erosion could be especially problematic in areas underlain by the Cotati and Gloria soil series. More generally, however, soil erosion would be more of a concern along segments of the Hollister power line where the terrain is hilly and where new and improved access roads and staging areas are proposed. Intense rain or wind events in such areas could result in substantial soil erosion into adjacent waterways, and possibly propagation of small rills or gullies. In cases such as this (i.e., constructed-related impacts), increased runoff or entrainment of sediment in runoff is just as much a concern as soil erosion. It is both processes (surface runoff and disturbed soils) that must be managed, and the principle concern for the Proposed Project for this issue relates more to water quality (see Section 3.8, *Hydrology and Water Quality*) impacts than loss of topsoil resources or impacts from the formation of rills, channels or gullies. In the event that rills or gullies form, the features would not significantly undermine any of the tower or pole footings, and any degradation of access roads would likely be minimized from design and installation of culverts and other proposed drainage improvements. Soil erosion and associated rilling or gullying that could pose a threat to the proposed facilities

would be detected and repaired through the routine inspection and maintenance procedures discussed in the Project Description.

Nevertheless, during construction and operation of the Proposed Project, erosion control measures and design features would be implemented that utilize BMPs to avoid or minimize soil erosion and off-site sediment transport. Because soil surface disturbance for the Proposed Project would be greater than one acre, specific erosion control measures would be identified as part of the NPDES permit and Storm Water Pollution Prevention Plan (SWPPP) required for construction. Examples of typical construction BMPs include scheduling or limiting activities to certain times of the year; installing sediment barriers such as silt fence and fiber rolls along the perimeter of the construction area; maintaining equipment and vehicles used for construction; tracking controls, such as stabilizing entrances to the construction site, and developing and implementing a spill prevention and cleanup plan. The SWPPP (and associated BMPs) would be prepared and implemented prior to commencing construction, and BMP effectiveness would be ensured through the sampling, monitoring, reporting, and record keeping requirements contained in the construction general permit.

In addition, the SWPPP requires implementation of post-construction BMPs that would restore the work sites to their original condition (such as reseeding of disturbed areas); thus, preventing or minimizing long-term erosion problems. As discussed in more detail in the Hydrology and Water Quality discussion (Section 3.8), it may be necessary to require additional and/or more specific measures in the SWPPP (i.e., measures that are not explicitly required as part of the General Construction Permit or the SWPPP) in order to adequately address local conditions that may present a relatively higher erosion risk. In either case, substantial or accelerated soil erosion during and following construction of the Proposed Project would be less than significant.

**c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse: *LESS THAN SIGNIFICANT IMPACT*.**

Portions of the Proposed Project that would be located in hilly areas, including most of the Hollister Tower Segment and some of the construction lay-down areas, could be subject to landslide hazards, including seismically induced landslides. In the long run, the Proposed Project would be unlikely to experience an increase in exposure to landslide hazards because it would occur within PG&E's ROW and most poles and towers would be placed in the same or similar location as the existing structures. The only poles to be constructed outside of the existing ROW would be at the San Benito River crossing, which is largely flat and not landslide-prone.

Grading and excavations associated with new access roads, construction laydown areas, and tower and pole footings, if improperly performed, could create unstable conditions, or worsen existing landslide risks. Cuts into hillsides could remove material that is needed to support the upland material, and road or staging area fills could slough, slump, or ravel if they result in over-steepened slopes. Landslide evaluations performed for the Proposed Project generally concluded the transmission alignment would cross areas of low to moderate landslide hazard, except for one

(Tower 36/227), which is located in an area of potentially moderate to high hazard[3] (WLA, 2008; WLA, 2010). In addition, no towers or poles would be located within existing landslides (WLA, 2008; WLA, 2010). Adherence to sound grading practices (e.g. bracing or underpinning of excavated faces), as stipulated in the CPUC General Order 95, the IBC, and OSHA regulations followed by all California construction projects, would generally ensure that construction activities would not create new areas of instability.

In summary, while one tower is located in a moderate to high landslide area, and there is a slight chance of minor slope failures on other portions of the Proposed Project, the impact is *less* than significant for three reasons. First, the Proposed Project would replace an existing line that is currently subject to the same hazards. Second, workers, vehicles, and equipment used during the Proposed Project-related grading and excavation would be protected through commonly-applied health and safety requirements and grading practices, as stipulated in the CPUC General Order 95, the IBC, and OSHA regulations. Third, the proposed alignment is primarily in an uninhabited area that is not generally visited by the public. Should a landslide occur in the long-run (most likely earthquake-induced), people and habitable structures would not be put at risk. PG&E would inspect and repair any damage incurred by the transmission line.

**d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property: *LESS THAN SIGNIFICANT IMPACT*.**

Portions of the Proposed Project are situated on soils with moderate to high expansion potential. If improperly designed or installed, expansive soils could cause damage to foundations over a long period of time, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. The soil conditions present in the study area are not particularly unique in comparison to other areas nor do they represent a significant impediment to the Proposed Project. Facility design and construction would comply with CPUC design standards and would employ standard engineering and building practices common to construction projects throughout California. Depending on the nature of the facilities and the characteristics of the substrate at the work sites, such standards and recommendations could require a variety of mitigation approaches, including specialized foundation design; over-excavation and placement of clean, nonexpansive engineered fill prior to construction; and/or other measures to reduce concerns related to expansive soils, consistent with the prevailing engineering standard of care. Consequently, impacts related to expansive soils would be *less than significant*.

[3] The landslide hazard classes used by WLA include very low to low (landslides are very unlikely), low to moderate (minor slope failures possible but unlikely), moderate (isolated slope failures), moderate to high (distributed slope failures), and known (failure of mapped landslide).

**e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater: *NO IMPACT*.**

The Proposed Project would not include any components that would include construction of any septic tank or other wastewater disposal system into soils. Accordingly, there would be *no impact* to soils in the project area from wastewater disposal.

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# 3.7 Hazards and Hazardous Materials

| *Issues (and Supporting Information Sources):* | | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|---|
| **7.** | **HAZARDS AND HAZARDOUS MATERIALS Would the project:** | | | | |
| 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? | ☐ | ☐ | ☒ | ☐ |

## 3.7.1 Environmental Setting

Materials and waste may be considered hazardous if they are poisonous (toxic), can be ignited by open flame (ignitable), corrode other materials (corrosive), or react violently, explode, or generate vapors when mixed with water (reactive). The term “hazardous material” is defined by the State of California, Health and Safety Code, Chapter 6.95, Section 25501(o) as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment. In some cases, past industrial or commercial uses on a site can result in spills or leaks of hazardous materials and petroleum to the ground; thus resulting in soil and groundwater contamination. Federal and State laws require that soils having concentrations of contaminants such as lead, gasoline, or industrial solvents that are higher than certain acceptable levels must be handled and disposed as hazardous waste during excavation, transportation, and disposal. The California Code of Regulations (CCR),

Title 22, Section 66261.20-24 contains technical descriptions of characteristics that would cause soil to be classified as a hazardous waste. The use of hazardous materials and disposal of hazardous wastes are subject to numerous laws and regulations at all levels of government.

In addition to toxic substances, the CPUC generally provides information about electric and magnetic fields (EMF) in its environmental documents, including this IS/MND, to inform the public and decision makers; however, it does not consider EMF, in the context of CEQA, as an environmental impact because there is no agreement among scientists that EMF creates a potential health risk and because CEQA does not define or adopt standards for defining any potential risk from EMF. The CPUC has implemented Decision D.06-01-042 requiring utilities to incorporate "low-cost" or "no-cost" measures for managing EMF from power lines up to approximately four percent of total project cost. Using the four percent benchmark, PG&E has incorporated low-cost and no-cost measures to reduce magnetic field levels along the proposed power lines (see Section 2.10, *Electric and Magnetic Fields Summary*). For informational purposes, additional information about EMF generated by power lines is provided in the project description and in Appendix A.

## Existing Environment

The study area is located in unincorporated areas of Monterey and San Benito Counties, near the Cities of San Juan Bautista and Hollister. Portions of the Proposed Project are located within or adjacent to undeveloped open space, rural residential, and agricultural land uses. Activities in the vicinity of the rural residential and agricultural uses could have resulted in hazardous material releases in those areas. As such, regulatory database searches were conducted to identify any known hazardous material storage sites, use locations, and or illicit release sites.

### *Hazardous Materials Database Records Search*

Internet searches were conducted using the Department of Toxic Substances Control's (DTSC's) EnviroStor (DTSC, 2010) and the State Water Resources Control Board's (SWRCB's) Geotracker (SWRCB, 2010) online databases that use Geographic Information System (GIS) for identifying sites that have known contamination or sites for which there may be reasons to investigate further.

The EnviroStor database includes facilities that are authorized to treat, store, dispose or transfer (TSDTF) hazardous waste and includes the following site types: Federal Superfund sites (National Priority List (NPL)); State response, including military facilities and State Superfund; voluntary cleanup; and school sites that are being evaluated by DTSC for possible hazardous materials contamination. The EnviroStor database also contains current and historical information relating to permitted and corrective action facilities. Geotracker contains regulatory data about leaking underground storage tanks (LUST), Department of Defense (DoD), spills-leaks-investigations-cleanups (SLIC) and landfill sites. The Geotracker database also contains information about public drinking water wells.

Data obtained from the EnviroStor and Geotracker databases indicates that no contamination has been identified along the Proposed Project segments or Hollister Substation. The closest hazardous materials site to any component of the Proposed Project is a closed LUST cleanup site approximately 1,500 feet north of the proposed Hollister Pole Segment where it crosses San Juan Highway (DTSC, 2010 and SWRCB, 2010).

It should also be noted that, although substation transformers now almost exclusively use mineral oil as an insulating agent, which is not considered a hazardous material, it is likely that transformer oil was historically used at Hollister Substation that contained several constituents of concern, including lead, petroleum hydrocarbons, and polychlorinated biphenyls (PCBs).

### *Wood Treatment Products*

The existing power line wood poles that would be removed under the Proposed Project are treated with chemicals that likely include pentachlorophenol, creosote, and chromated copper arsenate. These treatment chemicals are used in pressure treated wood to protect wood from rotting due to insects and microbial agents. These chemicals, for certain uses and quantities, can be considered to be hazardous materials, which require specific handling procedures prescribed by State and federal regulations. These chemicals are typically applied to utility wood poles by the manufacturer at their facility and are left to set and dry prior to installation and/or use of the poles. Additionally, the base of some of the treated wood poles may be wrapped with copper naphthenate paper, also known as CuNap wrap.[1] This paper has been accepted as a wood preservative for several decades and has been employed in non-pressure treatments of wood and other products. Copper naphthenate is a common preservative and its use has increased recently in response to environmental concerns associated with other wood treatment products.

### *Schools*

The nearest school to any of the Proposed Project component locations is the Countryside Day-Care Preschool, located approximately 500 feet to the east-southeast from the southeast fenceline of Hollister Substation. No other school sites are located within a quarter mile of any component of the Proposed Project.

### *Airports*

The Hollister Municipal Airport is located approximately 1.5 miles north of the eastern end of the proposed Hollister Pole Segment near the Hollister Substation. Portions of the Proposed Project would be located within areas designated under the Comprehensive Land Use Plan for the Hollister Municipal Airport. The City of Hollister owns and operates Hollister Municipal Airport, which supports general aviation activities. The airport is also the location of the California Department of Forestry Air Attack Base, which plays a role in suppressing wildfire in six counties (City of Hollister, 2010). With the exception of Hollister Municipal Airport, there are no other airport facilities within three miles of any component of the Proposed Project.

[1] CuNap wrap is a self contained delivery system for copper napthenate, the internationally recognized wood preservative that fights the damaging effects of moisture, decay, and insect attack.

### *Wildland Fire Conditions*

The California Department of Forestry and Fire Protection (Cal Fire) has published Draft Fire Hazard Severity Zones for the State. These maps give fire hazards either a moderate, high, or very high rating classification. The Monterey County and San Benito County Fire Hazard Severity Zone Maps indicate that the Proposed Project would be located within "moderate," "high," and "very high" fire severity zones. The hilly area along the proposed Hollister Tower Segment in the vicinity of the Monterey/San Benito County line is the area that has the very high fire classification. Conditions along the proposed Hollister Tower Segment represent a high risk for fire hazard (Cal Fire, 2010).

## 3.7.2 Regulatory Setting

### Federal

#### *Occupational Safety and Health Administration*

The federal Occupational Safety and Health Administration (OSHA) enforces regulations covering the handling of hazardous materials in the workplace. The regulations established in the Code of Federal Regulations (CFR) Title 29 are designed to protect workers from hazards associated with encountering hazardous materials at the work site. The regulations require certain training, operating procedures, and protective equipment to be used at work sites that could encounter hazardous materials.

#### *Resource Conservation and Recovery Act*

Under the federal Resource Conservation and Recovery Act (RCRA), individual states may implement their own hazardous waste programs in lieu of RCRA as long as the state program is at least as stringent as federal RCRA requirements and is approved by the U.S. Environmental Protection Agency (USEPA). The USEPA approved California's RCRA program, referred to as the Hazardous Waste Control Law (HWCL) in 1992.

#### *Toxic Substance Control Act*

The Toxic Substances Control Act (TSCA) of 1976 was enacted by Congress to give the USEPA the ability to track the 75,000 industrial chemicals currently produced or imported into the United States. The USEPA repeatedly screens these chemicals and can require reporting or testing of those that may pose an environmental or human-health hazard. The USEPA can ban the manufacture and import of those chemicals that pose an unreasonable risk.

#### *CERCLA*

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) was developed to protect the water, air, and land resources from the risk created by past chemical disposal practices. This act is also referred to as the Superfund Act, and the sites listed under it are referred to as Superfund sites. Under CERCLA, the USEPA maintains a list, known as the Comprehensive Environmental Response, Compensation, and Liability Information

System (CERCLIS), of all contaminated sites in the nation that have in part or are currently undergoing clean-up activities. CERCLIS contains information on current hazardous waste sites, potential hazardous waste sites, and remediation activities. This includes sites that are on the National Priorities List (NPL) or being considered for the NPL.

## State

### *California Code of Regulations*

The California Code of Regulations (CCR), Title 22, Section 66261.20-24, contains technical descriptions of characteristics that would classify wasted material, including soil, as hazardous waste. When excavated, soils with concentrations of contaminants higher than certain acceptable levels must be handled and disposed as hazardous waste.

### *State Water Resources Control Board*

The SWRCB and the Regional Water Quality Control Boards (RWQCBs) administer the requirements of the Clean Water Act that regulate pollutant discharges into waterways of the U.S. The Central Coast RWQCB (CCRWQCB) enforces site cleanup regulations for illicit discharges that have resulted in contamination of groundwater in the Proposed Project area.

### *California Hazardous Materials Release Response Plans and Inventory Law*

The California Hazardous Materials Release Response Plan and Inventory Law of 1985 (Business Plan Act) requires that businesses that store hazardous materials onsite prepare a business plan and submit it to local health and fire departments. The business plan must include details of the facility and business conducted at the site, an inventory of hazardous materials that are handled and stored onsite, an emergency response plan, and a safety and emergency response training program for new employees with an annual refresher course.

### *California Occupational Safety and Health Administration*

In California, the California Occupational Safety and Health Administration (Cal OSHA) regulates worker safety similar to the federal OSHA. OSHA has developed worker safety regulations for the safe abatement of lead-based paint and primers (Lead in Construction Standard, Title 8 CCR 1532.1).

### *Unified Hazardous Waste and Hazardous Materials Management Regulatory Program*

In January 1996, Cal EPA adopted regulations, which implemented a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program). The program has six elements, including: (1) hazardous waste generators and hazardous waste onsite treatment; (2) underground storage tanks (USTs); (3) aboveground storage tanks (ASTs); (4) hazardous materials release response plans and inventories; (5) risk management and prevention programs; and (6) Unified Fire Code hazardous materials management plans and inventories. The plan is implemented at the local level and the agency responsible for implementation of the Unified

Program is called the Certified Unified Program Agency (CUPA). In Monterey County, the Monterey County Environmental Health Division is the designated CUPA, and in San Benito County, the San Benito County Health and Human Services Agency Public Health Division is the designated CUPA.

### *Department of Toxic Substance Control*

DTSC is responsible for regulating the use, storage, transport, and disposal of hazardous substances in the State. DTSC maintains a Hazardous Waste and Substances Site List for site cleanup. This list is commonly referred to as the Cortese List. Government Code section 65962.5 requires the Cal EPA to update the Cortese List at least annually. DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List.

### *Hazardous Waste Management and Handling*

Under RCRA, individual states may implement their own hazardous waste programs in lieu of RCRA as long as the state program is at least as stringent as federal RCRA requirements. The USEPA must approve state programs intended to implement federal regulations. In California, Cal EPA and DTSC, a department within Cal EPA, regulate the generation, transportation, treatment, storage, and disposal of hazardous waste. The USEPA approved California's RCRA program, called the Hazardous Waste Control Law (HWCL), in 1992. DTSC has primary hazardous material regulatory responsibility, but can delegate enforcement responsibilities to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the HWCL.

The hazardous waste regulations establish criteria for identifying, packaging, and labeling hazardous wastes; prescribe the management of hazardous wastes; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in ordinary landfills. Hazardous waste manifests must be retained by the generator for a minimum of three years. Hazardous waste manifests provide a description of the waste, its intended destination, and regulatory information about the waste. A copy of each manifest must be filed with the State. The generator must match copies of hazardous waste manifests with receipts from treatment, storage, and disposal facilities.

Contaminated soils and other hazardous materials removed from a site during construction or remediation may need to be handled as hazardous wastes.

### *Hazardous Materials Transportation*

The State of California has adopted U.S. Department of Transportation (USDOT) regulations for the intrastate movement of hazardous materials; State regulations are contained in 26 CCR. In addition, the State of California regulates the transportation of hazardous waste originating in the State and passing through the State (26 CCR). Both regulatory programs apply in California.

The two State agencies with primary responsibility for enforcing federal and State regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans). The CHP enforces hazardous materials and hazardous waste labeling and packing regulations to prevent leakage and spills of material in transit and to provide detailed information to cleanup crews in the event of an accident. Vehicle and equipment inspection, shipment preparation, container identification, and shipping documentation are the responsibility of the CHP, which conducts regular inspections of licensed transporters to assure regulatory compliance. Caltrans has emergency chemical spill identification teams at as many as 72 locations throughout the State that can respond quickly in the event of a spill.

Common carriers are licensed by the CHP, pursuant to California Vehicle Code Section 32000. This section requires the licensing of every motor (common) carrier who transports, for a fee, in excess of 500 pounds of hazardous materials at one time, and every carrier, if not for hire, who carries more than 1,000 pounds of hazardous material of the type requiring placards.

Every hazardous waste package type used by a hazardous materials shipper must undergo tests that imitate some of the possible rigors of travel. Every package is not put through every test. However, most packages must be able to be kept under running water for a time without leaking, dropped fully loaded onto a concrete floor, compressed from both sides for a period of time, subjected to low and high pressure, and frozen and heated alternately.

### *Hazardous Materials Emergency Response*

Pursuant to the Emergency Services Act, California has developed an Emergency Response Plan to coordinate emergency services provided by federal, State, and local governmental agencies and private persons. Response to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services (OES). The OES coordinates the responses of other agencies, including the USEPA, CHP, California Department of Fish and Game (CDFG), the RWQCBs, the local air districts (in this case, the Monterey Bay Unified Air Pollution Control District (MBUAPCD)), and local agencies.

Pursuant to the Business Plan Law, local agencies are required to develop “area plans” for the response to releases of hazardous materials and wastes. These emergency response plans depend to a large extent on the Business Plans submitted by people who handle hazardous materials. An area plan must include pre-emergency planning and procedures for emergency response, notification, and coordination of affected governmental agencies and responsible parties, training, and follow up.

### *California Public Utilities Code*

California Public Utilities Code Section 21658 prohibits structural hazards associated with utility poles and lines near airports. Should a power line be located in the vicinity of an airport or exceed 200 feet in height, a Notice of Proposed Construction or Alteration (Form 7460-1) is required by the Federal Aviation Administration (FAA) in accordance with Federal Aviation Regulation, Part 77 “Objects Affecting Navigable Airspace.”

## 3.7.3 Applicant Proposed Measures

PG&E proposes the following applicant proposed measures (APMs) to minimize impacts related to hazards and hazardous materials. The impact analysis in this IS/MND assumes that these APMs would be implemented to reduce impacts related to hazards and hazardous materials discussed below.

**APM HAZ-1: Stop work if hazardous substances are encountered during construction.** 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, the materials will be handled, transported, and disposed of in accordance with federal, state, and local regulations.

**APM HAZ-2: Conduct groundwater sampling and testing if suspected contaminated groundwater is encountered during construction.** If suspected contaminated groundwater is encountered in the proposed project construction areas, samples will be collected and submitted for 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.

**APM HAZ-3: Develop and implement a Helicopter Lift Plan.** PG&E will require the helicopter vendor to prepare a Helicopter Lift Plan for approval by the FAA prior to any construction helicopter operations. Any specific transportation needs (e.g., temporary road closures) will be identified in the plan and will be coordinated with the appropriate jurisdictions.

**APM HAZ-4: Develop and implement a Fire Risk Management Plan.** PG&E follows a standard practice of developing and implementing a Fire Risk Management Plan that addresses fire-suppression equipment and procedures to be used during construction and training of construction and maintenance crews. Additionally, fire suppression equipment and materials 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. Information contained in the plan and the locations of fire-suppression materials and equipment will be included in the employee environmental training discussed in APM BIO-1.

## 3.7.4 Environmental Impacts and Mitigation Measures

### a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials: *LESS THAN SIGNIFICANT WITH MITIGATION*.

During construction of the Proposed Project, limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, solvents, oils, etc., would be used to fuel and maintain vehicles and motorized equipment. Accidental spill of any of these substances could impact water and/or groundwater quality. Temporary bulk above-ground storage tanks and

55-gallon drums may be used for fueling and maintenance purposes. As with any liquid, during handling and transfer from one container to another, the potential for an accidental release would exist. Depending on the relative hazard of the material, if a spill were to occur of significant quantity, the accidental release could pose a hazard to construction workers, the public, as well as the environment.

While the Proposed Project would not require long-term operational use, storage, treatment, disposal, or transport of significant quantities of hazardous materials, hazardous materials would be used during construction activities. PG&E has committed to implementing APM HYDRO-2, which requires development and implementation of a plan to minimize the potential for, and effects of, spills of hazardous materials during construction. However, additional mitigation would be required to describe the general requirements of the plan and to include adequate performance standards. Implementation of Mitigation Measures 3.7-1 through 3.7-5 (see below) would reduce these impacts associated with the use, storage, disposal, and/or transport of hazardous materials to a less-than-significant level.

In addition, as part of the Proposed Project, existing wood power line poles would be removed and new steel poles would be installed. The removed wood poles are chemically treated and would require storage and or disposal. Improper storage and or disposal of these poles could result in a hazard to the public or the environment. Mitigation Measure 3.7-1 would be required to ensure that the wood poles would be disposed of at appropriate landfills, consistent with the requirements of HSC 25143.1.4(b). Impacts would be mitigated to less than significant.

**Mitigation Measure 3.7-1:** PG&E and/or its contractors shall implement construction best management practices, including but not limited to, the following:

- Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction;
- Avoid overtopping construction equipment fuel gas tanks;
- Use tarps and adsorbent pads under vehicles when refueling to contain and capture any spilled fuel;
- During routine maintenance of construction equipment, properly contain and remove grease and oils;
- Properly dispose of discarded containers of fuels and other chemicals; and
- If wood poles removed from the Hollister Pole Segment are not recycled or reused, they shall be disposed of at a landfill facility that is authorized to accept treated wood pole waste in accordance with HSC 25143.1.4(b).

**Mitigation Measure 3.7-2:** PG&E shall prepare a Hazardous Substance Control and Emergency Response Plan (Plan) and implement it during construction to ensure compliance with all applicable federal, State, and local laws and guidelines regarding the handling of hazardous materials. The Plan shall prescribe hazardous material handling procedures to reduce the potential for a spill during construction, or exposure of the workers or public to hazardous materials. The Plan shall also include a discussion of

appropriate response actions in the event that hazardous materials are released or encountered during excavation activities. The Plan shall be submitted to the CPUC for review and approval prior to the commencement of construction activities.

**Mitigation Measure 3.7-3:** PG&E shall prepare and implement a Health and Safety Plan to ensure the health and safety of construction workers and the public during construction. The plan shall include information on the appropriate personal protective equipment to be used during construction.

**Mitigation Measure 3.7-4:** PG&E shall ensure that a Workers Environmental Awareness Program is established and implemented to communicate environmental concerns and appropriate work practices to all construction field personnel. The training program shall emphasize site-specific physical conditions to improve hazard prevention, and shall include a review of the Health and Safety Plan and the Hazardous Substance Control and Emergency Response Plan. The CPUC mitigation monitor shall attend the first training session. PG&E shall submit documentation to the CPUC prior to the commencement of construction activities that each worker on the project has undergone this training program.

**Mitigation Measure 3.7-5:** PG&E shall ensure that oil-absorbent material, tarps, and storage drums shall be used to contain and control any minor releases. Emergency spill supplies and equipment shall be kept at the project staging area and adjacent to all areas of work, and shall be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials shall be provided in the project's Hazardous Substance Control and Emergency Response Plan (see Mitigation Measure 3.7-2), which shall be implemented during construction.

**Significance after Mitigation:** Less than Significant.

### 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: *LESS THAN SIGNIFICANT IMPACT*.

Data obtained from the DTSC's EnviroStor and SWRCB's Geotracker databases indicate that no contamination has been identified along the Proposed Project segments or at Hollister Substation. However, there is a potential that undocumented releases of hazardous materials (e.g., petroleum hydrocarbons from underground storage tanks, etc.) could have occurred along the Proposed Project alignments. Implementation of APM HAZ-1 and HAZ-2 would ensure that potential impacts associated with releasing previously unidentified hazardous materials into the environment would be less than significant by outlining steps to take in the event of encountering previously unidentified hazardous materials. For mitigation to reduce impacts related to existing contaminated groundwater, refer to Section 3.8, *Hydrology and Water Quality*.

### c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school: *LESS THAN SIGNIFICANT WITH MITIGATION*.

The nearest school in the vicinity of the Proposed Project segments or Hollister Substation is the Countryside Day-Care Preschool, located approximately 0.1 mile (500 feet) from the fenceline of

Hollister Substation. Reconstruction of the proposed Hollister Pole Segment in this area would not change the existing conditions, which are not adversely affected by PG&E's current operations and maintenance activities. No new long-term significant sources of hazardous emissions or hazardous materials would be introduced by the Proposed Project. However, construction of the Proposed Project would result in short-term emissions of diesel particulate matter (DPM) from diesel powered construction equipment and vehicle exhaust. Because health risks associated with DPM are generally associated with chronic exposure, it can be assumed that short-term emissions generated during construction of the Proposed Project would have a less than significant impact on the children and staff associated with the Countryside Day-Care Preschool. (See Section 3.3 b for more information about potential impacts on sensitive receptors associated with DPM.)

In addition to air pollutant emissions, the Proposed Project would require the short-term use of various hazardous materials during construction. Equipment that would contain hazardous materials such as grease, fuel, oil, etc., would be stored and dispatched from laydown (staging) areas to be located at designated sites during construction of the Proposed Project. To avoid potential impacts in the study area, PG&E has committed to implementing APM HYDRO-2, which requires the preparation and implementation of a spill prevention, control, and countermeasure plan. As noted above, APM HYDRO-2 would be supplemented with additional mitigation to ensure that impacts would effectively be reduced to less than significant. Therefore, implementation of Mitigation Measures 3.7-1 through 3.7-5 (see above) would also ensure that potential impacts on nearby schools from hazardous materials would be reduced to a level that would be less than significant.

**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: *NO IMPACT*.**

The Proposed Project would not be located on a known hazardous materials site pursuant to Government Code Section 65962.5. Given the distances of the known sites to the Proposed Project, there would be no impact that would occur related to known hazardous materials sites creating a significant hazard to the public or the environment. No impact would occur.

**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: *LESS THAN SIGNIFICANT WITH MITIGATION*.**

A portion of the proposed Pole Segment and the Hollister Substation are located within areas designated under the Comprehensive Land Use Plan for the Hollister Municipal Airport. Federal Aviation Regulation (FAR) Part 77 regulates structure heights near airports through established threshold heights of protected air space. These surfaces are defined by horizontal planes above specific ground elevations and or sloped planes at specific ratios. The overall intent of protected air space is to protect airplanes and structures from interface hazards. An aeronautical study of the Proposed Project, under the provisions of 49 USC Section 44718 was performed by the FAA.

A Determination of 'No Hazard to Air Navigation' was issued for 45 locations along the Hollister Pole Segment, including Poles 20/01 through 22/06b. A check also was conducted for Poles 18/14 through 20/00, but these locations did not qualify for the aeronautical study. On all but two locations, Poles 22/00 and 22/01, the aeronautical study revealed that the structures did not exceed obstruction standards and would not be a hazard to air navigation, and that marking and lighting were not necessary. For Poles 22/00 and 22/01, PG&E has indicated that it has purchased a lighting system to comply with FAA conditions to its Determinations of No Hazard to Air Navigation for the Proposed Project, as stated in aeronautical studies prepared by FAA (PG&E, 2009; FAA, 2009a; and FAA, 2009b). Implementation of Mitigation Measure 3.7-6 is required to ensure that PG&E adheres to FAA conditions for the Proposed Project. Implementation of FAA conditions for Poles 22/00 and 22/01 would ensure that aviation safety impacts would be reduced to less than significant.

> **Mitigation Measure 3.7-6:** PG&E shall incorporate the Federal Aviation Administration (FAA) conditions outlined in FAA Aeronautical Studies 2009-AWP-1446-OE (FAA, 2009a) and 2009-AWP-1447-OE (FAA, 2009b), including:
>
> - Poles 22/00 and 22/01 shall be marked or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, *Obstruction Marking and Lighting, red lights*.
> - Notices of Actual Construction or Alternative, shall be completed and returned to the FAA within five days after the construction reaches its greatest height.
> - Poles 22/00 and 22/01 shall not exceed 82 feet above ground level (i.e., 381 feet above mean sea level).
>
> **Significance after Mitigation:** Less than Significant.

In addition, excavated soils, foundation forms, concrete, towers, tubular steel poles, light duty steel poles, and miscellaneous tools and materials would be transported in and out of the construction areas by helicopter. Helicopters may also be used to transport construction workers to some pole/tower sites. Operation of these helicopters over populated areas would pose a risk to structures and persons on the ground. To comply with requirements of the FAA, PG&E has committed to implementing APM HAZ-3, which would require the helicopter vendor to develop and implement a Helicopter Lift Plan. Implementation of the APM HAZ-3 would ensure that safety impacts associated with helicopter operations would be less than significant.

### 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: *NO IMPACT*.

There are no private airstrips located within the vicinity of any portion of the Proposed Project. Accordingly, there would be no impacts related to private airstrip safety hazards associated with the Proposed Project. No impact would occur.

**g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan: *LESS THAN SIGNIFICANT IMPACT*.**

In the vicinity of Watsonville, San Juan Road is a designated tsunami evacuation route pursuant to the *Monterey County Operational Area Tsunami Incident Response Plan* (Monterey County, 2007). This portion of San Juan Road is outside of the Proposed Project area; therefore, there would be no potential that the Proposed Project could impair emergency tsunami evacuation efforts in Monterey County. No other adopted emergency response or evacuation plans apply to the Proposed Project.

However, several private and public roadways, including but not limited to, Avenue Del Piero, State Route 156, San Juan Highway, Buena Vista Road, and Wright Road, would be crossed by the Proposed Project and would likely need to be temporarily closed or have traffic flow otherwise restricted during power line stringing activities. These roadways could be used by people evacuating the area during an emergency. However, in the event of an emergency, construction crews would cease all work and would remove any equipment that would impede the flow of traffic. Access for emergency vehicles would be maintained throughout project construction. Although construction activities may require temporary road closures, appropriate traffic management and control plans would be followed pursuant to Mitigation Measure 3.15-1 (see Section 3.15, *Transportation and Traffic*), and encroachment permits would be obtained from Caltrans or San Benito County, depending on the jurisdiction of the road. Therefore, the Proposed Project would not physically interfere with emergency response or evacuation plans. Impacts would be less than significant.

**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: *LESS THAN SIGNIFICANT IMPACT*.**

The Proposed Project is located in areas considered moderate to very high wildfire hazard areas. The primary risks of potential fire hazards for the Proposed Project involve the use of vehicles and equipment during construction. Heat or sparks emitted from equipment in the area can ignite dry vegetation and cause a fire. Construction crews would use existing roads along most parts of the segments to access pole and tower sites or new access roads that would be constructed for the Proposed Project. After construction, the PG&E vegetation management inspector would continue to inspect and document vegetation conditions annually; however, where needed, vegetation inspections may be conducted more frequently (see Project Description, Section 2.8.3, *Maintenance Procedures*, for more information about PG&E's proposed vegetation management practices). To maintain appropriate clearance under the power line, vegetation removal would continue to be performed on an annual basis or as needed. Implementation of APM HAZ-4, which would require development and implementation of a fire risk management plan, would ensure that potential fire hazard impacts would be less than significant.

# References

California Department of Forestry and Fire Protection (Cal Fire), 2010. Fire Hazard Severity Zone Maps for Monterey and San Benito Counties, accessed online (http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps.php) February 25, 2010.

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City of Hollister, 2010. Accessed the City of Hollister *Airport* webpage (http://www.hollister.ca.gov/Site/html/gov/office/airport.asp) on February 23, 2010.

Federal Aviation Administration (FAA), 2009a. Determination of No Hazard to Air Navigation for Power Line Hollister pole Location 183 (22/00), May 7, 2009.

Federal Aviation Administration (FAA), 2009b. Determination of No Hazard to Air Navigation for Power Line Hollister pole Location 184 (22/01), May 7, 2009.

Pacific Gas and Electric Company (PG&E), 2009. Proponent's Environmental Assessment (PEA) for the Hollister 115 kV Power Line Reconductoring Project. Submitted November 23, 2009, page 4.7-17,

Monterey County Office of Emergency Services (Monterey County), 2007. *Monterey County Operational Area Tsunami Incident Response Plan*, January 2007.

# 3.8 Hydrology and Water Quality

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **8. HYDROLOGY AND WATER QUALITY— Would the project:** | | | | |
| a) Violate any water quality standards or waste discharge requirements? | ☐ | ☒ | ☐ | ☐ |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | ☐ | ☐ | ☒ | ☐ |
| c) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site? | ☐ | ☒ | ☐ | ☐ |
| d) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river or, by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site? | ☐ | ☒ | ☐ | ☐ |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | ☐ | ☐ | ☒ | ☐ |
| f) Otherwise substantially degrade water quality? | ☐ | ☐ | ☐ | ☒ |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other authoritative flood hazard delineation map? | ☐ | ☐ | ☐ | ☒ |
| h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows? | ☐ | ☐ | ☒ | ☐ |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | ☐ | ☐ | ☒ | ☐ |
| j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow? | ☐ | ☐ | ☒ | ☐ |

## 3.8.1 Environmental Setting

This section discusses the existing environmental and regulatory setting of the Proposed Project, identifies potential impacts related to construction, operation and maintenance of the Proposed Project, and proposes mitigation measures for those impacts determined to be significant. Setting information in this section was compiled from the Proponent's Environmental Assessment (PEA) (ICF Jones & Stokes, 2009), resource agency websites and databases, and Geographic Information System (GIS) data.

## Climate and Precipitation

San Benito and Monterey Counties experience a Mediterranean climate characterized by cool, wet winters and warm, dry summers. The wet season typically extends from November through April with mean annual precipitation ranging from about 12 inches in the Hollister area, increasing to about 18 inches closer to the coast in Monterey County (Daly and Taylor, 1998). Generally, precipitation increases along with elevation and proximity to the coastline. The majority of precipitation typically falls in the form of moderate to heavy rain during winter storms lasting less than 24 hours.

## Regional Drainage Patterns

The project area lies within the Central Coast hydrologic region. Topographic features in the region are dominated by sub-parallel coastal mountain ranges and intervening valleys. Monterey and San Benito Counties are largely composed of three ranges which, from east to west, are the Diablo, Gabilan, and Santa Lucia Ranges. Except for rivers with large watershed areas (such as the Salinas and Pajaro Rivers), drainages in the region are typically dry during the summer and early fall; although occasionally seeps and springs may provide perennial flows to some streams. The Hollister Tower Segment of the Proposed Project crosses the northern tip of the Gabilan Range, the crest of which separates the Salinas River watershed to the southwest from the Pajaro River watershed to the northeast.

### *Pajaro River Watershed*

Most of the Proposed Project (i.e., the Hollister Pole Segment and the northern half of the Hollister Tower Segment) lies within the Pajaro River watershed. The Pajaro River watershed covers 1,263 square miles and overlaps four counties: Santa Cruz, Santa Clara, Monterey, and San Benito. Its elevation ranges from sea level to approximately 4,900 feet amsl. The mouth of the Pajaro River is near Watsonville, where it empties into Monterey Bay just north of Elkhorn Slough. The San Benito River, which parallels much of the Hollister Pole Segment, joins the Pajaro River approximately 2.5 miles north of Anzar Junction near Highway 101, and drains over half of its watershed area.

### *Salinas River Watershed*

The Salinas River is the largest water system in Central Coast Region. The Salinas River watershed is bounded by the Santa Lucia Mountains to the west and the Gabilan Mountains to the east. The Salinas River is 155 miles long and roughly bisects the county, terminating in Monterey Bay near Moss Landing. The Salinas River delivers approximately 282,000 acre-feet per year (AFY) of water to the Pacific Ocean at Moss Landing. Most of the water (approximately 90 percent) is delivered during periods of peak precipitation, between mid-December and April. The southern half of the Hollister Tower Segment is located within a subwatershed of the Salinas River, drained by Gabilan Creek.

## Surface Water Quality

The watersheds described above are broadly impacted by pollutants originating from non-point sources such as regional agricultural activities, grazing practices, urbanization and hydromodication; as well as certain point sources such as mining and waste water treatment operations. Common pollutants include excess sediment loads, nutrients, nitrate and fecal coliform.

### *Section 303(d) List of Impaired Water Bodies and TMDLs*

In accordance with Section 303(d) of the Clean Water Act, state governments must present the U.S. EPA with a list of "impaired water bodies," defined as those water bodies that do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology.

Placement of a water body on the Section 303(d) List of Impaired Water Bodies acts as the trigger for developing a Total Maximum Daily Load (TMDL) pollution control plan for each water body and associated pollutant/stressor on the list. The TMDL is the quantity of a pollutant that can be safely assimilated by a water body without violating water quality standards. The TMDL serves as the means to attain and maintain water quality standards for the impaired water body to support designated and potential beneficial uses identified in the Basin Plan (see *Section 3.8.2, Regulatory Setting*). During each Section 303(d) listing cycle, the water bodies on the list are prioritized, and a schedule is established for completing the TMDLs. Listed impaired water bodies in the vicinity of the Proposed Project alignment are presented in **Table 3.8-1**, including the status of TMDL preparation and approval.

## Groundwater Hydrology

The project alignment crosses two groundwater basins, as designated by the Department of Water Resources (DWR, 2004): the Gilroy-Hollister Valley Groundwater Basin and the Salinas Valley Groundwater Basin. The basins are divided by faults, rifts, mountain ranges, and rivers.

### *Gilroy-Hollister Valley Groundwater Basin*

The majority of the Hollister Pole Segment lies within the Gilroy-Hollister Valley Groundwater Basin, which is comprised of water-bearing Holocene and Pleistocene alluvium as well as the Pliocene Purisima Formation at depth. A number of municipal and agricultural wells utilize the basin as a source of water supply (DWR, 2010). Present groundwater levels vary between 40 feet below ground surface (bgs) at the east end of the San Juan Valley to about 20 feet bgs on the west end of the valley (SBCWD, 2009). Generally, groundwater levels have risen over 100 feet in the past 35 years due to delivery of imported surface water and the construction of the Hernandez Reservoir. A water quality analysis indicates the groundwater in the basin is somewhat hard and contains significant concentrations of sulfate and chloride.

**TABLE 3.8-1**
**SECTION 303(d) LIST OF IMPAIRED WATER BODIES**

| Water Body[a] | Pollutant | Status of TMDL Preparation and Approval[b] | Potential Sources |
|---|---|---|---|
| **Pajaro River Watershed** | | | |
| San Benito River | Fecal Coliform | Planned (2011) | Source unknown |
| | Sedimentation/siltation | Approved (2007) | Agriculture |
| | | | Nonpoint source |
| | | | Resource extraction |
| Pajaro River | Boron | Planned (2019) | Source unknown |
| | Fecal Coliform | Planned (2011) | Natural sources |
| | | | Nonpoint sources |
| | | | Pasture grazing-riparian and/or upland |
| | Nitrate | Approved (2006) | Source unknown |
| | Nutrients | Approved (2006) | Agricultural runoff and return flows |
| | | | Urban runoff/storm sewers |
| | | | Watewater – land disposal |
| | | | Nonpoint sources |
| | Sedimentation/siltation | Approved (2007) | Agriculture – storm runoff |
| | | | Channelization and erosion |
| | | | Hydromodification |
| | | | Range grazing-riparian and/or upland |
| | | | Surface mining and resource extraction |
| | | | Streambank modification/destabilization |
| **Salinas River Watershed** | | | |
| Gabilan Creek | Fecal Coliform | Planned (2007) | Urban runoff/storm sewers |
| | | | Natural sources |
| | | | Nonpoint sources\| |
| | Nitrate as Nitrate (NO3) | Planned (2019) | Source unknown |
| Alisal Creek | Fecal Coliform | Planned (2007) | Agriculture |
| | | | Natural sources |
| | | | Nonpoint sources |
| | | | Urban runoff/storm sewers |
| | Nitrate | Planned (2007) | Source unknown |
| Tembladero | Ammonia | Planned (2019) | Source unknown |
| Slough | Fecal Coliform | Planned (2007) | Agriculture |
| | | | Natural sources |
| | | | Pasture grazing-riparian and/or upland |
| | | | Urban runoff/storm sewers |
| | Nutrients | Planned (2006) | Multiple agricultural sources |
| | Pesticides | Planned (2008) | Multiple agricultural sources |

NOTES:

[a] Water bodies are listed and restricted to those that are hydrologically connected to the disturbance areas of the Proposed Project, and are grouped by watershed.

[b] The date of planned TMDL completion is provided in the 303(d) lists from the SWRCB. Although the planned date of completion has been passed for many of the TMDL projects, approved TMDLs have not been completed as of February 2010.

SOURCE: SWRCB, 2007.

### *Salinas Valley Groundwater Basin*

The southern end of the Hollister Tower Segment lies within the Salinas Valley Groundwater Basin (Langley Area Sub-Basin). From oldest to the youngest, the water-bearing units of the subbasin are the Pliocene Purisima Formation, the Plio-Pleistocene Paso Robles Formation, the Pleistocene Aromas Red Sands, Quaternary terrace deposits, Holocene alluvium, and Holocene sand dunes. The groundwater in this basin is heavily used for agriculture and municipal supplies and has experienced problems related to overdraft, including a groundwater depression in the center of the basin and associated seawater intrusion along coastal areas. Groundwater beneath the Granitic Ridge portion of the subbasin has been affected by elevated nitrate levels in shallow aquifers.

## Flood Hazards

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program to provide subsidized flood insurance for those communities that comply with FEMA regulations. FEMA has mapped 100-year flood zones (also known as a 1% annual chance flood) in the project area associated with the San Benito River and San Juan Creek, a tributary to the San Benito River that passes through San Juan Bautista (FEMA, 2009). The flood zone associated with San Juan Creek occurs adjacent to San Juan Highway at poles 13/10 through 13/19. The new river alignment would span the flood zone associated with the San Benito River between poles 14/15 and 15/00. Several existing poles—to be topped or abandoned—are currently within the San Benito River floodplain. The Hollister Tower Segment does not cross any flood zones as defined by FEMA.

# 3.8.2 Regulatory Setting

## Federal and State Water Quality Policies

The statutes that govern the activities under the Program that affect water quality are the federal Clean Water Act (CWA) (33 U.S.C. § 1251) and the Porter-Cologne Water Quality Control Act (Porter-Cologne) (Water Code § 13000 et seq.). These acts provide the basis for water quality regulation in the study area.

The California Legislature has assigned the primary responsibility to administer and enforce statutes for the protection and enhancement of water quality to the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs). The SWRCB provides state-level coordination of the water quality control program by establishing statewide policies and plans for the implementation of State and federal regulations. The nine RWQCBs throughout California adopt and implement water quality control plans that recognize the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, and water quality problems. The RWQCB adopts and implements a Water Quality Control Plan that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed in the plan (Water Code §13240-13247).

### *Beneficial Use and Water Quality Objectives (CWA Section 303)*

The Central Coast Regional Water Quality Control Board (CCRWQCB) is responsible for the protection of the beneficial uses of waters on the central coast, including the study area. The CCRWQCB uses its planning, permitting, and enforcement authority to meet this responsibility and has adopted the Water Quality Control Plan for the Central Coast (Basin Plan) to implement plans, policies, and provisions for water quality management. The CCRWQCB published the most recent version of the Basin Plan in January 1994 (CCRWQCB, 1994).

In accordance with State policy for water quality control, the CCWQCB employs a range of beneficial use definitions for surface waters, groundwater basins, marshes, and mudflats that serve as the basis for establishing water quality objectives and discharge conditions and prohibitions. The Basin Plan has identified existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdiction (CCWQCB, 1994). **Table 3.8-2** identifies beneficial uses designated in the Basin Plan for the surface water bodies and groundwater basins relevant to the study area. The Basin Plan also includes water quality objectives that are protective of the identified beneficial uses; the beneficial uses and water quality objectives collectively make-up the water quality standards for a given region and Basin Plan (CCRWQCB, 1994). Within the study area, agricultural supply is an important and prevalent beneficial use of surface water and groundwater. The CCRWQCB is charged with protecting the quality of surface water and groundwater that may be diverted or extracted (or otherwise captured) and used for agricultural supply.

**TABLE 3.8-2**
**DESIGNATED BENEFICIAL USES OF WATER BODIES IN THE PROJECT AREA**

| Water Body[a] | Designated Beneficial Uses |
|---|---|
| Pajaro River Watershed | |
| San Benito River | MUN, AGR, IND, GWR, REC-1, REC-2, WILD, WARM, SPWN, FRESH, COMM |
| Pajaro River | MUN, AGR, IND, GWR, REC-1, REC-2, WILD, COLD, WARM, MIGR, SPWN, FRESH, COMM |
| Salinas River Watershed | |
| Gabilan Creek | MUN, AGR, GWR, REC-1, REC-2, WILD, WARM, SPWN, COMM |
| Alisal Creek | MUN, AGR, GWR, REC-1, REC-2, WILD, COLD, WARM, SPWN, COMM |
| Groundwater Basins | |
| Gilroy-Hollister Valley | AGR, MUN, IND |
| Salinas Valley | AGR, MUN, IND |
| Pajaro Valley | AGR, MUN, IND |

NOTES:

[a] Water bodies are listed and restricted to those that are hydrologically connected to the disturbance areas of the Proposed Project, and are grouped by watershed.

Beneficial Uses Key:
MUN (Municipal and Domestic Supply); AGR (Agricultural Supply); REC-1 (Body Contact Recreation); REC-2 (Noncontact Recreation); WARM (Warm Freshwater Habitat); COLD (Cold Freshwater Habitat); MIGR (Fish Migration); SPWN (Fish Spawning); WILD (Wildlife Habitat); NAV (Navigation); GWR (Groundwater Recharge); FRSH (Freshwater Replenishment); RARE (Preservation of Rare and Endangered Species); SHELL (Shellfish Harvesting); COMM (Ocean, Commercial, and Sport Fishing); EST (Estuarine Habitat); IND (Industrial Service Supply); PROC (Industrial Process Water Supply).

SOURCE: CCRWQCB, 1994.

The objective of the federal CWA is "to restore and maintain the chemical, physical, and biological integrity of the nation's waters." Under CWA section 303(d), the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. Table 3.8-1 provides details on the impaired water bodies that cross or are downstream of the project disturbance areas. For those water bodies failing to meet standards, states are required to establish total maximum daily loads (TMDL). A TMDL defines how much of a specific pollutant a given water body can tolerate and still meet relevant water quality standards.

### *Dredge and Fill Permit (CWA Section 404)*

Section 404 of the CWA requires a permit from the United States Army Corps of Engineers (Corps) prior to discharging dredged or fill material into waters of the United States, unless such a discharge is exempt from CWA section 404. The term "waters of the United States" as defined in the Code of Federal Regulations (40 CFR 230.3[s]) includes all navigable waters and their tributaries.

### *Water Quality Certification (CWA Section 401)*

Section 401 of the CWA requires that an applicant for any federal permit (e.g., a Corps 404 permit) obtain certification from the State that the discharge will comply with other provisions of the CWA and with State water quality standards. For the study area, the CCRWQCB or SWRCB (in the case of activities associated with water diversions) must provide the water quality certification required under section 401 of the CWA. PG&E would contact the relevant federal agency(s) in order to determine whether the federal agency(s) would take jurisdiction on a specific project and require a permit; if a federal permit is required then PG&E would also be required to obtain water quality certification from the CCRWQCB.

### *NPDES Program (CWA Section 402)*

The CWA was amended in 1972 to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added section 402(p), which establishes a framework for regulating municipal and industrial storm water discharges under the NPDES Program. In November 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations that establish storm water permit application requirements for discharges of storm water to waters of the United States from construction projects that encompass five or more acres of soil disturbance. Regulations (Phase II Rule) that became final on December 8, 1999, expanded the existing NPDES Program to address storm water discharges from construction sites that disturb land equal to or greater than one acre and less than five acres (small construction activity).

### *General Construction Permit (Order 99-08-DWQ)*

While federal regulations allow two permitting options for storm water discharges (individual permits and General Permits), the SWRCB has chosen to adopt only one Statewide General Permit at this time that would apply to all storm water discharges associated with construction

activity.[1] This General Permit requires all dischargers where construction activity disturbs one acre or more, to:

- Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that would prevent all construction pollutants from contacting storm water and with the intent of keeping all products of erosion from moving off site into receiving waters.
- Eliminate or reduce non-storm water discharges to storm sewer systems and other waters of the nation.
- Perform inspections of all BMPs.

This General Permit is implemented and enforced by the nine RWQCBs. The CCRWQCB administers the stormwater permitting program in the section of San Benito and Monterey Counties that includes the study area. Dischargers are required to submit a Notice of Intent (NOI) to obtain coverage under this General Permit and annual reports identifying deficiencies of the BMPs and how the deficiencies were corrected. Dischargers are responsible for notifying the relevant RWQCB of violations or incidents of non-compliance.

On September 2, 2009, the SWRCB adopted the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (construction general permit, Order No. 2009-0009). Order No. 2009-0009 becomes effective July 1, 2010, supersedes Order No. 99-08 and also applies to construction sites that include one or more acre of soil disturbance. Notable changes in the new permit include the following:

- A risk-based permitting approach that includes requirements specific to three overall levels of risk, determined based on the potential for the project to cause sedimentation as well as the sensitivity of the receiving water to sedimentation.
- The new general permit specifies both numerical and qualitative effluent limitations and receiving water monitoring to demonstrate compliance with permit conditions.
- The new general permit specifies minimum qualifications for a qualified SWPPP developer and qualified SWPPP practitioner.

The new permit implements changes addressed at improving the effectiveness of site BMPs, ensuring that qualified personnel are designing and implementing water quality protection measures during construction, and increasing monitoring, reporting and accountability.

## Porter-Cologne Water Quality Control Act

The Porter-Cologne Act (codified in the Water Code §13000 *et seq*.) is the basic water quality control law for California. As mentioned above, it is implemented by the SWRCB and the nine RWQCBs. The SWRCB establishes Statewide policy for water quality control and provides oversight of the RWQCBs' operations. In addition to other regulatory responsibilities, the

[1] SWRCB Order No. 99-08-DWQ National Pollutant Discharge Elimination System General Permit No. CAS000002.

RWQCBs have the authority to conduct, order, and oversee investigation and cleanup where discharges or threatened discharges of waste to waters of the State[2] could cause pollution or nuisance, including impacts to public health and the environment.

### *Dredge/Fill Activities and Waste Discharge Requirements*

Actions that involve or are expected to involve dredge or fill, and discharge of waste, are subject to water quality certification under section 401of the CWA and/or waste discharge requirements under the Porter-Cologne Act. The SWRCB's Division of Water Rights processes section 401 water quality certifications on projects that involve water diversions (California Code of Regulations, title 23, § 3855). Chapter 4, Article 4 of the Porter-Cologne Act (Water Code § 13260-13274), states that persons discharging or proposing to discharge waste that could affect the quality of waters of the State (other than into a community sewer system) shall file a Report of Waste Discharge with the applicable RWQCB. For discharges directly to surface water (waters of the United States) an NPDES permit is required, which is issued under both State and federal law; for other types of discharges, such as waste discharges to land (e.g., spoils disposal and storage), erosion from soil disturbance, or discharges to waters of the State (such as isolated wetlands), Waste Discharge Requirements (WDRs) are required and are issued exclusively under State law. The WDR application process is generally the same as for CWA section 401 water quality certification, though in this case it does not matter whether the particular project is subject to federal regulation. PG&E would contact the CCRWQCB and file a Report of Waste Discharge; the CVRWQCB would then determine whether an issuance or a waiver of WDR is required.

### *Waiver for Dewatering and Discharge to Land (CCRWQCB Resolution R3-2008-0010)*

The CCRWQCB has adopted a waiver of WDR (Resolution R3-2008-0010) for specific types of low-threat discharges to the land surface with the Central Coast region. Among the activities covered by this waiver includes sediment removal (which can result in the discharge of leachate from the saturated sediment) for in-stream construction projects or minor stream alterations, as well as treated groundwater. Waivers serve much the same purpose as general permits (i.e., they are intended to describe a range of protective measures that could be applied to a broad category of activities). PG&E would apply for and obtain this waiver from the CCRWQCB in the event installation of culverts or other in-stream activity requires the removal and temporary stockpile of sediment.

### *Streambed Alteration Agreement (Fish and Game Code Section 1602)*

The California Department of Fish and Game requires a project applicant to obtain a Streambed Alteration Agreement (SAA) pursuant to Fish and Game Code Section 1602 if a project will: 1) substantially obstruct or divert the natural flow of a river, stream, or lake; 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or 3) deposit

[2] "Waters of the state" are defined in the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." (Water Code, § 13050 (e))

or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

## Local

Relevant general plan policies are summarized below:

### *San Benito County General Plan*

*Policy 8 – Development in drainage basins*: It is the County's policy to minimize development/uses within drainage basins that could alter the path of watercourses and impede groundwater recharge.

*Action*

1. Continually monitor mining operations to determine whether mitigation measures are needed.
2. Limit cut-and-fill of watercourses for flood control improvements.
3. Prohibit dumping into creek beds and watercourses and require property owners to clean up existing unauthorized dumps.

*Policy 9 – Water quality improvement*: It is the policy of the County to cooperate with the Regional Water Quality Control Board to improve water quality problems identified for the County, to maintain water quality on all drainage, and to develop policies and programs for the protection and enhancement of habitat for fish on major tributaries to the Pajaro River (San Benito River, Pacheco Creek) and water quality in the Silver Creek watershed.

*Action*

1. The County recognizes the value of watershed and natural recharge areas and will update its Grading Ordinance.
2. Because the County recognizes the value of watershed areas, and the direct relationship between hillside development and the loss of such watershed areas, the County will prohibit development on hillsides where slopes are 30% or greater in all areas of the County unless no alternative exists.
3. Pursue funding sources for resolution of water quality problems including Federal and State grants, assessment districts, etc.
4. Continue to compile information on water bodies that have limited information including but not limited to Tequisquita Slough, Clear Creek, Laguna Creek, and Tres Pinos Creek.
5. Proposals that include parking for 50 or more cars shall be required to install and maintain oil and grease separators in storm drain systems and include annual maintenance of separators and a sweeping program for the lot.

*Policy 43 – Reduce effects of flooding from development*: It is the County's policy to take measures to reduce potential effects of flooding from new development and encourage flood control improvements.

*Action*

1. Continue to cooperate with the City of Hollister for the collection of fees and development of flood control improvements for tributaries to the San Felipe Lake drainage basin.
2. It is the County's policy to require new development affecting the Enterprise Road drainage area to provide funding and/or physical improvements to reduce flooding.
3. Drainage systems shall be designed to reduce the velocity and volume of storm water runoff off site to predevelopment levels for a 10-year storm interval.

### *Monterey County General Plan*

*Objective 5.1*: Protect and preserve watersheds and recharge areas, particularly those critical for the replenishment of reservoirs and aquifers.

5.1.1 Vegetation and soil shall be managed to protect critical watershed areas.

5.1.2 Land use and development shall be accomplished in a manner to minimize runoff and maintain groundwater recharge in vital water resource areas.

*Objective 5.2*: Preserve vegetation where necessary to protect water ways from bank erosion and siltation.

5.2.1 Owners of property adjacent to waterways or responsible agencies shall be encouraged to maintain healthy vegetation along the drainage course, or provide other suitable means of preventing bank erosion or siltation.

5.2.2 The County shall establish special procedures for land use, building locations, grading operations, and vegetation removal adjacent to all waterways and significant water features.

*Objective 16.4:* Identify existing and potential erosion hazards, and prepare and implement plans to control the amount of erosion and siltation.

16.4.1 The County shall adopt and enforce a comprehensive erosion control ordinance.

16.4.2 The County should establish an active erosion control education program for the general public and building and agricultural trades in cooperation with the Resource Conservation Districts and the Soil Conservation Service.

*Objective 21.2:* Enhance the quality of water in the County by regulating the type, location, and intensity of land use, and grading operations.

21.2.1 The County shall require all new and existing development to meet federal, State, and County water quality regulations.

21.2.2 The County shall allow only those land uses which do not pollute the groundwater system beyond acceptable limits.

## 3.8.3 Applicant Proposed Measures

PG&E proposes the following applicant proposed measures (APMs) to minimize impacts related to hydrology and water quality. The impact analysis in this MND assumes that these APMs would be implemented to reduce impacts related to hydrology and water quality discussed below.

**APM HYDRO-1: Prepare and Implement a Storm Water Pollution Prevention Plan.** PG&E or its contractor will prepare and implement a SWPPP to prevent construction-related erosion and sediments from entering nearby waterways. The SWPPP will include a list of BMPs to be implemented in areas with potential to drain to tributaries of the Salinas River in Monterey County or to the San Benito River in San Benito County. These BMPs will be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. BMPs to be implemented as part of the project-specific SWPPP may include, but are not limited to, the following control measures:

- Temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, grass buffer strips, high infiltration substrates, grassy swales, and temporary revegetation or other ground cover) will be employed to control erosion from disturbed areas.

- Drainage facilities in downstream offsite areas will be protected from sediment using BMPs consistent with CCRWQCB requirements.

- Vegetative cover will be established on the disturbed areas as soon as possible after disturbance.

**APM HYDRO-2: Develop and implement a Spill Prevention Control and Countermeasure Plan.** PG&E or its contractor will develop and implement an SPCCP to minimize the potential for, and effects of, spills of hazardous, toxic, or petroleum substances during all construction activities. The SPCCP will be completed and included in the SWPPP before any construction activities begin. PG&E will routinely inspect the construction areas to verify that the control measures specified in the SPCCP are properly implemented and maintained. PG&E will notify its contractors immediately if there is a noncompliance issue and will require compliance.

If an appreciable spill has occurred, a detailed analysis will be performed by a Registered Environmental Assessor to identify the likely cause of contamination. This analysis will conform to American Society for Testing and Materials (ASTM) standards and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, PG&E and its contractors will select and implement additional measures to control contamination, with a performance standard that groundwater quality and surface water quality must be returned to baseline conditions.

**APM HYDRO-3: Perform a drainage study and implement a drainage plan.** A drainage study will be performed for any area that crosses a waterway and requires a conveyance structure (culvert) for grading of new construction maintenance roads. The study will include calculations for the potential increases in stormwater runoff from related construction activities. The study also will identify critical drainage paths, and PG&E will implement drainage improvements to minimize the risk of flooding to downstream areas. The drainage plan will require that PG&E or its contractor will be responsible for proper

maintenance of the drainages and any BMP associated with each drainage. Implementation of these measures will ensure that altered drainage patterns from project-related construction activities do not significantly affect erosion or sedimentation.

## 3.8.4 Environmental Impacts and Mitigation Measures

**a) Violate any water quality standards or waste discharge requirements: *LESS THAN SIGNIFICANT WITH MITIGATION.***

***Construction***

Construction activities associated with the Proposed Project could increase the turbidity or otherwise degrade the water quality of receiving stream channels or other surface waterways. Activities that disturb the ground near or within a stream channel (e.g., clearing and grading) could make soils and sediments more susceptible to erosion by altering their existing structure or state. Depending on the distance and ground slope, some portion of the eroded material could eventually be delivered to a receiving stream channel or other type of waterway over a relatively short time period (e.g., during the next rain event). In this case, increased erosion rates would likely lead to increased sediment concentrations and turbidity levels in the receiving stream channel and have a potentially adverse impact on the beneficial uses identified by the CCRWQCB (1994). Further, moderate increases in surface runoff from construction areas could initiate or exacerbate an erosion and sediment delivery problem. An increase in the runoff rate from a construction area may result from temporarily decreasing ground surface resistance to overland flow (e.g., clearing of native vegetation or slope grading), decreasing the infiltration capacity of the soil by means of compaction (e.g., with heavy equipment), or by increasing the velocity of runoff (e.g., concentrating flow into manmade features or into existing rills or gullies). In addition, if construction equipment or workers inadvertently release pollutants (e.g., hydraulic fluid or petroleum) on site, these compounds could be entrained by runoff and discharged into receiving channel(s) causing water quality degradation. The extent of erosion or pollution that could occur at any given construction site varies depending on soil type, vegetation/cover, and weather conditions.

Most elements of the Proposed Project that would require construction involve only short-term (i.e., within a single season) construction activities, and thus the associated potential impacts would be short-lived in nature. Actions associated with the Proposed Project that include notable construction components include removal and installation of towers, installation of new poles, installation of temporary shoo-fly connections, preparation of wire stringing sites, installation of access roads, and development of material staging yards. Specific construction activities referenced under this potential impact include, but are not limited to, clearing and grading, excavation work, and the stockpiling of soil or sediments. The Proposed Project would disturb a total of approximately 85 acres, of which approximately 0.5 acre would remain permanently disturbed following completion of construction activities. The area of disturbance would not be concentrated in one or two locations, but rather spread throughout the entire Proposed Project area at discrete locations along the alignment; this would reduce the magnitude of the overall potential impact with respect to erosion and sediment delivery and also make it easier to control or prevent these potential problems.

PG&E has committed to two Applicant Proposed Measures (APMs) to reduce the effects of construction activities on water quality. Under HYDRO-1 and HYDRO 2, PG&E would prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) as well as a Spill Prevention Control and Countermeasure Plan (SPCCP). The SWPPP would include a list of Best Management Practices (BMPs) to be implemented in areas with potential to drain to tributaries of Gabilan Creek in Monterey County or to the San Benito River (and its tributaries) in San Benito County. These BMPs would include such measures as scheduling practices to avoid earthwork during periods of heavy rainfall, minimizing the amount of time soils are exposed to wind and rain, and stabilizing and protecting soils prior to anticipated rainfall events and after construction would be completed. In addition, the SWPPP requires that construction sites employ sedimentation and erosion control BMPs such as containment of the site within silt fences and coir rolls, installation of slope breaks (e.g. straw waddles) near drainages and road crossings, and it would require that existing vegetation be preserved to the maximum extent feasible. These BMPs would be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. Preparation of a SWPPP must be consistent with the requirements of the General Construction Permit as described in the regulatory setting section.

The SPCCP would specify control measures to minimize the potential for, and effects of, spills of hazardous, toxic, or petroleum substances during all construction activities. It would be completed and included in the SWPPP before any construction activities begin and PG&E would routinely inspect the construction areas to verify that the control measures specified in the SPCCP are properly implemented and maintained. Common control measures in a SPCCP include storing hazardous materials and placing sanitary facilities and waste disposal locations away from sensitive areas, placing drip pans under parked vehicles, maintaining clean and sanitary work areas, and properly disposing of hazardous substances and construction/demolition wastes. In the event of an appreciable spill, a detailed analysis would be performed by a Registered Environmental Assessor to identify the likely cause of contamination and additional measures to control contamination would be selected and implemented, with a performance standard that groundwater quality and surface water quality must be returned to baseline conditions.

Another potential water quality issue as a result of construction would be the possible discharge of groundwater from construction dewatering into nearby surface waters. Regionally, groundwater levels are estimated to vary between 20 and 40 feet below ground surface (bgs) (SBCWD, 2009), and dewatering may be necessary in areas of shallow groundwater close to the San Benito River and ephemeral creeks, or potentially for installation of TSPs, which would require augered holes up to 30 feet deep. In these cases, groundwater would most likely be discharged to the land surface or into the nearest creek or storm drain. The Central Coast Regional Water Quality Control Board (CCRWQCB) typically issues a general waiver(s), which itself contains specific provisions for these types of low-threat discharges. The groundwater would be pumped from the shallow aquifer and would likely be the same or similar in quality as the water in the adjacent creek or river. Further, if discharged to the land surface, a portion (if not all) of the groundwater would likely just return to the aquifer by way of infiltration; thus, water quality impacts from construction dewatering are unlikely.

The SWPPP and SPCCP to be implemented as part of the Proposed Project would insure that the impacts of construction activities on the water quality of nearby water bodies are significantly reduced or avoided. Further, the newly adopted construction general permit, as described in the regulatory setting section, will take effect prior to construction of the Proposed Project. The new permit includes stricter provisions, including a risk assessment and implementation of specific BMPs based on site soil conditions and the sensitivity of the receiving water body. The APMs and permit requirements will ensure that the impacts to water quality during construction are *less than significant*. However, as discussed below, permanent disturbance areas associated with new and improved access roads will require that additional mitigation measures be implemented.

#### *Operation and Maintenance*

Operation and maintenance activities and long-term effects associated with the Proposed Project would result in minimal effects on water quality. Maintenance procedures would not change as a result of the Proposed Project, and very little new, permanent soil disturbance would occur. However, any remaining disturbance areas and new access roads could result in sedimentation or turbidity increase in local receiving waters.

A total of 0.25 miles of new access roads would be installed, and 1.53 miles of existing access road would be re-graded, some very near to or across existing unnamed tributary channels. In addition, approximately nine temporary drainage crossings (e.g. bridges, steel plates, or construction mats) and one culvert will be installed across tributary drainages which eventually drain to Gabilan Creek or the San Benito River. Because installation of drainage crossings could directly affect drainage courses, discussion relevant to installation of drainage crossings is provided in item c). The potential long term impacts on water quality due to new or improved roads are discussed below.

In general, roads commonly lead to increases in the volume of surface runoff as well as increases in erosion and sediment delivery. This is attributable to the fact that road installation substantially reduces the infiltration capacity of soils and disturbs the existing soil structure, making the soil more susceptible to erosion and entrainment by runoff. The beneficial uses of the surface water channels within the Proposed Project area are protected by the water quality standards outlined in the Basin Plan (CCRWQCB, 1994) as well as an existing sediment TMDL for the San Benito and Pajaro Rivers (SWRCB, 2007); these beneficial uses could be adversely affected by increased sedimentation and turbidity levels resulting from the erosion and delivery of sediment from the proposed new access roads.

The existing measures required of PG&E (e.g., the General Permit, water quality certification, and/or possibly WDR) are sufficient to reduce potential construction-related water quality impacts to a less than significant level. Though, with respect to long-term impacts associated with the proposed new access roads, the required measures are not necessarily sufficient. Therefore, Mitigation Measure 3.8-1 would be required to specifically address the potential water quality impacts associated with proposed new roads.

**Mitigation Measure 3.8-1:** For all segments of new access roads that would be within 300 feet of an existing surface water channel and traverse a ground slope greater than two percent, the following protective measures shall be installed:

- Permanent access roads shall be in-sloped with a rock-lined ditch on the inboard side;
- Water bars, or a similar drainage feature, shall be installed at 150 foot intervals (so as to reduce the effective, connected length of the access road to 150 feet).

**Significance after Mitigation:** Less than Significant.

**b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted): *LESS THAN SIGNIFICANT IMPACT.***

There is no element of the Proposed Project that would interfere with groundwater recharge. Added impervious surfaces would be minimal and would consist solely of tubular steel pole (TSP) foundations and tower footings; and these would not represent continuous surfaces that could divert rainfall away from recharge areas.

As discussed in item a), dewatering activities may be required during construction. This activity, if required, could temporarily affect groundwater levels in the shallow groundwater zones. Pole/tower placement, installation of temporary shoo-fly connections, construction of foundations for TSPs, or other construction-related activities near an ephemeral stream or creek and at lower elevations on the valley floor adjacent to the San Benito River may require groundwater dewatering. However, municipal and domestic wells located in the study area generally pump groundwater from deeper aquifers (SBCWD, 2009) and would not be affected by dewatering activities in the shallow groundwater zone. Furthermore, any effects related to lowering the shallow groundwater table would be temporary since dewatering would be required for only a limited period during construction activities. Therefore, if groundwater dewatering would be required, it would be localized, temporary in duration, limited to the shallow groundwater zone, and it would not affect municipal and domestic wells in the study area. As a result, impacts related to the depletion of groundwater resources would be less than significant.

**c) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site: *LESS THAN SIGNIFICANT WITH MITIGATION*.**

Most creeks and streams would be spanned by the proposed power lines, and tower/pole footings would generally be placed upslope of drainages and creeks. However, both temporary and permanent access roads for the proposed project may intersect ephemeral drainages, requiring disturbance of drainage courses. Under the California Fish and Game Code, the California Department of Fish and Game (CDFG) has jurisdiction over any activity that could affect the

bank or bed of any stream that has value to fish and wildlife. If any changes are proposed along a creek or waterway within its jurisdiction, a streambed alteration agreement (SAA) would be required under California Fish and Game Code Section 1602. Further, the CCRWQCB would require Clean Water Act (CWA) Section 401 water quality certification or Waste Discharge Requirements (WDRS) for the installation of conveyance structures. The CCWRCB includes a general waiver for in-stream sediment removal activities on condition that the project sponsor submits a report of waste discharge and comply with certain conditions, such as doing the work during the dry season, and preventing sediment leachate from discharging to the surface water. The SAA and CCRWQCB requirements include reasonable measures necessary to help protect water quality and aquatic resources.

### *Temporary Impacts*

Grading, drilling, and other earthwork during construction of the Proposed Project would result in soil disturbance that could temporarily alter drainage patterns and increase the hazard of erosion or siltation and flooding on- or off-site. As discussed in item a), erosion and siltation would be of most concern for construction of facilities, staging areas, and access roads in hilly terrain. The SWPPP to be implemented as part of the Proposed Project (further described in item a) of this checklist), particularly the erosion control measures, would minimize the potential for construction of the Proposed Project to cause substantial erosion or siltation onsite or offsite.

In a number of locations, PG&E proposes to install a crossing and conveyance structure across intermittent and ephemeral drainage features. In most cases, the crossings would consist of a temporary steel plate laid over the drainage feature. This would allow passage of construction equipment and vehicles without direct impacts to the drainage from compaction or erosion. In a couple cases, a temporary bridge and/or construction mat will be used to protect the affected drainage. Temporary drainage crossings will be removed when construction activities cease. Placement of crossing structures may require disturbance of approximately 0.0171 acres across nine drainages for minor grading of creek banks and approaches to assure a flat and well-placed steel plate (ICF Jones & Stokes, 2010). However, such disturbances would be restored following construction and would be subject to BMPs prescribed in the project-specific SWPPP. For these reasons, temporary drainage crossings would not result in the alteration of the course of a stream and would have a less than significant impact with respect to flooding, substantial erosion and siltation.

### *Permanent Impacts*

The only permanent stream alteration would be from the installation of a permanent corrugated metal pipe culvert along the Hollister pole segment (pole 18/14), which would require disturbance of approximately 0.045 acres of an ephemeral drainage that is tributary to the San Benito River (ICF Jones & Stokes, 2010). If improperly designed or sized, culverts can often result in flooding or erosion issues. Culverts typically serve to constrict the cross-sectional area and increase the velocity of large flows, which can increase flooding and sedimentation upstream (e.g., backwater) as well as bed and bank erosion downstream. As discussed in the setting (Tables 3.8-1 and 3.8-2), the San Benito River has beneficial use designations for fish spawning and warm freshwater habitat, and sedimentation/siltation is identified as a significant impairment. Without proper design and installation, culverts could result in a net increase in sediment and silt being delivered downstream.

Pursuant to APM HYDO-3, PG&E proposes to perform a drainage study and implement a drainage plan as part of the Proposed Project for locations that would require the installation of a conveyance structure. The study would include calculations for the potential increases in stormwater runoff from related construction activities and would also identify critical drainage paths. Based on the plan, PG&E would implement drainage improvements to minimize the risk of flooding to downstream areas. The drainage plan would require that PG&E or its contractor be responsible for proper maintenance of the drainages and any associated BMPs. Additional mitigation related to the drainage plan is required to adequately address possible flooding and erosion issues related to culvert installation. Mitigation Measure 3.8-2 requires that the drainage study include design and performance criteria that explicitly address the processes of erosion and flooding in order to reduce potential impacts to less than significant.

Implementation of the APM-HYDRO-3, Mitigation Measure 3.8-2, as well as adherence to the above regulatory provisions, would ensure that altered drainage patterns from Proposed Project-related construction and operation activities do not significantly affect erosion, siltation, or flooding on- or off-site. Therefore, impacts of the Proposed Project on existing drainage pattern would be less than significant.

> **Mitigation Measure 3.8-2:** The drainage study, as proposed by PG&E in APM-HYDRO-3, shall provide sizing recommendations to ensure each culvert can pass a 10-year storm event without being submerged, and design recommendations to ensure that culvert installation would result in no net increase in erosion and sedimentation during peak flows. Sizing and design recommendations for each culvert shall consider the individual drainage characteristics of the stream (e.g., slope, watershed area, and substrate) and may include any combination of features necessary to achieve no net increase in erosion and sediment transport. Such features may include the following:
>
> - Downstream armoring with gravel or gabions, coupled with appropriate roughness features or characteristics, so as to dissipate and slow flows exiting the culvert and leaving the modified stream segment;
> - A wide culvert that retains the natural stream bed and roughness elements without notably increasing flow depth;
> - Design length and slope of culvert to maintain existing topography
>
> The drainage study and associated sizing and design recommendation shall be reviewed and approved by a Professional Engineer, Hydrologist, or similarly qualified individual.

**d) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river or, by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site: *LESS THAN SIGNIFICANT WITH MITIGATION*.**

The discussion under item c) also addresses the potential from project construction and operation to result in flooding on or off-site. As discussed above, implementation of APM-HYDRO-3, Mitigation Measure 3.8-2, and the required regulatory approvals and permits, would ensure that

altered drainage patterns from Project-related construction and operation activities would have a less than significant impact of flooding.

**e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff: *LESS THAN SIGNIFICANT IMPACT.***

Storm drain systems in the Cities of Hollister and San Juan Bautista collect and convey stormwater runoff associated with impervious surfaces. Most of the systems drain to nearby streams and creeks. In rural areas, stormwater drainage is not controlled and travels in natural drainage courses to ephemeral receiving waters. Project operation and maintenance would not involve discharge of water and thus the Proposed Project would not create additional runoff and would have no affect on existing storm drain systems. In addition, added impervious surfaces would be minimal and would consist solely of TSP foundations and tower footings, and these would not represent continuous impervious surfaces that could divert rainfall or contribute to additional sources of polluted runoff to streams or storm drain systems. Access roads would not be paved and would not represent impermeable surfaces. Nevertheless, access roads decrease the natural infiltration capacity of the soil through grading and compaction, thereby providing possible increases in storm water received by local drainages. The effect of access roads with respect to polluted runoff (sediment and siltation) is provided under criterion a), above. For these reasons, the affect of the Proposed Project on the available capacity of existing storm drains or providing substantial additional sources of polluted runoff would be less than significant.

**f) Otherwise substantially degrade water quality: *NO IMPACT*.**

The main water quality concerns that would be associated with the Proposed Project involve erosion and siltation or release of hazardous materials during construction operations. These impacts have been discussed under item a) and item c). No water quality impacts of the Proposed Project other than those that have already been discussed above are reasonably foreseeable.

**g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other authoritative flood hazard delineation map: *NO IMPACT*.**

The Proposed Project would not involve the construction of housing. No impact would occur.

**h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows: *LESS THAN SIGNIFICANT IMPACT*.**

FEMA has mapped 100-year flood zones in the project area associated with the San Benito River and San Juan Creek, a tributary to the San Benito River that passes through San Juan Bautista (FEMA, 2009). The flood zone associated with San Juan Creek occurs adjacent to San Juan Highway at poles 13/10 through 13/19. The new river alignment would span the flood zone associated with the San Benito River between poles 14/15 and 15/00. Several existing poles,

which will be topped, are currently within the San Benito River floodplain. The Hollister Tower Segment does not cross any flood zones as defined by FEMA.

The Proposed Project would not affect 100-year flood zones because it would occur within the existing ROW, and the poles that cross the FEMA flood zones would be in the same location as the existing structures. The only deviation from the existing right-of-way would be across the San Benito River floodplain. At this location, the transmission line would span the mapped flood zone from bank to bank. For these reasons, the Proposed Project will have no impact on flood flows within a 100-year flood hazard area.

**i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam: *LESS THAN SIGNIFICANT IMPACT.***

The Hernandez and San Justo Reservoirs have dam inundation zones that are located in the San Juan Valley that could affect the Proposed Project (OEM, 2007). Catastrophic failure of a dam is an extremely unlikely event and dam safety regulations enforced by Department of Water Resources (DWR) Division of Safety of Dams require periodic inspections of dams and reservoirs for the purpose of determining their safety. Inspectors may require dam owners to perform work, maintenance, or implement controls if issues are found with the safety of a dam. If either the Hernandez or San Justo dams failed, the power poles or the temporary shoo-fly connections affected by the resulting flood flows are unlikely to be irrevocably damaged. The wind loading design requirements for power lines are very stringent and would likely prevent any poles from being toppled or carried away by flood flows. Following such an event, PG&E would conduct an inspection of all poles in the inundation zone and promptly repair or replace them. In the unlikely event a dam fails, it would represent an inspection and repair issue rather than a significant impact on the Proposed Project. Potential impacts are thus considered to be *less than significant*.

**j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow: *LESS THAN SIGNIFICANT IMPACT*.**

The area of the Proposed Project is distant from the coastline, is above 200 feet in elevation, and would not be affected by seiches or tsunamis. However, a mudflow could conceivably affect the Proposed Project in the event of heavy and prolonged rainfall. As discussed in item c) of Section 3.6, *Geology, Soils and Seismicity*, the Proposed Project would be unlikely to experience an increase in exposure to landslide hazards (including mudflows) because it would occur within PG&E's ROW and most poles and towers would be placed in approximately the same or similar location as the existing structures. New towers and poles in terrain prone to mudflows would be built using up-to-date building codes and modern engineering standards of care, and would be less likely to be damaged by a mudflow than the structures they are replacing. The only poles to be constructed outside of the existing ROW would be at the San Benito River crossing, which is largely flat and not prone to mudflows. For these reasons the impact is less than significant.

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San Benito County Water District (SBCWD), Annual Groundwater Report for Water Year 2009, prepared by Todd Engineers with Gus Yates, Consulting Hydrogeologist, December 2009.

# 3.9 Land Use and Planning

| *Issues (and Supporting Information Sources):* | | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|---|
| **9.** | **LAND USE AND PLANNING— Would the project:** | | | | |
| a) | Physically divide an established community? | ☐ | ☐ | ☐ | ☒ |
| b) | Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☐ | ☒ |
| c) | Conflict with any applicable habitat conservation plan or natural community conservation plan? | ☐ | ☐ | ☐ | ☒ |

## 3.9.1 Environmental Setting

The majority of the Proposed Project would be located within unincorporated northwestern San Benito County and northeastern Monterey County. The Hollister Substation and a portion of the Hollister Pole Segment would be located within the City of Hollister sphere of influence; however, the City's General Plan would not be applicable unless and until the properties on which the Proposed Project would be located are annexed.

### Existing Land Uses

From the Lagunitas Switches to Tower 3/21, the Hollister Tower Segment would head north within existing PG&E ROW located within Monterey County. Land uses in and surrounding this segment include grazing and agricultural rangeland. Around Tower 3/21, the Hollister Tower Segment would continue north to Tower 6/40A within existing PG&E ROW in San Benito County. Land uses in this area are also composed of primarily agricultural and rangeland uses with the exception of the portion of the line between Towers 4/27 and 5/31, which are and would continue to be located near a cluster of single family residences in the vicinity of Avenida Del Piero.

The Hollister Pole Segment would head west from the Hollister Substation to Tower 5/31 and would cross through hills and agricultural lands of San Benito County. With the exception of the 1.3-mile Proposed River Crossing, the Hollister Pole Segment would be located within existing PG&E ROW. The Proposed River Crossing would be located in agricultural and rangeland land uses, and would not be located within the vicinity of any residential communities. The Hollister Substation and the eastern portion of the Hollister Pole Segment would be located within the City of Hollister sphere of influence. This easternmost portion of the Hollister Pole Segment would be located approximately 0.5 mile north of an existing community in the Planning Area of the City of Hollister.

The project area does not fall within the geographic boundaries of any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

# 3.9.2 Regulatory Setting

## State

### *California Public Utilities Commission General Order No. 131-D*

The California Public Utilities Commission (CPUC) has sole and exclusive jurisdiction over the siting and design of the Proposed Project because it authorizes the construction, operation, and maintenance of investor-owned public utility facilities. Although such projects are exempt from local land use and zoning regulations and discretionary permitting (i.e., they would not require discretionary approval from a local decision-making body such as a planning commission, county board of supervisors or city council), General Order No. 131-D, Section XIV.B requires that in locating a project "the public utility shall consult with local agencies regarding land use matter." The public utility is required to obtain any required non-discretionary local permit.

## Local

### *San Benito County General Plan*

The Proposed Project would traverse land designated as *Agricultural Productive* and *Agricultural Rangeland* in the General Plan. The *Agricultural Productive* designation protects lands that are indentified as being prime agricultural lands. It also includes agriculturally productive lands of any type, including grazing land. The *Agricultural Rangeland* designation is assigned to remote hillside areas, watersheds and rangeland, such as Williamson Act lands, many of which have been classified as some form of open space within the Open Space and Conservation Elements of the County's General Plan (San Benito County, 2005).

The San Benito County General Plan contains the following policy that would be applicable to the Proposed Project (San Benito County, 2005):

> *Policy 2*: The types of uses allowed within the agriculturally designated areas shall be related to the suitability of the soil resources, climate and water supply. The types of uses allowed on most agriculturally designated areas within the County include agriculture, agricultural processing, grazing, land in its natural state, wildlife refuges, and low intensity residential. Uses subject to use permit approval include low intensity recreation facilities, mineral extraction and processing, and also institutional uses and uses that by their nature, should be located in undeveloped areas.

### *San Benito County Zoning Ordinance*

The Proposed Project would traverse parcels designated as *Agricultural Productive* (*AP*) and *Agricultural Rangeland* (*AR*) under the San Benito County Zoning Ordinance. The intent of the *AP* district is to provide areas within the County to be used for agricultural production of any type

as set forth in the general plan (San Benito County, 1984). Public utility facilities are allowed in the *AP* district with a conditional use permit. The intent of the *AR* district is to provide areas within the County to be used for agricultural rangeland purposes as set forth in the general plan (San Benito County, 1992). As with the *AP* district, public utility facilities are considered conditionally acceptable within the *AR* district.

### *Monterey County General Plan*

The Proposed Project would traverse parcels designated as *Permanent Grazing* in the Monterey County General Plan. Lands designated as *Permanent Grazing* typically have 40 to 160 acre minimums and include a range of land uses to conserve and enhance the productive grazing lands in the County (Monterey County, 2007).

The Monterey County General Plan contains the following policy that would be applicable to the Proposed Project (Monterey County, 2007):

> *Policy LU-1.12*: Structures in electrical transmission corridors or rights-of-way shall be prohibited.

### *Monterey County Zoning Ordinance*

The Proposed Project would traverse parcels designated as *Permanent Grazing* in the Monterey County Zoning Ordinance. The *Permanent Grazing* designation provides a district to preserve, protect, and enhance those productive exclusive grazing lands in the County of Monterey. Uses generally permitted in this district include all soil dependent agricultural uses including crop and tree farming, dry land farming, livestock farming, greenhouses and vineyards. Public and quasi-public land uses such as public utilities are conditionally permitted within this district (Monterey County, 1997).

### *City of Hollister General Plan*

The Proposed Project would be located on lands that are within the City's sphere of influence, which have not been annexed to the City; therefore, the City of Hollister General Plan would not be applicable to the Proposed Project unless and until annexation occurs.

If annexed, the Proposed Project would be located on land designated as *Agricultural* and *High Density Residential* in the City of Hollister General Plan. The *Agricultural* designation encompasses lands with continuing commercial agriculture potential. Lands uses allowed within the *Agricultural* designation include orchards, row crops, nurseries, grazing lands, open space, farm services and parks. The *High Density Residential* designation is intended to provide opportunities for multiple-family residential development in a well-designed environment. Land uses allowed within the *High Density Residential* designation include multi-family apartments, condos, row houses, apartments, court homes, and cluster housing (City of Hollister, 2005).

The City of Hollister General Plan contains the following policy that would apply to the Proposed Project if it were proposed within City limits (City of Hollister, 2005):

*Policy LU1.5*: Maintain the exiting regulations that promote the undergrounding of utility lines.

### *City of Hollister Zoning Ordinance*

Given that the City of Hollister's zoning regulations only apply to land with the city limits and the Proposed Project is located on parcels that are not currently annexed; the City of Hollister zoning regulations would not be applicable to the Proposed Project. Furthermore, the Proposed Project would not traverse any parcels that have been pre-zoned by the City of Hollister (Prado, 2010 and Johnson, 2010).

## 3.9.3 Applicant Proposed Measures

No applicant proposed measures have been identified by PG&E to reduce land use and planning impacts associated with the Proposed Project.

## 3.9.4 Environmental Impacts and Mitigation Measures

**a) Physically divide an established community: *NO IMPACT*.**

The Hollister Tower Segment traverses primarily agriculture and grazing land with the exception of a cluster of residences located near Avenida Del Piero in unincorporated San Benito County. This segment is located entirely within existing PG&E ROW, where similar infrastructure currently exists. Therefore, replacement of towers and conductors along the Hollister Tower Segment would not physically divide an established community. Therefore, the Hollister Tower Segment would have no impact on an established community.

The Hollister Pole Segment would be located within existing PG&E ROW with the exception of the 1.3-mile Proposed River Crossing alignment, which would traverse agricultural lands in a new ROW. Given that the majority of the pole segment would be located within existing ROW where similar infrastructure currently exists, and that the proposed power line in new ROW would not divide an established community, the Hollister Pole Segment would have no impact on an established community.

The Hollister Substation is located on an approximately 1.7-acre site primarily surrounded by agricultural lands. The substation is an existing use, and implementation of the Proposed Project would not result in any changes to the substation that would physically divide an established community; therefore, the Hollister Substation would have no impact on an established community.

**b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect: *NO IMPACT*.**

The CPUC has sole and exclusive permitting jurisdiction over the siting and design of the Proposed Project. Therefore, the Proposed Project would be exempt from local land use and

zoning regulations and discretionary permitting. Therefore, the Proposed Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. Thus, no related impact would result.

However, CPUC General Order No. 131-D requires that in locating a project "the public utility shall consult with local agencies regarding land use matters." Therefore, a local land use consistency analysis is provided below, for informational purposes only.

#### *San Benito County General Plan*

The Proposed Project would traverse land designated by the San Benito County General Plan as *Agricultural Productive* and *Agricultural Rangeland*. However, with the exception of the 1.3-mile Proposed River Crossing alignment, the Proposed Project would be located within existing PG&E ROW where similar infrastructure currently exists. Therefore, the existing land use would not change. Although the proposed 1.3 mile river crossing would be located in new ROW, the Proposed Project would be consistent with General Plan Policy 2, which allows institutional uses within agriculturally designated areas. The Hollister Substation is located on land designated by the San Benito County General Plan as *Agricultural Productive*. Given that all modifications to the Substation would occur within the existing fenceline, the existing land use would not change as a result of the Proposed Project. Therefore, the Proposed Project would not conflict with the San Benito County General Plan.

#### *San Benito County Zoning Ordinance*

The Proposed Project would traverse parcels zoned as *AR* and *AP* in the San Benito County Zoning Ordinance. In these zones, public utility facilities are conditionally permitted uses. However, given that the CPUC has sole and exclusive jurisdiction over the siting and design of the Proposed Project, a discretionary permit would not be required. Furthermore, aside from the 1.3-mile Proposed River Crossing, the Proposed Project would be constructed within existing PG&E ROW and all activities at the Hollister Substation would occur within the existing fenceline. Therefore, since the Proposed Project would not result in a land use change, it would not conflict with the San Benito County Zoning Ordinance.

#### *Monterey County General Plan*

The Proposed Project would traverse parcels designated as *Permanent Grazing*. The Monterey County General Plan does not discuss the allowance or disallowance of power line facilities within this land use designation. However, the portion of the Proposed Project within Monterey County would be constructed entirely within existing PG&E ROW where similar infrastructure currently exists. Therefore, since the Proposed Project would not result in a change to existing land use, it would not conflict with the Monterey County General Plan.

#### *Monterey County Zoning Ordinance*

The Proposed Project would traverse parcels zoned as *Permanent Grazing*. This zoning designation allows public/quasi public uses (including utility lines) with approval of a use permit. However, given that the CPUC has sole and exclusive jurisdiction over the siting and design of

the Proposed Project, a discretionary permit would not be required. Furthermore, the Proposed Project would be constructed entirely within existing PG&E ROW in Monterey County. Therefore, since the Proposed Project would not result in a change to existing land use, it would not conflict with the Monterey County Zoning Ordinance.

#### *City of Hollister General Plan*

The Hollister Substation and a portion of the Hollister Pole Segment are located within the City of Hollister's sphere of influence. The City's General Plan would not be applicable unless and until the properties on which the Proposed Project would be located are annexed. The Proposed Project would be located on land designated as *Agricultural* and *High Density Residential.* Given that the portion of the Proposed Project located within the City of Hollister's Sphere of Influence would be located within existing PG&E ROW and therefore would not result in a change to land use, the Proposed Project would not conflict with the City of Hollister General Plan.

#### *City of Hollister Zoning Ordinance*

The City of Hollister zoning regulations only apply to lands within the City limits. Therefore, such regulations would not apply to the Proposed Project as it is located in an unincorporated planning area. Thus, the Proposed Project would not conflict with the City of Hollister Zoning Ordinance.

**c) Conflict with any applicable habitat conservation plan or natural community conservation plan: *NO IMPACT*.**

No habitat conservation plan or natural community conservation plan has been adopted in the project area. Therefore, no such plan would apply to the Proposed Project and the Proposed Project would not conflict with any such plan. Accordingly, the Proposed Project would have no impact on any applicable habitat conservation plan or natural community conservation plan.

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# References

City of Hollister, 2005. *City of Hollister General Plan, Chapter 2: Land Use and Community Design Element,* adopted December 5, 2005.

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San Benito County, 1984. *Code of Ordinances, Section 25.07.020*, codified 1984.

San Benito County, 1992. *Code of Ordinances, Section 25.07.003*, codified 1992.

San Benito County, 2005. *General Plan, Land Use Element*, last amended April 5, 2005.

# 3.10 Mineral Resources

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **10. MINERAL RESOURCES—Would the project:** | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☒ | ☐ |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | ☐ | ☐ | ☒ | ☐ |

## 3.10.1 Environmental Setting

### Existing Mineral Resources

The primary mineral resources in the project vicinity consist of sand, gravel, and crushed stone, which are used as sources for aggregate (road materials and other construction). The major sources for aggregate in the region are coarse-grained alluvial deposits along the San Benito River and several hard rock quarries in the Northern Gabilan Range and Southern Santa Cruz Mountains. For example, the Granite Rock Company has a quarry near Highway 101 that mines Cretaceous hornblende gabbro from the Wilson Quarry, California's largest crushed rock mine (CGS, 2005). The project area is within the Monterey Bay Production-Consumption Region, a study area designated by the California Geological Survey to establish and quantify aggregate supply and demand. According the CGS (2006), the region has 347 million tons of permitted aggregate resources over the next 50 years, which is sufficient to supply approximately 91 percent of the anticipated demand.

In order to protect potential mineral resources in California, the California Geological Survey (formerly the Division of Mines and Geology) has classified the regional significance of mineral resources in accordance with the Surface Mining and Reclamation Act (SMARA). Mineral Resource Zones (MRZs), delineated by CGS, identify the presence and significance of mineral deposits within the project area. Portions of the Proposed Project would occur in an area zoned as MRZ-2: areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence (CDMG, 1987). These include the project realignment occurring at the San Benito River between proposed poles 14/14 and 15/00, as well as the existing river crossing between existing poles 14/15e through 15/12e.

### Geothermal Resources

There are no known or potential geothermal resources identified in the vicinity of the Proposed Project.

## Oil and Gas

Three areas designated as potential oil fields do exist in San Benito County, near the City of Hollister, within its sphere of influence. Specifically, all three of these oil fields are located west of the city and north of State Route 156. However, only one of the oil fields is directly on the alignment path, located at the base of the Flint Hills between Poles 19/00 and 20/01 of the Hollister Pole Segment. San Benito County has issued a use permit to Lario Oil and Gas for oil and gas well exploration. The Hollister Pole Segment marks the southern boundary of the use permit area.

# 3.10.2 Regulatory Setting

## State Regulations

### *Surface Mining and Reclamation Act*

The primary State law concerning conservation and development of mineral resources is SMARA, as amended to date. SMARA is found in the California Public Resources Code (PRC), Division 2, Chapter 9, Sections 2710, et seq.

Depending on the region, natural resources can include geologic deposits of valuable minerals used in manufacturing processes and the production of construction materials. SMARA was enacted in 1975 to limit new development in areas with significant mineral deposits. SMARA calls for the State geologist to classify the lands within California based on mineral resource availability.

SMARA states that the extraction of minerals is essential to the continued economic well-being of the State and to the needs of society, and that reclamation of mined lands is necessary to prevent or minimize adverse effects on the environment and to protect the public health and safety. The reclamation of mined lands will permit the continued mining of minerals and will provide for the protection and subsequent beneficial use of the mined and reclaimed land. Surface mining takes place in diverse areas where the geologic, topographic, climatic, biological, and social conditions are significantly different, and reclamation operations and the specifications therefore may vary accordingly (Pub. Res. Code Section 2711).

### *California Health and Safety Code*

In addition, the California Health and Safety Code requires the covering, filling, or fencing of abandoned shafts, pits and excavations (California Health and Safety Code Sections 24400-03).

## Local Regulations

Local governments regulate mineral resources and mining within their jurisdictions pursuant to their General Plan and local zoning ordinances.

### *Monterey County General Plan*

The Open Space Element of the Monterey County General Plan contains the following policies relating to mineral resources:

> *OS-2.1*: Potentially significant mineral deposits and existing mining operations identified through the State Division of Mines and Geology, including idle and reserve properties, shall be protected from on-site and off-site land uses that would be incompatible with mineral extraction activities.
>
> *OS-2.2*: Mineral extraction operations shall be in keeping with sound conservation practices consistent with the Surface Mining and Reclamation Act (SMARA) and other applicable standards and adequate financial security shall be required to insure reclamation of the extraction site to a condition consistent with the surrounding natural landscape and environmental setting.
>
> *OS-2.3*: Efforts to conserve raw mineral resources through recycling shall be supported.
>
> *OS-2.4*: Lands containing known valuable mineral deposits shall be mapped in the County GIS system. Mapped information shall be updated as needed.
>
> *OS-2.5*: The County shall inventory, assess, and characterize the location and condition of identified pre-SMARA abandoned gold, mercury and coal mines and implement such measures as may be necessary to ensure that such mines do not contribute to a significant risk to public health or safety or non-compliance with water quality standards and criteria.

### *Monterey County Code*

Chapter 16.04 of the Monterey County Code contains the County's Surface Mining and Reclamation Ordinance. The ordinance is adopted pursuant to the California Surface Mining and Reclamation Act of 1975, Chapter 9, Public Resources Code. The purpose of the ordinance is to 1) ensure adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a usable condition which is readily adaptable for alternative land uses, 2) that the production and conservation of minerals are encouraged, while giving consideration to values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment, and 3) that residual hazards to the public health and safety are eliminated.

### *San Benito County General Plan*

The Open Space and Conservation Element of the San Benito County General Plan contains the following policies relating to mineral resources:

> *Policy 20: Significant mineral resources*: It is the policy of the County to recognize areas classified Mineral Resource Zone 2 (MRZ-2) or Scientific Zone (SZ) pursuant to the Guidelines for Classification and Designation of Mineral Lands as mineral resources of statewide and regional significance. Strategies shall be developed to protect these mineral resources from premature development incompatible with mining.

*Actions*:

1. Implement existing "MR" zoning on selected mineral resource areas determined by the Board of Supervisors to require a special level of protection as an additional method of avoiding land use conflicts between mineral extraction and other incompatible uses with the following criteria:

    i. Lands classified as MRZ-2 or SZ by the State of California Division of Mines and Geology qualify for the "MR" zoning designation and/or;

    ii. Evidence of the location, extent, and depth, and quality of mineral resources shall be submitted as part of the MR overlay zoning application. The material shall be reviewed by a geologist selected by the County for accuracy.

    iii. Deny MR overlay zoning requests that do not provide evidence of significant mineral resources on site.

2. Review the General Plan Land Use map in significant mineral resource areas to identify potential land use conflicts.

3. Allow the use of voluntary conservation easements on mineral lands and contiguous properties to protect significant resources.

4. A notice explaining the location of important mineral resources shall be recorded on any parcel within a MRZ2 or SZ designation or within one-half mile.

### *San Benito County Code*

Chapter 19.13 of the San Benito County Code contains the County's Surface Mining Operations and Reclamation Ordinance. The ordinance is adopted pursuant to the California Surface Mining and Reclamation Act of 1975, Chapter 9, Public Resources Code. The purpose of the ordinance is to regulate surface mining operations so as to prevent or minimize the adverse environmental effects of surface mining; to provide for the reclamation of mined lands; to encourage the production and conservation of minerals; and to eliminate hazards to public health and safety.

## 3.10.3 Applicant Proposed Measures

No applicant proposed measures have been identified by PG&E to reduce impacts to mineral resources associated with the Proposed Project.

## 3.10.4 Environmental Impacts and Mitigation Measures

**a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state: *LESS THAN SIGNIFICANT IMPACT*.**

The only portions of the Proposed Project that would cross a known aggregate resource (areas zoned as MRZ-2) would occur along the Hollister Pole Segment within the San Benito River floodplain. This comprises proposed poles 14/14 through 15/00, where a new right-of-way would

be required; as well as existing poles 14/15e through 15/12e, which would be removed or topped. Activities relating to construction and operation of the new right-of-way temporarily could affect the availability of a known mineral resource directly, e.g., if the placement of poles or towers required localized removal of mineral resources in the limited area required for the foundation, or indirectly, e.g., if construction or maintenance needs temporarily precluded access to such mineral resources. However, the Proposed Project would not result in a substantial loss in the availability of the known mineral resources in the MRZ-2 zoned area either directly (because the work would not consume any available aggregate resource) or indirectly (e.g., by precluding access to such resources). No aggregate extraction currently is occurring, and future extraction would not be precluded, or significantly obstructed or otherwise affected by the Proposed Project.

As discussed in the setting, a portion of the Hollister pole segment crosses a known oil field at the base of the Flint Hills. The Hollister pole segment marks the southern boundary of an area that San Benito County has granted a use permit for oil and gas exploration to Lario Oil and Gas. However, the Proposed Project would not interfere with the company's ability to explore for oil resources. The new poles are to be placed in the same location as the exiting poles and access to the oil field would not be hindered.

In sum, access to and availability of known mineral resources that would be of value to the region and the residents of the State would not be substantially lost as a result of the Proposed Project. The potential impact would be less than significant.

**b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan: *LESS THAN SIGNIFICANT IMPACT*.**

The County of San Benito, in addition to recognizing State-designated MRZ zones, has acknowledged the San Benito River as a locally important mineral resource. The portion of the proposed river crossing that crosses the San Benito River between Poles 14/14 and 15/00 would be within a locally important mineral resource area of San Benito County. However, the pole replacement activities that would be associated with the Proposed Project would affect only a very small area and the proposed river crossing and would not result in the loss of availability of a locally important mineral resource recovery site. Therefore, the Proposed Project would result in less than significant impacts to locally important mineral resources.

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# References

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# 3.11 Noise

| *Issues (and Supporting Information Sources):* | | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|---|
| **11.** | **NOISE—Would the project:** | | | | |
| a) | Result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☒ | ☐ | ☐ |
| b) | Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☒ | ☐ |
| c) | Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☒ | ☐ |
| d) | Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☒ | ☐ | ☐ |
| e) | For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels? | ☐ | ☐ | ☒ | ☐ |
| f) | For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |

## 3.11.1 Environmental Setting

### Noise Background

Sound is mechanical energy transmitted by pressure waves through a medium such as air. Noise can be defined as unwanted sound. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. Sound pressure level is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain.

Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude (sound power). When all the audible frequencies of a sound are measured, a sound spectrum is plotted consisting of a range of frequency spanning 20 to 20,000 Hz. The sound pressure level, therefore, constitutes the additive force exerted by a sound corresponding to the sound frequency/sound power level spectrum.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic

filter that de-emphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to low and extremely high frequencies instead of the frequency mid-range. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA).

### *Noise Exposure and Community Noise*

An individual's noise exposure is a measure of the noise experienced by the individual over a period of time. A noise level is a measure of noise at a given instant in time. However, noise levels rarely persist consistently over a long period of time. In fact, community noise varies continuously with time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. Background noise levels change throughout a typical day, but do so gradually, corresponding with the addition and subtraction of distant noise sources and atmospheric conditions. The addition of short duration single event noise sources (e.g., aircraft flyovers, motor vehicles, sirens) makes community noise constantly variable throughout a day.

These successive additions of sound to the community noise environment vary the community noise level from instant to instant requiring the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts. This time-varying characteristic of environmental noise is described using statistical noise descriptors. The most frequently used noise descriptors are summarized below:

$L_{eq}$: The equivalent sound level is used to describe noise over a specified period of time, in terms of a single numerical value. The $L_{eq}$ is the constant sound level which would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).

$L_{max}$: The instantaneous maximum noise level measured during the measurement period of interest.

$L_{dn}$: The energy average of the A-weighted sound levels occurring during a 24-hour period, and which accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night ("penalizing" nighttime noises). Noise between 10 p.m. and seven a.m. is weighted (penalized) by adding 10 dBA to take into account the greater annoyance of nighttime noises.

### *Effects of Noise on People*

The effects of noise on people can be placed into three categories:

- subjective effects of annoyance, nuisance, dissatisfaction;
- interference with activities such as speech, sleep, learning; and
- physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers at industrial plants often experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction. A wide variation exists in the individual thresholds of annoyance, and different tolerances to noise tend to develop based on an individuals past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way the new noise compares to the existing noise levels that one has adapted, which is referred to as the "ambient noise" level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of one dBA cannot be perceived;
- Outside of the laboratory, a three dBA change is considered a just-perceivable difference when the change in noise is perceived but does not cause a human response;
- A change in level of at least five dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. A ruler is a *linear* scale: it has marks on it corresponding to equal quantities of distance. One way of expressing this is to say that the ratio of successive intervals is equal to one. A *logarithmic* scale is different in that the ratio of successive intervals is not equal to one. Each interval on a logarithmic scale is some common factor larger than the previous interval. A typical ratio is 10, so that the marks on the scale read: 1, 10, 100, 1,000, 10,000, etc., doubling the variable plotted on the x-axis. The human ear perceives sound in a non-linear fashion, hence the decibel scale was developed. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, rather they combine logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA.

### *Noise Attenuation*

Point sources of noise, including stationary mobile sources such as idling vehicles or onsite construction equipment, attenuate (lessen) at a rate of 6.0 dBA to 7.5 dBA per doubling of distance from the source, depending upon environmental conditions (e.g., atmospheric conditions, noise barriers, type of ground surface, etc.). Widely distributed noises such as a large industrial facility spread over many acres or a street with moving vehicles (a "line" source) would typically attenuate at a lower rate of approximately 3.0 to 4.5 dBA per doubling distance from the source (also dependent upon environmental conditions) (Caltrans, 1998).

### *Vibration*

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings. The root mean square (RMS) amplitude is most frequently used to describe the affect of vibration on the human body. The RMS amplitude is the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to measure RMS. The decibel notation acts to compress the range of numbers required to describe vibration (FTA, 2006). Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration.

## Existing Ambient Noise Environment

The Proposed Project is located in unincorporated northwestern San Benito County and northeastern Monterey County. The Proposed Project primarily traverses rural areas where typical noise sources would likely include vehicle traffic on nearby highways and local streets, farming equipment operation, and occasional aircraft overflight, including flights from and to the Hollister Municipal Airport, which is located approximately 1.5 miles north of the eastern end of the proposed Hollister Pole Segment near Hollister Substation. The Hollister Municipal Airport supports general aviation activities and serves a six-county area as a California Department of Forestry Air Attack Base. Maximum noise levels associated with aircraft overflights in the study area can range between 55 and 75 dBA. Typical noise levels in small town residential areas such as those in the study area range between 40 and 50 dBA $L_{dn}$ (FTA, 2006).

## Sensitive Receptors

Human response to noise varies considerably from one individual to another. Effects of noise at various levels can include interference with sleep, concentration, and communication, and can cause physiological and psychological stress and hearing loss. Given these effects, some land uses are considered more sensitive to ambient noise levels than others. In general, residences, schools, hotels, hospitals, and nursing homes are considered to be the most sensitive to noise. Places such as churches, libraries, and cemeteries, where people tend to pray, study, and/or contemplate are also sensitive to noise. Commercial and industrial uses are considered the least noise-sensitive.

The Hollister Tower Segment traverses primarily open space areas. There are a few residential receptors located within 100 to 300 feet of the alignment along Avenida Del Piero. Furthermore, Countryside Day-Care Preschool would be located within 500 feet of the Hollister Pole Segment and Anzar High School and Lagunita Elementary School would be located within 2,000 feet of the Hollister Tower Segment. The Hollister Pole Segment would also traverse mostly agricultural lands but would pass within 100 to 200 feet of a few homes located along Buena Vista Road, west of State Route 156.

# 3.11.2 Regulatory Setting

Federal, State, and local agencies regulate different aspects of environmental noise. Federal and State agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies. Local regulation of noise involves implementation of general plan policies and noise ordinance standards. Local general plans identify general principles intended to guide and influence development plans; local noise ordinances establish standards and procedures for addressing specific noise sources and activities.

## San Benito County

### *General Plan*

The San Benito County General Plan contains the following goal and policies that may be applicable to the Proposed Project (San Benito County, 1984).

> GOAL 4: To reduce construction related noise impacts
>
> *Policy 4.1:* It will be the County's continuing policy to control the operation of construction equipment at specific sound intensities and frequencies during specified hours.
>
> *Policy 4.2:* The County will encourage the use of barriers or enclosures for equipment having high noise emission.

### *Municipal Code*

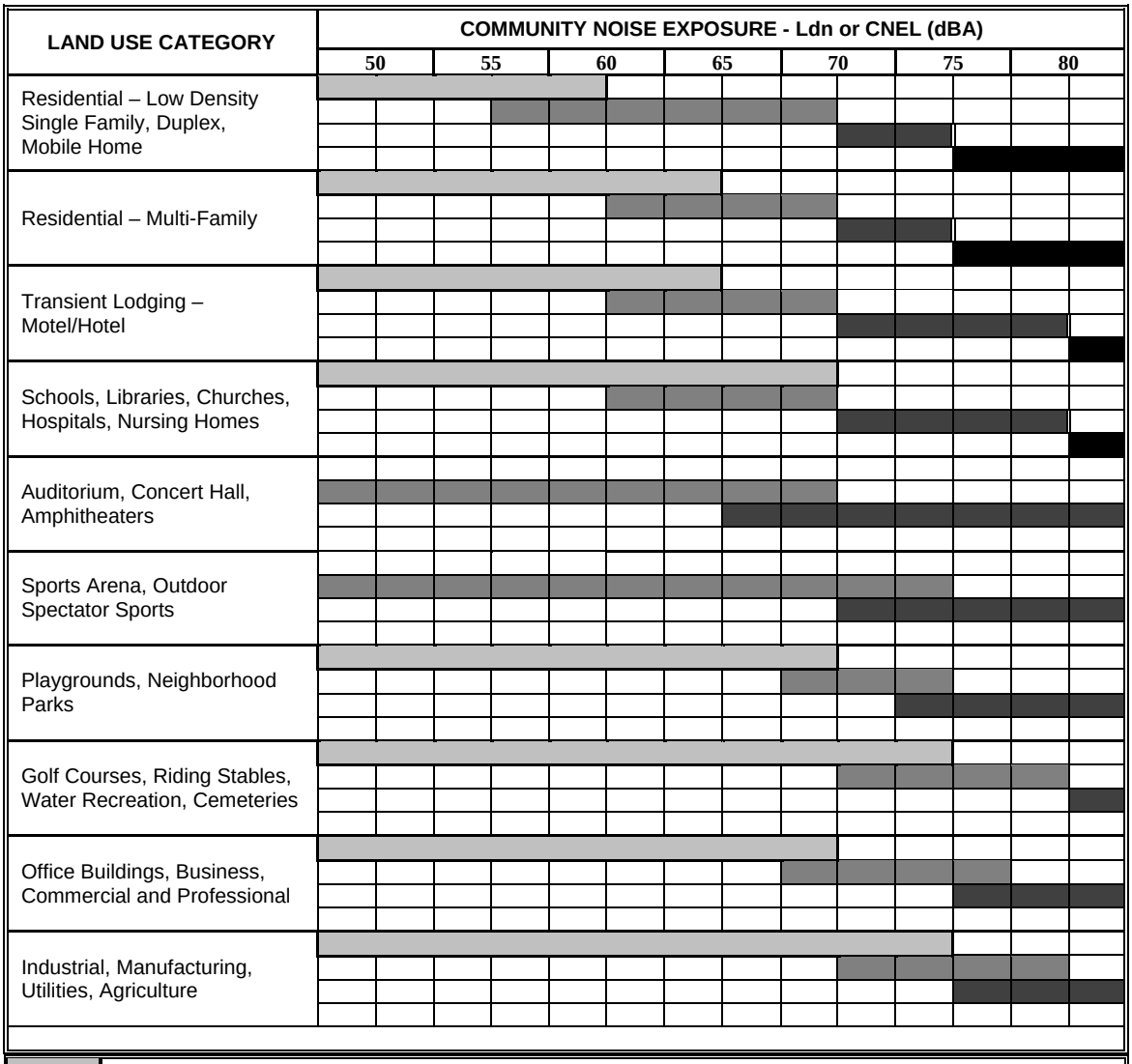
Noise level standards are set forth in Section 25.37.035 of the San Benito County Code of Ordinances. This section sets acceptable noise standards for noise emanating from any source, as it affects surrounding properties. However, temporary construction between the hours of seven a.m. and seven p.m., except for Sundays and federal holidays, is exempt from these standards (San Benito County, 1995).

## Monterey County

### *General Plan*

The Monterey County General Plan contains the following polices that may be applicable to the Proposed Project (Monterey County, 2007).

> *Policy S-7.8:* All discretionary projects which propose to use heavy construction equipment that has the potential to create vibrations that could cause structural damage to adjacent structures within 100 feet would be required to submit a pre-construction vibration study prior to the approval of a building permit. Specified measures and monitoring identified to reduce impacts would be incorporated into construction contracts. Pile driving or blasting are illustrative of the type of equipment that could be subject to this policy.
>
> *Policy S-7.9:* No construction activities pursuant to a County permit that exceed levels listed in *Policy S-7.1* (see **Figure 3.11-1** for noise levels set forth in Policy S-7.1) shall be allowed within 500 feet of a noise sensitive land use during the evening hours of Monday




SOURCE: OPR, 1998.

**Figure 3.11-1**
Land Use Compatibility for Community Noise Environment

through Saturday, or anytime on Sunday or holidays shall be allowed prior to completion of a noise mitigation study. Noise protection measures, in the event of any identified impact, may include but not be limited to:

- Constructing temporary barriers, or
- Using quieter equipment than normal.

*Policy S-7.10:* Standard noise protection measures shall be incorporated into all construction contracts. These measures shall include:

- Construction shall occur only during times allowed by ordinance/code unless such limits are waived for public convenience;
- All equipment shall have properly operating mufflers; and
- Lay-down yards and semi-stationary equipment such as pumps or generators shall be located as far from noise-sensitive land uses as practical.

### *Municipal Code*

Noise level standards are set forth in Chapter 10.60 of the Monterey County Code of Ordinances. This chapter states that no person shall operate any machine, mechanism, device, or contrivance within the unincorporated limits of Monterey County that produces a noise level exceeding 85 dBA measured at 50 feet. Aircraft noise and machines, mechanisms, devices, or contrivances operating in excess of 2,500 feet from any occupied dwelling unit are exempt from these restrictions (Monterey County, 1993).

## 3.11.3 Applicant Proposed Measures

PG&E proposes the following applicant proposed measures (APMs) to minimize impacts related to noise. The impact analysis in this IS/MND assumes that these APMs would be implemented to reduce impacts related to noise discussed below.

**APM NOI-1: Implement noise control measures.** PG&E will implement the following noise abatement measures during project construction to minimize the impact of temporary construction-related noise on nearby residences:

- Notify residents near future construction zones regarding the forecast schedule for nearby construction and provide project contact information.
- Comply with manufacturers' muffler requirements on all construction equipment engines.
- Turn off construction equipment when not in use, where applicable.
- Minimize equipment use.
- Use equipment fitted with factory-installed muffling devices during construction when readily available.
- Route truck traffic away from residential areas where feasible.

**APM NOI-2: Implement noise control measures for helicopter noise.** PG&E will implement the following BMPs during project construction to minimize the impact of temporary construction-related noise generated by helicopters:

- Notify residents near future construction zones and along helicopter flight paths regarding the schedule and reasons for upcoming construction and flight operations.
- Provide project contact information to facilitate response to noise complaints during the construction activity.
- To the extent feasible, plan helicopter flight paths between construction zones and the helicopter staging areas to avoid noise-sensitive receivers. Note: All flight operations including takeoff, landing, and flight paths must comply with FAA regulations and all applicable safety concerns.

## 3.11.4 Environmental Impacts and Mitigation Measures

### a) Result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies: *LESS THAN SIGNIFICANT WITH MITIGATION*.

#### *Construction*

Noise associated with construction equipment would result in temporary increases in noise levels in the study area. Consistency with applicable standards is discussed by jurisdiction below.

**San Benito County.** The San Benito County Code does not set specific noise level standards for construction equipment, but rather restricts construction activities to between the hours of seven a.m. and seven p.m., Monday through Saturday. As indicated in Chapter 1, *Project Description*, construction would generally be limited to daytime hours (6:30 a.m. to 5:00 p.m.), Monday through Friday. Therefore, the Proposed Project could conflict with the San Benito County Code; however, implementation of Mitigation Measure 3.11-1 would reduce this impact to less than significant.

As discussed previously, the San Benito County General Plan contains policies that encourage limiting construction activities to less noise sensitive hours of the day and encourage the use of barriers or enclosures for equipment having high noise emissions. The use of barriers or enclosures to limit Proposed Project construction noise would not be practical for most construction activities that would be conducted near sensitive receptors (e.g., pole and tower removal and installation, grading, etc.). In addition, construction noise at any one sensitive receptor location would be limited to no more than a few days in duration along the Proposed Project power line segments and would be limited to no more than a month in the vicinity of Hollister Substation. However, shielding of small stationary equipment (e.g., generators, etc.) from sensitive receptor locations that would be immediately adjacent to construction activities would ensure consistency with General Plan policies. Therefore, implementation of Mitigation Measure 3.11-2 would reduce potential impacts to less than significant.

**Monterey County.** The Monterey County Code prohibits the use of any machines, mechanisms, or devices that create noise levels exceeding 85 dBA measured 50 feet from the source, with the exception of aircraft or devices operated in excess of 2,500 feet from any occupied dwelling unit. Helicopters could generate noise levels in excess of 85 dBA; however, such equipment would be exempt from restrictions set forth in the Monterey County Code. Construction activities would also require the use of a drill rig for excavating holes for new tower and tubular steel pole (TSP) foundations and holes for light duty steel (LDS) poles and wood shoo-fly poles. Maximum noise levels from a drill rig could be as high as 98 dBA at 50 feet (FTA, 2006). Use of such equipment within 2,500 feet of a residence would be an apparent violation of the County Code. However, given that the nearest Monterey County residence to proposed construction sites where such equipment would be used is approximately 1,000 feet from the nearest Proposed Project site and given that the ground surface in the vicinity is undeveloped and covered with low lying vegetation (i.e., soft surfaces), noise levels at the nearest sensitive receptor locations would not be expected to exceed 65.5 dBA. Furthermore, use of such equipment would only occur for a day or two at each proposed tower location, further limiting the potential for noise impacts.

Although it appears that the Proposed Project would technically conflict with the Monterey County Code, noise impacts in Monterey County would not be substantial given the relatively long distance between the construction sites and the nearest residences, and the relatively limited duration of construction activities that would occur at each proposed tower site, as well as the southern shoo-fly connection site. Furthermore, implementation APM NOI-1 and NOI-2, as well as Mitigation Measures 3.11-1, 3.11-2 and 3.11-3 (see below), would ensure that potential noise impacts in Monterey County would be less than significant. Therefore, construction activities would not expose people to substantial noise levels and impacts would be mitigated to less than significant.

As discussed above, the Monterey County General Plan includes policies that aim to regulate vibration and noise impacts associated with construction equipment. As discussed under checklist item b) below, the Proposed Project would not require the use of construction equipment that has the potential to generate vibrations that could cause structural damage. Therefore, the Proposed Project would be consistent with Policy S-7.8. With regard to Policies S-7.9 and S-7.10, Proposed Project construction sites within Monterey County would not occur within 500 feet of sensitive receptors and construction activities would generally occur during daytime hours. PG&E has committed to implementing a number of noise control measures including complying with manufacturers' muffler requirements and minimizing equipment use. Therefore, the Proposed Project would be consistent with Policies S-7.9 and S-7.10 and impacts would be less than significant.

> **Mitigation Measure 3.11-1:** Construction activity shall be limited to between the hours of seven a.m. and seven p.m., Monday through Saturday, except with CPUC approval and where necessary to ensure worker safety or to conduct certain work during electrical line clearances or during procedures that cannot be interrupted.
>
> **Mitigation Measure 3.11-2:** PG&E and/or its contractors shall shield compressors and other small stationary construction equipment with portable barriers when operating within 100 feet of residences.

**Mitigation Measure 3.11-3:** In the event that nighttime (i.e., between seven p.m. and seven a.m.) construction activity is determined to be necessary within 500 feet of an occupied residential dwelling unit, a nighttime noise reduction plan shall be developed by PG&E and submitted to the CPUC for review and approval. The noise reduction plan shall include a set of site-specific noise attenuation measures that apply state of the art noise reduction technology to ensure that nighttime construction noise and levels and associated nuisance are reduced to the most extent feasible. The attenuation measures may include, but not be limited to, the control strategies and methods for implementation that are listed below. If any of the following strategies are found by PG&E to not be feasible, an explanation as to why the specific strategy is not feasible shall be included in the nighttime noise reduction plan.

- Plan construction activities to minimize the amount of nighttime construction.
- Offer temporary relocation of residents within 200 feet of nighttime construction areas.
- Temporary noise barriers, such as shields and/or blankets, shall be installed immediately adjacent to all nighttime stationary noise sources (e.g., drilling rigs, generators, pumps, etc.) that block the line of sight between nighttime activities and the closest residences.

**Significance after Mitigation:** Less than significant.

#### *Operations and Maintenance*

Noise associated with operation and maintenance of the Proposed Project is not expected to increase substantially from existing conditions. While the Proposed Project would include 1.3 miles of new ROW, there are no noise sensitive receptors within the vicinity of this proposed ROW. Therefore, operation and maintenance of the Proposed Project would not conflict with applicable local general plans or noise ordinances.

### b) Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels: *LESS THAN SIGNIFICANT IMPACT*.

#### *Construction*

Some types of construction equipment can produce vibration levels that can cause architectural damage to structures and be annoying to nearby sensitive receptors. Vibration levels generated during construction of the Proposed Project would vary during the construction period, depending upon the construction activity and the types of construction equipment used. Typical vibration levels for the construction equipment types that would generally result in the highest vibration levels (e.g., drill rig, large bulldozers) are presented in **Table 3.11-1**.

A numerical threshold to identify the point at which a vibration impact occurs has not been identified county standards or municipal codes. Therefore, a peak particle velocity (PPV) threshold identified by Caltrans is used in this analysis to determine the significance of vibration impacts related to adverse human reaction and risk of architectural damage to normal buildings. The PPV threshold is 0.20 in/sec (Caltrans, 2002). This PPV level has been found to be annoying to people in buildings and can pose a risk of architectural damage to buildings.

**TABLE 3.11-1**
**VIBRATION SOURCE LEVELS FROM CONSTRUCTION EQUIPMENT**

| | Peak Particle Velocity (in/sec) |
|---|---|
| **Distance (feet)** | **Drill Rig, Large Bulldozer** |
| 50 | 0.031 |
| 75 | 0.017 |
| 100 | 0.011 |
| 150 | 0.006 |

SOURCE: FTA, 2006.

The nearest residences would be as close as 100 feet to active Proposed Project construction equipment. At this distance, construction equipment PPV levels would be as high as 0.011 in/sec, which would be less than the 0.20 in/sec significance threshold. Therefore, short-term construction-related vibration impacts would be less than significant.

#### *Operations and Maintenance*

Operation and maintenance of the Proposed Project would not introduce any new sources of groundborne vibration to the study area. There would be no impact.

### c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project: *LESS THAN SIGNIFICANT IMPACT*.

Operation of power lines generate random cracking or hissing sounds associated with corona discharge. The term corona is used to describe the breakdown of air into charged particles caused by the electrical field at the surface of a conductor. Audible noise levels generated by corona discharge vary depending on weather conditions as well as the voltage of the line. Wet weather conditions often increase corona discharge due to accumulation of raindrops, fog, frost, or condensation on the conductor surface, which causes surface irregularities thereby promoting corona discharge. Since a portion of the Proposed Project would involve replacing the existing single circuit power line with a double circuit power line, there could be a slight increase in noise levels. However, given that noise levels from 115 kV lines are typically between 30 and 40 dBA at a distance of 90 feet from the outer conductor under worst case conditions, the addition of an additional circuit would not be expected to result in a substantial increase in ambient noise levels. Additionally, 1.3 miles of power line would be constructed within new ROW where no power line facilities currently exist; however, given that there are no sensitive receptors within the vicinity of this proposed new ROW, any increase in noise levels would result in impacts that would be less than significant.

**d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project: *LESS THAN SIGNIFICANT WITH MITIGATION*.**

***Construction***

Construction activities would result in temporary noise level increases in the Proposed Project vicinity. If nighttime construction would be determined to be necessary within the vicinity of existing residences, such activities could result in a nuisance to these noise sensitive receptors. Such impacts would be less than significant with implementation of Mitigation Measure 3.11-3. Furthermore, implementation of Mitigation Measures 3.11-1 and 3.11-2 would also help ensure that construction noise would have a less than significant impact on sensitive receptors within the study area.

***Maintenance***

Maintenance of the existing lines is performed on a routine basis, and would not be expected to change substantially under the Proposed Project. Therefore, noise associated with proposed maintenance activities would not be expected to increase substantially from the existing baseline and impacts would be less than significant.

**e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels: *LESS THAN SIGNIFICANT IMPACT*.**

The Proposed Project would be located approximately 1.5 miles south of the Hollister Municipal Airport. However, the Proposed Project would not involve the development of noise-sensitive land uses that would be exposed to excessive aircraft noise. Workers that would construct the Proposed Project would be exposed to periodic short-term aircraft overflight noise associated with Hollister Municipal Airport; however, the average construction activity noise levels that the workers would be exposed to would be far greater than the average overflight noise levels that they would be exposed to. Therefore, the impact associated with this criterion is less than significant.

**f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels: *NO IMPACT*.**

The Proposed Project is not located within the vicinity of a private airstrip. Therefore, there would be no impact associated with this criterion.

# References

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# 3.12 Population and Housing

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **12. POPULATION AND HOUSING— Would the project:** | | | | |
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☒ | ☐ |
| b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |

## 3.12.1 Environmental Setting

The Proposed Project would be constructed within northwestern San Benito County and northeastern Monterey County. Additionally, the Hollister Substation would be located immediately adjacent to the City of Hollister limits while the Hollister Tower Segment would be located approximately one mile west of the City of San Juan Bautista (Figure 2-1). The Hollister Tower Segment would be located near a residential subdivision along Avenida Del Piero, crossing within 100 feet of a number or residences.

### Population

**Table 3.12-1** summarizes estimated population growth from 2005 to 2030 for San Benito County and Monterey County as well as the City of Hollister. As demonstrated in the table, the population in these communities is expected to increase substantially over the next 20 years.

**TABLE 3.12-1**
**ESTIMATED POPULATION GROWTH, 2005 – 2020**

| Area | 2005 | 2010 | % Change 2005 - 2010 | 2020 | % Change 2010 - 2020 | 2030 | % Change 2020 - 2030 |
|---|---|---|---|---|---|---|---|
| Monterey County | 422,632 | 445,309 | 5.4 | 483,733 | 8.6 | 515,549 | 6.6 |
| San Benito County | 57,324 | 62,431 | 8.9 | 76,140 | 22.0 | 89,431 | 17.5 |
| City of Hollister | 37,002 | 40,415 | 9.2 | 49,064 | 21.4 | 59,259 | 20.8 |

SOURCE: AMBAG, 2008.

### Housing

**Table 3.12-2** summarizes estimate increases in housing units from 2005 to 2030 for San Benito County and Monterey County as well as the City of Hollister. As with population growth, the number of housing units is expected to increase substantially over the next 20 years.

**TABLE 3.12-2**
**ESTIMATED HOUSING UNITS, 2005 – 2020**

| Area | 2005 | 2010 | % Change 2005 - 2010 | 2020 | % Change 2010 - 2020 | 2030 | % Change 2020 - 2030 |
|---|---|---|---|---|---|---|---|
| Monterey County | 137,338 | 147,221 | 7.2 | 162,857 | 10.6 | 176,236 | 8.2 |
| San Benito County | 17,638 | 19,187 | 8.8 | 23,483 | 22.4 | 27,675 | 17.9 |
| City of Hollister | 10,587 | 11,544 | 9.0 | 14,085 | 22.0 | 17,108 | 21.5 |

SOURCE: AMBAG, 2008.

## 3.12.2 Regulatory Setting

CEQA Guidelines Section 15126.2 requires a discussion of the ways in which a project could directly or indirectly foster economic development or population growth, and how that growth would, in turn, affect the surrounding environment. The Monterey County, San Benito County and City of Hollister general plans do not include applicable goals, objective, and/or policies related to population and housing that would be directly applicable to the Proposed Project.

## 3.12.3 Applicant Proposed Measures

No applicant proposed measures have been identified by PG&E to reduce population and housing impacts associated with the Proposed Project.

## 3.12.4 Environmental Impacts and Mitigation Measures

**a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure): *LESS THAN SIGNIFICANT IMPACT*.**

The Proposed Project does not include new homes or businesses and would not directly induce substantial temporary or permanent population growth in the study area. Accordingly, the Proposed Project would have no direct impact on population growth inducement.

The Proposed Project could have an indirect impact on population growth inducement in the study area if it encouraged people to move to the study area to construct, operate or maintain the Propose Project. Construction activities would be limited to a 15-month period beginning in March of 2011 and, during peak construction activities, would require approximately 56 crew members per day (Table 2-6). Construction would be performed by PG&E construction crews or

contractors who reside generally within Monterey and San Benito Counties or adjacent areas and would not require a substantial number of workers to relocate into the study area to complete the work. Operation and maintenance activities associated with the Proposed Project also would not result in a substantial increase in area residents, given that the existing power line has been in operation for over 70 years and the Proposed Project primarily involves modifying existing infrastructure. Accordingly, the Proposed Project would have a less than significant indirect impact on population growth associated with the Proposed Project's temporary or permanent workforce.

The Proposed Project also could have an indirect impact on population growth inducement if it extends infrastructure and, thereby, induces substantial population growth in the study area. Construction, operation and maintenance of the Proposed Project would allow PG&E to continue to provide safe and reliable electrical service in its Electrical Needs Area, and to increase transmission capacity. It would not generate additional power. Growth in the study area is planned and regulated by applicable local planning and zoning ordinances. The Proposed Project's provision of electrical service is consistent with development anticipated by plans and zoning in the jurisdictions that the Proposed Project would serve. Furthermore, the availability of electrical capacity by itself does not normally induce growth within a particular area. Other factors such as economic conditions, land availability, population trends, availability of water supply or sewer services, and local planning policies have a more direct effect on growth. Accordingly, the Proposed Project would have a less than significant indirect impact on population growth associated with extension of existing infrastructure.

**b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere: *NO IMPACT*.**

No housing units would be displaced by the Proposed Project. Thus, the construction of replacement housing would not be required. The Proposed Project would generally traverse an existing PG&E easement with the exception of the 1.3-mile Proposed River Crossing that would be constructed within new ROW, approximately 3,000 feet north of the existing pole segment. There are a number of recently built homes just south of Highway 156 along Avenida Del Pierro in unincorporated San Benito County; however, none of these units would be displaced as a result of the Proposed Project. Construction, operation and maintenance within the Proposed River Crossing alignment would traverse open space and agricultural lands, where no homes are present. Therefore, the Proposed Project would displace no housing units, and would have no impact associated with the displacement of existing housing units.

**c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere: *NO IMPACT*.**

As noted above, the Proposed Project would not displace any people or housing or any other structures that are currently occupied by people. Therefore, the Proposed Project would have no impact associated with the displacement of people or the construction of replacement housing.

# References

Association of Monterey Bay Area Governments (AMBAG), 2008. *Monterey Bay Area 2008 Regional Forecast*, adopted June 11, 2008.

# 3.13 Public Services

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **13. PUBLIC SERVICES— Would the project:** | | | | |
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services: | | | | |
| i) Fire protection? | ☐ | ☐ | ☒ | ☐ |
| ii) Police protection? | ☐ | ☐ | ☒ | ☐ |
| iii) Schools? | ☐ | ☐ | ☒ | ☐ |
| iv) Parks? | ☐ | ☐ | ☒ | ☐ |
| v) Other public facilities? | ☐ | ☐ | ☒ | ☐ |

## 3.13.1 Environmental Setting

### Fire Protection

The California Department of Forestry and Fire Protection (Cal Fire [formerly CDF]), the San Benito County Fire Department and the North County Fire Protection District of Monterey County provide fire protection services within the project area.

#### *Cal Fire*

Cal Fire is responsible for State Responsibility Areas (SRAs), and primarily fights wildland fires; Cal Fire is not responsible for structural fires. The San Benito-Monterey Unit serves the project area. This unit is operationally divided into two fire divisions and twelve battalions or programs. The Unit has eleven state-funded fire stations, six local government stations, thirteen volunteer companies, one air attack base, and one Helitack base. The unit has cooperative fire protection agreements with seven local fire protection agencies (Cal Fire, 2009).

#### *San Benito County*

The San Benito County Fire Department (SBCFD) staffs one fire engine at the Cal Fire station on Fairview Road in Hollister, which provides year-round 24 hour coverage with two permanent fire fighters per shift (one engineer and one fire fighter). A recent study showed that response times within the County are generally about 15 minutes, which is not considered adequate. In fact, the County's fire resources are severely below any recognized standard of response (Avila, 2010).

### *Monterey County*

A portion of the Hollister Tower Segment falls within the jurisdiction of the North County Fire Protection District (NCFPD) of Monterey County which is a special district detached from County government. This District covers 164 square miles of predominantly rural land with a population of approximately 45,000. The District has three fire stations located in Castroville, Prunedale, and the Royal Oaks area. The Prunedale station, located at 17639 Pesante Road in Prunedale, would be the closest station to the southern end of the Hollister Tower Segment (NCFPD, 2006). This station has two Type 1 Engines which respond to most fires and one Type 3 engine which is a four-wheel drive engine that typically responds to wildland fires. The number of staff at the Prunedale station fluctuates between two and three firefighters per shift. Additional fire support may be provided by the other two stations within the NCFPD as well as the Aromas Tri-County Fire Protection District on an as needed basis (Pastore, 2010).

## Police Protection

### *San Benito County*

The San Benito County Sheriff's Department is located at 451 Fourth Street in Hollister, California. Patrol Division personnel are the first to respond to emergencies within the County. These personnel handle enforcement of criminal and vehicle code regulations and investigate misdemeanors and felony crimes. They are also responsible for enforcement of some ordinances of the County Code (San Benito County Sheriff's Office, 2010).

### *Monterey County*

The Monterey County Sheriff's Patrol Division provides law enforcement and related emergency response services to the unincorporated areas of Monterey County. The Sheriff's Patrol Division operates out of three stations: the Central Patrol Station (Salinas), the Coastal Station (Monterey), and the South County Station (King City). Services in the project area would be based out of the Central Patrol Station in Salinas which supplies coverage to approximately 1,400 square miles including all of North County. Patrol areas include agricultural, industrial, residential, recreational and undeveloped rural areas. The Central Patrol Station is the largest and busiest patrol station, fielding the most calls for service (Monterey County, 2010).

## Schools

School districts serving the study area include the Aromas-San Juan School District, the Hollister School District, the North County Joint Union School District, the Cienega Union School District, the San Benito High School District, and the Southside School District (San Benito County Office of Education, 2010). The Proposed Project would be located within 2,000 feet of Anzar High School and Lagunita Elementary School.

### Parks

See Chapter 3.14, *Recreation*, for a discussion of recreational facilities, including parks, in the vicinity of the Proposed Project.

## 3.13.2 Regulatory Setting

There are no federal or State regulations related to public services that apply to the Proposed Project. Additionally, the Monterey County, San Benito County and City of Hollister general plans do not include applicable goals, objectives, and/or policies related to public services that would be directly applicable to the Proposed Project.

## 3.13.3 Applicant Proposed Measures

PG&E proposes the following applicant proposed measure (APM) to minimize impacts on public services from the Proposed Project. The impact analysis in this MND assumes that this APM would be implemented to reduce impacts to public services as discussed below.

> **APM PUB-1: Maintain Secured Facilities during construction activities.** PG&E will implement the following measures during construction activities:
>
> - All equipment will be locked and secured when left unattended at the most secure locations available;
> - Contract security will be used at active pull/tension sites, laydown, and storage areas outside work hours;
> - All open holes will be covered and secured once activity at that location stops (after hours);
> - Anchor bolts on foundations without structures will be capped; and
> - Safety structures will be placed at road crossings during overhead wire installation activity to protect traffic and pedestrians.

## 3.13.4 Impacts and Mitigation Measures

Operation and maintenance activities associated with the Proposed Project would not result in an increase in residents or employees, given that the existing power line has been in operation for over 70 years and the Proposed Project primarily involves modifying existing infrastructure. Therefore, no change to the existing demand on public services would occur during operation of the Proposed Project. Any impacts to public services would be limited to the construction period.

The number of construction workers that would be required to construct the Proposed Project, at its peak, would be approximately 56 crew members per day. This includes the 10-person crew anticipated for the proposed modifications at the Hollister Substation. The Proposed Project construction activities would be temporary, lasting approximately 15 months, and would not result in additional staffing at the substation or along the proposed power line alignments.

**a.i) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection: *LESS THAN SIGNIFICANT IMPACT*.**

Construction of the Proposed Project could involve emergency situations (e.g., worker injury) that could require emergency response services. Additionally, because the Proposed Project alignments traverse largely undeveloped areas, emergency situations could arise that would require fire suppression services and emergency response. Implementation of APM HAZ-4 (see Section 2.7, *Hazards and Hazardous Materials*) would require PG&E to implement a fire risk management plan, thereby reducing the likelihood of situations requiring fire suppression services. This is especially important for areas within San Benito County given that the SBCFD already suffers from inadequate response times. However, given that construction activities would be temporary in nature, lasting approximately 15 months, increases in demand would not require construction of new or physically altered governmental facilities in order to maintain acceptable service ratios. Impacts would be less than significant.

**a.ii) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection: *LESS THAN SIGNIFICANT IMPACT*.**

The Proposed Project would not result in substantial adverse impacts to police services in the study area. Proposed Project construction may cause an increase in the existing demand for police services due to possible theft of construction equipment and/or vandalism that might occur during the construction period. Additionally, construction activities may, at times, require temporary lane closures on area roadways, requiring traffic control measures or safety measures, which would typically be coordinated by the police. PG&E has committed to implementing APM PUB-1 that would ensure that facilities are secured during construction. Thus, although construction of the Proposed Project may result in increased demand for police services, such increase is not likely to be substantial and would not require the construction of a new or modification of an existing police station, the construction of which could cause significant environmental effects. Therefore, the Proposed Project would have a less than significant impact associated with the provision of new or physically altered police facilities.

**a.iii) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools: *LESS THAN SIGNIFICANT IMPACT*.**

The Proposed Project would not result in substantial adverse impacts to school facilities in the study area. The construction crew that would be required for the Proposed Project is estimated to be up to 56 crew members during peak construction activities. The Proposed Project would not

result in a substantial increase in the local population or demand for housing, which typically are associated with an increased demand for public school services. Therefore, the Proposed Project would not result in a substantial increase in demand for school facilities and would not require the construction of a new or modification of an existing school, the construction of which could cause significant environmental effects. Therefore, the Proposed Project would have a less than significant impact associated with the provision of new or physically altered school facilities.

**a.iv) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks: *LESS THAN SIGNIFICANT IMPACT*.**

For potential impacts to recreational facilities, including parks, see Chapter 3.14, *Recreation*. Impacts to recreational facilities were found to be less than significant, or to have no impact.

**a.v) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities: *LESS THAN SIGNIFICANT IMPACT*.**

The Proposed Project would not result in substantial adverse impacts to other public facilities (e.g., public libraries, hospitals, or other civic uses) because, as discussed above, the Proposed Project would not result in a significant increase in local population or housing, which would typically be associated with increased demand for such public facilities. Although unlikely, it is possible that construction of the Proposed Project could result in some increased demand for other types of public services. However, any such increase is not likely to be substantial and would not require the construction of new or modification of existing public facilities, the construction of which could cause significant environmental effects. Therefore, the Proposed Project would have a less than significant impact associated with the provision of new or physically altered facilities for libraries, hospitals or other civic uses.

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# References

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San Benito County Office of Education, 2010. Website (http://www.sbcoe.k12.ca.us/districts.html), accessed February 16, 2010.

San Benito County Sheriff's Department, 2010. Patrol Division Website (http://www.sbcsheriff.org/units_patrol.html), accessed March 11, 2010.

# 3.14 Recreation

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **14. RECREATION—Would the project:** | | | | |
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☒ | ☐ |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☐ | ☒ |

## 3.14.1 Environmental Setting

Existing recreational and open space resources within the study area are discussed by jurisdiction below.

### Federal Recreational Resources

The Proposed Project would parallel and cross through the Juan Bautista de Anza National Historic Trail. This trail is a 1,210-mile historic route, beginning in Nogales, Arizona and ending in San Francisco, CA (see, e.g., Figure 2-1, *Project Location*). The trail commemorates, protects, marks and interprets the route traveled by Juan Bautista de Anza between 1774 and 1776 (NPS, 2009).

### State Recreational Resources

The Proposed Project would be located approximately 1.5 miles south of the San Juan Bautista State Historic Park. The park is located in the city of San Juan Bautista, 3 miles east of Highway 101 and 7 miles west of Hollister (see Figure 2-1, *Proposed Project Location and Overview*). It includes several structures built in the 1800s, as well as a blacksmith shop, a historic jail, and an early American settler's cabin (California Department of Parks and Recreation, 2009).

### Local Recreational Resources

Local parks within two miles of the Proposed Project include Calaveras Park, Dunne Park, Vista Park Hill, and the Hollister Community Center. The Calaveras Park is a neighborhood park located approximately 0.5 mile south of the Hollister Pole Segment and includes a softball field, basketball courts, a playground, an amphitheater and barbeque facilities. Neighborhood parks within the City of Hollister are between three and 10 acres in area and typically service neighborhood residents within walking distance of the park. Dunne Park is also a neighborhood park and is located approximately one mile south of the Hollister Substation; this park includes tennis courts, softball fields, a playground and memorial rose garden and barbeque pits. Vista Park Hill is a community park that includes a softball field, a playground and barbeque facilities;

this park is located approximately 0.5 mile south of the Hollister Substation. Community parks within the City of Hollister are a minimum of 10 acres in area and are intended to serve all residents within the City including community and school groups. The Hollister Community Center, located just south of the Vista Park Hill, is equipped with kitchen facilities, chairs and tables (City of Hollister, 2009).

## 3.14.2 Regulatory Setting

No federal or State plans or policies concerning recreation apply to the Proposed Project.

### San Benito County

Chapter 5 of the San Benito County General Plan contains the following policy that may be applicable to the Proposed Project (San Benito County, 1995).

> *Policy 56: Ratio of parks to population*. Recreational facilities for existing and new development in the unincorporated areas of the County shall be provided to meet the needs of the population based on a ratio of five acres of park land per 1,000 persons.

### Monterey County

Chapter 6 of the Monterey County General Plan includes Goal PS-11, which is to "maintain and enhance the County's parks and trails system in order to provide recreational opportunities, preserve natural scenic resources and significant wildlife habitats, and good stewardship of open space resources." None of the policies included under this goal would be directly applicable to the Proposed Project (Monterey County, 2007).

### City of Hollister

The City of Hollister General Plan includes the following policy that may be applicable to the Proposed Project (City of Hollister, 2006).

> *Policy CSF4.4: Park and Recreation Standards*. Provide for high-quality neighborhood and community parks to meet the recreational, open space, leisure and play needs and desire of existing and future residents. Coordinate efforts with the County of San Benito to provide an average of four acres of developed parks and recreational facilities for every 1,000 residents within the Hollister Planning Area.

## 3.14.3 Applicant Proposed Measures

PG&E proposes the following applicant proposed measure (APM) to minimize impacts on recreational resources from the Proposed Project. The impact analysis in this IS/MND assumes that this APM would be implemented to reduce impacts to recreational resources discussed below.

> **APM REC-1: Avoid Disruption of Recreational Facilities along the Juan Bautista de Anza National Historic Trail during Peak Use.** PG&E will limit construction activities that occur in the immediate vicinity of the Juan Bautista de Anza National Historic Trail to

weekdays or as otherwise permitted by the National Park Service. PG&E will ensure that the trail is fully accessible on the weekends, as well as any holidays observed by the National Park Service.

## 3.14.4 Impacts and Mitigation Measures

**a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated: *LESS THAN SIGNIFICANT IMPACT*.**

Operation and maintenance of the Proposed Project would result in no increase in area residents or employees, given that the existing power line has been in operation for over 70 years and the Proposed Project primarily involves modifying existing infrastructure. Therefore, operation and maintenance of the Proposed Project would result in no change to the existing levels of use of existing neighborhood and regional parks or other recreational facilities. Any impacts to on existing recreational facilities would be temporary and limited to the construction period.

The Proposed Project would result in no substantial increase in the use of existing neighborhood or regional parks or other recreational facilities because, as discussed above, the Proposed Project would not result in a significant increase in local population or housing, which typically would be associated with increased demand for such facilities. The number of construction workers that would be required to construct the Proposed Project, at its peak, would be approximately 56 crew members per day. This includes the 10-person crew anticipated for the proposed modifications at the Hollister Substation. The Proposed Project construction activities would be temporary, lasting approximately 15 months, and would not result in additional staffing at the substation or along the proposed power line alignments. It is possible that construction workers could increase the use of existing park and recreation facilities. However, any such increase is not likely to be substantial and would not result in a substantial increase in demand for existing park or recreational facilities, resulting in substantial physical deterioration of existing facilities. Impacts would be less than significant.

In addition to potential impacts from some increased usage of recreational facilities, the Proposed Project would include construction activities within existing recreational facilities along the Juan Bautista de Anza National Historic Trail. Impacts to this facility would be temporary in nature. Furthermore, PG&E has committed to implementing APM REC-1, which would limit construction activities within the immediate vicinity of Juan Bautista de Anza National Historic Trail to weekdays or as otherwise permitted by the National Parks Service. PG&E would ensure that the trail is fully accessible on the weekends as well as holidays observed by the National Parks Service. Therefore, it can be assumed that construction of the Proposed Project would not cause or accelerate any substantial physical deterioration of the trail.

**b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment: *NO IMPACT*.**

The Proposed Project does not include the addition of any recreational facilities and does not require the construction of new or expansion of existing recreational facilities, which might have an adverse physical effect on the environment. Therefore, the Proposed Project would have no impact in this regard.

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# References

California Department of Parks and Recreation, 2009. *San Juan Bautista State Historic Park*, website (http://www.parks.ca.gov/?page_id=563), accessed December 11, 2009.

City of Hollister, 2005. *City of Hollister General Plan,* adopted on December 5, 2005.

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National Parks Service (NPS), 2009. *Juan Bautista de Anza National Historic Trail Today*, website (http://www.solideas.com/DeAnza/TrailGuide/AnzaTrailToday.html), accessed December 11, 2009.

San Benito County, 1995. *Open Space and Conservation Element Update of the San Benito County General Plan*, adopted by San Benito County Board of Supervisors on February 7, 1995.

# 3.15 Transportation and Traffic

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **15. TRANSPORTATION AND TRAFFIC— Would the project:** | | | | |
| a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | ☐ | ☒ | ☐ | ☐ |
| b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | ☐ | ☐ | ☐ | ☒ |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | ☐ | ☐ | ☒ | ☐ |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☐ | ☒ |
| e) Result in inadequate emergency access? | ☐ | ☒ | ☐ | ☐ |
| f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | ☐ | ☒ | ☐ | ☐ |

## 3.15.1 Environmental Setting

The Proposed Project is located in Monterey and San Benito Counties, California near the cities of San Juan Bautista and Hollister. The study area is primarily rural, with areas of low-density residential and agricultural uses. The dominant mode of transportation in this region is the private automobile. The transportation system in the area is composed of an interconnected network of roadways under State, county, and city control; local transit systems; and a railroad right-of-way (ROW). The transportation system in the study area is described below.

### Roadway Network

Several public roadways provide regional and local access to the Proposed Project study area, each of which would likely be used to transport construction materials, equipment, and workers to and throughout the Proposed Project study area. The Proposed Project components and surrounding regional roadway network are illustrated in Figure 2-1 (see Chapter 2, *Project Description*). Descriptions of the regional and local roadway network in the study area are provided below.

### *Regional Roadways*

Regional access to the study area is provided by U.S. Highway 101 (US 101), State Route 25 (SR 25), State Route 129 (SR 129), and State Route 156 (SR 156). Below are summary descriptions of each of these regional roadways, which are under the jurisdiction of the California Department of Transportation (Caltrans).

***US 101*** is the major north-south freeway between the San Francisco Bay Area and the Monterey Peninsula. In the Proposed Project area, US 101 is a four-lane divided expressway that serves interregional traffic. SR 156 and US 101 join and share the same roadway for approximately eight miles between Prunedale and San Juan Bautista. Traffic volumes along US 101 in the area north of its junction with SR 156 have an annual average daily traffic (ADT) level of 50,000 vehicles per day (Caltrans, 2010). US 101 would not be crossed by the Proposed Project.

***SR 156*** is an east-west route beginning at State Route 1 (SR 1) in Castroville in Monterey County and ending at State Route 152 near Hollister in San Benito County. SR 156 is primarily a two-lane conventional highway;[1] however, SR 156 has as many as seven lanes in the vicinity of US 101. SR 156 links the Monterey Peninsula to the San Francisco Bay Area and beyond to the Central Valley. SR 156 provides a connection to US 101 northwest of San Juan Bautista. Traffic volumes along SR 156 in the area of the proposed Hollister Tower Segment crossing have an annual ADT level of 23,000 vehicles per day and in the area of the proposed Hollister Pole Segment crossing, annual ADT traffic volumes are 13,800 vehicles per day (Caltrans, 2010). SR 156 would be crossed by the Proposed Project at two locations: once along the Hollister Tower Segment and once along the Hollister Pole Segment. SR 156 is seven lanes where it would be crossed by the proposed Hollister Tower Segment and is three lanes where it would be crossed by the proposed Hollister Pole Segment.

***SR 25*** is primarily a two lane conventional highway, with up to five lanes within the City of Hollister, where the road is also known in the Proposed Project area as San Felipe Road, south of Pacific Way, and known as Bolsa Road, north of Pacific Way. SR 25 begins at its junction with SR 198 in Monterey County and extends in a north-northwest direction through San Benito and Santa Clara Counties, ending at its junction with US 101, south of the city of Gilroy in Santa Clara County. SR 25 intersects SR 156 just north of the City of Hollister. Traffic volumes along SR 25 in the area north of its junction with SR 156 have an annual ADT level of 21,000 vehicles per day (Caltrans, 2010). SR 25 would not be crossed by the Proposed Project.

***SR 129*** is an east-west conventional highway located primarily within Santa Cruz County that is known locally as Chittenden Road. SR 129 begins at SR 1 in Watsonville and extends to the east to a location within San Benito County at its junction with US 101. Traffic volumes along SR 129 in the area west of its junction with US 101 have an annual ADT level of 10,700 vehicles per day (Caltrans, 2010). SR 129 would not be crossed by the Proposed Project.

[1] Conventional highway is a standard arterial road, which operates like a normal street, complete with stop signs, signals, and full access from businesses and residences, as opposed to a freeway, which has limited access points.

### *Local Roadways*

The local roadways that border, cross, or may be used to access the study area are described below. Some of the roads would be affected during line stringing activities over the roads, while others would be used for access throughout the construction phase of the project. The local roads that would be crossed are two-lane roadways that experience relatively low traffic volumes. Below are summary descriptions of the local roadways that may be affected by the Proposed Project.

The Proposed Project would cross a number of San Benito County roads and private roads. No public roads would be crossed in Monterey County. Crazy Horse Canyon Road would provide access to the southern part of the Tower Segment. The new line along the proposed Tower Segment would cross Avenue Del Piero, El Circulo Del Real, Avenue Del Piero, and Rocks Road. Public roads that would be crossed by the new line along the Pole Segment would include San Juan Highway, San Justo Road, Buena Vista Road, and Wright Road. Hollister Substation is accessible from a private road off San Felipe Road.

## Public Transit

San Benito County Express provides transportation service to the communities of Hollister, San Juan Bautista, and Gilroy. The County Express also operates a complementary Dial-A-Ride service, as well as an intercounty service to Gilroy's Caltrain and Greyhound Stations, and Gavilan College with connecting service to the Santa Clara bus system. The County Express Red Line route provides service along San Felipe Road, east of Hollister Substation (San Benito County Express, 2010); however, none of the County Express routes would be crossed by any portion of the Proposed Project.

## Bicycle and Pedestrian Transportation

Bicycle facilities include bike paths, bike lanes, and bike routes. Bike paths are paved trails that are separated from the roadways (Class 1). Bike lanes are lanes on roadways that are designated for use by bicycles by striping, pavement legends, and signs (Class 2). Bike routes are roadways that are designated for bicycle use, but do not have additional width for bicycle lanes (Class 3). The Proposed Project would not cross any existing bicycle facilities (TAMC, 2008 and CSBCG, 2009).

Pedestrian facilities include sidewalks, crosswalks, and pedestrian signals. While the Proposed Project would cross a number of public and private roadways, it appears that with the exception of sidewalks along Avenue Del Piero, the Proposed Project would not cross any designated pedestrian facilities.

## Airports

The Hollister Municipal Airport is located approximately 1.5 miles north of the proposed Hollister Pole Segment and the existing Hollister Substation. The City of Hollister owns and operates Hollister Municipal Airport, which supports general aviation activities. The airport is also the location of the California Department of Forestry Air Attack Base, which plays a role in

suppressing wildfire in six counties (City of Hollister, 2010). With the exception of Hollister Municipal Airport, there are no other airport facilities within three miles of any component of the Proposed Project.

### Rail Service

The Union Pacific Railroad (UPRR) provides freight service in San Benito County along the Hollister Branch Line that runs from Hollister to Carnadero in Santa Clara County. Passenger rail service is currently not provided along the Hollister Branch Line. The Hollister Branch Line borders the west side of Hollister Substation and would be crossed by the proposed Hollister Pole Segment immediately west of the Hollister Substation.

## 3.15.2 Regulatory Setting

The development and regulation of the study area transportation network involves State and local jurisdictions. State jurisdiction includes permitting and regulation of the use of State roads, while local jurisdiction includes implementation of State permitting, policies, and regulations, as well as management and regulation of local roads. Construction work that would occur over a public roadway would require encroachment permits prior to commencing work in the public ROW from the jurisdiction that manages or maintains the applicable roadway(s).

Caltrans's construction practices require temporary traffic control planning for any time the normal function of a roadway is suspended. In addition, Caltrans requires that permits be obtained for transportation of oversized loads and transportation of certain materials, and for construction-related traffic disturbances. Caltrans regulations would apply to the transportation of oversized loads associated with the construction of the Proposed Project. Likewise, county regulations related to ROW encroachment and oversized loads would apply to the construction of the Proposed Project.

The Circulation Element of the Monterey County General Plan (adopted January 3, 2007) and the Transportation Element of the San Benito County General Plan (adopted May 22, 1990) include transportation-related goals and policies that establish measures of effectiveness for the performance of the local circulation system. The San Benito County and Monterey County general plans both identify a general traffic impact threshold of level of service (LOS) C. However, these thresholds are not applicable to the Proposed Project given that the Proposed Project would only generate daily traffic during the construction period and construction related trips would be dispersed throughout the Proposed Project area along the two power line segments.

## 3.15.3 Applicant Proposed Measures

No applicant proposed measures have been identified by PG&E to reduce transportation and traffic impacts associated with the Proposed Project.

## 3.15.4 Environmental Impacts and Mitigation Measures

**a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit: *LESS THAN SIGNIFICANT WITH MITIGATION*.**

The Proposed Project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. However, traffic would be generated during construction as a result of required deliveries of materials and equipment to the Proposed Project staging areas and tower and pole sites, truck haul trips to remove the existing poles and towers and other electric infrastructure, and up to 56 commuting construction workers. Construction activities would also include hauling of oversize loads, including poles, lattice steel, conductor spools, substation hardware, various types of equipment, etc. Excavated soil is proposed to be spread at the construction sites; therefore, no dump truck traffic to haul away soil would occur during Proposed Project construction. PG&E has estimated that construction along the proposed Hollister Pole and Tower Segments would generate over 200 construction-related vehicle trips per day dispersed on roadways in the Proposed Project study area.

Construction-generated traffic would be temporary and therefore would not result in any long-term degradation in performance of any of the roadways in the vicinity of the Proposed Project. In addition, not all construction-related trips would be assigned to the same construction location (i.e., crews would be assigned to different sections of the power lines); these project-generated trips would be dispersed throughout the study area and would occur at varying times throughout the workday. Therefore, the Proposed Project would not result in substantial trip-generated traffic congestion and would not be expected to add a substantial number of trips to the roadways in the vicinity of the Proposed Project.

Installation of the Proposed Project power lines would require overhead crossings of several San Benito County and Caltrans public roadways, including Avenue Del Piero, SR 156, El Circulo Del Real, Rocks Road, San Juan Highway, San Justo Road, Buena Vista Road, and Wright Road. In addition, the proposed Hollister Pole Segment would require stringing the power line on poles across UPRR's Hollister Branch Line. Crossing these roadways and railroad could temporarily disrupt existing automobile and train traffic patterns in the vicinity of the crossings, potentially resulting in significant impacts.

Prior to stringing conductor across roads, PG&E would install temporary clearance structures along the road and railroad crossings for public protection. The guard structures would be designed to prevent the conductor from being lowered or falling into traffic. The use of guard structures during power line stringing activities over roadways would be at the discretion of the regulatory agency with permit authority of the roadway and the use of a guard structure over the railroad would be at the discretion of UPRR. For example, Caltrans, San Benito County, or the

UPRR may require other or additional safety measures as part of its encroachment permit or approval process requirements.

PG&E would be required to obtain necessary encroachment permits and approvals prior to commencement of construction activities over any public roads or railroads. Power line stringing-related traffic disruption impacts to the existing circulation system could be significant. Implementation of Mitigation Measure 3.15-1 would require PG&E to prepare a traffic management and control plan prior to commencement of construction activities and Mitigation Measure 3.15-2 would require PG&E to coordinate all construction activities in the vicinity of the Hollister Branch Line with UPRR to avoid delays in freight train service. Implementation of these mitigation measures would ensure that impacts would be reduced to less than significant.

**Mitigation Measure 3.15-1: Traffic Management and Control Plan.** PG&E shall prepare a Traffic Management and Control Plan that shall include, at a minimum, the measures listed below. The Plan shall be submitted to the CPUC for approval and shall be distributed to all construction crew members prior to commencement of construction activities. The Plan shall:

- Include descriptions of work hours, haul routes, work area delineation, any traffic detour routes, pedestrian detour routes where work would be conducted over sidewalks, traffic control, and flagging;

- Identify all access and parking restriction and signage requirements;

- Require workers to park personal vehicles at the approved staging areas and take only necessary project vehicles to the work sites;

- Lay out plans for notifications and a process for communication with affected residents and landowners prior to the start of construction. Advance public notification shall include posting of notices and appropriate signage of construction activities. The written notification shall include the construction schedule, the exact location and duration of activities within each street (i.e., which road/lanes and access point/driveways/parking areas would be blocked on which days and for how long), and a toll-free telephone number for receiving questions or complaints;

- Include plans to coordinate all construction activities with emergency service providers in the area. Emergency service providers would be notified of the timing, location, and duration of construction activities. All roads would remain passable to emergency service vehicles at all times; and

- Identify all roadway locations where special construction techniques (e.g., night construction) would be used to minimize impacts to traffic flow.

**Mitigation Measure 3.15-2: Coordination with Union Pacific Railroad.** PG&E shall coordinate all construction activities with Union Pacific Railroad to avoid delays in freight train service along the Hollister Branch Line. PG&E shall implement, at a minimum, the Union Pacific Railroad safety and engineering guidelines when installing power lines over the railroad right-of-way (ROW). The Workers Environmental Awareness Program required under Mitigation Measure 3.7-4 shall require construction crews and project

personnel to be trained on Union Pacific Railroad safety guidelines prior to commencing work within or over the railroad ROW.

**Significance after Mitigation:** Less than significant.

### *Operations*

Once constructed, the operations of the power lines would require routine maintenance trips, inspection, and vegetation management activities. Maintenance activities would not increase above existing levels that are employed to maintain the existing power line ROWs and therefore, would not result in an increase in traffic in the project area. No impact would occur.

**b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways: *NO IMPACT*.**

No congestion management programs are administered by the County of San Benito or the County of Monterey that would be applicable to the Proposed Project (San Benito County, 2010 and Monterey County, 2010). The Proposed Project components would not introduce any new uses to the study area that would generate long-term changes in traffic as impacts would be solely related to construction activities of the Proposed Project. No impact would occur.

**c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks: *LESS THAN SIGNIFICANT IMPACT*.**

The Proposed Project could result in a temporary change in air traffic patterns, but any such change would not result in substantial safety risks. Construction of the Proposed Project would require the use of helicopters to install poles and towers, and to deliver workers and equipment to the project sites that would be difficult to access with vehicles and, thereby, would increase air traffic levels commensurate with the number of helicopter trips required to reach these remote locations. The Proposed Project is estimated to require up to a few daily helicopter trips per day to the Proposed Project area during the construction period. Under existing conditions, aerial inspections of the power lines by helicopter are conducted on an as needed basis. Such inspections would continue under the Proposed Project, resulting in no change in long-term helicopter operations in the Proposed Project area. Furthermore, as required by the Federal Aviation Administration (FAA), and pursuant to APM HAZ-3 (Develop and Implement a Helicopter Lift Plan), PG&E would require the helicopter vendor to develop and implement a helicopter lift plan. This measure would ensure that the Proposed Project would comply with FAA regulations and that impacts would be less than significant with no additional mitigation required. For discussion related to long-term aviation safety issues associated with the poles and towers, refer to Section 2.7, *Hazards and Hazardous Materials*, checklist item e). With the imposition of APM HAZ-3, the Proposed Project would have a less than significant impact on air traffic-related safety.

**d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment): *NO IMPACT.***

The Proposed Project would not result in the construction of new or modify existing roadways, and so would not change the configuration (alignment) of area roadways, introduce curves or add intersections or other design features. Therefore, the Proposed Project would not increase hazards due to design features. Similarly, the Proposed Project does not include a new or modified use relative to existing uses. Before, during and after the Proposed Project, the Hollister Substation, Tower Line Segment and Pole Segment will continue to be used for electricity transmission uses. Therefore, the Proposed Project would not substantially increase hazards due to incompatible uses. Thus, there would be no impact.

**e) Result in inadequate emergency access: *LESS THAN SIGNIFICANT WITH MITIGATION*.**

Operation of the Proposed Project would have no impact on emergency access. However, construction of the Proposed Project could have a significant impact on emergency access associated with temporary effects on traffic flow during the times when the proposed power lines are constructed over roadways. Power line installation across roads and the associated potential temporary closure of travel lanes could result in delays for emergency vehicles passing through the vicinity.

Implementation of Mitigation Measure 3.15-1 would require the construction contractor to coordinate all construction activities with emergency service providers to minimize disruption to emergency vehicle access to land uses along the Proposed Project segments. Specific requirements are identified under Mitigation Measures 3.15-1 (see above). Implementation of this measure would ensure potential impacts associated with temporary effects on emergency access would be mitigated to a less than significant level.

**f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities: *LESS THAN SIGNIFICANT WITH MITIGATION*.**

The Proposed Project would not conflict with adopted policies, plans, or programs regarding alternative transportation because it would not require an increase in long-term use of traditional modes of transportation or result in any increased demand on public transit, bicycle, or pedestrian facilities. Construction of the Proposed Project could result in temporary impacts to the performance and safety of pedestrian facilities where the proposed Tower Segment would be stung over the sidewalk along Avenue Del Piero. However, implementation of Mitigation Measure 3.15-1 would ensure that impacts would be mitigated to a less than significant level by requiring detour routes for pedestrians around active construction work areas. Impacts would be mitigated to a less than significant level.

# References

California Department of Transportation (Caltrans), 2010. Traffic and Vehicle Data Systems Unit 2008 All Traffic Volumes on CSHS Webpage (http://traffic-counts.dot.ca.gov/2008all.htm) accessed on February 16, 2010.

City of Hollister, 2010. Accessed the City of Hollister *Airport* webpage (http://www.hollister.ca.gov/Site/html/gov/office/airport.asp) on February 23, 2010.

Council of San Benito County Governments (CSBCG), 2009. San Benito County Bikeway and Pedestrian Master Plan. September 2009.

Monterey County, 2010. Personal communication with Neal Thompson, Public Works Department, on March 30, 2010.

San Benito County Express, 2010. Accessed San Benito County Express webpage (http://www.sanbenitocountyexpress.org/info.html) on February 22, 2010.

San Benito County, 2010. Personal communication with Arman Nazemi, Public Works Department Traffic Engineer, on March 30, 2010.

Transportation Agency for Monterey County (TAMC), 2008. Monterey County 2008 Bike Map for North County. Obtained online (http://www.tamcmonterey.org/programs/bikeped/bike_map.html) on February 24, 2010.

# 3.16 Utilities and Service Systems

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **16. UTILITIES AND SERVICE SYSTEMS—Would the project:** | | | | |
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | ☐ | ☐ | ☐ | ☒ |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☐ | ☒ |
| c) Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☐ | ☒ |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | ☐ | ☐ | ☐ | ☒ |
| e) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☐ | ☒ |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | ☐ | ☐ | ☒ | ☐ |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | ☐ | ☐ | ☐ | ☒ |

## 3.16.1 Environmental Setting

The Proposed Project parallels numerous public utility and services systems, including water, sewer, solid waste, electric and natural gas in the study area.

### Water Service

Water service in the study area is provided by the San Benito County Water District (SBCWD) and the Sunnyslope County Water District. There are also a number of private wells within the study area.

The SBCWD is a special district whose service area includes all of San Benito County, with an area of approximately 1,400 square miles and a population of over 55,000 people. Water is delivered to SBCWD customers through the Central Valley Project, which is a federal project that stores water in reservoirs in Northern California and delivers this water to cities and farms throughout California. The SBCWD serves the cities of Hollister and San Juan Bautista (SBCWD, 2010) as well as Tres Pinos and unincorporated urban areas surrounding Hollister.

The Sunnyslope County Water District is a special district that provides local service in accordance with the California State Water Code. The district relies on its wells and surface water to serve more than 5,200 customers within the Hollister area (Sunnyslope County Water District, 2010).

## Waste Water Service

The majority of the Proposed Project would be located within rural unincorporated areas of San Benito County and Monterey County. These areas generally lack sanitary service infrastructure and therefore rely on individual or community septic systems. Some sewer services are available in more developed areas near the Proposed Project and are provided by the Sunnyslope County Water District (Sunnyslope County Water District, 2010).

## Solid Waste and Recycling Service

Private haulers licensed throughout San Benito and Monterey counties provide solid waste and disposal services to unincorporated areas of the counties. Solid waste generated within the study area would primarily be disposed of in the John Smith Class III Landfill, the Johnson Canyon Sanitary Landfill or the Monterey Regional Waste Management Landfill. **Table 3.16-1** lists the total and remaining capacities of these landfills.

**TABLE 3.16-1**
**COUNTY LANDFILL REMAINING ESTIMATED CAPACITY**

| Landfill | County | Total Estimated Permitted Capacity (cubic yards) | Total Estimated Capacity Used (cubic yards) | Remaining Estimated Capacity (cubic yards) | Estimated Year to Close |
|---|---|---|---|---|---|
| Monterey Regional Waste Management Landfill | Monterey | 49,700,000 | 1,140,000 (2.3%) | 48,560,000 (97.7%) | 2107 |
| Johnson Canyon Sanitary Landfill | Monterey | 13,834,328 | 6,911,031 (50%) | 6,923,297 (50%) | 2040 |
| John Smith Road Class III Landfill | San Benito | 4,625,827 | 1,030,928 (22.3%) | 3,594,899 (77.7%) | 2024 |

SOURCE: CIWMB, 2009a.

## Electricity and Natural Gas

PG&E provides electricity and natural gas throughout San Benito County and Monterey County.

# 3.16.2 Regulatory Setting

## State

### *Protection of Underground Infrastructure*

Section 1, Chapter 3.1 "Protection of Underground Infrastructure," Article 2 of California Government Code 4216 requires that utility operators and other excavators must contact a regional notification center at least two days prior to excavation of any subsurface installations. The notification center for southern California is Underground Service Alert. Any utility provider seeking to begin an excavation project must call Underground Service Alert's toll-free hotline. In turn, Underground Service Alert will notify the utilities that may have buried lines within 1,000 feet of the excavation. Representatives of the utilities are required to mark the specific location of their facilities within the work area prior to the start of excavation. The excavator is required to probe and expose the underground facilities by hand prior to using power equipment.

### *Assembly Bill 939*

Assembly Bill 939 (AB 939), enacted in 1989 and known as the Integrated Waste Management Act, required each city and/or county's Source Reduction and Recycling Element to reduce the amount of waste being disposed to landfills, with diversion goals of 50 percent by the year 2000. The unincorporated area of Monterey County's diversion rate in 2006 was 54 percent (CIWMB, 2009b); therefore the County met the requirement of AB 939. In unincorporated San Benito County, the diversion rate in 2006 was 47 percent (CIWMB, 2009b); therefore, San Benito County did not meet the requirement of AB 939.

## Regional

### *Central Coast Regional Water Quality Control Board*

The Central Coast Regional Water Quality Control Board (CCRWQB) has jurisdiction over a 300-mile long by 40-mile wide section of the State's central coast. Its geographic area encompasses all of Santa Cruz, San Benito, Monterey, San Luis Obispo, and Santa Barbara Counties as well as the southern one-third of Santa Clara County, and small portions of San Mateo, Kern, and Ventura Counties. The CCRWQB is responsible for: preparing new or revised policies to address region-wide water quality concerns; adopting, monitoring compliance with, and enforcing waste discharge requirements and NPDES permits; providing recommendations to the State Board on financial assistance programs, proposals for water diversion, budget development, and other statewide programs and policies; coordinating with other public agencies which are concerned with water quality control; and informing and involving the public on water quality issues.

## Local

### *San Benito County*

Section 15.01.046 of the San Benito County Code requires that no building permits be issued until a solid waste diversion plan has been submitted to and approved by the Integrated Waste Management Department. Permittees are required to divert a minimum of 50 percent of their construction or demolition waste from disposal. If the 50 percent diversion rate is not achieved, permittees must pay the County of San Benito an amount equal to the rate per ton of disposal of mixed waste at the John Smith Road Landfill existing at the time the penalty is calculated times the number of tons of waste that were not properly diverted as required by the ordinance (San Benito County, 2010).

### *Monterey County*

Chapter 10.41 of the Monterey County Code outlines regulations for solid waste collection and disposal. It does not set forth specific diversion requirements for solid waste associated with construction and demolition debris (Monterey County, 2010).

# 3.16.3 Applicant Proposed Measures

PG&E proposes the following applicant proposed measures (APMs) to minimize impacts on utilities and service systems from the Proposed Project. The impact analysis in this IS/MND assumes that these APMs would be implemented to reduce impacts to utilities and service systems discussed below.

> **APM PU-1: Conduct a pre-construction records search/field survey to identify specific locations of water wells and well fields.** To ensure minimal disturbance or alteration of water wells or well fields within the project alignment, PG&E will conduct a pre-construction records search and field survey to identify specific locations of water wells and well fields.
>
> **APM PU-2: Notify Underground Service Alert at least two days prior to initiation of construction activities in the underground portion of the power line.** PG&E will ensure that Underground Service Alert is notified at least two days prior to initiation of construction activities of the underground portion of the power line. Underground Service Alert verifies and physically marks the location of all existing underground utilities in the area of anticipated construction activities to prevent accidental disturbance.

# 3.16.4 Environmental Impacts and Mitigation Measures

#### a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board: *NO IMPACT*.

The Proposed Project would have no impact on the Central Coast Regional Water Quality Control Board's wastewater treatment requirements. Portable toilets would be used during construction; related waste would be disposed of at a publicly or privately owned sewage treatment plant. The number of workers present at the peak construction time would be about 56 people per day.

Construction activities would be temporary, lasting approximately 15 months, and would not result in additional staffing at the substation or along the proposed power line alignments. Accordingly, wastewater generated during construction would be limited and self-contained and no additional wastewater would be generated during operation or maintenance of the Proposed Project. Accordingly, the Proposed Project would have no impact on the applicable Regional Water Quality Control Board's wastewater treatment requirements. See also, e) below.

**b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects: *NO IMPACT*.**

The Proposed Project would not require or result in the construction of new or expansion of existing water facilities, the construction of which could cause significant environmental impacts. No water facilities would be developed as part of the Proposed Project and no construction, operations or maintenance-related activity is expected to displace or destroy any existing water wells, pipelines or other facilities that provide water or wastewater service in the study area. Furthermore, PG&E has committed to conducting a preconstruction records search and field survey to identify specific locations of water wells and well fields to avoid or minimize disturbance to such facilities.

The Proposed Project would require water use during construction, primarily for periodic dust control on access roads. However, this water use would be temporary in nature and would not generate wastewater that would require treatment or disposal. Operation and maintenance of the Proposed Project would not require the use of water, and would therefore not create any demand for wastewater treatment or disposal. Consequently, the Proposed Project would not require or result in the construction of new or expanded water or wastewater treatment plant facilities; therefore, no impact would occur. See also, d) and e) below.

**c) Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects: *NO IMPACT*.**

The Proposed Project would require the removal of 36 double circuit lattice towers and installation of 37 new double lattice towers within existing ROW, and would require the removal of 154 poles and installation of approximately 135 light-duty steel (LDS) poles and 30 tubular steel poles (TSPs) along the existing and new ROW. For the towers and poles that would be removed, holes would be filled and compacted, and the area would be smoothed to match surrounding grade. Permanent access roads would be designed to meet local government requirements, which may involve drainage standards. The net increase in impervious surfaces would be limited because new access roads would not be paved; therefore, the only new impervious surfaces would be those associated with TSP foundations and tower footings.

The Proposed Project would include modifications to the Hollister Substation that would consist of relocating two existing poles on the substation property, updating relay settings, and changing the 115 kV bus conductors. However, all of the substation modifications would occur within the

existing fence line of the substation. Consequently, none of these modifications would substantially increase runoff.

Since the Proposed Project would not substantially increase the amount of impervious surfaces, it would not create a substantial amount of additional runoff water. Therefore, the Proposed Project would not require or result in the construction of a new or expansion of an existing storm drainage facility, and no impact would occur.

**d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed: *NO IMPACT*.**

Operation and maintenance of the Proposed Project would not require the use of water. The primary use of water during construction of the Proposed Project would be for dust suppression on access roads. Such water would be trucked in from off-site. A small amount of water would also be available during construction for fire suppression. Workers would bring in drinking water from off-site. Water used during the construction period would be available from existing sources and would not require local water providers to obtain additional water entitlements. The amount of water required for construction of the Proposed Project would be negligible and no new or expanded water entitlements would be needed. Accordingly, the Proposed Project would have no impact associated with water supplies.

**e) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments: *NO IMPACT*.**

As described in d), the primary use of water during construction of the Proposed Project would be for dust suppression on access roads. Disposal would not be required because the water used during dust suppression activities would be minimal and would evaporate or be absorbed into the ground. In addition, construction crews would use portable toilets, generating relatively small volumes of wastewater for a limited time. Sanitation waste would be disposed of according to sanitation waste management practices. No other sources of wastewater are anticipated during the Proposed Project construction activities, and operation of the Proposed Project would not require the use of water. The negligible amount of water used during construction would not affect the wastewater treatment facilities' abilities to serve the Proposed Project's projected demand in addition to the provider's existing commitments; therefore, no impact on wastewater treatment capacity would occur.

**f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs: *LESS THAN SIGNIFICANT IMPACT*.**

Operation of the Proposed Project would not generate solid waste and would therefore not affect existing landfill capacities. Construction of the Proposed Project would generate various waste materials, largely in the form of utility line cables, scrap metal from the replacement of existing towers and substation modifications, soil and vegetation.

The Proposed Project would require the removal and disposal of approximately 36 existing 115 kV lattice steel towers and associated hardware (i.e., insulators, vibration dampeners, suspension clamps, ground wire clamps, shackles, links, nuts, bolts, washers, cotter pins, insulator weights, and bond wires), approximately 154 existing single circuit poles, and the top section of the approximately 17 wood poles to be topped. Existing wood poles to be removed and the 15 wood poles used for temporary shoo-fly connections would either be reused, or if demand does not exist for these poles, they would be disposed of in an appropriate landfill with sufficient capacity to accept the material. Depending on how the poles were initially treated, they may need to be disposed of in a Class I hazardous waste facility, or in the lined portion of a Regional Water Quality Control Board (RWQCB) certified municipal landfill. Other miscellaneous non-hazardous construction materials that cannot be reused or recycled would be disposed of at municipal county landfills, such as the Monterey Regional Waste Management Landfill, and the Johnson Canyon Sanitary Landfill in Monterey County, as well as the John Smith Road Class III Landfill in San Benito County. Any hazardous material would be recycled, treated and/or disposed of in accordance with federal and local laws (see Section 3.7, *Hazards and Hazardous Materials,* for additional information).

Soil and vegetative matter from excavations and land-clearing for new tower foundations and poles would be screened and separated for use as backfill material at the project sites to the maximum extent possible. Soils and vegetative matter unsuitable for backfill use would be disposed of at appropriate disposal sites.

Each of the Monterey County and San Benito County landfills have remaining permitted capacity, as indicated in Table 3.16-1. Because the majority of waste resulting from the removal of lattice steel towers and wood poles would be salvageable, and because the local landfills would have sufficient capacity to accept the remaining construction waste, the Proposed Project would be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs; impacts would be less than significant.

**g) Comply with federal, state, and local statutes and regulations related to solid waste: *NO IMPACT*.**

As discussed above, the Proposed Project would generate some waste during construction and no waste during operations and maintenance. Construction waste would include disposal of a limited amount of material that could not be recycled or reused. The construction waste generated would be minimal and PG&E would dispose of the waste in an appropriate landfill. As discussed above, landfills within the study area have sufficient capacity to accept anticipated project waste.

As discussed previously, the San Benito County Code has established an ordinance requiring that at least 50 percent of construction and demolition debris be diverted from landfills. The Monterey County Code also regulates solid waste collection and disposal but has not set specific performance goals for construction and demolition debris. PG&E would reduce its construction material and treated wood pole waste through the measures described above in f), consistent with Monterey County and San Benito County recycling and reduction policies.

Therefore, the Proposed Project would comply with federal, State and local requirements governing solid waste and no impact associated with such compliance would occur.

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# References

California Integrated Waste Management Board (CIWMB), 2009a. *California Waste Stream Profiles: Facilities.* http://www.ciwmb.ca.gov/Profiles/Facility/Landfill/Default.asp, accessed June 30, 2009.

California Integrated Waste Management Board (CIWMB), 2009b. *Countywide, Regionwide, and Statewide Jurisdiction Diversion Progress Report, Consolidated Waste Management Authority.* http://www.ciwmb.ca.gov/LGTools/mars/jurdrsta.asp, accessed June 30, 2009.

Monterey County, 2010. *Code of Ordinances, Chapter 10.41, Solid Waste Collection and Disposal*. http://search.municode.com/html/16111/index.html, accessed March 11, 2010.

San Benito County, 2010. *Code of Ordinances, Section 15.01.046, Building Permits; Diversion Plans*. http://www.amlegal.com/library/ca/sanbenitoco.shtml, accessed March 11, 2010.

San Benito County Water District (SBCWD), 2010. Website (http://www.sbcwd.com/), accessed February 17, 2010.

Sunnyslope County Water District, 2010. Website (http://www.sscwd.org/index.html), accessed February 17, 2010.

# 3.17 Mandatory Findings of Significance

| *Issues (and Supporting Information Sources):* | | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporation* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|---|
| **17. MANDATORY FINDINGS OF SIGNIFICANCE** | | | | | |
| a) | Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☒ | ☐ | ☐ |
| b) | Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | ☐ | ☐ | ☒ | ☐ |
| c) | Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☒ | ☐ | ☐ |

## 3.17.1 Mandatory Findings of Significance Discussion

**a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory: *LESS THAN SIGNIFICANT WITH MITIGATION.***

The Proposed Project has the potential to degrade the quality of the environment or eliminate important examples of the major periods of California history or prehistory. The Proposed Project does not have the potential to substantially reduce the habitat of a fish or wildlife species, reduce the number or restrict the range of a rare or endangered plant or animal, or cause a fish or wildlife population to drop below self-sustaining levels or threaten to eliminate a plant or animal community. As discussed in the *Aesthetics*, *Biological Resources*, *Cultural Resources*, *Hazards and Hazardous Materials, Hydrology and Water Quality*, *Noise, and Transportation and Traffic* sections of this IS/MND, the Proposed Project would result in potentially significant impacts (predominantly temporary impacts as a result of construction of the Proposed Project) that would have the potential to degrade the quality of the environment. However, adoption and implementation of mitigation measures would reduce these individual impacts to levels that would be less than significant.

As described in *Aesthetics*, the Proposed Project could adversely affect nighttime views. Implementation of mitigation measures would reduce these impacts to less than significant levels.

As described in *Biological Resources*, the Proposed Project would have the potential to adversely affect: species identified as a candidate, sensitive, or special-status species; sensitive habitats, including federally protected wetlands; and could conflict with local policies or ordinances protecting biological resources. Implementation of mitigation measures would reduce these impacts to less than significant levels.

As described in *Cultural Resources*, the Proposed Project could cause a substantial adverse change in the significance of a unique archaeological resource or disturb human remains and, thereby, would have the potential to eliminate important examples of the major periods of California history or pre-history. However, implementation of mitigation measures would reduce such impacts to less than significant levels. Additionally, there would be no direct impacts to known cultural resources during construction of the Proposed Project.

As described in *Hazards and Hazardous Materials*, the Proposed Project has the potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing school; and could result in a safety hazard for people residing or working in the project area. Implementation of mitigation measures would reduce these impacts to less than significant levels.

As described in *Hydrology and Water Quality*, the Proposed Project could violate water quality standards or waste discharge requirements and could substantially alter the existing drainage pattern of a site or area in a manner that would result in substantial erosion or siltation on- or off-site or a substantial increase in the rate or amount of surface runoff. Implementation of mitigation measures would reduce these impacts to less than significant levels.

As described in *Noise*, the Proposed Project could result in exposure of persons to, or generation of, noise levels in excess of standards established in an applicable general plan or noise ordinance and in a substantial temporary or periodic increase in ambient noise levels. Implementation of mitigation measures would reduce these impacts to less than significant levels.

As described in *Transportation and Traffic*, the Proposed Project could conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, result in inadequate emergency access, or conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities or otherwise decrease the performance or safety of such facilities. Implementation of mitigation measures would reduce these impacts to less than significant levels.

### b) Have impacts that are individually limited, but cumulatively considerable: ***LESS THAN SIGNIFICANT IMPACT.***

The Proposed Project does not have impacts that are individually limited but cumulatively considerable. CEQA Guidelines Section 15130 requires a discussion of the cumulative impacts of

a project when the project's incremental contribution to a significant cumulative effect is "cumulatively considerable," meaning that the project's incremental effects are considerable when viewed in connection with the effects of past, current, and probable future projects. An incremental, project-specific contribution to a cumulative impact is less than cumulatively considerable, and thus is not significant, if, for example, the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The cumulative impacts discussion does not need to provide as much detail as is provided in the analysis of project-only impacts and should be guided by the standards of practicality and reasonableness.

CEQA Guidelines Section 15130(b) identifies the following three elements as necessary for an adequate cumulative analysis:

- A list of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the Lead Agency; or a summary of projections contained in an adopted General Plan or related planning document designed to evaluate regional or area-wide conditions.

- A summary of expected environmental effects to be produced by those projects. The summary shall include specific reference to additional information stating where that information is available.

- A reasonable analysis of the cumulative impacts of the relevant projects, and an examination of reasonable options for mitigating or avoiding any significant cumulative effects of a proposed project.

San Benito County, Monterey County, City of Hollister, and the California Department of Transportation (Caltrans) were contacted for information on projects within their respective jurisdictions. **Table 3.17-1** and **Figure 3.17-1** provide details and geographic locations of these projects that comprise the cumulative project scenario.

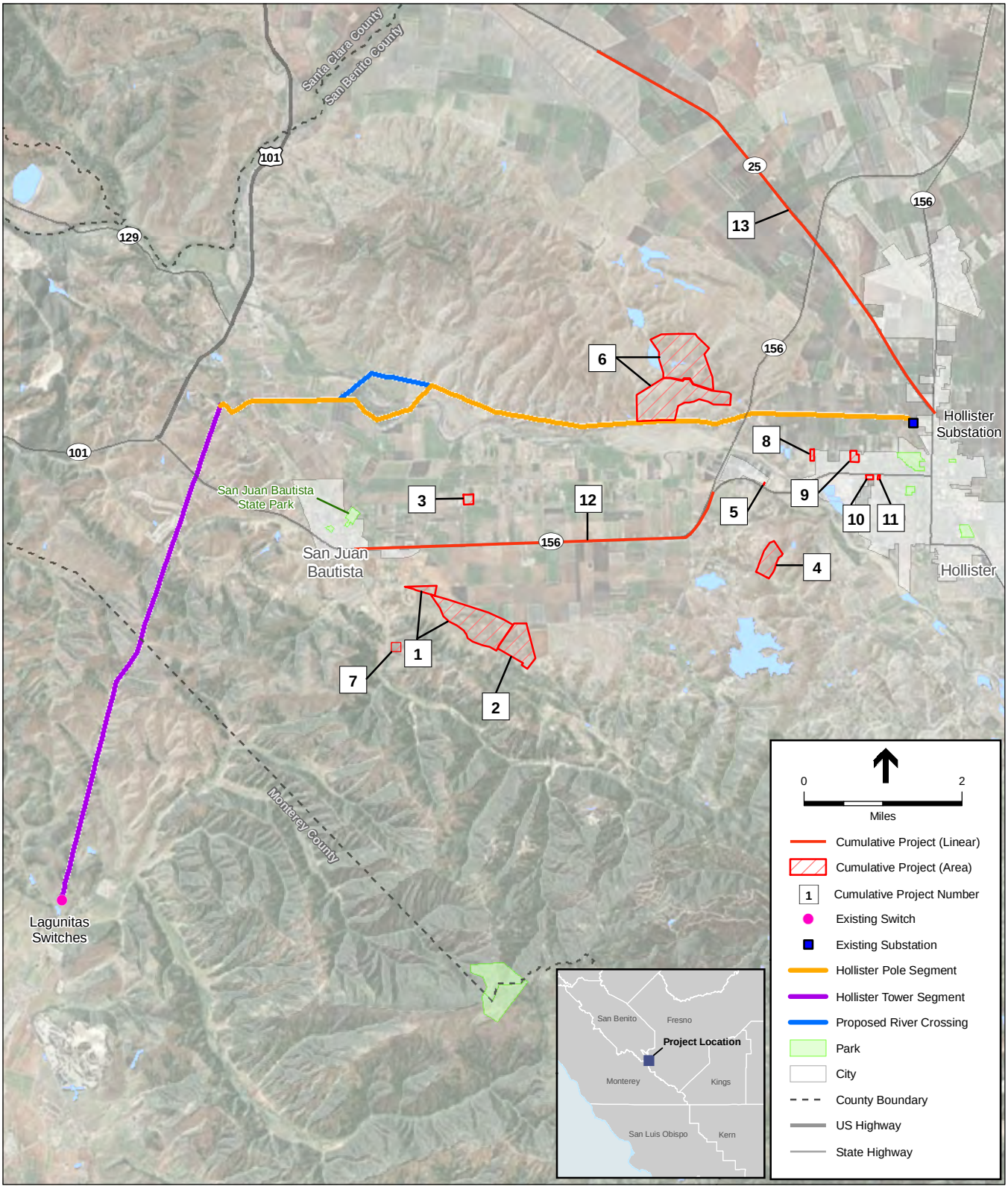
The projects identified above are considered reasonably likely to be constructed and/or operated during a similar timeframe as the Proposed Project. Since the impacts related to construction of the Proposed Project would be temporary and localized, the potential to combine with similar impacts of other projects would only occur if construction activities were occurring at the same time and in close proximity to the Proposed Project. In the event that the cumulative projects are constructed at the same time and in close proximity to the Proposed Project, there would be a potential for short-term construction-related cumulative impacts to occur. However, either there is no existing significant cumulative impact to which the Proposed Project's incremental, temporary, construction-related impacts could contribute, or such incremental impacts would not be cumulatively considerable. Resource-specific analysis of possible construction-related cumulative impacts is included below by resource area.

Operation of the Proposed Project would not result in the potential for any individually significant impact, and any less than significant operational impacts of the Proposed Project would not be cumulatively considerable.

**TABLE 3.17-1**
**CUMULATIVE SCENARIO FOR THE HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT**

| Map ID | APN(s) or Project Name | Description | Address / Location | Agency / Organization | Details | Status / Timeline | Distance from Proposed Project |
|---|---|---|---|---|---|---|---|
| 1 | 018-200-026<br>018-200-045 | Major Subdivision | 555 Mission Vineyard Road | San Benito County | Subdivide parcels into five lots. | Under review; likely to be approved or denied by the end of 2010. | ~2.75 miles south of the Existing River Crossing |
| 2 | Windhaven Ranch (018-200-036) | Use Permit | 547 Mission Vineyard Road | San Benito County | Use permit for multi-use event center (parties, weddings, etc.) | Under review; likely to be approved or denied by the end of 2010. | ~3.25 miles south of Hollister Pole Segment |
| 3 | 018-130-016 | Use Permit | 525 Lucy Brown Lane | San Benito County | Use permit for greenhouse and grading. | Under review; likely to be approved or denied by the end of 2010. | ~1.5 miles south of the Hollister Pole Segment |
| 4 | 021-070-001 | Major Subdivision and Zone Change | 2324 Union Road | San Benito County | Major subdivision of parcel into nine lots and zone change. | Under review; likely to be approved or denied by the end of 2010. | ~2 miles south of the Hollister Pole Segment |
| 5 | 021-010-010 | Manufacturing District Review | 2490 San Juan Hollister Road | San Benito County | Manufacturing district review for a truck parking and maintenance facility. | Approved | ~1 mile south of the Hollister Pole Segment |
| 6 | Lario Oil and Gas (018-040-003) | Use Permit | Buena Vista Road | San Benito County | Use permit for gas well exploration. | Approved. | Immediately adjacent to the Hollister Pole Segment |
| 7 | MS 1217-08 | Minor Subdivision | 1000 San Juan Canyon Road | San Benito County | Minor subdivision, four lots | Application submitted | ~3.0 miles south of Hollister Pole Segment |
| 8 | Hillview Subdivision | Subdivision | Buena Vista Road near Ranchito Drive | City of Hollister | Subdivide parcel into 25 lots for affordable single family homes. | Final map approved but construction has not commenced. | ~0.5 mile south of Hollister Pole Segment |
| 9 | KT Orchard Park | Subdivision | Buena Vista Road near Miller Road | City of Hollister | Subdivide parcel into 91 small lots for residential development. | Allocation granted but tentative map has not been submitted. | ~0.5 mile south of Hollister Pole Segment |
| 10 | Thorning | Subdivision | San Juan Hollister Road | City of Hollister | Subdivide parcel to allow for development of 74 units including row houses and mixed use apartments. | Applied for allocation. | ~1 mile south of Hollister Pole Segment |
| 11 | Westside Apartments | Subdivision | San Juan Hollister Road | City of Hollister | Subdivide parcel into 11 lots for affordable rentals. | Final map approved but construction has not commenced. | ~1 mile south of Hollister Pole Segment |
| 12 | San Benito Route 156 Improvement Project | Road Improvement | State Route 156 (San Benito County) | Caltrans | Widen State Route 156 in San Benito County from two to four lanes from The Alameda in San Juan Bautista to the Hollister Bypass. | Construction anticipated in 2014. | ~1 mile south of Hollister Pole Segment at its closest point |
| 13 | Hollister to Gilroy State Route 25 Widening | Road Widening | State Route 25 (San Benito County) | Caltrans | Widen 11.2 miles of Route 25 from a two-lane highway to a four-lane expressway, starting at San Felipe Road in Hollister and ending at Highway 101 in Santa Clara County. | Under environmental review with publication of final environmental document anticipated in fall 2010. A portion of the project near Hollister may be constructed within the next few years. | ~0.5 miles north of the Hollister Substation and Hollister Pole Segment |

Sources: Caltrans, 2008 and 2010; San Benito County, 2010; Monterey County, 2010; and City of Hollister, 2010




PG&E, 2010; ESRI, 2010; Microsoft Virtual Earth, 2010
City of Hollister, 2010; San Benito County, 2010; Caltrans, 2010

Hollister 115 kV Power Line Reconductoring Project . 207584.03

**Figure 3.17-1**
Cumulative Projects

### Aesthetics

The geographic scope of the cumulative impacts to visual quality is the viewsheds that could be affected by the Proposed Project from public roadways, trails, and open space areas. As discussed in Section 3.1, *Aesthetics*, Mitigation Measure 3.1-1 would ensure that the Proposed Project would not result in significant individual effects on visual resources. The projects described in Table 3.17-1 include numerous development projects in eastern Monterey County that could alter the visual character of areas within the project vicinity. Many of these projects would have the potential to create new visual impacts within the viewsheds that could be affected by the Proposed Project from public roadways, trails, open space, and residential areas. However, the projects would generally be located in urbanized, developed areas and would therefore not be likely to affect the area's visual character. Additionally, future development within the project vicinity is guided by the applicable city and county General Plans, and associated planning and environmental documents. Furthermore, new development would be subject to the applicable city and county design review process.

As discussed Section 2, *Project Description*, the Proposed Project would replace existing electrical infrastructure along the majority of the alignment. It would add new electrical infrastructure only along the 1.3-mile Proposed River Crossing. At the river crossing, the new infrastructure would influence the overall visual setting of the project area. The Proposed Project would contribute to cumulative adverse influences where aboveground facilities or evidence of underground facilities (e.g., cleared ROWs) occupy the same field of view as other built facilities or impacted landscapes that are currently in the viewsheds of sensitive viewers in the project area. Existing utility infrastructure (described in the impact analysis above), including transmission lines and substations, have compromised the existing visual setting in the project vicinity. The Proposed Project, along with the past, present, and reasonably foreseeable projects, would not create a cumulatively significant effect because it would not dominate the landscape setting.

When considered with the existing visual setting and the past, present, and reasonably foreseeable projects in the project area, the Proposed Project's contribution would not be cumulatively considerable because it would not significantly alter existing scenic quality or viewsheds.

### Agriculture and Forestry Resources

The geographical context of cumulative impacts to agricultural resources includes important Farmland within San Benito County and Monterey County. Both of these counties have experienced reductions in important Farmland since 2004. In 2006, the total acreage of Farmland in San Benito County was 68,600 acres, which equates to a 2,963 acre reduction in Farmland between 2004 and 2006 (see Table 3.2-1). Monterey County had 236,142 acres of important Farmland in 2006, down from 240,394 acres in 2004.

The Proposed Project would temporarily disturb approximately 106 acres of agricultural land, approximately 21 of which is classified as Farmland. Less than 0.01 acre of Farmland would be disturbed permanently. As a number of the projects included in Table 3.17-1 are not yet in the environmental planning stage, the acreage of Farmland that could be converted by these projects is not known. However, in general, the acreage of Farmland in San Benito County and Monterey

County is expected to decline. Since the Proposed Project's incremental impact to Farmland would be less than 0.01 acre, it can be assumed that it would not have a cumulatively considerable contribution to the decline in Farmland throughout San Benito County and/or Monterey County and impacts would be less than cumulatively considerable.

### Air Quality and Greenhouse Gas Emissions

The geographic scope of cumulative air quality impacts would be generally limited to the North Central Coast Air Basin (NCCAB), which is designated as non-attainment for the State one- and eight-hour ozone standards as well as the State PM10 standard. As described in Section 3.3, *Air Quality and Greenhouse Gas Emissions*, Pursuant to Monterey Bay Unified Air Pollution Control District (MBUAPCD) policy, projects that would be inconsistent with the applicable Air Quality Management Plan (AQMP) or induce population growth beyond that estimated in current population projections would be considered to have a significant cumulative impact with regards to criteria air pollutant emissions. The Proposed Project would not induce population growth; it would allow PG&E to serve current and projected demand in the area. Construction activities under the Proposed Project could contribute to increases in ozone and particulate matter levels through emissions of ozone precursors, specifically NOx, and fugitive dust.

When considered in combination with other construction projects including those described in Table 3.17-1, the cumulative emissions could impede the NCCAB's ability to achieve attainment of State ozone and PM10 standards. However, the Proposed Project's incremental contribution to daily ozone and PM10 levels would be less than significant and implementation of APMs AIR-1 and AIR-2 would ensure that the Project's contribution to PM10 levels from fugitive dust and NOx levels from tailpipe emissions would be less than significant (see Section 3.3, *Air Quality and Greenhouse Gas Emissions*). Therefore, the incremental impact of the Proposed Project relating to criteria air pollutant emissions would not be cumulatively considerable.

As discussed under items f) and g) in Section 3.3, *Air Quality and Greenhouse Gas Emissions*, the significance of greenhouse gas (GHG) emissions is determined based on whether such emissions would have a cumulatively considerable impact on global climate change. The Proposed Project's amortized construction emissions would be considerably less than 1,100 metric tons $CO_2e$ per year and would not conflict with the State's GHG reduction goals. Therefore, Project-specific incremental impacts would not be cumulatively considerable.

### Biological Resources

Biological impacts resulting from Proposed Project implementation are localized around individual utility towers and poles, and are comprised primarily of ground-disturbance during construction and maintenance activities. These project-level impacts are less than significant following mitigation. Nonetheless, the Proposed Project would make incremental, less-than-significant project-specific contributions to cumulative impacts, if any, on the following biological resources: The Proposed Project would result in a project-wide loss of 1 to 3 acres of upland habitat, 0.001 acre of wetland habitat, some native trees, and the potential loss of special-status individuals.

Cumulative projects in the area include seven housing subdivisions, two road-widening projects, a potential truck parking and maintenance facility, and several use permit project, including a gas well exploration project in the hills north of the project area (see Table 3.17-1). Impacts on biological resources related to potential road widening from two lanes to four lanes over a distance of about 16 miles would result in an estimated loss of 49 acres of land, mostly in agricultural areas. Subdivision requests ranging from four to 91 lots (a total of 219 lots) would require more than 100 acres of land, assuming a conservative average lot size of 0.5 acre; some of these subdivisions are proposed in undeveloped foothill grasslands and could result in a large area of habitat conversion, depending on the number of lots constructed and the nature and extent of roadway and other infrastructure necessary to serve them. Indirect impacts on habitats and species also could result from the attraction of additional people and domestic pets to the area. Gas well exploration would result in the establishment of access roads and ground disturbance over an area approximately 640 acres in size among foothill grasslands. The cumulative impact of these projects on upland habitat, wetland habitat, native trees and special-status species is not significant in percentage terms relative to remaining resources, to the extent that such resources can be assessed using publicly available digital and satellite imagery (e.g., Google Earth). However, even if there were an existing cumulative impact, the incremental contribution of the Proposed Project would not be cumulatively considerable.

### Cultural Resources

There is no significant cumulative impact to which the Proposed Project could contribute. Cumulative projects within five miles of the project area include seven housing subdivisions, two road-widening projects, a potential truck parking and maintenance facility, and several Use Permits projects, including a permit for gas well exploration in the hills north of the project area. While these other projects may have impacts to cultural resources, these projects would be required to go through the CEQA process, including an assessment of impacts to cultural resources. Mitigation measures similar to the ones for the Proposed Project presented in Section 3.5, *Cultural Resources*, would also be implemented. Potential impacts to cultural resources resulting from the Proposed Project would be localized around individual utility towers and poles, and limited primarily to ground-disturbance during construction. These project-level impacts are less than significant with mitigation incorporated and would not be cumulatively considerable.

### Geology, Soils, and Seismicity

Impacts on geology and soils are generally localized and do not result in regionally cumulative impacts. Geologic conditions can vary significantly over short distances creating entirely different effects elsewhere. Other future development would be constructed to the then-current standards, which could potentially exceed those of existing improvements within the region, which reduces the potential impacts to the public.

The impact of the Proposed Project on geology, soils, and seismicity would be localized (i.e., would not affect the immediate vicinity surrounding the project area) and incrementally less than significant. The projects identified in Table 3.17-1 are not adjacent to the Proposed Project, with the exception of a use permit for gas and well exploration adjacent to the Hollister Pole Segment in the Flint Hills. The possible well exploration project and the Proposed Project both would be

constructed in accordance with the most recent version of the California Building Code seismic safety requirements and recommendations contained in the respective project specific geotechnical reports. Therefore, the potential for a cumulative impact is unlikely. In sum, the less-than-significant incremental Proposed Project-specific impacts on geology, soils and seismicity would not be cumulatively considerable.

### Hazards and Hazardous Materials

As indicated in the Environmental Setting discussion (see Section 3.7, *Hazards and Hazardous Materials*, there is no existing contamination or other inherently cumulative hazards in the immediate vicinity of the Proposed Project area; therefore, there is no existing significant cumulative impact on hazards or hazardous materials to which the Proposed Project could contribute. Further, construction activities associated with the Proposed Project would increase the hazard potential in the study area by a less than significant amount, and operation of the Proposed Project would have no impact. This incremental, Proposed Project-specific impact would not be cumulatively considerable when analyzed together with the impacts of other past, present, and reasonably foreseeable future projects, which would presumably be similar to those of the Proposed Project.

### Hydrology and Water Quality

The geographic context for the cumulative impacts associated with hydrology and water quality is the Salinas and Pajaro River watersheds downstream of the projects identified in Table 3.17-1, as well and the Gilroy-Hollister Valley and Salinas Valley groundwater basins.

The Proposed Project, along with the projects identified in Table 3.17-1, would be required to comply with applicable federal, State, and local water quality regulations. The Proposed Project, along with other projects involving similar general construction activities, would be required to obtain coverage under the General Permit, Section 401 (of the Clean Water Act) water quality certification, and/or Waste Discharge Requirements (WDRs). Storm water management measures would be required to be identified and implemented that would effectively control erosion and sedimentation and other construction related pollutants during construction. Other management measures, such as construction of infiltration/detention basins, would be required to be identified and implemented that would effectively treat pollutants that would be expected for the post-construction land use for certain projects. Construction and operational related stormwater runoff from the Proposed Project would be controlled by the requirements of a National Pollution Discharge Elimination System (NPDES) permit (e.g., General Permit), WDR measures, and mitigation measures required as part of this IS/MND. Other new development in the area would also be required to control construction and operational stormwater by implementing federal, State, and local requirements regarding hydrology and water quality, as well as by requirements introduced through CEQA review where applicable. The imposition of such requirements would minimize any potential cumulative impact. In any event, the incremental impact of the Proposed Project, in combination with the projects identified in Table 3.17-1, would not be cumulatively considerable.

### Land Use and Planning

The geographic scope for cumulative impacts associated with land use issues would include the cities and unincorporated areas of northwestern San Benito County and northeastern Monterey County. However, given that the Proposed Project would have no impacts with respect to land use, there would be no cumulative impact associated with land use and planning.

### Mineral Resources

The geographic scope for cumulative impacts associated with the availability of mineral resources is the Monterey Bay Production-Consumption Region, a study area designated by the California Geological Survey to establish and quantify aggregate supply and demand. The Proposed Project would have a less than significant impact on the availability of mineral resources in the project area because it would not result in the loss of or otherwise permanently hinder access to mineral resources. The other projects identified in Table 3.17-1 would have no impact on mineral or aggregate resources, because they are not located on land zoned as an important mineral resource. Thus, the Proposed Project's impact on mineral resource availability would not be cumulatively considerable.

### Noise

Noise levels tend to lessen quickly with distance from a source; therefore, the geographic scope for cumulative impacts associated with noise would be limited to projects within one mile of the Proposed Project. Construction of the Proposed Project would result in a potentially significant impact associated with construction equipment; however, this impact would be reduced to less than significant with mitigation. Operation and maintenance activities would not result in permanent increases to existing noise levels in the study area and impacts would be less than significant.

As identified in Table 3.17-1, there are a number of projects located within one mile of the Proposed Project that are reasonably foreseeable and would have the potential to be constructed simultaneously with the Proposed Project. If construction of these projects were to occur simultaneously with construction of the Proposed Project, the potential for impacts to nearby sensitive receptors from construction noise would increase. However, as discussed in Section 3.11, *Noise*, with implementation of APM NOI-1 and NOI-2 as well as Mitigation Measures 3.11-1, 3.11-2, and 3.11-3, the Proposed Project's incremental contribution to noise levels in the study area from construction activities would be less than significant. Other projects constructed simultaneously with the Proposed Project would be subject to applicable noise standards as well, thereby reducing their own incremental contribution during construction. Therefore, when considered in combination with cumulative development, the Proposed Project's incremental contribution to temporary noise impacts from construction, with proposed mitigation, would not be cumulatively considerable.

The main noise source from operation of the Proposed Project would be corona discharge. Given that all but 1.3 miles of the Proposed Project would be located within existing PG&E ROW where a power line currently exists, and the 1.3 miles of new ROW would not be located near any sensitive receptors, it can be assumed that the Proposed Project would not substantially increase noise levels near sensitive receptors. Furthermore, maintenance activities would include

infrequent inspection of the lines, which currently takes place and therefore would not constitute a new noise source. Overall, operation and maintenance of the Proposed Project would result in little to no incremental change in noise levels in the study area and would have a less than significant contribution to increases in ambient noise levels.

### Population and Housing

The geographic context for the cumulative impacts associated with population and housing issues are the cities and unincorporated communities of San Benito and Monterey Counties, which assumes full build-out of the Proposed Project, in combination with build-out of the projects listed in Table 3.17-1.

Both San Benito County and Monterey County are expected to undergo population growth over the next few decades. As described in Section 3.12, *Population and Housing*, by 2030, the population of San Benito County is expected increase over 56 percent from 2005 levels to 89,431 persons while the population of Monterey County is expected to increase nearly 22 percent from 2005 levels to 515,549 persons. The projects listed in Table 3.17-1 include numerous subdivisions for single- and multi-family residences, which would have a direct impact on population growth in the study area, and other projects, which could have an indirect impact. The Proposed Project would have no direct impact on population growth and would result in a less than significant indirect impact. Because the Proposed Project's construction crews would not be expected to relocate into the study area to construct the Proposed Project, any incremental indirect impacts on population growth associated with the Proposed Project's labor force would not be cumulatively considerable. Additionally, the cumulative projects, as well as other future development, would be subject to the applicable city and/or county planning process, as well as environmental review on a project-by-project basis. As such, build-out of the projects listed in Table 3.17-1 would not be likely to result in the inducement of substantial direct or indirect population growth in the area beyond what is planned. Accordingly, the Proposed Project's less than significant incremental impact on indirect population growth associated with the extension of infrastructure would not be cumulatively considerable.

### Public Services

The geographic scope of this impact is the service area of affected public services, generally limited to the area within northeastern Monterey County and northwestern San Benito County. During construction, the Proposed Project would have an individually less than significant effect on public services including police and fire protection as well as schools and other public facilities. The projects identified in Table 3.17-1 include a number of residential projects that may increase demand for public services in the study area. Furthermore, construction activities associated with reasonably foreseeable projects may overlap with construction activities associated with the Proposed Project, which could result in substantial temporary increases in demand for public services. However, given that the Proposed Project's less-than-significant incremental impacts to public services would be limited to the 15-month construction period, the Proposed Project would not make a cumulatively considerable contribution to any cumulative effect on public services that would require the construction of new or physical alteration of existing government facilities to

maintain acceptable service ratios. The Proposed Project's contribution to cumulative impacts on public services would not be cumulatively considerable.

### Recreation

The geographic scope of this impact is the regional recreation facilities in the study area, generally located within northwestern San Benito County and northeastern Monterey County. As described in Section 3.14, *Recreation*, the Proposed Project would have no impact on the environment from construction or expansion of additional recreational facilities, and so would not contribute to cumulative impacts there from.

With regard to potential increased use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated, impacts from the Proposed Project, if any, would be limited to the 15-month construction period and would not be significant. The projects identified in Table 3.17-1 include several development projects in San Benito County and the City of Hollister that could increase the demand on existing park and recreation facilities and/or result in the need for new facilities within the project vicinity by increasing the population in the study area. The Proposed Project would have no incremental demand on existing recreational facilities once construction is complete. During the construction phase, the Proposed Project's less than significant impact on park and recreation facilities would not be cumulatively considerable.

### Transportation and Traffic

Proposed Project construction activities, as described in Section 1, *Project Description*, could have a temporary construction-related impact on local traffic flow in the Proposed Project area as street and lane closures may be required. The geographic context for the cumulative impacts associated with transportation and traffic issues is limited to the areas where transportation facilities (e.g., roads, railroads, etc.) would be crossed during conductor stringing activities. In conjunction with other construction projects identified in Table 3.17-1, potential cumulative impacts could occur. For example, two Caltrans widening projects (i.e., State Route 156 Widening Project and the Highway 25 Widening Project) are proposed in the study area. These projects are in the general geographic area of the Proposed Project, but the Proposed Project would not cross these roads in the immediate vicinity of the road widening projects.

Implementation of Mitigation Measure 3.15-1 (see Section 3.15, *Transportation and Traffic*) would ensure that the Proposed Project's contribution to any transportation and traffic-related cumulative impacts during construction would not be cumulatively considerable.

### Utilities and Service Systems

The geographic scope of utilities and service system-related impacts is the service area of affected utilities and service systems, which generally is limited to the area within northeastern Monterey County and northwestern San Benito County. Construction of the Proposed Project would generate solid waste; however, the Proposed Project would be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs and impacts would be less than significant. Operation of the residential projects identified in

Table 3.17-1 would result in long-term increases in solid waste generation. However, given that the Proposed Project's demand for landfill services would be limited to the construction period which would be completed prior to implementation of most of the planned residential projects, the Proposed Project would have a less than cumulatively considerable contribution related to any landfill-related cumulative impact.

The Proposed Project would have a temporary less-than-significant impact with regard to contacting or disturbing underground utility lines during construction activities. Construction of many of the projects identified in Table 3.17-1 appears likely to involve subsurface work that could result in contact with or disturbance of underground utility lines or facilities. Additionally, the Lario Oil and Gas Project would likely involve subsurface drilling for gas well exploration, and would have the potential to contact underground utility lines. However, other projects involving ground-disturbing activities also would be required to notify the Underground Service Alert, thereby reducing their individual chances of contacting underground utility lines. Therefore, there is no existing significant cumulative impact relating to contact with or disturbance of underground utility lines during construction and, in any event, the Proposed Project's incremental less-than-significant impact on such lines or facilities would not be cumulatively considerable.

**c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly: *LESS THAN SIGNIFICANT WITH MITIGATION.***

The Proposed Project has the potential to have environmental effects that could cause substantial direct or indirect adverse effects on human beings; however, the implementation of mitigation measures would reduce such impacts to less-than-significant levels. As analyzed in the context of criterion a), the Proposed Project's impacts relating to *Hazards and Hazardous Materials*, *Noise*, *and Transportation and Traffic* could cause adverse effects on human beings. However, implementation of the mitigation measures identified in the respective sections of this IS/MND would reduce or avoid such impacts on human beings to a less than significant level.

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# SECTION 5

# Mitigation Monitoring, Reporting and Compliance Program

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PUBLIC UTILITIES COMMISSION
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# MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM

## PG&E HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT (A.09-11-016)

## INTRODUCTION

This document describes the mitigation monitoring, reporting and compliance program (MMRCP) for ensuring the effective implementation of the mitigation measures required for the California Public Utilities Commission (CPUC, or Commission) approval of the Pacific Gas and Electric (PG&E) application to construct, operate, and maintain the Proposed Project. All mitigations are presented in Table 5-1 provided at the end of this MMRCP.

If the Proposed Project is approved, this MMRCP would serve as a self-contained general reference for the Mitigation Monitoring Program adopted by the Commission for the project. If and when the Proposed Project has been approved by the Commission, the CPUC will compile the Final Plan from the Mitigation Monitoring Program in the Final MND, as adopted.

### California Public Utilities Commission – MMRCP Authority

The California Public Utilities Code in numerous places confers authority upon the CPUC to regulate the terms of service and the safety, practices, and equipment of utilities subject to its jurisdiction. It is the standard practice of the CPUC, pursuant to its statutory responsibility to protect the environment, to require that mitigation measures stipulated as conditions of approval are implemented properly, monitored, and reported on. In 1989, this requirement was codified statewide as Section 21081.6 of the Public Resources Code. Section 21081.6 requires a public agency to adopt a reporting or monitoring program when it adopts a mitigated negative declaration for a project that could have potentially significant environmental effects. California Environmental Quality Act (CEQA) Guidelines Section 15097 was added in 1999 to further clarify agency requirements for mitigation monitoring and reporting.

The purpose of a MMRCP is to ensure that measures adopted to mitigate or avoid significant impacts of a project are implemented. The CPUC views the MMRCP as a working guide to facilitate not only

the implementation and compliance of mitigation measures by the project proponent, but also to facilitate the monitoring and reporting activities of the CPUC and any monitors it may designate.

The Commission will address its responsibility under Public Resources Code Section 21081.6 when it takes action on PG&E's application. If the Commission approves the application, it will also adopt a Mitigation Monitoring, Compliance, and Reporting Program that includes the mitigation measures ultimately made a condition of approval by the Commission.

Because the CPUC must decide whether or not to approve the PG&E application and because the application may cause either direct or reasonably foreseeable indirect effects on the environment, CEQA requires the CPUC to consider the potential environmental impacts that could occur as the result of its decision and to consider mitigation for any identified significant environmental impacts.

If the CPUC approves PG&E's application for a permit to construct and operate the power line and modify its substation, PG&E would be responsible for implementation of any mitigation measures governing both construction and future operation of the power line and substation. Though other federal, State, and local agencies would have permit and approval authority over some aspects of construction of the power line, the CPUC would continue to act as the lead agency for monitoring compliance with all mitigation measures required by the adopted IS/MND. All approvals and permits obtained by PG&E would be submitted to the CPUC for mitigation compliance prior to commencing the activity for which the permits and approvals were obtained.

In accordance with CEQA, the CPUC reviewed the impacts that would result from approval of the application. The activities considered include the reconductoring on two segments, the Hollister Tower and Hollister Pole Segments, of an existing 115 kV overhead electric power line system; relocation of an approximately 1.3-mile segment of the 115 kV Hollister No. 1 line out of the San Benito River floodplain; and minor modifications to the Hollister Substation. The CPUC review concluded that implementation of the Proposed Project would not result in any significant unmitigable impacts. All potential impacts would be mitigated to less than significant levels or would be less than significant. PG&E has agreed to incorporate all the CPUC-recommended mitigation measures into the Proposed Project. The CPUC has included the stipulated mitigation measures as conditions of approval of the application and has circulated an IS/MND for public review.

The attached IS/MND presents and analyzes potential environmental impacts that would result from construction, operation, and maintenance of the reconductored power line and substation modifications, and recommends mitigation measures, as appropriate. Based on the IS/MND, approval of the application would have no impact or less than significant impacts in the following areas:

- Agricultural and Forestry Resources
- Air Quality and Greenhouse Gas Emissions
- Geology, Soils, and Seismicity
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems

The IS/MND indicates that approval of the application would result in less than significant impacts with mitigation in the areas of:

- Aesthetics
- Biological Resources
- Cultural Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Transportation and Traffic

## Roles and Responsibilities

As the lead agency under CEQA, the CPUC is required to monitor this project to ensure that the required mitigation measures and any Applicant Proposed Measures are implemented. The CPUC will be responsible for ensuring full compliance with the provisions of this MMRCP and has primary responsibility for implementation of the monitoring program. The purpose of the monitoring program is to document that the mitigation measures required by the CPUC are implemented and that mitigated environmental impacts are reduced to the level identified in the Program. The CPUC has the authority to halt any activity associated with the proposed project if the activity is determined to be a deviation from the approved project or the adopted mitigation measures.

The CPUC may delegate duties and responsibilities for monitoring to other mitigation monitors or consultants as deemed necessary. The CPUC will ensure that the person(s) delegated any duties or responsibilities are qualified to monitor compliance.

The CPUC, along with its mitigation monitor, will ensure that any variance process, which will be designed specifically for the Proposed Project, or deviation from the procedures identified under the monitoring program is consistent with CEQA requirements; no project variance will be approved by the CPUC if it creates new significant environmental impacts. As defined in this MMRCP, a variance should be strictly limited to minor project changes that will not trigger other permit requirements, that does not increase the severity of an impact or create a new impact, and that clearly and strictly complies with the intent of the mitigation measure. A change to the Proposed Project that has the potential for creating significant environmental effects will be evaluated to determine whether supplemental CEQA review is required. Any proposed deviation from the approved project and adopted mitigation measures, including correction of such deviation, shall be reported immediately to the CPUC and the mitigation monitor assigned to the construction for their review and CPUC approval. In some cases, a variance may also require approval by a CEQA responsible agency.

## Enforcement and Responsibility

The CPUC is responsible for enforcing the procedures for monitoring through the environmental monitor. The environmental monitor shall note problems with monitoring, notify appropriate agencies or individuals about any problems, and report the problems to the CPUC. The CPUC has the authority to halt any construction, operation, or maintenance activity associated with the project if the activity is determined to be a deviation from the approved project or adopted mitigation measures. The CPUC may assign its authority to its environmental monitor.

## Mitigation Compliance Responsibility

PG&E is responsible for successfully implementing all the adopted mitigation measures in this MMRCP. The MMRCP contains criteria that define whether mitigation is successful. Standards for successful mitigation also are implicit in many mitigation measures that include such requirements as obtaining permits or avoiding a specific impact entirely. Additional mitigation success thresholds will be established by applicable agencies with jurisdiction through the permit process and through the review and approval of specific plans for the implementation of mitigation measures.

PG&E shall inform the CPUC and its mitigation monitor in writing of any mitigation measures that are not or cannot be successfully implemented. The CPUC in coordination with its mitigation monitor will assess whether alternative mitigation is appropriate and specify to PG&E the subsequent actions required.

### *Dispute Resolution Process*

This MMRCP is expected to reduce or eliminate many of the potential disputes concerning the implementation of the adopted measures. However, in the event that a dispute occurs, the following procedure will be observed:

- **Step 1.** Disputes and complaints (including those of the public) should be directed first to the CPUC's designated Project Manager for resolution. The Project Manager will attempt to resolve the dispute.

- **Step 2.** Should this informal process fail, the CPUC Project Manager may initiate enforcement or compliance action to address deviations from the Proposed Project or adopted Mitigation Monitoring, Reporting and Compliance Program.

- **Step 3**. If a dispute or complaint regarding the implementation or evaluation of the MMRCP or the mitigation measures cannot be resolved informally or through enforcement or compliance action by the CPUC, any affected participant in the dispute or complaint may file a written "notice of dispute" with the CPUC's Executive Director. This notice should be filed in order to resolve the dispute in a timely manner, with copies concurrently served on other affected participants. Within 10 days of receipt, the Executive Director or designee(s) shall meet or confer with the filer and other affected participants for purposes of resolving the dispute. The Executive Director shall issue an Executive Resolution describing his/her decision, and serve it on the filer and other affected participants.

- **Step 4.** If one or more of the affected parties is not satisfied with the decision as described in the Resolution, such party(ies) may appeal it to the Commission via a procedure to be specified by the Commission.

Parties may also seek review by the Commission through existing procedures specified in the Commission's Rules of Practice and Procedure for formal and expedited relief.

## General Monitoring Procedures

### *Mitigation Monitor*

Many of the monitoring procedures will be conducted during the construction phase of the project. The CPUC and the mitigation monitor are responsible for integrating the mitigation monitoring procedures into the construction process in coordination with PG&E. To oversee the monitoring procedures and to ensure success, the mitigation monitor assigned to the construction must be on site during that portion of construction that has the potential to create a significant environmental impact or other impact for which mitigation is required. The mitigation monitor is responsible for ensuring that all procedures specified in the monitoring and reporting program are followed.

### *Construction Personnel*

A key feature contributing to the success of mitigation monitoring will be obtaining the full cooperation of construction personnel and supervisors. Many of the mitigation measures require action on the part of the construction supervisors or crews for successful implementation. To ensure success, the following actions, detailed in specific mitigation measures included in the MMRCP, will be taken:

- PG&E shall require all contractors to comply with the conditions of project approval, including all applicable mitigation measures.
- One or more pre-construction meetings will be held to inform all and train construction personnel about the requirements of the MMRCP.
- A written summary of mitigation monitoring procedures will be provided to construction supervisors for all mitigation measures requiring their attention.

### *General Reporting Procedures*

Site visits and specified monitoring procedures performed by other individuals will be reported to the mitigation monitor assigned to the construction. A monitoring record form will be submitted to the mitigation monitor by the individual conducting the visit or procedure so that details of the visit can be recorded and progress tracked by the mitigation monitor. A checklist will be developed and maintained by the mitigation monitor to track all procedures required for each mitigation measure and to ensure that the timing specified for the procedures is adhered to. The mitigation monitor will note any problems that may occur and take appropriate action to rectify the problems. PG&E shall provide the CPUC with written quarterly reports of the project, which shall include progress of construction, resulting impacts, mitigation implemented, and all other noteworthy elements of the project. Quarterly reports shall be required as long as mitigation measures are applicable.

### *Public Access to Records*

The public is allowed access to records and reports used to track the monitoring program. Monitoring records and reports will be made available for public inspection by the CPUC on request. The CPUC and PG&E will develop a filing and tracking system.

### *Condition Effectiveness Review*

In order to fulfill its statutory mandates to mitigate or avoid significant effects on the environment and to design a MMRCP to ensure compliance during project implementation (CEQA 21081.6):

- The CPUC may conduct a comprehensive review of conditions which are not effectively mitigating impacts at any time it deems appropriate, including as a result of the Dispute Resolution procedure outlined above; and

- If in either review, the CPUC determines that any conditions are not adequately mitigating significant environmental impacts caused by the project, or that recent proven technological advances could provide more effective mitigation, then the CPUC may impose additional reasonable conditions to effectively mitigate these impacts.

These reviews will be conducted in a manner consistent with the CPUC's rules and practices.

## Mitigation Monitoring, Reporting and Compliance Program

The table attached to this program presents a compilation of the mitigation measures in the IS/MND. The purpose of the table is to provide a single comprehensive list of impacts, mitigation measures, monitoring and reporting requirements, and timing.

PG&E proposed the following Applicant Proposed Measures (APMs) to minimize impacts to the environment from implementation of the Proposed Project. The impact analysis in this IS/MND assumed that these APMs would be implemented as part of the Proposed Project.

**APM AES-1: Limit construction hours to daylight hours as feasible.** Construction activities that are visible to the public and scheduled to occur after 6:00 p.m. or on weekends should not continue past daylight hours (which vary according to season) unless required because of project safety concerns or clearance requirements. This will reduce the amount of construction activities visible to viewer groups because most construction activities will occur during business hours (when most viewer groups are likely at work), and daylight construction will eliminate the need to introduce high-wattage lighting sources to be able to operate in the dark.

**APM AG-1: Compensate for reduced agricultural production and loss of use.** PG&E will offer appropriate compensation for land held in private ownership as part of the acquisition of temporary construction easements or permanent utility easements. PG&E will compensate property owners for removal of any structures, crops, or agriculture-related improvements required to construct the project. PG&E will negotiate easements with private landowners for the temporary or permanent use of agricultural areas. Upon completion of the project, the areas will be left as specified in the individual agreements. In addition, PG&E will prepare a SWPPP (see APM HYDRO 1 [Prepare and implement a Storm Water Pollution Prevention Plan] in Section 2.8, *Hydrology and Water Quality*) to ensure that areas affected by construction are restored to pre-construction conditions.

**APM AIR-1: Implement Monterey Bay Unified Air Pollution Control District (MBUAPCD) mitigation measures for construction fugitive dust.** PG&E will implement all applicable and feasible fugitive dust control measures required by MBUAPCD. This requirement will be incorporated into the construction contract. These measures include:

- Water all active construction sites at least twice daily. Frequency of watering should be based on the type of operation, soil, and wind exposure.
- Prohibit all grading activities during periods of high wind (over 15 mph).
- Haul trucks will maintain at least 2'0" of freeboard.
- On-site vehicles will be limited to a speed on unpaved roads that minimizes dust emissions.
- Cover all trucks hauling dirt, sand, or loose materials.
- Cover inactive storage piles.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- Sweep streets if visible soil material is carried out from the construction site.
- Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person will respond and take corrective action within 48 hours. The phone number of the MBUAPCD also will be visible to ensure compliance with Rule 402 (Nuisance).
- Limit the area under construction at any one time as feasible.

**APM AIR-2: Implement BMPs to reduce construction tailpipe emissions.** PG&E will implement all applicable and feasible measures to reduce tailpipe emissions from diesel-powered construction equipment. This requirement will be incorporated into the construction contract. These measures include:

- Maximize use of diesel construction equipment meeting CARB's 1996 or newer certification standard for off-road heavy-duty diesel engines.
- Use emission control devices at least as effective as the original factory-installed equipment.
- Maintain all diesel-powered equipment in a manner to minimize visible soot emissions.
- Locate stationary diesel-powered equipment and haul truck staging areas as far as practicable from sensitive receptors.
- Minimize unnecessary idling time through application of a "common sense" approach to vehicle use, so that idling is reduced as far as possible below the maximum of 5 consecutive minutes required by California law—if a vehicle is not required immediately or continuously for construction activities, its engines will be shut off. Construction foremen will include briefings to crews on vehicle use as part of pre-construction conferences. Those briefings will include discussion of a "common sense" approach to vehicle use.
- Use ground equipment in place of helicopters where practicable.

**APM AIR-3: Minimize greenhouse gas emissions during construction.** PG&E or its contractors will implement the following measures during construction to reduce greenhouse gas emissions:

- Encourage construction workers carpooling to the job site to the extent feasible.
- Encourage recycling of construction waste where feasible.
- Minimize welding and cutting by using compression of mechanical applications where practical and within standards.
- Encourage use of natural gas-powered vehicles for passenger cars and light-duty trucks where feasible and available.
- Minimize construction equipment exhaust by using low-emission or electric construction equipment where feasible.

**APM BIO-1: Conduct an environmental training and monitoring program for construction crews before beginning construction.** An Environmental Training and Monitoring Program for construction crews will be conducted before beginning construction and will be ongoing during construction activities for new crew members. The education program will include information about the federal and state Endangered Species Acts, the consequences for noncompliance with environmental laws, identification of special-status plant and wildlife species and wetland habitats, and review of mitigation measures. (Also see APM HYDRO-2 [Develop and implement a Spill Prevention Control and Countermeasure Plan], which requires communicating environmental concerns and appropriate work practices, including spill prevention, emergency response measures, and applicable BMPs, to all construction personnel in an Environmental Training and Monitoring Program.)

**APM BIO-2: Restrict vehicles to established roadways and approved access routes and staging areas.**

**APM BIO-3: Retain an environmental monitor onsite during construction activities near sensitive habitat.** An environmental monitor will be onsite during any construction activity near sensitive habitat to ensure implementation of, and compliance with, APMs. The monitor will have authority to stop construction activities and develop alternative work practices, in consultation with construction personnel and resources agencies, if construction activities are likely to impact special-status species or other sensitive biological resources.

**APM BIO-4: Set back staging areas from waterbodies to avoid impacts on riparian habitat.** Staging areas will be set back at least 50 feet from streams, creeks, or other water bodies to avoid impacts on riparian habitat.

**APM BIO-5: Contact the environmental monitor if special-status species are located.** If construction personnel observe special-status species within the work area prior to, or during construction activities, construction personnel will contact the environmental monitor. The monitor will notify PG&E contacts via an established communication protocol that will be developed prior to the start of construction. The USFWS Biological Opinion will state agency notification protocols should a federally-listed species be observed within the work area.

**APM BIO-6: Complete photodocumentation of sensitive habitat conditions before beginning and immediately after completing construction activities.** Photodocumentation of preconstruction habitat conditions will occur at all construction locations within sensitive habitats prior to the start of construction and immediately after completing construction activities.

**APM BIO-7: Prohibit trash, firearms, and pets in the project area during construction.** Additional APMs (identified below) to avoid and minimize specific potential impacts to biological resources will be implemented as necessary to reduce potentially significant impacts. In some cases, conducting preconstruction surveys to determine the presence or absence of special-status plant and wildlife species within the project area and subsequent avoidance of identified resources will avoid significant impacts. Due to the extent of the project, however, specific project components—such as grading new access roads and digging new tower footings—will affect areas where the presence of special-status species is presumed based on occurrence of suitable habitat, CNDDB occurrences in relation to the project area, or results of prior biological resource assessment surveys.

**APM BIO-8: Restore upland and riparian habitat types temporarily disturbed during construction.** Following construction, PG&E will restore upland and riparian habitat types temporarily disturbed during construction. As part of a Habitat Mitigation Plan (HMP) developed for the project, a list of specific actions necessary to restore habitats disturbed onsite will be prepared by a qualified biologist prior to construction. While some habitats in the project area may require minimal restoration actions, such as restoration of the topography and topsoil following construction, the HMP will detail the specific measures necessary for each habitat and area disturbed to ensure that the functions and values of the disturbed habitat are restored.

**APM BIO-9: Implement sudden oak death preventative measures when trimming or removing oak trees.** PG&E will implement BMPs to control the potential introduction or spread of sudden oak death when trimming or removing trees as part of the project. At a minimum, the BMPs will include the following measures:

- All debris from host species (wood, branches, and chips) shall be left onsite following trimming.
- All tools used to perform the work shall be disinfected before leaving infested areas.

**APM BIO-10: Avoid impacts to protected trees, track protected trees removed during construction, and mitigate for impacts to protected trees.**

- PG&E will avoid impacts to protected trees to the extent feasible. If avoidance is not feasible, PG&E will track the trees removed, including their species and size, and will replace protected trees as stipulated in applicable local regulations. To avoid removal of active nests, tree trimming, vegetation removal, and removal of towers should be conducted during the non-breeding season (August 16–March 1).

**APM BIO-11: Implement general protection measures for waters of the United States.** During construction, PG&E will implement the following measures to minimize or avoid impacts on waters of the United States:

- Establish exclusion zones and minimize the amount of area disturbed to the minimum amount necessary to complete the work. Align work areas to avoid wetland areas and margins as much as feasible.

- Delineate wetland areas, and restrict construction personnel and equipment from entering fenced protected areas.

- Conduct all fueling of vehicles, equipment, and helicopters at least 100 feet from wetlands and other waterbodies.

- To the extent feasible, complete road construction adjacent or within waters of the United States during the dry season. If it is not feasible to complete road construction work during the dry season, PG&E will use appropriate erosion control measures for the site that will be identified in the SWPPP (see APM HYDRO-1 in Section 4.8).

**APM BIO-12: Develop a wetlands mitigation plan.** PG&E will develop a wetlands mitigation plan to offset effects to waters of the United States, including wetlands. The plan will be developed in consultation with the Corps and will include, at a minimum, plans for restoration of any temporarily disturbed wetlands and other waters of the United States and methods to achieve mitigation for permanent impacts at a minimum ratio of 1:1. Mitigation may include onsite restoration and improvement of existing wetlands or other offsite compensation.

**APM BIO-13: Complete spring surveys for special-status plants in all unsurveyed disturbance areas.** Prior to construction, a qualified botanist will complete spring surveys for special-status plants at all unsurveyed staging areas, helicopter landing areas, and new access roads to determine the presence or absence of special-status plants. The surveys should be completed by qualified botanists and should be conducted during the appropriate period(s) necessary to observe special-status plants known to occur in the region.

**APM BIO-14: Avoid impacts on special-status plants.** PG&E will, under the direction of a qualified botanist and to the extent possible, adjust the location of staging areas, pull sites, helicopter landing areas, access roads, and other project components to completely avoid impacts on Pajaro manzanita and other special-status plants that are discovered prior to or during construction. If this avoidance measure is not feasible, PG&E will implement APM BIO-15 (Minimize impacts on special-status plants) and APM BIO-16 (Restore habitat for special status plants disturbed during construction).

**APM BIO-15: Minimize impacts on special-status plants.** Avoidance areas will be clearly staked and flagged in the field by a qualified botanist prior to construction. If Pajaro manzanita and other special-status plants cannot be avoided during construction, PG&E will minimize impacts by reducing the work area to the smallest area necessary to complete the work. Where temporary disturbance is necessary, PG&E will conduct project activities and necessary ground disturbance in a manner that is consistent with the successful reestablishment of the species to the extent feasible. The specific actions necessary will depend on the biology of the species in question; however, the actions will be designed to ensure successful reestablishment of the species following temporary disturbance. As part of an HMP, a list of specific actions will be prepared by a qualified botanist prior to construction that will include onsite restoration actions, or reseeding plans specific to any impacted construction areas (described below in APM BIO-16).

To minimize impacts to Pajaro manzanita, which is already known to occur in the project area, PG&E will implement the following measures:

- Vegetation clearing in occupied Pajaro manzanita habitat should be conducted after Pajaro manzanita has set seed and before flowering begins (typically between May and November).

- If mechanical brushing is conducted in occupied Pajaro manzanita habitat, mastication implements should not come within 6 inches of the ground surface to avoid disturbing the seed bank.

- Where feasible, removal of entire Pajaro manzanita plants from the ground should be avoided.

The Environmental Training and Monitoring Program (see APM BIO-1) will also include information on the location of special-status plants in the project area and the measures that will be implemented to avoid or minimize impacts on the plants.

**APM BIO-16: Restore habitat for special-status plants disturbed during construction.** If impacts on special status plants are unavoidable, PG&E will develop a special-status plant restoration plan as part of the HMP and in consultation with CDFG. The specific actions necessary will depend on the biology of the species in question and the type of impact (i.e., temporary or permanent); however, the actions will be designed to ensure successful reestablishment of the species following disturbance. The plan will be prepared by a qualified botanist prior to construction and will indicate when and where the actions will be implemented during construction.

**APM BIO-17: Implement management practices to control the introduction and spread of invasive plants.** Prior to construction, PG&E will identify the location of noxious weed species of concern within areas that will be disturbed as part of the project. Appropriate management practices will be designed by a botanist and implemented during construction to reduce the likelihood of spreading already established weeds into new areas or increasing their abundance, and of introducing new weed species to the project area. Actions to prevent noxious weed establishment will be described within the HMP and will be consistent with PG&E's draft Invasive Plant Management Strategy. The project SWPPP will include BMPs such as using construction equipment that has been cleaned of soil and plant parts, including seeds, before entering the project area and using weed-free straw for erosion control. Disturbed areas will be revegetated with appropriate locally based native seed mixes. Implementing the management practices described above will reduce potentially significant impacts related to non-native invasive plants to a less-than-significant level.

**APM BIO-18: Implement avoidance and mitigation measures outlined in the USFWS biological opinion for California red-legged frog and California tiger salamander.** USFWS will specify avoidance and mitigation measures to minimize impacts to California red-legged frogs and California tiger salamanders in the biological opinion they will draft for the project. PG&E will follow and implement the measures that are outlined in the biological opinion.

**APM BIO-19: Compensate for permanent impacts on California red-legged frog and California tiger salamander upland habitat.** It was determined that the project would result in permanent impacts to suitable upland habitat for California red-legged frogs and California tiger salamanders. To compensate for anticipated permanent impacts to suitable upland habitat

for California red-legged frogs and California tiger salamanders, PG&E may preserve additional upland habitat within a USFWS-approved conservation area; specific actions will be determined in coordination with USFWS. The ratio of compensation, specific mitigation acreages, and location of the conservation area will be determined through formal consultation with USFWS.

**APM BIO-20: Conduct tree trimming, vegetation removal, and, if possible, tower removal during the non-breeding season.** To avoid removal of active nests, tree trimming, vegetation removal, and removal of towers should be conducted during the non-breeding season (August 16–March 1). If this is not possible, APM BIO-21 will be implemented.

**APM BIO-21: Conduct preconstruction surveys for nesting migratory birds and raptors, and develop an Avian Protection Plan.** Construction activities are anticipated to occur mainly during the nesting season for migratory birds and raptors (generally early February through early August) (Avian Power Line Interaction Committee and USFWS, 2005). PG&E will retain a qualified wildlife biologist to conduct preconstruction surveys for nesting birds, for all construction activities that occur within or near suitable breeding habitat. The surveys will be staggered so that they are conducted no more than 1 week prior to the start of construction activities in any one area. Surveys will include the power line route, staging areas, pull sites, and areas of access road improvements where ground disturbance or vegetation clearing is required, at a frequency and timing appropriate for nest detection. If no active nests are detected, no additional mitigation measures are required.

PG&E will develop a project-specific Avian Protection Plan that will outline protection measures for nesting migratory birds and raptors, in the event that nesting migratory birds or raptors are identified in areas where construction activities will occur during preconstruction surveys.

**APM BIO-22: Avoid disturbance of active nests by helicopter use.** Use of helicopters will be restricted to necessary trips to install and remove towers and poles, install power lines, and deliver and remove equipment to areas lacking vehicle access. Helicopter flight paths will be designed to minimize impacts to nests, and buffers of active nests may be greater than those stated above to avoid helicopter disturbance of active nests identified in preconstruction surveys of the project sites. If active nests occur under planned helicopter flight paths, especially those near landing areas, coordination with CDFG will be required to determine whether modification of the flight path is necessary to avoid disturbance of active nests.

**APM BIO-23: Conduct preconstruction surveys for active burrowing owl burrows.** CDFG (1995) recommends that preconstruction surveys be conducted in suitable habitat in the project study area (Exhibit 1) and in a 250 foot-wide buffer zone around the construction site to locate active burrowing owl burrows. PG&E will retain a qualified biologist to conduct preconstruction surveys for active burrows according to the CDFG guidelines. The surveys will include a nesting season survey and a wintering season survey, which is the season immediately preceding construction. The surveys will cover all affected areas, including the power line route, staging areas, pull sites, and areas of access road improvements where ground disturbance is required. If no burrowing owls are detected, no further mitigation is required. If active burrowing owl burrows are detected, PG&E will implement APM BIO-24 (Implement CDFG guidelines for burrowing owl mitigation, if necessary).

**APM BIO-24: Implement CDFG (1995) guidelines for burrowing owl mitigation, if necessary.** Disturbance of occupied burrows will be avoided to the maximum extent feasible. Disturbance is generally defined as activities occurring with 250 feet of active burrowing owl nesting pairs during the breeding season (February 1 through August 31), or within 160 feet of occupied burrows in the non-breeding season (September 1–January 31).

During the non-breeding season, if direct impacts to an occupied burrow are unavoidable, passive relocation techniques may be considered after all other alternatives have been exhausted. Relocation may involve installing one-way doors at occupied burrow entrances and ensuring that alternative suitable burrows are available. Any relocation effort will be implemented in coordination with CDFG and in accordance with standard burrowing owl guidelines. Any burrowing owl exclusion process will be coordinated by a biologist with prior burrowing owl relocation experience.

PG&E will support site-specific mitigation measures for any burrowing owls with potential to be impacted by construction activities. Measures may include onsite burrow enhancement or artificial burrow installation, in coordination with CDFG. In the event that a site-specific burrowing owl relocation is implemented, PG&E will consult with CDFG regarding suitable replacement of foraging and burrow habitat.

**APM BIO-25: Implement avoidance and mitigation measures outlined in the USFWS biological opinion for San Joaquin kit fox.** USFWS will specify avoidance and mitigation measures to minimize impacts on San Joaquin kit foxes in the biological opinion they will draft for the project. PG&E will follow and implement the measures outlined in the biological opinion.

**APM CR-1: Implement construction monitoring.** An archaeologist that meets the Secretary of the Interior's Standards and Guidelines for professional archaeologists will monitor ground-disturbing activities in areas that were documented as having high archaeological sensitivity on Figures 2a through 2d of the Historic Properties Inventory Report (ICF 2010). The monitor will be empowered to temporarily halt construction in the immediate vicinity of a discovery while it is evaluated for significance. With the archaeologist's approval, work may continue on other portions of the site. If the discovery proves to be significant, additional measures will be implemented; these may include avoidance, capping beneath a layer of sterile soil, or data recovery through archaeological excavation (PRC 21083).

**APM CR-2: Stop work if previously unknown cultural resources are discovered.** If buried cultural resources such as chipped or ground stone, historic debris, or building foundations are inadvertently discovered during site preparation or construction activities, work will stop in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with PG&E and other appropriate agencies. With the archaeologist's approval, work may continue on other portions of the site. PG&E will be responsible for ensuring that the archaeologist's recommendations for treatment are implemented.

**APM CR-3: Stop work if human remains are discovered.** If human remains are encountered during any phase of construction, work within a 100-foot radius of the remains will be suspended immediately and PG&E and/or their representative will immediately notify the respective county coroner, as required by state law (California Health and Safety Code 7050.5) and County Ordinance No. B6-18. If the remains are determined by the coroner to be Native

American, the Native American Heritage Commission (NAHC) will be notified within 24 hours, and the NAHC will in turn immediately notify the Most Likely Descendent, pursuant to Section 5097.98 of the Sate Resources Code. Upon notification, the MLD has 48 hours to make recommendations as to the treatment or disposition of the remains. PG&E or its appointed representative will implement any mitigation before the resumption of activities at the site where the remains were discovered.

**APM GEO-1: Perform Site-Specific Geologic Studies at Active Fault Crossings and Modify Siting/Design as Feasible to Reduce Damage.** For all pole or tower replacements proposed within a State-designated Earthquake Fault Zone or within 500 feet on either side of a fault considered likely to be active but not zoned by the State, PG&E will perform site-specific geologic investigations with the purpose of locating any active fault trace(s) and ensuring that project facilities are sited and designed to avoid and reduce damage due to surface fault rupture. Studies may include any appropriate combination of literature research, air photo evaluation, reconnaissance field survey, and/or subsurface investigation (fault trenching), based on the professional judgment of licensed supervising personnel (California Professional Geologist or Certified Engineering Geologist). Where significant potential for damage due to surface fault rupture is identified, facilities siting and design will be modified to the extent feasible to avoid or reduce damage.

**APM HAZ-1: Stop work if hazardous substances are encountered during construction.** 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, the materials will be handled, transported, and disposed of in accordance with federal, state, and local regulations.

**APM HAZ-2: Conduct groundwater sampling and testing if suspected contaminated groundwater is encountered during construction.** If suspected contaminated groundwater is encountered in the proposed project construction areas, samples will be collected and submitted for 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.

**APM HAZ-3: Develop and implement a Helicopter Lift Plan.** PG&E will require the helicopter vendor to prepare a Helicopter Lift Plan for approval by the FAA prior to any construction helicopter operations. Any specific transportation needs (e.g., temporary road closures) will be identified in the plan and will be coordinated with the appropriate jurisdictions.

**APM HAZ-4: Develop and implement a Fire Risk Management Plan.** PG&E follows a standard practice of developing and implementing a Fire Risk Management Plan that addresses fire-suppression equipment and procedures to be used during construction and training of construction and maintenance crews. Additionally, fire suppression equipment and materials 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. Information contained in the plan and the locations of fire-suppression materials and equipment will be included in the employee environmental training discussed in APM BIO-1.

**APM HYDRO-1: Prepare and Implement a Storm Water Pollution Prevention Plan.** PG&E or its contractor will prepare and implement a SWPPP to prevent construction-related erosion and sediments from entering nearby waterways. The SWPPP will include a list of BMPs to be implemented in areas with potential to drain to tributaries of the Salinas River in Monterey County or to the San Benito River in San Benito County. These BMPs will be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. BMPs to be implemented as part of the project-specific SWPPP may include, but are not limited to, the following control measures:

- Temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, grass buffer strips, high infiltration substrates, grassy swales, and temporary revegetation or other ground cover) will be employed to control erosion from disturbed areas.

- Drainage facilities in downstream offsite areas will be protected from sediment using BMPs consistent with CCRWQCB requirements.

- Vegetative cover will be established on the disturbed areas as soon as possible after disturbance.

**APM HYDRO-2: Develop and implement a Spill Prevention Control and Countermeasure Plan.** PG&E or its contractor will develop and implement an SPCCP to minimize the potential for, and effects of, spills of hazardous, toxic, or petroleum substances during all construction activities. The SPCCP will be completed and included in the SWPPP before any construction activities begin. PG&E will routinely inspect the construction areas to verify that the control measures specified in the SPCCP are properly implemented and maintained. PG&E will notify its contractors immediately if there is a noncompliance issue and will require compliance.

If an appreciable spill has occurred, a detailed analysis will be performed by a Registered Environmental Assessor to identify the likely cause of contamination. This analysis will conform to American Society for Testing and Materials (ASTM) standards and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, PG&E and its contractors will select and implement additional measures to control contamination, with a performance standard that groundwater quality and surface water quality must be returned to baseline conditions.

**APM HYDRO-3: Perform a drainage study and implement a drainage plan.** A drainage study will be performed for any area that crosses a waterway and requires a conveyance structure (culvert) for grading of new construction maintenance roads. The study will include calculations for the potential increases in stormwater runoff from related construction activities. The study also will identify critical drainage paths, and PG&E will implement drainage improvements to minimize the risk of flooding to downstream areas. The drainage plan will require that PG&E or its contractor will be responsible for proper maintenance of the drainages and any BMP associated with each drainage. Implementation of these measures will ensure that altered drainage patterns from project-related construction activities do not significantly affect erosion or sedimentation.

**APM NOI-1: Implement noise control measures.** PG&E will implement the following noise abatement measures during project construction to minimize the impact of temporary construction-related noise on nearby residences:

- Notify residents near future construction zones regarding the forecast schedule for nearby construction and provide project contact information.
- Comply with manufacturers' muffler requirements on all construction equipment engines.
- Turn off construction equipment when not in use, where applicable.
- Minimize equipment use.
- Use equipment fitted with factory-installed muffling devices during construction when readily available.
- Route truck traffic away from residential areas where feasible.

**APM NOI-2: Implement noise control measures for helicopter noise.** PG&E will implement the following BMPs during project construction to minimize the impact of temporary construction-related noise generated by helicopters:

- Notify residents near future construction zones and along helicopter flight paths regarding the schedule and reasons for upcoming construction and flight operations.
- Provide project contact information to facilitate response to noise complaints during the construction activity.
- To the extent feasible, plan helicopter flight paths between construction zones and the helicopter staging areas to avoid noise-sensitive receivers. Note: All flight operations including takeoff, landing, and flight paths must comply with FAA regulations and all applicable safety concerns.

**APM PUB-1: Maintain Secured Facilities during construction activities.** PG&E will implement the following measures during construction activities:

- All equipment will be locked and secured when left unattended at the most secure locations available;
- Contract security will be used at active pull/tension sites, laydown, and storage areas outside work hours;
- All open holes will be covered and secured once activity at that location stops (after hours);
- Anchor bolts on foundations without structures will be capped; and
- Safety structures will be placed at road crossings during overhead wire installation activity to protect traffic and pedestrians.

**APM REC-1: Avoid Disruption of Recreational Facilities along the Juan Bautista de Anza National Historic Trail during Peak Use.** PG&E will limit construction activities that occur in the immediate vicinity of the Juan Bautista de Anza National Historic Trail to weekdays or as otherwise permitted by the National Park Service. PG&E will ensure that the trail is fully accessible on the weekends, as well as any holidays observed by the National Park Service.

**APM PU-1: Conduct a pre-construction records search/field survey to identify specific locations of water wells and well fields.** To ensure minimal disturbance or alteration of water wells or well fields within the project alignment, PG&E will conduct a pre-construction records search and field survey to identify specific locations of water wells and well fields.

**APM PU-2: Notify Underground Service Alert at least two days prior to initiation of construction activities in the underground portion of the power line.** PG&E will ensure that Underground Service Alert is notified at least two days prior to initiation of construction activities of the underground portion of the power line. Underground Service Alert verifies and physically marks the location of all existing underground utilities in the area of anticipated construction activities to prevent accidental disturbance.

**TABLE 5-1**
**MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE PG&E HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this IS/MND | Implementing Actions | Monitoring/Reporting Requirements | Timing |
|---|---|---|---|---|
| Aesthetics | | | | |
| **Light and Glare** | **Mitigation Measure 3.1-1:** Reduce construction night lighting impacts. PG&E shall design and install all lighting at construction and storage yards and staging areas such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project facilities, vicinity, and nighttime sky is minimized. PG&E shall submit a *Construction Lighting Mitigation Plan* to the CPUC for review and approval at least 90 days prior to the start of construction or the ordering of any exterior lighting fixtures or components, whichever comes first. PG&E shall not install or operate any exterior lighting fixtures or lighting components for the Proposed Project until the *Construction Lighting Mitigation Plan* is approved by the CPUC. The Plan shall include but is not limited to the following measures:<br><br>• Lighting shall be designed so exterior lighting is hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources are shielded to prevent light trespass outside the project boundary.<br><br>• All lighting shall be of minimum necessary brightness consistent with worker safety. | PG&E and its contractors to implement measure as defined. | PG&E to submit Construction Lighting Mitigation Plan to CPUC for review.<br><br>CPUC mitigation monitor to inspect compliance. | Submit plan to CPUC at least 90 days prior to commencement of construction activities or the ordering of any exterior lighting fixtures or components, whichever comes first.<br><br>During all phases of construction activities. |
| Agriculture and Forestry Resources | | | | |
| No mitigation required. | | | | |
| Air Quality and Greenhouse Gas Emissions | | | | |
| No mitigation required. | | | | |

**TABLE 5-1 (continued)**
**MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE PG&E HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this IS/MND | Implementing Actions | Monitoring/Reporting Requirements | Timing |
|---|---|---|---|---|
| Biological Resources | | | | |
| **Special-Status Species: California tiger salamander and California red-legged frog** | **Mitigation Measure 3.4-1:** PG&E and/or its contractors shall implement the following measures for construction areas and maintenance areas located in suitable habitat:<br>• The project will avoid direct impacts to sensitive wetlands areas and minimize disturbances to wetland and riparian corridors, wherever possible. Ground disturbance and construction footprints shall be minimized to the greatest degree feasible.<br>• Work activities within or adjacent to suitable habitat will be completed between April 15 and October 31, when possible.<br>• If construction activities must occur during the wet season, the perimeter of pull sites, staging areas, landing zones, shoo-fly lines, and other active construction areas shall be fenced by October 15 with amphibian exclusion fencing.<br>• A qualified biological resource monitor will conduct worker awareness training for construction personnel, addressing the species' basic biology and identifying characteristics, legal status, job-specific protection measures, and penalties for non compliance.<br>• A preconstruction survey will be conducted each day by an onsite monitor immediately preceding construction activity that occurs within or adjacent to suitable habitat.<br>• Suitable habitat that is temporarily impacted by project-related activities will be restored to pre-project conditions.<br>• Temporary impacts to upland habitat will be compensated at a 0.5:1 ratio (i.e., restoration of temporarily disturbed areas, plus permanent conservation of an additional area at a 0.5:1 ratio) and permanent impacts to upland and aquatic habitat will be compensated at a 3:1 ratio or at ratios as | PG&E and its contractors to implement measure as defined. | PG&E to submit to the CPUC for review survey results and, if applicable, documentation showing CDFG consultation.<br><br>CPUC mitigation monitor to monitor compliance. | Submit documentation to CPUC prior to commencement of construction activities.<br><br>During all phases of construction activities. |

**TABLE 5-1 (continued)**
**MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE PG&E HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this IS/MND | Implementing Actions | Monitoring/Reporting Requirements | Timing |
|---|---|---|---|---|
| Biological Resources (cont.) | | | | |
| **Special-Status Species: California tiger salamander and California red-legged frog** (cont.) | prescribed by the U.S. Fish and Wildlife Service and California Department of Fish and Game. Compensation will be secured at an approved, off-site mitigation bank, with documentation provided to the resource agencies (i.e., U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and California Department of Fish and Game) at least 4 weeks before construction begins. | | | |
| **Special-Status Species: Western pond turtle** | **Mitigation Measure 3.4-2:** PG&E and/or its contractors shall implement the following measures for construction areas located in suitable habitat within 0.3 mile of aquatic features:<br>• Include western pond turtle in the Environmental Training and Monitoring Program.<br>• Before daily activities begin near areas of suitable habitat, the onsite monitor shall perform pond turtle surveys within suitable aquatic and upland habitat. Any pond turtles located within the construction area would be relocated to the nearest safe location.<br>• To minimize the likelihood of encountering turtles in upland areas near stream crossings, construction footprints shall be restricted to the smallest area possible. | PG&E and its contractors to implement measure as defined. | PG&E to survey daily and conduct relocation of turtle, if necessary.<br>CPUC mitigation monitor to monitor compliance. | During all phases of construction activities. |
| **Special-Status Species: American badger** | **Mitigation Measure 3.4-3:** PG&E and/or its contractors shall implement the following measures for construction areas located in grasslands that provide potential habitat for American badger:<br>• Include American badger in the Environmental Training and Monitoring Program.<br>• Preconstruction surveys shall be conducted within 200 feet of work areas to identify potential maternal badger dens or other refugia in and surrounding work areas. A qualified biologist shall conduct the survey 14 to 30 days before construction begins. If no evidence of badger presence is detected, no further mitigation is required. | PG&E and its contractors to implement measure as defined. | PG&E to submit to the CPUC for review survey results and, if applicable, documentation showing CDFG consultation.<br>CPUC mitigation monitor to monitor compliance. | Submit documentation to CPUC prior to commencement of construction activities. |

**TABLE 5-1 (continued)**
**MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE PG&E HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this IS/MND | Implementing Actions | Monitoring/Reporting Requirements | Timing |
|---|---|---|---|---|
| Biological Resources (cont.) | | | | |
| **Special-Status Species: American badger** (cont.) | • Suitable, as determined by the Environmental Monitor, vacated burrows that are located within the work area and that will not be destroyed by construction activities will be temporarily covered using plywood sheets or other similar material to prevent badgers from occupying the burrows within the work areas.<br>• If active, non-maternal dens are located, badgers will be passively relocated via installation of one-way doors.<br>• If active maternal dens are located, the den will be avoided during construction by establishment of a 100-foot buffer. Smaller buffers, if required for construction, would be established in coordination with CDFG. | | | |
| **Special-Status Species: San Joaquin kit fox** | **Mitigation Measure 3.4-4:** PG&E and/or its contractors shall implement the following San Joaquin kit fox protection measures for construction areas located in grasslands and agricultural lands that provide potential habitat for San Joaquin kit fox.<br>• Preconstruction surveys shall be conducted within 200 feet of work areas to identify potential San Joaquin kit fox dens or other refugia in and surrounding work areas. A qualified biologist shall conduct the survey 14 to 30 days before construction begins. All potential dens shall be monitored for evidence of kit fox use by placing an inert tracking medium at den entrances and monitoring for at least three consecutive nights. If no activity is detected at these sites, they may be closed following guidance established in the 1999 USFWS Standardized Recommendations for Protection of the San Joaquin Kit Fox.<br>• If kit fox occupancy is determined at a given site, den closure activities shall immediately be halted and the USFWS contacted. Depending on the den type, | PG&E and its contractors to implement measure as defined. | PG&E to submit to CPUC for review survey results and, if applicable, documentation showing USFWS consultation.<br>CPUC mitigation monitor to monitor compliance. | Submit documentation to CPUC prior to commencement of construction activities. |

**TABLE 5-1 (continued)**
**MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE PG&E HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this IS/MND | Implementing Actions | Monitoring/Reporting Requirements | Timing |
|---|---|---|---|---|
| Biological Resources (cont.) | | | | |
| **Special-Status Species: San Joaquin kit fox** (cont.) | reasonable and prudent measures to avoid effects to kit fox could include seasonal limitations on project construction at the site (i.e., restricting the construction period to avoid spring-summer pupping season), and/or establishing a construction exclusion zone around the identified site, or resurveying the den a week later to determine species presence or absence.<br><br>• To minimize the possibility of inadvertent kit fox mortality, project-related vehicles shall observe a maximum 20 miles per hour speed limit on private roads in kit fox habitat. Nighttime vehicle traffic shall be kept to a minimum on nonmaintained roads. Off-road traffic outside the designated project area shall be prohibited in areas of kit fox habitat.<br><br>• To prevent accidental entrapment of kit fox or other animals during construction, all excavated holes or trenches greater than two feet deep shall be covered at the end of each work day by suitable materials, or escape routes constructed of earthen materials or wooden planks shall be provided. Before filling, such holes shall be thoroughly inspected for trapped animals. All pipes, culverts, or similar structures with a diameter of 4 inches or greater must be capped at both ends while not in use, and otherwise inspected for kit fox presence prior to relocation or use.<br><br>• All food-related trash items (such as wrappers, cans, bottles, and food scraps) shall be disposed of in closed containers and removed daily from the project area.<br><br>• To prevent harassment and mortality of kit foxes or destruction of their dens, no pets shall be allowed in the project area.<br><br>• Suitable habitat that is temporarily impacted by project-related activities will be restored to pre-project conditions. | | | |

**TABLE 5-1 (continued)**
**MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE PG&E HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this IS/MND | Implementing Actions | Monitoring/Reporting Requirements | Timing |
|---|---|---|---|---|
| Biological Resources (cont.) | | | | |
| **Special-Status Species: San Joaquin kit fox** (cont.) | • Temporary impacts will be compensated at a minimum of 0.5:1 ratio (i.e., restoration of temporarily disturbed areas, plus permanent conservation of an additional area at a 0.5:1 ratio) and permanent impacts will be compensated at a minimum 3:1 ratio or at ratios as prescribed by the U.S. Fish and Wildlife Service and California Department of Fish and Game. Compensation will be implemented by participating in the San Joaquin Kit Fox Conservation Fund, which is administered via trust by the Center for Natural Lands Management. | | | |
| **Special-Status Species: Raptors and Nesting Birds** | **Mitigation Measure 3.4-5:** PG&E and/or its contractors shall implement the following measures for the protection of nesting birds and raptors:<br><br>• Project design, construction, and maintenance will conform with PG&E's corporate Avian Protection Plan and Avian Power Line Interaction Committee (APLIC) Guidelines.<br><br>• A project-specific Avian Protection Plan would be developed and would include routine ground surveys by a qualified avian biologist, ground surveys staggered over time in concert with project implementation, additional ground surveys by a qualified environmental monitor, species-specific buffers, and a minimum 1,000-foot helicopter buffer for active eagle nests.<br><br>• During the permitting process, the USFWS may identify the need for protocol surveys for least Bell's vireo.<br><br>• If active nests are not identified during the preconstruction survey, no further action is required for breeding birds.<br><br>• If active nests are identified during the preconstruction survey, the following measures, | PG&E and its contractors to implement measure as defined. | PG&E to submit to the CPUC for review documentation demonstrating conformance with APLIC Guidelines and, if applicable, documentation showing USFWS and CDFG consultation.<br><br>CPUC mitigation monitor to inspect compliance. | Submit documentation to CPUC prior to commencement of construction activities. |

**TABLE 5-1 (continued)**
**MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE PG&E HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this IS/MND | Implementing Actions | Monitoring/Reporting Requirements | Timing |
|---|---|---|---|---|
| Biological Resources (cont.) | | | | |
| **Special-Status Species: Raptors and Nesting Birds** (cont.) | which shall be included in the project-specific Avian Protection Plan, will be implemented to avoid and minimize impacts.<br>– For golden eagle, construction contractors shall observe CDFG avoidance guidelines, which stipulate a minimum 500-foot buffer zone around active golden eagle nests. Buffer zones of 50 feet for passerine birds and 250 feet for raptors other than golden eagles will be established or closer as needed with resources agency permission. Buffer zones shall remain until young have fledged.<br>– Monitoring of the nest by a qualified biologist may be required if the project-related activity has potential to adversely impact the nest.<br>– CDFG may, on a case-by-case basis, allow construction activities to continue even if raptors and passerine birds nest within the buffers of the work activities during the nesting season.<br>– For activities conducted with agency approval within a raptor-nesting buffer zone, a qualified biologist shall monitor construction activities and the nest(s) to monitor reactions to activities. If activities are deemed to have a negative effect on nesting raptors, the biologist shall immediately inform the construction manager that work should be halted, and CDFG will be consulted. While the USFWS issues limited take permits for golden eagle, this species and certain other raptors are fully-protected under California law.<br>– Following construction, PG&E will comply with the PG&E company-wide Avian Protection Plan. | | | |

**TABLE 5-1 (continued)**
**MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE PG&E HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this IS/MND | Implementing Actions | Monitoring/Reporting Requirements | Timing |
|---|---|---|---|---|
| Biological Resources (cont.) | | | | |
| **Riparian and Upland Habitat** | **Mitigation Measure 3.4-6:** PG&E and/or its contractors shall implement the following measures for the protection and restoration of riparian and upland habitat:<br>• PG&E shall complete a Habitat Management Plan to be approved by the resource agencies at least 4 weeks prior to construction in potential restoration areas.<br>• The Habitat Management Plan will include, at a minimum, quantifiable success criteria, contingency provisions, and follow-up monitoring responsibilities and schedules.<br>• Affected riparian and upland habitat shall be restored to pre-project conditions. | PG&E and its contractors to implement measure as defined. | PG&E to submit Habitat Management Plan to CPUC and resource agencies for review.<br>CPUC mitigation monitor to inspect compliance. | Submit plan to CPUC at least 4 weeks prior to construction in potential restoration areas. |
| **Native Trees** | **Mitigation Measure 3.4-7:** PG&E and/or its contractors shall implement the following additional measures for the protection and restoration of impacted native trees:<br>• The record of protected trees removed during construction and the associated plans for native tree replacement will be included in the Habitat Management Plan required under Mitigation Measure 3.4-6, above.<br>• For replacement trees, the Habitat Management Plan shall include, at a minimum, quantifiable success criteria, contingency provisions, and follow-up monitoring responsibilities and schedules. | PG&E and its contractors to implement measure as defined. | PG&E to submit Habitat Management Plan to CPUC and resource agencies for review.<br>CPUC mitigation monitor to inspect compliance. | Submit plan to CPUC at least 4 weeks prior to construction in potential restoration areas. |

**TABLE 5-1 (continued)**
**MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE PG&E HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this IS/MND | Implementing Actions | Monitoring/Reporting Requirements | Timing |
|---|---|---|---|---|
| Cultural Resources | | | | |
| **Paleontological Resources** | **Mitigation Measure 3.5-1:** Stop work if previously unknown paleontological resources are discovered. Prior to the start of any subsurface excavations (excluding pole and tower holes) that would extend into Pleistocene to Oligocene sedimentary rock units, all construction forepersons and field supervisors shall receive training by a qualified professional paleontologist, as defined by the SVP (1995), who is experienced in teaching non-specialists, to ensure they can recognize fossil materials and will follow proper notification procedures in the event any are uncovered during construction. Procedures to be conveyed to workers include halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who will evaluate its significance. Training on paleontological resources will also be provided to all other construction workers, but may involve using a videotape of the initial training and/or written materials rather than in-person training by a paleontologist. If a fossil is determined to be significant and avoidance is not feasible, the paleontologist will develop and implement an excavation and salvage plan in accordance with SVP standards (SVP, 1995; SVP, 1996). | PG&E and its contractors to implement measure as defined. | PG&E to suspend all work and contact CPUC if paleontological resources are discovered.<br><br>If resource is significant, submit excavation and salvage plan to CPUC.<br><br>CPUC mitigation monitor to monitor compliance. | During all phases of construction activities. |
| Geology, Soils, and Seismicity | | | | |
| No mitigation required. | | | | |
| Hazards and Hazardous Materials | | | | |
| **Hazardous Materials** | **Mitigation Measure 3.7-1:** PG&E and/or its contractors shall implement construction best management practices, including but not limited to, the following:<br><br>• Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction;<br><br>• Avoid overtopping construction equipment fuel gas tanks;<br><br>• Use tarps and adsorbent pads under vehicles when refueling to contain and capture any spilled fuel; | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to monitor compliance. | During all phases of construction activities. |

**TABLE 5-1 (continued)**
**MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE PG&E HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this IS/MND | Implementing Actions | Monitoring/Reporting Requirements | Timing |
|---|---|---|---|---|
| Hazards and Hazardous Materials (cont.) | | | | |
| **Hazardous Materials** (cont.) | • During routine maintenance of construction equipment, properly contain and remove grease and oils;<br>• Properly dispose of discarded containers of fuels and other chemicals; and<br>• If wood poles removed from the Hollister Pole Segment are not recycled or reused, they shall be disposed of at a landfill facility that is authorized to accept treated wood pole waste in accordance with HSC 25143.1.4(b). | | | |
| | **Mitigation Measure 3.7-2:** PG&E shall prepare a Hazardous Substance Control and Emergency Response Plan (Plan) and implement it during construction to ensure compliance with all applicable federal, State, and local laws and guidelines regarding the handling of hazardous materials. The Plan shall prescribe hazardous material handling procedures to reduce the potential for a spill during construction, or exposure of the workers or public to hazardous materials. The Plan shall also include a discussion of appropriate response actions in the event that hazardous materials are released or encountered during excavation activities. The Plan shall be submitted to the CPUC for review and approval prior to the commencement of construction activities. | PG&E and its contractors to implement measure as defined. | PG&E to submit Hazardous Substance Control and Emergency Response Plan to CPUC for review and approval.<br><br>CPUC mitigation monitor to monitor compliance. | Submit plan to CPUC at prior to commencement of construction activities.<br><br>During all phases of construction activities. |
| | **Mitigation Measure 3.7-3:** PG&E shall prepare and implement a Health and Safety Plan to ensure the health and safety of construction workers and the public during construction. The plan shall include information on the appropriate personal protective equipment to be used during construction. | PG&E and its contractors to implement measure as defined. | PG&E to submit Health and Safety Plan to CPUC for review and approval.<br><br>CPUC mitigation monitor to monitor compliance. | Submit plan to CPUC prior to commencement of construction activities.<br><br>During all phases of construction activities. |
| | **Mitigation Measure 3.7-4:** PG&E shall ensure that a Workers Environmental Awareness Program is established and implemented to communicate environmental concerns and appropriate work practices to all construction field personnel. The training program shall emphasize site-specific physical conditions to improve hazard prevention, and shall include a review of the Health and Safety Plan and the Hazardous | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to attend the first program.<br><br>PG&E to submit copies of sign in sheets from training sessions. | Training to be completed prior to commencement of construction activities.<br><br>Submit sign-in sheets to CPUC prior to commencement of construction activities. |

**TABLE 5-1 (continued)**
**MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE PG&E HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this IS/MND | Implementing Actions | Monitoring/Reporting Requirements | Timing |
|---|---|---|---|---|
| Hazards and Hazardous Materials (cont.) | | | | |
| **Hazardous Materials** (cont.) | Substance Control and Emergency Response Plan. The CPUC mitigation monitor shall attend the first training session. PG&E shall submit documentation to the CPUC prior to the commencement of construction activities that each worker on the project has undergone this training program. | | | |
| | **Mitigation Measure 3.7-5:** PG&E shall ensure that oil-absorbent material, tarps, and storage drums shall be used to contain and control any minor releases. Emergency spill supplies and equipment shall be kept at the project staging area and adjacent to all areas of work, and shall be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials shall be provided in the project's Hazardous Substance Control and Emergency Response Plan (see Mitigation Measure 3.7-2), which shall be implemented during construction. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to monitor compliance. | During all phases of construction activities. |
| **Protected Air Space** | **Mitigation Measure 3.7-6:** PG&E shall incorporate the Federal Aviation Administration (FAA) conditions outlined in FAA Aeronautical Studies 2009-AWP-1446-OE (FAA, 2009a) and 2009-AWP-1447-OE (FAA, 2009b), including:<br>• Poles 22/00 and 22/01 shall be marked or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, red lights.<br>• Notices of Actual Construction or Alternative, shall be completed and returned to the FAA within five days after the construction reaches its greatest height.<br>• Poles 22/00 and 22/01 shall not exceed 82 feet above ground level (i.e., 381 feet above mean sea level). | PG&E and its contractors to implement measure as defined. | PG&E to submit evidence of compliance with FAA regulations to CPUC.<br><br>CPUC mitigation monitor to monitor compliance. | Submit compliance documentation to FAA within five days after construction of the Hollister Pole Segment reaches its greatest height.<br><br>During all phases of construction activities. |

**TABLE 5-1 (continued)**
**MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE PG&E HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this IS/MND | Implementing Actions | Monitoring/Reporting Requirements | Timing |
|---|---|---|---|---|
| Hydrology and Water Quality | | | | |
| **Water Quality** | **Mitigation Measure 3.8-1:** For all segments of new access roads that would be within 300 feet of an existing surface water channel and traverse a ground slope greater than two percent, the following protective measures shall be installed:<br>• Permanent access roads shall be in-sloped with a rock-lined ditch on the inboard side;<br>• Water bars, or a similar drainage feature, shall be installed at 150 foot intervals (so as to reduce the effective, connected length of the access road to 150 feet). | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to monitor compliance. | During all construction of all new access roads within 300 feet of an existing surface water channel and that traverse a ground slope greater than two percent. |
| **Drainage** | **Mitigation Measure 3.8-2:** The drainage study, as proposed by PG&E in APM-HYDRO-3, shall provide sizing recommendations to ensure each culvert can pass a 10-year storm event without being submerged, and design recommendations to ensure that culvert installation would result in no net increase in erosion and sedimentation during peak flows. Sizing and design recommendations for each culvert shall consider the individual drainage characteristics of the stream (e.g., slope, watershed area, and substrate) and may include any combination of features necessary to achieve no net increase in erosion and sediment transport. Such features may include the following:<br>• Downstream armoring with gravel or gabions, coupled with appropriate roughness features or characteristics, so as to dissipate and slow flows exiting the culvert and leaving the modified stream segment;<br>• A wide culvert that retains the natural stream bed and roughness elements without notably increasing flow depth;<br>• Design length and slope of culvert to maintain existing topography | PG&E and its contractors to implement measure as defined. | PG&E to submit the drainage study to CPUC for review and approval.<br>CPUC mitigation monitor to monitor compliance. | Submit study to CPUC prior to commencement of construction activities.<br>During all culvert-related construction activities. |

**TABLE 5-1 (continued)**
**MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE PG&E HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this IS/MND | Implementing Actions | Monitoring/Reporting Requirements | Timing |
|---|---|---|---|---|
| Land Use and Planning | | | | |
| No mitigation required. | | | | |
| Mineral Resources | | | | |
| No mitigation required. | | | | |
| Noise | | | | |
| **Construction Noise** | **Mitigation Measure 3.11-1:** Construction activity shall be limited to between the hours of seven a.m. and seven p.m., Monday through Saturday, except with CPUC approval and where necessary to ensure worker safety or to conduct certain work during electrical line clearances or during procedures that cannot be interrupted. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to monitor compliance. | During all phases of construction activities. |
| | **Mitigation Measure 3.11-2:** PG&E and/or its contractors shall shield compressors and other small stationary construction equipment with portable barriers when operating within 100 feet of residences. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to monitor compliance. | During all phases of construction activities. |
| | **Mitigation Measure 3.11-3:** In the event that nighttime (i.e., between seven p.m. and seven a.m.) construction activity is determined to be necessary within 500 feet of an occupied residential dwelling unit, a nighttime noise reduction plan shall be developed by PG&E and submitted to the CPUC for review and approval. The noise reduction plan shall include a set of site-specific noise attenuation measures that apply state of the art noise reduction technology to ensure that nighttime construction noise and levels and associated nuisance are reduced to the most extent feasible. The attenuation measures may include, but not be limited to, the control strategies and methods for implementation that are listed below. If any of the following strategies are found by PG&E to not be feasible, an explanation as to why the specific strategy is not feasible shall be included in the nighttime noise reduction plan.<br><br>• Plan construction activities to minimize the amount of nighttime construction. | PG&E and its contractors to implement measure as defined. | If applicable, PG&E to submit nighttime noise reduction plan to CPUC for review and approval.<br><br>CPUC mitigation monitor to monitor compliance. | Submit plan to CPUC prior to commencing any nighttime construction activities.<br><br>During all phases of construction that include nighttime construction activities. |

**TABLE 5-1 (continued)**
**MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE PG&E HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this IS/MND | Implementing Actions | Monitoring/Reporting Requirements | Timing |
|---|---|---|---|---|
| Noise (cont.) | | | | |
| **Construction Noise** (cont.) | • Offer temporary relocation of residents within 200 feet of nighttime construction areas.<br>• Temporary noise barriers, such as shields and/or blankets, shall be installed immediately adjacent to all nighttime stationary noise sources (e.g., drilling rigs, generators, pumps, etc.) that block the line of sight between nighttime activities and the closest residences. | | | |
| Population and Housing | | | | |
| No mitigation required. | | | | |
| Public Services | | | | |
| No mitigation required. | | | | |
| Recreation | | | | |
| No mitigation required. | | | | |
| Transportation and Traffic | | | | |
| **Construction Traffic** | **Mitigation Measure 3.15-1:** Traffic Management and Control Plan. PG&E shall prepare a Traffic Management and Control Plan that shall include, at a minimum, the measures listed below. The Plan shall be submitted to the CPUC for approval and shall be distributed to all construction crew members prior to commencement of construction activities. The Plan shall:<br>• Include descriptions of work hours, haul routes, work area delineation, any traffic detour routes, bicyclists and pedestrian detour routes, traffic control, and flagging;<br>• Identify all access and parking restriction and signage requirements;<br>• Require workers to park personal vehicles at the approved staging areas and take only necessary project vehicles to the work sites; | PG&E and its contractors to implement measure as defined. | PG&E to submit Traffic Management to CPUC for review and approval.<br><br>CPUC mitigation monitor to monitor compliance. | Prior to commencement of construction activities.<br><br>During all phases of construction. |

**TABLE 5-1 (continued)**
**MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR THE PG&E HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT**

| Environmental Impact | Mitigation Measures Proposed in this IS/MND | Implementing Actions | Monitoring/Reporting Requirements | Timing |
|---|---|---|---|---|
| Transportation and Traffic (cont.) | | | | |
| **Construction Traffic** (cont.) | • Lay out plans for notifications of all lane and road closures and a process for communication with affected road users, including truckers, residents, and landowners prior to the start of construction. Advance public notification shall include posting of notices and appropriate signage of construction activities. The written notification shall include the construction schedule, the exact location and duration of activities within each street (i.e., which road/lanes and access point/driveways/parking areas would be blocked on which days and for how long), and a toll-free telephone number for receiving questions or complaints;<br>• Include plans to coordinate all construction activities with emergency service providers in the area. Emergency service providers would be notified of the timing, location, and duration of construction activities. All roads would remain passable to emergency service vehicles at all times; and<br>• Identify all roadway locations where special construction techniques (e.g., night construction) would be used to minimize impacts to traffic flow. | | | |
| | **Mitigation Measure 3.15-2:** Coordination with Union Pacific Railroad. PG&E shall coordinate all construction activities with Union Pacific Railroad to avoid delays in freight train service along the Hollister Branch Line. PG&E shall implement, at a minimum, the Union Pacific Railroad safety and engineering guidelines when installing power lines over the railroad right-of-way (ROW). The Workers Environmental Awareness Program required under Mitigation Measure 3.7-4 shall require construction crews and project personnel to be trained on Union Pacific Railroad safety guidelines prior to commencing work within or over the railroad ROW. | PG&E and its contractors to implement measure as defined. | PG&E to submit documentation to CPUC showing proof of coordination with Union Pacific Railroad.<br><br>CPUC mitigation monitor to monitor compliance. | During all phases of construction involving wire installation within or over the railroad ROW. |
| Utilities and Service Systems | | | | |
| No mitigation required. | | | | |

# APPENDIX A
# Electric and Magnetic Fields

# SECTION A.1
# Electric and Magnetic Fields Summary

## Electric and Magnetic Fields

The California Public Utilities Commission (CPUC) and the California Department of Health Services (CDHS) have not concluded that exposure to magnetic fields from utility electric facilities is a health hazard. Many reports have concluded that the potential for health effects associated with electric and magnetic field (EMF) exposure is too speculative to allow the evaluation of impacts or the preparation of mitigation measures. EMF is a term used to describe electric and magnetic fields that are created by electric voltage (electric field) and electric current (magnetic field). Power frequency EMF is a natural consequence of electrical circuits, and can be either directly measured using the appropriate measuring instruments or calculated using appropriate information. EMF are present wherever electricity flows: around appliances and power lines, in offices, schools, and homes. Electric fields are invisible lines of force, created by voltage, and are shielded by most materials. Units of measure are volts per meter (V/m). Magnetic fields are invisible lines of force, created by electric current and are not shielded by most materials, such as lead, soil and concrete. Units of measure are Gauss (G) or milliGauss (mG, 111000 of a Gauss). Electric and magnetic field strengths diminish with distance. These fields are low energy, extremely low frequency fields, and should not be confused with high energy or ionizing radiation such as X-rays and gamma rays.

## Possible Health Effects

The possible effects of EMF on human health have come under scientific scrutiny. Concern about EMF originally focused on electric fields; however, much of the recent research has focused on magnetic fields. Uncertainty exists as to what characteristics of magnetic field exposure need to be considered to assess human exposure effects. Among the characteristics considered are field intensity, transients, harmonics, and changes in intensity over time. These characteristics may vary from power lines to appliances to home wiring, and this may create different types of exposures. The exposure most often considered is intensity or magnitude of the field. There is a consensus among the medical and scientific communities that there is insufficient evidence to conclude that EMF causes adverse health effects. Neither the medical nor scientific communities have been able to provide any foundation upon which regulatory bodies could establish a standard or level of exposure that is known to be either safe or harmful. Laboratory experiments have shown that magnetic fields can cause biologic changes in living cells, but scientists are not sure whether any risk to human health can be associated with them. Some studies have suggested an association between surrogate measures of magnetic fields and certain cancers while others have not.

# California Public Utilities Commission Summary

**Background.** On January 15, 1991, the CPUC initiated an investigation to consider its role in mitigating the health effects, if any, of electric and magnetic fields from utility facilities and power lines. A working group of interested parties, called the California EMF Consensus Group, was created by the CPUC to advise it on this issue. It consisted of 17 stakeholders representing citizens groups, consumer groups, environmental groups, state agencies, unions, and utilities. The Consensus Group was charged to 1) consider a balanced set of facts and concerns; 2) define near-term research objectives; and 3) develop interim policies and procedures to guide the electric utilities in educating their customers, reducing EMF, and responding to potential health concerns. The Consensus Group's fact-finding process was open to the public, and its report incorporated concerns expressed by the public. Its recommendations were filed with the Commission in March of 1992. In August of 2004, the CPUC opened an Order Instituting Rulemaking to update the Commission's policies and procedures related to electric and magnetic fields emanating from regulated utility facilities. The final decision was issued in D.06-01-042.

**Findings.** Based on the work of the Consensus Group, written testimony, and evidentiary hearings, the CPUC issued its decision (D.06-01-042) to address public concern about possible EMF health effects from electric utility facilities. The conclusions and findings included the following:

- The body of scientific evidence continues to evolve. However, it is recognized that public concern and scientific uncertainty remain regarding the potential health effects of EMF exposure.

- It is not appropriate to adopt any specific numerical standard in association with EMF until we have a firm scientific basis for adopting any particular value.

**Interim Policies.** The CPUC's decision specifically requires seven measures. One of these measures that is involved with the Project is as follows:

- No-cost and low-cost steps to reduce EMF. In response to a situation of scientific uncertainty and public concern, the CPUC felt it appropriate for utilities to take no-cost and low-cost measures where feasible to reduce exposure from new or upgraded utility facilities. It directs that no-cost mitigation measures be undertaken, and that low-cost options be implemented through the Project certification process. Four percent of total Project budgeted cost is the benchmark in developing EMF mitigation guidelines, and mitigation measures should achieve some noticeable reductions.

The CPUC will continue to monitor these issues. If new information develops in the future, the CPUC may amend its decision to reflect new scientific evidence.

**Exemption Criteria.** The CPUC agreed that "Utility management should have reasonable latitude to deviate and modify their guidelines as conditions warrant and as new EMF information is received. However, if the EMF guidelines are to be truly used as guidelines, the utilities should incorporate criteria which justify exempting specific types of projects from the guidelines."

Utilities may use the following guidelines to determine those specific types of projects that will be exempt from no/low cost field reduction:

1. Operation, repair, maintenance replacement or minor alteration of existing structures: facilities or equipment.

2. Restoration or rehabilitation of deteriorated or damaged structures, facilities or equipment to meet current standards of public safety.

3. Addition of safety devices.

4. Replacement or reconstruction of existing structures and facilities on the same site and for the same purpose as the replaced structure or facility.

5. Emergency restoration projects.

6. Re-conductoring projects except when structures are reframed or reconfigured.

7. Projects located on land under the jurisdiction of the Forest Service, Bureau of Land Management or other governmental agency.

8. Privately owned tree farms.

9. Agricultural land within the Williamson Act.

10. Areas not suited to residential/commercial development. Such areas might include steep slopes, areas subject to flooding or areas without access to public facilities.

The intent of the exemption criteria is to exclude two types of projects. The first type of projects are those that either replace or make minor additions or modifications to existing facilities. This will include pole replacements or relocations less than 2,000 feet in length. Those projects where more than 2,000 feet of line is relocated or reconstructed or where the circuit is reinsulated or reconfigured should be considered for low cost magnetic field management techniques.

The second type projects are those located in undeveloped areas.

**EMF Reduction.** Utilities must use the following Guidelines in the application of no and low cost steps to reduce magnetic field strengths:

1. Take low cost steps to reduce fields from new and upgraded facilities in accordance with CPUC decision D.06-01-042 on EMF.

2. No cost measures will be implemented when available and practical.

3. Mitigation measures should not compromise the reliability, operation, safety or maintenance of the system.

4. Total cost of mitigation measures should not exceed 4 percent of the total cost of the Project.

5. Mitigation measures should have a noticeable reduction in the magnetic field level approximately 15 percent or more.

In accordance with CPUC Decision No. 93-11-013 and 06-01-042, Pacific Gas and Electric Company (PG&E) will incorporate "no cost" and "low cost" magnetic field reduction steps in the proposed power line and substation facilities. The following measures would be included to reduce the magnetic field strength levels from electric power facilities:

*For the Hollister Tower Segment (seven mile segment north of Lagunitas Switches, existing Moss Landing- Salinas – Soledad 115 kV ROW)*

- Raise the height of the line on four of the five towers in the residential land use area by five feet. This is to be achieved by installing horizontal post insulators on suspension towers. The fifth tower is a transposition tower and cannot be modified through this method or any other method that would not increase the massiveness of the tower.
- Given that lines are optimally phased, existing phasing would be maintained to reduce magnetic levels.

*For the Hollister Pole Segment (nine mile segment, east of the Hollister Tower Segment, existing Hollister No. 1 115 kV ROW)*

- Phases of the new Hollister 115 kV line would be arranged for minimum magnetic field at the edge of the ROW. Phases would be arranged C-B-A (Top, Middle, Bottom)
- For the Hollister No. 1 115 kV line maintain the existing configuration, A-B-C (Top, Middle, Bottom).

# APPENDIX A.2
# Electric and Magnetic Fields Field Management Plan for the Proposed Project

# TRANSMISSION MAGNETIC BASIC FIELD MANAGEMENT PLAN
# HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT

## I. General Description of Project

Project Lead: Project Manager, Electric Transmission Maintenance and Construction

Transmission Lines: Moss Landing - Salinas - Soledad 115 kV Power Line (both circuits) between Lagunitas Switches and Anzar Junction, and the Hollister No. 1 115 kV Power Line between a point near Anzar Junction and Hollister Substation

Distribution Line Underbuild: 12 kV and 21 kV on part of the Hollister No. 1 line.

Scope of Work:

Reconductor approximately 7 miles of the double-circuit Moss Landing - Salinas - Soledad 115 kV Power Line from the Lagunitas Switches (Tower 37/232) to near Anzar Junction (Tower 30/196) with 477 kcmil ACSS/Flicker conductor, and replace most existing steel towers with new steel towers.

Reconductor approximately 9 miles of the Hollister No. 1 115 kV Power Line and add a second 115 kV circuit on the same line segment.

## II. BACKGROUND: CPUC DECISION 93-11-013 AND EMF POLICY

On January 15, 1991, the CPUC initiated an investigation to consider its role in mitigating the health effects, if any, of electric and magnetic fields from utility facilities and power lines. A working group of interested parties, called the California EMF Consensus Group, was created by the CPUC to advise it on this issue. It consisted of 17 stakeholders representing citizens groups, consumer groups, environmental groups, state agencies, unions, and utilities. The Consensus Group's fact-finding process was open to the public, and its report incorporated concerns expressed by the public. Its recommendations were filed with the Commission in March 1992.

In August 2004 the CPUC began a proceeding known as a "rulemaking" (R.04-08-020) to explore whether changes should be made to existing CPUC policies and rules concerning EMF from electric transmission lines and other utility facilities.

Through a series of hearings and conferences, the Commission evaluated the results of its existing EMF mitigation policies and addressed possible improvements in implementation of these policies. The CPUC also explored whether new policies are warranted in light of recent scientific findings on the possible health effects of EMF exposure.

The CPUC completed the EMF rulemaking in January 2006 and presented these conclusions in Decision D.06-01-042:

- The CPUC affirmed its existing policy of requiring no-cost and low-cost mitigation measures to reduce EMF levels from new utility transmission lines and substation projects.

- The CPUC adopted rules and policies to improve utility design guidelines for reducing EMF, and provides for a utility workshop to implement these policies and standardize design guidelines.

- Despite numerous studies, including one ordered by the Commission and conducted by the California Department of Health Services, the CPUC stated "we are unable to determine whether there is a significant scientifically verifiable relationship between EMF exposure and negative health consequences."

- The CPUC said it will "remain vigilant" regarding new scientific studies on EMF, and if these studies indicate negative EMF health impacts, the Commission will reconsider its EMF policies and open a new rulemaking if necessary.

In response to a situation of scientific uncertainty and public concern, the decision specifically requires PG&E to consider "no-cost" and "low-cost" measures, where feasible, to reduce exposure from new or upgraded utility facilities. It directs that no-cost mitigation measures be undertaken, and that low-cost options, when they meet certain guidelines for field reduction and cost, be adopted through the project certification process. PG&E was directed to develop, submit

and follow EMF guidelines to implement the CPUC decision. Four percent of total project budgeted cost is the benchmark in implementing EMF mitigation, and mitigation measures should achieve incremental magnetic field reductions of at least 15%.

## III. ELECTRIC AND MAGNETIC FIELDS (EMF)

EMF is a term used to describe electric and magnetic fields that are created by electric voltage (electric field) and electric current (magnetic field). Power frequency EMF is a natural consequence of electrical circuits, and can be either directly measured using the appropriate measuring instruments or calculated using appropriate information.

Electric fields are present whenever voltage exists on a wire, and are not dependent on current. The magnitude of the electric field is primarily a function of the configuration and operating voltage of the line and decreases with the distance from the source (line). The electric field can be shielded (i.e., the strength can be reduced) by any conducting surface, such as trees, fences, walls, buildings, and most types of structures. The strength of an electric field is measured in volts per meter (V/m) or kilovolts per meter (kV/m).

Magnetic fields are present whenever current flows in a conductor, and are not dependent on the voltage of the conductor. The strength of these fields also decreases with distance from the source. However, unlike electric fields, most common materials have little shielding effect on magnetic fields.

The magnetic field strength is a function of both the current on the conductor and the design of the system. Magnetic fields are measured in units called Gauss. However, for the low levels normally encountered near electric utility facilities, the field strength is expressed in a much smaller unit, the milliGauss (mG), which is one thousandth of a Gauss.

Power frequency EMF are present wherever electricity is used. This includes not only utility transmission lines, distribution lines, and substations, but also the building wiring in homes, offices, and schools, and in the appliances and machinery used in these locations. Magnetic field intensities from these sources can range from below 1 mG to above 1,000 mG (1 Gauss).

Magnetic field strengths diminish with distance. Fields from compact sources (i.e., those containing coils such as small appliances and transformers) drop off with distance "r" from the source by a factor of $1/r^3$. For three-phase power lines with balanced currents, the magnetic field strength drops off at a rate of $1/r^2$. Fields from unbalanced currents, which flow in paths such as neutral or ground conductors, fall off inversely proportional to the distance from the source, 1/r. Conductor spacing and configuration also affect the rate at which the magnetic field strength decreases, as well as the presence of other sources of electricity. The magnetic field levels of PG&E's power lines will vary with customer demand.

Magnetic field strengths for typical transmission power line loads at the edge of rights-of-way are approximately 10 to 90 mG.

## IV. No Cost and Low Cost Magnetic Field Mitigation

**Base Case Phasing:**

From Lagunitas Switches to Tower 34/222:

Moss Landing - Salinas - Soledad #1 Phasing is A-C-B (top to bottom)
Moss Landing - Salinas - Soledad #2 Phase is B-C-A (top to bottom).

From Tower 34/222 to Tower 31/208:

Moss Landing - Salinas - Soledad #1 Phasing is B-A-C (top to bottom)
Moss Landing - Salinas - Soledad #2 Phase is C-A-B (top to bottom).

From Tower 31/208 to Anzar Junction (Tower 30/196):

Moss Landing - Salinas - Soledad #1 Phasing is C- B-A (top to bottom)
Moss Landing - Salinas - Soledad #2 Phase is A-B-C (top to bottom)

The lines are optimally phased. The existing phasing will be maintained to reduce magnetic field levels.

**Base Case Phasing:**

Hollister No. 1 115 kV line: ABC (Top, Middle, Bottom).
New Hollister 115 kV circuit: ABC (Top, Middle, Bottom).

Optimally Phase Circuits:
The phases of the new Hollister 115 kV line will be arranged for minimum magnetic field level at the edge of the right of way. The phases will be arranged CBA (Top, Middle, Bottom).

The phases of the Hollister No. 1 115 kV line will remain in the same configuration. The phases are arranged ABC (Top, Middle, Bottom).

**No Cost Field Reduction**

The phases of the new Hollister 115 kV line will be arranged for minimum magnetic field level at the edge of the right of way. The phases will be arranged CBA (Top, Middle, Bottom). The phases of the Hollister No. 1 115 kV line will remain in the same configuration. The phases are arranged ABC (Top, Middle, Bottom).

Figure 1 - **Moss Landing - Salinas - Soledad 115 kV Power Lines near residential land use.**

# TRANSMISSION MAGNETIC BASIC FIELD MANAGEMENT PLAN
# HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT

## V. General Description of Surrounding Land Uses

### Moss Landing - Salinas - Soledad 115 kV Power Lines

**Schools or Daycare:** None.
**Residential:** Five towers.
**Commercial/Industrial:** None.
**Recreational:** None.
**Agricultural, Rural, and Undeveloped Land:** Thirty-four towers.

### Hollister No. 1 115 kV Power Line

**Schools or Daycare:** None.
**Residential:** Thirteen poles.
**Commercial/Industrial:** None.
**Recreational:** None.
**Agricultural, Rural, and Undeveloped Land:** One hundred fifty-one poles.

## Priority Areas where Low Cost Measures are to be Applied

The five towers in the residential land use area are considered for magnetic field reduction.

## VI. Conclusion - Field Reduction Options Selected

### Moss Landing - Salinas - Soledad 115 kV Power Lines

This FMP proposes to raise the height of the line on four of the five towers in the residential land use area by five feet. Horizontal post insulators will be installed on the suspension towers within the residential section to raise the conductor heights 5 feet. The towers are located in the City of San Juan Bautista south of State Highway 156 (see Figure 1). The fifth tower is a transposition tower (on which the conductors are rearranged), and cannot be modified through this method or any other method that would not substantially increase the massiveness of the tower.

### Hollister No. 1 115 kV Power Line

This FMP proposes the phases of the new **Hollister 115 kV line** will be arranged for minimum magnetic field level at the edge of the right of way. The phases will be arranged **CBA** (Top, Middle, Bottom). The phases of the **Hollister No. 1 115 kV line** will remain in the same configuration. The phases are arranged **ABC** (Top, Middle, Bottom).

CERTIFICATE OF SERVICE BY HAND DELIVERY

I, the undersigned, state that I am a citizen of the United States and am employed in the City and County of San Francisco; that I am over the age of eighteen (18) years and not a party to the within cause; and that my business address is 77 Beale Street, B30A, San Francisco, California 94105

On November 23, 2009, I served a true copy of:

**APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY FOR A PERMIT TO CONSTRUCT THE HOLLISTER 115 kV POWER LINE RECONDUCTORING PROJECT**

by hand delivery, addressed to:

Jenny Au
Division of Ratepayer Advocates
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Monisha Gangopadhyay
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

I certify and declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on this 23rd day of November, 2009 at San Francisco, California.

DONNA LEE

# APPENDIX B
# Air Quality

## Criteria Pollutants - Helicopter Emissions

### Helicopter Criteria Pollutant Emisssion Factors (pounds/hour)

| Type | Engine | Piece | HP | Fuel Consumption (gallon/hr) | HC | Nox |
|---|---|---|---|---|---|---|
| Bell 214B | Honeywell T5508D | 1 | 2050 | 160 | 0.96 | 8.74 |
| Bell 407 | Rolls-Royce C-47 | 1 | 850 | 45 | 0.15 | 3.86 |

Source: PG&E, October, 2010. Supplement to PG&E application materials.

Note:

Emission factors were obtained from the California Public Utilities Commission (2006).

Emission factors for Bell 214B were derived from the emission factors for Sikorsky S-72 (double T58-GE-5 1,500 hp engines).

Emission factors for Bell 407 were derived from the emission factors for Bell 204/205 (Lycoming T-53-L-11D 1,100 hp engine).

Emission Factors for Approach/Climb-out Modes

Reference:

California Public Utilities Commission (CPUC). 2006. Southern California Edison. Antelope-Pardee 500-kV Transmission Line Project. Environmental Impact Report. Appendix C for Air Quality Calculation.

### Helicopter Criteria Pollutant Emisssions

| Type | Operation hrs/day | HC | Nox |
|---|---|---|---|
| Bell 214B | 10 | 9.6 | 87.4 |
| Bell 407 | 10 | 1.5 | 38.6 |
| Total | | 11.1 | 126.0 |

## GHG Emissions - Helicopters

| Helicopter | Average hourly fuel consumption (gallon/hr) [a] | Emission Factors (lb CO2/gallon)[b] | CO2 Emissions (lb/hr) | Helicopter Usage[c] (hour/day) | days | **CO2 Emissions (tons)** |
|---|---|---|---|---|---|---|
| Bell 214B | 160 | 18.355 | 2936.8 | 4 | 180 | **1057** |
| Bell 407 | 45 | 18.355 | 825.975 | 4 | 180 | **297** |
| **Total CO2 Emissions From Helicopters** | | | | | | **1355** |

[a] *Interagency Aviation Training, 2010. Aircraft Identification Library, website (https://www.iat.gov/aircraft_library/index.asp), accessed February 23, 2010.and the U.S Department of Inter, National Busuness Center, Aviation Management directive (http://amd.nbc.gov/akro/akflight/pdf/ex2.pdf).*

[b] *US Energy Information Administration, Independent Statistics and Analysis, 2010. Voluntary Reporting of Greenhouse Gases Program, Fuel and Energy Source Codes and Emission Coefficients, website (http://www.eia.doe.gov/oiaf/1605/coefficients.html), accessed February 23, 2010.*

[c] *Hours per day are averages for the whole construction period.*

## Construction GHG Emissions Summary

| Activity | CO2 Emissions | | | |
|---|---|---|---|---|
| | 2011 (tons) | 2012 (tons) | Max Annual Total (tons) | (metric tons) |
| Hollister Pole Segment Construction | 550 | -- | 550 | **499** |
| Hollister Tower Segment Construction | 374 | 34 | 374 | **339** |
| Hollister Substation Upgrades Construction | 21 | -- | 21 | **19** |
| Helicopter Usage | 1355 | 0 | 1355 | **1229** |
| **Total Construction GHG Emissions** | | | | **2086** |
| **Amortized Emissions (30 years)** | | | | **70** |

**2/23/2010 10:09:37 AM**

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: G:\207xxx\D207584.03 - CPUC Hollister Transmission Line\06 Project Library\Data Responses\Data Response 1\Air Quality\Hollister Urbemis Files_Nov 2009\Hollister pole.urb924

Project Name: Hollister Pole Segment

Project Location: Monterey Bay Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

| | CO2 |
|---|---|
| 2011 TOTALS (tons/year unmitigated) | 550.08 |

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

| | CO2 |
|---|---|

| | |
|---|---|
| 2011 | 550.08 |
| Fine Grading 01/03/2011-03/04/2011 | 77.55 |
| Fine Grading Dust | 0.00 |
| Fine Grading Off Road Diesel | 68.86 |
| Fine Grading On Road Diesel | 5.72 |
| Fine Grading Worker Trips | 2.97 |
| Fine Grading 02/28/2011-12/30/2011 | 472.53 |
| Fine Grading Dust | 0.00 |
| Fine Grading Off Road Diesel | 211.39 |
| Fine Grading On Road Diesel | 224.60 |
| Fine Grading Worker Trips | 36.54 |



Phase Assumptions

Phase: Fine Grading 1/3/2011 - 3/4/2011 - Staging Area Prepartion

Total Acres Disturbed: 40

Maximum Daily Acreage Disturbed: 2

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill:  0 cubic yards/day;  Offsite Cut/Fill: 0 cubic yards/day

On Road Truck Travel (VMT): 60

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

**2/23/2010 10:09:37 AM**

Phase: Fine Grading 2/28/2011 - 12/30/2011 - Hollister Pole Construction

Total Acres Disturbed: 6

Maximum Daily Acreage Disturbed: 1

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill:  10 cubic yards/day;  Offsite Cut/Fill: 0 cubic yards/day

On Road Truck Travel (VMT): 802.92

Off-Road Equipment:

1 Aerial Lifts (60 hp) operating at a 0.46 load factor for 8 hours per day

1 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day

1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day

1 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day

3 Off Highway Trucks (189 hp) operating at a 0.57 load factor for 8 hours per day

13 Other Equipment (0 hp) operating at a 0.62 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

**2/23/2010 10:24:31 AM**

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: G:\207xxx\D207584.03 - CPUC Hollister Transmission Line\06 Project Library\Data Responses\Data Response 1\Air Quality\Hollister Urbemis Files_Nov 2009\Hollister station.urb924

Project Name: Hollister Substation

Project Location: Monterey Bay Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

| | CO2 |
|---|---|
| 2011 TOTALS (tons/year unmitigated) | 21.23 |

**2/23/2010 10:24:31 AM**

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

| | CO2 |
|---|---|
| 2011 | 21.23 |
| Fine Grading 10/31/2011-11/25/2011 | 21.23 |
| Fine Grading Dust | 0.00 |
| Fine Grading Off Road Diesel | 16.20 |
| Fine Grading On Road Diesel | 4.24 |
| Fine Grading Worker Trips | 0.79 |



Phase Assumptions

Phase: Fine Grading 10/31/2011 - 11/25/2011 - Hollister Station Construction

Total Acres Disturbed: 0

Maximum Daily Acreage Disturbed: 0

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill: 0 cubic yards/day; Offsite Cut/Fill: 0 cubic yards/day

On Road Truck Travel (VMT): 100

Off-Road Equipment:

3 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

**2/23/2010 10:22:21 AM**

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: \\sfo-file01\PROJECTS\SFO\207xxx\D207584.03 - CPUC Hollister Transmission Line\06 Project Library\Data Responses\Data Response 1\Air Quality\Hollister Urbemis Files_Nov 2009\Hollister towers.urb924

Project Name: Hollister Tower Segment

Project Location: Monterey Bay Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

| | CO2 |
|---|---|
| 2011 TOTALS (tons/year unmitigated) | 374.44 |
| 2012 TOTALS (tons/year unmitigated) | 34.33 |

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

| | CO2 |
|---|---|

| | |
|---|---|
| 2011 | 374.44 |
| Fine Grading 01/03/2011-02/11/2011 | 51.70 |
| Fine Grading Dust | 0.00 |
| Fine Grading Off Road Diesel | 45.91 |
| Fine Grading On Road Diesel | 3.81 |
| Fine Grading Worker Trips | 1.98 |
| Fine Grading 02/07/2011-02/03/2012 | 322.74 |
| Fine Grading Dust | 0.00 |
| Fine Grading Off Road Diesel | 225.80 |
| Fine Grading On Road Diesel | 57.91 |
| Fine Grading Worker Trips | 39.03 |
| 2012 | 34.33 |
| Fine Grading 02/07/2011-02/03/2012 | 34.33 |
| Fine Grading Dust | 0.00 |
| Fine Grading Off Road Diesel | 24.02 |
| Fine Grading On Road Diesel | 6.16 |
| Fine Grading Worker Trips | 4.15 |



Phase Assumptions

Phase: Fine Grading 1/3/2011 - 2/11/2011 - Staging Area Prepartion

Total Acres Disturbed: 45

Maximum Daily Acreage Disturbed: 2

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill:  0 cubic yards/day;  Offsite Cut/Fill: 0 cubic yards/day

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On Road Truck Travel (VMT): 60

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Fine Grading 2/7/2011 - 2/3/2012 - Hollister Tower Construction

Total Acres Disturbed: 2

Maximum Daily Acreage Disturbed: 1

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill: 10 cubic yards/day; Offsite Cut/Fill: 0 cubic yards/day

On Road Truck Travel (VMT): 193.79

Off-Road Equipment:

1 Aerial Lifts (60 hp) operating at a 0.46 load factor for 8 hours per day

1 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day

1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day

1 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day

3 Off Highway Trucks (189 hp) operating at a 0.57 load factor for 8 hours per day

13 Other Equipment (0 hp) operating at a 0.62 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

# APPENDIX C
# Aesthetics Methodology

This appendix presents the methodology used by ESA in this Initial Study/Mitigated Negative Declaration for evaluating potential impacts of the Proposed Project on visual resources under the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

The study area for visual resources encompasses the landscapes directly affected by Proposed Project facilities and the surrounding areas that would be within view of the project components. The visual analysis focuses on potential impacts to views from public vantage points, including travel routes, parks and recreational areas. Impact significance is determined as a function of the Visual Sensitivity of a location, and the Degree of Visual Change created by the project (discussed below).

# Definitions Related to Visual Resources

Visual resources consist of the landforms, vegetation, rock and water features, and cultural modifications that create the visual character and sensitivity of a landscape. A number of factors are documented for the existing visual resources of the study area in order to determine the manner in which those resources or characteristic landscapes may be modified by the Proposed Project. The primary existing visual condition factors considered in this analysis are defined below and include: Visual Quality, Viewer Types and Volumes, Viewer Exposure, and Visual Sensitivity.

*Visual Quality* is defined as the overall visual impression or attractiveness of an area as determined by the particular landscape characteristics, including landforms, rock forms, water features, and vegetation patterns. The attributes of variety, vividness, coherence, uniqueness, harmony and pattern contribute to the overall visual quality of an area. For the purposes of this analysis, visual quality is defined according to three levels:

- *Indistinctive, or industrial* – defined as generally lacking in natural or cultural visual resource amenities typical of the region
- *Representative* – defined as visual resources typical or characteristic of the region's natural and/or cultural visual amenities
- *Distinctive* – defined as visual resources that are unique or exemplary of the region's natural or cultural scenic amenities

*Viewer Types and Volumes* of use pertain to the types and amounts of use that various land uses receive. Land uses that derive value from the quality of their settings are considered potentially sensitive to changes in visual setting conditions. Land uses within the study area that may be sensitive to change in visual conditions include major transportation systems such as designated scenic highways, designated scenic roads, and designated park, recreation and natural areas.

*Viewer Exposure* addresses the variables that affect viewing conditions from potentially sensitive areas. Viewer exposure considers the following factors:

- landscape visibility (the ability to see the landscape)
- viewing distance (i.e., the proximity of viewers to the project)

- viewing angle – whether the project would be viewed from above (superior), below (inferior) or from a level (normal) line of sight
- extent of visibility – whether the line of sight is open and panoramic to the project area or restricted by terrain, vegetation and/or structures
- duration of view

***Visual Sensitivity*** is the overall measure of an existing landscape's susceptibility to adverse visual changes. This analysis of visual sensitivity is based on the combined factors of visual quality, viewer types and volumes, and visual exposure to the proposed project and alternatives. Visual sensitivity is reflected according to high, moderate and low visual sensitivity ranges.

# Viewer Types and Exposures

For each of the viewer groups identified in the study area, viewer exposure conditions are determined based on knowledge of the project areas and site visits. Variables considered include the viewing distance, angle of view, the extent to which views are screened or open, and duration of view. Viewing distances are described according to whether the project activities would be viewed within a foreground (within one-half mile or 2,640 feet), middleground (one-half mile to two miles), or background (beyond two miles) zone. Viewing angle and extent of visibility considers the relative location of the project facility to the viewer and whether visibility conditions are open or panoramic, or limited by intervening vegetation, structures or terrain.

Duration of view pertains to the amount of time the project facilities or area would typically be seen from a sensitive viewpoint. In general, duration of view would be less in instances where the project component would be seen for short or intermittent periods (such as from major travel routes and recreation destination roads) and greater in instances where the project facility would be seen regularly and repeatedly (such as from public use areas).

For motorists on regional or scenic travel routes, traffic volumes are classified as low (less than 10,000 vehicle trips per day), moderate (10,000 to 20,000) and high (over 20,000 vehicle trips per day). Because local roadways in the study area generally experience low traffic volumes, they are not evaluated individually, unless formally designated as "scenic" by a City or County.

# Significance Criteria

Using the criteria above, this analysis evaluates the impact of implementation of the proposed project on the scenic resources and visual character of the study area. The evaluation of potential impacts is based on the potential to change the visual character of the area if implementation of the proposed project would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;

- Substantially degrade the existing visual character or quality of the site and its surroundings; and

- Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

# Definition and Use of Significance Criteria

An adverse visual impact may occur when: (1) an action perceptibly changes the existing physical features of the landscape that are characteristic of the region or locale; (2) an action introduces new features to the physical landscape that are perceptibly uncharacteristic of the region or locale, or become visually dominant in the viewshed; or (3) an action blocks or totally obscures aesthetic features of the landscape. The degree of visual impact depends on how noticeable the adverse change is. The noticeability of a visual impact is a function of the project features, context, and viewing conditions (angle of view, distance, and primary viewing directions). The key factors in determining the ***Degree of Visual Change*** are visual contrast, project dominance, and view blockage.

## Visual Contrast

Visual contrast is a measure of the degree of change in line, form, color, and texture that the project will create, when compared to the existing landscape. Visual contrast ranges from none to strong, and is defined as:

- None –The element contrast is not visible or perceived

- Weak –The element contrast can be seen but does not attract attention

- Moderate –The element contrast begins to attract attention and begins to dominate the characteristic landscape

- Strong – The element contrast demands the viewer's attention and cannot be overlooked

## Project Dominance

Visual dominance is a measure of a project feature's apparent size relative to other visible landscape features in the viewshed, or seen area. A feature's dominance is affected by its relative location in the viewshed and the distance between the viewer and feature. The level of dominance can range from subordinate to dominant.

## View Blockage or Impairment

View blockage or impairment is a measure of the degree to which project features would obstruct or block views to aesthetic features due to the project's position and/or scale. Blockage of aesthetic landscape features or views can cause adverse visual impacts, particularly in instances where scenic or view orientations are important to the use, value or function of the land use.

## Overall Adverse Visual Impact

Overall adverse visual impact reflects the composite visual changes to both the directly affected landscape and from sensitive viewing locations. The visual impact levels indicate the relative degree of overall change to the visual environment that the project alternatives would create, considering visual sensitivity, visual contrast, view blockage, and project dominance.

In general, the determination of impact significance is based on combined factors of Visual Sensitivity and the Degree of Visual Change that the proposed project would cause. The inter-relationship of these two overall factors in determining whether adverse visual impacts are significant is shown in Table Appendix 1-1.

**TABLE APPENDIX 1-1**
**GUIDELINES FOR DETERMINING AESTHETIC IMPACT SIGNIFICANCE**

| | Overall Visual Change | | | | |
|---|---|---|---|---|---|
| **Overall Visual Sensitivity** | **Low** | **Low to Moderate** | **Moderate** | **Moderate to High** | **High** |
| **Low** | Not Significant | Not Significant | Adverse, but Not Significant | Adverse, but Not Significant | Adverse, but Not Significant |
| **Low to Moderate** | Not Significant | Adverse, but Not Significant | Adverse, but Not Significant | Adverse, but Not Significant | Adverse, but Not Significant |
| **Moderate** | Adverse, but Not Significant | Adverse, but Not Significant | Adverse, but Not Significant | Adverse and Potentially Significant | Adverse and Potentially Significant |
| **Moderate to High** | Adverse, but Not Significant | Adverse, but Not Significant | Adverse and Potentially Significant | Adverse and Potentially Significant | Significant |
| **High** | Adverse, but Not Significant | Adverse and Potentially Significant | Adverse and Potentially Significant | Significant | Significant |

**Not Significant** impacts may or may not be perceptible but are considered minor in the context of existing landscape characteristics and view opportunity.
**Adverse but Not Significant Impacts** are perceived as negative but do not exceed environmental thresholds.
**Adverse and Potentially Significant Impacts** are perceived as negative and may exceed environmental thresholds depending on project- and site-specific circumstances.
**Significant impacts** with feasible mitigation may be reduced to less than significant levels or avoided all together. Without mitigation or avoidance measures, significant impacts would exceed environmental thresholds.

# APPENDIX D

# Mailing List and Certificate of Service

| FIRST NAME | LAST NAME | AGENCY | ADDRESS | CITY | STATE | ZIP |
|---|---|---|---|---|---|---|
| **Lead Agency** | | | | | | |
| CHRISTINE M. | WALWYN | CALIFORNIA PUBLIC UTILITIES COMMISSION, DIVISION OF ADMINISTRATIVE LAW JUDGES | 505 VAN NESS AVENUE, ROOM 5008 | SAN FRANCISCO | CA | 94102-3214 |
| MONISHA | GANGOPADHYAY | CALIFORNIA PUBLIC UTILITIES COMMISSION | 505 VAN NESS AVENUE | SAN FRANCISCO | CA | 94102 |
| **Project Applicant** | | | | | | |
| JO LYNN | LAMBERT | PACIFIC GAS AND ELECTRIC COMPANY | | | | |
| ROD | PARAME | PACIFIC GAS AND ELECTRIC COMPANY | | | | |
| ANDREW | SMITH | PACIFIC GAS AND ELECTRIC COMPANY | 650 "O" STREET, MAIL BAG 23 | FRESNO | CA | 93760-0001 |
| DANIELLE | WILSON | ICF INTERNATIONAL | 630 K STREET, SUITE 400 | Sacramento | CA | 95814 |
| **Agencies** | | | | | | |
| N/A | N/A | CALIFORNIA ENERGY MARKETS | 425 DIVISADERO ST., SUITE 303 | SAN FRANCISCO | CA | 94117 |
| SMITH | ROBERT | US ARMY CORP OF ENGINEERS | 1455 MARKET STREET, 16TH FLOOR | SAN FRANCISCO | CA | 94103 |
| DIANE | ELAM | US FISH AND WILDLIFE SERVICE | 2800 COTTAGE WAY SUITE W2606 | SACRAMENTO | CA | 95825 |
| DAVE | PEREKSTA | US FISH AND WILDLIFE SERVICE | 2493 PORTOLA ROAD, SUITE B | VENTURA | CA | 93003 |
| DOUG | COOPER | US FISH AND WILDLIFE SERVICE | 2493 PORTOLA ROAD, SUITE B | VENTURA | CA | 93003 |
| CHRIS | DIEL | US FISH AND WILDLIFE SERVICE | 2493 PORTOLA ROAD, SUITE B | VENTURA | CA | 93003 |
| JACOB | MARTIN | US FISH AND WILDLIFE SERVICE | 2493 PORTOLA ROAD, SUITE B | VENTURA | CA | 93003 |
| RICK | FARRIS | US FISH AND WILDLIFE SERVICE | 2493 PORTOLA ROAD, SUITE B | VENTURA | CA | 93003 |
| RON | PARSONS | OFFICE OF HISTORIC PRESERVATION | 1725 23RD STREET SUITE 100 | SACRAMENTO | CA | 95816 |
| LAURA | CREMER | REGIONAL WATER QUALITY CONTROL BOARD, DISTRICT 3 | 895 AEROVISTA PLACE, SUITE 101 | SAN LUIS OBISPO | CA | 93401-7906 |
| PHIL | HAMMER | REGIONAL WATER QUALITY CONTROL BOARD | 895 AEROVISTA PLACE, SUITE 101 | SAN LUIS OBISPO | CA | 93401-7906 |
| JOHN | OLEJNIK | CALIFORNIA DEPARTMENT OF TRANSPORTATION, DISTRICT 5 | 50 HIGUERA STREET | SAN LUIS OBISPO | CA | 93401-5415 |
| JUSTIN | SLOAN | CALIFORNIA DEPARTMENT OF FISH AND GAME, REGION 4 | 1234 E. SHAW AVENUE | FRESNO | CA | 93710 |
| JULIE | VANCE | CALIFORNIA DEPARTMENT OF FISH AND GAME | 1234 E. SHAW AVENUE | FRESNO | CA | 93710 |
| BYRON | TURNER | SAN BENITO COUNTY PLANNING DIVISION | 3224 SOUTHSIDE ROAD | HOLLISTER | CA | 95023 |
| LISSETTE | KNIGHT | SAN BENITO COUNTY PLANNING DIVISION | 3224 SOUTHSIDE ROAD | HOLLISTER | CA | 95023 |
| MIKE | NOVO | MONTEREY COUNTY PLANNING DIVISION | 168 W. ALISAL ST. 2ND FLOOR | SALINAS | CA | 93901 |
| TAVEN | KINISON-BROWN | MONTEREY COUNTY PLANNING DIVISION | 168 W. ALISAL ST. 2ND FLOOR | SALINAS | CA | 93901 |
| MELODY | GILLETTE | MONTEREY COUNTY PLANNING DIVISION | 168 W. ALISAL ST. 2ND FLOOR | SALINAS | CA | 93901 |
| ENRIQUE | SAAVEDRA | MONTEREY COUNTY PLANNING DIVISION | 168 W. ALISAL ST. 2ND FLOOR | SALINAS | CA | 93901 |
| MARY | PAXTON | CITY OF HOLLISTER PLANNING DIVISION | 375 FIFTH STREET | HOLLISTER | CA | 95023 |
| JEAN | GETCHELL | MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT | 24580 SILVER CLOUD COURT | MONTEREY | CA | 93940-6536 |
| KATY | SANCHEZ | NATIVE AMERICAN HERITAGE COMMISSION | 915 CAPITOL MALL, ROOM 364 | SACRAMENTO | CA | 95814 |
| MICHAEL | TOLLSTRUP | CALIFORNIA AIR RESOURCES BOARD | 1001 I STREET PO BOX 2815 | SACRAMENTO | CA | 95812 |
| | | STATE CLEARINGHOUSE | 1400 TENTH STREET | SACRAMENTO | CA | 95814 |
| JOE PAUL | RAMIREZ | SAN BENITO COUNTY CLERK, COUNTY COURTHOUSE | 440 5TH STREET, ROOM 206 | HOLLISTER | CA | 95023 |
| | | SAN BENITO COUNTY FREE LIBRARY | 470 5TH STREET | HOLLISTER | CA | 95023 |
| | | SAN JUAN BAUTISTA CITY LIBRARY | 801 SECOND STREET/PO BOX 1420 | SAN JUAN BAUTIST | CA | 95045 |

## CERTIFICATE OF SERVICE

We, Anthony Padilla, of Environmental Science Associates, and Stan Williams, of Phoenix1 Printing, certify that we have on this date caused the following:

Publication of the Initial Study/Mitigated Negative Declaration (MND) for PG&E's Application to the California Public Utilities Commission pursuant to General Order (GO) 131-D to construct and operate the Hollister 115 kV Power Line Reconductoring Project. The Notice of Intent to adopt the MND is to be served by United Stated Postal Service (USPS) mail to owners of property adjacent to the Proposed Project route alignments. Copies of the IS/MND for Responsible, Trustee, and other local, State and federal public agencies whose jurisdiction falls within the project area; planning departments of San Benito and Monterey Counties and the City of Hollister are to be delivered via USPS certified mail or an overnight delivery service as documented in the comprehensive mailing list included in Appendix D of the MND.

I declare under penalty of perjury pursuant to the laws of the State of California that the foregoing is true and correct.

Executed on November 16, 2010 in San Francisco and Hayward, California.

Anthony Padilla

Stan Williams