BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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Application of PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, for a Permit to Construct the Shepherd Substation Project Pursuant to General Order 131-D (U 39 E)	Application No. A1012003

APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY FOR A PERMIT TO CONSTRUCT THE SHEPHERD SUBSTATION PROJECT

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December 8, 2010

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 Shepherd Substation 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
SHEPHERD SUBSTATION PROJECT

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 Shepherd Substation Project ("project"), a new three-bank, 115/21 kilovolt ("kV") substation and associated power line interconnection in unincorporated Fresno County. The project is needed by May 2013 to meet increased electric demand in the northeast Fresno and northwest Clovis area, and to maximize system efficiency and reliability.

I. BACKGROUND

The Woodward Distribution Planning Area (DPA), which includes northeast Fresno and northwest Clovis, has experienced consistent, increased electrical load growth due to major residential and commercial developments. The heavily residential and commercial area is comprised primarily of large subdivisions and commercial developments. The City of Clovis's proposed Northwest Village, a two-mile square development containing residential, open space and light commercial uses, will also increase future demand in the DPA. The area's electrical growth rate is approximately 5.0 megawatts (MW) (1.5%) per year, and is

still growing at a steady rate even in the current recession. The current capacity of the DPA is 339.0 MW, while the current load is 325.0 MW. In 2014, Woodward DPA is projected to be overloaded by 2.6 MW (0.8%) and in 2015, by 7.5 MW (2.2%).

The Shepherd Substation Project proposes to ameliorate this situation by constructing a new substation and associated power line interconnection. (*See* Project Overview Map, Exhibit A, and Proponent's Environmental Assessment [PEA],[1/] Exhibit B). The proposed substation site is located in unincorporated Fresno County at the southwest corner of the intersection of Sunnyside and Perrin Avenues. Construction of the proposed substation will relieve the projected electric system deficiency and ensure the ability of the system to safely and reliably serve the area without interruptions or emergency conditions. (*See* California Independent Systems Operator ("CAISO") Transmission Plan 2009, Exhibit C, page 219, item 37 (approving interconnection).)

II. REGIONAL CONTEXT AND PROJECT COMPONENTS

A. Regional Context

1. Existing Regional Electric System

In the Fresno County area, 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 area electric system is divided into "distribution planning areas" or "DPAs." The Woodward DPA serves the northeastern portion of the City of Fresno and the northwestern portion of the City of Clovis. The DPA is bounded by Shaw Avenue to the south, Palm Avenue to the west, Fowler Avenue to the east, and Copper Avenue and Friant Road up to Millerton Road to the

1/ The PEA is attached as Exhibit B to this Application and incorporated herein by reference. References to PEA figures refer to figures within this exhibit.

north. The DPA is served by eight transformers at four existing 115/21 kV substations: Bullard, Clovis, Pinedale, and Woodward.

Pinedale Substation and Woodward Substation both have three 115/21 kV transformers serving the Woodward DPA; Bullard Substation and Clovis Substation each have one 115/21 kV transformer devoted to serving the Woodward DPA. All substations are fully built out.

B. Project Components

PG&E proposes to construct and operate the Shepherd Substation Project, including a distribution substation, interconnection with the electrical supply grid, and up to nine distribution circuit outlets. Major elements of the project, which are described in more detail in the following sections, include:

- A new 115/21 kV distribution substation, with three 45 megavolt ampere ("MVA") transformers and a capacity of 135 megawatts (MW),
- A new double–circuit 115 kV power line on tubular steel poles ("TSPs") to connect the substation to the existing Kerckoff-Clovis-Sanger #1 115 kV Power Line,
- Up to three distribution circuits per transformer,
- One metal-clad building, 24 feet by 80 feet in size, to house the protection and control systems, and
- Two permanent paved access roads, approximately 35 feet long, from Sunnyside Avenue into the substation.

1. Substation

The proposed substation property is approximately 5.0 acres in size and is located at the southwest corner of Sunnyside Avenue and Perrin Avenue in unincorporated Fresno County. The enclosed portion of the substation will be approximately 390 by 399 feet. A typical substation layout and corresponding profile is provided in Figures 2.6-1 and 2.6-2 of the PEA.

The unmanned substation will have automated features and remote control capabilities. The structures and all equipment in the substation will be neutral gray in color.

A neutral-colored, prefabricated concrete wall will be constructed around the north and east sides of the substation and a chain link fence will be erected along the remaining sides. All fencing will be eight feet high. To maintain a vegetative screen, PG&E will leave three rows of almond tress between the substation fence and Sunnyside Avenue as well as three rows of almond trees along the north side of the substation.

Security lighting and telecommunication facilities will be installed for safety and security purposes. Security lighting will consist of sodium vapor lamps and all exterior lighting will use non-glare light bulbs, designed and positioned to minimize casting light and/or glare to offsite locations. Light poles placed at each corner of the substation will be approximately ten feet high and constructed of galvanized steel. The lights will be controlled by a photocell that automatically turns the lights off during the day and on at night. Telecommunication facilities will consist of installing a fiber optic telecommunication line from an existing fiber optic line along Shepherd Avenue. The fiber optic line will be attached to existing wood poles supporting an existing PG&E electrical distribution line that travels north from Shepherd Avenue along Sunnyside Avenue.

2. Power Line Interconnection

A double-circuit, 115 kV power line will link the existing Kerckhoff-Clovis-Sanger #1 115 kV Power Line to Shepherd Substation. The power line interconnection will be approximately 1.5 miles long, and will be constructed from the Shepherd Substation north to Copper Avenue through a mix of low-density housing, agricultural land, quasi-public land, and undeveloped lands. An existing distribution line extends approximately one mile north from the proposed substation site. The new power line will follow the same alignment as the

existing distribution line, which will be collocated on the new power line structures. The old distribution line wood poles will be removed.

Two types of power line poles, a tubular steel pole ("TSP") and hybrid pole (a pole resembling a TSP but with a concrete bottom and a fiberglass upper portion), will be installed along the interconnection. The new poles will be approximately 90 to 100 feet tall, spaced roughly 500 to 660 feet apart.

3. Access and Construction Work Areas

Access to the substation site during construction will be via Shepherd, Perrin, and Sunnyside Avenues, with entry to the substation site on two new, paved, 20-foot-wide access roads from Sunnyside Avenue into the substation. The roads will be at the north and south ends of the substation and will be approximately 35 feet in length. Access to the power line interconnection work area will be via Sunnyside, Behymer, and Copper Avenues. Other than at the substation entrances, no new access roads will be constructed.

The entire 5.0-acre substation site will be used during construction for parking and staging for construction material and equipment; no additional staging areas will be required.

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 was 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 April 9 2010 in Application 10-04-017, 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 November 4, 2010, by PG&E Corporation and the Pacific Gas and Electric Company for the period ending September 30, 2010) are attached hereto as Exhibit D.

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 B to this Application. The following information is required by Section IX.B of GO 131-D:

a. A description of the proposed power line and 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 of the facilities.

A detailed description of the proposed project and equipment is contained in Section II.B above and in Section 2 of the PEA, Exhibit B. A Preliminary Project Schedule is attached as Exhibit E.

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 overview map is attached as Exhibit A and a map showing populated areas is provided in Figure 2.2-1 of the PEA, attached as Exhibit B. Detailed maps showing

existing transmission and power lines, and the proposed substation site and proposed power line interconnection are provided in Section 2.0 of the PEA, Exhibit B, at Figures 2.2-2 through 2.2-5. A map showing recreation and park areas is provided in Figure 3.2-3 of the PEA. There are no scenic areas within 300 feet of the proposed substation and power line interconnection.

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.

Early in the planning process, PG&E planning engineers considered several electric planning solutions and system alternatives to address the need for additional reliability and distribution capacity. Because existing area substations are at capacity and voluntary electricity reductions through PG&E's Customer Energy Efficiency ("CEE") program would not suffice, PG&E moved forward with investigating sites for a new substation.

PG&E defined a new substation study area bounded by Copper Avenue to the north, Shepherd Avenue to the south, Minnewawa Avenue to the west, and Sunnyside Avenue to the east. This study area was chosen because a substation in this location would best serve the present and future growth in the Woodward DPA. PG&E's Distribution Planning Department also indicated a preference for the southeastern part of the study area, which is closest to the current and projected growth of northeast Fresno, northwest Clovis and surrounding areas. After identifying all parcels within the study area that appeared capable of supporting the substation site, preliminary investigation for available properties revealed three potential sites:

Site #1 - Portion of APN 556-050-06: This parcel is located north of Shepherd Avenue, approximately one-quarter mile east of Minnewawa Avenue. After contacting this property owner, it was discovered this property had recently been purchased by a local

housing developer, and was no longer available.

Site #2 - Portion of APN 580-080-18: This approximately 150-acre site stretches east from Minnewawa Avenue to Sunnyside Avenue. It is currently being farmed as a fruit tree orchard. This parcel is located in the middle of the study area. This property owner also owns property at the southeast corner of the study area, and offered that as an alternative site (see Site #3 below).

Site #3 - Portion of APN 556-050-07: This approximately 157-acre site, one-quarter mile square, is located at the northwest corner of the intersection of Shepherd and Sunnyside Avenues. It is currently being farmed as an almond tree orchard. This parcel is located in the southeast portion of the study area, and is offered by the same owner of site #2. The property owner advised PG&E to consider the northeasterly corner of this property, away from the intersection of Shepherd and Sunnyside Avenues.

Since either of the available sites were feasible, they were then analyzed by evaluating each site by the following criteria to determine their suitability:

- Economics
- Engineering
- Environmental impacts
- Land Use
- Project objectives

The proposed site was chosen because it is located closest to current and future electric demand, relatively close to a power line, adjacent to distribution feeders and franchise corridors, within compatible land uses with minimal residential, set back from Shepherd Avenue, and in an almond orchard that would provide good screening. In addition, both the City of Clovis and Fresno County supported this site for construction of a substation. An additional factor was the prospect of being able to include the substation in an

Environmental Impact Report that the City of Clovis would be preparing for the Northwest Village project. The timing of the City of Clovis' EIR, however, was not conducive to PG&E meeting its schedule.

PG&E also investigated power line interconnection alternatives from the proposed substation site, including options to interconnect with several other surrounding power lines. These options were dismissed due to longer required connections, increased costs without a corresponding environmental benefit, and the need to reconductor significant segments of existing power lines. The proposed interconnection alignment was selected because it could be developed without prohibitive engineering or economic constraints, it had no potentially significant environmental impacts, it parallels existing infrastructure and back property lines, and is the most direct route between the existing line and the proposed substation, thereby reducing construction time and costs.

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.

Fresno County

On May 4, 2007 and April 12, 2010, PG&E met with staff members from the County of Fresno Department of Public Works and Planning to provide an overview of the proposed project. The Department indicated support of the project and requested that PG&E submit a ministerial site plan review for the substation. The County provided PG&E with a letter of support dated June 25, 2010, which is included in the PEA at Appendix C.

The City of Clovis:

PG&E met with City of Clovis staff members on at least six different occasions between January 2007 and July 2009 to discuss the proposed substation project. On April 13, 2010, PG&E again met with City officials to discuss updates and finalized plans for the proposed substation and power line interconnection. The City provided PG&E with a letter of support for the project dated May 6, 2010, which is included in the PEA at Appendix C.

The Native American Heritage Commission (NAHC):

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 no Native American cultural resources were listed in their files for the project site or the immediate vicinity, but provided the names of 12 Native American individuals from 11 organizations who may have knowledge of cultural resources in the project area. All of these individuals were contacted, and no replies have been received. Correspondence associated with the consultation efforts is included in Appendix D of the PEA.

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 substation and power line facilities.

The Commission's EMF Decision and PG&E's EMF Design Guidelines require PG&E to prepare a Field Management Plan ("FMP") checklist for the substation, as well as

an FMP for the power line, both of which indicate the no-cost and low-cost EMF measures that will be installed as part of the final engineering design for the project. The FMPs for this project propose the following measures to reduce the magnetic field strength levels from electric power facilities:

- Keep high current devices, transformers, capacitors, and reactors away from the substation property lines.
- For underground duct banks, the minimum distance should be 12 feet from the adjacent property lines or as close to 12 feet as practical.
- Locate new substations close to existing power lines to the extent practical.
- Increase the substation property boundary to the extent practical.
- For power line, install conductors with optimal phasing to reduce the magnetic field at the edge of the right of way.
- Increase height of 16 poles nearest to residences by 5' to reduce EMF at edge of right of way.

Copies of the FMP checklist and power line FMP for this project are attached as Exhibit F.

VI. PUBLIC NOTICE

Pursuant to Section XI(A) of GO 131-D, notice of the Application will be sent to the Planning Commission and Board of Supervisors for Fresno County, 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 State Water Resources Control Board, the Air Resources Board, the San Joaquin Valley Air Pollution Control District, the Central Valley Regional Water Quality Control Board, the Native American Heritage Commission, the California Department of

Transportation District 6, and 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 notice of the Application once a week for two successive weeks in the Fresno Bee. 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 substation and power line facilities are 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 E, PG&E's Preliminary Project Schedule, the project must be complete and operational by May 2013 in order to relieve the electric system deficiency projected to occur in this DPA and to ensure the ability of the system to safely and reliably serve the area without interruptions or emergency conditions. To meet these operations requirements, PG&E must begin construction by June 4, 2012.

Given this 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: Project Overview Map

Exhibit B: Shepherd Substation Project PEA

Exhibit C: CAISO Approval

Exhibit D: Form 10-Q Quarterly Report filed on November 4, 2010

Exhibit E: Preliminary Project Schedule

Exhibit F: EMF Field Management Plans

IX. CONCLUSION

For the reasons stated above, 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 Shepherd Substation Project.

Dated in San Francisco, California, this 8th day of December, 2010.

Respectfully submitted,

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By: /s/
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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 E, 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 19, 2010, at San Francisco, California.

/s/

Des Bell
Senior Vice President Shared Service and
Chief Procurement Officer

BEFORE THE PUBLIC UTILITIES COMMISSION
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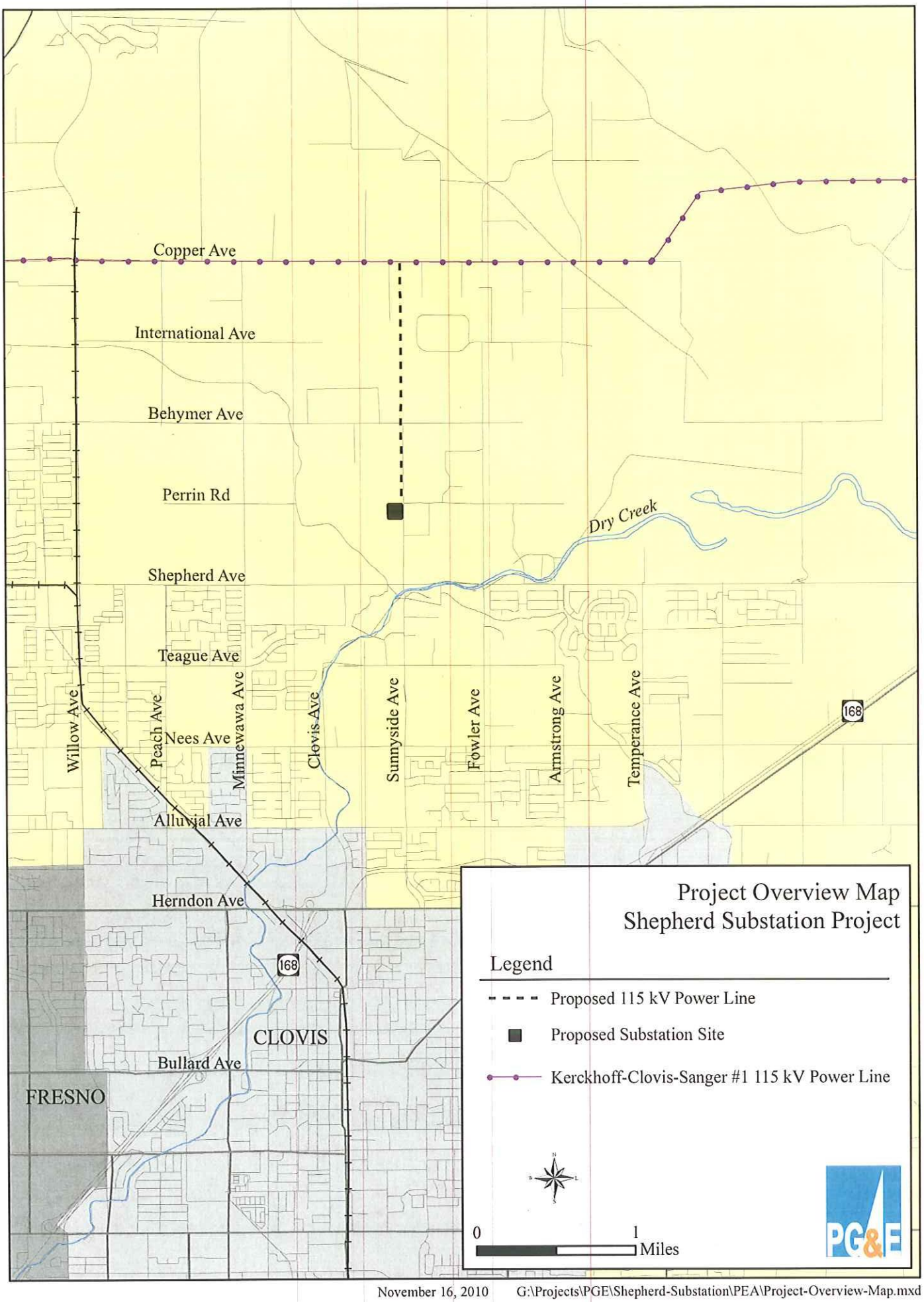
Application of PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, for a Permit to Construct the Shepherd Substation Project Pursuant to General Order 131-D (U 39 E)	Application No.

EXHIBIT A

PROJECT OVERVIEW MAP



November 16, 2010 G:\Projects\PGE\Shepherd-Substation\PEA\Project-Overview-Map.mxd

BEFORE THE PUBLIC UTILITIES COMMISSION
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Application of PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, for a Permit to Construct the Shepherd Substation Project Pursuant to General Order 131-D (U 39 E)	Application No.

EXHIBIT B

PROPONENT'S ENVIRONMENTAL ASSESSMENT

[Proponent's Environmental Assessment (PEA) was filed separately in paper form]

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Application of PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, for a Permit to Construct the Shepherd Substation Project Pursuant to General Order 131-D (U 39 E)	Application No.

EXHIBIT C

CAISO APPROVAL

California ISO
Your Link to Power

2009

California ISO Transmission Plan

Department of Market and Infrastructure Development

Amended - June 2009

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Table 1-1: New transmission projects approved by the ISO Management (cont.)

No	Project & Scope	Project Sponsor	Area	Needs	In-Service Date
30	Burns Reliability Project	PG&E	Central Coast, Los Padres, Kern	Improved reliability (reduction in customer outage minutes) - Quicker restoration and isolation - Operational flexibility	Dec-10
31	Caruthers - Kingsburg 70kV	PG&E	Central Coast, Los Padres, Kern	NERC Category A - Reduce outage exposure - to support anticipated additional load	
32	Guernsey-Henrietta 70 kV Line Reconductor Project	PG&E	PG&E-San Joaquin Valley	NERC Category B (G-1) Known current operating issues	May-11
33	Herndon 115 kV Circuit Breaker Replacement Project	PG&E	PG&E-San Joaquin Valley	New-PG&E identified (increase system reliability)	May-11
34	Herndon 230/115 kV Transformer Project	PG&E	PG&E-San Joaquin Valley	Overload following the outage of the parallel transformer (Category B)	May-11
35	Sanger-Reedley 70 kV to 115 kV Conversion Project	PG&E	PG&E-San Joaquin Valley	Overloads following various Category B contingencies	May-11
36	Sanger-California Ave 70 kV to 115 kV Voltage Conversion Project	PG&E	PG&E-San Joaquin Valley	Mitigate overload	May-11
37	Shepherd Substation	PG&E	PG&E-San Joaquin Valley	Required for load interconnection request	May-11
38	Barre-Ellis 230kV Line Upgrade Project	SCE	SCE	Overload on BARRE-ELLIS 230 kV line #1 after various category B and C contingencies	Jan-10
39	Redondo-La Fresa 230 kV Line Upgrades	SCE	SCE	Overloads following various category C contingencies	Dec-09

7.2 Projects Approved by ISO Management

In this section, Table 7-3 lists new projects that received ISO management approval as part of the 2009 transmission planning cycle.

Table 7-3: New transmission projects approved by the ISO Management

No	Project & Scope	Project Sponsor	Area	Needs	In-Service Date	Estimate Costs ($M)	ISO Justification
1	Humboldt 115/60 kV Transformer Replacements: This is a project proposal to replace Humboldt 115/60 kV Banks #1 and #2 banks with higher ratings transformers (200/220 MVA)	PG&E	Humboldt	Overloads of Humboldt 115/60kV Banks #1 and #2 under various B and C contingencies	Dec-10	15	This proposed project is consistent with the ISO identified solutions to mitigate the overloading problems on these transformers under various category B and C contingency conditions. They also provide operation flexibility in the area.
2	Maple Creek Reactive Support: Install approx 10 MVAR of dynamic reactive support (SVC) at this substation	PG&E	Humboldt	Ridge Cabin, Maple Creek, Russ Ranch, Willow Creek, and Hoopa 60 kV	May-11	10	This proposed project is consistent with the ISO identified solutions to mitigate the low voltage problems at these substations. It also provides dynamic reactive support that increases overall reliability of this system.
3	Garberville Reactive Support: Install approx 20 MVAR of dynamic reactive support (SVC) at this substation	PG&E	Humboldt	Bridgeville, Fruitland, Fort Seward, Garberville, Kekawaka, Laytonville, Covelo 60 kV	May-11	10	This proposed project is consistent with the ISO identified solutions to mitigate the low voltage problems on these substations. It also provides dynamic reactive support that increases overall reliability of this system.

Table 7-3: New transmission projects approved by the ISO Management (cont.)

No	Project & Scope	Project Sponsor	Area	Needs	In-Service Date	Estimate Costs ($M)	ISO Justification
4	**Fulton-Fitch Mountain 60 kV Line Reconductor:** The project proposes to Reconductor the limiting 8 Miles section with 715 Al conductor (631/742A)	PG&E	North Coast/Bay	Overload of Fulton-Hopland 60kV #1 following the outage of L-1 Ukiah-Hopland-Cloverdale 115kV and T-1 Cortina 230/115 Bank #4	May-13	5	This proposed project will increase import capability to the North Geysers area by reconductoring the limiting facility between Fulton-Fitch Mountain 60 kV Line.
5	Clear Lake 60 kV System Reinforcement: This is a project proposal to: 1) Build a new 12-mile 115 kV line (297/345 A) tapping Eagle Rock-Cortina line to Middletown substation. 2) Install 100 MVA 115/60 kV Bank at Middletown substation	PG&E	North Coast/Bay	Overloads of 1) Hopland 115/60kV Bank #2 2) Mendocino-Clear Lake 60kV#1 3) Clear lake-Eagle Rock 60kV#1 4) Clear lake-Hopland 60kV #1 5) Low voltages at several 60 and 115 kV substations in the areas under various B and C contingencies	May-12	30	This project has demonstrated it is a prudent solution to the identified problem since it will connect 115 kV systems from Cortina substation with the 60 kV systems at Middletown substation. It will mitigates the overloads, low voltage problems in this are
6	**Lakeville No. 2 60 kV Switch Upgrade:** This is a project proposal to Replace switch 57 to increase rating of this section from 400 to 440/517A	PG&E	North Coast/Bay	Overload of Lakeville 60kV #2	May-10	1	This proposed project is found to be a better alternative to increase import capability of this line since the limiting facility of this line section is the switch.
7	**Glenn #1 60 kV Reconductoring**: This is a proposal to reconductor 5.5 miles of Glenn #1 60 kV line.	PG&E	North Valley	Mitigate Category B and C criteria violations.	May-13	6-8	Planning studies demonstrate that the preferred alternative is a prudent and technically sound solution to the ISO identified reliability criteria violations.

Table 7-3: New transmission projects approved by the ISO Management (cont.)

No	Project & Scope	Project Sponsor	Area	Needs	In-Service Date	Estimate Costs ($M)	ISO Justification
8	Palermo 115 kV Circuit Breaker & Switch Replacement: This is a project proposal to replace Palermo circuit breaker 182 and associates switches	PG&E	North Valley	Mitigate Category B criteria violation. It also contributes to LCR reduction	May-10	1-5	Planning studies demonstrate that the preferred alternative is a prudent and technically sound solution to the ISO identified reliability needs. This project is a completion of project T686B and will result in LCR decrease see page 40 in the 2011-13 Long-Term LCR study
9	Gold Hill-Horseshoe 115 kV Reinforcement: This is a proposal to reconductor 16 miles of the Gold Hill-Horseshoe #1 & #2 115 kV Lines as well as Horseshoe #1 & #2 taps	PG&E	Central Valley	Mitigate Category A, B and C criteria violations	May-11	5-10	Planning studies demonstrate that the preferred alternative is a prudent and technically sound solution to the ISO identified reliability needs
10	**Carbona Reliability:** There is a proposal to 1) Reconductor a portion of the Carbona No. 1 60 KV Tap Line 2) Install a new circuit breaker at Kasson Substation and 3) Upgrade Carbona Switch Nos. 37 and 39 to SCADA controlled switches	PG&E	Central Valley	Improve system reliability	May-10	1-5	Planning studies demonstrate that the preferred alternative is a prudent and technically sound solution to the identified reliability needs allowing maintenance on the Carbona #2 60 kV Tap without firm load drop
11	**Kyoho Manufacturing California 115 kV Interconnection:** This is a project proposal to construct a new 2 mile tap line on to the Stockton "A"-Lockeford-Bellota #2 115 kV Line	PG&E	Central Valley	Interconnect customer	Jun-10	1-5	Planning studies demonstrate that the preferred alternative is a prudent and technically sound solution to interconnect this new customer to the ISO grid

Table 7-3: New transmission projects approved by the ISO Management (cont.)

No	Project & Scope	Project Sponsor	Area	Needs	In-Service Date	Estimate Costs ($M)	ISO Justification
12	**Lodi-industrial 60 kV Line Switch Upgrade Project**: A proposal to replace switch 29 on the Lodi-Industrial 60 kV line	PG&E	Central Valley	Mitigate Category B criteria violation	May-10	<1	Planning studies demonstrate that the preferred alternative is a prudent and technically sound solution to the identified reliability needs
13	**Salado-Newman 60 kV Line #2 Reconductor:** This is a project to reconductor 6 spans of the Salado-Newman 60kV#2	PG&E	Central Valley	Mitigate Category B criteria violation	May-10	<1	Planning studies demonstrate that the preferred alternative is a prudent and technically sound solution to the identified reliability needs
14	**Country Club 60 kV Bus Upgrade:** This is a project to reconductor Country 60 kV Bus and re-rate Hammer-Country Club 60 kV to 4 fps	PG&E	Central Valley	Mitigate Category B criteria violation	May-10	1-5	Planning studies demonstrate that the preferred alternative is a prudent and technically sound solution to the identified reliability needs
15	**Valley Spring 230/60 kV Transmission Addition:** This is a proposal to add a new Valley Springs 230/60 kV Transformer #2	PG&E	Central Valley	Mitigate Category B criteria violation. The project also improve reliability (reduce hours of load potential load dropping) in the area	May-12	8-10	Planning studies demonstrate that the preferred alternative is a prudent and technically sound solution to the ISO identified reliability needs. It also eliminates load drop ~130 MW for a single transformer outage and it allows for the existing transformer to be maintained without firm load drop
16	**Cooley Landing-Los Altos 60 kV line reconductor:** This is a project proposal to reconductor Cooley Landing – Los Altos 60 kV line (~ 11 miles) with a conductor 800 amps or greater. Also, line terminal equipment may need to be upgraded	PG&E	Greater Bay Area	Overload of Cooley Landing-Westinghouse Junction, Los Altos-Westinghouse Jct, and Los Altos sub-Los Altos 60 kV Jct lines following various Category B contingencies	May-13	5-10	This project is the preferred alternative to mitigate Category B overloads and satisfies ISO defined reliability needs

Table 7-3: New transmission projects approved by the ISO Management (cont.)

No	Project & Scope	Project Sponsor	Area	Needs	In-Service Date	Estimate Costs ($M)	ISO Justification
17	Evergreen-Mabury 60 kV to 115 kV conversion: The scope if this project includes -Convert Mabury Substation from 60 kV to 115 kV -Rebuild Evergreen-Mabury 60 kV line (~6 miles) into a 115 kV circuit with conductors rated 800 amps or greater. In addition, line terminal equipment may need to be upgraded	PG&E	Greater Bay Area	Overloads of Dixon Landing-Newark and Piercy-Metclf E 115 kV lines following the outage of Piercy-Metcalf 115 kV line out and Swift - Metcalf 115 kV and Piercy - Metcalf 115 kV lines out	May-12	10-15	This project is the preferred alternative to mitigate Category B and Category C overloads and satisfies ISO defined reliability needs
18	**Menlo Area 60 kV System Upgrade:** As part of this project, it includes - Replace fifteen 600 amp switches with 1200 amp switches - Upgrade limited components on the Jefferson-Stanford and Cooley Landing-Stanford 60 kV lines -Reconductor 60 kV buses at Glenwood and Menlo substations	PG&E	Greater Bay Area	Overloads of Jefferson-Emerald Lake, Glenwood-S.R.I., Las Pulgas-Emerald Lake, Menlo-Las Pulgas (all sections), Jefferson-Emerald Lake, Glenwood-S.R.I., Las Pulgas-Emerald Lake, Menlo-Las Pulgas, and Cooley Landing-S.R.I. 60 kV line #2 following various contingencies	May-10	5-10	This project mitigates nine different overloaded facilities caused under category B and Category C contingencies. It is a prudent and technically sound solution to ISO defined reliability needs
19	**Monta Vista-Los Gatos-Evergreen 60 kV Project:** This is a project proposal to reconductor limited sections of Monta Vista-Los Gatos (~9 miles) and Evergreen-Los Gatos (~11 miles) 60 kV lines with a conductor rated for 800 amps or greater. Line terminal equipment may need upgrade	PG&E	Greater Bay Area	Overloads of Monta Vista-Los Gatos, Almaden-Senter Tap, and Senter Tap-Evergreen 60 kV lines following various Category B contingencies	May-18	10-15	This project is the best alternative to mitigate Category B overloads and satisfies ISO defined reliability needs

Table 7-3: New transmission projects approved by the ISO Management (cont.)

No	Project & Scope	Project Sponsor	Area	Needs	In-Service Date	Estimate Costs ($M)	ISO Justification
20	Daly City Bus Reconfiguration: The scope of this project include the installation of two new 115 kV line circuit breakers with SCADA, two bus sectionalizing circuit breakers with SCADA, disconnect switches and a low profile 115 kV bus at Daly City substation	PG&E	Greater Bay Area	Improve system reliability	Dec-10	5-10	This project will prevent Category B violations and improve operational flexibility at the Daly City 115 kV substation to do equipment clearances
21	Larkin Circuit Breaker No. 192: This is a proposal to - Operate Larkin CB 192 normally closed - Install CTs and over current relays on distribution transformers at Larkin - Adjust CT ratios at Martin, Potrero and Mission substations	PG&E	Greater Bay Area	Improve system reliability	Mar-09	1-5	This project will require operating the circuit breaker No. 192 at Larkin substation normally closed, which will balance the loading on 115 kV lines from Martin substation
22	Tri-Valley Voltage Control: This is a proposal to install two 48 MVAR shunt reactors at Vineyard substation and one 48 MVAR shunt reactor at Dublin substation. Substation terminal equipment may need to be upgraded as well	PG&E	Greater Bay Area	Improve system reliability	Nov-10	10-15	This project mitigates higher voltages at Cayetano, North Dublin and Vineyard 230 kV substations and satisfies ISO reliability standard for voltage limits

Table 7-3: New transmission projects approved by the ISO Management (cont.)

No	Project & Scope	Project Sponsor	Area	Needs	In-Service Date	Estimate Costs ($M)	ISO Justification
23	**Ravenswood-Cooley Landing 115 kV line Reconductor**: This is a proposal to reconductor Ravenswood-Cooley Landing 115 kV lines #1 and #2 (~1.8 miles each) with a conductor rated at 1100 amps or greater	PG&E	Greater Bay Area	Overload of Ravenswood-Cooley Landing 115 kV #1 and #2 lines following the outages of Ravenswood-Cooley Landing 115 kV line #2 line #1 respectively with Cardinal Cogen out	May-12	5-10	This project is the best alternative to mitigate Category B overloads and satisfies ISO defined reliability needs
24	**San Mateo-Bair 60 kV line reconductor**: This is a proposal to Reconductor San Mateo - Bair 60 kV line (~11 miles) with a conductor 1100 amps or greater. Line terminal equipment may need to be upgraded as well	PG&E	Greater Bay Area	Overload of San Mateo-Oracle 60 kV Line following the outages of Bair 115/60 kV Txmr or Bus Fault at Bair 115 kV bus	May-10	5-10	This project is the best alternative to mitigate Category B and Category C overloads and satisfies ISO defined reliability needs
25	**Midway-Renfro 115 kV Reconductor**: This is a proposal to reconductor Midway-Renfro and Midway-Rio Bravo-Renfro 115 kV lines	PG&E	Central Coast, Los Padres, Kern	Overloads of Midway-Renfro and Midway-Rio Bravo-Renfro 115 kV Lines after various Category B contingencies	May-12	17-22	Mitigates a Cat B overload for the loss of Midway-Renfro and Midway-Rio Bravo-Fresno 115kV lines
26	**Occidental of Elk Hills 230 kV Interconnection Project**: This is a proposal to reconductor Midway-Renfro and Midway-Rio Bravo-Renfro 115 kV lines	PG&E	Central Coast, Los Padres, Kern	Customer interconnection	Jun-10	0.4	Customer has requested transition of service point from 115kV to its new 230/115kV substation

Table 7-3: New transmission projects approved by the ISO Management (cont.)

No	Project & Scope	Project Sponsor	Area	Needs	In-Service Date	Estimate Costs ($M)	ISO Justification
27	Del Monte - Fort Ord 60 kV Reinforcement Project: This is a proposal to install two 60 kV CBs at Ford Ord and reconductor Del Monte-Ford Ord 60 kV #1 and #2	PG&E	Central Coast, Los Padres, Kern	Normal overloads of Del Monte 60 kV Line #1 and overload of Del Monte 60 kV Line #2 following the outage of Del Monte 60 kV Line #1	May 2010 and May 2012	5-10	Mitigates Cat A and B overloads due to load growth in Fort Ord area
28	Natividad Substation Interconnection: This proposal is proposed to build New distribution sub at Natividad with a 115kV ring bus and Reconductor the Crazy Horse – Salinas sections	PG&E	Central Coast, Los Padres, Kern	Overloads of Moss Landing – Salinas – Soledad #1 and #2 following the outages of Moss Landing Salinas #1 and #2 115 kV Lines (Category C)	May-12	15-20	Mitigates Cat C overload and provides additional distribution capacity which cannot be handled by existing Galiban station in Central Coast
29	San Justo Substation Interconnection: This is a proposal to build a new San Justo substation connected to Crazy Horse – Hollister No. 1 115kV line	PG&E	Central Coast, Los Padres, Kern	- Improved service reliability for the City of San Juan Bautista - Cater to increasing load (almost 4 MW block load by 2009). Increase in load cannot be served by Hollister - Several food processing plants require reliable service - PG&E distribution expects a transfer of 21 MW of load to San Justo from Hollister	May-11	5-10	San Jusato substation will off-load Hollister and take care of block load increase downstream of Hollister.

Table 7-3: New transmission projects approved by the ISO Management (cont.)

No	Project & Scope	Project Sponsor	Area	Needs	In-Service Date	Estimate Costs ($M)	ISO Justification
30	**Burns Reliability Project:** This is a proposal to Install a 60kV breaker at Burns and SCADA operated switches at Big Basin and Lone Star Jct	PG&E	Central Coast, Los Padres, Kern	- Improved reliability (reduction in customer outage minutes) - Quicker restoration and isolation - Operational flexibility	Dec-10	3-5	Facilitates quick isolation of faults on Monta Vista-Burns 60kV path. Reduces restoration time.
31	**Caruthers - Kingsburg 70kV:** This is a proposal to reconductor Camden-Camden Junction, Camden Junction-Caruthers, and Camden Junction-Lemoore Naval Air Station (NAS) 70 kV line sections (approximately 25 miles in length). In addition, the 2 mile Henrietta-Lemoore NAS 70 kV line section will be double circuited to provide increased reliability. The project scope would also involve upgrading station terminal equipment and obtaining any necessary environmental and land permits to complete the reconductoring work	PG&E	Central Coast, Los Padres, Kern	- NERC Category A - Reduce outage exposure by allowing Camden and Caruthers to operate as Flip-Flop Stations - to support anticipated additional load for Agricultural Internal Combustion Engine Conversion	May-12	10-15	Allows for Camden and Caruthers to be served from multiple sources.
32	**Guernsey-Henrietta 70 kV Line Reconductor Project:** This is a proposal to reconductor a 3 miles section of the line	PG&E	PG&E-San Joaquin Valley	- NERC Category B (G-1) - Known current operational issue	May-11	1-5	Reduce the overload exposure for the loss of the GWF Hanford Cogen

Table 7-3: New transmission projects approved by the ISO Management (cont.)

No	Project & Scope	Project Sponsor	Area	Needs	In-Service Date	Estimate Costs ($M)	ISO Justification
33	Herndon 115 kV Circuit Breaker Replacement Project: This project proposal involves the replacement of CB 122 with a 2000 Amps circuit breaker	PG&E	PG&E-San Joaquin Valley	New-PG&E identified (increase system reliability)	May-11	1-5	This project would remove the need to drop load for the loss of the parallel circuit
34	Herndon 230/115 kV Transformer Project: This is a proposal to add 3rd 230/115kV Bank at Herndon	PG&E	PG&E-San Joaquin Valley	Overload of Herndon 230/115kV Bank #1 or #2 following the outage of the parallel transformer (Category B)	May-11	10-15	Reduce the overload exposure of the 230/115kV Banks at Herndon and thereby also reducing the area LCR requirement
35	Sanger-Reedley 70 kV to 115 kV Conversion Project: This is a proposal to convert Sanger – Reedley 70 kV for 115 kV operation and reconductor line to carry minimum of 900 Amps under emergency conditions	PG&E	PG&E-San Joaquin Valley	Overloads of Kingsriver-Sanger-Reedley 115kV and Sanger-Reedley 70kV Lines following various Category B contingencies	May-11	20-25	This project would convert the last remaining 70kV element between Sanger and Reedley, thereby increase the load serving capability to the Reedley area
36	Sanger-California Ave 70 kV to 115 kV Voltage Conversion Project: This is a proposal to convert Sanger – California 70 kV Line #2 for 115 kV operations	PG&E	PG&E-San Joaquin Valley	Overload of Cal Ave-McCall 115kV Line after the outage of McCall-West Fresno 115kV Line (Category B)	May-11	5-10	This project would add a third source into the West Fresno/California Ave area significantly improve area reliability
37	Sheperd Substation: This is a proposal to loop proposed Shepherd Substation off the Kerckhoff-Clovis-Sanger #1 115kV Line	PG&E	PG&E-San Joaquin Valley	Required for load interconnection request	May-11	8-10	Tariff and Compliance (Obligation to Serve)

Table 7-3: New transmission projects approved by the ISO Management (cont.)

No	Project & Scope	Project Sponsor	Area	Needs	In-Service Date	Estimate Costs ($M)	ISO Justification
38	Barre-Ellis 230kV Line Upgrade Project: This project will upgrade terminal equipment as required at both Barre and Ellis substations. Additionally, it will also modify/upgrade the structures in the right of way as required to increase the respective emergency ratings	SCE	SCE	Overload on BARRE-ELLIS 230 kV line #1 after various category B and C contingencies	Jan-10	1	The ISO Staff recommends that this project be approved by ISO Management. This project is determined to be the least cost feasible transmission alternative and would mitigate identified NERC Category B and C contingency overloads
39	Redondo-La Fresa 230 kV Line Upgrades: This is a proposed project to upgrade the terminal equipment at the Redondo 230 kV substation (i.e. disconnects, CBs etc), to raise its emergency rating	SCE	SCE	Overloads of Redondo - La Fresa 230 kV #1 and #2 following various category C contingencies	Dec-09	2.7	The ISO Staff recommends that this project be approved by ISO Management. This project is determined to be the least cost feasible transmission alternative and would mitigate identified NERC Category C contingencies

Table 7-3: New transmission projects approved by the ISO Management (cont.)

No	Project & Scope	Project Sponsor	Area	Needs	In-Service Date	Estimate Costs ($M)	ISO Justification
40	Rector Static VAR System (SVS) Project: This project is to expand Rector Static VAR System (SVS) by adding two 79.2 MVAR Mechanically Switched Capacitor (MSC) at Rector 230 kV Bus and SVC control points to maintain minimum voltages of 229 kV as directed by SOB17, and optimize SVC VAR output to provide dynamic stability for system disturbance	SCE	SCE	Transient Voltage and Frequency Dip at RECTOR 66KV Bus following the outages of Big Creek 3-Rector 230KV N-1 and Big Creek 3-Rector 230KV N-2	Apr-10	7.6	The ISO recommends that this project be approved by ISO Management with the condition that: (a) SCE implements fast fault clearing (4-cycle) of 3-phase fault using the fast-fault clearing capability of the 230kV circuit breakers in the Big Creek and Rector areas; (b) SCE completes the previously ISO-approved San Joaquin Cross Valley Project as scheduled by 2012; and (c) SCE investigates the feasibility of modifying the time it takes to run back Big Creek generation under N-1 and N-2 contingencies from 12 cycles to 4 cycles (note: if 4 cycles are not feasible for generation run-back, then consider 8 cycles)
41	Bailey 66 kV Circuit Breakers Upgrades: This is a proposal to replace 2 ISO controlled 66 kV CB at Bailey Substation to 40 kA	SCE	SCE	Two CBs at Bailey substation will exceed their interrupting current limits	Dec-09	0.4	The ISO agrees with the need of this project

Table 7-3: New transmission projects approved by the ISO Management (cont.)

No	Project & Scope	Project Sponsor	Area	Needs	In-Service Date	Estimate Costs ($M)	ISO Justification
42	Devers 115 kV circuit Breakers Upgrades: This is a proposal to replace 7 ISO controlled 115 kV CB at Devers Substation to 40 kA	SCE	SCE	Seven CBs at Devers substation will exceed their interrupting current limits	Dec-09	2.5	The ISO agrees with the need of this project
43	Kramer 115 kV circuit Breakers Upgrades: This is a proposal to replace 10 ISO controlled 115 kV CB at Kramer Substation to 40 kA	SCE	SCE	Four CBs at Kramer substation will exceed their interrupting current limits	Dec-09	1.4	The ISO agrees with the need of this project
44	Antelope 66 kV Circuit Breakers Upgrades: This is a proposal to replace 38 ISO controlled 66 kV CB at Antelope Substation to 40 kA	SCE	SCE	Thirty-eight CBs at Kramer substation will exceed their interrupting current limits	Dec-09	7	The ISO agrees with the need of this project
45	New 138 Tap: TL13835 The project will create a new 138kV tap from Talega substation to TL13835 serving Laguna Niguel and San Mateo areas.	SDG&E	SDG&E	Overload of Talega-San Mateo following the outage of Laguna Niguel and vice versa	Oct-09	<10	Proposed by SDG&E. Will help to avoid reconductoring of two 138 kV lines in preparation for the Orange County Transmission Upgrade Project

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 Shepherd Substation Project Pursuant to General Order 131-D (U 39 E)	Application No.

EXHIBIT D

FORM 10-Q QUARTERLY REPORT FILED ON NOVEMBER 4, 2010

PACIFIC GAS AND ELECTRIC COMPANY
CONDENSED CONSOLIDATED BALANCE SHEETS

(in millions)	(Unaudited) Balance At September 30, 2010	December 31, 2009
ASSETS		
Current Assets		
Cash and cash equivalents	$ 119	$ 334
Restricted cash ($38 and $39 related to Energy recovery bonds at September 30, 2010 and December 31, 2009, respectively)	573	633
Accounts receivable:		
Customers (net of allowance for doubtful accounts of $76 at September 30, 2010 and $68 at December 31, 2009)	989	859
Accrued unbilled revenue	752	671
Regulatory balancing accounts	1,118	1,109
Other	781	751
Inventories:		
Gas stored underground and fuel oil	192	114
Materials and supplies	187	200
Income taxes receivable	-	138
Prepaid expenses and other	806	662
Total current assets	5,517	5,471
Property, Plant, and Equipment		
Electric	32,074	30,481
Gas	11,079	10,697
Construction work in progress	2,180	1,888
Total property, plant, and equipment	45,333	43,066
Accumulated depreciation	(14,659)	(14,175)
Net property, plant, and equipment	30,674	28,891
Other Noncurrent Assets		
Regulatory assets ($833 and $1,124 related to Energy recovery bonds at September 30, 2010 and December 31, 2009, respectively)	5,702	5,522
Nuclear decommissioning trusts	1,977	1,899
Income taxes receivable	673	610
Other	357	316
Total other noncurrent assets	8,709	8,347
TOTAL ASSETS	$ 44,900	$ 42,709

See accompanying Notes to the Condensed Consolidated Financial Statements.

PACIFIC GAS AND ELECTRIC COMPANY
CONDENSED CONSOLIDATED BALANCE SHEETS

(in millions, except share amounts)	(Unaudited) Balance At September 30, 2010	December 31, 2009
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities		
Short-term borrowings	$ 986	$ 833
Long-term debt, classified as current	500	95
Energy recovery bonds, classified as current	399	386
Accounts payable:		
Trade creditors	943	984
Disputed claims and customer refunds	746	773
Regulatory balancing accounts	371	281
Other	376	363
Interest payable	777	813
Income taxes payable	260	223
Deferred income taxes	154	334
Other	1,377	1,307
Total current liabilities	6,889	6,392
Noncurrent Liabilities		
Long-term debt	10,378	10,033
Energy recovery bonds	528	827
Regulatory liabilities	4,446	4,125
Pension and other postretirement benefits	2,006	1,717
Asset retirement obligations	1,610	1,593
Deferred income taxes	5,322	4,764
Other	2,105	2,073
Total noncurrent liabilities	26,395	25,132
Commitments and Contingencies		
Shareholders' Equity		
Preferred stock without mandatory redemption provisions:		
Nonredeemable, 5.00% to 6.00%, 5,784,825 shares outstanding at September 30, 2010 and December 31, 2009	145	145
Redeemable, 4.36% to 5.00%, 4,534,958 shares outstanding at September 30, 2010 and December 31, 2009	113	113
Common stock, $5 par value, authorized 800,000,000 shares, 264,374,809 shares outstanding at September 30, 2010 and December 31, 2009	1,322	1,322
Additional paid-in capital	3,228	3,055
Reinvested earnings	7,025	6,704
Accumulated other comprehensive loss	(217)	(154)
Total shareholders' equity	11,616	11,185
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$ 44,900	$ 42,709

See accompanying Notes to the Condensed Consolidated Financial Statements.

PACIFIC GAS AND ELECTRIC COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF INCOME

	(Unaudited)			
	Three Months Ended September 30,		Nine Months Ended September 30,	
(in millions)	**2010**	**2009**	**2010**	**2009**
Operating Revenues				
Electric	$ 2,857	$ 2,630	$ 7,882	$ 7,610
Natural gas	656	605	2,338	2,250
Total operating revenues	3,513	3,235	10,220	9,860
Operating Expenses				
Cost of electricity	1,102	997	2,885	2,763
Cost of natural gas	182	134	924	879
Operating and maintenance	1,224	1,047	3,172	3,143
Depreciation, amortization, and decommissioning	500	450	1,419	1,298
Total operating expenses	3,008	2,628	8,400	8,083
Operating Income	505	607	1,820	1,777
Interest income	3	3	7	29
Interest expense	(161)	(162)	(481)	(501)
Other income, net	25	16	20	52
Income Before Income Taxes	372	464	1,366	1,357
Income tax provision	107	111	498	374
Net Income	265	353	868	983
Preferred stock dividend requirement	3	3	10	10
Income Available for Common Stock	$ 262	$ 350	$ 858	$ 973

See accompanying Notes to the Condensed Consolidated Financial Statements.

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OF THE STATE OF CALIFORNIA

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EXHIBIT E

PRELIMINARY PROJECT SCHEDULE

Exhibit E

SHEPHERD SUBSTATION PROJECT
PRELIMINARY PROJECT SCHEDULE

PTC Application submitted	December 8, 2010
Preliminary CPUC review, notice of deficiencies, if any	January 7, 2011 or sooner
Response to any deficiencies	February 6, 2011 or sooner
Application complete	March 1, 2011
Draft Negative Declaration released	June 10, 2011
Public Review Period begins	June 10, 2011
Close of Public Review Period	July 11, 2011
Negative Declaration completed and adopted	October 2011
Proposed Decision granting PTC	November 2011
PTC Decision Adopted and Effective	December 2011
Acquisition of Required Permits	January 2012 – June 2012
Materials Procurement	January 2012 – June 2012
Construction Begins	June 2012
Project Operational (EDRO)	May 2013

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EXHIBIT F

EMF FIELD MANAGEMENT PLANS

Shepherd FMP checklist

Table 5-1 Substation Checklist for a FMP

No.	NoCost and LowCost Magnetic Field Reduction Measures Evaluated for a Substation Project	Measures Adopted? (Yes/No)	Reason(s) if not Adopted
1	Keep high current devices, transformers, capacitors, and reactors away from the substation property lines.	Yes	
2	For underground duct banks, the minimum distance should be 12 feet from the adjacent property lines or as close to 12 feet as practical.	Yes	
3	Locate new substations close to existing power lines to the extent practical.	Yes	
4	Increase the substation property boundary to the extent practical.	Yes	
5	Other:		

PRELIMINARY TRANSMISSION MAGNETIC FIELD MANAGEMENT PLAN
SHEPHERD SUBSTATION 115 KV LINE INTERCONNECTION PROJECT

I. General Description of Project

Project Lead: Project Manager, Electric Transmission Maintenance and Construction

Transmission Lines: Kerckhoff-Clovis-Sanger #1 115 kV line.

Distribution line Underbuild: 12 kV.

Scope of Work:

Install a 115 kV overhead double circuit power line interconnection, approximately 1.5 miles long, to link the new Shepherd 115/21 kV substation to the existing Kerckhoff-Clovis-Sanger #1 115 kV line.

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.

PRELIMINARY TRANSMISSION MAGNETIC FIELD MANAGEMENT PLAN
SHEPHERD SUBSTATION 115 KV LINE INTERCONNECTION PROJECT

IV. No Cost and Low Cost Magnetic Field Mitigation

Base Case Phasing:
Kerckhoff-Clovis-Sanger #1 115 kV line (West side)**: ABC** (Top, Middle, Bottom).
Kerckhoff-Clovis-Sanger #1 115 kV line (East side)**: ABC** (Top, Middle, Bottom).

Optimally Phase Circuits:
The interconnection to the substation will be optimally phased to reduce the magnetic field at the edge of the right of way. The interconnection will have the same phasing on the top, middle, and bottom positions of the new poles (A-B-C Top-Middle-Bottom).

V. General Description of Surrounding Land Uses

Schools or Daycare: None.
Residential: Sixteen poles.
Commercial/Industrial: None.
Recreational: None.
Agricultural, Rural, and Undeveloped Land: None.

Low Cost Magnetic Field Reduction Options

The sixteen poles in the residential land use area are considered for magnetic field reduction.

VI. Conclusion - Field Reduction Options Selected

For the Kerckhoff-Clovis-Sanger #1 115 kV line loop into the new Shepherd substation, the interconnection to the substation will be optimally phased to reduce the magnetic field at the edge of the right of way. The interconnection will have the same phasing on the top, middle, and bottom positions of the new poles (A-B-C Top-Middle-Bottom).

This FMP proposes to raise the height of sixteen poles in the residential land use area by five feet taller than required for meeting General Order 95. No other low cost mitigation is available for this project.

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 December 8, 2010, I served a true copy of:

APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY FOR A PERMIT TO CONSTRUCT THE SHEPHERD SUBSTATION PROJECT

by hand delivery, addressed to:

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

Mike Rosauer
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 8th day of December, 2010 at San Francisco, California.

/s/
DONNA LEE