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**Introduction**

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This Monthly Compliance Report is intended to provide the California Public Utilities Commission (CPUC) with a status update regarding compliance with the Pacific Gas and Electric Company (PG&E) Hollister 115 Kilovolt (kV) Power Line Reconductoring Project (project) Mitigation Monitoring, Reporting and Compliance Program (MMRCP). The MMRCP was developed pursuant to the California Environmental Quality Act and in accordance with the Initial Study/Mitigated Negative Declaration (MND) for the project.

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**Status of Construction**

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Construction activities for the project continued during the month of January in the Anzar Junction area. Henkels and McCoy (H&M) crews augured holes, installed new light-duty steel (LDS) poles with associated insulators and travelers, removed the existing wooden poles at the work areas for Poles 14/02, 14/03, 14/04, 14/05, and 14/08, and backfilled the holes with stockpiled soil. In addition, LDS Pole 14/00 was installed. Crews then transferred conductor from the existing wooden poles to the LDS poles and backfilled the LDS excavations with gravel. New conductor was installed and new insulators were installed on the dead-ends on the Anzar Switch Tower and Pole 13/02 (Variance #7).

H&M crews transposed the lower two phases at Pole 13/02. H&M crews removed existing wooden Poles 13/00, 13/00a, 13/00b, 13/00c, and 13/01 in the Anzar Junction area. The top of the existing wooden Pole 14/00 was removed and the remainder of the wooden pole was left in place. LDS poles were staged and assembled at the work areas for Poles 13/09, 20/13 through 21/16, and 22/02 through 22/04. LDS poles were framed at the work areas for Poles 13/09, 21/06 through 21/16, and 20/18 through 21/06. Permanent grounding rods were installed at the work areas for LDS Poles 13/03, 13/04, 13/06, 13/08, 13/09, 13/12 through 13/19, 14/00, 14/03, 14/04, and 14/08. The H&M crew did not mobilize into the project area on January 25 due to muddy conditions.

An H&M crew conducted shoofly installation work inside Llagas Substation, at the Anzar switch tower, Lagunitas Switches area, and at Hollister Substation. Part of this work was conducted at night, which is discussed in further detail under the section describing Other Issues and Concerns.

The PG&E tower crews and Aztrack Construction crews excavated and poured concrete for tubular steel pole (TSP) foundation holes at the work areas for Poles 13/01, 13/02, 13/05, 13/07, 13/10, 06/40, and 06/40A. The crew attempted to excavate the tubular steel pole foundation hole at the work area for Pole 13/10 but abandoned the operation due to muddy conditions and water present within the excavation at approximately 8 feet in depth, which caused the walls of the excavation to collapse. Subsequently, excavation activities were halted and the hole was

backfilled. The PG&E tower crew marked Underground Service Alert locations at the work areas for Poles 14/01 and 14/09. The PG&E tower crew staged tower cages and anchor bolts within the Earthbound Farms Staging Area.

A Davey Tree Expert Company crew conducted tree trimming and removal on the access road to Pole 13/09 (Variance #8) on January 5, 6, 9, and 10. Lead Environmental Inspector (LEI) Nick Fisher and David Joynt (Davey Tree Expert Company) conducted a site visit for tree removal and tree trimming from Towers 00/03 through 00/07 on January 9. A list of trees that have been trimmed on the project to date is included in Attachment A: Tree Trimming Table.

No construction activities were conducted on January 21 through 23 due to rain events that exceeded 0.25 inches within the 24-hour period prior to construction. Representative photographs of activities that occurred during the month of January are included in Attachment B: Photographs.

### **Erosion Control/Storm Water Pollution Prevention Plan Compliance**

An ETIC Engineering crew installed rock and rumble plates at the ingress/egress site located at the junction of San Justo Road and a dirt access road to Pole 14/06. In addition, rock was installed at the ingress/egress site located at the junction of San Justo Road and a dirt access road to Pole 14/04. An ETIC Engineering crew installed larger-sized rock at the ingress/egress sites located at the junction of San Justo Road and the dirt access roads to Poles 14/01, 14/04, and 14/06. Extra rock was added to the previously installed rock at the ingress/egress locations at San Justo Road and San Benito Substation.

Spoils piles were secured by the PG&E crew prior to forecasted rain with plastic sheeting, jute netting, and fiber rolls at the work areas for Poles 06/40, 13/02, 13/05, 13/07, and 13/10. An H&M crew secured fiber rolls around gravel piles at the access road to Pole 14/06 and adjacent to San Benito Substation prior to forecasted rain. Fiber rolls were placed around the bases of all soil stockpiles.

Additional jute netting was delivered by a Geo Options, Incorporated (Geo Options) crew to Tower Pull Site (TP)-7 on January 26, along with fiber rolls and gravel bags. Plastic sheeting was utilized in some instances to cover soil stockpiles where jute netting was not available. Additional erosion control materials are stored at the Anzar Junction area.

On January 24 and 25, an ETIC Engineering crew repaired the damaged exclusion fencing at the Lagunitas Switches area, which had been previously documented by the LEI in the Daily Environmental Report for January 21. Repairs were completed and no further action is required.

ETIC Engineering is finalizing a plan to construct a stabilized entrance to prevent sediment tracking, which will be implemented at Lagunitas Switches prior to the restart of construction activities in this area.

## **Environmental Inspection/Biological Monitoring**

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The LEI and Environmental Inspectors (EIs) were on site each day that construction activities were occurring. Pre-construction wildlife surveys for California red-legged frog (CRLF) and California tiger salamander (CTS) were conducted each day prior to construction activities. Western pond turtle surveys were conducted daily before construction activities began for project areas located in suitable aquatic and upland habitat within 0.3 mile of aquatic features.

Wildlife exclusion fences were inspected daily by the LEI and/or by the United States Fish and Wildlife Service (USFWS) and California Department Fish and Game (CDFG)-approved CTS Biologists (Designated CTS Biologists), with the exception of January 1 due to the New Year's Day holiday. PG&E had communicated with both the USFWS and the CDFG prior to January 1 and both agencies agreed that due to the lack of rain, the risk of take was sufficiently low enough to forgo the fence inspection on January 1. Regular fence inspection resumed the following day. The exclusion fence at Tower Landing Zone (TLZ-)5 was not inspected on January 23 through 31 due to safety concerns of muddy roads, bulls, and the potential presence of a mountain lion that has been reported to occur in the area. Due to the lack of any small mammal burrows that could provide long-term refuge for CTS at this location and the distance from any ponds, the Designated CTS Biologists believed that the possibility for a CTS to occur was very remote, particularly within the fenced boundary of the site. The Designated CTS Biologists determined that temporarily excluding the inspection of this site would not present a significant risk to special-status species. All other wildlife exclusion fences were inspected daily by the LEI, EI or a Designated CTS Biologist. No special-status species were observed. Fences were found in order. The LEI and EIs made minor repairs to the wildlife exclusion fences, as needed. Additional details regarding environmental inspection and monitoring activities is included in Attachment C: Mitigation Monitoring, Compliance, and Reporting Program.

The EIs and Designated CTS Biologists conducted burrow excavation activities with hand tools at TLZ-4 from January 3 through 5, January 9, and January 12. Burrow excavation activities were halted after January 5. All excavated areas were covered with plywood at the end of the day and excavated burrows were marked with spray paint. No special-status amphibian species were observed during the month of January.

### **Pre-construction Wildlife Surveys**

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The LEI conducted den dusting adjacent to Poles 22/00 and 22/01 from January 4 through 7. No sign or presence of special-status species was observed.

The LEI conducted a pre-construction wildlife survey for American badger (*Taxidea taxus*), San Joaquin kit fox (SJKF) (*Vulpes macrotis mutica*), and Western burrowing owl (*Athene cunicularia hypugaea*) at the following locations:

- Pole Landing Zone 5 and Pole 20/17 on January 7
- Poles 20/07 through 20/17 on January 9
- Poles 20/03 through 20/07 on January 10
- Poles 20/02 through 19/11 on January 12

No special-status species were observed.

An EI conducted a Western burrowing owl survey along the access road to TP-5 on January 13. Two burrowing owls had previously been identified utilizing at least three burrows during a survey conducted on December 15, 2011. The EI monitored the burrows on January 13 to determine whether burrowing owls were continuing to occupy the site. Two owls were observed during the survey. One owl was observed in a burrow located approximately 100 feet south of the access road. Another owl was observed at a burrow located approximately 20 feet north of the access road. No construction activity has occurred in the area to date and the only project activities have consisted of the LEI, EI, and/or Designated CTS Biologists driving past the burrows to access TP-5 for inspection of the wildlife exclusion fence. The LEI escorted all vehicles upon ingress and egress along the access road to TP-5 on January 18, past the area where two burrowing owls had previously been observed.

A 70 percent or greater chance of rain was present within the 72-hour forecast on January 17 through 20. As a result, pre-construction wildlife surveys were conducted to clear all work areas and allow construction work to continue, in accordance with Measure 8.10 of the project's CDFG ITP Number 2081-2011-032-04. No special-status amphibian species were observed.

The LEI and EIs conducted surveys for target sensitive species and for habitat suitable for target sensitive species within the following areas:

- TP-2 on January 23
- From Poles 00/05 through 00/07 on January 24
- From Poles 01/08 through 01/10 on January 25
- From Poles 19/07 through 19/10 on January 26
- From Poles 00/03a through 02/13 on January 27
- From Poles 02/13 through 03/20 on January 28

Species surveyed for included Pajaro manzanita (*Arctostaphylos parjaroensis*) and Monterey ceanothus (*Ceanothus cuneatus* var. *rigidus*). Habitat surveyed for included habitat for woodrats (*Neotoma* sp., most likely *Neotoma fuscipes perplexa* due to the historical range of the subspecies), American badger, Western burrowing owl, and SJKF. The LEI and EIs also surveyed for migratory bird nests. Woodrat nests and Pajaro manzanita shrubs in the vicinity of work areas, pull sites, and access roads were flagged for avoidance. No Pajaro manzanita was observed within work areas, pull sites, and access roads. The results of all the biological surveys have also been documented separately in biological survey memos.

The LEI conducted den dusting at potential SJKF dens in the vicinity of Poles 02/12 and 02/13 from January 29 through 31. No sign or presence of special-status species was observed.

### **Sensitive Resource Sightings/Discoveries**

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One Northern harrier (*Circus cyaneus*) was observed on January 3 and 5 at TLZ-4. One Northern harrier was observed flying in the vicinity of Pole 03/20 on January 28.

One golden eagle (*Aquila chrysaetos*) was observed on January 4 at TLZ-4. One golden eagle was observed flying overhead at the Anzar Junction area on January 7. One golden eagle was observed foraging near Pole 19/14 on January 28. One golden eagle was observed flying above TP-7 on January 19.

A ferruginous hawk (*Buteo regalis*) was observed flying in the vicinity of Pole 03/20 on January 28. A flock of tricolor blackbirds (*Agelaius phoeniceus aciculatus*) was observed flying and perching in the area between Poles 02/12 through 02/14 on January 28. As all birds were likely foraging and/or in transit to another destination, they will likely not be affected by project activities.

### **Cultural Resource Monitoring**

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Cultural resource monitor Tim Slowik (Far Western Anthropological Research Group, Incorporated) was present for pole removal activities from January 3 through 7 at the work areas for Poles 14/02, 14/03, 14/04, 14/05, and 14/08. The cultural resource monitor was present for excavation of a TSP foundation hole on January 10 at the work area for Pole 13/10. The cultural resource monitor was present for excavation of TSP foundation holes on January 17, 18, and 19 at the work areas for Poles 13/01, 13/02, 06/40, and 06/40A. The cultural resource monitor was present to monitor the installation of permanent grounding rods in culturally sensitive areas on January 26 at the work areas for Poles 13/13 through 13/19. The cultural resource monitor was also present to monitor the installation of permanent grounding rods in culturally sensitive areas at the work areas for Poles 14/03, 14/04, and 14/08 on January 27. No cultural resources were observed.

### **Non-Compliances**

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No non-compliances were observed or documented during the month of January.

### **Other Issues and Concerns**

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One Compliance Issue was documented on January 13. Due to a clearance issue, shoofly installation work in the Lagunitas Switches area was delayed past sunset and work continued to 10:30 p.m. The United States Fish and Wildlife Service (USFWS) Biological Opinion California Red-Legged Frog Conservation Measure CM-09 requires major construction activities in sensitive habitat areas to occur between 30 minutes after sunrise and 30 minutes before sunset. In the event that construction activities need to continue beyond 30 minutes after sunset, PG&E is required to notify the USFWS within 24 hours of work being extended. The CPUC MMRCP Mitigation Measure 3.11-1 requires that construction activity be limited to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday, except with CPUC approval or where necessary to ensure worker safety. The CDFG ITP Condition 8.5 requires work to be conducted during daylight hours only.

The EI notified Andy Smith, PG&E Environmental Compliance Lead, of the Compliance Issue, who in turn notified the USFWS, CDFG, and CPUC. An email was sent to the agencies describing the precautions that were taken for working at night, which included the following measures that were implemented:

- All activities were performed in areas currently fenced with amphibian exclusion fencing
- No ground disturbance was conducted
- Existing roads (paved and dirt) were used to transport crew and equipment to and from the site
- Equipment arrived at the work areas during daylight hours
- The LEI escorted the vehicles—on foot and using a flashlight to check for special-status species—from the work areas at the end of the night
- The LEI checked under vehicles for special-status species before the vehicles were relocated and before leaving the work area

As PG&E was unable to notify the USFWS within 24 hours following night construction work, this incident was documented as a Compliance Issue and described in EI Kevin Kilpatrick's Daily Environmental Report. No further action is required.

One Minor Problem was documented on January 14. Dust control measures were not implemented prior to construction activities. Applicant-proposed measure AIR-01 of the CPUC MMRCRCP requires PG&E to water all active construction sites at least twice daily, based on the type of operation, soil, and wind exposure. More specifically, the access road to Lagunitas Switches was not watered prior to construction activities. The LEI discussed the issue with the H&M construction crew and a water truck was brought to the site later in the afternoon. No further action is required.

One Occurrence was documented on January 21 at the exclusion fencing in the Lagunitas Switches area. The LEI noted that a section of the trench in which the exclusion fence was installed had experienced some erosion due to recent rainfall. The section of the trench measured approximately 75 yards in length and was located at the southern end of the fenced area. The PG&E Environmental Compliance Lead was notified in accordance with the project's CPUC MMRCRCP. On January 24 and 25, an ETIC Engineering crew repaired the damaged exclusion fencing at the Lagunitas Switches area. No further action is required.

No other issues or concerns were observed or documented during the month of January.

### **Mitigation Monitoring, Reporting and Compliance Program Summary**

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A CPUC Third-Party Monitor, Rachel Danielson, conducted site inspections on January 5, 12, 18, and 25. No issues or concerns were reported to PG&E following the site visits. The MMRCRCP status report provided in Attachment C: Mitigation Monitoring, Compliance, and Reporting Program includes additional details and the current implementation status of each mitigation measure.

### **Environmental Training**

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All new project personnel are required to attend an environmental training prior to beginning work on the right-of-way. Environmental trainings were provided on a daily basis as new employees arrived to the project. In January, 33 new employees were trained. A total of 155 project personnel have received the environmental training to date. Attachment D:

Environmental Training Log includes copies of the training sign-in sheets for the month of January.

## Variance Requests

The following summarizes the status of variance requests for the project to date:

### CPUC Variances

<b>Variance Request Number</b>	<b>Description</b>	<b>Approval Date</b>
1	The PG&E Llagas Substation Shoo-fly was changed from two temporary wood poles to six temporary wood poles.	9/27/11
2	Pole 13/07 was redesigned from an LDS pole to a tubular steel pole in the Project Description of the MND.	9/27/11
3	The PG&E Natividad Switch Replacement site was added to the Project Description of the MND.	9/27/11
4	Pole Pull Site (PP)-1 and PP-2 were combined to one site.	10/14/11
5	Request for a new staging area located on Santa Ana Road in Hollister.	Cancelled
6	Request for a new staging area located north of Poles 13/17 to 14/00, on property owned by Earthbound Farms.	12/14/11
7	Request for a change in the location and configuration of a power pole shoofly for the Anzar switch tower near Poles 13/01 and 13/02.	12/15/11
8	Request for a change in the locations of proposed access routes for Poles 13/09 and 13/10.	12/14/11
9	Modification of CPUC Mitigation Measure Bio 3.4-1 - to allow for fencing of staging areas, landing zones, and pull sites beyond the October 15, 2011, deadline.  Modification of CPUC Mitigation Measure Bio 3.4-3 and 3.4-4 for American badger and San Joaquin Kit Fox to change the 14- to 30-day pre-construction biological survey timing to allow for surveys 1 to 30 days prior to construction in new areas.	11/22/11
10	Request for a new pull site located between Poles 14/01 and 14/02.	Cancelled
11	Request for a new pole route between Poles 14/09 to 14/15.	Submitted to CPUC on 02/01/12; status pending
12	Request for a new access road to TLZ-4.	PG&E review
13	Request authorization to conduct soil hauling by truck.	Insignia revisions

<b>Variance Request Number</b>	<b>Description</b>	<b>Approval Date</b>
14	Request authorization to use TP-1 as a landing zone.	01/25/12
15	Request a new pull site near Pole 20/03.	PG&E review
16	Request modification of applicant-proposed measure HAZ-03 of the CPUC MMRCP to eliminate the need for the Federal Aviation Administration to approve the project's Helicopter Lift Plan prior to any construction helicopter operations.	Submitted to CPUC on 02/03/12; status pending



**Attachment A: Tree Trimming Table**



## Hollister Tree Trimming Table

November 2011 through January 2012

Date	Location	Species	Pre-Construction Condition*	Trimming Type	Estimated Percentage Trimmed <sup>1</sup>	Diameter at Breast Height (DBH) (in Inches)	Tower/Pole
<b>November 1 and 2, 2011</b>	Anzar Switch	Coastal Live Oak	4	Side and Overhang	10	15	Access road
	Anzar Switch	Black Walnut	3	Side and Overhang	5	13	Access road
	Anzar Switch	Fruit Tree	4	Side and Overhang	5	20	Access road
	Anzar Switch	Coastal Live Oak	5	Side and Overhang	10	41 total (2 stems)	Access road
	Anzar Switch	Tan Oak	3	Side and Overhang	10	18	Access road
	Anzar Switch	Coastal Live Oak	5	Side and Overhang	10	42 total (2 stems)	Access road
	Anzar Switch	Coastal Live Oak	5	Side and Overhang	20	18	Access road
	Anzar Switch	Coastal Live Oak	6	Side and Overhang	25	33	Access road
	Anzar Switch	Coastal Live Oak	5	Side and Overhang	15	28	Access road
	Anzar Switch	Black Locust	4	Side and Overhang	15	37	Access road
	Anzar Switch	Almond	3	Side and Overhang	10	8	Access road
	Anzar Switch	Almond	3	Side and Overhang	10	9	Access road
	Anzar Switch	Almond	3	Side and Overhang	10	7	Access road
	Anzar Switch	Almond	3	Side and Overhang	10	10	Access road
	Anzar Switch	Coastal Live Oak	5	Side and Overhang	10	13	Access road
	Anzar Switch	Blue Gum	4	Side and Overhang	5	6	Access road
	Anzar Switch	Coastal Live Oak	4	Side and Overhang	10	18 total (3 stems)	Access road

<sup>1</sup> The percentage trimmed is an approximate estimate based on the tree canopy.

Trees were trimmed by necessity, based on the following criteria:

- For access roads, trees were trimmed based on the width of access needed for the construction vehicles
- For compliance, trees were trimmed based on the area needed to maintain adequate line clearance, in accordance with California Public Utilities Commission General Order 95

All trims were conducted in a manner that would maintain the continued health of the tree to the maximum extent feasible.

Date	Location	Species	Pre-Construction Condition*	Trimming Type	Estimated Percentage Trimmed <sup>1</sup>	Diameter at Breast Height (DBH) (in Inches)	Tower/Pole
<b>November 23, 2011</b>	Anzar Switch	Poison Oak	10	Removed	100	1	Anzar Switch
	Anzar Switch	Brush	10	Removed	100	1	Pole 13/07
	Anzar Switch	Brush	10	Removed	100	1	Pole 13/08
	Anzar Switch	Coastal Live Oak	4	Side	20	19 total (4 stems)	Pole 13/08
	San Juan Rd.	Brush	6	Removed	100	5	Pole 13/11
<b>December 5, 2011</b>	Anzar Switch	Coast Live Oak	5	Side	15	24	Pole 13/01
<b>January 5, 6, 9, and 10, 2012</b>	Slibsager's	Black Locust	2	Side and Overhang	5	19	Pole 13/09 access road
	Slibsager's	Coast Live Oak	3	Side and Overhang	10	20	Pole 13/09 access road
	Slibsager's	Brush	3	Removed	100	2	Pole 13/09 access road
	Slibsager's	Black Locust	3	Side and Overhang	10	15 total (3 stems)	Pole 13/09 access road
	Slibsager's	Coast Live Oak	4	Side and Overhang	10	16	Pole 13/09 access road
	Slibsager's	Coast Live Oak	4	Side and Overhang	15	16 total (3 stems)	Pole 13/09 access road
	Slibsager's	White Oak	4	Side and Overhang	10	14 total (2 stems)	Pole 13/09 access road
	Slibsager's	Coast Live Oak	4	Side and Overhang	15	16	Pole 13/09 access road
	Slibsager's	Coast Live Oak	5	Side and Overhang	15	17 total (3 stems)	Pole 13/09 access road
	Slibsager's	Coast Live Oak	3	Side and Overhang	15	19 total (3 stems)	Pole 13/09 access road
	Slibsager's	Black Locust	5	Side and Overhang	5	13	Pole 13/09 access road
	Slibsager's	White Oak	4	Side and Overhang	5	14	Pole 13/09 access road
	Slibsager's	Coast Live Oak	4	Removed	100	8	Pole 13/09 access road

Date	Location	Species	Pre-Construction Condition*	Trimming Type	Estimated Percentage Trimmed <sup>1</sup>	Diameter at Breast Height (DBH) (in Inches)	Tower/Pole
	Slibsager's	Coast Live Oak	5	Side and Overhang	10	18	Pole 13/09 access road
	Slibsager's	Coast Live Oak	5	Side and Overhang	20	20	Pole 13/09 access road
	Slibsager's	Black Locust	2	Side and Overhang	15	30 total (3 stems)	Pole 13/09 access road
	Slibsager's	Coast Live Oak	4	Side and Overhang	10	18	Pole 13/09 access road
	Slibsager's	Black Walnut	0	Removed	100	40	Pole 13/09 access road
	Slibsager's	Black Walnut	3	Removed	100	12	Pole 13/09 access road
	Slibsager's	Black Walnut	3	Removed	100	21	Pole 13/09 access road
	Slibsager's	Coast Live Oak	6	Side and Overhang	10	26	Pole 13/09 access road
	Slibsager's	Acacia	2	Removed	100	23	Pole 13/09 access road

**\*Pre-Construction Condition Descriptions Provided by Contractor's Certified Arborist:**

0 = deceased

1 = evidence of massive past failures, extreme disease, and in severe decline.

2 = may be saved with attention to class 4 pruning, insect/pest eradication and future monitoring.

3 = some past failures, some pest or structural defects that may be mitigated by class 4 pruning.

4 = may have had minor past failures, excessive deadwood, or minor structural defects that can be mitigated with pruning.

5 = relatively healthy tree with little visual structural and or pest defects.

6 = healthy tree that probably can be left in its natural state.

7-9 = have had proper arboricultural pruning and attention or have no apparent structural defects

10 = specimen tree with perfect shape, structure and foliage in a protected setting (i.e., park).

**Attachment B: Photographs**



**Photograph 1:**

An ETIC Engineering crew member utilizing a backhoe to install rock and rumble plates at the ingress/egress location at the junction of San Justo Road and the access road to Pole 14/06



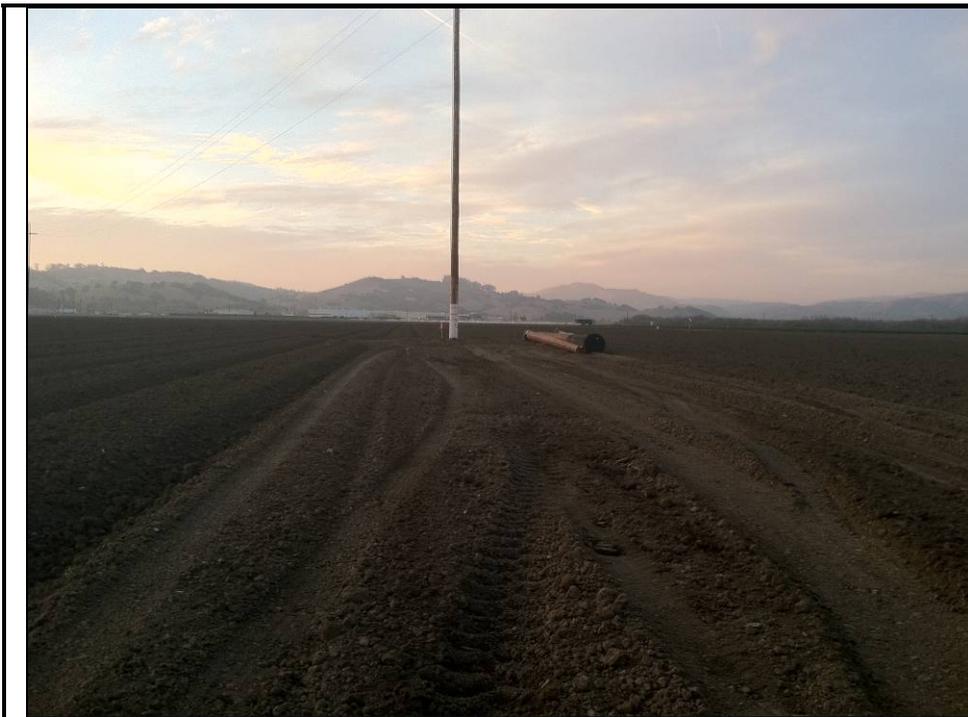
**Photograph 2:**

Staged erosion control materials delivered to TP-7



**Photograph 3:**

A Davey Tree Expert Company crew chipping trees on the access route to Pole 13/09



**Photograph 4:**

An LDS pole staged at the work area at Pole 14/05

**Attachment C: Mitigation Monitoring, Compliance, and Reporting Program**



Report Criteria:

AGENCY: CPUC

SOURCE: MMCRP

LOCATION: All

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Geology, Minerals, Soil	GEO-APM-01	01	Perform Geologic studies at active fault crossings and modify siting/design 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.	A geological investigation was completed as part of the Proponent's Environmental Assessment (PEA), which was submitted to the CPUC on November 23, 2009. Project facilities were designed and sited to avoid and reduce impacts due to fault rupture.	Pre	Complete
Agricultural	AG-APM-01	01	Compensate for reduced agricultural production	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.	PG&E has compensated property owners for modifications of easements and for temporary use of property. This measure will continue to be implemented throughout and following construction.	During and Post	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Air Quality	AIR-APM-01	01	Implement MBUAPCD dust control measures	<p>PG&amp;E will implement all applicable and feasible fugitive dust control measures required by MBUAPCD. This requirement will be incorporated into the construction contract.</p> <p>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); and limit the area under construction at any one time as feasible.</p>	<p>Dust control measures were incorporated into the construction contract. Dust control measures required by the MBUAPCD are being implemented during construction, with the exception of the Minor Problem on January 14, 2012, discussed as follows.</p> <p>One Minor Problem was documented on January 14, 2012. The access road to Lagunitas Switches was not watered prior to construction activities. A water truck was brought to the site later in the afternoon, which addressed the issue, and no further action is required.</p>	During	On-going
Air Quality	AIR-APM-02	01	Manage tailpipe emissions	<p>PG&amp;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.</p> <p>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;</p>	<p>PG&amp;E incorporated the Best Management Practices (BMPs) described in this measure in the construction contract; therefore, the pre-construction portion of this measure is complete. PG&amp;E has minimized tailpipe emissions to the extent practicable through the implementation of this measure whenever diesel-powered construction equipment has been utilized on the project. This measure will be continue to be implemented during construction.</p>	Pre and During	On-going
Air Quality	AIR-APM-02	02	Manage tailpipe emissions	<p>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.</p>	<p>Unnecessary idling is addressed in the environmental training program and is monitored throughout the day.</p>	Pre and During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Air Quality	AIR-APM-02	03	Manage tailpipe emissions	Use ground equipment in place of helicopters where practicable.	PG&E will utilize ground equipment in place of helicopters to the extent possible.	During	On-going
Air Quality	AIR-APM-03	01	Minimize greenhouse gas emissions	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; and minimize construction equipment exhaust by using low-emission or electric construction equipment where feasible.	Carpooling on the project is provided to the extent possible. Construction waste on the project is recycled to the extent feasible. Natural gas-powered vehicles and light-duty trucks, as well as low-emission construction equipment will be used on the project where feasible.	During	On-going
Biological	BIO-3.4-1	01	Special Status Species	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.	There are no wetland or riparian resources present within the project areas that have been approved for construction. PG&E will avoid direct impacts to sensitive wetlands and riparian areas in new construction areas for activities planned in 2012.	During	On-going
Biological	BIO-3.4-1	02	Special Status Species	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 in sensitive habitat(s) or adjacent to sensitive plant or wildlife resources, 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. All amphibian exclusion fencing shall be monitored by the on-site environmental monitor or designated construction personnel daily to ensure that it is (1) functional; and (2) that wildlife, particularly amphibians or reptiles, are not congregating along the fence perimeter.	The United States (U.S.) Fish and Wildlife Service (USFWS) and the U.S. Army Corps of Engineers (USACE) approved a variance request on November 15, 2011, to extend the October 15, 2011 fencing requirement to December 3, 2011. The California Public Utilities Commission (CPUC) approved this variance request on November 22, 2011. The fencing of all pull sites, landing zones, staging areas and shoo-fly work areas was completed by December 3, 2011. A biologist has monitored all fence installations and removals to date, and will monitor future fence work.	Pre and During	On-going
Biological	BIO-3.4-1	03	Special Status Species	All erosion control and landscaping specifications shall be restricted to natural-fiber, biodegradable meshes and coir rolls.	All erosion control materials have been and will continue to be restricted to natural fiber, biodegradable meshes, and coir rolls.	Pre and During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-3.4-1	04	Special Status Species	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.	All project personnel will attend the project-specific awareness training prior to working in project areas. To date, 155 construction personnel have attended the environmental training.	Pre and During	On-going
Biological	BIO-3.4-1	05	Special Status Species	A preconstruction survey will be conducted each day by an onsite monitor immediately preceding construction activity that occurs within or adjacent to suitable habitat.	A pre-construction survey for California red-legged frog (CRLF) and California tiger salamander (CTS) has been conducted by an on-site biological monitor each day immediately prior to construction activities. To date, no special-status amphibian species have been observed. The on-site Biological Monitor will continue to implement this measure during construction.	During	On-going
Biological	BIO-3.4-1	06	Special Status Species	Suitable habitat that is temporarily impacted by project-related activities will be restored to pre-project conditions.	Suitable habitat that is temporarily impacted by project-related activities will be restored to pre-project conditions.	During and Post	On-going
Biological	BIO-3.4-1	07	Special Status Species	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. Mitigation shall be provided on-site through habitat enhancement and preservation, or through an alternative arrangement with the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG). No agency-approved mitigation banks currently service the Proposed Project area; therefore, if an approved bank is not established prior to Proposed Project construction that can service mitigation needs for the Proposed Project, then at the discretion of the USFWS and CDFG funds may be (a) set aside in escrow toward the establishment of a regional California tiger salamander mitigation bank, or (b) paid to establish a California tiger salamander conservation program locally or in another region, for the purpose of acquiring suitable habitat.	PG&E provided the California Department of Fish and Game (CDFG) with a letter of credit in the amount of \$1,911,150 toward the establishment of a conservation easement for off-site CTS mitigation on September 30, 2011. This letter of credit provides permanent protection and management of 85.95 acres of mitigation lands. The mitigation lands are defined as the French Ranch Property in the foothills above Hollister. The USFWS has agreed to this compensatory mitigation for CTS.	Pre, During, and Post	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-3.4-2	01	Mitigate impacts on Western pond turtle	<p>PG&amp;E and/or its contractors shall implement the following measures for construction areas located in suitable habitat within 0.3 mile of aquatic features:</p> <p>Include western pond turtle in the Environmental Training and Monitoring Program.</p> <p>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.</p> <p>To minimize the likelihood of encountering turtles in upland areas near stream crossings, construction footprints shall be restricted to the smallest area possible.</p>	<p>The western pond turtle has been included in the environmental training program; therefore, the pre-construction portion of this measure is complete. An on-site Biological Monitor has performed pond turtle surveys before daily construction activities began within suitable aquatic and upland habitat, such as within the Anzar Junction area. No special-status species were observed. This measure will continue to be implemented throughout construction.</p>	Pre and During	On-going
Biological	BIO-3.4-3	01	Mitigate impacts on American badger	<p>Include American badger in the Environmental Training and Monitoring Program.</p>	<p>The American badger has been included in the environmental training and monitoring program; therefore, this measure is complete.</p>	Pre	Complete
Biological	BIO-3.4-3	02	Mitigate impacts on American badger	<p>PG&amp;E and/or its contractors shall implement the following measures for construction areas located in grasslands that provide potential habitat for American badger: 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. PG&amp;E shall use the same methods for determining vacated badger burrows as implemented for San Joaquin kit fox (see Mitigation Measure 3.4-4). If no evidence of badger presence is detected, no further mitigation is required.</p>	<p>The USFWS and USACE approved a variance request to change the pre-construction survey window to 1 to 30 days prior to construction on November 15, 2011. The CPUC approved the variance request in an email dated November 22, 2011.</p> <p>Pre-construction surveys for the American badger have been conducted within 200 feet of work areas 1 to 30 days prior to construction. No American badger presence has been detected at any of the surveyed locations. Additional pre-construction surveys will be conducted within the appropriate time frame for the remainder of the project prior to working in new areas.</p>	Pre	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-3.4-3	03	Mitigate impacts on American badger	PG&E and/or its contractors shall implement the following measures for construction areas located in grasslands that provide potential habitat for American badger: 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.	Pre-construction surveys for the American badger have been conducted within 200 feet of work areas 14 to 30 days prior to construction. No American badger presence has been detected at any of the surveyed locations. Therefore, this measure is complete for these locations because no protection measures are required. Additional surveys will be conducted for the remainder of the project prior to working in new areas.	During	On-going
Biological	BIO-3.4-3	04	Mitigate impacts on American badger	PG&E and/or its contractors shall implement the following measures for construction areas located in grasslands that provide potential habitat for American badger: If active, non-maternal dens are located, badgers will be passively relocated via installation of one-way doors.	Pre-construction surveys for the American badger have been conducted within 200 feet of work areas 14 to 30 days prior to construction. No American badger presence has been detected at any of the surveyed locations. Therefore, this measure is complete for these locations because no protection measures are required. Additional surveys will be conducted for the remainder of the project prior to working in new areas.	During	On-going
Biological	BIO-3.4-3	05	Mitigate impacts on American badger	PG&E and/or its contractors shall implement the following measures for construction areas located in grasslands that provide potential habitat for American badger: 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.	Pre-construction surveys for the American badger have been conducted within 200 feet of work areas 14 to 30 days prior to construction. No American badger presence has been detected at any of the surveyed locations. Therefore, this measure is complete for these locations because no protection measures are required. Additional surveys will be conducted for the remainder of the project prior to working in new areas.	During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-3.4-4	01	Mitigate impacts on San Joaquin kit fox	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.	The USFWS and USACE approved a variance request to change the pre-construction survey window to 1 to 30 days prior to construction on November 15, 2011. The CPUC approved the variance request in an email dated November 22, 2011.  Pre-construction surveys for the San Joaquin kit fox (SJKF) have been conducted within 200 feet of work areas 1 to 30 days prior to construction. In addition, all potential dens have been monitored with use of a tracking medium for at least three consecutive nights. No SJKF presence was detected at any of these locations. Pre-construction surveys will be conducted within the appropriate time frame for the remainder of the project prior to working in new areas.	Pre	On-going
Biological	BIO-3.4-4	02	Mitigate impacts on San Joaquin kit fox	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. 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.	Pre-construction surveys for SJKF have been conducted within 200 feet of work areas 1 to 30 days prior to construction. In addition, all potential dens have been monitored with use of a tracking medium for at least three consecutive nights. No SJKF presence was detected at any of these locations. Therefore, this measure is complete for these locations because no protection measures are required. Additional surveys will be conducted for the remainder of the project prior to working in new areas.	Pre	On-going
Biological	BIO-3.4-4	04	Mitigate impacts on San Joaquin kit fox	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. 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.	Pre-construction surveys for SJKF have been conducted within 200 feet of work areas 1 to 30 days prior to construction. In addition, all potential dens have been monitored with use of a tracking medium for at least three consecutive nights. No SJKF presence was detected at any of these locations. However, escape ramps have been constructed in all excavated holes or trenches greater than 2 feet deep. In addition, all holes have been thoroughly inspected for trapped animals. A Biological Monitor will be present on site daily to monitor compliance with this measure.	During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-3.4-4	05	Mitigate impacts on San Joaquin kit fox	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. 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.	Pre-construction surveys for SJKF have been conducted within 200 feet of work areas 1 to 30 days prior to construction. In addition, all potential dens have been monitored with use of a tracking medium for at least three consecutive nights. No SJKF presence was detected at any of these locations. However, all food-related trash items have been and will be removed from the project area daily. A Biological Monitor will be on site daily to monitor compliance with this measure.	During	On-going
Biological	BIO-3.4-4	06	Mitigate impacts on San Joaquin kit fox	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. To prevent harassment and mortality of kit foxes or destruction of their dens, no pets shall be allowed in the project area.	No pets are allowed in the project area. A Biological Monitor will be on site daily to monitor compliance with this measure.	During	On-going
Biological	BIO-3.4-4	07	Mitigate impacts on San Joaquin kit fox	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. Suitable habitat that is temporarily impacted by project-related activities will be restored to pre-project conditions.	Suitable habitat that is temporarily impacted by project-related activities will be restored to pre-project conditions following the completion of construction activities.	During and Post	On-going
Biological	BIO-3.4-4	08	Mitigate impacts on San Joaquin kit fox	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. 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.	PG&E is compensating for impacts to SJKF by restoring grassland habitats following construction, as described in the Habitat Mitigation Plan. The USFWS and CDFG have agreed to this mitigation for SJKF.	Pre, During, and Post	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-3.4-5	01	Mitigate impacts on Raptors and Nesting Birds	Project design, construction, and maintenance will conform with PG&E's corporate Avian Protection Plan and Avian Power Line Interaction Committee (APLIC) Guidelines.	The project was designed to conform with PG&E's corporate Avian Protection Plan and APLIC Guidelines; therefore, the pre-construction portion of this measure is complete. Construction and maintenance will conform with PG&E's Avian Protection Plan and APLIC Guidelines and a Biological Monitor will be on site to monitor compliance with this measure daily during construction activities.	Pre, During, and Post	On-going
Biological	BIO-3.4-5	02	Mitigate impacts on Raptors and Nesting Birds	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.	An Avian Mitigation Plan has been developed for the project. This plan was approved by the CPUC on August 4, 2011.	Pre and During	Complete
Biological	BIO-3.4-5	03	Mitigate impacts on Raptors and Nesting Birds	During the permitting process, the USFWS may identify the need for protocol surveys for least Bell's vireo.	The USFWS did not identify the need for protocol-level surveys for the least Bell's vireo. The USFWS issued the Biological Opinion (81440-2010-F0404) for the project on May 9, 2011. The Biological Opinion does not identify the need for least Bell's vireo protocol level surveys.	Pre	Complete
Biological	BIO-3.4-5	04	Mitigate impacts on Raptors and Nesting Birds	If active nests are not identified during the preconstruction survey, no further action is required for breeding birds.	Pre-construction special-status species surveys were completed from September 2011 through January 2012, which is outside of the typical avian nesting season; therefore, a pre-construction survey for nesting birds was not conducted. In addition, construction in 2011 started in October, which is outside the avian nesting season. Nesting bird surveys will be conducted prior to construction during the nesting season.	Pre	On-going
Biological	BIO-3.4-5	05	Mitigate impacts on Raptors and Nesting Birds	For golden eagle, construction contractors shall observe CDFG and USFWS 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.	Construction on the project started in October, which is outside the avian nesting season. Nesting bird surveys will be conducted prior to construction in 2012 during the avian nesting season. If a nest is observed, the appropriate buffers will be implemented. In addition, a Biological Monitor will be on site daily to monitor compliance with this measure.	During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-3.4-5	06	Mitigate impacts on Raptors and Nesting Birds	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.	A qualified biologist will be on site daily to monitor compliance with this measure. If a nest is within the buffers of the work activities, the Biological Monitor will coordinate with the CDFG.	During	On-going
Biological	BIO-3.4-5	07	Mitigate impacts on Raptors and Nesting Birds	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 and USFWS's Division of Migratory Birds shall will be consulted. While the USFWS issues limited take permits for golden eagle, this species and certain other raptors are protected under the Bald and Golden Eagle Protection Act and fully-protected under California law.	A Biological Monitor will be on site daily to monitor compliance with this measure. If construction activities are deemed to have a negative effect on nesting raptors, the Biological Monitor will halt work and consult with the CDFG and USFWS.	During	On-going
Biological	BIO-3.4-5	08	Mitigate impacts on Raptors and Nesting Birds	Following construction, PG&E will comply with the PG&E company-wide Avian Protection Plan.	This measure will be implemented following construction.	Post	To be Implemented Following
Biological	BIO-3.4-6	01	Implement 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.	A Habitat Mitigation Plan was submitted to the CPUC, USFWS, and CDFG on August 17, 2011. The USFWS and the CDFG have verbally approved the Habitat Mitigation Plan. In addition, the USFWS used the Habitat Mitigation Plan for its jeopardy determination for the Reinitiation of Formal Consultation for the PG&E Hollister 115 kV Power Line Reconductoring Project (8-8-11-FS-59R). This document was issued on September 22, 2011, and provides an amendment to the Biological Opinion (81440-2010-F0404), which was issued on May 9, 2011.	Pre	Complete
Biological	BIO-3.4-6	02	Implement measures for the protection and restoration of riparian and upland habitat	Affected riparian and upland habitat shall be restored to pre-project conditions.	All affected riparian and upland habitat will be restored to pre-project conditions following construction.	During and Post	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-3.4-7	01	Implement measures for the protection and restoration of 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.	The record of protected trees removed during construction will be included in the Habitat Mitigation Plan following completion of construction. The plan for native tree replacement was included in the Habitat Mitigation Plan, which was submitted to the CPUC on August 17, 2011.	Pre, During, and Post	On-going
Biological	BIO-3.4-7	02	Implement measures for the protection and restoration of native trees	For replacement trees, the Habitat Management Plan shall include, at a minimum, quantifiable success criteria, contingency provisions, and follow-up monitoring responsibilities and schedules.	The Habitat Mitigation Plan, which was submitted to the CPUC on August 17, 2011, included a quantifiable success criteria, contingency provisions, and follow-up monitoring responsibilities and schedules for replacement trees.	Pre	Complete
Biological	BIO-APM-01	01	Conduct environmental training and monitoring program for crews	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.)	PG&E has developed a project-specific environmental training program that will be attended by all project personnel prior to starting work on the project.	Pre and During	Complete
Biological	BIO-APM-02	01	Restrict vehicles to roadways and approved access routes	Restrict vehicles to established roadways and approved access routes and staging areas.	All vehicles have been utilizing established roadways and approved access routes and staging areas. A Biological Monitor will be on site daily to monitor compliance with this measure.	During	On-going
Biological	BIO-APM-03	01	Retain an environmental monitor	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.	A Biological Monitor will be present on site during construction. The Biological Monitor will have the authority to stop work, if necessary.	During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-APM-04	01	Set back staging areas from waterbodies	Staging areas will be set back at least 50 feet from streams, creeks, or other water bodies to avoid impacts on riparian habitat.	All staging areas have been set back at least 50 feet from streams, creeks, and other waterbodies to avoid impacts to riparian vegetation.	Pre and During	On-going
Biological	BIO-APM-05	01	Contact 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.	Construction personnel have been instructed to contact the environmental monitor if any special-status species have been observed. A communication protocol has been established as part of the project Field Reference Manual. On December 16, 2011, two Western burrowing owls were observed along the access road to TP-5. Three burrows are being utilized by the owls along the access road, which has not been utilized for construction activities to date. This occurrence was documented and reported to the Environmental Compliance Biologist, Environmental Compliance Supervisor, PG&E Environmental Compliance Lead, and PG&E Project Biologist via the established communication protocol in the MMRCP.	During	On-going
Biological	BIO-APM-06	01	Photograph sensitive habitat conditions before beginning and after construction	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.	Pre-construction photodocumentation of sensitive habitats has been conducted at all construction locations within sensitive habitats prior to the start of construction activities. Post-construction photodocumentation will be completed after construction activities are complete at these locations. Additional photodocumentation will be conducted for the remainder of the project prior to working in new areas.	Pre and Post	On-going
Biological	BIO-APM-07	01	Additional APMs	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.	Additional applicant-proposed measures (APMs) will be implemented, as necessary.	During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-APM-08	01	Restore upland and riparian habitats 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.	A list of specific actions to restore habitats on disturbed sites was included in the Habitat Mitigation Plan.	Pre, During, and Post	On-going
Biological	BIO-APM-09	01	Implement sudden oak death prevention measures	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 and  All tools used to perform the work shall be disinfected before leaving infested areas.	A Sudden Oak Death Prevention Plan was approved by the CPUC on August 4, 2011. The Sudden Oak Death Prevention Plan included BMPs to control the introduction and spread of sudden oak death. A Biological Monitor will be on site daily to ensure compliance with this measure.	During	On-going
Biological	BIO-APM-10	01	Avoid impacts to protected trees removed during construction	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).	All trees trimmed and removed are documented in a tree trimming table that is submitted to the CPUC on a monthly basis. To date, all tree trimming has occurred during the non-breeding season. A Biological Monitor is on site daily to monitor compliance with this measure.	During	On-going
Biological	BIO-APM-11	01	Implement 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.	Work areas have been planned to avoid wetland areas and margins. A Biological Monitor will be on site daily to monitor compliance with this measure.	During	On-going
Biological	BIO-APM-11	02	Implement protection measures for Waters of the United States	Delineate wetland areas, and restrict construction personnel and equipment from entering fenced protected areas.	No wetlands have been identified to date; therefore, no wetlands need to be delineated. Additional surveys will be conducted for the remaining project areas, and fencing and/or flagging will be installed as necessary.	Pre and During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-APM-11	03	Implement protection measures for Waters of the United States	Conduct all fueling of vehicles, equipment, and helicopters at least 100 feet from wetlands and other waterbodies.	To date, no vehicle fueling has occurred within the project area. A Biological Monitor will be on site daily to monitor compliance with this measure.	During	On-going
Biological	BIO-APM-11	04	Implement protection measures for Waters of the United States	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).	To date, no road construction has occurred within the project area. A Biological Monitor will be on site daily to monitor compliance with this measure.	During	On-going
Biological	BIO-APM-12	01	Develop a wetland 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.	The Wetlands Mitigation Plan is included in the Habitat Mitigation Plan, which was submitted to the CPUC on August 17, 2011.	Pre, During, and Post	Complete
Biological	BIO-APM-13	01	Complete spring surveys for special-status plants	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.	Two years of surveys for rare plants were conducted (2006 to 2008) in all project areas, including staging areas, helicopter landing areas, and all access roads. Only Pajaro manzanita was observed during these surveys. Habitat suitability was assessed for the approved variance areas utilized in December of 2011 and January of 2012, which included the Earthbound Farms Staging Area, the access road to Pole 13/10, and the access route/work area for Pole 13/09. These areas were determined to have low potential to support special-status plants.	Pre	Complete

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-APM-14	01	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).	Two years of surveys for rare plants were conducted (2006 to 2008) in all project areas including staging areas, helicopter landing areas, and all new access roads. No Pajaro manzanita was observed during the rare plant surveys. Habitat suitability was assessed for the approved variance areas utilized in December of 2011 and January of 2012, which included the Earthbound Farms Staging Area, the access road to Pole 13/10, and the access route/work area for Pole 13/09. These areas were determined to have low potential to support special-status plants. In addition, no Pajaro manzanita, other special-status plants, or potential habitat have been observed at any of the active work areas, access roads, pull sites, or any other active project area where construction has been conducted to date.	Pre and During	On-going
Biological	BIO-APM-15	01	Minimize impacts on special-staus 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:	Two years of surveys for rare plants were conducted (2006 to 2008) in all project areas including staging areas, helicopter landing areas, and all new access roads in the project area. No Pajaro manzanita was observed during the rare plant surveys. In addition, no Pajaro manzanita, other special-status plants, or potential habitat have been observed at any of the active work areas, access roads, pull sites, or any other active project area where construction has been conducted to date. Habitat suitability was assessed for the approved variance areas utilized in December of 2011 and January of 2012, which included the Earthbound Farms Staging Area, the access road to Pole 13/10, and the access route/work area for Pole 13/09. These areas were determined to have low potential to support special-status plants. A qualified botanist will stake and flag all special-status plant avoidance areas prior to construction in those areas. No construction activities have yet occurred in these areas. A list of specific actions was prepared by a qualified botanist including, on-site restoration and reseeding plans. These actions were included in the Habitat Mitigation Plan which was submitted to the CPUC on August 17, 2011. Specific measures to avoid or minimize impacts to special-status plants will be implemented during construction.	Pre and During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-APM-15	02	Minimize impacts on special-staus plants	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).	To date, construction activities have not occurred in occupied Pajaro manzanita habitat. In areas where occupied Pajaro manzanita habitat does occur, vegetation clearing will be conducted after Pajaro manzanita has set seed and before flowering begins. A Biological Monitor will be on-site daily to monitor compliance with this measure.	During	On-going
Biological	BIO-APM-15	03	Minimize impacts on special-staus plants	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.	To date, no construction activities have occurred in occupied Pajaro manzanita habitat. If construction occurs in occupied Pajaro manzanita habitat, a Biological Monitor will be on-site daily to monitor compliance with this measure.	During	On-going
Biological	BIO-APM-15	04	Minimize impacts on special-staus plants	Where feasible, removal of entire Pajaro manzanita plants from the ground should be avoided.	PG&E will not remove entire Pajaro manzanita plants, if possible. A Biological Monitor will be on-site daily to monitor compliance with this measure.	During	To be Implemented During
Biological	BIO-APM-16	01	Restore habitat for special-status plants	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.	A special-status plant restoration plan was developed by a qualified botanist as part of the Habitat Mitigation Plan.	Pre, During, and Post	Complete

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-APM-17	01	Control the 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.	As of November 1, 2011, PG&E has identified the location of noxious weed species of concern within areas that will be disturbed as part of the project. During this survey, 350 noxious weeds were identified. PG&E is currently preparing a Weed Control Plan, which will include the noxious weed survey results. Actions to prevent noxious weed establishment were described in the Habitat Mitigation Plan which was submitted to the CPUC on August 17, 2011. The project Storm Water Pollution Prevention Plan (SWPPP), which was certified on September 15, 2011, includes BMPs to minimize the introduction of noxious weeds.	Pre, During, and Post	On-going
Biological	BIO-APM-18	01	Implement avoidance measures 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.	USFWS issued the Biological Opinion on May 9, 2011. The Biological Opinion contains measures to minimize impacts to CRLF and CTS. The USFWS provided an amendment to the Biological Opinion on September 22, 2011 (Reinitiation of Formal Consultation for the PG&E Hollister 115 kV Power Line Reconductoring Project [8-8-11-FS-59R]). A Biological Monitor will be on site daily to monitor compliance with this measure. In addition, a CTS 10(a)(1)(A) Permitted Biologist will be on site during ground-disturbing activities to avoid and minimize impacts to CTS.	Pre and During	To be Implemented During Construction
Biological	BIO-APM-19	01	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.	Refer to mitigation measure BIO-3.4-1, Task 7.	Pre, During, and Post	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-APM-20	01	Conduct vegetation trimming/removal during non-breeding season	To avoid removal of active nests, tree trimming, vegetation removal, and removal of towers should be conducted during the nonbreeding season (August 16–March 1). If this is not possible, APM BIO-21 will be implemented.	To date, all tree trimming, vegetation removal, and removal of poles and towers has been conducted during the non-breeding season.	During	On-going
Biological	BIO-APM-21	01	Conduct preconstruction nesting bird surveys and develop 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.	PG&E has developed an Avian Mitigation Plan, which was approved by the CPUC on August 4, 2011. No pre-construction surveys are required at this time for nesting birds. Pre-construction nesting bird surveys will be conducted prior to any construction that occurs within the avian nesting season.	Pre and During	On-going
Biological	BIO-APM-22	01	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.	A helicopter survey of the project area was conducted on November 3, 2011. The Lagunitas Switches work area was used as a landing zone for the helicopter during this survey. No construction activities were conducted by helicopter.	During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-APM-23	01	Conduct preconstruction surveys for active burrowing owls	<p>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&amp;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&amp;E will implement APM BIO-24 (Implement CDFG guidelines for burrowing owl mitigation, if necessary).</p>	<p>Pre-construction surveys for Western burrowing owl have been conducted in suitable habitat and in a 250-foot-wide buffer zone around the power line route, work areas, landing zones, staging areas, pull sites, and areas of access road improvements where ground disturbance is required. On December 16, 2011, two Western burrowing owls were observed along the access road to TP-5. PG&amp;E has consulted with the CDFG and CPUC, and the following measures are being implemented to avoid potential impacts to burrowing owls along the access road to TP-5: Biologists and Environmental Inspectors will be restricted to one round-trip per day which is necessary travel for permit-required wildlife exclusion fence inspections. The Biologists and Environmental Inspectors will not stop in this area and will not exceed 5 miles per hour (mph). During construction activities, speed limits of 10 mph will be observed along the access road. Construction personnel will check in with the monitoring biologist prior to accessing TP-5 as long as burrowing owls remain present in this area. Construction personnel will be instructed to drive 5 mph within 0.5 mile of the location of the burrowing owls, and will be instructed to watch for burrowing owls within the vicinity of the road. Construction personnel will be notified weekly of the presence or absence of burrowing owls occurring in different areas of the project (including along the TP-5 access road). All project personnel will be notified within 24 hours of any new burrowing owls detected during pre-construction or monitoring surveys to facilitate awareness, avoidance of disturbance, and maintenance of no-work buffers at any occupied site. Burrowing owl behavior will be monitored by a biologist at least once a week to determine the occupied status of the burrows. Construction-related disturbance within 160 feet of occupied burrows will be avoided during non-breeding season (September 1 through January 31) or within 250 feet during the breeding season (February 1 through August 31) in accordance with the 1995 CDFG Staff Report on Burrowing Owl Mitigation. Additional pre-construction surveys will be conducted for the remainder of the project prior to working in new areas.</p>	Pre	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-APM-24	01	Implement CDFG guidelines for burrowing owl mitigation if necessary	<p>Disturbance of occupied burrows will be avoided to the maximum extent feasible. Disturbance is generally defined as activities occurring within 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&amp;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&amp;E will consult with CDFG regarding suitable replacement of foraging and burrow habitat.</p>	<p>Pre-construction surveys for Western burrowing owl have been conducted in suitable habitat and in a 250-foot-wide buffer zone around the power line route, work areas, landing zones, staging areas, pull sites, and areas of access road improvements where ground disturbance is required. On December 16, 2011, two Western burrowing owls were observed along the access road to TP-5. PG&amp;E has consulted with the CDFG and CPUC, and the following measures are being implemented to avoid potential impacts to burrowing owls along the access road to TP-5: Biologists and Environmental Inspectors will be restricted to one round-trip per day which is necessary travel for permit-required wildlife exclusion fence inspections. The Biologists and Environmental Inspectors will not stop in this area and will not exceed 5 mph. During construction activities, speed limits of 10 mph will be observed along the access road. Construction personnel will check in with the monitoring biologist prior to accessing TP-5 as long as burrowing owls remain present in this area. Construction personnel will be instructed to drive 5 mph within 0.5 mile of the location of the burrowing owls, and will be instructed to watch for burrowing owls within the vicinity of the road. Construction personnel will be notified weekly of the presence or absence of burrowing owls occurring in different areas of the project (including along the TP-5 access road). All project personnel will be notified within 24 hours of any new burrowing owls detected during pre-construction or monitoring surveys to facilitate awareness, avoidance of disturbance, and maintenance of no-work buffers at any occupied site. Burrowing owl behavior will be monitored by a biologist at least once a week to determine the occupied status of the burrows. Construction-related disturbance within 160 feet of occupied burrows will be avoided during non-breeding season (September 1 through January 31) or within 250 feet during the breeding season (February 1 through August 31) in accordance with the 1995 CDFG Staff Report on Burrowing Owl Mitigation.</p> <p>Additional pre-construction surveys will be conducted for the remainder of the project prior to working in new areas. In addition, a Biological Monitor will be on site daily to implement this measure.</p>	During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-APM-25	01	Implement avoidance measures 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.	The USFWS issued the Biological Opinion on May 9, 2011. The Biological Opinion specified avoidance and mitigation measures to minimize impacts to SJKF. The USFWS provided an amendment to the Biological Opinion on September 22, 2011 (Reinitiation of Formal Consultation for the PG&E Hollister 115 kV Power Line Reconductoring Project [8-8-11-FS-59R]). A Biological Monitor is on site daily to monitor compliance with the Biological Opinion.	Pre and During	On-going
Cultural and Paleontological	CR-3.5-1	01	Stop work if paleontological resources are found	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).	Paleontological resources were included in the environmental training program; therefore, the pre-construction portion of this measure is complete. To date, no work has been conducted in Pleistocene to Oligocene sedimentary rock units. This measure will be implemented, as necessary.	Pre and During	On-going
Cultural and Paleontological	CR-APM-01	01	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).	PG&E has provided the CPUC with the name and qualifications of the Archaeological Monitor. The monitor has been on site throughout January and will continue to be on site to monitor ground-disturbing activities in areas that were documented as having high archaeological sensitivity. The archaeologist has the authority to halt work, if necessary.	During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Cultural and Paleontological	CR-APM-02	01	Stop work if previously unknown cultural resources are encountered	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.	Should any cultural resources be inadvertently discovered during site preparation or construction activities, this measure will be implemented as defined.	During	On-going
Cultural and Paleontological	CR-APM-03	01	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 State 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.	To date, no human remains have been discovered within the project area. If human remains are discovered during any phase of construction, this measure will be implemented as defined.	During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Hazards and Public Safety	HAZ-3.7-1	01	Implement best management practices	<p>PG&amp;E and/or its contractors shall implement construction best management practices, including, but not limited to the following:</p> <ul style="list-style-type: none"> <li>• Follow manufacturer’s recommendations on use, storage, and disposal of chemical products used in construction;</li> <li>• Avoid overtopping construction equipment fuel gas tanks;</li> <li>• Use tarps and absorbent pads under vehicles when refueling to contain and capture any spilled fuel;</li> <li>• Properly dispose of discarded containers of fuels and other chemicals;</li> <li>• During routine maintenance of construction equipment, properly contain and remove grease and oils; and</li> <li>• 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).</li> </ul>	A Biological Monitor is on site daily to monitor compliance with this measure.	During	On-going
Hazards and Public Safety	HAZ-3.7-2	01	Prepare a Hazardous Substance Control and Emergency Response Plan (Plan) and implement it during construction	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 has prepared a Hazardous Substance Control and Emergency Response Plan. The plan was approved verbally on September 21, 2011, by the CPUC. A Biological Monitor is on site daily to ensure the Hazardous Substance Control and Emergency Response Plan is implemented.	Pre and During	Complete
Hazards and Public Safety	HAZ-3.7-3	02	Prepare a Health and Safety Plan and implement it during construction	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 has prepared a Health and Safety Plan. The plan was submitted to the CPUC on June 4, 2011 and was approved on August 4, 2011. The Health and Safety Plan is located in the Field Reference Manual for the project and is kept on site daily. In addition, the Health and Safety Plan is part of the environmental training program. PG&E Construction Inspectors are on site daily to ensure the Health and Safety Plan is implemented.	Pre and During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Hazards and Public Safety	HAZ-3.7-4	01	Ensure that a Workers Environmental Awareness Program is established and implemented	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.	PG&E has prepared an environmental training program and will communicate project requirements to all construction personnel prior to construction. The CPUC monitor attended the supervisor training on October 3, 2011. Additional trainings are conducted in the field for new project personnel. PG&E discussed this measure with the CPUC on November 17, 2011. As agreed to by the CPUC, training logs have been and will continue to be submitted with each monthly compliance report.	Pre and During	On-going
Hazards and Public Safety	HAZ-3.7-5	01	Contain and control spills	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.	Spill response kits are on site in case of a hazardous material spill. A spill occurred on December 9, 2011, from a hydraulic hose on a line truck auger. The spill was contained and cleaned in accordance with the project's Hazardous Substance Control and Emergency Response Plan. On December 14, a spill occurred from a hydraulic hose on a line truck auger. The spill was contained and cleaned in accordance with the project's Hazardous Substance Control and Emergency Response Plan. These spills were documented as occurrences and the vehicles were taken off site for repairs. No other spills were observed in the month of December. A Biological Monitor will be on site to monitor compliance with this measure daily.	During	On-going
Hazards and Public Safety	HAZ-3.7-6	01	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) and 2009-AWP-1447-	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; and poles 22/00 and 22/01 shall not exceed 82 feet above ground level (i.e., 381 feet above mean sea level).	This measure will be implemented during construction. No work has been conducted on Poles 22/00 and 22/01 to date.	During	To be Implemented During Construction

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Hazards and Public Safety	HAZ-APM-01	01	Stop work if hazardous substances are encountered	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.	No hazardous substances were discovered during construction in December. A Biological Monitor will be on site daily to monitor compliance with this measure. If a hazardous substance is unexpectedly encountered, the Biological Monitor will stop work.	During	On-going
Hazards and Public Safety	HAZ-APM-02	01	Conduct groundwater sampling and testing if contamination is suspected	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.	No suspected contaminated groundwater was encountered in December. A Biological Monitor will be on site daily to monitor compliance with this measure.	During	On-going
Hazards and Public Safety	HAZ-APM-03	01	Develop 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.	No construction helicopter operations have been conducted to date. The construction contractor is currently preparing a Helicopter Lift Plan for submittal to the Federal Aviation Administration.	Pre	Pending
Hazards and Public Safety	HAZ-APM-04	01	Develop 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.	PG&E has prepared a Fire Risk Management Plan. The Fire Risk Management Plan was submitted to the CPUC on June 24, 2011 and was approved on September 14, 2011. Information contained within the Fire Risk Management Plan was included as part of the environmental training program. PG&E Construction Inspectors are on site daily to ensure the Fire Risk Management Plan is implemented. Fire suppression equipment is clearly marked and kept adjacent to all work areas and in staging areas.	Pre and During	Complete

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Hazards and Public Safety	PUB-APM-01	01	Maintain secure facilities	<p>PG&amp;E will implement the following measures during construction activities:</p> <ul style="list-style-type: none"> <li>• All equipment will be locked and secured when left unattended at the most secure locations available;</li> <li>•Contract security will be used at active pull/tension sites, laydown, and storage areas outside work hours;</li> <li>•All open holes will be covered and secured once activity at that location stops (after hours);</li> <li>•Anchor bolts on foundations without structures will be capped; and</li> <li>•Safety structures will be placed at road crossings during overhead wire installation activity to protect traffic and pedestrians.</li> </ul>	PG&E Construction Inspectors are on site daily to ensure these measures are implemented, as needed.	During	On-going
Hydrology and Water	HYDRO-3.8-1	01	Implement protective measures on steep slopes	<p>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:</p> <ul style="list-style-type: none"> <li>•Permanent access roads shall be in-sloped with a rock-lined ditch on the inboard side</li> <li>•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).</li> </ul>	No new access roads that are located within 300 feet of an existing surface water channel and that traverse a ground slope greater than 2 percent have been constructed on the project to date. This measure will be implemented, as necessary.	During	On-going
Hydrology and Water	HYDRO-3.8-2	01	Provide sizing recommendations to ensure each culvert can pass a 10- year storm event without being submerged	<p>The drainage study, as proposed by PG&amp;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:</p> <p>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; and design length and slope of culvert to maintain existing topography.</p>	No work has been conducted or is planned to be conducted in a drainage; therefore, a drainage study is not required at this time. However, culvert sizing calculations will be performed prior to installing any culverts.	Pre	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Hydrology and Water	HYDRO -APM-1	01	Prepare SWPPP	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.	PG&E has contracted ETIC Engineering to prepare and implement the project SWPPP. The SWPPP includes a list of BMPs that will be implemented. The SWPPP was submitted on September 14, 2011, and certified on September 15, 2011 (WDID 335C361953). The SWPPP is being implemented during construction.	Pre	On-going
Hydrology and Water	HYDRO -APM-1	02	Prepare SWPPP	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.	Erosion control measures have been employed to control erosion from disturbed areas. A SWPPP Monitor has been retained on the project and conducts regular inspections. In addition, the Biological Monitor is on site daily to ensure compliance with this measure.	During	On-going
Hydrology and Water	HYDRO -APM-1	03	Prepare SWPPP	Drainage facilities in downstream offsite areas will be protected from sediment using BMPs consistent with CCRWQCB requirements.	Erosion control measures have been employed to control erosion from disturbed areas. A SWPPP Monitor retained on the project conducts regular inspections. In addition, the Biological Monitor is on site daily to ensure compliance with this measure.	During	On-going
Hydrology and Water	HYDRO -APM-1	04	Prepare SWPPP	Vegetative cover will be established on the disturbed areas as soon as possible after disturbance.	This measure is ongoing. Vegetative cover will be established on the disturbed areas as soon as possible after disturbance.	During and Post	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Hydrology and Water	HYDRO -APM-2	01	Develop 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.	PG&E provided measures to minimize the potential for, and effects of, spills of hazardous, toxic, or petroleum substances in the Hazardous Substance and Emergency Control Plan, which was submitted to the CPUC on September 21, 2011. The Biological Monitor is on site daily to ensure compliance with this measure.	Pre and During	Complete
Hydrology and Water	HYDRO -APM-3	01	Perform drainage study and implement 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.	Refer to mitigation measure HYDRO-3.8-2, Task 1.	Pre	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Noise	NOI-3.11-1	01	Limit work hours from seven a.m. to seven p.m.	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 or where necessary to ensure worker safety or to conduct certain work during electrical line clearances or during procedures that cannot be interrupted.	Construction activities will be limited to the hours between 7:00 a.m. and 7:00 p.m. A Biological Monitor is on site daily to monitor compliance with this measure. Nighttime construction was required on November 30, 2011 and January 13, 2012. Regulatory agencies were contacted before night work began and the following measures were implemented: staging equipment during daylight hours and leaving large equipment overnight, and carpooling to and from work areas. The Lead Environmental Inspector (LEI) escorting vehicles on foot with a flashlight to check for special-status species, compliance with the Construction Lighting Mitigation Plan, and inspecting under vehicles with a flashlight prior to leaving the site. As PG&E was unable to notify the USFWS within 24 hours following night construction work on January 13, 2012, the incident was documented as a Compliance Issue and was addressed accordingly. No further action is required.	During	On-going
Noise	NOI-3.11-2	01	Use portable barriers near residences	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.	To date, no construction activities involving the use of compressors or other small stationary equipment have been conducted within 100 feet of a residence. This measure will be implemented as necessary.	During	On-going
Noise	NOI-3.11-3	01	Develop a nighttime noise reduction plan	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.	To this date, no nighttime construction activities have occurred within 500 feet of an occupied residential dwelling unit. This measure will be implemented as necessary.	Pre and During	Complete
Noise	NOI-3.11-3	02	Develop a nighttime noise reduction plan	Plan construction activities to minimize the amount of nighttime construction.	Construction activities have been planned to minimize the amount of nighttime construction.	Pre and During	Complete

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Noise	NOI-3.11-3	03	Develop a nighttime noise reduction plan	Offer temporary relocation of residents within 200 feet of nighttime construction areas.	To this date, no nighttime construction activities have occurred within 200 feet of a residence. This measure will be implemented as necessary.	During	Complete
Noise	NOI-3.11-3	04	Develop a nighttime noise reduction plan	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.	To this date, no nighttime construction activities involving stationary noise sources have occurred. This measure will be implemented as necessary.	During	Complete
Noise	NOI-APM-1	01	Implement noise control measures	Notify residents near future construction zones regarding the forecast schedule for nearby construction and provide project contact information.	Residents have been notified of construction and provided with project contact information near construction locations. Residents near future construction zones will be notified of construction and provided with project contact information prior to the beginning of construction activities.	Pre and During	On-going
Noise	NOI-APM-1	02	Implement noise control measures	<p>PG&amp;E will implement the following noise abatement measures during project construction to minimize the impact of temporary construction-related noise on nearby residences:</p> <ul style="list-style-type: none"> <li>• Comply with manufacturers' muffler requirements on all construction equipment engines.</li> <li>• Turn off construction equipment when not in use, where applicable.</li> <li>• Minimize equipment use.</li> <li>• Use equipment fitted with factory-installed muffling devices during construction when readily available.</li> <li>• Route truck traffic away from residential areas where feasible.</li> </ul>	PG&E has been implementing the noise abatement measures, as feasible. Compliance with this measure is monitored daily.	During	On-going
Noise	NOI-APM-2	01	Implement control measures for helicopter noise	Notify residents near future construction zones and along helicopter flight paths regarding the schedule and reasons for upcoming construction and flight operations.	Residents have been notified of construction and provided with project contact information near construction locations. Residents near future construction zones will be notified of construction and provided with project contact information prior to the beginning of construction activities.	Pre and During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Noise	NOI-APM-2	02	Implement control measures for helicopter noise	Provide project contact information to facilitate response to noise complaints during the construction activity.	Residents have been provided with contact information for noise complaints during construction activities near current construction activities. Residents near future construction activities will be provided with contact information prior to the beginning of construction activities in these areas.	During	On-going
Noise	NOI-APM-2	03	Implement control measures for helicopter noise	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.	Helicopter flight paths have been and will be planned to avoid noise-sensitive receivers, to the extent feasible.	During	On-going
Socioeconomics	PU-APM-01	01	Identify 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.	PG&E conducted a pre-construction records search and field survey to identify specific locations of water wells and well fields. No wells or well fields were located.	Pre	Complete
Socioeconomics	PU-APM-02	01	Notify Underground Service Alert prior to beginning work on underground lines.	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.	Underground Service Alert has been notified at least 2 days prior to current construction activities in the underground portion of the power line. PG&E, or its contractor, will continue to notify the Underground Service Alert at least 2 days prior to initiation of construction activities in new locations of the underground portion of the power line.	Pre and During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Transportation	TRANS-3.15-1	01	Prepare a Traffic Management and Control Plan	<p>PG&amp;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:</p> <ul style="list-style-type: none"> <li>•Include descriptions of work hours, haul routes, work area delineation, any traffic detour routes, bicyclists and pedestrian detour routes, traffic control, and flagging;</li> <li>•Identify all access and parking restriction and signage requirements;</li> <li>•Require workers to park personal vehicles at the approved staging areas and take only necessary project vehicles to the work sites;</li> <li>•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;</li> <li>•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</li> <li>•Identify all roadway locations where special construction techniques (e.g., night construction) would be used to minimize impacts to traffic flow.</li> </ul>	PG&E has prepared a Traffic Control Plan. The Traffic Control Plan was submitted to the CPUC on June 24, 2011, and approved on September 14, 2011. The plan is maintained on site in the Field Reference Manual, which has been distributed to the construction contractor and PG&E supervisors. In addition, traffic control is part of the environmental training program.	Pre	Complete
Transportation	TRANS-3.15-2	01	Coordination with Union Pacific Railroad	<p>PG&amp;E shall coordinate all construction activities with Union Pacific Railroad to avoid delays in freight train service along the Hollister Branch Line. PG&amp;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.</p>	To date, no construction activities have been conducted near a railway. PG&E will coordinate with Union Pacific Railroads prior to any construction activities that may cause delays of freight train services. Construction crews are trained on Union Pacific Railroad safety guidelines prior to construction, as part of the environmental training program. PG&E will implement the Union Pacific Railroad safety and engineering guidelines when installing power lines over the railroads.	Pre	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Visual	AES-3.1-1	01	Light and Glare	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.	PG&E has prepared a Construction Lighting Mitigation Plan. The plan was submitted to the CPUC on June 24, 2011, and approved on September 14, 2011. Compliance with this measure is monitored, as necessary. Nighttime construction was required on November 30, 2011, and January 13, 2012. Regulatory agencies were contacted before night work began and the following measures were implemented: staging equipment during daylight hours and leaving large equipment overnight; carpooling to and from work areas; the LEI escorting vehicles on foot utilizing a flashlight to check for special-status species; compliance with the Construction Lighting Mitigation Plan; and inspecting under vehicles with a flashlight prior to leaving the site. As PG&E was unable to notify the USFWS within 24 hours following night construction on January 13, 2012, this incident was documented as a Compliance Issue and addressed accordingly. No further action is required.	Pre and During	Complete
Visual	AES-APM-01	01	Limit construction hours	Construction activities that are visible to the public and scheduled to occur after 6:00 pm or on weekends should not continue past daylight hours (which vary according to season) unless required because of the 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.	Construction activities were required at night on November 30, 2011, and January 13, 2012 due to the necessity to limit power outages to one day. Regulatory agencies were contacted before night work began and the following measures were implemented: staging equipment during daylight hours and leaving large equipment overnight; carpooling to and from work areas; the LEI escorting vehicles on foot utilizing a flashlight to check for special-status species; compliance with the Construction Lighting Mitigation Plan; and inspecting under vehicles with a flashlight prior to leaving the site. As PG&E was unable to notify the USFWS within 24 hours following night construction work on January 13, 2012, the incident was documented as a Compliance Issue and addressed accordingly. No further action is required.	During	On-going
Wilderness and Recreation	REC-APM-01	01	Avoid disrupting Rec Facilities along Juan Bautista de Anza National Historic Trail	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.	To date, no construction activities have occurred in the vicinity of the Juan Bautista de Anza National Historic Trail. Construction activities near this area will only occur on the weekdays.	During	On-going

**Attachment D: Environmental Training Log**





## Crew-Level Environmental Training

### Hollister 115 kV Power Line Reconductoring Project

This is to certify these individuals have completed a mandatory Crew-Level Environmental Training. By signing below, the participant indicates that they understand and shall abide by the guidelines set forth in the program materials.

Employee Name	Company	Signature	Date
Ernest Cowell	Geo Options		11-15-11
Fanet Loduca	PG&E		<del>11/11/12</del>
Mark Newton	PG&E		<del>11/11/12</del>
Diana Nickell	PG&E		11/11/12
Chap Koest	PG&E		11/11/12
MANHO YEUNG	PG&E		11/11/12
Chuck Wyckoff	PG&E		11/11/12
Sarah Basson	PG&E		11/11/12
Jane Bally	PG&E		11/11/12
ROBERT GIBSON	PG&E		11/11/12
Dave Fontes	Graniterock		11/11/12
JARROD ZGRAGEN	Graniterock		11/11/12
Febrina Herrera	Granite Rock		11/11-12
Vicente Ponce	Granite Rock		1-11-12
Jim Komp	Granite Rock		11-11-12
Sopran Choudhury	PG&E		11/11/12
Risa Roche	Granite Rock		11/11/12
Brad P	G Rock		11/12/12
Brook Taylor Raymond A. Dessler	Graniterock		11/12/12

