Hollister 115 kV Power Line Reconductoring Project
MONTHLY COMPLIANCE REPORT
November 2011

Introduction

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 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.

Status of Construction

Preconstruction activities for the project continued during the month of November and included tree trimming, environmental training, and a helicopter survey. Preconstruction activities were completed by November 6. Construction activities for the project began the week of November 7 and were conducted at the Anzar Junction and Lagunitas Switches areas. In preparation for the work, crews were mobilized to the project area and equipment and materials were staged within the approved work areas for the Anzar Junction and Lagunitas Switches. A Henkels and McCoy crew installed wood poles and associated hardware for the Lagunitas shoofly, including guy wires, insulators, shoes, reflectors, guy anchors, jumpers, and travelers. New conductor was installed on the shoofly and clipped into the insulators on the wooden poles. Light-duty steel poles were spotted, framed, pole sections were assembled, and arms were adjusted at the Anzar Junction area. Gravel was placed on the existing gravel road to the Anzar Junction area, which was in need of improvement. General clean-up and demobilization activities continued at the Lagunitas Switches area.

The Davey Expert Tree Company conducted tree trimming along project access roads in the Anzar Junction area and around the base of Pole 13/8, the proposed location for Pole 13/14, and the entrance to the gravel access road off of San Juan Highway. Brush was cut around the base of Pole 13/2.

An ETIC Engineering crew installed jute netting over soil stockpiles in the Anzar Junction area and installed T-posts and wire on exclusion fence gates at the Lagunitas Switches and Natividad Switches areas in order to ensure gate integrity.

During construction activities and fence maintenance, a United States Fish and Wildlife Service (USFWS) and California Department Fish and Game (CDFG) Designated Biologist helped ensure that small mammal burrows were avoided. No special-status amphibian species were observed during the month of November.

Representative photographs of activities that occurred during the month of November are included in Attachment A: Photographs.

Environmental Inspection/Biological Monitoring

The LEI was on site each day that surveys and/or reconnaissance work was occurring. Preconstruction wildlife surveys for California red-legged frog (CRLF) and California tiger salamander (CTS) were conducted each day prior to construction activity. 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 and California Department Fish and Game approved Designated CTS Biologists. In addition, a wildlife survey for San Joaquin kit fox, American badger, and Western burrowing owl was conducted at Pole Landing Zone 6 as this site was considered for use as a potential staging area. Biological preconstruction clearance surveys were also conducted prior to forecasted rain events for special-status amphibian species at the Anzar Junction location including the Anzar shoofly, Tower Pull Site 7, Poles 13/0 through 13/8, the gravel access road to Anzar Junction, Lagunitas Switches, and Natividad Switches. No evidence of special-status species was observed.

All exclusion fence maintenance activities were monitored by the USFWS- and CDFG-approved Designated Biologists. No special-status species were observed. One great horned owl (*Bubo virginianus*) was observed flying in the vicinity of the Lagunitas Switches area. Additional detail regarding environmental inspection and monitoring activities is included in Attachment B: Mitigation Monitoring, Compliance, and Reporting Program.

Reinitiation of consultation with the USFWS began on October 25, 2011 in order to modify USFWS Biological Opinion (BO) Protective Measure #1 for CRLF and CTS to allow for fencing of staging areas, landing zones, and pull sites beyond the stated October 15 date, up to December 3. In addition, the reinitiation also requested modification of USFWS BO Protective Measure #1 for 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. The amended BO was approved on November 15, 2011.

CPUC Variance Request Number 9 was approved by the CPUC on November 22, 2011. The variance requested 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 deadline. In addition, the variance requested 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.

Non-Compliances

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

Other Issues and Concerns

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

Mitigation Monitoring, Reporting and Compliance Program Summary

Rachel Danielson (CPUC, Third-Party Monitor) conducted site inspections on Tuesday, November 1; Thursday, November 10; Thursday, November 17; and Tuesday, November 22. No issues or concerns were reported to PG&E following the site visits. The MMCRP status report provided in Attachment B: Mitigation Monitoring, Compliance, and Reporting Program of this report, includes additional details on and the current implementation status of each mitigation measure.

Environmental Training

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. Seventeen new employees were trained in November. A total of 94 project personnel have received the environmental training to date. Attachment C: Environmental Training Log of this report includes copies of the training sign-in sheets for the month of November.

Variance Requests

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

CPUC Variances

Variance Request Number	Description	Approval Date
1	The PG&E Llagas Substation Shoofly was changed from 2 temporary wood poles to six temporary wood poles	9/27/11
2	Pole 13/07 was redesigned from a light duty steel pole to a tubular steel pole in the Project Description of the MND	9/27/11
3	The PG&E Natividad Switches Replacement site was added to the Project Description of the MND	9/27/11
4	Pole segment 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	Submitted 10/24/11, Status Pending
6	Request for a new staging area located north of Poles 13/17 to 14/00, on property owned by Earthbound Farms	Submitted 11/02/11, Resubmitted 11/16/11, Status Pending
7	Request for a change in the location and configuration of a power pole shoofly for the Anzar switch tower near pole segment locations 13/01 and 13/02.	In development
8	Request for a change in the locations of proposed access routes for Poles 13/09 and 13/10.	In development
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 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.	Approved 11/22/11

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Attachment A: Photographs

Photograph 1:

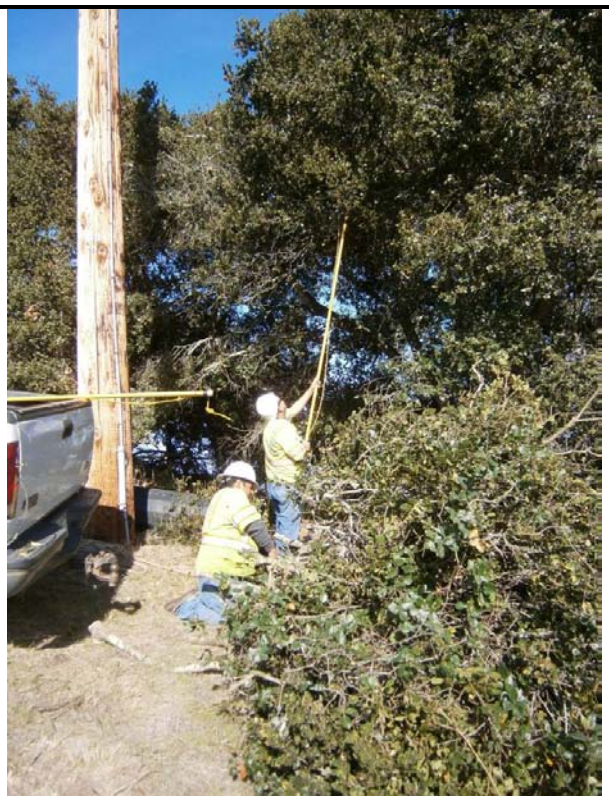
A Henkels and McCoy crew installing insulators and hanging travelers on a wood shoofly pole at the Lagunitas Switches area

Photograph 2:

Soil stockpiles covered at the base of wood poles at the Lagunitas Switches area

Photograph 3:

New conductor installed with bucket trucks on the northern wooden shoofly dead-ends at the Lagunitas shoofly



Photograph 4:

A Davey Tree Expert Company crew trimming trees at Pole 13/8

Attachment B: Mitigation Monitoring, Compliance, and Reporting Program

Hollister Reconductoring Project Mitigation Measure Status Report

Friday, December 02, 2011
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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	PG&E will implement all applicable and feasible fugitive dust control measures required by MBUAPCD. This requirement will be incorporated into the construction contract. These measures include: Water all active construction sites at least twice daily. Frequency of watering should be based on the type of operation, soil, and wind exposure; prohibit all grading activities during periods of high wind (over 15 mph); haul trucks will maintain at least 2'0" of freeboard; on-site vehicles will be limited to a speed on unpaved roads that minimizes dust emissions; cover all trucks hauling dirt, sand, or loose materials; cover inactive storage piles; install wheel washers at the entrance to construction sites for all exiting trucks; sweep streets if visible soil material is carried out from the construction site; post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person will respond and take corrective action within 48 hours. The phone number of the MBUAPCD also will be visible to ensure compliance with Rule 402 (Nuisance); and limit the area under construction at any one time as feasible.	Dust control measures were incorporated into the construction contract. Dust control measures required by the MBUAPCD are being implemented as required.	During	On-going
Air Quality	AIR-APM-02	01	Manage tailpipe emissions	PG&E will implement all applicable and feasible measures to reduce tailpipe emissions from diesel-powered construction equipment. This requirement will be incorporated into the construction contract. These measures include: Maximize use of diesel construction equipment meeting CARB's 1996 or newer certification standard for off-road heavy-duty diesel engines; use emission control devices at least as effective as the original factory-installed equipment; maintain all diesel-powered equipment in a manner to minimize visible soot emissions; locate stationary diesel-powered equipment and haul truck staging areas as far as practicable from sensitive receptors;	PG&E incorportated the BMPs described in this measure in the construction contract; therefore, the preconstruction portion of this measure is complete. PG&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.	Pre and During	On-going
Air Quality	AIR-APM-02	02	Manage tailpipe emissions	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.	Unnessary idling is addressed in the environmental training program and is monitored throughout the day.	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-powererd 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 are planned for construction in 2011, including the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/01 to 14/01, tower pull sites (TP)-1 and TP-5, pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, PLZ-6, helicopter tower landing zone (TLZ)-4, Natividad Switches, the proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms, and approximately 1,600 feet of access roads requiring improvement. Therefore, this measure is not applicable for construction activities in 2011. PG&E will avoid direct impacts to sensitive wetlands and riparian areas in new construction areas for activities planned in 2012.	During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
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) have approved a variance request on November 15, 2011 to extend the October 15 fencing requirement to December 3. The California Public Utilities Commission (CPUC) approved this variance request on November 22, 2011. A biological monitor will be present on site to monitor the fencing during construction.	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 will be restricted to natural-fiber, biodegradable meshes, and coir rolls.	Pre and During	On-going
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, 94 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 has been conducted by an on-site biological monitor each day immediately prior to construction activities. To date, no special-status species have been observed. The onsite 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

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
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 CDFG with a letter of credit in the amount of $1,911,150 toward the establishment of a conservation easement for off-site California tiger salamander 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 California tiger salamander.	Pre, During, and Post	On-going
Biological	BIO-3.4-2	01	Mitigate impacts on Western pond turtle	PG&E and/or its contractors shall implement the following measures for construction areas located in suitable habitat within 0.3 mile of aquatic features: Include western pond turtle in the Environmental Training and Monitoring Program. Before daily activities begin near areas of suitable habitat, the onsite monitor shall perform pond turtle surveys within suitable aquatic and upland habitat. Any pond turtles located within the construction area would be relocated to the nearest safe location. To minimize the likelihood of encountering turtles in upland areas near stream crossings, construction footprints shall be restricted to the smallest area possible.	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.	Pre and During	On-going
Biological	BIO-3.4-3	01	Mitigate impacts on American badger	Include American badger in the Environmental Training and Monitoring Program.	The American badger has been included in the environmental training and monitoring program; therefore, this measure is complete.	Pre	Complete

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Biological	BIO-3.4-3	02	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: 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&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.	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. A pre-construction survey for the American badger was completed in September, October, and November 2011 at the following locations: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/0 to 14/01, tower pull sites (TP)-1 and TP-5, pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, PLZ-6, helicopter tower landing zone (TLZ)-4, Natividad Switches, the proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms, and approximately 1,600 feet of access roads requiring improvement. No American badger presence was detected at these locations. Additional pre-construction surveys will be conducted within the appropriate timeframe for the remainder of the project prior to working in new areas.	Pre	On-going
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.	No American badger potential habitat or signs were observed during the September, October, and November 2011 pre-construction surveys at the following locations: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/0 to 14/01, tower pull sites (TP)-1 and TP-5, pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, PLZ-6, helicopter tower landing zone (TLZ)-4, Natividad Switches, the proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms, and approximately 1,600 feet of access roads requiring improvement. 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-3.4-3	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.	No American badger potential habitat or signs were observed during the September, October, and November 2011 pre-construction surveys at the following locations: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/0 to 14/01, tower pull sites (TP)-1 and TP-5, pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, PLZ-6, helicopter tower landing zone (TLZ)-4, Natividad Switches, the proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms, and approximately 1,600 feet of access roads requiring improvement. 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.	No American badger potential habitat or signs were observed during the September, October, and November 2011 pre-construction surveys at the following locations: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/0 to 14/01, tower pull sites (TP)-1 and TP-5, pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, PLZ-6, helicopter tower landing zone (TLZ)-4, Natividad Switches, the proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms, and approximately 1,600 feet of access roads requiring improvement. 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 preconstruction 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 were completed in September, October, and November 2011 at the following locations: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/0 to 14/01, tower pull sites (TP)-1 and TP-5, pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, PLZ-6, helicopter tower landing zone (TLZ)-4, Natividad Switches, the proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms, and approximately 1,600 feet of access roads requiring improvement. No San Joaquin kit fox presence was detected at these locations. Preconstruction surveys will be conducted within the appropriate timeframe 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.	No San Joaquin kit fox presence was observed during the September, October, and November 2011 preconstruction surveys at the following locations: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/0 to 14/01, tower pull sites (TP)-1 and TP-5, pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, PLZ-6, helicopter tower landing zone (TLZ)-4, Natividad Switches, the proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms, and approximately 1,600 feet of access roads requiring improvement. 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

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
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.	No San Joaquin kit fox or San Joaquin kit fox signs were observed during the September, October, and November 2011 pre-construction surveys at the following locations: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/0 to 14/01, tower pull sites (TP)-1 and TP-5, pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, PLZ-6, helicopter tower landing zone (TLZ)-4, Natividad Switches, the proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms, and approximately 1,600 feet of access roads requiring improvement. However, escape ramps have been constructed in all excavated holes or trenches greater than two 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 this measure.	During	On-going
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.	No San Joaquin kit fox or San Joaquin kit fox signs were observed during the September, October, and November 2011 pre-construction surveys at the following locations: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/0 to 14/01, tower pull sites (TP)-1 and TP-5, pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, PLZ-6, helicopter tower landing zone (TLZ)-4, Natividad Switches, the proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms, and approximately 1,600 feet of access roads requiring improvement. However, all food-related trash items have been and will be removed from the project area daily. A biological monitor will be onsite daily to monitor compliance 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

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
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 San Joaquin kit fox by restoring grassland habitats following construction, as described in the Habitat Mitigation Plan. The USFWS and CDFG have agreed to this mitigation for San Joaquin Kit Fox.	Pre, During, and Post	On-going
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 onsite 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

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
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.	Preconstruction special-status species surveys were completed in September and October 2011, 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 in 2012, 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 sruveys 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 onsite daily to monitor compliance with this measure.	During	On-going
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 onsite 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 onsite 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

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
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
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. The plan for native tree replacement was included in the Habitat Mitigation Plan, which was submitted to the CPUC on August 17, 2011.	Pre and During	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 responsibities and schedules for replacement trees.	Pre	Complete

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
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
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.	During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
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 was completed in September, October, and November 2011 for the following locations: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/01 to 14/01, Tower pull sites (TP)-1 and TP-5, Pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, PLZ-6, helicopter tower landing zone (TLZ)-4, Natividad Switches, the proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms, and approximately 1,600 feet of access roads requiring improvement. 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 APMs will be implemented, as necessary.	During	On-going
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

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
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).	A biological monitor will be 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 onsite 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.	Pre-construction surveys were completed in September, October, and November 2011 at the following locations: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/01 to 14/01, Tower pull sites (TP)-1 and TP-5, Pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, PLZ-6, helicopter tower landing zone (TLZ)-4, Natividad Switches, the proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms, and approximately 1,600 feet of access roads requiring improvement. No wetlands were identified; therefore, no wetlands need to be delineated in these locations. 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 onsite 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 onsite 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 new access roads in the project area. Only Pajaro manzanita was observed during these surveys. The proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms was not surveyed as it was not deemed to contain suitable habitat for 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 in the project area. No Pajaro manzanita was observed at the following locations: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/01 to 14/01, Tower pull sites (TP)-1 and TP-5, Pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, PLZ-6, helicopter tower landing zone (TLZ)-4, Natividad Switches, and approximately 1,600 feet of access roads; therefore, this measure is complete for these locations. The proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms was not surveyed as it was not deemed to contain suitable habitat for special-status plants.	Pre and During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
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 at the following locations: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/01 to 14/01, Tower pull sites (TP)-1 and TP-5, Pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, PLZ-6, helicopter tower landing zone (TLZ)-4, Natividad Switches, and approximately 1,600 feet of access roads; therefore, this measure is complete for these locations. The proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms was not surveyed as it was not deemed to contain suitable habitat for 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, onsite 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
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 onsite 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 onsite 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-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 onsite 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
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. 350 noxious weeds were identified during this survey. 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 SWPPP, which was certified on September 15, 2011, includes BMPs to minimize the introduction of noxious weeds.	Pre, During, and Post	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
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 California red-legged frog and California tiger salamander. 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 California tiger salamander 10(a)(1)(A) permitted biologist will be on-site during ground disturbing activities to avoid and minimize impacts to California tiger salamander.	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
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, no tree trimming has been required during the breeding season.	During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
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	CDFG (1995) recommends that preconstruction surveys be conducted in suitable habitat in the project study area (Exhibit 1) and in a 250 foot-wide buffer zone around the construction site to locate active burrowing owl burrows. PG&E will retain a qualified biologist to conduct preconstruction surveys for active burrows according to the CDFG guidelines. The surveys will include a nesting season survey and a wintering season survey, which is the season immediately preceding construction. The surveys will cover all affected areas, including the power line route, staging areas, pull sites, and areas of access road improvements where ground disturbance is required. If no burrowing owls are detected, no further mitigation is required. If active burrowing owl burrows are detected, PG&E will implement APM BIO-24 (Implement CDFG guidelines for burrowing owl mitigation, if necessary).	A pre-construction survey for burrowing owl was completed in September, October, and November 2011 for the following locations: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/01 to 14/01, Tower pull sites (TP)-1 and TP-5, Pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, PLZ-6, helicopter tower landing zone (TLZ)-4, Natividad Switches, the proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms, and approximately 1,600 feet of access roads requiring improvement. No burrowing owl presence or sign was detected at these locations. Additional pre-construction surveys will be conducted for the remainder of the project prior to working in new areas.	Pre	On-going
Biological	BIO-APM-24	01	Implement CDFG guideluines for burrowing owl mitigation if nescessary	Disturbance of occupied burrows will be avoided to the maximum extent feasible. Disturbance is generally defined as activities occurring with 250 feet of active burrowing owl nesting pairs during the breeding season (February 1 through August 31), or within 160 feet of occupied burrows in the non-breeding season (September 1–January 31). During the non-breeding season, if direct impacts to an occupied burrow are unavoidable, passive relocation techniques may be considered after all other alternatives have been exhausted. Relocation may involve installing one-way doors at occupied burrow entrances and ensuring that alternative suitable burrows are available. Any relocation effort will be implemented in coordination with CDFG and in accordance with standard burrowing owl guidelines. Any burrowing owl exclusion process will be coordinated by a biologist with prior burrowing owl relocation experience. PG&E will support site-specific mitigation measures for any burrowing owls with potential to be impacted by construction activities. Measures may include onsite burrow enhancement or artificial burrow installation, in coordination with CDFG. In the event that a site-specific burrowing owl relocation is implemented, PG&E will consult with CDFG regarding suitable replacement of foraging and burrow habitat.	A pre-construction survey for the burrowing owl was completed in September, October, and November 2011 for the following locations: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/01 to 14/01, Tower pull sites (TP)-1 and TP-5, Pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, PLZ-6, helicopter tower landing zone (TLZ)-4, Natividad Switches, the proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms, and approximately 1,600 feet of access roads requiring improvement. No burrowing owl presence or sign was detected at these locations; therefore, no additional protection measures need to be implemented. Additional pre-construction surveys will be conducted for the remainder of the project prior to working in new areas. If burrowing owls or sign are observed during these surveys protection measures will be implemented. In addition, a biological monitor will be onsite daily to implement this measure.	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 the San Joaquin kit fox. 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 complaince 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).	To date, no construction activities have occurred in areas that were documented as having high archeaological sensitivity. PG&E provided the CPUC with the name and qualifications of the archaeological monitor. The monitor will be onsite 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 previousley unknown cultutral 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 Sate Resources Code. Upon notification, the MLD has 48 hours to make recommendations as to the treatment or disposition of the remains. PG&E or its appointed representative will implement any mitigation before the resumption of activities at the site where the remains were discovered.	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	PG&E and/or its contractors shall implement construction best management practices, including, but not limited to the following: • Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction; • Avoid overtopping construction equipment fuel gas tanks; • Use tarps and absorbent pads under vehicles when refueling to contain and capture any spilled fuel; • Properly dispose of discarded containers of fuels and other chemicals; • During routine maintenance of construction equipment, properly contain and remove grease and oils; and • If wood poles removed from the Hollister Pole Segment are not recycled or reused, they shall be disposed of at a landfill facility that is authorized to accept treated wood pole waste in accordance with HSC 25143.1.4(b).	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 onsite in case of a hazardous material spill. No spills were observed in the month of October. A biological monitor will be onsite 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-	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
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 October. 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

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
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 October. A biological monitor will be onsite 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 onsite 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
Hazards and Public Safety	PUB-APM-01	01	Maintain secure facilities	PG&E will implement the following measures during construction activities: • All equipment will be locked and secured when left unattended at the most secure locations available; •Contract security will be used at active pull/tension sites, laydown, and storage areas outside work hours; •All open holes will be covered and secured once activity at that location stops (after hours); •Anchor bolts on foundations without structures will be capped; and •Safety structures will be placed at road crossings during overhead wire installation activity to protect traffic and pedestrians.	PG&E construction inspectors are on-site daily to ensure these measures are implemented, as needed.	During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
Hydrology and Water	HYDRO -3.8-1	01	Implement protective measures on steep slopes	For all segments of new access roads that would be within 300 feet of an existing surface water channel and traverse a ground slope greater than two percent, the following protective measures shall be installed: •Permanent access roads shall be in-sloped with a rock-lined ditch on the inboard side •Water bars, or a similar drainage feature, shall be installed at 150 foot intervals (so as to reduce the effective, connected length of the access road to 150 feet).	No new access roads 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	The drainage study, as proposed by PG&E in APM-HYDRO-3, shall provide sizing recommendations to ensure each culvert can pass a 10- year storm event without being submerged, and design recommendations to ensure that culvert installation would result in no net increase in erosion and sedimentation during peak flows. Sizing and design recommendations for each culvert shall consider the individual drainage characteristics of the stream (e.g., slope, watershed area, and substrate) and may include any combination of features necessary to achieve no net increase in erosion and sediment transport. Such features may include the following: Downstream armoring with gravel or gabions, coupled with appropriate roughness features or characteristics, so as to dissipate and slow flows exiting the culvert and leaving the modified stream segment; a wide culvert that retains the natural stream bed and roughness elements without notably increasing flow depth; and design length and slope of culvert to maintain existing topography.	PG&E plans to begin work at the following locations: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/01 to 14/01, tower pull sites (TP)-1 and TP-5, pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, PLZ-6, helicopter tower landing zone (TLZ)-4, Natividad Switches, the proposed staging area located north of Poles 13/17 to 14/00 on property owned by Earthbound Farms, and approximately 1,600 feet of access roads. No work is planned in a drainage at the locations; 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
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

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
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 onsite 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 on-going. Vegetative cover will be established on the disturbed areas as soon as possible after disturbance.	During and Post	On-going
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 onsite 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. To date, no work has occurred beyond these work limits. A biological monitor is on-site daily to monitor compliance with this measure.	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 have been within 100 feet of a residence. This measure will be implemented as necessary.	During	On-going
Noise	NOI-3.11-3	01	Develop a nightime 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 nightime 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
Noise	NOI-3.11-3	03	Develop a nightime 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 nightime 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

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
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 including: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/01 to 14/01, tower pull sites (TP)-1 and TP-5, pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, helicopter tower landing zone (TLZ)-4, Natividad Switches, and approximately 1,600 feet of access roads. 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	PG&E will implement the following noise abatement measures during project construction to minimize the impact of temporary construction-related noise on nearby residences: • Comply with manufacturers' muffler requirements on all construction equipment engines. • Turn off construction equipment when not in use, where applicable. • Minimize equipment use. • Use equipment fitted with factory-installed muffling devices during construction when readily available. • Route truck traffic away from residential areas where feasible.	PG&E has been implementing the noise abatement measures, as feasible. Compliance with this measure is monitored daily.	During	On-going

Location: All

Measure Category Title	MMNo	TaskNo	Mitigation Measure	Task Text	Comments	Timing	Status
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 including: the shoofly line to be located near the Lagunitas Switches and Tower 37/232, the shoofly line to be located near Tower 6/40A, the project pole segment from Pole 13/01 to 14/01, tower pull sites (TP)-1 and TP-5, pole pull sites (PP)-1 and PP-2, helicopter pole landing zone (PLZ)-1, helicopter tower landing zone (TLZ)-4, Natividad Switches, and approximately 1,600 feet of access roads. 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-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 two 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 two 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	PG&E shall prepare a Traffic Management and Control Plan that shall include, at a minimum, the measures listed below. The Plan shall be submitted to the CPUC for approval and shall be distributed to all construction crew members prior to commencement of construction activities. The Plan shall: • Include descriptions of work hours, haul routes, work area delineation, any traffic detour routes, bicyclists and pedestrian detour routes, traffic control, and flagging; • Identify all access and parking restriction and signage requirements; • Require workers to park personal vehicles at the approved staging areas and take only necessary project vehicles to the work sites; • Lay out plans for notifications 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; • Include plans to coordinate all construction activities with emergency service providers in the area. Emergency service providers would be notified of the timing, location, and duration of construction activities. All roads would remain passable to emergency service vehicles at all times; and • Identify all roadway locations where special construction techniques (e.g., night construction) would be used to minimize impacts to traffic flow.	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 onsite 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	PG&E shall coordinate all construction activities with Union Pacific Railroad to avoid delays in freight train service along the Hollister Branch Line. PG&E shall implement, at a minimum, the Union Pacific Railroad safety and engineering guidelines when installing power lines over the railroad right-of-way (ROW). The Workers Environmental Awareness Program required under Mitigation Measure 3.7-4 shall require construction crews and project personnel to be trained on Union Pacific Railroad safety guidelines prior to commencing work within or over the railroad ROW.	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 powerlines 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. 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 Lead Environmental Inspector 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.	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 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 Lead Environmental Inspector 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.	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 C: 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
Wylee Douglas	H2M	Wylee Douglas	15-7-2011
Rick L Sharpe	PGE	Rick L. Sharpe	11-7-11
CHRIS FIVECOAT	ETIC	[illegible]	11-7-11
RYAN FORMOSA	ETIC	[illegible]	11-7-11
Philip Lippe	ETIC	[illegible]	11-7-11
Tom Wallace	ETIC	T. Wallace	11-7-11
Mark Bibbo	GANDA	Mark Bibbo	11-9-11
Norman Sisk	GANDA	Norman K Sisk	11/9/11
Rudy MADRIGAL	G+L SUPPLY	Rudy Madrigal	11-9-11
Wm. J. Scott	JOHNSON TRANS.	[illegible]	11/10/11

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

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
Ryan Stampe	Rogers Helicopters	[illegible]	11/3/11
Javier Zamora	DAVEY TREE	Javier Zamora	11/22/11

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
SEECO	Roman Ananesov		11/28/11
Jeffrey S. Coughlin	PG&E		11/28/2011
Jeremy Fast	"		11/28/11
Stanton Hooker	"		11-28-11
David CASAGRANDE	"		11-28-2011
Tonja Chi	Insignia		11-28-2011
W Young	H&M Coy		11-28-2011
Josh Reneson	H&M Coy		11-29-11
Manuel Lasto	ETIC		12-1-11
DANIEL COLORZANO	ETIC		12-1-11
Alex Smith	ETIC		12-1-11
James Hofstetter	ETIC		12-1-11
Eli Greenwald	ETIC		12-2-11
Aurelio Calderon	Coastal/ETIC		12-02-11
Michael Bradburn	Coastal / ETIC		12/2/11
Daniel Ashmore	Henkels & McCoy		12/2/11
Jeff Lockwood	PG&E		12/2/11
Chris Giranis	"		12/2/11