



**Pacific Gas and
Electric Company™**

BRANDON LIDDELL
SENIOR LAND PLANNER
LAND & ENVIRONMENTAL MANAGEMENT

245 MARKET STREET
SAN FRANCISCO, CA 94109

MAILING ADDRESS:
MAIL CODE N10A
PO BOX 770000
SAN FRANCISCO, CA 94177

February 16, 2018

Ms. Billie Blanchard
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

**RE: Ravenswood-Cooley Landing 115 kV Reconductoring Project (A. 17-12-010)
Response to California Public Utilities Commission Review of Application
Completeness**

Dear Ms. Blanchard:

This letter is in reply to your January 10, 2018 letter in which you request certain additional information regarding Pacific Gas and Electric Company's (PG&E's) application (A.12-01-012) for a Permit to Construct the Ravenswood-Cooley Landing 115 kilovolt (kV) Reconductoring Project (project). The original text for each deficiency identified by the California Public Utilities Commission (CPUC) is included, followed by PG&E's response.

This document includes the following attachments, which are described in more detail in the text below under the applicable response.

- Attachment 1. PG&E Easement Exhibit
- Attachment 2. BCDC Permit No. M87-74(A)
- Attachment 3. GIS files for Cultural Resources Study Figures (submitted confidentially)
- Attachment 4. GIS files for CNDDDB Plant and Animal Records (submitted confidentially)
- Attachment 5. PG&E Drawing No. 405799 – Existing Tower Configuration
- Attachment 6. PG&E Drawing No. 3010510 – Cage-top Extensions
- Attachment 7. PG&E Drawing No. 325992 – OPGW Peaks
- Attachment 8. Example Guard Structures
- Attachment 9. Revised PEA Section 3.5, Cultural Resources
- Attachment 10. Declaration Supporting Confidential Designation

CPUC Deficiency #1 - Project Objectives/Proposed Project

Required in: CPUC Information and Criteria List (ICL) Section V.10; GO 131-D Section IX. A. PEA Checklist (Chapter 2: Project Purpose and Need and Objectives; Section 3.3, Project Objectives; Section 3.4 Proposed Project)

Purpose/Need - Transfer Capacity. In order to understand the project and its purpose, we need clarification of the initial and increased transfer capacity that would result from implementation of the project. It is important that we clearly understand the project's benefits to the electrical system.

- a. The PEA on page 2-2 indicates that on a typical weekday the power flow on the two 115kV lines is more than 120 MW. On a hot afternoon when the temperature is more than 95 degrees the flow on the two 115kV lines can be more than 180 MW. On page 2-3 PG&E further states that PG&E's proposed project will re-conductor the Ravenswood-Cooley Landing Line with a conductor that has a summer rating of over 1,100 amps which will increase the capacity of the two 115 kV circuits by more than 24%. Please explain how the expected capacity increase of 24% between the Ravenswood and Cooley Landing substations is calculated. Please provide capacity increases in MWs as PG&E has stated for existing line power flows.
- b. If the transfer capacity between the Ravenswood and Cooley Landing substations will increase, will there also be an increase in the capacity of other existing lines leaving those substations?

PG&E's Response

As a general matter, we note that CPUC General Order ("GO") 131-D, Section IX.B.1.f states that an application for a Permit to Construct ("PTC") "need not include ... a detailed analysis of purpose and necessity..." As the CPUC stated when adopting GO 131-D, the PTC process "is meant strictly for environmental review, not economic or 'needs' review. As compared with the procedures for a CPCN [certificate of public convenience and necessity] ... the permit-to-construct procedure is more streamlined, since it does not address the need for ... a proposed facility." (CPUC Decision ("D") 94-06-014 at 22.) For that reason, the CPUC has consistently identified the issues within the scope of a PTC proceeding as not including need. (See, e.g., D.13-10-025 at 4-5; D.12-06-039 at 3-4; D.11-07-020 at 6; D.10-06-014 at 9-10.)

Although a "detailed analysis" of need and cost are outside the scope of a PTC proceeding, section 2.2 of PG&E's Proponent's Environmental Assessment ("PEA") provides a brief discussion of the need for the project. As stated on page 2-1 of the PEA, the purpose and need for the project is to improve and upgrade the Ravenswood-Cooley Landing line to increase capacity in the area to address potential overloads and future load growth. Answers to your specific questions are provided below.

- a. The total electric power flowing in a circuit is a combination of both the real power and the reactive power:

$$S^2 = P^2 + Q^2,$$

where S = total power in megavoltamperes (MVA),
P = real power in megawatts (MW), and
Q = reactive power in megavars (MVAR).

The total power is also a function of the circuit's voltage and current:

$$S = 1.732 \times V_{\phi} \times I / 1000,$$

where V_{ϕ} = voltage between phases of the circuit in kilovolts (kV), and
I = current in the circuit in amps.

Therefore, the relationship between the current in the circuit and the real power flowing in the circuit is also impacted by the reactive power flow and the actual voltage on the circuit.

As shown below in Figure 1, power demand in the Southeastern Peninsula area is highest on hot summer days. For this reason, the summer ratings on the two Ravenswood–Cooley Landing Line circuits are the most critical ratings. Currently, the two Ravenswood-Cooley Landing circuits have the following ratings during summer daytime hours (10:00 AM to 7:00 PM):

- 3 feet per second (fps) Summer normal rating = 780 Amps (= 155.4 MVA at 115 kV)
- 3 fps Summer emergency rating = 885 Amps (=176.3 MVA at 115 kV)

Outside of those hours, the ratings revert back to PG&E’s standard summer ratings for the 715.5 kcmil all-aluminum conductor (AAC):

- 2 fps Summer normal rating = 703 Amps (=140.0 MVA at 115 kV)
- 2 fps Summer emergency rating = 802 Amps (=159.7 MVA at 115 kV)

The CAISO-approved reinforcement project that PG&E proposes will increase the summer emergency rating on the two circuits to more than 1,100 Amps. This is more than 24% higher than the existing 3 fps summer emergency rating of 885 Amps.

The actual conductor that PG&E plans to install on the two circuits is 477 kcmil steel-supported aluminum conductor (ACSS). This conductor has the following summer rating:

- 2 fps Summer normal and emergency ratings = 1,144 Amps (= 227.9 MVA at 115 kV)

Therefore, the summer emergency rating of 1,144 Amps for the new conductor will be more than 29% higher than the existing 3 fps summer emergency rating of 885 Amps.

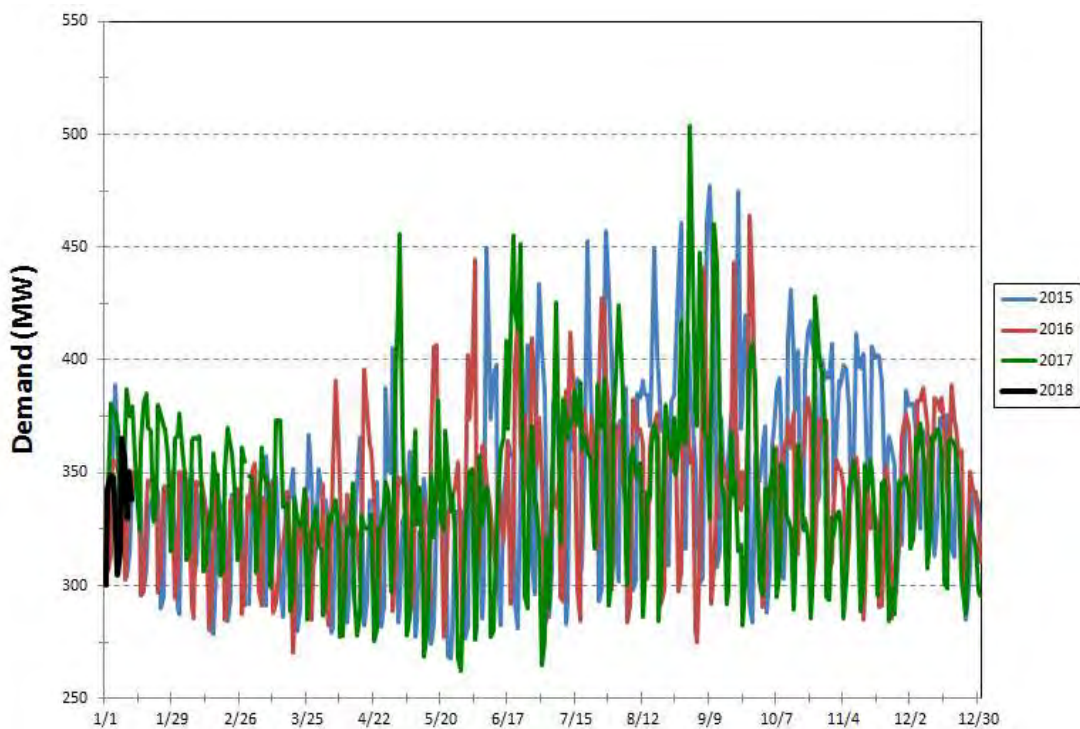


Figure 1: Daily Peak Power Demands in the Southeastern Peninsula Area

Converting the ampacity ratings of the circuits into a precise MW value is difficult because of variations in local transmission system voltages and reactive power flows on the circuits from hour to hour, as mentioned above. However, a review of the Ravenswood-Cooley Landing circuit data over the last three years shows that the local system voltages are generally around 119 kV to 121 kV, and reactive power flows on the circuits are generally very low. The ratio of the real power flow in MW on the circuits compared to the electrical current on the circuits had an average value of 0.209. So, one can roughly convert the ampacity ratings of the circuits into MW values by the equation:

$$(\text{MW Rating}) = 0.209 \times (\text{Ampacity Rating}).$$

The existing 3 fps summer emergency rating of each 115 kV circuit is 885 Amps, which would roughly correspond to a 185 MW emergency rating. With the new ACSS conductor, the summer ampacity rating is 1,144 Amps, which would correspond to a 239 MW rating. This represents an increase of 54 MW, or 29%, over the existing summer emergency rating of the circuits.

- b. The proposed increase in transfer capacity between the Ravenswood and Cooley Landing substations will not result in increased capacity of lines leaving the two substations. Upgrade of line equipment for the other lines leaving the two substations would be necessary to increase the capacity of these lines.

CPUC Deficiency #2 - Project Description

Required in: CPUC ICL Section V.11; GO 131-D Section IX. A; PEA Checklist Chapter 3 (Section 3.1, Project Location; Section 3.2, Existing System; Section 3.4, Proposed Project; Section 3.6, Right-of-Way (ROW) Requirements; Section 3.7 construction

- a. PEA Checklist 3.1 - Describe if the proposed project is located within an existing property owned by the applicant, traverses existing rights of way (ROW) or requires new ROW. Give the approximate area of the property or the length of the project that is in an existing ROW or which requires new ROWs.
 - While new ROW appears not to be necessary along the entirety of the existing alignment of the proposed project, PEA Section 2.6 indicates temporary construction easements *may* need to be obtained to access pull sites, staging areas, or other areas outside of the permanent easements. Please provide a figure that clearly shows the areas (length and width) along the entire project route for both the permanent and proposed temporary construction easements. Please use a current aerial as the base layer of the map.
- b. Checklist 3.7.1.3 - For road types that require preparation, describe the methods and equipment that would be used.
 - Information is partially provided in PEA Section 2.7.3. The PEA identifies that overland routes would be used, in addition to public roads and temporary mats over marshland. However, the type of equipment used to install the matting is not discussed. Please provide this information.
- c. Per Checklist Section 3.2 please provide a schematic diagram of the existing system.
- d. Per Checklist Section 3.2 please provide a schematic diagram that illustrates the system as it would be configured with implementation of the proposed project.

- e. Table 2.9-1 does not contain information on the San Francisco Bay Conservation and Development Commission (BCDC). Given portions of the proposed project are within BCDC jurisdiction, and potential permits and approvals may be required for project construction, how will coordination be achieved.

PG&E's Response

- a. Based on PG&E's preliminary design and construction plan, a temporary construction easement may be required from the San Francisco Public Utilities Commission for Staging Area 3. Otherwise, PG&E appears to have adequate land rights for all other access roads, work areas, and staging areas. Please refer to Attachment 1 for figures depicting PG&E's existing permanent easement and proposed temporary construction easement, including their dimensions. Note that these identified access roads, work areas and staging areas are preliminary and subject to change depending on final project design, ground conditions and other factors.
- b. PG&E does not plan to establish any new access roads except for temporary matting through marshlands and overland travel routes in upland areas. For the matting installation, PG&E will install and remove the matts using a rough terrain forklift. If use of the matts causes rutting to occur, PG&E will use a skid steer to cleanup and restore the ground surface to original contours. Note that plans are preliminary and subject to change depending on final project design, ground conditions and other factors.
- c. Please refer to PEA Section 2.4, Figure 2.4-2 (Page 2-8) for a schematic diagram (referred to as a single-line diagram in the PEA) of the existing system in the Southeastern Peninsula area.
- d. The proposed reconductoring of the Ravenswood-Cooley Landing Line will not add to or otherwise modify the existing system in the Southeastern Peninsula area. Therefore, the existing schematic diagram depicted in PEA Figure 2.4-2 represents both the pre- and post-project system configuration.
- e. Please refer to Attachment 2 for the BCDC Permit No. M87-74(A) that covers work activities described in the Proponents Environmental Assessment. PG&E is coordinating with the BCDC to renew the permit so that the project will be covered under the future amended permit. PG&E will notify the BCDC as described in the attached permit procedures.

CPUC Deficiency #3 - GIS Data and Surveys

Required in: CPUC ICL Section V.11; GO 131-D Section IX. A; PEA Checklist (Section 3.4, Proposed Project)

The PEA Checklist has a requirement to provide GIS (or equivalent) data layers for the proposed project preliminary engineering including estimated locations of all physical components of the proposed project as well as those related to construction.

The following information appears to be missing from the GIS files and is necessary to support our environmental review and analysis. Here is a list of Ravenswood GIS datasets that were not located and are needed to complete project analysis:

- a. Project Location – As shown on the CONF- RCL- PEA- Cultural Resources Study Figure 2
- b. Cultural ¼ Mile Records Search Extent - As shown on the CONF- RCL- PEA- Cultural Resources Study Figure 8
- c. Cultural Study Areas - As shown on the CONF- RCL- PEA- Cultural Resources Study Figure 8
- d. Cultural Area Surveyed - As shown on the CONF- RCL- PEA- Cultural Resources Study Figure 11
- e. Cultural Resources - As shown on the CONF- RCL- PEA- Cultural Resources Study Figure 11
- f. Cultural Site Boundaries - As shown on the CONF- RCL- PEA- Cultural Resources Study Figure 9
- g. Biological CNDDDB Plant Records – As shown on the CONF- RCL- PEA- Biological Resources Technical Report Figure 4
- h. Biological CNDDDB Animal Records – As shown on the CONF- RCL- PEA- Biological Resources Technical Report Figure 5

PG&E's Response

- a.-f. GIS files for the requested Cultural Resources Study figures are provided as Attachment 3 to this response, which is being submitted confidentially for the reasons described in the declaration provided as Attachment 10.
- g.-h. GIS files for the CNDDDB Plant and Animal Records are provided as Attachment 4 to this response, which is being submitted confidentiality for the reasons described in the declaration provided as Attachment 10.

CPUC Deficiency #4 - Structure Information

Required in: CPUC ICL Section V.11; GO 131-D Section IX. A; PEA Checklist (Section 3.5.2, Poles and Towers; Section 3.5.3, Above-Ground Installation)

Structure information is included in the PEA description of the proposed project map book and GIS files. However, the following is also needed for PEA completeness:

- a. Provide structure diagrams (including, if available, photos of existing structures, preliminary diagram or “typical” drawings).

PG&E's Response

- a. Typical drawings showing the existing tower configuration and the proposed tower modifications (10-foot cage-top extensions and 4.5-foot OPGW peaks) are included as attachments to this response:
 - i. Attachment 5 - Drawing No. 405799 shows the existing Ravenswood-Cooley Landing Line structure configuration
 - ii. Attachment 6 - Drawing No. 3010510 shows the cage-top extensions proposed for Towers 1 and 2
 - iii. Attachment 7 - Drawing No. 325992 shows the OPGW peaks proposed for all towers

Please refer to Attachment 8 - Example Guard Structures, for photographs of typical wood pole guard structures in use.

CPUC Deficiency #5 - Staging and Work Areas

Required in: CPUC ICL Section V.11; GO 131-D Section IX. A; PEA Checklist (Section 3.7.1.1 Staging Areas)

- a. Per PEA section 2.7.2.4 addressing staging areas it is indicated that portable generators will be used to provide power. Please provide a description of the lighting equipment to be used at construction sites and staging yards for any nighttime construction or security lighting.

PG&E's Response

- a. PG&E plans to use portable towable light towers for any necessary night time construction work at construction sites and staging yards. These lighting units come with four shielded directional bulbs on a telescoping tower that can be articulated to focus on the immediate work area for safe construction while minimizing incidental light impacts.

CPUC Deficiency #6 - Biological Resources

Required in: CPUC ICL Section V.11; GO 131-D Section IX. A; PEA Checklist (Chapter 5.4, Biological Resources)

Results of special-status species surveys were provided in the PEA Section 3.4 and in the Biological Resources Technical Report, however there is no GIS data documenting locations of special-status species.

- a. Please provide any GIS data documenting locations of special-status species (please see Questions 3g and 3h above).

PG&E's Response

- a. PG&E did not observe or document any special-status species during the reconnaissance-level biological field surveys completed for the Biological Resources Technical Report. For this reason, PG&E does not have any GIS files documenting locations of special-status species other than the CNNDB GIS files which are provided as Attachment 4 of this response.

CPUC Deficiency #7 - Cultural Resources

Required in: CPUC ICL Section V.11; GO 131-D Section IX. A; PEA Checklist (Section 5.5, Cultural Resources)

For each resource area discussion, the PEA in Chapter 4 must include a description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.), local environment (site-specific) and regional environment. The PEA must also include description of the regulatory environment/context of Federal, State and Local government.

In Chapter 5 Section 5.5 Cultural Resources requires in addition to Impact analysis the following:

- a. Cultural Resources Report documenting a cultural resources investigation of the propose [sic] project. This report should include a literature search, pedestrian survey, and Native American consultation.
- b. Provide a copy of the records found in the literature search

- c. Provide a copy of all letters and documentation of Native American consultation.

Per the PEA checklist please provide the following items or additions/changes/revisions to the PEA:

- d. The PEA lacks the tribal cultural resources section of the CEQA checklist. Please provide this section and address the corresponding checklist questions.
- e. Please update the cultural resources regulatory setting (PEA Section 3.5.2) to reflect that the Office of Publication and Research published AB 52 guidance in June 2017.
- f. Please amend the cultural resources regulatory setting to include the criteria for California Historic Landmarks.
- g. Although PEA Section 3.5.2 discusses county regulations pertinent to cultural resources, it is silent on those of the relevant cities and any regulations that might be promulgated for the wildlife refuges in the area. Please amend this section as appropriate.

PG&E's Response

- a. PG&E provided a Cultural Resources Report to the CPUC Energy Division at the time of filing the project application. The Cultural Resources Report includes the requested information. Specifically, results of the literature search are discussed on pages 24-26, the pedestrian survey is described on pages 30-34, and Native American consultation is discussed on page 27.
- b. Appendix A of the Cultural Resources Report includes copies of records obtained through the literature search.
- c. Please refer to PEA Appendix B for a copy of all letters and documentation of Native American consultation.
- d. PG&E has revised PEA Section 3.5, Cultural Resources to include the tribal cultural resources section of the CEQA checklist and corresponding checklist questions. PG&E added a discussion of the results of its investigation of the potential presence of tribal cultural resources in the project area and whether it anticipates that any impacts to such resources may occur. However, PG&E did not make an "effects" determination because AB 52 states that the lead agency, in this case the CPUC, must make that finding. The revised PEA Section 3.5 is included as Attachment 9 of this response.
- e. PG&E has revised PEA Section 3.5.2 to include an updated regulatory setting discussion that reflects the Office of Publication and Research AB 52 guidance published in June 2017. Please refer to Attachment 9 of this response.
- f. PG&E has revised PEA Section 3.5.2 to include the criteria for California Historic Landmarks. Please refer to Attachment 9 of this response.
- g. PG&E has revised PEA Section 3.5.2 to discuss regulations pertinent to cultural resources for the cities of Menlo Park and East Palo Alto, and for the wildlife refuges and nature preserves in the area. Please refer to Attachment 9 of this response.

We trust the information provided herein is fully responsive to your requests. However, should you have any further questions, please do not hesitate to contact me at (415) 973-4893.

Sincerely,



Brandon Liddell
Senior Land Planner

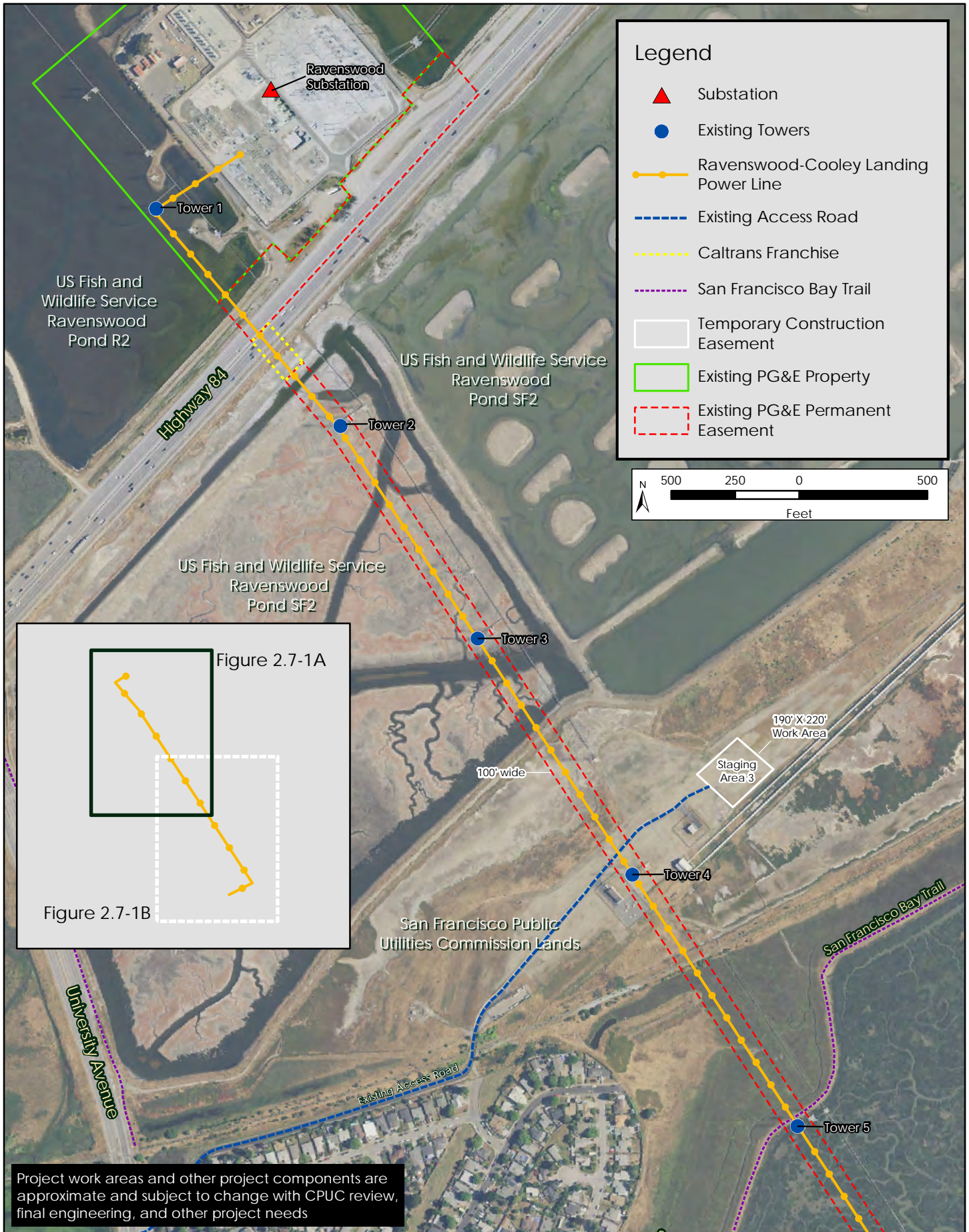
Enclosure(s) hardcopy and DVD:

- Attachment 1. PG&E Easement Exhibit
- Attachment 2. BCDC Permit No. M87-74(A)
- Attachment 3. GIS files for Cultural Resources Study Figures (submitted confidentially)
- Attachment 4. GIS files for CNDDDB Plant and Animal Records (submitted confidentially)
- Attachment 5. PG&E Drawing No. 405799 – Existing Tower Configuration
- Attachment 6. PG&E Drawing No. 3010510 – Cage-top Extensions
- Attachment 7. PG&E Drawing No. 325992 – OPGW Peaks
- Attachment 8. Example Guard Structures
- Attachment 9. Revised PEA Section 3.5, Cultural Resources
- Attachment 10. Declaration Supporting Confidential Designation

cc:

Mike Monasmith, California Energy Commission
Mathew Swain, PG&E Law Department
Scott Oppelt, Stantec

Attachment 1
PG&E Easement Exhibit



Legend

- ▲ Substation
- Existing Towers
- Ravenswood-Cooley Landing Power Line
- - - Existing Access Road
- - - - - Caltrans Franchise
- - - - - San Francisco Bay Trail
- Temporary Construction Easement
- Existing PG&E Property
- Existing PG&E Permanent Easement

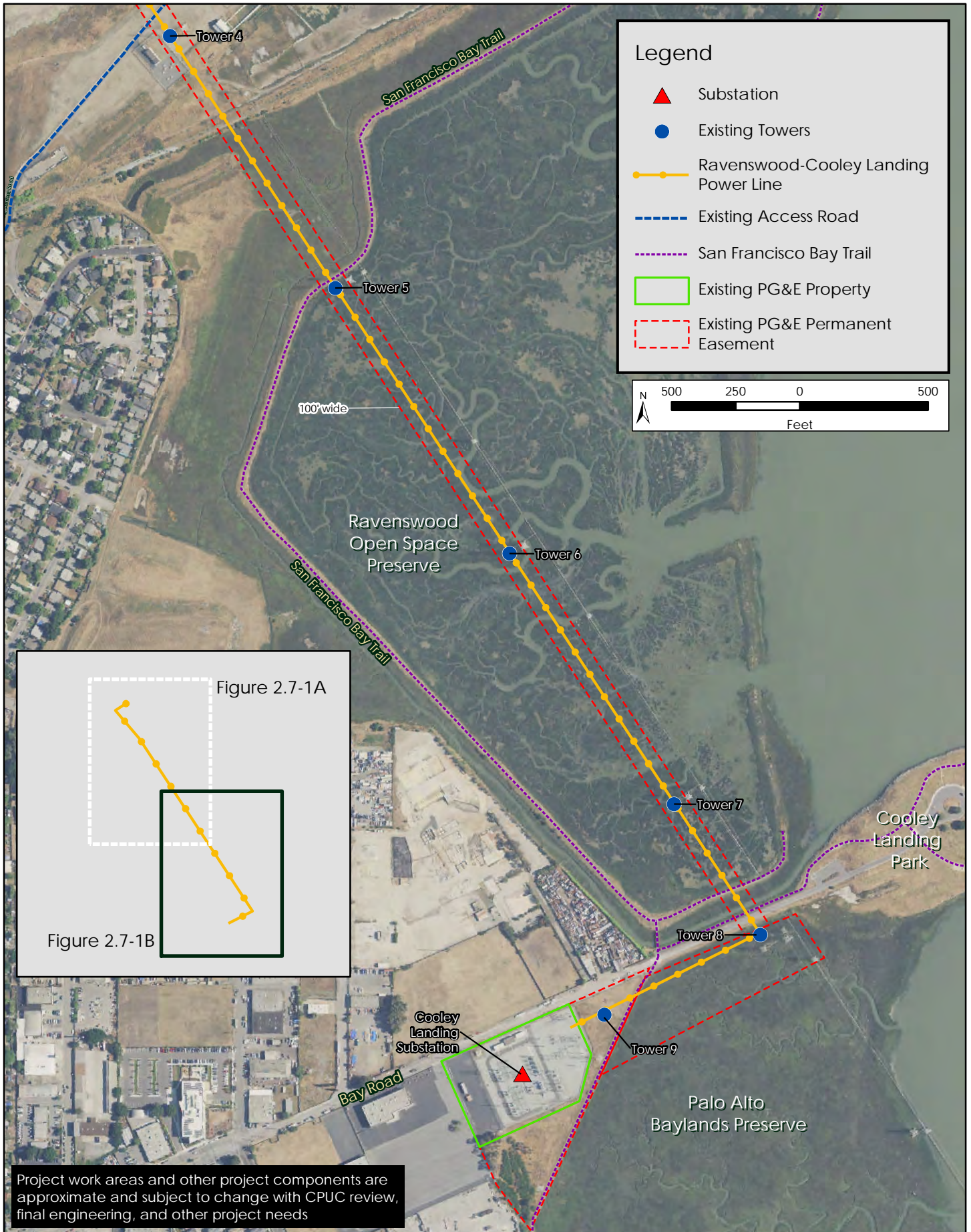


Figure 2.7-1A

Figure 2.7-1B

Project work areas and other project components are approximate and subject to change with CPUC review, final engineering, and other project needs

N:\Projects\390013980-01\Reports\Easement Exhibit\Fig 1A Survey Area.mxd



Legend

- ▲ Substation
- Existing Towers
- Ravenswood-Cooley Landing Power Line
- - - Existing Access Road
- - - San Francisco Bay Trail
- Existing PG&E Property
- Existing PG&E Permanent Easement



100' wide

Ravenswood Open Space Preserve

Cooley Landing Park

Cooley Landing Substation

Bay Road

Palo Alto Baylands Preserve

Figure 2.7-1A

Figure 2.7-1B

Project work areas and other project components are approximate and subject to change with CPUC review, final engineering, and other project needs

N:\Projects\390013980-01\Reports\Easement Exhibit\Fig 1B Survey Area.mxd

Attachment 2
BCDC Permit No. M87-74(A)



Making San Francisco Bay Better

Permittee's Copy

PERMIT NO. M87-74(A)
 (Issued on December 8, 1987, As
 Amended Through April 21, 2011)
AMENDMENT NO. TEN

Pacific Gas and Electric Company
 245 Market Street
 San Francisco, California 94105-1702

ATTENTION: Richard A. Gigliotti
 Manager, Land Energy Delivery

Ladies and Gentlemen:

I. Authorization

A. Subject to the conditions stated below, the permittee, the Pacific Gas and Electric Company, is hereby authorized to do the following:

Location: In the Commission's "Bay," "Certain Waterway," and "Salt Pond" jurisdictions and within the 100-foot shoreline band at various Pacific Gas and Electric facilities in the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma. This amended permit does not involve activities within the Suisun Marsh.

Description: A ten-year maintenance permit to:

1. **In the Bay and a Certain Waterways, and Within the 100-foot Shoreline Band:**
 - a. Place riprap for shoreline protection in a manner that does not decrease bay surface area;
 - b. Repair and replace on an in-kind basis existing submarine cables, transmission towers and overhead tower lines, including guys, footings and fenders, wood poles, gas lines, boardwalks, and various warning signs:

- c. Install temporary wood piles for the purpose of repairing damage or deterioration to existing transmission towers;
 - d. Repair Pier 90 (Hunters Point Power Plant) support pilings and fenders;
 - e. Repair the lagoon intake structure at Hunters Point Power Plant; and
 - f. Repair and replace on an in-kind, as-needed basis existing security fences that will not result in any increase in length or square footage or a significant change in appearance.
2. **Within the 100-foot Shoreline Band:**
- a. Renovate and remodel within existing buildings;
 - b. Repair existing trails and roads;
 - c. Repair storm drain lines, fire protection lines, and other miscellaneous buried piping that lie within the 100-foot shoreline band at Hunters Point Power Plant;
 - d. Repair intake structure equipment including circulating water pumps, intake screens, grizzly racks (bar racks), and stop logs;
 - e. Repair and replace underground distribution lines; and
 - f. Place approximately 980 cubic yards of aggregate road base at the top of an approximately 1,500-foot-long section of a levee surrounding a shell pond located in Bay Point, Contra Costa County, and conduct on-going repair and maintenance of the aggregate road base authorized herein (Amendment No. Nine); and
 - g. At the former Hunter's Point Power Plant, in the City and County of San Francisco, remove an approximately 540-foot-long abandoned fuel oil pipeline, of which 100-feet are within the shoreline band, backfill the excavated area with soil and asphalt and maintain grades over time at the excavated area.
3. **In Salt Ponds.** Repair and replace on an in-kind basis existing transmission towers and overhead tower lines including guys, footings, and fenders, wood poles, boardwalks, and various warning signs.

PERMIT NO. M87-74(A)

Pacific Gas and Electric Company
(Issued on December 8, 1987, As
Amended Through April 21, 2011)
AMENDMENT NO. TEN
Page 3

4. **In the Bay, Certain Waterways, and Salt Ponds, and Within the 100-foot Shoreline Band:**
 - a. Install, use, and maintain optical ground wires (OPGW) and 4-to 6-foot peaks onto existing electrical transmission towers across 97.6 miles of transmission lines (Amendment No. Four); and
 - b. To protect the steel footings of transmission towers from the corrosive affects of salt water, encapsulate and maintain the footings with concrete resulting in no increase in the size of the existing concrete footprints and construct temporary access boardwalks (Amendment No. Seven).
5. **In the Bay, and in Salt Ponds, and Within the 100-foot Shoreline Band.** Install, use, and maintain all-dielectric, self-supporting (ADSS) cables and 4- to 11-foot peaks onto existing electrical transmission towers across 7.85 miles of transmission lines (Amendment No. Five).
6. **In the Bay and Within the 100-foot Shoreline Band.** Install, use, and maintain approximately 550 feet of all-dielectric, self-supporting (ADSS) cables at Guadalupe Slough that will be supported by electrical transmission towers located outside of the Commission's jurisdiction (Amendment No. Six).

B. This amended authority is generally pursuant to and limited by your original application dated November 4, 1987, including its accompanying exhibits, and your letters dated May 26, 1988; April 7, 1995; October 16, 1997; July 8, 1999; October 25, 1999; October 17, 2000, June 15, 2004; December 19, 2007, ~~and~~ December 15, 2008, and January 13, 2011, requesting Amendment Nos. One, Two, Three, Four, Five, Six, Seven, Eight, ~~and~~ Nine, and Ten, respectively, including all accompanying and subsequent exhibits and correspondence, and all conditions of this amended permit.

C. Work authorized herein may be carried out until January 1, 2018, at which time the amended permit shall expire. This amended permit may be renewed for successive ten-year periods at the discretion and by or on behalf of the Commission.

II. Special Conditions

The amended authorization made herein shall be subject to the following special conditions, in addition to the standard conditions in Part IV:

A. **Abandonment.** If, at any time, the Commission determines that the improvements in the Bay authorized herein, have been abandoned for a period of two years or more, or have deteriorated to the point that public health, safety or welfare is adversely affected, the

Commission may require that the improvements be removed by the permittee, its assigns or successors in interest, or by the owner of the improvements, within 60 days or such other reasonable time as the Commission may direct.

B. Annual Report. The permittee shall submit a report to the Commission by March 1 of each year that this amended permit is in effect, summarizing the activities authorized in the previous calendar year within the Commission's jurisdiction. The report shall include a description of the work and the location.

The report shall also describe the work proposed for the current calendar year. Within 30 days of the date BCDC receives the annual report, BCDC shall notify the permittee of any proposed work which does not conform to the intent, terms, or conditions of this amended permit. Such notification shall constitute denial of the proposed work. A separate BCDC application may be made for any such denied work.

~~**C. Construction Debris.** Any debris that results from construction authorized in a tidal area, salt pond, or certain waterway shall be removed to an authorized upland location outside of the jurisdiction of the Commission.~~

C. Best Management Practices

1. **Debris Removal.** All construction debris shall be removed to an authorized location outside the jurisdiction of the Commission. In the event that any such material is placed in any area within the Commission's jurisdiction, the permittee, its assigns, or successors in interest, or the owner of the improvements, shall remove such material, at their expense, within ten days after they have been notified by the Executive Director of such placement (Amendment No. Ten).
2. **Construction Operations.** All construction operations shall be performed to prevent construction materials from falling, washing or blowing into the Bay. In the event that such material escapes or is placed in an area subject to tidal action of the Bay, the permittee shall immediately retrieve and remove such material at its expense (Amendment No. Ten).

D. Marshland. All construction activity performed in a marsh area shall be performed in such a manner as to minimize destruction or disturbance of the marsh environment.

E. Riprap Placement. Riprap material shall be placed so that a permanent shoreline with a minimum amount of fill is established by means of an engineered slope.

F. Riprap Material. Riprap material shall be either quarry rock or concrete pieces conforming to quality requirements for specific gravity, absorption, and durability specified by the California Department of Transportation. The use of dirt, small concrete rubble, exposed rebar, large and odd shaped pieces of concrete, and asphalt concrete as riprap is prohibited.

G. Fill. This amended permit does not authorize the placement of any additional earth fill inland of riprap unless otherwise authorized specifically by this amended permit.

PERMIT NO. M87-74(A)

Pacific Gas and Electric Company
(Issued on December 8, 1987, As
Amended Through April 21, 2011)

AMENDMENT NO. TEN

Page 5

H. Support Pilings, Fenders and Tower Footings. Repairs to, raising, and replacement of support pilings, fenders and tower footings shall not result in any substantial enlargement, any substantial extension into the water or wetlands, or any substantial change in use.

I. Storm Drain Lines, Fire Protection Lines, and Other Miscellaneous Pipe Lines. Repairs and replacement of storm drain lines, fire protection lines, and other miscellaneous pipe lines shall not result in any substantial enlargement or any substantial extension into the Bay.

J. Temporary Boardwalks and Work Platforms. All temporary boardwalks and work platforms, periodically necessary for site access and as staging areas, shall be entirely removed from the Commission's jurisdiction within 60 days of project completion (Amendment No. Seven).

K. Work Windows. All work performed in environmentally sensitive habitat areas shall occur in conformance with the work windows established by the U.S. Fish and Wildlife Service. Work in possible habitat for California black rail and California clapper rail may not occur between February 1 and August 31 unless a habitat evaluation has been conducted and, if necessary, a springtime field survey has been performed confirming the absence of the species within an appropriate buffer area for each specific endangered species. Work in or immediately adjacent to possible habitat for breeding California gulls may not occur between March 1 and July 31 unless a habitat evaluation has been conducted and, if necessary, a springtime field survey has been performed confirming the absence of the species within an appropriate buffer area or permission to destroy nests is sought and obtained prior to the commencement of construction (Amendment No. Seven).

L. Environmentally Sensitive Habitat. All equipment and crews shall be kept off of environmentally sensitive habitat areas to the maximum extent possible. Work in such areas will be limited to the boardwalks and designated staging areas or confined to as small an area as possible. Plans for work in environmentally sensitive habitats shall be submitted for review and approval by or on behalf of the Commission prior to construction (Amendment No. Seven).

M. Notice to Contractor. The permittee shall provide a copy of this permit to any contractor or person working in concert with the permittee to carry out the activities authorized herein and shall point out the special conditions contained herein (Amendment No. Nine).

N. Aggregate Road Repair and Maintenance. The on-going repair and maintenance of the road base authorized in Amendment No. Nine of this amended permit is allowed as long as this amended permit remains in effect. This repair and maintenance activity shall not result in an increase of the footprint authorized herein unless additional Commission authorization is granted.

PERMIT NO. M87-74(A)

Pacific Gas and Electric Company
(Issued on December 8, 1987, As
Amended Through April 21, 2011)
AMENDMENT NO. TEN
Page 6

III. Findings and Declarations

On behalf of the Commission, I find and declare that:

A. Ten-Year Maintenance Activities. The project authorized by this amended permit involves placing riprap to stabilize existing banks as defined in Regulation Section 10601(a)(2); repairing existing multiple boat dock support pilings, as defined in Regulation Section 10601(a)(6); replacing, repairing and maintaining utility cables, and transmission towers as defined in Regulation Section 10601(a)(5); repairing, reconstructing and replacing of intake structures, that will not involve any substantial enlargement or change in use, as defined in Regulation Section 10601(a)(6); placing small amounts of inert fill to repair existing trails and roads, as defined in Regulation Section 10601(b)(1); undertaking various maintenance activities at various Pacific Gas and Electric facilities within the 100-foot shoreline band, as defined in Regulation Section 10601(b)(5); repairing and maintaining on an in-kind basis existing security fences, and reconstructing existing power transmission towers, communication towers and walkways providing access to such towers and similar maintenance activities associated with electrical transmission towers in salt ponds and wetlands, as defined in Regulation Section 10601(c)(1) and Regulation Section 10601(a)(6); installing and maintaining optical ground wires (OPGW) and 4 to 6-foot peaks onto existing electrical transmission towers in the Bay, certain waterways, salt ponds, and within the 100-foot shoreline band, as defined in Regulation Sections 10601(a)(5), 10601(a)(6), 10601(b)(5), and 10601(e)(3); installing and maintaining all-dielectric, self-supporting (ADSS) cables and 4 to 11-foot peaks onto existing electrical transmission towers in the Bay, salt ponds, and within the 100-foot shoreline band, as defined in Regulation Sections 10601(a)(5), 10601(a)(6), 10601(b)(5), and 10601(e)(3); installing temporary boardwalks in the Bay, salt ponds and certain waterways as defined by Regulation Section 10601(e)(1), a similar activity, as defined by Regulation Section 10601(a)(1) and 10601(c)(1); and repairing and maintaining transmission towers in certain waterways as defined by Regulation Section 10601(e)(3), a similar activity as defined by Regulation Section 10601(a)(6); and thus all of these activities are defined as a "minor repair or improvement" for which the Executive Director may issue a permit, pursuant to Government Code Section 66632(f) and Regulation Section 10622(a), and an amendment to a permit, pursuant to Regulation Sections 10810 and 10812.

B. Amendment No. Seven. Amendment No. Seven authorizes the concrete encapsulation of transmission tower footings so that steel towers are not subject to the corrosive action of seawater as former salt ponds are restored to tidal action. Some of the work authorized by Amendment No. Seven will be performed in environmentally sensitive habitat areas. As conditioned, such work will be limited to either existing boardwalks or to temporary boardwalks and work platforms constructed for access and staging. As conditioned, the authorization limits the concrete encapsulation of transmission tower footings to the same footprint as the existing tower footings, requires the removal of the temporary boardwalks and work platforms at project completion, limits the months during which this work can occur in environmentally sensitive habitat to periods that will protect the California black rail, California clapper rail and breeding California gulls, and requires all equipment and crews to stay off of environmentally sensitive habitat areas and to work from boardwalks and designated staging areas. As such, work

authorized by Amendment No. Seven is consistent with the McAteer-Petris Act and with the San Francisco Bay Plan in that it will not adversely affect the Bay and will be performed in a manner to limit effects on wildlife and sensitive species.

C. Amendment No. Eight. Amendment No. Eight authorizes a 10-year renewal of this maintenance permit. As this renewal does not materially alter the project authorized, the Executive Director may issue this amended permit pursuant to Regulation Section 10810. Amendment No. Eight also splits the original permit into two separate permits to reflect the ownership change of the Potrero Power plant, which was sold to Mirant Potrero, LLC. This amended permit No. M87-74(A) is issued to Pacific Gas and Electric Company for continued maintenance of all of its facilities as authorized by the original permit, excluding work at the Potrero Power facility. Future maintenance work at the Potrero facility will now be authorized by Amendment No. Eight to Permit No. M87-74(B), issued to Mirant Potrero, LLC.

D. Amendment No. Nine. Amendment No. Nine authorizes the placement of aggregate road base material and on-going repair and maintenance of the road base at a 1,500-foot-long portion of a levee in the shoreline band, thereby involving the placement of a small amount of inorganic material, and on-going maintenance and repair activities that will not adversely affect public access or the environment, conflict with a priority use designation, or substantially change the use of the project site, as defined by Regulation Sections 10601(b)(1) and 10601(b)(5), and, therefore, the project qualifies as a "minor repair or improvement" for which the Executive Director may issue a permit, pursuant to Government Code Section 66632(f) and Regulation Section 10622(a).

E. Amendment No. Ten. Amendment No. Ten authorizes the removal of an abandoned fuel oil pipeline, backfilling and maintaining areas at the excavated area over time, all within the 100-foot shoreline band. The authorization has been conditioned to assure that work activities will not lead to degrading the Bay's water quality or affecting navigation, as required by the Bay Plan's Water Quality and Navigational Safety Policies. The work authorized by Amendment No. Ten, therefore involves the placement of a small amount of inorganic material, and on-going maintenance and repair activities that will not adversely affect public access or the environment, conflict with a priority use designation, or substantially change the use of the project site, as defined by Regulation Sections 10601(b)(1) and 10601(b)(5), and therefore, the project qualifies as a "minor repair or improvement" for which the Executive Director may issue a permit, pursuant to Government code Section 66632(f) and Regulation Section 10622(a).

F. McAteer-Petris Act and the San Francisco Bay Plan. The project authorized by this amended permit is consistent with the McAteer-Petris Act and with the San Francisco Bay Plan in that it will not adversely affect the Bay nor public access to and enjoyment of the Bay.

G. Consistent with Coastal Zone Management Act. The Commission further finds, declares, and certifies that the activities authorized herein are consistent with the Commission's Amended Management Program for San Francisco Bay, as approved by the Department of Commerce under the Federal Coastal Zone Management Act of 1972, as amended.

PERMIT NO. M87-74(A)

Pacific Gas and Electric Company
(Issued on December 8, 1987, As
Amended Through April 21, 2011)

AMENDMENT NO. TEN

Page 8

G. H. CEQA. Pursuant to Regulation Section 11501, the projects authorized by this amended permit are categorically exempt from the requirement to prepare an environmental impact report.

H. I. Listing with the Commission. Pursuant to Regulation Section 10620, the original project was listed with the Commission on December 3, 1987.

IV. Standard Conditions

A. Permit Execution. This amended permit shall not take effect unless the permittee executes the original of this amended permit and returns it to the Commission within ten days after the date of the issuance of the amended permit. No work shall be done until the acknowledgment is duly executed and returned to the Commission.

B. Notice of Completion. The attached Notice of Completion and Declaration of Compliance form shall be returned to the Commission within 30 days following completion of the work.

C. Permit Assignment. The rights, duties, and obligations contained in this amended permit are assignable. When the permittee transfers any interest in any property either on which the activity is authorized to occur or which is necessary to achieve full compliance of one or more conditions to this amended permit, the permittee/transferor and the transferee shall execute and submit to the Commission a permit assignment form acceptable to the Executive Director. An assignment shall not be effective until the assignee executes and the Executive Director receives an acknowledgment that the assignee has read and understands the amended permit and agrees to be bound by the terms and conditions of the amended permit, and the assignee is accepted by the Executive Director as being reasonably capable of complying with the terms and conditions of the amended permit.

D. Permit Runs With the Land. Unless otherwise provided in this amended permit, the terms and conditions of this amended permit shall bind all future owners and future possessors of any legal interest in the land and shall run with the land.

E. Other Government Approvals. All required permissions from governmental bodies must be obtained before the commencement of work; these bodies include, but are not limited to, the U. S. Army Corps of Engineers, the State Lands Commission, the Regional Water Quality Control Board, and the city or county in which the work is to be performed, whenever any of these may be required. This amended permit does not relieve the permittee of any obligations imposed by State or Federal law, either statutory or otherwise.

F. Built Project must be Consistent with Application. Work must be performed in the precise manner and at the precise locations indicated in your application, as such may have been modified by the terms of the amended permit and any plans approved in writing by or on behalf of the Commission.

G. Life of Authorization. Unless otherwise provided in this amended permit, all the terms and conditions of this amended permit shall remain effective for so long as the amended permit remains in effect or for so long as any use or construction authorized by this amended permit exists, whichever is longer.

H. Commission Jurisdiction. Any area subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission under either the McAteer-Petris Act or the Suisun Marsh Preservation Act at the time the amended permit is granted or thereafter shall remain subject to that jurisdiction notwithstanding the placement of any fill or the implementation of any substantial change in use authorized by this amended permit. Any area not subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission that becomes, as a result of any work or project authorized in this amended permit, subject to tidal action shall become subject to the Commission's "bay" jurisdiction.

I. Changes to the Commission's Jurisdiction as a Result of Natural Processes. This amended permit reflects the location of the shoreline of San Francisco Bay when the permit was issued. Over time, erosion, avulsion, accretion, subsidence, relative sea level change, and other factors may change the location of the shoreline, which may, in turn, change the extent of the Commission's regulatory jurisdiction. Therefore, the issuance of this amended permit does not guarantee that the Commission's jurisdiction will not change in the future.

J. Violation of Permit May Lead to Permit Revocation. Except as otherwise noted, violation of any of the terms of this amended permit shall be grounds for revocation. The Commission may revoke any amended permit for such violation after a public hearing held on reasonable notice to the permittee or its assignee if the amended permit has been effectively assigned. If the amended permit is revoked, the Commission may determine, if it deems appropriate, that all or part of any fill or structure placed pursuant to this amended permit shall be removed by the permittee or its assignee if the amended permit has been assigned.

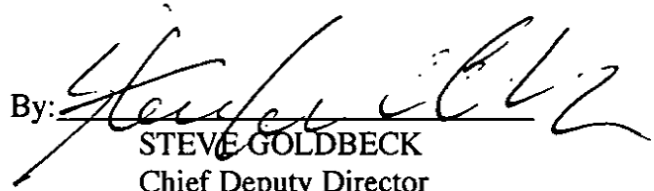
K. Should Permit Conditions Be Found to be Illegal or Unenforceable. Unless the Commission directs otherwise, this amended permit shall become null and void if any term, standard condition, or special condition of this amended permit shall be found illegal or unenforceable through the application of statute, administrative ruling, or court determination. If this amended permit becomes null and void, any fill or structures placed in reliance on this amended permit shall be subject to removal by the permittee or its assignee if the amended permit has been assigned to the extent that the Commission determines that such removal is appropriate. Any uses authorized shall be terminated to the extent that the Commission determines that such uses should be terminated.

L. Permission to Conduct Site Visit. The permittee shall grant permission to any member of the Commission's staff to conduct a site visit at the subject property during and after construction to verify that the project is being and has been constructed in compliance with the authorization and conditions contained herein. Site visits may occur during business hours without prior notice and after business hours with 24-hour notice.

PERMIT NO. M87-74(A)
Pacific Gas and Electric Company
(Issued on December 8, 1987, As
Amended Through April 21, 2011)
AMENDMENT NO. TEN
Page 10

Executed at San Francisco, California, on behalf of the San Francisco Bay Conservation and
Development Commission on the date first above written.

WILL TRAVIS
Executive Director
San Francisco Bay Conservation and
Development Commission

By: 
STEVE GOLDBECK
Chief Deputy Director

SG/KW/ra

cc: U. S. Army Corps of Engineers, Attn.: Regulatory Functions Branch
San Francisco Bay Regional Water Quality Control Board,
Attn.: Certification Section
Environmental Protection Agency

* * * * *

Receipt acknowledged, contents understood and agreed to:

Executed at San Francisco


Applicant

On 5/2/11

By: Chip Koch
Manager
Title

Garbage Page

The Area, Region or Location (operating area)	22
Land Service Office	GO
Operating Department (either or all - distribution, gas transmission, electric transmission hydro, DCP, etc.) (use words, not the number codes for type of interest)	Power Gen – Hunters Point Plant
USGS location (MERIDIAN and T, R, S, & QQ)	MD 2S, 5W, Sec 26, NW of NE
PG&E Drawing Number(s)	.
PLAT NO.	
LD of any affected documents (if applicable)	BCDC Permit M87-74(A) , Amendments 1 thru 9
LD of any Cross-referenced documents (if applicable)	
TYPE OF INTEREST (use the number codes)	27 – BCDC Permit Amendment 10
SBE Parcel Number (if applicable, most current and complete #)	135-38-18-2
Order # or PM #:	
JCN:	
County:	San Francisco
Utility Notice Numbers (if applicable)	
851 Approval Application No. Decision	
Prepared By	EER2
Checked By:	
Revision Number (if applicable)	

Hunters Point Power Plant Fuel Oil Pipeline Removal