Decision 18-05-014 May 10, 2018

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, for a Permit to Construct the South of Palermo 115 kV Power Line Reinforcement Project Pursuant to General Order 131-D (U39 E).	Application 16-04-023

DECISION GRANTING PACIFIC GAS AND ELECTRIC COMPANY A PERMIT TO CONSTRUCT THE SOUTH OF PALERMO 115 KV POWER LINE REINFORCEMENT PROJECT

Summary

This decision grants Pacific Gas and Electric Company a Permit to Construct the South of Palermo 115 kilovolt Power Line Reinforcement Project. This proceeding is closed.

1. Proposed Project

Pacific Gas and Electric Company (PG&E) proposes to construct the South of Palermo 115 kilovolt (kV) Power Line Reinforcement Project (Proposed Project) in Butte, Yuba, and Sutter Counties by replacing existing conductors with new aluminum cable (a process referred to as reconductoring), modifying existing lattice steel towers, and replacing existing lattice steel towers and lattice steel poles along approximately 59.5 miles of PG&E's existing power lines within the Palermo-Rio Oso 115 kV transmission system. PG&E's Palermo-Rio Oso 115 kV transmission system provides power to local communities, including Oroville, Palermo, Honcut, Tierra Buena, Yuba City, Marysville, Linda, Olivehurst, Plumas Lake, Rio Oso, and East Nicolaus. Proposed modifications to existing facilities would take place within PG&E's existing utility corridor.

The lines in the Palermo-Rio Oso transmission system also serve as a transmission path for a significant amount of hydroelectric energy flow into PG&E's network. These power lines transfer electric generation output from hydroelectric facilities in the Pacific Northwest and local hydroelectric plants in the Sierra Nevada, including facilities along the Feather River between Lake Almanor and Lake Oroville, to load centers in the San Francisco Bay Area and southern California.

In 2010 and 2015, the California Independent System Operator (CAISO) transmission plan identified the need to improve and upgrade this system to address potential overloads and power outages that would affect customers in the service area. The Proposed Project would replace the existing conductor and modify/replace existing lattice steel towers along approximately 59.5 miles of PG&E's existing Palermo–Rio Oso 115 kV transmission system. PG&E's stated purpose for the Proposed Project is to: (1) to maintain transmission system reliability by ensuring that the Palermo-Rio Oso 115 kV transmission system would continue to meet planning standards and criteria established by the CAISO and North American Electric Reliability Council and (2) to replace aging facilities.

2. Procedural Background

PG&E filed an application on April 28, 2016 for a permit to construct the Proposed Project. On May 9, 2016, PG&E filed compliance documents including declarations of advertising, postings, and mailings to affected governmental bodies and property owners giving notice of the application, as required by General Order (GO) 131-D, Section XI.A.3. The Office of Ratepayer Advocates (ORA) filed a response on June 1, 2016 and PG&E filed a timely reply. The Commission deemed PG&E's application complete on March 3, 2017, after conducting a completeness review of the Proponent's Environmental Assessment.

On April 17, 2017, the Commission's Energy Division circulated the Draft Initial Study and Mitigated Negative Declaration (IS/MND) for public review, in compliance with the California Environmental Quality Act (CEQA) and Commission's Rules of

Practice and Procedure Rule 2.4. The Commission also filed the Draft IS/MND with the State Clearinghouse on this date, initiating a 30-day public review period. On May 15, 2017, the Commission circulated a Notice of Intent to adopt the Draft IS/MND for PG&E's Proposed Project. The availability of the Draft IS/MND was noticed on the Commission's website and in local[1] newspapers; the document was made available on the Commission's website and hardcopies were available at a local library.

During the public review period for the Draft IS/MND, the Commission received comments from a number of organizations, including: Central Valley Flood Protection Board, Central Valley Regional Water Quality Board, Department of Oil, Gas, and Geothermal Resources Northern District Sacramento, Department of Transportation (Caltrans) District 3, Department of California Highway Patrol, California State Lands Commission, Union Pacific Railroad, and PG&E. These comments were made during the public review period and are included and responded to in the Final Initial Study and Mitigated Negative Declaration (Final IS/MND).[2] Despite these minor revisions, the Final IS/MND does not identify any new significant environmental impacts and does not omit any existing mitigation measures from those identified in the Draft IS/MND. A telephonic prehearing conference (PHC) was held on January 22, 2018. At the PHC, PG&E, ORA, and Energy Division staff agreed to the scope of the proceeding and that no evidentiary hearings would be necessary.

3. Scope of Issues

Pursuant to GO 131-D, in order to issue a Permit to Construct, the Commission must find that the project complies with CEQA. CEQA requires the lead agency to

[1] Local refers to the locality where the construction would take place-in the Butte, Yuba, and Sutter Counties.

[2] The Energy Division issued the Final IS/MND on August 30 2017. The Final IS/MND is hereby identified as Exhibit A and received into the evidentiary record of this proceeding. The Table of contents section of the Final IS/MND is attached to this Decision, an electronic copy of the entire Final IS/MND can be found at http://www.cpuc.ca.gov/environment/info/dudek/Palmero/SPRP_Final_MND_20170830.pdf.

conduct a review of the project to identify environmental impacts and ways to avoid or mitigate environmental damage. These impacts and mitigation measures are considered in the determination of whether to approve the project or a project alternative. Here, the lead agency is the Commission. If the initial study finds no substantial evidence that the Proposed Project may have a significant effect on the environment, or if the initial study identifies potentially significant effects and the project proponent makes or agrees to revisions to the project plan that will reduce all project-related environmental impacts to less than significant levels, then the lead agency shall prepare a mitigated negative declaration or MND, subject to public notice and the opportunity for the public review and comment. (CEQA Guidelines §§ 15070-15073.)

Prior to approving the project or a project alternative, CEQA requires the lead agency to consider the MND and corresponding comments received during the public review process. The lead agency can adopt the MND only if it finds, on the basis of the whole record, that there is no substantial evidence the project will have a significant effect on the environment, and that the MND reflects the lead agency's independent judgment and analysis. (CEQA Guidelines § 15074(a)-(b).)

If the lead agency adopts a MND, CEQA also requires the lead agency to adopt a program for monitoring or reporting the changes or conditions required to mitigate or avoid significant environmental effects. (CEQA Guidelines § 15074(d).)

In addition, pursuant to GO 131-D and Decision (D.) 06-01-042, the Commission will not certify a project unless its design is in compliance with the Commission's policies governing the mitigation of electromagnetic field (EMF) effects using low-cost and no-cost measures.

Energy Division has prepared a Final IS/MND for the Proposed Project. Accordingly, the following issues will be determined in this proceeding:

1. Is there no substantial evidence that the project, as revised pursuant to the Final MND and Mitigation Monitoring and Reporting Plan, will have a significant effect on the environment?

2. Was the MND completed in compliance with CEQA, and does the MND reflect the Commission's independent judgment?
3. Is the Proposed Project designed in compliance with the Commission's policies governing the mitigation of EMF effects using low-cost and no-cost measures?

4. Environmental Impacts

The Proposed Project will have either no significant impacts or less than significant impacts with respect to aesthetics,[3] agriculture and forestry resources,[4] air quality,[5] cultural and paleontological resources,[6] geology and soils,[7] greenhouse gas emissions,[8] hydrology and water quality,[9] land use and planning,[10] mineral resources,[11] noise,[12] population and housing,[13] public services,[14] recreation,[15] and utilities and service systems.[16]

The Proposed Project has potentially significant impacts with respect to biological resources,[17] hazards and hazardous materials,[18] transportation and traffic,[19] and tribal

[3] Final IS/MND at 5.1.1 – 5.1.4 (2017).

[4] *Id.* at 5.2.1 - 5.2.4.

[5] *Id.* at 5.3.1 - 5.3.4.

[6] *Id.* at 5.5.1 - 5.5.2.

[7] *Id.* at 5.6.1 - 5.6.4.

[8] *Id.* at 5.7.1 - 5.7.4.

[9] *Id.* at 5.9.1 - 5.9.4.

[10] *Id.* at 5.10.1 - 5.10.4.

[11] *Id.* at 5.11.1 - 5.11.4.

[12] *Id.* at 5.12.1 - 5.12.5.

[13] *Id.* at 5.13.1 - 5.13.4.

[14] *Id.* at 5.14.1 - 5.14.4.

[15] *Id.* at 5.15.1 - 5.15.4.

[16] *Id.* at 5.18.1 - 5.18.4.

[17] *Id.* at 5.4.1 - 5.4.4.

[18] *Id.* at 5.8.1 - 5.8.4.

cultural resources.[20] However, with the implementation of the measures identified in the South of Palermo Reinforcement Project Final MND Mitigation Measures, the potentially significant impacts are reduced to less than significant levels.[21]

5. Certification of Environmental Impact Report

CEQA requires the lead agency to certify that the MND was completed in compliance with CEQA, that the agency has reviewed and considered it prior to approving the project, and that the MND reflects the agency's independent judgment.

The Commission circulated the Draft IS/MND and filed the Draft IS/MND with the state clearinghouse on April 17, 2017 to initiate the 30-day public review period; On May 15, 2017, the Commission circulated a Notice of Intent to adopt the Draft IS/MND for PG&E's Proposed Project. The Final MND responding to all written and oral comments that were received during the 30-day public comment period was adopted on August 30, 2017.

The Commission certifies that the MND was completed in compliance with CEQA, that the Commission has reviewed and considered the information contained in it, and that it reflects the Commission's independent judgment.

6. EMF

The Commission examined EMF impacts in several previous proceedings.[22] The scientific evidence presented in those proceedings was uncertain as to the possible health effects of EMFs, and we did not find it appropriate to adopt any related numerical standards. Given the lack of scientific consensus regarding the potential health risks of EMF exposure, and that CEQA does not define or adopt any standards to address the

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[19] *Id.* at 5.16.1 - 5.16.4.

[20] *Id.* at 5.17.1 - 5.17.4.

[21] The South of Palermo Reinforcement Project Final MND Mitigation Measures, attached hereto, are hereby identified as Exhibit B and received into the record of this proceeding.

[22] *See* D.06-01-042 and D.93-11-013.

potential health risk of EMF exposure, the Commission does not consider EMFs in the context of CEQA or environmental impact determination.

However, recognizing that public concern remains, we do require, pursuant to GO 131-D, Section X.A., that all requests for a Permit to Construct include a description of the measures taken or proposed by the utility to reduce the potential for exposure to EMFs generated by the Proposed Project. The Commission developed an interim policy that requires utilities to identify the no-cost and the low-cost measures implemented to reduce potential EMF impacts. The benchmark established for low-cost measures is four percent of the total budgeted project cost that results in an EMF reduction of at least 15 percent.[23]

In accordance with Section X.A. of GO 131-D, D.06-01-042, and the EMF Design Guidelines (EMF Guidelines) for Electrical Utilities, the applicant must prepare a Field Management Plan (FMP) Checklist. The FMP Checklist identifies the no-cost and low-cost EMF reduction measures that will be installed as part of the final engineering design for the project. The FMP Checklist proposes one measure to potentially reduce EMF impacts: raising the height of the poles in the residential and school land use areas by 10 feet taller than otherwise required to reduce magnetic field strength at ground level.

This design complies with the PG&E's EMF Guidelines prepared in accordance with the Commission's EMF decisions D.93-11-013 and D.06-01-042.

7. Waiver of Comment Period

This is an uncontested matter where the Proposed Decision grants the relief requested. Accordingly, pursuant to Section 311(g)(2) of the Public Utilities Code and Rule 14.6(c)(2), the otherwise applicable 30-day period for public review and comment is waived.

[23] Measured from the edge of the utility's right-of-way.

8. Category and Need for Hearing

In Resolution ALJ 176-3377 issued on May 12, 2016, the Commission preliminarily categorized this proceeding as ratesetting with hearings required.

We confirm this preliminary determination of category but change the hearing determination to evidentiary hearings are not required. Hearings are not needed because issues raised by ORA in its response to the Application have been resolved through discovery, and parties agreed that no factual issues remain in the scope of this proceeding.

9. Assignment of Proceeding

For this proceeding, Carla J. Peterman is the assigned Commissioner and S. Pat Tsen is the assigned Administrative Law Judge.

Findings of Fact

1. The Proposed Project will have either no significant impacts or less than significant impacts with respect to aesthetics, agriculture and forestry resources, air quality, cultural and paleontological resources, geology and soils, greenhouse gas emissions, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, and utilities and service systems.

2. The Proposed Project has potentially significant impacts with respect to biological resources, hazards and hazardous materials, transportation and traffic, and tribal cultural resources. However, with the implementation of the mitigation measures identified in the PG&E South of Palermo Reinforcement Project Mitigated Negative Declaration Mitigation Measures, the potentially significant impacts are reduced to less than significant levels.

3. The Proposed Project is designed in compliance with the Commission's policies governing the mitigation of EMF effects using low-cost and no-cost measures.

4. The Final IS/MND was completed in compliance with the CEQA.

5. The Commission has reviewed and considered the information contained in the Final IS/MND.

6. The Final IS/MND reflects the Commission's independent judgment and analysis.

Conclusions of Law

1. PG&E should be granted a Permit to Construct the South of Palermo Reinforcement Project in conformance with the Mitigation Measures attached to this order.
2. The Final IS/MND and the Final MND Mitigation Measures should be adopted and received into the record.
3. The proceeding should be categorized as ratesetting.
4. Hearings are not required.
5. This proceeding should be closed.
6. This order should be effective immediately.

O R D E R

IT IS ORDERED that:

1. The applicant, Pacific Gas and Electric Company, is granted a Permit to Construct the South of Palermo Reinforcement Project in conformance with the Mitigation Measures attached to this order.
2. The Final Initial Study Mitigated Negative Declaration is adopted and received into the evidentiary record.
3. The Final Mitigated Negative Declaration Mitigation Measures attached as Attachment B is adopted and received into the evidentiary record.
4. The Energy Division may approve requests by Pacific Gas and Electric Company (PG&E) for minor project refinements that may be necessary due to final engineering of the South of Palermo Reinforcement Project so long as such minor project refinements are located within the geographic boundary of the study area of the Final Mitigated Negative Declaration and do not, without mitigation, result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the environmental document; conflict with any mitigation measure or

applicable law or policy; or trigger an additional permit requirement. PG&E shall seek any other project refinements by a petition to modify this decision.

5. Application 16-04-023 is categorized as ratesetting.
6. Hearings are not required.
7. Application 16-04-023 is closed.

This order is effective immediately.

Dated May 10, 2018, at Fontana, California.

MICHAEL PICKER
President
CARLA J. PETERMAN
LIANE M. RANDOLPH
MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
Commissioners

Attachment A

The Final Initial Study Mitigated Negative Declaration

Final
Initial Study
and
Mitigated Negative Declaration

for

Pacific Gas and Electric Company
South of Palermo 115 kV Power Line Reinforcement Project
(Application No. 16-04-023)

August 2017

Prepared for:
California Public Utilities Commission
Energy Division
505 Van Ness Avenue
San Francisco, California 94102

Prepared by:
DUDEK

Final Initial Study and Mitigated Negative Declaration for PG&E South of Palermo Reinforcement Project

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Attachment B

The Final Mitigated Negative Declaration Mitigation Measures

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Table 1
Applicant Proposed Measures

APM Number	Description
APM AQ-2	**Implement Butte County Air Quality Management District (BCAQMD) Construction Best Practices** PG&E shall implement the following standard construction best practices recommended by the BCAQMD to help reduce construction-related emissions. Note that some BCAQMD construction best practices are not listed below, as they are identified in ~~the~~ APM GHG-1 ~~described in Section 3.7, Greenhouse Gas Emissions [of the PEA]~~. 1. Diesel PM Exhaust from Construction Equipment a. Avoid idling, staging, and queuing of diesel equipment within 1,000 feet of sensitive receptors. b. Install diesel particulate filters or implement other California Air Resources Board (CARB)-verified diesel emission control strategies. c. To the extent feasible, construction truck trips shall be scheduled during non-peak hours to reduce peak hour emissions. 2. Fugitive Dust: The following is a list of measures that may be required throughout the duration of the construction activities: a. Reduce the amount of the disturbed area where possible. b. Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. c. All dirt stockpile areas should be sprayed daily as needed, and covered. d. Exposed ground areas that will be reworked at dates more than 1 month after initial grading should be sown with a fast-germinating noninvasive grass seed and watered until vegetation is established. e. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders or jute netting. f. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site. g. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with local regulations. h. Post a sign in a prominent location visible to the public with the telephone numbers of the contractor and Air District for any questions or concerns about dust from the project. The above measures will be applied across the entire project area.
APM AQ-3	**Off-Site Mitigation Measures in FRAQMD** PG&E shall enter into an off-site mitigation agreement with the FRAQMD to offset construction emissions in excess of 4.5 tons per year of NOX to levels below the FRAQMD's 4.5 tons per year significance threshold. The off-site mitigation rate shall be based on the current project cost effectiveness factor from the Carl Moyer Memorial Air Quality Standards Attainment Program. The current off-site mitigation rate is $18,030 per ton of O_3 precursor emissions (NOX or ROG) over the District threshold calculated over the length of the expected exceedance.
Biological Resources	
APM BIO-1	**Conduct Worker Environmental Awareness Training Program** A qualified biologist will develop an environmental awareness training program that is specific to the project. All on-site construction personnel will attend the training before they begin work on the project. Training will include a discussion of the avoidance and minimization measures that are being implemented to protect biological resources as well as the terms and conditions of project permits. Training will include information about the federal Endangered Species Act and the California Endangered Species Act, special-status species as defined in this chapter, and the consequences of noncompliance with these acts. Under this program, workers will be informed about the presence, life history, and habitat requirements of all special-status species that may be affected in the project area. Training also will include information on state

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Table 1
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APM Number	Description
	and federal laws protecting nesting birds, wetlands, and other water resources. An educational brochure will be produced for construction crews working on the project. The brochure will include color photos of sensitive species as well as a discussion of relevant APMs. In particular, construction personnel will be directed to stop work and contact the biological monitor if special-status species are observed.
APM BIO-2	**Conduct Preconstruction Survey(s) For Special-Status Species and Sensitive Resource Areas** A qualified biologist will conduct pre-construction survey(s) for special-status species and sensitive resource areas immediately prior to construction activities within suitable aquatic and upland habitat for special-status species. If a special-status species is encountered during the pre-construction survey(s), PG&E will be contacted immediately to determine the appropriate course of action. For state- or federally listed species, PG&E will contact the appropriate resource agency (California Department of Fish and Wildlife (CDFW) and/or U.S. Fish and Wildlife Service [USFWS]), as required.
APM BIO-3	**Identification and Marking of Sensitive Resources** Sensitive biological resource areas identified during pre-construction surveys in the project area will be clearly marked in the field or on project maps. Sensitive resource areas will include active bird nests within specified buffer zones (see APM BIO-11), special-status plants, special-status vegetation types, vernal pools and wetland boundaries in/or adjacent to work sites. Such areas will be avoided during construction to the extent practicable.
APM BIO-4	**Biological Monitoring** A qualified biologist will monitor ground-disturbing activities in and adjacent to areas identified in APM BIO-3 to ensure compliance with best management practices (BMPs) and APMs, unless the area has been protected by barrier fencing to protect sensitive biological resources and has been cleared by the qualified biologist. The monitor will have authority to stop or redirect work if construction activities are likely to affect sensitive biological resources. If a listed wildlife species is encountered during construction, project activities will cease in the area where the animal is found until the qualified biologist determines that the animal has moved out of harm's way, or, with prior authorization from the U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW), if required, the qualified biologist relocates the animal out of harm's way and/or takes other appropriate steps to protect the animal. Work may resume once the qualified biologist has determined that construction activities will not harm any listed wildlife species. The PG&E authorized~~qualified~~ biologist will be responsible for any necessary reporting to USFWS and/or CDFW, including unexpected take of listed wildlife species.
APM BIO-5	**Restore Habitat for Special-Status Plants Disturbed During Construction** In the unlikely event special-status plant species cannot be avoided, PG&E will stockpile separately the upper 6 inches of topsoil during excavations of special-status plant species habitat. PG&E will use the stockpiled topsoil to restore the area after temporary construction has been completed. When this topsoil is replaced, compaction will be minimized to the extent consistent with utility standards. Restoration and reseeding methods using a California native seed mix will be used to restore the sites.
APM BIO-6	**Avoid or Minimize Impacts on Habitat For Special-Status Vernal Pool Species** PG&E will implement the following measures to reduce potential impacts on vernal pool species and habitat within the project area. These measures may be refined during the ~~Section 7 consultation process or~~ Section 10 Habitat Conservation Plan (HCP) process conducted for the project with the USFWS, as applicable. • Where feasible, the project will avoid and minimize direct and indirect impacts on vernal pool species and their habitat. • Where feasible, new structures will be located outside of suitable habitat features; and work areas and temporary overland access routes will avoid vernal pool habitats.

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Applicant Proposed Measures

APM Number	Description
	• Where feasible, ground-disturbing activities in and adjacent to vernal pools will be conducted during the dry season (generally May 1 to October 15). • Any ground-disturbing activities taking place within 50 feet of suitable aquatic habitat for vernal pool species will be minimized by: limiting the duration of work, using rubber tire vehicles to reduce soil compaction, and restricting ground disturbance to well-defined, small work areas. • If construction activities must occur on the ground during the wet season, PG&E will implement BMPs consistent with the Storm Water Pollution Prevention Plan (SWPPP) (see APM HYDRO-1), which may include silt fencing to minimize impacts on vernal pool habitat.
APM BIO-7	**Compensate for Permanent Impacts on Habitat for Vernal Pool Species in Accordance with USFWS Permit** PG&E will provide off-site compensation for permanent impacts on vernal pool species habitat at a minimum ratio of 1 acre preserved or created for each acre of direct impact by the project. PG&E will provide this compensatory amount of vernal pool habitat at an off-site location, which may include acquiring mitigation credits at a USFWS-approved conservation area that supports vernal pool fairy shrimp. Final compensation ratios will be based on site-specific information and determined through coordination with the USFWS as part of the permitting processes for the project.
APM BIO-8	**Avoid, Minimize, or Compensate for Any Impacts on Valley Elderberry Longhorn Beetle** PG&E's Valley Elderberry Longhorn Beetle (VELB) Conservation Program allows PG&E to perform routine operations and maintenance activities and new construction, subject to certain terms and conditions as specified in the USFWS Biological Opinion (BO) (File 1-1-01-F-0114). The VELB BO provides for 30 years of incidental take coverage and was issued on June 27, 2003. It defines reasonable and prudent measures required to avoid and minimize impacts on habitat for the federally listed VELB. PG&E will implement the surveying, avoidance, and any necessary compensation measures required for the Conservation Program as authorized by USFWS. These measures may include: (1) surveying for and flagging all elderberry plants with one or more stems measuring 1 inch or more in diameter at ground level that are within 20 feet of work sites; (2) avoiding all such elderberry plants to the extent feasible; and (3) reporting unavoidable impacts on elderberry shrubs to USFWS for coverage under the Conservation Program's funding of VELB habitat acquisition, development, and protection.
APM BIO-9	**Avoid and Minimize Impacts on Giant Garter Snake** PG&E will implement the following avoidance and minimization measures as may be refined during the permitting processes with USFWS and CDFW for the project: • To the fullest extent possible, PG&E will avoid construction activities within 200 feet of the banks of giant garter snake (GGS) aquatic habitat. Habitat disturbance areas and vegetation clearance will be confined to the minimal area necessary to facilitate construction activities. • As feasible, construction activity within GGS aquatic and upland habitat in and around agricultural ditches, irrigation and drainage canals, rice fields, and marshes and sloughs, will be conducted within the active period for GGS (May 1 through October 1). Depending on weather conditions and consultation with USFWS and CDFW, it may be possible to extend the construction period into mid- or late October. • When construction work must occur during the GGS dormant period (October 2 through April 30), additional protective measures will be implemented, which may include: having a biological monitor in sensitive habitat areas or installation of exclusion fencing to prevent giant garter snakes from establishing hibernacula in work areas. • Prior to any construction within suitable GGS aquatic habitat, the habitat will be dewatered and must remain dry for at least 15 consecutive days after April 15 and prior to excavating or filling dewatered habitat.

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Table 1
Applicant Proposed Measures

APM Number	Description
	• Pre-construction surveys in suitable GGS habitat will be conducted in accordance with APM BIO-2. The construction area will be resurveyed whenever there is a lapse in construction activity of 2 weeks or more. • If a GGS is encountered within the construction work area, construction activities will be suspended in accordance with APM BIO-4. Based on the results of preconstruction surveys conducted under APM BIO -2, the qualified biologist will coordinate with the PG&E biologist to determine whether to install exclusion fencing to keep GGS out of the construction area. • In accordance with APM BIO-12, service and refueling procedures will be conducted in uplands at least 100 feet away from wetlands or waterways to minimize potential harm to aquatic species from water quality degradation.
APM BIO-10	**Compensate for Permanent Loss of Giant Garter Snake Aquatic and Upland Habitat in Accordance with USFWS Permit** For any permanent loss of GGS aquatic and upland habitat that cannot be avoided, PG&E will preserve a compensatory amount of GGS habitat, including acquiring mitigation credits at a USFWS-approved conservation area that supports GGS. PG&E will provide off-site compensation for permanent impacts on GGS habitat at a minimum ratio of 1 acre preserved for each acre of impacts, or as otherwise required by the USFWS and the CDFW during the permitting processes for the project.
APM BIO-11	**Avoidance and Minimization of Impacts on Nesting Birds** If work is scheduled during the nesting season (February 15 through August 31), nest detection surveys will be conducted within a standard buffer for individual species in accordance with the species-specific buffers set forth in Appendix D of the PEA and will occur within 15 days prior to the start of work activities at designated construction areas, staging areas, and landing zones to determine nesting status by a qualified wildlife biologist. Nest surveys will be accomplished by ground surveys and/or by helicopter and will support phased construction, with surveys scheduled to be repeated if construction lapses in a work area for 15 days between March and July. Access for ground surveys will be subject to property access permission. Helicopter flight restrictions for nest detection surveys may be in effect for densely populated residential areas, and will include observance of appropriate established buffers and avoidance of hovering in the vicinity of active nest sites. If active nests containing eggs or young are found, the biologist will establish a species-specific nest buffer, as defined in Appendix D of the PEA. Where feasible, standard buffers will apply, although the biologist may increase or decrease the standard buffers in accordance with the factors set forth in Appendix D. Nesting pair acclimation to disturbance in areas with regularly occurring human activities will be considered when establishing nest buffers. The established buffers will remain in effect until the young have fledged or the nest is no longer active as confirmed by the biologist. Active nests will be periodically monitored until the biologist has determined that the young have fledged or all construction is finished. Per the discretion of the biologist, vegetation removal by hand may be allowed within nest buffers or in areas of potential nesting activity. Inactive nests may be removed in accordance with PG&E's approved avian permits. The biologist will have authority to order the cessation of nearby project activities if nesting pairs exhibit signs of disturbance.
APM BIO-12	**Implement General Protection Measures for Wetlands and Other Waters** PG&E will implement the following general measures, in addition to those outlined in Section 2.8.8, Best Management Practices, to minimize or avoid impacts on wetlands and other waters: • Avoid wetlands and other waters as identified in BIO APM-3. • Establish overland access routes to avoid wetlands and other waters to the extent feasible. • Conduct all fueling of vehicles at least 100 feet from wetlands and other water bodies.

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Applicant Proposed Measures

APM Number	Description
	• Set staging areas back at least 50 feet from streams, creeks, or other water bodies. Additionally, per APM HYDRO-1, PG&E will prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) to prevent construction-related erosion and sediments from entering nearby waterways.
APM BIO-13	**Compensate for Permanent Impacts on Wetlands and Other Waters in Accordance with Project Permits** PG&E will compensate for permanent impacts on wetlands with at least a 2:1 ratio of acre restored or created to acre filled. Final compensation ratios will be based on site-specific information and determined through coordination with the U.S. Army Corps of Engineers and the Central Valley Regional Water Quality Control Board as part of the permitting processes for the project.
APM BIO-14	**Restore Temporarily Impacted Wetlands and Other Waters** All wetlands and other waters that are temporarily disturbed as a result of project activities will be restored upon completion of construction.
	Cultural Resources
APM CR-1	**Workers Environmental Awareness Training** PG&E will provide environmental awareness training on archeological and paleontological resources protection. This training may be administered by the principal cultural resources specialist as a stand-alone training or included as part of the overall environmental awareness training as required by the project and will at minimum include: types of cultural resources or fossils that could occur at the project site; types of soils or lithologies in which the cultural resources or fossils could be preserved; procedures that should be followed in the event of a cultural resource, human remain, or fossil discovery; and penalties for disturbing cultural or paleontological resources.
APM CR-2	**Flag and Avoid Resources P-51-000150, P-58-001372, P-58001369, PL-Palermo-011H, Old Marysville Road** A qualified archaeologist will flag sites P-51-000150, P-58-001372, PL-Palermo-011H, and the Old Marysville Road for avoidance. Sites will be marked with flagging tape, safety fencing, and/or sign designated it as an "environmentally sensitive area" to ensure that PG&E construction crews and heavy equipment will not intrude on these sites during construction. For those sites that contain an existing access road within their site boundary or are an existing road (e.g., Old Marysville Road), the road will be used as-is (i.e., no grading, widening, or other substantial improvements), and signs or safety fencing will be established on either side of the road within the site's boundary to avoid impacts caused by construction vehicles. If it is determined that the project cannot avoid impacts on one or more of the sites, then, for those sites that have not been previously evaluated, evaluation for inclusion in the National Register of Historic Places (NRHP)/California Register of Historic Resources (CRHR) will be conducted. Should the site be found eligible, appropriate measures to reduce the impact to a less-than-significant level will be implemented, including but not limited to data recovery, photographic and archival documentation, or other measures as deemed appropriate in consultation with CPUC and interested parties. If it is determined that sites that have been previously determined to be eligible for inclusion in either the NRHP or CRHR cannot be avoided, measures will be implemented to reduce the impact to a less-than-significant level, including but not limited to data recovery, photographic and archival documentation, or other measures as deemed appropriate in consultation with the CPUC and interested parties.
APM CR-3	**Manage Unanticipated Cultural Resources Discoveries Properly** a. Buried Cultural Resources. If buried cultural resources 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 cultural resources specialist/archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with PG&E and other appropriate agencies. Work may continue on

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Table 1
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APM Number	Description
	other portions of the site with the cultural resources specialist/archaeologist's approval. PG&E will implement the cultural resources specialist/archaeologist's recommendations for treatment of discovered cultural resources. b. Human Remains. In the unlikely event that human remains or suspected human remains are uncovered during pre-construction testing or during construction, all work within 100 feet of the discovery will be halted and redirected to another location. The find will be secured, and PG&E's cultural resources specialist or designated representative will be contacted immediately to inspect the find and determine whether the remains are human. If the remains are not human, the cultural resources specialist will determine whether the find is an archaeological deposit and whether paragraph (a) of this APM should apply. If the remains are human, the cultural resources specialist will immediately implement the applicable provisions in PRC Sections 5097.9 through 5097.996, beginning with the immediate notification to the affected county coroner. The coroner has two working days to examine human remains after being notified. If the coroner determines that the remains are Native American, California Health and Safety Code 7050.5 and PRC Section 5097.98 require that the cultural resources specialist contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC, as required by PRC Section 5097.98, will determine and notify the Most Likely Descendant. c. Paleontological Discoveries. If significant paleontological resources are discovered during construction activities, work will stop within 100 feet and the project cultural resource specialist will be contacted immediately. The project cultural resources specialist will work with the qualified paleontologist to evaluate the discovery. If the discovery is determined to be significant, PG&E will implement measures to protect and document the paleontological resource. Work may not resume within 100 feet of the find until approval by the cultural resource specialist in coordination with the paleontologist. In the event that significant paleontological resources are encountered during the project, protection and recovery of those resources may be required. Treatment and curation of fossils will be conducted in consultation with the landowner, PG&E, and CPUC. The paleontologist will be responsible for developing the recovery strategy and will lead the recovery effort, which will include establishing recovery standards, preparing specimens for identification and preservation, documentation and reporting, and securing a curation agreement from the approved agency.
APM CR-4	**Paleo Monitoring** Interval (spot check) monitoring for paleontological resources will be required for excavation activities larger than 3 feet in diameter and grading to depths greater than 2 feet that intersect undisturbed sediments in the Riverbank, Modesto, and Laguna formations. Monitoring is not required for shallow excavations into sediments previously disturbed by agricultural activities, development, or construction related to the existing Palermo–East Nicolaus 115 kV Transmission Line regardless of the mapped geologic unit sensitivity ranking because fossils found within such sediments would lack provenience data critical to scientific significance. In the unlikely event that a highly fossiliferous facies is encountered, monitoring will be conducted full time until excavations within that facies are complete. Conversely, monitoring may be reduced or suspended in the absence of encountering paleontologically sensitive sediments. Monitoring will be done by a qualified paleontological monitor. The paleontological monitor will document monitoring activities on monitoring logs. Monitoring logs and reports will include the activities observed, geology encountered, description of any resources encountered, and measures taken to protect or salvage fossils discovered. Photographs and other supplemental information will be included as necessary.

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Table 1
Applicant Proposed Measures

APM Number	Description
	Geology and Soils
APM GEO-1	**Minimize Construction in Soft or Loose Soils** Where soft or loose soils are encountered during project construction, several measures are available, feasible and can be implemented to avoid, accommodate, replace, or improve such soils. Depending on site-specific conditions and permit requirements, one or more of these measures may be implemented to eliminate impacts from soft or loose soils: • Locating construction facilities and operations away from areas of soft and loose soil. • Over-excavating soft or loose soils and replacing them with engineered backfill materials. • Increasing the density and strength of soft or loose soils through mechanical vibration and/or compaction. • Installing material, such as aggregate rock, steel plates, or timber mats, over access roads. • Treating soft or loose soils in place with binding or cementing.
	Greenhouse Gas Emissions
APM GHG-1	**Minimize Greenhouse Gas Emissions** • Encourage construction workers to carpool to the job site to the extent feasible. The ability to develop an effective carpool program for the project will depend upon the proximity of carpool facilities to the area, the geographical commute departure points of construction workers, and the extent to which carpooling will not adversely affect worker arrival time and the project's construction schedule. • Minimize unnecessary construction vehicle idling time for on-road and off-road vehicles. The ability to limit construction vehicle idling time will depend on the sequence of construction activities and when and where vehicles are needed or staged. Certain vehicles, such as large diesel-powered vehicles, have extended warm-up times following start-up that limit their availability for use following start-up. Where such diesel-powered vehicles are required for repetitive construction tasks, these vehicles may require more idling time. The project will apply a "common sense" approach to vehicle use, so that idling is reduced as far as possible below the maximum of 5 consecutive minutes allowed by California law; if a vehicle is not required for use immediately or continuously for construction activities, its engine 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. • Maintain construction equipment in proper working conditions in accordance with PG&E standards. • Minimize construction equipment exhaust by using low-emission or electric construction equipment where feasible. Portable diesel fueled construction equipment with engines 50 horsepower or larger and manufactured in 2000 or later will be registered under the CARB Statewide Portable Equipment Registration Program. • 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. • Encourage recycling construction waste where feasible.
	Hazards and Hazardous Material
APM HAZ-1	**Hazardous-Substance Control and Emergency Response** PG&E will implement its hazardous substance control and emergency response procedures to ensure the safety of the public and site workers during construction. The procedures identify methods and techniques to minimize the exposure of the public and site workers to potentially hazardous materials during all phases of project construction through operation. They address worker training appropriate to the site worker's role in

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APM Number	Description
	hazardous substance control and emergency response. The procedures also require implementing appropriate control methods and approved containment and spill-control practices for construction and materials stored on-site. If it is necessary to store chemicals on-site, they will be managed in accordance with all applicable regulations. Material safety data sheets will be maintained and kept available on-site, as applicable. Project construction will involve soil surface blading/leveling, excavation of up to several feet, and augering to a maximum depth of 35 feet in some areas. In the event that soils suspected of being contaminated (on the basis of visual, olfactory, or other evidence) are removed during site grading activities or excavation activities, the excavated soil will be tested, and if contaminated above hazardous waste levels, will be contained and disposed of at a licensed waste facility. The presence of known or suspected contaminated soil will require testing and investigation procedures to be supervised by a qualified person, as appropriate, to meet state and federal regulations. All hazardous materials and hazardous wastes will be handled, stored, and disposed of in accordance with all applicable regulations, by personnel qualified to handle hazardous materials. The hazardous substance control and emergency response procedures include, but are not limited to, the following: • Proper disposal of potentially contaminated soils. • Establishing site-specific buffers for construction vehicles and equipment located near sensitive resources. • Emergency response and reporting procedures to address hazardous material spills. • Stopping work at that location and contacting the County Fire Department Hazardous Materials Unit immediately if visual contamination or chemical odors are detected. Work will be resumed at this location after any necessary consultation and approval by the Hazardous Materials Unit. PG&E will complete a standard Emergency Action Plan Form as part of project tailboard meetings. The purpose of the form is to gather emergency contact numbers, first aid location, work site location, and tailboard information.
APM HAZ-2	**Worker Environmental Awareness Program for Health, Safety, and Environment (WEAP-HSE)** The program will include the following components related to hazards and hazardous materials: • PG&E Health, Safety, and Environmental expectations and management structure. • Applicable regulations. • Summary of the hazardous substances and materials that may be handled and/or to which workers may be exposed. • Summary of the primary workplace hazards to which workers may be exposed. • Overview of the measures identified in APM HAZ-1. • Overview of the controls identified in the Storm Water Pollution Prevention Plan (SWPPP under APM HYDRO-1.
APM HAZ-3	**Fire Risk Management** PG&E will follow its standard fire risk management procedures, including safe work practices, work permit programs, training, and fire response. Project personnel will be directed to park away from dry vegetation. During fire season in designated State Responsibility Areas, all motorized equipment driving off paved or maintained gravel/dirt roads will have federally approved or State-approved spark arrestors. All off-road vehicles will be equipped with a backpack pump (filled with water) and a shovel. Fire-resistant mats and/or windscreens will be used when welding. In addition, during fire "red flag" conditions (as determined by CalFire), welding will be curtailed. Every fuel truck will carry a large fire extinguisher with a minimum rating of 40 B:C, and all flammable materials will be removed from equipment parking and storage areas.

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Table 1
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APM Number	Description
	Hydrology and Water Quality
APM HYDRO-1	**Prepare and Implement a Storm Water Pollution Prevention Plan (SWPPP)** PG&E 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 any water body in Butte, Yuba, or Sutter counties. BMPs to be part of the project-specific SWPPP may include, but are not limited to, the following control measures. • Implementing 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) to control erosion from disturbed areas. • Protecting drainage facilities in downstream off-site areas from sediment using BMPs accepted to Butte, Sutter, and Yuba counties, and the Central Valley RWQCB. • Protecting the quality of surface water from non-stormwater discharges such as equipment leaks, hazardous materials spills, and discharge of groundwater from dewatering operations. • Restoring disturbed areas, after project construction is completed, unless otherwise requested by the landowner in agricultural land use areas. Requirements of the SWPPP would be coordinated with the requirements of any Section 401 Water Quality Certification issued for the project under the Clean Water Act and/or Streambed Alteration Agreement issued under Fish and Game Code Section 1602, as applicable.
	Noise
APM NO-1	**Employ Noise-Reducing Construction Practices during Temporary Construction Activities** PG&E will employ standard noise-reducing construction practices such as the following: • Ensure that all equipment is equipped with mufflers that meet or exceed factory new-equipment standards. • Locate stationary equipment as far as practical from noise-sensitive receptors. • Limit unnecessary engine idling. • Limit all construction activity near sensitive receptors to daytime hours unless required for safety or to comply with line clearance requirements. Minimize noise-related disruption by notifying residents. Should nighttime project construction be necessary because of planned clearance restrictions, affected residents will be notified at least 7 days in advance by mail, personal visit, or door hanger, and informed of the expected work schedule.
	Transportation
APM TRA-1	**Temporary Traffic Controls** PG&E will obtain any necessary transportation and encroachment permits from Caltrans and the local jurisdictions, as required, including those related to state route crossings and the transport of oversized loads and certain materials, and will comply with permit requirements designed to prevent excessive congestion or traffic hazards during construction. PG&E will develop road and lane closure or width reduction or traffic diversion plans as required by the encroachment permits. Construction activities that are in or along or that cross local roadways will follow best management practices and local jurisdictional encroachment permit requirements—such as traffic controls in the form of signs, cones, and flaggers—to minimize impacts on traffic and transportation in the project area.
APM TRA-2	**Air Transit Coordination** PG&E will implement the following protocols related to helicopter use during construction and air traffic: • PG&E will comply with all applicable Federal Aviation Administration (FAA) regulations regarding air traffic within 2 miles of the project alignment. • PG&E's helicopter operator will coordinate all project helicopter operations with local airports before

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Table 1
Applicant Proposed Measures

APM Number	Description
	and during project construction. • Helicopter use and landing zones will be managed to minimize impacts on local residents. PG&E will submit to CPUC staff a Helicopter Use Plan, which will identify the anticipated landing zones, flight paths and general helicopter operation procedures.
APM TRA-3	**Coordinate Road Closures with Emergency Service Providers** At least 24 hours prior to implementing any road or lane closure, PG&E will coordinate with applicable emergency service providers in the project vicinity. PG&E will provide emergency service providers with information regarding the road or lanes to be closed; the anticipated date, time, and duration of closures; and a contact telephone number.

MITIGATION MEASURES

The following mitigation measures (Table 2), agreed to by the applicant, would reduce project-related impacts to a less-than-significant level.

Table 2
Mitigation Measures

MM Number	Description
	Biological Resources
MM BIO-1	Prior to initiation of ground-disturbing activities, special-status plant surveys will be conducted by a qualified biologist familiar with the species' biology and habitat requirements in suitable habitat in the project area. The surveys shall be conducted in the appropriate bloom season prior to the commencement of construction, when plants are evident and identifiable. The surveys will be conducted in accordance with applicable California Native Plant Society (CNPS), California Department of Fish and Wildlife (CDFW), and U.S. Fish and Wildlife Service (USFWS) survey protocols. If no special-status plant species are observed during preconstruction surveys, no further mitigation is necessary. If special-status plant species are observed, the population(s) shall be avoided to the maximum extent practicable and flagged during construction to ensure avoidance. If avoidance is not possible, appropriate relocation, seed collection and establishment, or other mitigation measures approved in coordination CDFW and/or USFWS, as appropriate, shall be implemented. Where special-status plant species are observed, and if deemed appropriate by the qualified biologist, vehicle-washing stations would be stationed at site access points. All vehicles and equipment entering and leaving the project site will be washed to minimize the spread of non-native invasive plants.
MM BIO-2	This mitigation measure is an extension to Applicant Proposed Measure (APM) BIO-7. Where impacts from construction activities result in permanent loss of function or permanent change to vernal pool species habitat, Pacific Gas and Electric Company (PG&E) will provide off-site compensation. Impacts to vernal pool species habitat will be compensated at a minimum ratio of 1 acre preserved or created for each acre of disturbance. PG&E will provide this compensatory habitat at an off-site location, which may include acquiring mitigation credits at a U.S. Fish and Wildlife Service (USFWS)-approved conservation area that supports vernal pool fairy shrimp. This mitigation ratio may be refined as appropriate during the future federal Endangered Species Act (ESA) ~~Section 7 or~~ Section 10 consultation process conducted for the project.

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Table 2
Mitigation Measures

MM Number	Description
MM BIO-3	Where impacts from construction activities result in permanent loss of function or permanent change to northern hardpan vernal pool habitat Pacific Gas and Electric Company (PG&E) will provide off-site compensation. Impacts to northern hardpan vernal pool habitat will be compensated at a minimum ratio of 1 acre preserved or created for each acre impacted by the project. PG&E will provide this compensatory habitat at an off-site location, which may include acquiring mitigation credits at a U.S. Fish and Wildlife Service (USFWS-approved conservation area). This mitigation ratio may be refined as appropriate during the future federal Endangered Species Act (ESA) ~~Section 7 or~~ Section 10 consultation process conducted for the project.
	Hazards and Hazardous Materials
MM HAZ-1	**Develop and Implement Construction Fire Risk Management Plan.** The applicant shall develop a Fire Risk Management Plan that addresses training of construction and maintenance crews, and provides details of fire-suppression procedures and equipment to be used during construction. At minimum, the plan will include the following: • Procedures for minimizing potential ignition, including, but not limited to, helicopter operations, vegetation clearing, parking requirements/restrictions, idling restrictions, smoking restrictions, proper use of gas-powered equipment, use of spark arrestors, and hot work restrictions; • Work restrictions during Red Flag Warnings and High to Extreme Fire Danger days; • Fire coordinator and fire patrol roles and responsibilities; • Detailed information for responding to fires; • Worker training for fire prevention, initial attack firefighting, and fire reporting; • Emergency communication, response, and reporting procedures; • Coordination with local fire agencies to facilitate agency access through the project site; • Emergency contact information; • Demonstrate compliance with applicable wildland fire management plans and policies established by state and local agencies. Information contained in the Plan and location of fire-suppression materials and equipment shall be included as part of the employee environmental training discussed in APM HAZ-2. At a minimum, fire-suppression equipment and materials shall be kept adjacent to all areas of work and in staging areas, and shall be clearly marked. Water tanks shall be sited in the project area to protect against fire, and all vehicles shall carry fire-suppression equipment. The applicant shall contact and coordinate with local and county fire departments to determine the minimum amounts of fire equipment to be carried on the vehicles and appropriate locations for the water tanks.
	Traffic and Transportation
MM TRA-1	PG&E shall obtain all necessary transportation and/or encroachment permits and transport of oversized loads and certain materials, and shall comply with permit requirements designed to prevent excessive congestion or traffic hazards during temporary lane closures. PG&E would develop lane closure/width reduction or traffic diversion plans as required by the encroachment permits. Construction activities that are in, along, or cross local roadways shall follow best management practices and/or local jurisdictional encroachment permit requirements, to minimize impacts to traffic and transportation in the Project area. PG&E will demonstrate to the CPUC that it has obtained all permits prior to construction activity in a given jurisdiction or location.

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ENVIRONMENTAL DETERMINATION

The IS has been prepared to identify the potential effects on the environment from implementation of the proposed project and to evaluate the significance of these effects. The IS is based on the applicant's PEA filed on April 28, 2016; proposed project site inspections by the CPUC environmental team; and other environmental analysis for the proposed project. APMs proposed by the applicant as project design features are incorporated into Section 4, Project Description, of this IS.

Based on the IS, the proposed project, with integration of APMs and mitigation measures where applicable, would result in less-than-significant effects or have no impacts in the areas of aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems.

REVIEW PERIOD

The 30-day public review period for the re-issued Draft MND begins on May 15, 2017. The CPUC will be accepting comments on the document during this timeframe. Written comments will be accepted until 5:00 p.m. on June 14, 2017.

The IS/MND, as well as PG&E's application and PEA for the South of Palermo 115 kV Power Line Reinforcement Project, are available at the project's website:

http://www.cpuc.ca.gov/environment/info/dudek/Palmero/index.htm

Contact Person

May 10, 2017
Date

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(End of Attachment 2)