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 Hollister 115kV Power Line Reconductoring Project Pursuant to General Order 131-D (U 39 E)	Application No.

APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY FOR A PERMIT TO CONSTRUCT THE HOLLISTER 115kV POWER LINE RECONDUCTORING PROJECT

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November 23, 2009

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Pursuant to Section IX(B) of General Order ("GO") 131-D and Rules 2.1 through 2.5 and 3.1 of the California Public Utilities Commission's ("Commission" or "CPUC") Rules of Practice and Procedure, PACIFIC GAS AND ELECTRIC COMPANY ("PG&E") respectfully requests a Permit to Construct ("PTC") the Hollister 115kV Power Line Reconductoring Project to replace the wires on (reconductor) a section of the existing, double-circuit Moss Landing-Salinas-Soledad 115kV Power Line and to rebuild a section of the existing, single-circuit Hollister No. 1 115kV Power Line into a double-circuit line. The project is needed by summer of 2012 to maintain compliance with applicable grid reliability criteria and to prevent service interruptions and improve transmission capacity and reliability for the greater San Juan Bautista and Hollister areas in San Benito County.

I. BACKGROUND

PG&E proposes to reconductor, or replace the wires on, approximately 16 miles of the existing 115 kV electric power line system near Hollister and San Juan Bautista. The segments to be reconductored include the Hollister Tower Segment, an approximately 7-mile long section of the double-circuit Moss Landing-Salinas-Soledad 115kV Power Line, and the Hollister Pole Segment, an approximately 9-mile long section of the single-circuit Hollister No. 1 115 kV Power Line that will be rebuilt as a double-circuit line. (*See* Proponent's Environmental Assessment [PEA],[1] Exhibit A). Approximately 1.3 miles of the Hollister Pole Segment will be relocated out of the San Benito River floodplain.

In the existing transmission system configuration, the Hollister Substation is supplied by two 115 kV power lines, the Hollister Nos. 1 and 2 lines, which begin at the Lagunitas Switches as part of the Moss Landing-Salinas-Soledad 115kV tower line for approximately 7 miles before splitting and extending in different directions to Hollister Substation. PG&E's local transmission system is at risk of overloading should there be a loss of one of these two power lines. In the event of an outage on either of the two lines, all of the electrical load would need to be served from the remaining line. The load-serving capability of the lines is limited by the sections of 2/0 copper conductor on both the Hollister No. 1 line and the Moss Landing-Salinas-Soledad line. At peak demand, an outage on one line could cause load levels along the 2/0 copper conductor on the other power line to exceed emergency ratings and fail to meet reliability planning standards. The resulting overload on the second line could require PG&E to drop customer load, or institute rolling black-outs. By reconductoring these line segments and adding a second circuit to the Hollister No. 1 line, PG&E will continue to maintain compliance with applicable grid reliability criteria and ensure safe and reliable electric service to the area. In addition, the Moss Landing – Salinas

[1] The PEA is attached as Exhibit A to this Application and incorporated herein by reference. References to PEA figures refer to figures within Exhibit A.

– Soledad line segment is constructed on old lattice towers built in the early 1930's that need to be replaced to address reliability concerns.

II. PROPOSED HOLLISTER 115KV POWER LINE RECONDUCTORING PROJECT

A. Regional Context

1. Existing Regional Electric System

In the Monterey and San Benito County areas, electric power is transmitted to regional substations at voltages of 230 kV, 115 kV, and 60 kV. The power is then stepped down at substations and distributed to customers using overhead or underground distribution lines. The regional transmission system also serves as a connection to the Moss Landing Power Plant.

The communities of Hollister and San Juan Bautista are served by the Hollister Substation. In the existing transmission system configuration, the Hollister Substation is supplied by two 115 kV power lines, the Hollister Nos. 1 and 2 lines. These lines begin on a single set of towers as part of the double-circuit Moss Landing – Salinas – Soledad 115 kV Power Line at the Lagunitas Switches near the intersection of Crazy Horse Road and San Juan Grade Road in Monterey County. From the Lagunitas Switches, the double-circuit tower line heads north for approximately 7 miles. Near Anzar Junction,[2] about 1.5 miles northwest of the City of San Juan Bautista, the tower line ends, and the Hollister No. 1 115 kV line heads easterly on wood poles to

[2] The intersection of the Moss Landing – Salinas – Soledad double-circuit tower line and the Hollister No. 1 pole line extending from the northern end of the tower line to Hollister Substation is a point approximately 200 feet from Anzar Junction (a junction in the Watsonville-Salinas 60 kV power line that generally runs parallel with the Hollister Tower Segment from Lagunitas Switches to Anzar Junction). Because the intersection between the two Hollister project line segments is close to Anzar Junction and there are no other identifying features in the immediate area, this document uses Anzar Junction, for ease of reference, to provide a general dividing point.

the Hollister Substation. The Hollister No. 2 115 kV line continues to the north on wood poles, then turns east and then south to reach the Hollister Substation.

B. Project Components

As stated above, PG&E proposes to reconductor, or replace the conductors on, an approximately 7-mile long section of the Moss Landing-Salinas-Soledad 115kV power line (the Hollister Tower Segment) and an approximately 9-mile long section of the Hollister No. 1 115 kV power line (the Hollister Pole Segment), which will be rebuilt as a double-circuit line. Approximately 1.3 miles of the Hollister Pole Segment will be relocated out of the San Benito River floodplain. Except for this relocated section, the proposed project lies within existing easements. PG&E has designed the project's new structures, work areas, and access points to avoid sensitive resources along the alignment to the extent possible. The project includes the following major components:

1. Power Line Support Structures

To accommodate the new, heavier conductor, most of the existing power line support structures must be replaced. For the proposed tower segment, approximately 37 of 39 towers will be replaced along the existing alignment. The existing towers are constructed of dull, galvanized, lattice steel angle members connected by steel bolts, and are constructed on concrete footings. The towers will be replaced with new lattice steel towers similar in design to the existing towers. The span length between towers will range from approximately 51 to 1,847 feet, with an average span of approximately 850 feet.

The pole segment will be reconstructed as a double-circuit power line in its current alignment, except for the section relocated out of the San Benito River floodplain. The segment will be reconstructed using a combination of both tubular steel and light-duty steel poles. Approximately 159 existing wood poles will be replaced with approximately 164 new steel poles. The poles will be rusted brown in appearance, ranging from approximately 70 to 95 feet in height

and from approximately 2 to 6 feet in diameter at the base. Span lengths between the poles will range from approximately 94 to 935 feet, but the average span will be approximately 295 feet. Where feasible, the new poles will be installed to avoid environmentally-sensitive areas.

Approximately 17 poles are currently located in the floodplain of the San Benito River, and approximately 9 additional poles are located in adjacent agricultural areas. To reduce impacts to the river floodplain area and increase the safety and reliability of this section due to its location, this section will be relocated approximately 3,000 feet to the north of the existing river alignment and will span the San Benito River channel from bank to bank. The existing wood poles in the floodplain will be "topped," allowing the existing distribution line to continue to serve nearby customers. As part of this relocation, approximately 10 poles will be removed from this segment and approximately 22 new steel poles will be installed to accommodate the river crossing.

2. Power Line Conductors

The existing line segments consist of 3/0 and 2/0 copper conductors. PG&E will replace the existing conductor on both of the 115kV power line segments with 477 kcmil (circular wire gauge size = 1, 000 circular mils) steel-supported aluminum conductor (SSAC).

During construction, conductor pull and tension sites will be regularly spaced along the alignment. Along the tower segment, approximately five staging areas and approximately seven pull sites will be established. For the pole segment, approximately six staging areas and approximately twelve pull sites will be used. The actual pulling activity is usually the last step in the construction process and entails either stringing the new structures with "pulling rope" or using the existing conductor to pull the new conductor through. At locations where the alignment crosses roadways, railroads, or other aerial utilities, PG&E will utilize crossing guard structures to prevent the conductor from falling to the ground, causing injury or damage. All guard structure locations will be sited to avoid environmentally sensitive areas.

3. Staging/Work Areas

Prior to power line construction, approximately eleven staging areas of approximately 5 acres each will be prepared to provide space for materials delivery, storage, and preparation, equipment storage, and crew parking. In addition, several portable stations for concrete cleanup will be placed along the alignment within staging areas, as needed. PG&E will negotiate leases with private landowners for the temporary use of these areas.

Upon completion of the project, the areas will be left as specified in the individual lease agreements. The site layouts will be approved by the project's environmental monitor, and work crew activities will follow all PG&E environmental guidelines. Staging areas will be set back at least 50 feet from streams, creeks, or other water bodies to avoid impacts to riparian habitat.

Helicopters will be used to install towers in locations where overland access is not possible or access is difficult due to topography and vegetation. Helicopters will be used to remove and deliver tower sections, materials, equipment, concrete, and workers to these tower locations and to other locations where conventional access is difficult or as otherwise warranted. Preliminary locations for temporary helicopter landing zones are shown in Figures 3-2 through 3-19 of the PEA.

4. Access Roads and/or Spur Roads

Access roads expected to be used for the project include existing roads currently used for operations and maintenance. In addition, a few new permanent roads will be constructed as part of the project. Access roads are either paved, gravel, or dirt. Portions of some existing access roads will need to be reestablished through tree trimming, vegetation clearing, and some minor grading. These roads are shown in blue in Figures 3-2 through 3-19 of the PEA. PG&E selected access roads that minimize environmental impacts and, where possible, take advantage of existing topography to minimize the need for grading. Typical

access road will be approximately 15 feet wide, widening to approximately 30 feet at corners. Most unpaved access roads will not require surfacing.

Overland access from existing access roads or along the right-of-way is anticipated in some areas. These areas are shown as yellow in Figures 3-2 through 3-19 of the PEA. Overland routes were selected because no grading, vegetation clearing, or trimming is expected across the grassy areas. These overland routes are currently used by PG&E for existing access for power line operations and maintenance. Any temporary disturbance to the route area will be minimal and short term.

5. Substations

A minor upgrade to the Hollister Substation will be required as part of this project. The upgrade includes relocating two existing poles on the substation property, updating relay settings, and changing the 115 kV bus conductors.

III. THE APPLICANT

Since October 10, 1905, PG&E has been an operating public utility corporation, organized under the laws of the State of California. PG&E is engaged principally in the business of furnishing gas and electric service in California. PG&E's principal place of business is 77 Beale Street, San Francisco, California 94105.

Communications with regard to this Application should be addressed to:

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Incorporated herein by reference is a certified copy of PG&E's Articles of Incorporation, effective April 12, 2004, which were filed with the Commission in connection with PG&E's Application No. A.04-05-005 on May 3, 2004.

A copy of PG&E's most recent proxy statement was filed with the Commission on May 18, 2009 in Application 09-05-016, and is incorporated herein by reference. Copies of PG&E's most recent financial statements (contained in the Form 10-Q Quarterly Report filed on October 29,, 2009 by PG&E Corporation and the Pacific Gas and Electric Company for the period ending September 30, 2009) were filed with the Commission in connection with PG&E's Application No. A.09-11-010, filed on November 13, 2009, and are incorporated herein by reference.

IV. ADDITIONAL INFORMATION REQUIRED BY SECTION IX(B) OF GO 131-D:

Pursuant to Rule 2.4(b) of the Commission's Rules of Practice and Procedure, PG&E has submitted a Proponent's Environmental Assessment, which is attached as Exhibit A to this Application. The following information is required by Section IX.B of GO 131-D:

a. *A description of the proposed power line or substation facilities, including the proposed power line route; proposed power line equipment, such as tower design and appearance, heights, conductor sizes, voltages, capacities, substations, switchyards, etc., and a proposed schedule for authorization, construction, and commencement of operation.*

A detailed description of the proposed project, route and components is contained in Section II.B above and in Chapter 3 of the PEA, Exhibit A. A Preliminary Project Schedule is attached as Exhibit B.

b. *A map of the proposed power line routing or substation location showing populated areas, parks, recreational areas, scenic areas, and existing electrical transmission or power lines within 300 feet of the proposed route or substation.*

A project map showing the relevant line segments and their regional context is attached as Exhibit C and is also provided in Figure 3-1 of the PEA, Exhibit A. Detailed

maps showing the project segments are provided in Chapter 3 of the PEA, Exhibit A, at Figures 3-1 through 3-19. A map depicting populated areas near the project site is found in Figure 4.2-3 of the PEA, Exhibit A. A map showing recreational areas is found in Figure 4.14-1 and a map depicting scenic highways is found in Figure 4.1-9. No other scenic areas exist within 300 feet of the project.

c. Reasons for adoption of the power line route or substation location selected, including comparison with alternative routes or locations, including the advantages and disadvantages of each.

As discussed in Chapter 3 of the PEA, Exhibit A, this project consists of reconductoring existing power lines. As a result, except for the 1.3-mile section relocated out of the San Benito River floodplain, the discussion of routing issues required in GO 131-D, section IX.B.1.c is not applicable to this application.

PG&E considered several alternatives before selecting the Proposed River Crossing. Among these was the option of retaining the existing alignment of the Hollister No. 1 line in the floodplain of the San Benito River. Because retaining the existing alignment would result in potential future impacts to wetland areas during routine maintenance events, that alternative was rejected in favor of routes that would cross the river at another location, removing the power line from the floodplain.

Few alternative routes to avoid the floodplain were available for evaluation. PG&E looked at two narrow points in the river, where a crossing would most likely be able to span the river from bank to bank beyond the riparian habitat, thus eliminating the need to install a steel pole in the floodplain. A route approximately 4000 feet easterly (up river) of the Proposed River Crossing was eliminated because it would be closer to residences and have a greater impact on agricultural operations. The Proposed River Crossing was selected because it is further from residences and has fewer impacts on agriculture, and because it also

minimizes the number of angles in the power line (where larger structures must be used) and incorporates a route where the river is at its narrowest, allowing the shortest river crossing.

PG&E did consider another engineering alternative to reconductoring the Hollister No. 1 line. That alternative was to upgrade and reconstruct the Hollister No. 2 115 kV Power Line, the 22-mile stretch of power line that runs in a northerly route from the Hollister Substation to the Lagunitas Switches. PG&E rejected this engineering option because the Hollister No. 1 line alternative, which is approximately 9 miles in length, is less than half as long and also provides the opportunity to relocate the existing portion of the power line that is located in the San Benito River floodplain.

d. A listing of the governmental agencies with which proposed power line route or substation location reviews have been undertaken, including a written agency response to applicant's written request for a brief position statement by that agency. (Such listing shall include The Native American Heritage Commission, which shall constitute notice on California Indian Reservation Tribal governments.) In the absence of a written agency position statement, the utility may submit a statement of its understanding of the position of such agencies.

United State Army Corps of Engineers (USACE)

On April 8, 2009, PG&E met with the USACE to discuss the project and any potential impact to jurisdictional wetlands. A preliminary delineation of wetlands and other waters of the United States has been submitted to the USACE (PEA, Exhibit A, Appendix G). The preliminary delineation will need to be verified by the San Francisco District.

United State Fish and Wildlife Service (USFWS)

On February 19, 2009, PG&E met with the USFWS to provide staff with a brief overview of the project and to discuss potential impacts to species and habitat during project construction. No specific concerns were expressed.

Federal Aviation Administration (FAA)

An aeronautical study of the project pole alignment was completed by the Federal Aviation Administration (FAA). The FAA issued a "Determination of No Hazard to Air Navigation" for 43 pole locations where the structures did not exceed obstruction standards and therefore required no marking or lighting. At two pole locations, the FAA determined that markings and/or lighting were required. PG&E designed a lighting system to comply with FAA regulations at these two locations.

California Department of Fish and Game (CDFG)

On January 28, 2009, PG&E met with representatives from the Fresno Office of the CDFG. CDFG will review the USFWS's Section 7 in order to make a determination of consistency with the California Endangered Species Act on dual-listed species (California tiger salamander and San Joaquin kit fox).

CDFG staff indicated that it is planning to release guidelines on the California red-legged frog within the next few months, and that it would recommend a process should the California red-legged frog be listed after the project has begun construction. Typical avoidance and protection measures suggested by CDFG staff were incorporated into the PEA.

County of Monterey

On various occasions beginning in January 2009 and continuing through Fall 2009, PG&E has exchanged correspondence with County staff, via email and telephone conversations, to provide an overview of the proposed project. County staff indicated their support for the project.

County of San Benito

On October 16, 2008, PG&E met with County staff and presented an overview of the project. County staff expressed their support for the project.

The Native American Heritage Commission (NAHC):

In June 2006 and September 2008, the NAHC was consulted to determine if any cultural resource sites recorded in the Commission's Sacred Lands File occur in or near the project area. The NAHC responded that it had no sites within the study area listed on its Sacred Lands Inventory, but recommended further contacts. Additional follow-up was completed as suggested. All correspondence on this issue is included in Appendix D of the PEA, Exhibit A.

California Independent System Operator Corporation ("ISO"):

In April of 2006, the California ISO approved the Hollister 115 kV Reconductoring project as part of PG&E's 2005 Expansion Plan, noting that it was "a prudent and technically sound solution to the identified reliability criteria violations." (See April 19, 2006 California ISO approval letter, attached as Exhibit D, page 9). In January of 2007, the California ISO listed the Hollister 115kV Reconductoring Project as an approved project under the Executive Summary, Table E-1. The full 2007 CAISO Transmission Plan can be found at the following website: http://www.caiso.com/1ca5/1ca5d8e751ad0.html.

V. MEASURES TAKEN TO REDUCE EMF EXPOSURE

Section X(A) of GO 131-D requires that applications for a PTC include a description of the measures taken or proposed by the utility to reduce the potential exposure to electric and magnetic fields ("EMF") generated by the proposed facilities. In accordance with Section X(A) of GO 131-D, CPUC Decision No. D.06-01-042 ("EMF Decision"), and PG&E's EMF Design Guidelines prepared in accordance with the EMF Decision, PG&E will incorporate "no cost" and "low cost" magnetic field reduction steps in the design of the proposed reconstruction.

The Commission's EMF Decision and PG&E's EMF Design Guidelines require PG&E to prepare an EMF Field Management Plan ("FMP") that indicates the no-cost and low-cost EMF

measures that will be installed as part of the final engineering design for the project. The FMP evaluates the no-cost and low-cost measures considered for the Reconductoring Project, the measures adopted, and reasons that certain measures were not adopted. The FMP for this project proposes the following measures to reduce the magnetic field strength levels from electric power facilities:

- Arrange the phases of the new Hollister 115 kV line, co-located with the Hollister No. 1 115 kV line on the same poles between Anzar Junction and Hollister Substation, for minimum magnetic field level at the edge of the right of way.
- Raise the height of the power line by five feet at four towers located in a residential area in the City of San Juan Bautista south of State Highway 156.

A copy of the EMF Field Management Plan for this project is attached as Exhibit E.

VI. PUBLIC NOTICE

Pursuant to Section XI(A) of GO 131-D, notice of the Application will be sent to the Planning Commissions and Board of Supervisors for Monterrey and San Benito Counties, the California Energy Commission, the State Department of Transportation and its Division of Aeronautics, the Secretary of the Resources Agency, the Department of Fish and Game, the Department of Public Health, the California Water Resources Control Board, the Air Resources Board, the Monterey Bay Unified Air Pollution Control District, the Central Coast Regional Water Quality Control Board, the Native American Heritage Commission, the State Department of Transportation's District Five Office, the U.S. Fish and Wildlife Service, all owners of land within 300 feet of the proposed project (as determined by the most recent local assessor's parcel roll available to PG&E at the time the notice is sent), and any other interested parties that have requested such notification.

In accordance with Section XI(A)(2), within ten days after filing the Application, PG&E will publish a notice of the Application once a week for two successive weeks in the Hollister Free Lance. In accordance with Section XI(A)(3), PG&E will also post a notice of the Application on-site and off-site where the proposed Expansion is located. PG&E will deliver a copy of the notice to the CPUC Public Advisor and the CPUC's Energy Division in accordance with Section XI(A)(3), and will file a declaration of mailing and posting with the Commission within five days after completion.

VII. REQUEST FOR TIMELY ACTION

As described in Exhibit B, PG&E's Proposed Project Schedule, the project must be completed and operational by Summer 2012 in order to ensure the ability of the system to safely and reliably serve the Hollister area without interruptions or emergency conditions and to maintain compliance with applicable grid reliability criteria. To meet these operations requirements, PG&E must begin construction by September 2010.

Given this pressing need and the lack of anticipated environmental issues or public controversy connected with this project, PG&E respectfully requests a streamlined review and approval of this Application.

VIII. EXHIBITS

The following exhibits are attached and incorporated by reference to this Application:

Exhibit A: Hollister 115 kV Power Line Reconductoring Project PEA

Exhibit B: Preliminary Project Schedule

Exhibit C: Project Map

Exhibit D: California ISO April 19, 2006 approval letter

Exhibit E: EMF Field Management Plan

IX. CONCLUSION

WHEREFORE, Applicant Pacific Gas and Electric Company respectfully requests that the Commission issue an order pursuant to GO 131-D, effective immediately, granting PG&E a Permit to Construct the Hollister 115kV Power Line Reconductoring Project.

Dated in San Francisco, California, this 23rd day of November, 2009.

Respectfully submitted,

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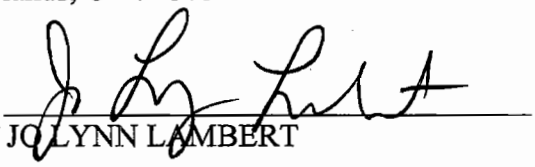
By: 
JO LYNN LAMBERT

Attorneys for Applicant
PACIFIC GAS AND ELECTRIC COMPANY

SCOPING MEMO INFORMATION

Category:

Ratesetting. Pursuant to Rule 2.1(c) of the Commission's Rules of Practice and Procedure, the application must propose a category for the proceeding as defined in Rule 1.3. If none of the enumerated categories are applicable, proceedings will be categorized under the catch-all "ratesetting" category. (CPUC Rule 7.1 (e)(2).) The Commission has consistently found that applications for CPCNs and PTCs under GO 131-D do not fit within any of the enumerated categories and should therefore be considered as "ratesetting proceedings."

Need for hearing:

The CPUC has determined that issues related to project need and cost are not within the scope of PTC applications, leaving only environmental review as a relevant issue. No areas of environmental or other public concern are known. If concerns about the project are raised, PG&E recommends that a public participation hearing be held.

Issues:

None known.

Proposed Schedule:

See Exhibit B, attached.

VERIFICATION

I, the undersigned, declare:

I am an officer of PACIFIC GAS AND ELECTRIC COMPANY, a corporation, and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to matters which are therein stated on information or belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

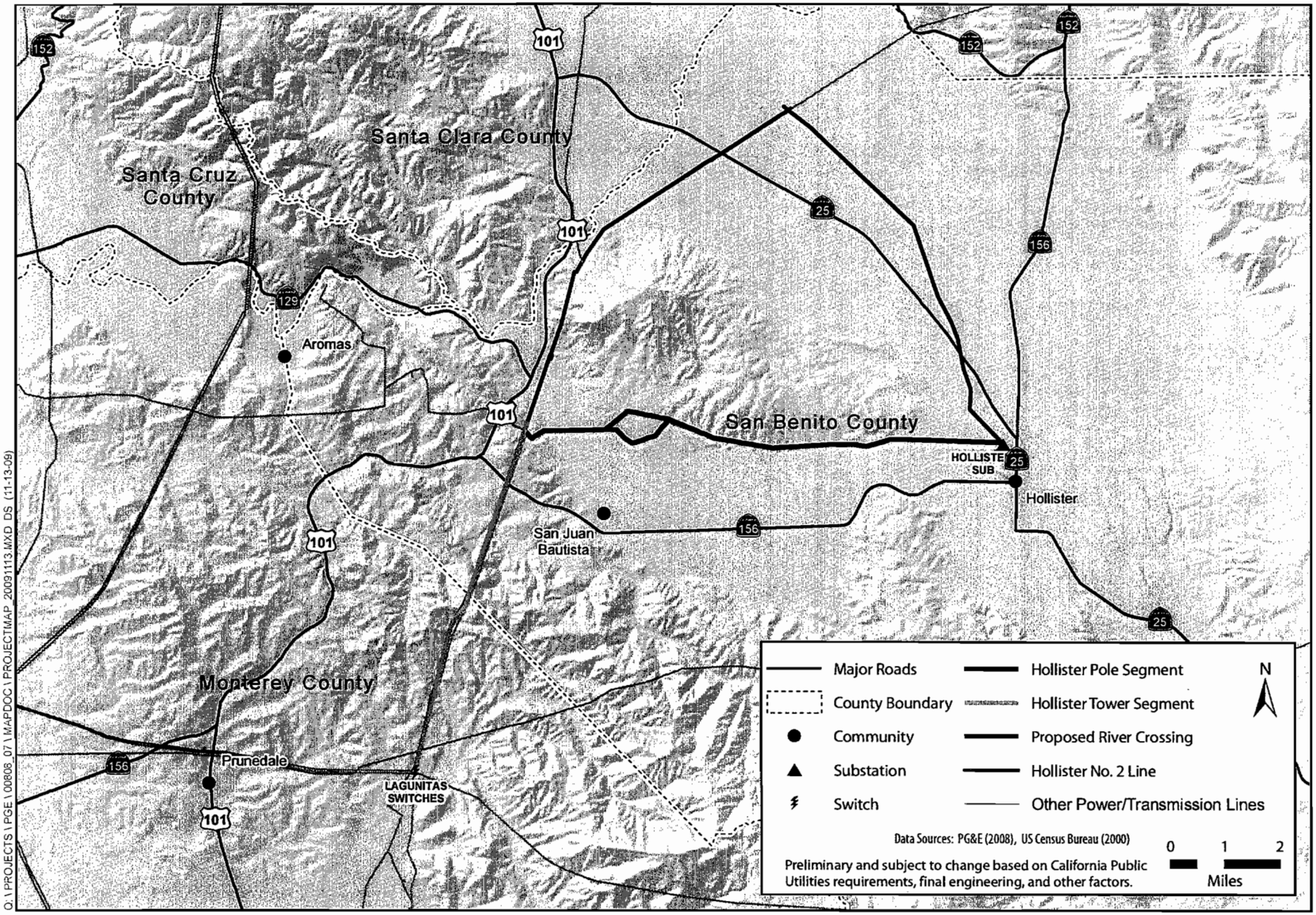
Executed on November 18, 2009, at San Francisco, California.

Des Bell
Senior Vice President Shared Service and
Chief Procurement Officer

Exhibit B

HOLLISTER 115 kV RECONDUCTORING PROJECT
PRELIMINARY PROJECT SCHEDULE

PTC Application submitted	November 23, 2009
Preliminary CPUC review, notice of deficiencies, if any	December 24, 2009 or sooner
Response to any deficiencies	January 21, 2010 or sooner
Application complete	February 19, 2010 or sooner
Draft Negative Declaration released	April 13, 2010
Public Review Period begins	April 13, 2010
Close of Public Review Period	May 13, 2010
Negative Declaration completed and adopted (no later than 105 days (15 weeks) from complete application per CPUC Rule 17.1(f))	June 2010
PTC Decision Adopted and Effective	July 2010
Acquisition of Required Permits	February-August 2010
Materials Procurement (long lead)	January 2010-March 2011
Construction Begins	September 2010
Construction Complete	November 2011
Project Operational	December 2011



ICF Jones & Stokes
an ICF International Company

Project Map

Hollister 115 kV Power Line Reconductoring Project

California ISO
Your Link to Power

California Independent
System Operator Corporation

Gary L. DeShazo
Director of Regional Transmission – North
(916) 608-5880

April 19, 2006

Mr. Luther Dow
Director of Transmission and Distribution Planning
Pacific Gas and Electric Company
P.O. Box 770000; Mail Code B26P
San Francisco, CA 94177

Subject: PG&E Electric Transmission Grid Expansion Plan for the Years 2006-2015

Dear Mr. Dow:

Consistent with the California Independent System Operator (CAISO) Tariff, Participating Transmission Owners (PTOs) file an annual transmission expansion plan with the CAISO that covers a minimum five-year planning period. In compliance with the Tariff, each year the CAISO and Pacific Gas and Electric Company (PG&E), as part of an overall coordinated CAISO Stakeholder Planning Process, work together to prepare PG&E's annual Electric Transmission Grid Expansion Plan (Expansion Plan). The intent of the Expansion Plan is to identify the transmission projects and other applicable mitigation measures that are required to enable PG&E's portion of the CAISO Controlled Grid to meet CAISO Grid Planning Standards. PG&E has completed this year's Expansion Plan effort and documented the study results in a report entitled "PG&E's 2005 Electric Transmission Grid Expansion Plan" for the Years 2006 to 2015 and dated December 21, 2005. While PG&E's Expansion Plan is a ten-year plan with focus on the first five years, the Expansion Plan includes a proactive approach by PG&E in identifying transmission reinforcements to reduce Reliability Must-Run (RMR) requirements, congestion and increase the deliverability of renewable generation resources.

The CAISO has completed its review of the Expansion Plan and all subsequent information provided to the CAISO by PG&E. The purpose of this letter is to formally approve PG&E's Expansion Plan and transmit our comments.

The CAISO approves this ten-year expansion plan as a whole. Specifically, the CAISO approves and supports the completion of PG&E's year 2007 projects, which are expected to start construction within the next eighteen months. The CAISO supports the initiation and continuation of PG&E's engineering and permitting efforts for its 2008-2015 projects, which have not been approved by the CAISO at this time. The CAISO will continue to work with PG&E on plan-of-service issues, if any, for its 2008-2015 projects.

Our comments are focused on four core areas: Adequate Analysis, Project Effectiveness, Alternatives Considered, and Project Economics. Based on the information provided to the CAISO, the following is concluded.

Adequate Analysis: PG&E's performance of steady state, post-transient and transient stability analysis was adequate and sufficient for the ten-year study span from 2006 to 2015. An acceptable degree of study accuracy was attained through the use of the latest power flow models and data. Key assumptions specified in the Study Plan were followed in the assessment and the study results generally reflect an accurate, comprehensive test of system performance under NERC/WECC category A, B, and C contingencies. Specifically, problems involving thermal overloads, low voltage and insufficient reactive reserve margin were accurately identified within the PG&E area.

Project Effectiveness: Technical studies identified reinforcement to the transmission system in the form of upgrading existing transmission facilities or building new facilities to mitigate projected criteria violations and ensure reliable system performance. Where deemed appropriate and as an economic solution, PG&E elected to either re-rate transmission facilities or propose an operating procedure or Special Protection System (SPS) to mitigate reliability problems.

Alternatives Considered: PG&E considered transmission-related facility additions, re-rating of existing transmission facilities, SPS, and operating procedures as alternatives to mitigating reliability problems within the PG&E Area.

Project Economics: PG&E conducted a qualitative economic analysis of alternatives in selecting a preferred solution. While not the only factor used in selecting a preferred alternative, pursuing an alternative with the lowest cost to ratepayers was the most important component when choosing between alternatives that could solve the reliability problem.

New transmission projects approved this year by the CAISO are listed within Table 1 in Attachment 1. Transmission projects not being approved at this time are listed within Table 2 in Attachment 1. Transmission projects approved as part of the 2005 CAISO Transmission Plan and not listed in PG&E's Plan are listed within Table 3.

In addition to the CAISO's assessment of the core areas discussed above, some specific comments on the Expansion Plan are provided below and in Attachments 2, 3 and 4.

1. It was initially highlighted in the CAISO's comments on PG&E's 2000 Expansion Plan that previous expansion plans primarily focused on the minimum requirement of five-year planning and not an assessment of system reliability issues in the longer-term, five- to ten-year time frame. PG&E presently produces an annual ten-year transmission plan that includes longer-term transmission project proposals. Longer-term assessments are conducted for the purpose of producing larger scale projects that could provide a more reliable, cost effective and longer-term solution than constructing multiple smaller scale projects, which the five-year planning horizon assessments tend to favor. Larger and longer-term transmission projects also tend to require longer lead

times for permitting and construction. The CAISO recognizes the difficult and time-consuming nature of this type of study and has worked closely with PG&E to support and facilitate successful conclusions. The CAISO commends PG&E for their continuing effort in this direction where PG&E has completed long-term investigations for most of their planning areas within Northern California. For several areas, projects have been recommended that are more global in nature.

In continuing this undertaking, the following areas should be assessed within the 2006 annual assessment of PG&E's transmission system:

1. Central Coast
2. North Bay, including Eagle Rock, Fulton, Santa Rosa and Ignacio
3. Sacrament, including West Sacramento and Davis
4. Sierra, including Drum

2. Reliable operation of the CAISO controlled grid depends on transmission upgrades being completed and placed into service by the operation date based on when the related reliability problem is projected to first occur. A change in the commercial operation date of a project to a later date should continue to be communicated to the CAISO as PG&E becomes aware that a project is slipping its schedule. For example, a project that is scheduled for operation by May, but cannot be completed until December of that year could present additional operating difficulty and complexity during summer peak load periods. Given the volume of new transmission projects, PG&E should consider means to assure that, if possible and within the control of PG&E, projected project operation dates continue to be met.

In summary, the CAISO agrees with and approves the Expansion Plan in whole in that reliability problems that would occur based on the study assumptions have been accurately identified. The identified preferred transmission alternatives seem to be the logical solutions. For several projects not being approved at this time, the CAISO requests additional documentation or investigation to assure that the most effective and economic project alternative has been identified. Transmission projects estimated to cost $20 million or more require specific CAISO Board approval and, therefore, their approval, through this Closure Letter, should be considered preliminary.

In closing, throughout the 2005 Electric Transmission Grid Expansion process, PG&E and especially Mark Esguerra, worked closely with the CAISO in a very coordinated and cooperative manner. PG&E was consistently very responsive to questions and comments from the CAISO. This approach allowed PG&E and the CAISO to take advantage of opportunities to address concerns as they arose during the study and to resolve them prior to issuance of the Final Expansion Plan. The process went smoothly and the outcome was very successful.

If you have any questions regarding these comments, please direct them to me at (916) 608-5880 (gdeshazo@caiso.com) or Larry Tobias at (916) 608-5763 (lstobias@caiso.com).

Sincerely,

Original signed by Larry Tobias for

Gary L. DeShazo
Director of Regional Transmission – North

cc: Yakout Mansour Jim Detmers Dariush Shirmohammadi
Mark Esguerra (PG&E) Manho Yeung (PG&E) Ben Morris (PG&E)
Glen Rounds (PG&E) Mike VanRemoortere (PG&E)
CAISO Regional Transmission – North and South
CAISO/PG&E Stakeholder Study Group

Attachment 1
Project Summary Table

Table 1: Projects Approved by the CAISO as Part of the 2005 Expansion Plan

No.	Project Name	Project Number	Purpose and Benefit	Planned Operating Date	Scope	Estimated Cost
1	Airways Distribution Substation	T568	Interconnect Customer	2007	Interconnect Distribution Substation	5M-10M
2	Bay Area Reactive: Ravenswood	T790B	Reduce RMR, Meet Customer Demand and Improve Service Reliability	2007	Install Shunt Capacitors	5M-10M
3	Del Monte 115/60 kV Transformer	T949	Improve Service Reliability	2007	Install Additional 230/60 kV Transformer	5M-10M
4	Hollister 115 kV	T947	Meet Customer Demand and Improve Service Reliability	2007	Reconductor 115 kV Lines	5M-10M
5	Ignacio 115/60 kV Transformer	T197A	Meet Customer Demand and Improve Service Reliability	2007	Transformer Replacement	5M-10M
6	Monta Vista 115/60 kV Transformer		Meet Customer Demand and Improve Service Reliability	2007	Install 115/60 kV Transformer	5M-10M
7	Mountain Quarries 60 kV Tap	T950	Meet Customer Demand	2007	Reconductor 60 kV Tap	5M-10M

(1) Transmission projects estimated to cost $20 million or more require specific ISO Board approval and therefore are only granted preliminary approval through this Closure Letter.

Table 2: Transmission Projects that have not been approved at this time

No.	Project Name	Project Number	Purpose and Benefit	Planned Operating Date	Scope	Estimated Cost
1	Atlantic-Lincoln Transmission	T759	Meet Customer Demand and Improve Service Reliability	2008	Convert 60 kV Facilities to 115 kV and Construct New 115 kV Line	20M-50M
2	Diablo Canyon 230 kV Shunt Capacitors	T965	Improve Service Reliability	2008	Install Shunt Capacitors	1M-5M
3	Glass-Madera 70 kV Reconfiguration	T964	Meet Customer Demand	2008	Install 70 kV Breaker and Construct New Line	<1M
4	Gregg 230 kV Reactor	T258A	Improve Service Reliability	2008	Install Shunt Capacitors	5M-10M
5	Humboldt-Harris 60 kV	T958	Meet Customer Demand	2008	Reconductor 60 kV Lines	5M-10M
6	Martin 115/60 kV Transformer		Meet Customer Demand	2008	Transformer Replacement	5M-10M
7	Templeton-Atascadero 70 kV	T966	Meet Customer Demand	2008	Reconductor 70 kV Line	1M-5M
8	West Point-Valley Springs 60 kV	T880B	Meet Customer Demand	2008	Reconductor 60 kV Line	5M-10M
9	Vaca Dixon-Contra Costa 230 kV		Access Resource	2008	Reconductor 230 kV Lines	50M-100M
10	Cottonwood-Vaca Dixon 230 kV Capacity Increase		Access Resource	2008	Install 230 kV Series Capacitors	30M-60M
11	Brighton 230/115 kV Transformer		Meet Customer Demand	2009	Transformer Replacement	5M-10M
12	Central Coast Switching Station	T970	Improve Service Reliability	2009	Construct New Switching Station	10M-20M
13	Newark-Ravenswood 230 kV		Reduce RMR	2009	Reconductor 230 kV Line	5M-10M
14	Rio Oso 115 kV Reactor		Improve Service Reliability	2009	Install Reactor	5M-10M
15	Rio Oso 230/115 kV Transformer Upgrades		Reduce RMR and Meet Customer Demand	2009	Transformer Replacements	10M-20M
16	South of San Mateo Capacity Increase		Reduce RMR and Improve Service Reliability	2009	Increase 115 kV Transmission Capacity	10M-20M
17	West Sacramento-Brighton 115 kV		Meet Customer Demand and Improve Service Reliability	2009	Reconductor 115 kV Lines	5M-10M

No.	Project Name	Project Number	Purpose and Benefit	Planned Operation Date	Scope	Estimated Cost
18	Brighton-Davis 115 kV		Meet Customer Demand	2014	Reconductor 115 kV Lines	5M-10M
19	East Nicolaus 115 kV Area Reinforcement		Meet Customer Demand	2010	Increase 115 kV Transmission Capacity	5M-10M
20	Half Moon Bay Reactive Support		Meet Customer Demand and Improve Service Reliability	2010	Increase 60 kV Transmission Capacity	5M-10M
21	Lockeford-Lodi 60 kV		Meet Customer Demand	2010	Reconductor 60 kV Line	5M-10M
22	Monta Vista-Los Altos 60 kV		Meet Customer Demand	2010	Reconductor 60 kV Line	1M-5M
23	Pittsburg-Tesla 230 kV		Reduce RMR	2010	Increase 230 kV Capacity	10M-20M
24	Tesla 115 kV Capacity Increase	T967	Reduce RMR and Meet Customer Demand	2008	Increase Transmission Capacity	5M-20M
25	Upgrade Tesla-Newark 230 kV Path		Reduce RMR	2010	Increase 230 kV Capacity	5M-10M
26	Vaca Dixon-Sobrante-Moraga 230 kV		Access Resource	2010	Increase Transmission Capacity to Access Resources	50M-200M
27	Table Mountain-Vaca Dixon 230 kV		Access Resource	2010-2013	Increase Transmission Capacity to Access Resources	50M-200M
28	Cortina 60 kV Reliability		Reduce RMR and Improve Service Reliability	2011	Install Additional Transformer	5M-10M
29	Gold Hill-Clarksville 115 kV		Meet Customer Demand	2011	Reconductor 115 kV Lines	<1M
30	Missouri-Gold Hill 115 kV		Meet Customer Demand	2014	Reconductor 115 kV Lines	5M-10M
31	Atlantic-Placer Capacity Increase		Meet Customer Demand and Improve Service Reliability	2012	Increase Area Capacity	10M-20M
32	Gates-Gregg Double Circuit Tower Line		Reduce RMR, Meet Customer Demand and Improve Service Reliability	2012	Construct 230 kV Lines	100M-200M
33	Midway-Gregg 500 kV Line		Access Resource	2012	Increase Transmission Capacity to Access Resources	100M-200M
34	Bay Area 500 kV Substation		Reduce RMR, Meet Customer Demand and Improve Service Reliability	2013	Construct 500 kV Facilities	>50M
35	Woodward 115 kV Reinforcement	T986	Meet Customer Demand	2013	Reconductor 115 kV Lines	5M-10M
36	Contra Costa 230 kV		Meet Customer Demand	2015	Increase 230 kV Transmission Capacity	10M-20M
37	Cortina-Eagle Rock 115 kV		Reduce RMR	2015	Reconductor 115 kV Lines	20M-50M
38	Vaca Dixon-Fulton Connection		Reduce RMR	2015	Increase Transmission Capacity	20M-50M
39	Ignacio-San Rafael and Ignacio-Las Gallinas 115 kV		Meet Customer Demand and Improve Service Reliability	2015	Reconductor 115 kV Lines	5M-10M
40	North Valley and Sierra 230 kV Line Capacity Increase		Reduce RMR and Meet Customer Demand	2015	Increase 230 kV Transmission Capacity	20M-50M
41	San Mateo and Moraga Synchronous Condenser Replacement		Improve Service Reliability	2015	Replace Synchronous Condensers	5M-10M
42	SF Underground 115 kV Cable Replacement		Reduce RMR, Meet Customer Demand and Improve Service Reliability	2015	Increase 115 kV Transmission Capacity	20M-50M

(1) Transmission projects estimated to cost $20 million or more require specific ISO Board approval and therefore are only granted preliminary approval through this Closure Letter.

Table 3: Projects being approved within the 2005 CAISO Transmission Plan that are not listed in PG&E's Plan.

No.	Project Name	Project Number	Purpose and Benefit	Planned In-Service Date	Scope	Estimated Cost
1	McCall 230/115 kV Transformer (1)	T923A	Reduce RMR and Improve Service Reliability	2008	Transformer Replacement	5M-10M
2	Humboldt Reactive Support (1)		Reduce RMR and Improve Service Reliability	2008	Install Voltage Support	5M-10M
3	Oakland Underground Cable (1)		Reduce RMR and Reduce Congestion	2010	Construct New Underground Cable	20M-50M
4	Vaca Dixon - Lakeville 230 kV (1)		Reduce RMR	2010	Reconductor 230 kV Lines	20M-50M

Attachment 2

Comments on Projects Approved By the CAISO as Part of This Year's Expansion Plan Cycle

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T568: Airways Substation Interconnection
Operating date – May 2007

The CAISO approves this PG&E project.
Planning studies demonstrate that the preferred alternative is a prudent and technically sound solution to meet customer demand in Fresno County. This substation is designed to handle three 45 MVA distribution transformers to serve electric customers.

T790B: Ravenswood Reactive Support
Operating date – May 2007

The CAISO approves this PG&E project.
Planning studies demonstrate that the preferred alternative is a prudent and technically sound solution to the identified reliability criteria violations. This project is part of the CAISO Action Plan established for releasing Potrero Power Plant generator units from their RMR contracts and therefore facilitating reduced reliance on old generation resources within the San Francisco area. This project includes installing 4 steps of (75 MVAr each – 300 MVAr total) 230 kV shunt capacitors at Ravenswood Substation.

T949: Del Monte 115/60 kV Transformer
Operating date – May 2007

The CAISO approves this PG&E project.
CAISO planning studies confirms a project to reduce the risk of dropping 25 MW of load for the outage of Del Monte 115/60 kV transformer #4 is needed and encourages PG&E to complete this project by the proposed operating date. The Del Monte 115/60 kV transformer #4 is old, and it has become unreliable due to severe gassing. In order to assure long-term load serving capability into the Monterey area, PG&E is proposing to install an additional 115/60 kV transformer at Del Monte substation. The new Del Monte 115/60 kV transformer #5 is scheduled for an in-service date of May 2006. This project will increase electric transmission capacity and reliability in PG&E's Central Coast division.

T947: Hollister 115 kV Tap Section #1 and #2 Reconductoring
Operating date – May 2007

The CAISO approves this PG&E project.
Planning studies demonstrate that the preferred alternative is a prudent and technically sound solution to the identified reliability criteria violations. The peak load at Hollister substation for 2006 is forecasted to be 70 MW. Furthermore, the load at Hollister substation is forecasted to grow at a rate of 2.5 MW per year. The Hollister tap section #1 is 16 miles long, and the Hollister tap section #2 is 22 miles long. The outage of one Moss Landing-Salinas-Soledad 115 kV line will overload the other parallel line. Reconductoring both Hollister tap sections with 715 Al conductor will relieve the thermal overloading of both Hollister tap sections. This project will increase electric transmission capacity and reliability in PG&E's Central Coast division.

T?: Ignacio 115/60 kV Transformer Capacity Increase
Operating date – May 2007

The CAISO approves this PG&E project.
Planning studies demonstrate that the preferred alternative is a prudent and technically sound solution to the identified reliability criteria violations and to eliminate the need for an SPS. Currently, two transmission transformers are located at Ignacio that serve customers on the 60 kV network. Transformer No. 1 is an 81 MVA, 115/60 kV transformer. Transformer No. 3 is an 84 MVA, 230/60 kV transformer. Due to its poor condition, transformer No. 3 will be replaced as part of a PG&E infrastructure replacement project, with a 115/60 kV 200 MVA transformer. This project will replace Transformer No. 1, with a 115/60 kV 200 MVA transformer.

T?: Monta Vista 115/60 kV Transformer.
Operating date – May 2007

The CAISO approves this PG&E project.
Planning studies demonstrate that the preferred alternative is a prudent and technically sound solution to the identified reliability criteria violations. A failure of the single 230/60 kV transformer could interrupt electric service to over 16,700 customers (over 100 MW during peak conditions) in the area. Due to size limitations at Monta Vista substation, it is not feasible to install a second 230/60 kV transformer. This project will increase the reliability of the 60 kV electrical system, by installing a 115/60 kV transformer rated at 200 MVA or higher.

T?: Mountain Quarries 60 kV Tap Reconductoring.
Operating date – May 2007

The CAISO approves this PG&E project.
Planning studies demonstrate that the preferred alternative is a prudent and technically sound solution to the identified reliability criteria violations. Mountain Quarries Substation is located

in El Dorado County and serves approximately 2,700 electric customers. The substation receives its electric power from the Mountain Quarries 60 kV tap line. In 2004, the peak demand for this substation was recorded at 10 MW. In summer 2005, the customer demand at Mountain Quarries Substation peak at 14 MW, which overloaded the Mountain Quarries 60 kV tap line by 14%. The project will reconductor the Mountain Quarries 60 kV tap line with 397 Al conductors or larger.

TRANSMISSION MAGNETIC BASIC FIELD MANAGEMENT PLAN
HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT

I. General Description of Project

Project Lead: Project Manager, Electric Transmission Maintenance and Construction

Transmission Lines: Moss Landing - Salinas - Soledad 115 kV Power Line (both circuits) between Lagunitas Switches and Anzar Junction, and the Hollister No. 1 115 kV Power Line between a point near Anzar Junction and Hollister Substation

Distribution Line Underbuild: 12 kV and 21 kV on part of the Hollister No. 1 line.

Scope of Work:

Reconductor approximately 7 miles of the double-circuit Moss Landing - Salinas - Soledad 115 kV Power Line from the Lagunitas Switches (Tower 37/232) to near Anzar Junction (Tower 30/196) with 477 kcmil ACSS/Flicker conductor, and replace most existing steel towers with new steel towers.

Reconductor approximately 9 miles of the Hollister No. 1 115 kV Power Line and add a second 115 kV circuit on the same line segment.

II. BACKGROUND: CPUC DECISION 93-11-013 AND EMF POLICY

On January 15, 1991, the CPUC initiated an investigation to consider its role in mitigating the health effects, if any, of electric and magnetic fields from utility facilities and power lines. A working group of interested parties, called the California EMF Consensus Group, was created by the CPUC to advise it on this issue. It consisted of 17 stakeholders representing citizens groups, consumer groups, environmental groups, state agencies, unions, and utilities. The Consensus Group's fact-finding process was open to the public, and its report incorporated concerns expressed by the public. Its recommendations were filed with the Commission in March 1992.

In August 2004 the CPUC began a proceeding known as a "rulemaking" (R.04-08-020) to explore whether changes should be made to existing CPUC policies and rules concerning EMF from electric transmission lines and other utility facilities.

Through a series of hearings and conferences, the Commission evaluated the results of its existing EMF mitigation policies and addressed possible improvements in implementation of these policies. The CPUC also explored whether new policies are warranted in light of recent scientific findings on the possible health effects of EMF exposure.

The CPUC completed the EMF rulemaking in January 2006 and presented these conclusions in Decision D.06-01-042:

- The CPUC affirmed its existing policy of requiring no-cost and low-cost mitigation measures to reduce EMF levels from new utility transmission lines and substation projects.

- The CPUC adopted rules and policies to improve utility design guidelines for reducing EMF, and provides for a utility workshop to implement these policies and standardize design guidelines.

- Despite numerous studies, including one ordered by the Commission and conducted by the California Department of Health Services, the CPUC stated "we are unable to determine whether there is a significant scientifically verifiable relationship between EMF exposure and negative health consequences."

- The CPUC said it will "remain vigilant" regarding new scientific studies on EMF, and if these studies indicate negative EMF health impacts, the Commission will reconsider its EMF policies and open a new rulemaking if necessary.

In response to a situation of scientific uncertainty and public concern, the decision specifically requires PG&E to consider "no-cost" and "low-cost" measures, where feasible, to reduce exposure from new or upgraded utility facilities. It directs that no-cost mitigation measures be undertaken, and that low-cost options, when they meet certain guidelines for field reduction and cost, be adopted through the project certification process. PG&E was directed to develop, submit

and follow EMF guidelines to implement the CPUC decision. Four percent of total project budgeted cost is the benchmark in implementing EMF mitigation, and mitigation measures should achieve incremental magnetic field reductions of at least 15%.

III. ELECTRIC AND MAGNETIC FIELDS (EMF)

EMF is a term used to describe electric and magnetic fields that are created by electric voltage (electric field) and electric current (magnetic field). Power frequency EMF is a natural consequence of electrical circuits, and can be either directly measured using the appropriate measuring instruments or calculated using appropriate information.

Electric fields are present whenever voltage exists on a wire, and are not dependent on current. The magnitude of the electric field is primarily a function of the configuration and operating voltage of the line and decreases with the distance from the source (line). The electric field can be shielded (i.e., the strength can be reduced) by any conducting surface, such as trees, fences, walls, buildings, and most types of structures. The strength of an electric field is measured in volts per meter (V/m) or kilovolts per meter (kV/m).

Magnetic fields are present whenever current flows in a conductor, and are not dependent on the voltage of the conductor. The strength of these fields also decreases with distance from the source. However, unlike electric fields, most common materials have little shielding effect on magnetic fields.

The magnetic field strength is a function of both the current on the conductor and the design of the system. Magnetic fields are measured in units called Gauss. However, for the low levels normally encountered near electric utility facilities, the field strength is expressed in a much smaller unit, the milliGauss (mG), which is one thousandth of a Gauss.

Power frequency EMF are present wherever electricity is used. This includes not only utility transmission lines, distribution lines, and substations, but also the building wiring in homes, offices, and schools, and in the appliances and machinery used in these locations. Magnetic field intensities from these sources can range from below 1 mG to above 1,000 mG (1 Gauss).

Magnetic field strengths diminish with distance. Fields from compact sources (i.e., those containing coils such as small appliances and transformers) drop off with distance "r" from the source by a factor of $1/r^3$. For three-phase power lines with balanced currents, the magnetic field strength drops off at a rate of $1/r^2$. Fields from unbalanced currents, which flow in paths such as neutral or ground conductors, fall off inversely proportional to the distance from the source, 1/r. Conductor spacing and configuration also affect the rate at which the magnetic field strength decreases, as well as the presence of other sources of electricity. The magnetic field levels of PG&E's power lines will vary with customer demand.

Magnetic field strengths for typical transmission power line loads at the edge of rights-of-way are approximately 10 to 90 mG.

IV. No Cost and Low Cost Magnetic Field Mitigation

Base Case Phasing:

From Lagunitas Switches to Tower 34/222:

Moss Landing - Salinas - Soledad #1 Phasing is A-C-B (top to bottom)
Moss Landing - Salinas - Soledad #2 Phase is B-C-A (top to bottom).

From Tower 34/222 to Tower 31/208:

Moss Landing - Salinas - Soledad #1 Phasing is B-A-C (top to bottom)
Moss Landing - Salinas - Soledad #2 Phase is C-A-B (top to bottom).

From Tower 31/208 to Anzar Junction (Tower 30/196):

Moss Landing - Salinas - Soledad #1 Phasing is C- B-A (top to bottom)
Moss Landing - Salinas - Soledad #2 Phase is A-B-C (top to bottom)

The lines are optimally phased. The existing phasing will be maintained to reduce magnetic field levels.

Base Case Phasing:

Hollister No. 1 115 kV line: ABC (Top, Middle, Bottom).
New Hollister 115 kV circuit: ABC (Top, Middle, Bottom).

Optimally Phase Circuits:
The phases of the new Hollister 115 kV line will be arranged for minimum magnetic field level at the edge of the right of way. The phases will be arranged CBA (Top, Middle, Bottom).

The phases of the Hollister No. 1 115 kV line will remain in the same configuration. The phases are arranged ABC (Top, Middle, Bottom).

No Cost Field Reduction

The phases of the new Hollister 115 kV line will be arranged for minimum magnetic field level at the edge of the right of way. The phases will be arranged CBA (Top, Middle, Bottom). The phases of the Hollister No. 1 115 kV line will remain in the same configuration. The phases are arranged ABC (Top, Middle, Bottom).

Figure 1 - **Moss Landing - Salinas - Soledad 115 kV Power Lines near residential land use.**

TRANSMISSION MAGNETIC BASIC FIELD MANAGEMENT PLAN
HOLLISTER 115 KV POWER LINE RECONDUCTORING PROJECT

V. General Description of Surrounding Land Uses

Moss Landing - Salinas - Soledad 115 kV Power Lines

Schools or Daycare: None.
Residential: Five towers.
Commercial/Industrial: None.
Recreational: None.
Agricultural, Rural, and Undeveloped Land: Thirty-four towers.

Hollister No. 1 115 kV Power Line

Schools or Daycare: None.
Residential: Thirteen poles.
Commercial/Industrial: None.
Recreational: None.
Agricultural, Rural, and Undeveloped Land: One hundred fifty-one poles.

Priority Areas where Low Cost Measures are to be Applied

The five towers in the residential land use area are considered for magnetic field reduction.

VI. Conclusion - Field Reduction Options Selected

Moss Landing - Salinas - Soledad 115 kV Power Lines

This FMP proposes to raise the height of the line on four of the five towers in the residential land use area by five feet. Horizontal post insulators will be installed on the suspension towers within the residential section to raise the conductor heights 5 feet. The towers are located in the City of San Juan Bautista south of State Highway 156 (see Figure 1). The fifth tower is a transposition tower (on which the conductors are rearranged), and cannot be modified through this method or any other method that would not substantially increase the massiveness of the tower.

Hollister No. 1 115 kV Power Line

This FMP proposes the phases of the new **Hollister 115 kV line** will be arranged for minimum magnetic field level at the edge of the right of way. The phases will be arranged **CBA** (Top, Middle, Bottom). The phases of the **Hollister No. 1 115 kV line** will remain in the same configuration. The phases are arranged **ABC** (Top, Middle, Bottom).

CERTIFICATE OF SERVICE BY HAND DELIVERY

I, the undersigned, state that I am a citizen of the United States and am employed in the City and County of San Francisco; that I am over the age of eighteen (18) years and not a party to the within cause; and that my business address is 77 Beale Street, B30A, San Francisco, California 94105

On November 23, 2009, I served a true copy of:

APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY FOR A PERMIT TO CONSTRUCT THE HOLLISTER 115 kV POWER LINE RECONDUCTORING PROJECT

by hand delivery, addressed to:

Jenny Au
Division of Ratepayer Advocates
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Monisha Gangopadhyay
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

I certify and declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on this 23rd day of November, 2009 at San Francisco, California.

DONNA LEE