

Notice of Preparation for an Environmental Document for the Bay Area Operations and Maintenance Activities Proposed by Pacific Gas and Electric

A. Introduction

Pacific Gas and Electric Company (PG&E) has filed an application for an Incidental Take Permit (ITP) under the California Endangered Species Act (CESA) Section 2081 with the California Department of Fish and Wildlife (CDFW). The ITP would cover PG&E's Bay Area Operations and Maintenance (O&M) Activities for natural gas pipelines and electric transmission and distribution lines (proposed project) and establish a comprehensive approach to avoid and minimize impacts to covered species, as well as mitigate for any impacts. A region-wide ITP provides an enhanced conservation strategy while eliminating the time and expense involved in processing individual ITPs. O&M activities are expected to be performed primarily within PG&E's existing rights-of-way (ROWs) over the course of the 30-year permit term. The CDFW will direct the preparation of an Environmental Document (ED) under its certified regulatory program to assess the environmental effects of the ITP Application. The long-term ITP would cover O&M activities, minor new construction activities, and habitat management and enhancement activities that could affect certain species. The species to be covered by the 2081 ITP are the California tiger salamander and Alameda whipsnake, which are listed under CESA as threatened, and the California freshwater shrimp, which is listed under CESA as endangered.

The CDFW is the lead agency under California law and will prepare a Draft and Final ED to comply with the California Environmental Quality Act (CEQA). As required by CEQA, this NOP is being sent to interested agencies and members of the public. The purpose of this NOP is to inform recipients that the CDFW is beginning preparation of an ED for the proposed project and to solicit information that will be helpful in the environmental review process. This notice includes a description of the proposed project, a summary of potential project impacts (including for resources that may not be addressed in detail in the ED), the times and locations of public scoping meetings, and information on how to provide comments. Two public meetings will be held during the scoping period (see detail in Section D). The scoping period will end on **January 24, 2018**. A Scoping Report will be prepared to summarize comments.

This NOP can be viewed on the CDFW web site at the following link: https://www.wildlife.ca.gov/notices.

B. Project Description

CDFW is processing an Incidental Take Permit application to cover PG&E's Bay Area Operations and Maintenance (O&M) Activities for natural gas pipelines and electric transmission and distribution lines (proposed project) and establish a comprehensive approach to avoid and minimize impacts to covered species, as well as mitigate for any impacts. Most of PG&E's Bay Area electric and gas transmission and distribution infrastructure was installed between the 1950s and 1970s. Ongoing operations result in normal wear and tear, which trigger the need to periodically test, maintain and repair facilities. These activities ensure compliance with California Public Utilities Commission (CPUC) mandates concerning the siting, design, operation, and maintenance of public utilities in California, specifically CPUC General

Order 95 (overhead electrical line construction), General Order 112-E (construction, testing, operation, and maintenance of gas gathering, transmission, and distribution piping systems), and General Order 131-D (planning and construction of electrical generation, transmission/power/distribution line facilities and substations). As part of O&M, PG&E occasionally needs to install new or replacement structures to upgrade existing facilities or extend service to new residential or commercial customers. O&M activities or minor new construction fall within the CPUC's exclusive jurisdiction. If a resource may be potentially affected or other regulatory requirements apply, PG&E coordinates with the appropriate regulatory agency(ies) to secure any required permits or authorizations.

PG&E's proposed ITP will be a comprehensive 30-year plan that establishes avoidance and minimization measures and best management practices to reduce impacts to covered species, a framework for mitigating impacts, and incidental take coverage for the California tiger salamander, the Alameda whipsnake, and the California freshwater shrimp. The proposed ITP requires compensatory mitigation in advance of impacts and will foster regional, larger scale conservation efforts.

Description of Covered Activities

The ED will cover the activities covered under the ITP, including three categories of activities that would be conducted in accordance with CPUC requirements and for which PG&E is requesting incidental take authorization: operational activities, maintenance activities, and minor new construction, as described below.

- *Operational activities* typically include inspecting, monitoring, testing, cleaning and operating valves, enclosures, switches, insulators and other components. These activities involve utility personnel working at existing facilities in existing ROW; personnel typically use existing access roads.
- Maintenance activities include repairing and replacing facilities, structures, and access roads. This work includes reconductoring electrical transmission and distribution projects and gas pipeline replacement. This work also includes emergency repair and replacement and vegetation management, including tree pruning and removal. These activities primarily take place at existing facilities and within existing ROWs; hazard trees may occur adjacent to the ROW as PG&E is required by law to manage and remove them to ensure the safety of its facilities.
- Minor new construction activities include installing or replacing facilities to upgrade existing infrastructure or extending service to locally approved new residential or commercial customers. When conducted in natural vegetation that contain suitable habitat for sensitive species, covered linear activities are limited to 2 miles or less from an existing line. Line extensions exceeding 2 miles would not be an O&M activity covered by this ED. The size of a minor new construction project for purposes of this ED would be calculated as the total footprint, expressed in acres. New or replacement structures to upgrade existing infrastructure are limited to new gas pressure limiting stations with 1 acre or less of natural vegetation disturbance and electrical substation expansions with 3 acres or less of natural vegetation disturbance.

Approximate annual disturbance for these activities is anticipated as:

Table 1. O&M and New Construction Activities Approximate Disturbance*					
Activities	Estimated Annual Temporary Disturbance	Estimated Annual Permanent Disturbance	Estimated Total Permanent Disturbance (for 30-yr permit term)		
Natural Gas	68 acres	30 acres	907 acres		

Electrical	261 acres	38 acres	1,130 acres

^{*}Note: This includes all types of disturbance, not just disturbance in natural vegetation.

Typical O&M activities would take between 4 hours and 2 days, with some larger activities taking up to 3 months. Minor new construction activities may take 3 days to 3 months for gas pipelines, 5 days to 3 months for transmission lines, and 5 to 10 days for distributions lines.

Proposed Project Location

O&M activities for the proposed project would occur in nine San Francisco Bay Area counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma, see below. All covered activities will occur within the following types of lands:

- PG&E gas and electrical transmission and distribution facilities, ROWs, or lands adjacent to existing facilities,
- the lands owned by PG&E or subject to PG&E easements to maintain these facilities,
- access routes associated with PG&E's routine maintenance,
- a buffer around the ROW, and
- mitigation areas acquired to compensate for impacts resulting from covered activities.

The O&M activities would occur within the nine-county area, totaling approximately 402,440 acres (128,735 acres of which are in natural vegetation). O&M and minor new construction activities are expected to be performed throughout PG&E's ROWs and in close proximity to the ROWs over the course of the 30-year permit term. Activities on mitigation land will also be analyzed by the CEQA document.

PG&E's Natural Gas Transmission and Distribution System

PG&E's natural gas system consists of a transmission system and a distribution system. The transmission system in the Bay Area includes 16 primary gas transmission lines totaling approximately 1,820 miles of pipeline. The gas transmission system transports natural gas in steel pipelines buried 3 to 4 feet deep (measured to the top of the pipe). Depending on the location and type of pipe, pipe diameter can vary from 8 to 42 inches. The Bay Area gas distribution system consists of approximately 19,350 miles of both steel and plastic lines, which are typically buried 2 to 4 feet deep.

The ROW width for the natural gas system varies from 5 to 150 feet. PG&E owns less than 1% of the linear ROWs in fee title; the remainder are in easements and franchise.

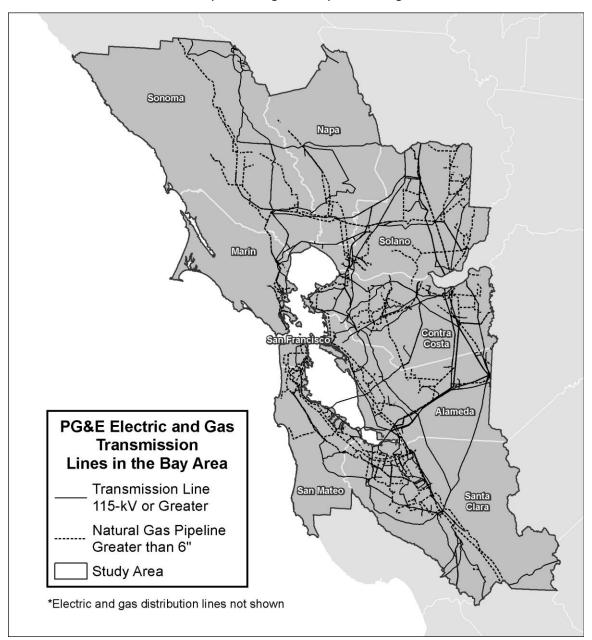
PG&E's Electrical Transmission and Distribution System

PG&E's electrical system consists of a transmission system and a distribution system. The electrical transmission system in the Bay Area consists of approximately 4,430 miles of transmission lines. Bulk transmission lines (230 kilovolt [kV] and 500 kV) are supported on steel-lattice towers or steel poles. Power lines with a 60 kV, 70 kV, or 115 kV capacity are most often supported by wood poles, but steel poles, tubular steel poles (TSPs), and lattice towers are also used in certain areas. PG&E operates 207 transmission substations, and over 275 distribution substations in the Bay Area. Power from high-voltage transmission lines is transformed to lower voltage at these substations.

Transmission ROWs are of varying widths and generally are easements that are negotiated with private landowners or the holders of public lands. PG&E owns less than 1% of these ROWs in fee title; the rest

are in easements. The ROW widths depend on circuit or line voltage, the number of lines per ROW, terrain, and other factors.

PG&E's electrical distribution system provides links between most customers and the transmission system. Approximately 14,885 miles of overhead distribution lines extend through the Bay Area, and another 8,130 miles are underground. Wood or steel poles support the distribution conductors. The electrical distribution ROW widths vary according to the system voltage, terrain, and other factors.



PG&E's Conservation Strategy

PG&E's proposed ITP includes a compensatory mitigation plan to ensure that impacts to covered species are fully offset. The plan includes a strategy for mitigating both temporary and permanent impacts. The plan requires that mitigation be purchased in advance of impacts. Mitigation options include, but

are not limited to, the placement of conservation easements on land purchased in fee by PG&E or on lands owned by others, and the purchase of mitigation credits from approved banks. For the conservation easements, PG&E will fund endowments to provide for management in perpetuity. The plan will ensure that mitigation is achieved on a larger, regional scale. The mitigation sites may require restoration or enhancement work, which would be considered a covered activity under the ITP. Additionally, avoidance and minimization measures will be implemented to reduce impacts to covered species.

Project Purpose and Objectives

Following are the objectives of the Proposed Project as described by PG&E:

- Support continued long-term operation and maintenance of PG&E electrical and natural gas facilities to ensure delivery of reliable and safe energy to PG&E customers, in accordance with CPUC mandates and in compliance with CESA and other relevant state and federal laws through obtaining an incidental take authorization or other regulatory authorization as required.
- Complete necessary O&M activities in a manner that minimizes impact to and provides conservation of habitat for California tiger salamander, Alameda whipsnake, and California freshwater shrimp, as well as other species with similar habitat requirements, within approximately 402,440 acres of lands comprising the Plan Area within the nine counties in the San Francisco Bay Area.
- Mitigate for environmental impacts from O&M activities in a manner that contributes to the long-term survival of California tiger salamander, Alameda whipsnake, and California freshwater shrimp, as well as other species with similar habitat requirements, through protection and management of those species and their habitats in the study area by participating in the network of permanently protected and managed lands throughout the Bay Area that support populations of those species.

C. Analysis of Potential Environmental Effects

In accordance with CEQA guidelines and CDFW's certified regulatory program, the CDFW intends to prepare an ED to evaluate potential environmental effects of the proposed project, and to propose mitigation measures to reduce any significant effects identified. The ED will also study the environmental impacts of alternatives to the proposed project, and propose mitigation to reduce their effects.

Based on preliminary review of the proposed project and documents submitted by PG&E, completion of the proposed project may have potentially significant environmental effects, but some resource areas appear unlikely to experience significant environmental effects. Potential issues and impacts are listed in Attachment A. No determinations have yet been made as to the significance of these potential impacts, some resources may be eliminated from detailed analysis in the ED.

Scoping comments are welcome on the range of environmental resources being considered for analysis in the ED. The ED will also evaluate the cumulative impacts of the project in combination with other present and planned projects in the area.

Mitigation Measures. PG&E has developed a set of standard resource protection measures, standard operating procedures, and best management practices that could reduce or eliminate potential impacts of the proposed project. The effectiveness of these measures will be evaluated in the ED, and additional measures ("mitigation measures") will be developed to further reduce impacts, if required. When the CDFW makes the final decision on the proposed project, it will define the mitigation measures to be adopted as a condition of project approval.

Alternatives. As required by CEQA, the ED will evaluate alternatives to the proposed project that could potentially reduce, eliminate, or avoid impacts of the project. In compliance with CEQA, a Draft ED must describe a reasonable range of alternatives to the project or project location that could meet the project's purpose and need, feasibly attain most of the basic project objectives, and avoid or lessen any of the significant environmental impacts of the proposed project. The No Project Alternative will also be analyzed in the Draft ED to describe the situation that would likely occur in the absence of proposed project implementation. The ED will evaluate the comparative merits of the alternatives.

D. Public Scoping Meetings

The CDFW will initially conduct 2 public Scoping Meetings as shown in Table 2. The purpose of the scoping meetings is to present information about the proposed project and the CDFW's decision-making processes, and to listen to the views of the public on the range of issues relevant to the scope and content of the ED.

Location	Burlingame Recreation Center	Mill Valley Community Center, Terrace Lounge
Day & Date	January 8, 2018	January 9, 2018
Time(s)	4:00 to 6:00 p.m.	4:30 to 6:30 p.m.
Address	850 Burlingame Ave. Burlingame, CA 94010	180 Camino Alto Mill Valley, CA 94941

E. Scoping Comments

The CDFW is soliciting information regarding the topics and alternatives that should be included in the ED. All comments for the scoping period must be received by January 24, 2018.

All Scoping Comments: You may submit comments in a variety of ways: (1) by U.S. mail, (2) by electronic mail, or (3) submitting comments at a Public Scoping Meeting (see times and locations in Table 2 above).

All comments will be considered public unless otherwise requested.

By Mail: If you send comments by U.S. mail, please use first-class mail and be sure to include your name and a return address. Please send written comments on the scope and content of the ED to:

Craig Weightman (CDFW Project Manager) California Department of Fish and Wildlife c/o Aspen Environmental Group 235 Montgomery Street, Suite 935 San Francisco, CA 94104-3002

By Electronic Mail: Email communications are encouraged; please remember to include your name and return address in the email message. Email messages should be sent to bayareaitp@aspeneg.com.

A **Scoping Report** will be prepared, summarizing all comments received (including oral comments made at the Scoping Meetings). This report will be posted on the CDFW website and copies will be placed in local document repository sites listed in Table 2 below.

F. For Additional Project Information

Internet Website – Information about this application and the environmental review process will be posted on the CDFW website. This site will be used to post all public documents during the environmental review process and to announce upcoming public meetings. In addition, a copy of the Draft ED will be posted at the site after it is published.

Document Repositories – Documents related to the Project and the ED will be made available at the sites listed in Table 3.

Table 3. Project Document Repository Sites				
Library Sites				
Central Santa Rosa Library	211 E Street, Santa Rosa, CA 95404	(707) 545-0831		
Napa Main Library	580 Coombs Street, Napa, CA 94559	(707) 253-4241		
Civic Center Library	3501 Civic Center Drive, San Rafael, CA 94903	(415) 473-6057		
Fairfield Civic Center Library	1150 Kentucky Street, Fairfield, CA 94533	(866) 572-7587		
Martinez Library	740 Court Street, Martinez, CA 94553	(925) 646-9900		
Oakland Main Library	125 14th Street, Oakland, CA 94612	(510) 238-3134		
King Library	150 E. San Fernando St., San Jose, CA 95112	(408) 808-2000		
San Carlos Public Library	610 Elm Street, San Carlos, CA 94070	(650) 522-7800		
San Francisco Main Library	100 Larkin St., San Francisco, CA 94102	(415) 557-4400		
California Department of Fish	and Wildlife Office			
Bay Delta Region (Region 3)	7329 Silverado Trail, Napa, CA 94558	(707) 944-5500		

Attachment A: Summary of Environmental Impacts

Potential issues and impacts are listed below. No determinations have yet been made as to the significance of these potential impacts, some resources may be eliminated from detailed analysis in the ED. CDFW welcomes comments as to whether certain resources should be eliminated from detailed analysis.

Ongoing O&M activities would occur in a similar manner to existing activities with a similar level of impacts. Minor new construction activities as well as management of compensatory mitigation lands, including restoration and enhancement activities as well as other minor activities associated with ITP avoidance and minimization measures, could have additional impacts on resources. Thus, the impacts listed in the table could occur from project activities.

Attachment A – Summary of Potential Impacts of PG&E's Bay Area O&M and Minor New Construction Activities

Environmental Issue Area / Potential Issues or Impacts

- AESTHETICS / VISUAL For ongoing O&M activities, visual impacts from maintenance would continue to be short-term and temporary and occur along already existing infrastructure. Such activities are part of the environmental baseline and, while occasionally noticeable, would not degrade the visual character of the surrounding area.
- Long-term visual impacts to scenic vistas from minor new construction would be generally limited to areas within or immediately adjacent to a PG&E ROW, and above ground structures would generally have small footprints. New overhead distribution lines generally follow existing roadways and are common visual features similar to street lights and traffic controls that do not create a significant impact.
- Some more substantial visual impacts could occur when minor new construction includes up to 2 miles of new overhead transmission lines in undeveloped areas.
- Implementation of the ITP would have minimal aesthetic impacts resulting from the management of compensatory mitigation lands, including restoration or enhancement activities, as well as other minor activities associated with ITP avoidance and minimization measures.

AGRICULTURAL RESOURCES

- Ongoing O&M activities could potentially disrupt the use of farmlands that are classified as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. These impacts would be temporary and short term because they primarily involve repairs or maintenance of existing gas and electric infrastructure. PG&E would continue to coordinate restoration in accordance with easement documents. Future O&M activities are anticipated to be similar to current impacts from ongoing activities, without any anticipated increase.
- There is some potential for temporary and permanent conversion of farmland to nonagricultural uses relating to PG&E's facilities upgrades and expansions, and construction of minor new facilities. Permanent conversions are unlikely to be greater than 3 acres and PG&E estimates that permanent conversion of agriculture land would occur at an average of approximately 1 acre per year, which would be minimal and is unlikely to have a measurable impact on area farming operations.
- Compensation lands could be identified on lands under Williamson Act contract, such that either the Purchase of Habitat Compensation Lands option or the Enhancement as Compensation option could result in the limited withdrawal of lands from Williamson Act protection. PG&E has stated that it would generally seek compensation land that is not under a Williamson Act contract. In any event, any such

Environmental Issue Area / Potential Issues or Impacts

conversions would be small in size and would not significantly affect area farming operations. Because gas and electric facilities are considered a compatible use in agricultural preserves under Section 51238 of the California Government Code, PG&E's O&M work on such existing facilities would not normally affect any Williamson Act contracts in place. While PG&E's construction of minor new facilities could require taking small acreages of land out of existing Williamson Act contracts, the balance of the existing contract would generally not be affected under applicable law.

- The Plan Area includes few areas zoned for forest land, timberland, or Timberland Production Zone so any impacts to these areas would be minimal and there would be limited or no loss or conversion of forest land.
- Implementation of the ITP would have the potential for temporary and permanent conversion of farmland to nonagricultural uses resulting from the management of compensatory mitigation lands, including restoration or enhancement activities. However, the agricultural acreage acquired as part of the conservation strategy would likely be small and such activities would have a minimal effect on existing farming operations.
- Other than as addressed above, the proposed project would not involve other changes that could result in the conversion of farmland to non-agricultural use.

AIR QUALITY

- Impacts during ongoing O&M will continue to occur as a result of airborne dust and heavy equipment, helicopters, support vehicles, and other equipment powered by internal combustion engines that generate exhaust containing: carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NOx), sulfur oxides (SOx), and particulate matter (PM10 and PM2.5). These impacts related to ongoing O&M are part of the existing baseline, and will be temporary and short-term. PG&E's ongoing O&M activities would also be part of any existing non-attainment conditions. PG&E will continue to implement Best Management Practices for its ongoing operations.
- Implementation of the ITP could facilitate minor new construction activities that are similar or additional to those performed historically, which could have additional impacts as a result of airborne dust and heavy equipment, helicopters, support vehicles, and other equipment powered by internal combustion engines that generate exhaust containing criteria air pollutants.
- Implementation of the ITP, directly through habitat creation and related activities, or indirectly through PG&E's minor new construction, could create potential impacts to human and environmental health by contributing to existing non-attainment conditions with respect to the EPA's National Ambient Air Quality Standards (NAAQS) and California standards for particulate matter and ozone.

Environmental Issue Area / Potential Issues or Impacts

BIOLOGICAL RESOURCES

- Potential temporary and permanent impacts to sensitive vegetation communities from activities such as restoration or enhancement of mitigation lands, fencing maintenance, pipeline replacement, ROW vegetation management, tower repair or replacement, and minor new construction activities.
- Impacts from an increase in non-native weed establishment and recruitment, particularly at ground disturbance sites.
- Potential temporary and permanent impacts to sensitive plant species.
- Potential temporary and permanent impacts to federal or state jurisdictional wetland or non-wetland drainages through vegetation removal, placement of fill, erosion, sedimentation, and degradation of water quality.
- Potential direct, permanent impacts to wildlife, which may be accidentally run over by vehicles.
- Potential direct and indirect impacts to wildlife species listed in the California Natural Diversity Database (CNDDB).
- Potential direct and indirect, temporary and permanent impacts to sensitive wildlife species, including the California tiger salamander, Alameda whipsnake, and California freshwater shrimp.
- Potential direct, permanent impacts to burrowing wildlife species, which may be inadvertently killed when burrows are collapsed by heavy machinery.
- Potential direct and indirect impacts to bird species listed in the CNDDB.
- Potential direct, permanent impacts to birds nesting in structures, equipment, shrubs, trees, or on the ground, if their nests are disturbed or destroyed.
- Potential impacts to nesting bird species from helicopter rotor wash, noise, dust, and vibrations.
- Beneficial impacts resulting from acquisition of lands as part of the conservation strategy that would result in permanent protection in perpetuity.

CULTURAL RESOURCES

- Potential impacts to known and unknown archaeological sites during restoration or enhancement of compensatory mitigation lands or ground disturbance activities associated with operations and maintenance activities and minor new construction.
- Potential impacts to Traditional Cultural Properties (TCPs) or potential TCPs from the restoration or enhancement of compensatory mitigation lands, and minor new construction of utility facilities.
- Potential impacts to historic-era sites that are potentially eligible for listing on the NRHP.
- Potential impacts to paleontological resources in particular in areas of high or undetermined areas of paleontological sensitivity.

GEOLOGY AND SOILS

- Impacts from existing O&M and minor new construction activities in this area could include potential impacts from: rupture of active faults or strong seismic groundshaking, landslides, mudslides, or other related ground failures from seismic activity, localized soil erosion, slope failure, and expansive soils. Standard measures to address geological and soils issues are incorporated in all utility design work to reduce potential impacts.
- Implementation of the ITP could have impacts on geology and soils resulting from the management of compensatory mitigation lands, including restoration or enhancement activities, as well as other minor activities associated with ITP avoidance and minimization measures.

Environmental Issue Area / Potential Issues or Impacts

GREENHOUSE GAS EMISSIONS

- Minor new construction activities are similar or additional to those performed historically by PG&E. These activities are not likely to generate substantial greenhouse gas (GHG) emissions because most GHG emissions would be associated with construction equipment and vehicles, which are used on an ongoing basis and represent baseline conditions. Greenhouse gases would also result from purging natural gas pipelines if needed during maintenance activities. Construction associated with compensatory mitigation lands and minor new construction activities would be temporary and short term, and GHG emissions would be amortized over 30 years under guidance followed by the CPUC. Additional operational emissions would be limited to minimal carbon dioxide (CO2) emissions from vehicle use, accidental leaks of sulphur hexafluoride (SF6) (used in new breakers) and gas compressor emissions.
- Impacts during ongoing O&M would continue to occur from time to time from use of heavy equipment, helicopters, support vehicles, and other equipment powered by internal combustion engines that generate greenhouse gas emissions. These ongoing maintenance activities are existing activities that are anticipated to continue with the same intensity as they have historically and are currently.
- Implementation of the ITP would have minor greenhouse gas emissions resulting from the management of compensatory mitigation lands, including restoration or enhancement activities, as well as other minor activities associated with ITP avoidance and minimization measures. Impacts from implementation of the ITP are highly unlikely to be significant.
- Implementation of the project is unlikely to conflict with an applicable plan, policy or regulation adopted to reduce greenhouse gas emissions. Moreover, as directed by the CPUC, PG&E includes GHG mitigation measures in its standard construction practices as feasible, even though GHG impacts are often less than significant.

HAZARDS AND HAZARDOUS MATERIALS

- Potential impacts from the improper storage or handling or hazardous materials and/or hazardous wastes during management of compensatory mitigation lands O&M activities or minor new construction activities.
- Potential impacts from the leaking or spilling of petroleum or hydraulic fluids from management of compensatory mitigation lands or construction equipment or other vehicles during project lifetime.
- Potential impacts from the inadvertent uncovering of hazardous materials during excavation activities, causing toxic releases to the environment.
- Potential impacts from handling hazardous materials within one-quarter mile of an existing or proposed school.
- Potential impacts from being located within an airport land use plan or within a private airstrip.
- Potential impacts from loss, injury, or death involving wildland fires in particular for work that involves flame, arcing, or sparking equipment such as welding

Environmental Issue Area / Potential Issues or Impacts

HYDROLOGY AND WATER QUALITY

- Possible impacts from increased surface water runoff, erosion, siltation, and sedimentation above baseline conditions.
- Possible impacts to streams or washes from violation of water quality standards or waste discharge requirements.
- Possible impacts on the existing drainage pattern including through alteration of a stream or river that could result in erosion or siltation. Removal or replacement of pipelines could require work in channel banks or within streams.
- Project is unlikely to substantially deplete groundwater supplies or interfere substantially with groundwater recharge due to the limited use of water for management of compensatory mitigation lands and limited minor new construction.
- Project would not place housing within a 100-year flood hazard area nor would it impede or redirect flood flows through a 100-year flood hazards area.
- Although portions of the Plan Area are near levees or dams and in areas subject to seiche, tsunami or mudflow, the management of compensatory mitigation lands and minor new construction activities would result in minimal increased risk of exposure of people or structures to significant risk or inundation.

LAND USE

- Project is unlikely to conflict with applicable land use plans, policies, or regulations adopted to avoid or mitigate an environmental effect.
- Effects to landowners, businesses, and public and community facilities or other sensitive receptors depending on location of project activities.
- Potential to conflict with applicable Habitat Conservation Plan or Natural Community Conservation Plan requirements.
- Project activities would not have the potential to physically divide an established community.

MINERAL RESOURCES

- Project activities may occur in areas classified as mineral resource zones but would include a small amount of ground disturbance and are unlikely to impact recovery of the resource outside of the limited project footprint.
- Compensatory mitigation lands or minor new construction activities are unlikely to cross a locally important mineral resource recovery site. Compensatory mitigation sites would generally not be established in such locations, or would be designed to minimize impacts to the mineral resource. Minor new construction activities serving development in urban centers would not likely occur in locally important mineral recovery sites. In more rural areas, PG&E would site minor new construction activities to avoid or minimize potential conflicts with mineral resources.

Environmental Issue Area / Potential Issues or Impacts

NOISE

- For ongoing O&M activities, noise impacts from maintenance would continue to be short-term and temporary, and occur along already existing utility infrastructure. Such activities would continue to be consistent with the hourly requirements in local noise ordinances except in exigent circumstances. Construction noise would be generated by equipment operation including potential helicopter use.
- Additional noise impacts could occur with minor new construction.
- Minor new construction could also have some limited operational noise, such as the noise from the operation of new transmission lines or gas pressure limiting stations, which could increase ambient noise levels surrounding these facilities. However, these noise impacts are not likely to be significant for small construction projects.
- Implementation of the ITP would have minor, temporary construction noise impacts resulting from the management of compensatory mitigation lands, including restoration or enhancement activities, as well as other minor activities associated with ITP avoidance and minimization measures. Implementation of the ITP could also facilitate minor new utility construction activities that are similar or additional to those performed historically.

POPULATION/HOUSING

- PG&E's ongoing O&M activities would continue to be part of the environmental baseline, and would not provide infrastructure that could directly or indirectly induce population growth, or displace housing or people because these activities would be conducted on existing electrical and gas facilities, primarily located within existing PG&E rights-of-way (ROW).
- Minor new construction activities are specifically intended to support development patterns identified in approved general plans, and would not directly or indirectly induce population growth. Sufficient temporary housing exists in the area for the fraction of the construction workforce that would require lodging.
- No housing would be displaced for minor new construction activities, which are generally required to support development patterns identified in approved general plans. Temporary construction easements and new ROW to support extension of existing infrastructure and expansion of existing facilities may be required, but the facilities will be sited to avoid displacement of existing housing.
- No people will be displaced due to minor new construction activities, which are intended to support development patterns identified in approved general plans and would be sited to avoid displacement of people.
- Implementation of the ITP would not directly or indirectly induce population growth, displace housing or displace people. Implementation of the ITP could facilitate minor new construction but, as detailed below, those activities would have no impact on population and housing.

PUBLIC SERVICES

• Fire and Police Protection: The activities that would be conducted in the Plan Area involve the management of compensatory mitigation lands, minor new construction, and O&M activities for existing electrical and gas facilities, which are part of the existing environmental baseline and anticipated to continue at current levels. While fire or police services may be required during these activities due to an accident, such an event is unlikely to occur and would not trigger the need for new fire or police protection services. Any fire or police protection services required for these activities could be handled by existing facilities. To reduce the potential impacts to response times, PG&E would coordinate lane and road closures with the local jurisdiction through the encroachment permit process prior to construction.

Environmental Issue Area / Potential Issues or Impacts

- Schools: Compensatory mitigation lands, O&M activities and minor new construction could extend beyond existing ROWs for construction access/staging activities. O&M and minor new construction activities would tend to be located within previously disturbed areas or adjacent to existing ROW and would avoid impacts to schools. None of these activities would result in an increase in population in the Plan Area, so no new schools would be required.
- Parks: O&M activities, minor new construction, and habitat mitigation activities would not cause an increase in population in the Plan Area and no new or altered parks and recreation facilities would be required.
- Other Public Facilities: The activities occurring in the Plan Area involve minor new construction, and O&M activities for existing electrical and gas facilities, which are part of the existing environmental baseline, and the management of compensatory mitigation lands. Some activities could occur adjacent to existing public facilities (e.g., libraries and hospitals); these activities would be short-term in nature. PG&E would continue to coordinate lane and road closures with the local jurisdiction through the encroachment permit process prior to construction. Any aboveground facilities (e.g., gas pressure-limiting stations, minor substation expansions, new electrical distribution/transmission lines) would be no more than 1 acre for a gas pressure-limiting station, 3 acres for minor substation expansion, and 2 miles for new electrical distribution/transmission lines in natural habitats and would not result in the need for expanded or added public facilities. Project activities would not increase the local population or otherwise result in a change that would require alteration or expansion of existing public facilities.

RECREATION

- Existing ROW for gas and electric transmission or distribution infrastructure may be located within or adjacent to existing recreational facilities. Project activities may be necessary in, or adjacent to, existing recreational facilities, potentially resulting in temporary impacts to recreational activities. PG&E would implement its land use planning process and avoidance and minimization measure to identify preferred timeframes for O&M and minor new construction and to minimize disruption of recreational activities. PG&E would provide notification to the appropriate agency in advance of any temporary access restrictions required within these recreational facilities. Windows for certain minor new construction activities may be constrained by operational restrictions or by best management practice (BMP) restrictions. Emergency repairs made to PG&E infrastructure would be completed as quickly as possible to ensure public safety and continuity of service; such repairs typically cannot be deferred. Although PG&E would minimize impacts on recreation, temporary closure or limitation of access to existing recreational facilities could occur. However, these activities are highly unlikely to increase the use of alternative neighborhood or regional parks to the degree that it would result in the substantial physical deterioration of these park facilities due to the number of recreation available in the Plan Area and the duration of the work. Recreational uses would be restored as quickly as possible following the completion of maintenance, repair, or minor new construction activities, and no substantial long-term disruption of recreation is expected.
- Minor new construction activities would not include changes to existing recreational facilities within the Plan Area. As described previously, minor new construction activities would not increase the use of existing facilities; therefore, the program will not require the construction or expansion of recreational facilities.
- Some mitigation lands acquired as compensation might accommodate very limited, passive recreational uses, but the need for new infrastructure would be minimal, consistent with the primary land use purpose of habitat conservation. Additionally, lands targeted to fulfill the conservation strategy generally do not support recreational activities.

Environmental Issue Area / Potential Issues or Impacts

TRANSPORTATION/TRAFFIC

- Ongoing O&M activities would involve a varying number of personnel driving to and from work areas throughout the day but is not anticipated to change from existing conditions. Personnel would typically drive to the work site at the beginning of the day and leave at the end of the day, with fewer people traveling to and from the work site throughout the day. Activities associated with this ongoing O&M work are not expected to alter roadway level of service or conflict with congestion management programs in the Plan Area.
- Some ongoing O&M activities will include work areas that extend beyond the ROW established for the program area, which is part of the existing environmental baseline. Such O&M activities conducted within public ROWs could temporarily impede vehicle, bicycle, and pedestrian traffic, consistent with existing conditions. Caution signs and/or flaggers will continue to be used to regulate traffic, cyclists, and pedestrians to maintain a safe transportation corridor. If temporary lane closures are required for O&M activities, PG&E will continue to coordinate with local jurisdictional agencies to obtain the necessary encroachment permits and perform the work according to the relevant permit requirements.
- For ongoing gas pipeline patrols and associated facilities, PG&E conducts aerial patrols on a quarterly-basis using fixed-wing aircraft that fly at an elevation of 500 feet or helicopters. Annual patrols of electrical transmission lines, distribution lines, and associated facilities are conducted with helicopters. These inspections and patrols generally take 1 day to complete. PG&E will continue to notify the Federal Aviation Administration (FAA), as appropriate, prior to conducting fixed-wing aircraft and helicopter inspection activities. Based on the limited frequency and duration of fixed-wing air craft and helicopter usage, as well as the coordination with the FAA, ongoing O&M activities will continue as usual as part of baseline environmental conditions, and will not disrupt air traffic patterns or levels.
- Project activities may result in temporary road blockages; caution signs and/or flaggers would be used to regulate traffic where necessary in accordance with encroachment permits and the associated approved Traffic Control Plans. While temporary traffic delays could occur, the delays would be short term and isolated, and emergency vehicles would be provided access. PG&E would coordinate with local jurisdictional agencies to obtain the necessary traffic control permits and inform emergency responders of potential lane closures in accordance with the relevant permit requirements.
- Though some project activities could intermittently reduce, disrupt, or temporarily eliminate access to portions of adjacent bus routes, bicycle paths, and public sidewalks, PG&E would implement applicable encroachment permit conditions and the associated approved Traffic Control Plans to minimize these disruptions and ensure adequate alternative access. Partial lane closures would be short-term and isolated. Project activities in the program area would not conflict with adopted plans, policies, or programs associated with public transit, bicycle, and pedestrian facilities.
- Any new transmission lines would need to comply with FAA requirements that limit the height of structures around airports and hazard marking.
- Implementation of the ITP would have minor, temporary construction traffic impacts resulting from the management of compensatory mitigation lands, including restoration or enhancement activities, as well as other minor activities associated with ITP avoidance and minimization measures. Implementation of the ITP could also facilitate minor new construction activities that are similar or additional to those performed historically.

UTILITIES/SERVICE SYSTEMS

• Wastewater Treatment Requirement Exceedances: Project activities would not result in an exceedance of various Regional Water Quality Control Board wastewater treatment requirements.

Environmental Issue Area / Potential Issues or Impacts

- PG&E's O&M activities will not change with implementation of the ITP and are anticipated to continue on at existing levels. Except for hydrostatic testing activities and vault dewatering, O&M activities utilize and discharge water primarily for dust control purposes and would not result in the generation of new wastewater. Water discharged during dust control activities is distributed over the work areas and evaporates or infiltrates into the ground. Wastewater resulting from hydrostatic testing or trench dewatering will continue to be discharged in accordance with applicable federal, state, and local regulations to ensure that the discharge does not violate water quality standards. Prior to discharge, applicable permits will continue to be obtained and standard best management practices will continue to be implemented. PG&E anticipates it will continue to be able to discharge water to baker tanks or existing sewer systems. If baker tanks or sewer systems are not feasible when working in natural vegetation areas, crews will lay temporary plastic or rubber pipe to discharge the test water to less sensitive natural areas or agricultural land. PG&E discharges only clean water, and the water is not released under pressure. Vault dewatering is conducted in compliance with State Water Resources Control Board permit WQ 2014-0174-DWQ, using a pump to remove water that is then run through a filter sock.
- Water and Wastewater Treatment Plant Expansion and Wastewater Treatment Capacity: project activities conducted in the Plan Area are not expected to require or result in the permanent construction of new water or wastewater treatment facilities. Water utilized during project activities would generally be transported to the Plan Area in a water truck. However, construction activities (e.g., dewatering and hydrostatic testing) may require the use of an available water source, as well as the discharge of wastewater as described above.
- Stormwater Drainage Facility Expansion: For some project activities, alteration or replacement of culverts may be required during ROW or access road repair. Erosion control techniques implemented during project activities may require the construction of new storm water drainage facilities (e.g., diversion channels and terraces), the installation of ditch plugs, and the implementation of additional soil stabilization practices. Project activities involving the creation or alteration of storm water drainage facilities will be conducted in accordance with applicable BMPs to minimize impacts associated with storm water runoff. PG&E would minimize disturbance areas, properly dispose of waste and spilled materials, remove materials and equipment upon the completion of an activity, and train employees on the implementation of BMPs. If the alteration or replacement of a culvert or minor expansion of an electrical substation is proposed within jurisdictional waters, PG&E would obtain the necessary resource permits prior to the disturbance in jurisdictional areas.
- Water Supply Availability: The project activities associated with the Plan Area are limited in both size and scope. Water would either be transported to work areas or supplied by local public utility districts. Water requirements during construction would not exceed the available supply in the Plan Area.
- Landfill Capacity: Solid waste materials generated project activities would include trash from consumables; pipe bandings and spacers; spent welding rods; timber skids; and cleared vegetation, stumps, and rocks. Non-hazardous construction debris would also include empty bags, plastic wrapping, cardboard boxes, and shipping containers. When feasible, materials (e.g., cardboard and metal) would be recycled, and the overall amount of waste generated would be minimized. Therefore, construction activities would not be expected to result in greater amounts of waste than could be accommodated by existing landfills in the program area. Waste generated during project activities would be disposed of at Class III landfill sites, which are designated for disposal of non-hazardous wastes. Several landfills in the Plan Area are available for use to accommodate disposal needs of project activities. Based on the frequency and duration of project activities in the Plan Area, it is expected that existing landfill capacity levels would be sufficient to accommodate the program.

Environmental Issue Area / Potential Issues or Impacts

• Solid Waste Statutes and Regulations: PG&E would dispose of waste in accordance with federal, state, or local statutes and regulations related to solid waste.

OTHER ISSUES

- Cumulative Impacts.
- Growth-Inducing Effects.
- Consideration of a reasonable range of alternatives.
- Enforceable and effective mitigation measures.