STATE OF CALIFORNIA ARNOLD SCHWARZENEGGER, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

July 23, 2009

Advice Letter 3416-E

Brian K. Cherry
Vice President, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177

Subject: Procurement Transaction Quarterly Compliance Filing (Q4, 2008)

Dear Mr. Cherry:

Advice Letter 3416-E is effective July 22, 2009.

Sincerely,

Julie A. Fitch, Director
Energy Division

Pacific Gas and Electric Company

Brian K. Cherry
Vice President
Regulatory Relations

Pacific Gas and Electric Company
77 Beale St., Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177

Fax: 415.973.7226

January 30, 2009

Advice 3416-E
(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Procurement Transaction Quarterly Compliance Filing (Q4, 2008)

Pacific Gas and Electric Company (PG&E) hereby submits to the California Public Utilities Commission (Commission or CPUC) its compliance filing for the fourth quarter of 2008, pursuant to Pacific Gas and Electric Company's (PG&E) Conformed 2006 Long-Term Procurement Plan (LTPP), submitted in Advice 3233-E, as amended by Advice 3233-E-A. PG&E's submittal of this Procurement Transaction Quarterly Compliance Report for record period October through December 2008 (Q4-2008)[1] is in accordance with Decision (D.) 03-12-062, O.P. 19, which requires that the Quarterly Procurement Plan Compliance Reports be submitted within 30 days of the end of the quarter.

Background

Decision 07-12-052 directed Energy Division and the Investor Owned Utilities (IOU)s to continue the collaborative effort to develop a reformatted QCR. The Commission authorized Energy Division to implement a reformatted QCR and to make ministerial changes to the content and format of the report as needs arise. Energy Division and the IOU's have finalized the QCR format. PG&E's submittal of its Fourth Quarter 2008 QCR is in the final format authorized by Energy Division on December 15, 2008.

Compliance Items

An Attachment (the narrative) with supporting Confidential Appendices conforms to the reformatted QCR and is being submitted to the Energy Division.

The supporting Confidential Appendices are:

[1] PG&E's 2006 Conformed Long-Term Procurement Plan, Cal. P.U.C. Sheet No. 87.

Appendix A – Fourth Quarter 2008 Transactions
Appendix B – Fourth Quarter 2008 Counterparties' Information
Appendix C – Fourth Quarter 2008 Electric Transactions
Appendix D – Fourth Quarter 2008 Natural Gas Transactions
Appendix E – Fourth Quarter 2008 Other Transactions
Appendix F – Fourth Quarter 2008 Key Briefing Packages
Appendix G – Fourth Quarter 2008 RFO Independent Evaluator Reports
Appendix H – Fourth Quarter 2008 New Contracts Executed / Contracts Amended
Appendix I – Summary of Retained Generation Investments Completed During Quarter
Appendix J – System Load Requirements / Conditions
Appendix K – Risk Management Strategy Communication and Management Disclosure
Appendix L – Reasonable Number of Analyses, Models, Description of Models, and How Models Operate
Appendix M – Transactions Subject to Strong Showing

Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, by facsimile or electronically, any of which must be received no later than **February 19, 2009**, which is 20 days after the date of this filing. The protest must state the grounds upon which it is based, including such items as financial and service impact, and should be submitted expeditiously. Protests should be mailed to:

CPUC Energy Division
Tariff Files, Room 4005
DMS Branch
505 Van Ness Avenue
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: jnj@cpuc.ca.gov and mas@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest also should be sent via U.S. mail to (and by facsimile and electronically, if possible) to PG&E at the address shown below on the same date it is mailed or delivered to the Commission:

Brian K. Cherry
Vice President, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-7226
E-mail: PGETariffs@pge.com

Effective Date

In compliance with D.02-10-062, the effective date of this advice letter is **January 30, 2009**.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter excluding the confidential appendices is being sent electronically and via U.S. mail to parties shown on the attached list and the service lists for Rulemaking (R.)01-10-024 and R.04-04-003. Address changes to the General Order 96-B service list should be directed to Rose de la Torre at (415) 973-4716. Send all electronic approvals to PGETariffs@pge.com. Advice letter filings can also be accessed electronically at: **http://www.pge.com/tariffs**.

Brian Cherry /

Vice President - Regulatory Relations

cc: Service List - R.01-10-024, R.04-04-003
PG&E's Procurement Review Group

Attachments

Attachment and Related Confidential Appendices A through N

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY
ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **Pacific Gas and Electric Company (ID U39 M)**

Utility type:	Contact Person: Linda Tom-Martinez
☑ ELC ☑ GAS	Phone #: (415) 973-4612
☐ PLC ☐ HEAT ☐ WATER	E-mail: lmt1@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas
PLC = Pipeline HEAT = Heat WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: **3416-E** **Tier:** 2
Subject of AL: Procurement Transaction Quarterly Compliance Filing (Q4, 2008)

Keywords (choose from CPUC listing): Procurement Compliance

AL filing type: ☐ Monthly ☑ Quarterly ☐ Annual ☐One-Time ☐ Other ______________________________

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: D.02-10-062, D.03-06-076, D.03-12-062

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL[1]: ____________________

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for: Yes. See page 2 of advice letter for the complete list of confidential information.

Confidential information will be made available to those who have executed a nondisclosure agreement: ☐ Yes ☐ No

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: Sharon Tatai (415) 973-2788

Resolution Required? ☐ Yes ☑ No

Requested effective date: **1/30/09** No. of tariff sheets: N/A

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed[1]: N/A

Pending advice letters that revise the same tariff sheets: N/A

Protests, dispositions, and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Tariff Files, Room 4005
DMS Branch
505 Van Ness Ave.,
San Francisco, CA 94102
jnj@cpuc.ca.gov and mas@cpuc.ca.gov

Pacific Gas and Electric Company
Attn: Brian K. Cherry
Vice President, Regulatory Relations
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177
E-mail: PGETariffs@pge.com

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

**DECLARATION OF SHARON K. TATAI IN SUPPORT OF
THE DIVISION OF RATEPAYER ADVOCATES' QUARTERLY
PROCUREMENT TRANSACTION REPORT DATA REQUEST
FOR THE FOURTH QUARTER OF 2008**

I, Sharon K. Tatai, declare:

1. I am a Senior Energy Compliance and Reporting Analyst of the Electric Contracts Management and Settlements Department within the Energy Procurement Department at Pacific Gas and Electric Company (PG&E). I am responsible for the coordination of the quarterly procurement transaction compliance report and related data. In carrying out these responsibilities, I have acquired knowledge of the transactions identified, in PG&E's electric portfolio, which are the subject of this advice letter. I have reviewed PG&E's response to data request from the Division of Ratepayer Advocates (DRA) and was responsible for supervision of the preparation of the related attachments. I am familiar with the information included in this response, and would testify to the facts and representations in this declaration under oath based on personal knowledge, experience, information, and belief.

2. Based on my knowledge and experience, and in accordance with the "Administrative Law Judge's Ruling Clarifying Interim Procedures For Complying With Decision 06-06-066," issued in Rulemaking 05-06-040 on August 22, 2006, I make this declaration seeking confidential treatment for certain information in a specific Master Data Request from the Division of Ratepayer Advocates, GenResourcePlanOIR_DR_DRA_005-2008-Qtr4-Qu02, 03, 04, 05, 06, submitted on January 30, 2009.

3. Attached to this declaration is a matrix identifying the data and information for which PG&E is seeking confidential treatment. The matrix specifies that the material PG&E is seeking to protect constitutes the particular type of data and information listed in Appendix 1 (the "IOU Matrix") of Decision 06-06-066. The matrix also specifies the category or categories

in the IOU Matrix to which the data and information corresponds, and why confidential protection is justified. Finally, the matrix specifies that: (1) PG&E is complying with the limitations specified in the IOU Matrix for that type of data or information; (2) the information is not already public; and (3) the data cannot be aggregated, redacted, summarized or otherwise protected in a way that allows partial disclosure. By this reference, I am incorporating into this declaration all of the explanatory text that is pertinent to my testimony in the attached matrix.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct. Executed on January 30, 2009, at San Francisco, California.

/s/

SHARON K. TATAI

1	PACIFIC GAS AND ELECTRIC COMPANY							
2			Document: GenResourcePlanOIR_DR_DRA_005-2008-Qtr4-Q7-Q10Atch-CONF.xls					
3	IDENTIFICATION OF CONFIDENTIAL INFORMATION PER DECISION 06-06-066							
4	Date: January 30, 2009							
5								
6	**Redaction Reference**	**1) The material submitted constitutes a particular type of data listed in the Matrix, appended as Appendix 1 to D.06-06-066 (Y/N)**	**2) Which category or categories in the Matrix the data correspond to:**	**3) That it is complying with the limitations on confidentiality specified in the Matrix for that type of data (Y/N)**	**4) That the information is not already public (Y/N)**	**5) The data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure (Y/N)**	**PG&E's Justification for Confidential Treatment**	**Length of Time**
7								
8	**Document: GenResourcePlanOIR_DR_DRA_005-2008-Qtr4-Q7-Q10Atch-CONF.xls**							
9	Question 7	Y	Item I, Natural Gas Information, (B) Historical Information (gas), (2) Utility recorded gas procurement and cost information.	Y	N	N	Identification of amounts that contribute to the Monthly Energy Division Report	1 year
10	Question 8	Y	Item I, Natural Gas Information, (B) Historical Information (gas), (2) Utility recorded gas procurement and cost information.	Y	N	N	Identification of amounts that contribute to the Monthly Energy Division Report	1 year
11	Question 9	Y	Item I, Natural Gas Information, (B) Historical Information (gas), (2) Utility recorded gas procurement and cost information.	Y	N	N	Identification of amounts that contribute to the Monthly Energy Division Report	1 year
12	Question 9	Y	Item I, Natural Gas Information, (A) Forecasts (gas), (5) Monthly California Department of Water Resources (DWR) gas position updates, including information about hedging activities.	Y	N	N	Identification of amounts that contribute to the Monthly Energy Division Report	3 years
12	Question 10	Y	Item I, Natural Gas Information, (B) Historical Information (gas), (2) Utility recorded gas procurement and cost information.	Y	N	N	Identification of amounts that contribute to the Monthly Energy Division Report	1 year
13	Question 10	Y	Item I, Natural Gas Information, (A) Forecasts (gas), (5) Monthly California Department of Water Resources (DWR) gas position updates, including information about hedging activities.	Y	N	N	Identification of amounts that contribute to the Monthly Energy Division Report	3 years

PACIFIC GAS AND ELECTRIC COMPANY

PROCUREMENT PLAN COMPLIANCE REPORT

FOR THE FOURTH QUARTER OF 2008

January 30, 2009

List of Attachments

Confidential Attachment A:	Fourth Quarter 2008 Transactions
Confidential Attachment B:	Fourth Quarter 2008 Counterparty Information
Confidential Attachment C:	Fourth Quarter 2008 Electric Transactions
Confidential Attachment D:	Fourth Quarter 2008 Natural Gas Transactions
Confidential Attachment E:	Fourth Quarter 2008 Other Transactions
Confidential Attachment F:	Fourth Quarter 2008 Key Briefing Packages
Confidential Attachment G:	Fourth Quarter 2008 Independent Evaluator Reports
Confidential Attachment H:	Fourth Quarter 2008 New Contracts Executed / Contracts Amended
Confidential Attachment I:	Summary of Retained Generation Investments Completed During Fourth Quarter 2008
Confidential Attachment J:	System Load Requirements / Conditions
Confidential Attachment K:	Risk Management Strategy Communication and Management Disclosure
Confidential Attachment L:	Reasonable Number of Analyses Models, Description of Models, and How Models Operate
Confidential Attachment M:	Transactions Subject to Strong Showing

A. Introduction

As required by Ordering Paragraph 8 of Decision (D.) 02-10-062, and clarified in D.03-06-076, D.03-12-062, D.04-07-028, D.04-12-048 and D.07-12-052, Pacific Gas and Electric Company (PG&E) hereby provides its report demonstrating that its procurement-related transactions during the period October 1, 2008 through December 31, 2008, were in compliance with the latest California Public Utilities Commission (CPUC or Commission)-approved Assembly Bill (AB) 57 Long-Term Procurement Plan (Plan) adopted by the Commission in D.07-12-052, effective December 21, 2007, and were in compliance with the most recent hedging authority as cited in D.07-12-052 and approved on June 26, 2008 by Resolution E-4177.

Material deviations from the LTPP are explained herein or in a separate letter to be filed with this advice letter.

B. Summary

During the Fourth Quarter, PG&E engaged in competitively priced transactions consistent with its Plan. All transactions were conducted using processes specified in the Plan. Any transactions executed with affiliates are disclosed in Confidential Attachment A. All non-investment grade counterparties that PG&E transacted with during the Quarter are shown in Confidential Attachment B, *Counterparty Information*. Furthermore, the top 10 counterparties transacted with by dollar value or volume are also listed in Confidential Attachment B, *Counterparty Information.*

Confidential Attachments C, *Electric Transactions Summary* and D, *Natural Gas Transactions Summary* are summaries of the electric and gas transactions executed during the Quarter. Confidential Attachment E, *Fourth Quarter 2008 Other Transactions*, is a summary of any additional transactions that occurred during the quarter. The quantities shown in these attachments are based on the delivery period specified in the transactions. Therefore, volumes received during the Quarter pursuant to transactions executed in prior quarters are excluded. Also excluded are transactions in the California Independent System Operator's (CAISO) real-time and ancillary services markets, since these transactions are, for the most part, made by the CAISO on behalf of PG&E and are made without regard to the Plan.[1]

C. Master Data Request Documentation

D.02-10-062, Appendix B, as clarified by D.03-06-076, sets forth specific elements to be addressed in this report. Each element is discussed below.

1. Identification of the ultimate decision maker(s) up to the Board level, approving the transactions.

All procurement-related activity during the Quarter was approved and executed either by, or under the direction of Fong Wan, Senior Vice President, Energy Procurement or Roy Kuga, Vice President, Energy Supply, consistent with the delegation of authority effective for the period.

2. The briefing package provided to the ultimate decision maker.

The "decision-maker" for a particular contemplated transaction depends on many factors, including term, volume, notional value, etc. For many of the transactions during the Quarter, the "decision-maker" was a gas or power transaction employee executing transactions (e.g., day-ahead or hour-ahead power purchases and sales) per an established plan or to achieve a particular objective (such as balancing the portfolio supply and demand). For such transactions, briefing packages are not prepared. Briefing packages prepared during the Quarter for large or unusual transactions that required senior management approval are listed in Confidential Attachment F. These briefing packages are included in the workpapers.

In addition, copies of presentations made by PG&E to its Procurement Review Group (PRG) during the quarter are included in Confidential Attachment F, *Fourth Quarter 2008 Key Briefing Packages*. To the extent that senior management decision maker briefing packages are the same as presentations made to the PRG, presentations are marked to reflect this fact.

[1] All CAISO real-time transactions are excluded from the Quarterly Compliance Report (QCR) process; other real-time transactions should be included, if applicable.

3. Description of and justification for the procurement processes used to select the transactions.[2]

a) Electric

Description of Procurement Processes

The approved procurement processes used during the Quarter were as follows:

- California Independent System Operator (CAISO) 2009 Congestion Revenue Rights (CRR) Allocation and Auction Process – PG&E participated in the CAISO's CRR release process to procure 2009 CRRs in Tiers 2, 3, and the Auction. PG&E also procured Long-Term (LT) CRRs in Tier LT.
- Request for Offers (RFO) - Resource Adequacy (RA) – PG&E issued an RFO to purchase and sell system and local RA June 25, 2008. The first phase of the RFO, as described in the Quarterly Procurement Transaction Compliance Report, Third Quarter 2008, was completed July 31, 2008 and the second phase of the procurement was completed on October 31 2008.
- RFO - Price Hedges – PG&E issued an RFO for Fixed for Floating price hedges in compliance with Resolution E-4164. PG&E entered into fixed for floating swaps to hedge the exposure to the North of Path 15 (NP-15) electricity prices associated with the Power Purchase Agreement (PPA) for the period of November 2008 through December 2010.
- Voice Brokers – PG&E continued the use of voice and broker-markets for non-standard products, such as trading in the day-ahead market for individual hours, blocks or strips of hours, on specific days of the week during Fourth Quarter 2008.
- Electronic Exchanges – PG&E engaged in electronic broker market transactions to manage its physical net open position and to participate in economic transactions designed to reduce ratepayer's exposure to market volatility. Transactions include forward transactions with deliveries starting within the next quarter and up to one

[2] Electricity and gas products can be separated or combined at the discretion of the investor-owned utility (IOU).

quarter in duration, monthly, balance of month (BOM), day-ahead, and hour-ahead transactions.

b) Justification for Procurement Processes[3]

For competitive solicitations, describe the process used to rank offers and select winning bid(s).

- Resource Adequacy RFO – RA offers are ranked by price separately for system RA, Bay Area local RA and Other Area local RA and by the month of the offer. Each shortlisted offer allowed selection of RA for individual months in conformance with the RFO protocols. Winning offers were those offers with the lowest prices and the amounts selected were consistent with PG&E's identified need.
- Fixed-for-Floating Hedge RFO – On October 28, 2008, PG&E conducted a Fixed-for-Floating Financial Swap RFO to replace hedges that PG&E terminated due to counterparty credit concerns. Originally, the July 9, 2008 Fixed-for-Floating Hedge RFO was separately filed through Advice Letter 3334-E and approved on October 17, 2008. Only the remaining full contract months of November 2008, December 2008, Calendar Year 2009 and Calendar Year 2010 were re-hedged through the October 28 replacement Fixed-for-Floating Hedge RFO. Fifteen participants responded to PG&E's October 28 Fixed-for-Floating Hedge RFO. Four products were selected from three counterparties based on price and all transactions were financially cleared through Intercontinental Exchange (ICE).

For other transactional methods, provide the documentation supporting the selection of the chosen products.

- California Independent System Operator (CAISO) 2009 Congestion Revenue Rights (CRR) Allocation & Auction Process – PG&E determined that with the implementation of Market Redesign and Technology Upgrade (MRTU), the Utility

[3] If the justification is already described in the IOU's Plan, it is acceptable to make a notation of where this information can be found in the Plan. Any deviations from the plan must be discussed with the PRG, and a reference to the specific PRG presentations in the Attachments should be noted here.

would be exposed to congestion risk on the electric transmission grid as power is delivered from its generating resources and contracts to serve bundled customer load. As a result, PG&E participated in the CAISO's 2009 Annual Allocation & Auction process to obtain CRRs to mitigate this risk. PG&E sought CRRs to fulfill the following objectives:

– Narrow the distribution of the Utility's energy procurement costs due to electric transmission congestion as measured by the electric To-expiration-Value-at-Risk (TeVaR); and
– Reduce the expected congestion costs that the Utility would incur in its operations.

Furthermore, PG&E sought only CRRs that were consistent with the Utility's assessment of congestion between its resources and load, rather than seeking the CRRs with the highest market value irrespective of the Utility's needs. This assessment included existing and executed supply arrangements, which were then applied to the 2009 CRR allocation and auction process. In all its detailed analysis and CRR selection strategy, PG&E used Locational Marginal Pricing (LMP) congestion prices and risk characteristics from CAISO's LMP3C study and the 2008 CRR auction as MRTU had not been implemented to date and hence historical or forward LMP congestion values were unavailable.

- Voice and On-Line Brokers – The dynamic environment of the short-term electric markets requires that traders have the ability to transact when market conditions are within parameters described by a particular trading strategy. The structure that allows for trading in this type of environment is built around standard enabling agreements such as Edison Electric Institute (EEI) and Western System Pool Power (WSPP), counterparties that can be contacted directly, and brokers that solicit bids from potential buyers and offers from potential sellers that allows for market transparency and enhances market efficiency. When a buyer's bid and seller's offer match, a transaction can be executed. The standing enabling agreement between the counterparties allows the transaction to be executed, and the broker (voice or on-line) matches the buyer with the seller. Soliciting bids and offers in this fashion is what constitutes the electric market. Prices vary during a trading session as buyers and sellers adjust their prices in response to items such as electric system conditions, market responses, industry news and weather forecasts. As a result, it is common to see trades executed at different prices over the course of a trading session. The key aspect is that the transaction was executed within the parameters described by the trading strategy.

- <u>Independent Evaluator Reports</u> – For all solicitations that involve affiliate transactions or utility-owned or utility turnkey bids and for all competitive RFOs seeking products greater than two years in length (and subject to QCR filings) regardless of the bidders,[4] list the Independent Evaluator (IE) reports in Attachment G, *RFO Independent Evaluator Reports,* along with a list of workpaper citations. For Fourth Quarter 2008, PG&E executed an RFO, which required an Independent Evaluator Report.
- <u>Transactions Subject to a Strong Showing</u> – For Fourth Quarter 2008, PG&E executed transactions that were subject to a strong showing as per the standard in D.07-12-052 and are identified in Confidential Attachment M.
- <u>Procurement Review Group Presentations</u> – Presentations of those activities presented to the PRG are in Confidential Attachment F.
- <u>Executed Agreements</u> – The executed agreements are in Confidential Attachment H, *Fourth Quarter 2008 New Contracts Executed / Contracts Amended.*

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[4] D.08-11-008.

c) Natural Gas

Description of Procurement Processes

The approved procurement processes used during the Quarter were as follows:

- Electronic Exchanges - Commodity Purchases/Sales – PG&E bought and sold physical natural gas on the ICE and the ICE Natural Gas Exchange (NGX) physical clearing service. ICE is an electronic system that matches buyers and sellers of natural gas products. Once buyer and seller are matched, ICE trades become bilateral trades. ICE/NGX trades are cleared by NGX rather than bilateral. Transactions include forward transactions with deliveries starting within the next quarter and up to one quarter in duration, monthly, BOM, day-ahead, and same-day.
- Electronic Exchanges - Gas Hedges – PG&E executed hedges (swaps and options) directly on the ICE, and cleared through exchanges (ICE or the New York Mercantile Exchange (NYMEX)). ICE and NYMEX provide access to anonymous bids and offers establishing both a liquid and robust market for financial products, and a benchmark for bilateral products. These products include Henry Hub swaps and options, and basis swaps against the industry benchmark indices, including Canadian Gas Price Reporter (CGPR), Gas Daily, Natural Gas Intelligence (NGI) and Inside Federal Energy Regulatory Commission (FERC).
- Bilateral - Commodity Purchases/Sales – PG&E buys and sells some gas directly with counterparties in the bi-lateral market. Day-ahead gas is traded at fixed prices and Gas Daily index. Term gas (balance of month and longer) is purchased at fixed prices, daily index (Gas Daily) or bidweek index (CGPR, NGI, and Inside FERC).
- Bilateral - Gas Hedges – PG&E executed hedges (swaps and options) directly with bilateral counterparties. The bi-lateral gas market provides access to a wide variety of standard and custom products including Henry Hub swaps and options, and basis swaps against the industry benchmark indices, including CGPR, Gas Daily, NGI and Inside FERC.

- Voice Brokers - Gas Hedges – PG&E executed hedges (swaps and options) through voice brokers that resulted in bi-lateral and exchange-cleared trades. Brokers provide access to anonymous bids and offers from both bi-lateral parties and cleared counterparties. After a broker matches a buyer and a seller in a trade, the parties will determine whether the trade will be cleared bi-laterally or cleared through NYMEX or ICE. The broker market trades the same financial products as the bi-lateral market.
- RFO - Gas Storage – PG&E issued an RFO for firm natural gas storage capacity in Fourth Quarter. The RFO, which included participation of an Independent Evaluator, resulted in a storage service agreement between PG&E and a storage service provider. That agreement was submitted to the Commission for approval via Advice Letter on December 30, 2008 (AL 3389-E).

d) Justification for Procurement Processes

For competitive solicitations, describe the process used to rank offers and select winning bid(s).

- RFO - Gas Storage – PG&E used an RFO to acquire firm storage capacity because of the term of the transaction and because another utility department provides gas storage service and was a likely bidder in the RFO. In addition, PG&E used an Independent Evaluator as required by D.07-12-052.

For other transactional methods, provide the documentation supporting the selection of the chosen products.

- Electronic Exchanges - Commodity Purchases/Sales – ICE and ICE/NGX provide access to anonymous bids and offers establishing both a liquid and robust market for physical products, and benchmarks for bilateral products. PG&E makes extensive use of ICE and ICE/NGX for day-ahead and same-day gas.
- Electronic Exchanges - Gas Hedges – ICE and NYMEX provide access to anonymous bids and offers establishing both liquid and robust markets for financial

products, and benchmark for bilateral products. PG&E makes extensive use of both exchanges for financial swaps and options.

- Bilateral - Commodity Purchases/Sales – PG&E uses the bi-lateral markets for physical gas trading to supplement spot gas trades on ICE/NGX and for delivery periods not actively traded on ICE or ICE/NGX (such as term gas). For spot gas, PG&E uses the real-time ICE bid/ask prices and the ICE weighted average price as a benchmark for trading. For term gas, PG&E trades at either Gas Daily or a bidweek index (CGPR, NGI, or Inside FERC).
- Bilateral - Gas Hedges – PG&E uses the bi-lateral markets for gas financial trading to supplement trades through ICE, NYMEX and voice brokers. Bi-lateral markets are beneficial when trading large positions, trading products that are not active on ICE or NYMEX, and when trading for delivery periods that are several years forward. When trading in the bi-lateral market, PG&E uses real-time ICE and NYMEX bid/ask and last trade prices, broker quotes, and offers from multiple counterparties as benchmarks for trading.
- Voice Brokers - Gas Hedges – PG&E uses voice brokers for gas financial trading to supplement trades directly through ICE, NYMEX. Voice brokers are beneficial because they are anonymous, offer a wide range of counterparties, and provide critical price discovery across a wide variety of products. PG&E primarily uses voice brokers to trade products that are less liquid on ICE or NYMEX. PG&E tends to use ICE or NYMEX clearing services in conjunction with voice brokers in order to get the best prices—through clearing we can be matched with any counterparty without having to be concerned about counterparty credit risk. When trading through voice brokers, PG&E uses real-time ICE and NYMEX bid/ask and last trade prices as benchmarks for trading. In addition, voice brokers provide live bids and offers from anonymous buyers and sellers, very similar to the electronic exchanges.

- Independent Evaluator Reports – For all solicitations that involve affiliate transactions or utility-owned or utility turnkey bids and for all competitive RFOs seeking products greater than two years in length (and subject to QCR filings) regardless of the bidders,[5] list the IE reports in Attachment G, *Fourth Quarter 2008 Independent Evaluator Reports*, along with a list of workpaper citations. For Fourth Quarter 2008, PG&E held an RFO for Gas Storage and has included the Independent Evaluator Report associated with that RFO in Confidential Attachment G.
- Transactions Subject to a strong Showing – For Fourth Quarter 2008, PG&E did not execute transactions that were subject to a strong showing as per the standard in D.07-12-052.
- Procurement Review Group Presentations – Activities was presented to the PRG and the presentations are in Confidential Attachment F.
- Executed Agreements – The executed agreements are in Confidential Attachment H, *Fourth Quarter 2008 New Contracts Executed / Contracts Amended.*

e) Other Commodities

This is not applicable to PG&E for Fourth Quarter 2008.

4. Explanation/justification for the timing of the transactions.

Throughout the Quarter, PG&E attempted to enter into electric transactions needed to match forecast supply and demand ahead of the deadline for submitting final hour-ahead schedules to the CAISO. This objective was achieved by gradually reducing the forecast open (i.e., short or long) energy positions through the use of [the following product types are illustrative] month-ahead, balance-of-month, day-ahead, and hour-ahead transactions, etc., employing both standard and non-standard products. When selecting electric transactions to match forecast supply and demand, the best-priced bids/offers were selected first (merit-order selection) among

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5 D.08-11-008.

those available for the required products at the time of the transaction, subject to credit and other limitations and operational constraints. Such operational constraints include the local area reliability requirements of the CAISO, as set forth in D.04-07-028.

The timing of physical gas transactions was largely driven by the requirement to ensure that the delivery of fuel to the gas-fired electric facilities managed by PG&E matched such facilities' forecast burn. The timing of financial gas transaction was specified in PG&E's approved hedging plan.

Detailed explanation/justification for the timing of the transactions is included in the workpapers Confidential Attachment J.

5. Discussion of the system load requirements/conditions underlying the need for the Quarter's transactions.

a) Near-Term Planning and Procurement

As prescribed by D.03-12-062, PG&E's near-term planning process is designed to reduce the net open position prior to the operating month to within 5 percent of expected requirements. PG&E develops a near-term analysis of its resource position (intra-month through several months forward) using an optimization model, which solves for lowest cost by optimizing a mix of resources to meet requirements, including dispatchable California Department of Water Resources (CDWR) contracts, Utility Retained Generation (URG) resources (for simplicity, Power Purchase Agreements with dispatchability are included in this category (e.g., Crockett)), Tolling Arrangements with "Merchant Plants" (e.g., Dynegy and Mirant), and market purchases, while accounting for all resource requirements and constraints (must-run, must-take and operating constraints).

Term and BOM purchases and sales are transacted to close the net open position and to reduce PG&E's reliance on the spot market. PG&E also conducts locational basis spread transactions to manage its position in different zones. After identifying transactions required to meet the must-run, must-take and operating constraints, PG&E

considers "economic" transactions that involve decisions regarding dispatchable units and market purchases/sales. The decision to engage in "economic" transactions is more complex and depends on several quantitative and subjective factors. "Economic" transactions are conducted using information and data regarding system conditions, market prices and options available at the time of the decision. While potentially, attractive, "economic" transactions that reduce ratepayer volatility inherently include risks that must be considered, such as: (a) sharp swings in electric prices; (b) changes in production costs due to market dynamics; or (c) system changes, which may result in these transactions becoming more, or less, valuable, during the operating period or possible losses on hedge transactions. Additionally, changes in load or expected generation may result in having to buy (or sell) energy in the day-ahead or real-time markets at a cost greater than the revenue earned (or a price less than paid) in the forward transaction. Factors that go into the decision to engage in these transactions include (but are not limited to) the forecasted level of short/long energy during the forecasted period, sensitivity to changes in market price, reserve margins and demand volatility.

b) Day-Ahead Planning and Procurement

In day-ahead planning, PG&E strives to balance projected energy requirements with available resources and provide hour-ahead traders and real-time operators with appropriate resources in order to respond to changes that may occur in system requirements subsequent to day-ahead trading. On a daily basis, PG&E conducts a least-cost analysis to determine unit dispatch and market transactions to meet energy and ancillary services requirements. This process integrates all regulatory, environmental, safety and legal requirements.

During Fourth Quarter 2005, a new requirement was included in PG&E's least cost dispatch process. The CAISO gained FERC approval on September 2005, to amend its operating tariffs (i.e., "Amendment No. 72"). This Amendment requires scheduling coordinators to schedule at least 95 percent of its load in the day-ahead time frame. On February 23, 2007, CAISO filed a further amendment to Amendment No. 72 to relax the existing minimum load-scheduling requirement during off-peak hours from 95 to 75 percent of each Scheduling Coordinator's (SC) demand forecast and to establish specific exemptions to account for small or infrequent scheduling deviations. FERC accepted CAISO's filing, effective April 26, 2007.

PG&E's day-ahead planning and procurement incorporates weather-adjusted load forecasts, resource availability, dispatch costs and current electric market prices. The results of this analysis will determine the supply mix of CDWR contracts allocated to PG&E, PG&E-owned or controlled thermal and hydro generation, Qualifying Facilities (QF) and existing bilateral contracts, and market purchases. In determining its trading strategy, PG&E will dispatch resources whose variable costs are below market price, purchase the remainder of energy at market price or, alternatively, sell excess energy in the market.

While PG&E strives to go into the hour-ahead trading market and real-time operations with schedules as close to balanced as practicable, PG&E must also anticipate and plan for potential schedule changes. Between the day-ahead and hour-ahead market timeframes, changes in system conditions such as weather, transmission and resource availability are inevitable. Further, resources are "lumpy" when compared to load; hence, it is not always possible to perfectly balance schedules in every hour, which often results in excess energy during some hours while leaving PG&E short during other hours. To address these concerns, PG&E has contracted for resources that provide intra-day flexibility that will help to match changes in electric demand—such as sudden weather variations and other occurrences—that cause loads and resources to vary from day-ahead forecasts. These contracts contribute to system reliability as well as reduce incremental, decremental and other costs associated with the changes between day-ahead and hour-ahead forecasted conditions, and thereby reduces costs overall to consumers. The specific agreements have been addressed in PG&E's Q2-2005 Quarterly Procurement Compliance advice letter (Advice 2693-E).

In addition, PG&E's daily procurement process incorporates opportunities available in the day-ahead market as well as its must-run and must-take resource requirements by purchasing or selling energy for individual hours or small blocks of hours.

PG&E actively participates in the daily energy market using a combination of brokered transactions, exchange-based transactions and direct transactions with counterparties. Day-ahead trading generally occurs between 5:30 a.m. and 7 a.m. on the day prior to the operating day. The day-ahead market continues to evolve in terms of participants, products and characteristics. In addition to "standard" on-peak and off-peak "packages" of multiples of 25-megawatt (MW) blocks of energy with specified delivery points, the day-ahead market has became more liquid in the trading of non-standard products, with individual-hourly transactions as well as custom packages of hours.

c) Hour-Ahead Planning and Procurement

"Hour-ahead" planning and procurement is somewhat of a misnomer since it effectively begins at the conclusion of day-ahead trading market. As day-ahead analysis and trading occurs early in the morning prior to the operating day, there can be substantial changes to operating day requirements. Additionally, PG&E prepares weather-adjusted load forecasts throughout the day in order to determine if changes in generation or system operation are required. Further, unit outages and transmission outages and constraints may also affect resource requirements prior to real-time. To balance its portfolio during this time frame, PG&E's hour-ahead staff has several resources at its disposal. Generation, including hydro, the Helms units, certain QF generators, and certain CDWR contracts, may be adjusted at unique dispatch prices. Hour-ahead personnel will then optimize the portfolio, and based on operating requirements and market opportunity costs will decide if available generating resources should be adjusted to minimize system costs, and whether market transactions are required or beneficial.

The hour-ahead market, while active, is far less transparent and dynamic than that of the day-ahead market. As there are few brokers operating in this market and limited electronic exchange opportunities, the bulk of transactions are bilateral in nature. PG&E constantly participates in the hour-ahead market to optimize its generation and market transactions to reduce costs.

d) Locational Spreads

During Fourth Quarter 2008, PG&E engaged in day-ahead locational spread transactions, authorized by PG&E's approved Plan, in order to manage its position, reduce risk of congestion costs, and maximize the value of its purchased firm transmission rights assets.

e) PG&E-Owned Generation Conditions During Fourth Quarter 2008

Dry conditions continued in the Fourth Quarter with only 76.7 percent of normal precipitation. PG&E's conventional hydroelectric resources used natural runoff and withdrawals from storage to meet daily peak loads and to provide ancillary service reserves.

Helms Pumped Storage Project was used to meet peak daily loads and provide ancillary service reserves. Helms pumped throughout the quarter as system conditions and economics allowed. Pumping was limited by transmission work and unit maintenance. Helms 1 and 2 were unavailable briefly for minor maintenance and inspections. Helms 3 continued a major overhaul which began at the end of September.

Significant planned maintenance on conventional hydro in the quarter included work on Balch 2 (54 MW), Chicago Part (41.5 MW), Colgate Units 1 & 2 (175 MW each), Cresta Units 1 & 2 (35 MW each), Donnells (67.5 MW), Drum 2 (49.5 MW), Dutch Flat 2 (26 MW), Electra Units 1, 2 & 3 (31 MW, 31 MW, and 37 MW, respectively), Haas Units 1 & 2 (72 MW each), Kerckhoff 2 (155 MW), Middle Fork Units 1 & 2 (68 MW each), Pit 1 Units 1 & 2 (31 MW each), Pit 4 Units 1 & 2 (47 MW each), Pit 5 Unit 2 (40 MW), Poe Units 1 & 2 (60 MW each), Ralston (88 MW), Rock Creek Units 1 & 2 (56 MW each), Stanislaus (91 MW), and Tiger Creek Units 1 & 2 (30 MW each.)

Significant forced outages on conventional hydro during the quarter included: Bucks Creek Units 1 & 2 (58 MW total) for seven days due to a bushing leak, and James Black Units 1 & 2 (172 MW total) 65 days due to penstock leak.

For PG&E's retained fossil generation, Humboldt Unit 2 (conventional steam, 53 MW) was off-line seven days for boiler maintenance. Humboldt Unit 1 (conventional steam, 52 MW) was forced out for six days due to a tube leak.

Diablo Canyon Unit 1 was de-rated to half load for approximately 34 hours due to intake screen clogging and feedwater pump testing. Diablo Canyon Unit 2 was forced out of service for approximately 39 hours due to intake screen clogging.

Confidential discussion of the monthly system conditions is included in Confidential Attachment J, *System Load Requirements / Conditions.*

6. Discussion of how the quarter's transactions meet the goals of the risk management strategy reflected in the Plan.

Throughout the Quarter, PG&E executed transactions in accordance to its risk management strategy and approved Plan. A list of information regarding CRT notifications and management is included in Confidential Attachment K, *Risk Management Strategy Communication and Management Disclosure*.

PG&E executed Hedges in accordance with its approved revised Plan per Resolution E-4177. Financial hedges are executed directly on the ICE, through a broker and cleared through an exchange (ICE or the NYMEX) or directly with a bilateral counterparty. ICE and the brokers provide access to anonymous bids and offer from both bilateral parties and cleared counterparties establishing both a liquid and robust market for financial products, and a benchmark for bilateral products. These products include Henry Hub swaps and options, and basis swaps against the industry benchmark indices, including CGPR, Gas Daily, NGI and Inside FERC.

A list of information regarding CRT notifications and management is included in Confidential Attachment K, *Risk Management Strategy Communication and Management Disclosure.*

7. Copy of each contract.

A list of contracts executed and/or modified by PG&E during the Quarter are included in Confidential Attachment H. Copies of these contracts that were not separately Advice-filed are also included in Confidential Attachment H.

Master agreements are listed in Confidential Attachment H.

All Final RFO contracts subject to QCR filings along with the IE reports should be reported in Confidential Attachments H and G, respectively.

8. The valuation results for the contract(s) (for contracts of three months or greater duration).

PG&E provides the valuation results for the contracts filed via this QCR in Confidential Attachment H, with details of the valuation method contained in the workpapers.

9. An electronic copy of any data or forecasts used to analyze the transactions.

Because transaction personnel are continuously monitoring a wide range of market information on a 24-hour-per-day, 7-day-per-week basis, it is not feasible to provide all the data and forecasts used to analyze all potential and executed transactions. However, key analysis data utilized during the Quarter is contained in the workpapers in Confidential Attachment K.

10. Provide a reasonable number of analyses requested by the Commission or the Procurement Review Group (PRG) and provide the resulting outputs.

To the extent any analyses requested by the Commission or PRG during the Quarter were not already included as a part of PG&E’s response to Items 1 through 9 above, such additional analyses are contained in the workpapers. For any such analyses, the models used, analytic processes, and how the models operate are described in Confidential Attachment L, *Reasonable Number of Analyses, Models, Description of Models, and How Models Operate.*

- PG&E has included analysis for the CRR transactions and a description for RA RFO in Appendix L.

11. Any other information sought by the Commission under the Public Utilities Code.

To the extent the Commission requested information for the Quarter not already provided in the Master Data Request, such information is included in the workpapers.

For Fourth Quarter, this does not apply to PG&E.

D. Additional Reporting Requirement Pursuant to Decision 07-01-039

As required by Ordering Paragraph 12 of D.07-01-039, PG&E has included in Confidential Attachment I, *Summary of Retained Generation Investments,* investments in retained generation that were completed during the Quarter, as well as any multiple contracts of less than five years with the "same supplier, resource or facility." (Section 5.1, p. 152.)

PG&E does not have any agreements to disclose for Fourth Quarter 2008 applicable to this decision.

E. Cost Allocation Mechanism

If applicable, the costs and revenues associated with Cost Allocation Mechanism (CAM)-elected resources should be identified. The IE report for CAM-elected resources should be included in Confidential Attachment G, *Fourth Quarter Independent Evaluator Reports*.

For Fourth Quarter 2008, PG&E did transact for any CAM-elected resources.

PG&E Gas and Electric
Advice Filing List
General Order 96-B, Section IV

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Alcantar & Kahl
Ancillary Services Coalition
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Meek, Daniel W.
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Mirant
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New United Motor Mfg., Inc.
Norris & Wong Associates
North Coast SolarResources
Northern California Power Association
Occidental Energy Marketing, Inc.
OnGrid Solar
PPL EnergyPlus, LLC
Pinnacle CNG Company
Praxair
R. W. Beck & Associates
RCS, Inc.
RMC Lonestar
Recon Research
SCD Energy Solutions
SCE
SESCO
SMUD
SPURR
Santa Fe Jets
Seattle City Light
Sempra Utilities
Sequoia Union HS Dist
Sierra Pacific Power Company
Silicon Valley Power
Smurfit Stone Container Corp
Southern California Edison Company
St. Paul Assoc.
Sunshine Design
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TFS Energy
Tabors Caramanis & Associates
Tecogen, Inc.
Tiger Natural Gas, Inc.
Tioga Energy
TransCanada
Turlock Irrigation District
U S Borax, Inc.
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Verizon
Wellhead Electric Company
Western Manufactured Housing Communities Association (WMA)
White & Case
eMeter Corporation