

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



December 3, 2009

**Advice Letter 3501-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 (Q2, 2009)**

Dear Mr. Cherry:

Advice Letter 3501-E is effective July 30, 2009.

Sincerely,

A handwritten signature in blue ink, appearing to read "Julie A. Fitch".

Julie A. Fitch, Director  
Energy Division



July 30, 2009

**Advice 3501-E  
(Pacific Gas and Electric Company ID U 39 E)**

Public Utilities Commission of the State of California

**Subject: Procurement Transaction Quarterly Compliance Filing (Q2, 2009)**

Pacific Gas and Electric Company (PG&E) hereby submits to the California Public Utilities Commission (“Commission” or “CPUC”) its compliance filing for the second quarter of 2009, pursuant to PG&E’s Conformed 2006 Long-Term Procurement Plan, submitted in Advice 3233-E and amended by Advice 3233-E-A. PG&E’s submittal of this Procurement Transaction Quarterly Compliance Report (QCR) for record period April through June 2009 (Q2-2009)<sup>1</sup> is in accordance with Decision (D.) 03-12-062, Ordering Paragraph 19, which requires that the Quarterly Procurement Plan Compliance Reports be submitted within 30 days of the end of the quarter.

**Background**

D.07-12-052 directed Energy Division and the Investor Owned Utilities (IOUs) 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 IOUs have finalized the QCR format. PG&E’s submittal of its Second Quarter 2009 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:

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<sup>1</sup> PG&E’s 2006 Conformed Long-Term Procurement Plan, Cal. P.U.C. Sheet No. 87.

- Appendix A – Second Quarter 2009 Transactions
- Appendix B – Second Quarter 2009 Counter-Party Information
- Appendix C – Second Quarter 2009 Electric Transactions
- Appendix D – Second Quarter 2009 Natural Gas Transactions
- Appendix E – Second Quarter 2009 Other Transactions
- Appendix F – Second Quarter 2009 Key Briefing Packages
- Appendix G – Second Quarter 2009 Independent Evaluator Reports
- Appendix H – Second Quarter 2009 New Contracts Executed/Contracts Amended
- Appendix I – Summary of Retained Generation Investments Completed During Second Quarter 2009
- 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 **August 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: [jj@cpuc.ca.gov](mailto:jj@cpuc.ca.gov) and [mas@cpuc.ca.gov](mailto: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 accordance with D.02-10-062, the effective date of this advice letter is **July 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 San Heng at (415) 973-2640. Send all electronic approvals to PGETariffs@pge.com. Advice letter filings can also be accessed electronically at: <http://www.pge.com/tariffs>.

A handwritten signature in cursive script that reads "Brian Cheng / mt".

Vice President - Regulatory Relations

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

Attachments and Related Confidential Appendices A through M

# 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:

ELC       GAS  
 PLC       HEAT       WATER

Contact Person: Linda Tom-Martinez

Phone #: (415) 973-4612

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) #: **3501-E**

**Tier: 2**

Subject of AL: Procurement Transaction Quarterly Compliance Filing (Q2, 2009)

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<sup>1</sup>: \_\_\_\_\_

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: John Whitlow (415) 973-1127

Resolution Required?  Yes  No

Requested effective date: 7/30/09

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<sup>1</sup>: 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](mailto:jnj@cpuc.ca.gov) and [mas@cpuc.ca.gov](mailto: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](mailto:PGETariffs@pge.com)**

**ADVICE LETTER FILING OF  
PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)**

**DECLARATION OF JOHN R. WHITLOW IN SUPPORT OF ADVICE LETTER  
FILING 3501-E, THE SECOND QUARTER 2009 QUARTERLY PROCUREMENT  
TRANSACTION COMPLIANCE REPORT**

I, John R, Whitlow, declare:

1. I am a Senior Energy Compliance and Reporting Analyst of the Energy Procurement and Policy Analysis 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 advice filing and was responsible for supervision of the preparation of narrative and 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 attachment in Advice Letter 3501-E, submitted on July 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 July 30, 2009, at San Francisco, California.

/s/

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JOHN R. WHITLOW

1	<b>PACIFIC GAS AND ELECTRIC COMPANY</b>							
2	<b>Document: Advice 3501-E</b>							
3	<b>IDENTIFICATION OF CONFIDENTIAL INFORMATION PER DECISION 06-06-066</b>							
4	<b>Date: July 30, 2009</b>							
5								
6	<b>Redaction Reference</b>	<b>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)</b>	<b>2) Which category or categories in the Matrix the data correspond to:</b>	<b>3) That it is complying with the limitations on confidentiality specified in the Matrix for that type of data (Y/N)</b>	<b>4) That the information is not already public (Y/N)</b>	<b>5) The data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure (Y/N)</b>	<b>PG&amp;E's Justification for Confidential Treatment</b>	<b>Length of Time</b>
7	Confidential Attachment A	Y	Page 13, Item VI, Open Net Position (Electric)	Y	N	N	Reveals PG&E's position in the energy procurement market. Identification of strategies-leading to transactions that close our net open position.	3 yrs
8			Page 2, Item I.A.4 - Long-term fuel (gas) buying and hedging plans; Page 3, Item II.B.2 Utility recorded gas procurement and cost information	Y	N	N	Identification of hedging strategies.	3 yrs
9	Confidential Attachment B	Y	Under Public Utilities Code Section 583 and General Order 66-C	N	N	N	Strategies provide specific strategy that PG&E employs for closing its net open position, including specific planned purchasing strategy.	No quantification in GO 66-C
10	Confidential Attachment C	Y	Page 13, Item VI, Open Net Position; (Electric)	Y	N	N	Reveals PG&E's position in the energy procurement market. Identification of strategies-leading to transactions that close our net open position.	3 yrs
11	Confidential Attachment D	Y	Page 2, Item I.A.4 - Long-term fuel (gas) buying and hedging plans; Page 3, Item II.B.2 Utility recorded gas procurement and cost information	Y	N	N	Identification of hedging strategies.	3 yrs
12	Confidential Attachment E	Y	Page 22, Item XIII, Energy Division Monthly Data Request (electric)	Y	N	N	Reveals PG&E's position in the RA procurement market. Identification of strategies-leading to transactions that close our net open RA position.	

1	<b>PACIFIC GAS AND ELECTRIC COMPANY</b>							
2	<b>Document: Advice 3501-E</b>							
3	<b>IDENTIFICATION OF CONFIDENTIAL INFORMATION PER DECISION 06-06-066</b>							
4	<b>Date: July 30, 2009</b>							
5								
6	<b>Redaction Reference</b>	<b>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)</b>	<b>2) Which category or categories in the Matrix the data correspond to:</b>	<b>3) That it is complying with the limitations on confidentiality specified in the Matrix for that type of data (Y/N)</b>	<b>4) That the information is not already public (Y/N)</b>	<b>5) The data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure (Y/N)</b>	<b>PG&amp;E's Justification for Confidential Treatment</b>	<b>Length of Time</b>
13	Confidential Attachment F	Y	Page 15, Section VII - Bilateral Contract Terms and Conditions Electric, Section B - Contracts and power purchase agreements between utilities and non-affiliated third parties (except RPS) and Public Utilities Code 583 and General Order 66-C	Y	N	N	Presentations specifically relate to bilateral agreements between PG&E and counterparties	3 yrs
		Y	Page 2, Item I.A.4 - Long-term fuel (gas) buying and hedging plans; Page 3, Item II.B.2 Utility recorded gas procurement and cost information	Y	N	N	Identification of hedging strategies and transactions	3 yrs
14	Confidential Attachment G		N/A					
15	Confidential Attachment H	Y	Page 15, Section VII - Bilateral Contract Terms and Conditions Electric, Section B - Contracts and power purchase agreements between utilities and non-affiliated third parties (except RPS) and Public Utilities Code 583 and General Order 66-C	Y	N	N	Specific agreements related to price, counterparty, and volumes	3 yrs
16	Confidential Attachment I		N/A					

1	<b>PACIFIC GAS AND ELECTRIC COMPANY</b>							
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4	<b>Date: July 30, 2009</b>							
5								
6	<b>Redaction Reference</b>	<b>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)</b>	<b>2) Which category or categories in the Matrix the data correspond to:</b>	<b>3) That it is complying with the limitations on confidentiality specified in the Matrix for that type of data (Y/N)</b>	<b>4) That the information is not already public (Y/N)</b>	<b>5) The data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure (Y/N)</b>	<b>PG&amp;E's Justification for Confidential Treatment</b>	<b>Length of Time</b>
17	Confidential Attachment J	Y	Page 22, Item XIII, Energy Division Monthly Data Request (electric)	Y	N	N	Identification of amounts that contribute to the Monthly Energy Division Report and identification	
		Y	Page 2, Item I.A.4 - Long-term fuel (gas) buying and hedging plans; Page 3, Item II.B.2 Utility recorded gas procurement and cost information	Y	N	N	Identification of hedging strategies.	3 yrs
18	Confidential Attachment K	N	Under Public Utilities Code Section 583 and General Order 66-C	N	N	N	Strategies provide specific strategy that PG&E employs for closing its net open position, including specific planned purchasing strategy.	No quantification in GO 66-C
19	Confidential Attachment L	N	Under Public Utilities Code Section 583 and General Order 66-C	N	N	N	Strategies provide specific strategy that PG&E employs for closing its net open position, including specific planned purchasing strategy.	No quantification in GO 66-C
20	Confidential Attachment M	N	Under Public Utilities Code Section 583 and General Order 66-C	N	N	N	Strategies provide specific strategy that PG&E employs for closing its net open position, including specific planned purchasing strategy.	No quantification in GO 66-C

**PACIFIC GAS AND ELECTRIC COMPANY**  
**PROCUREMENT PLAN COMPLIANCE REPORT**  
**FOR THE SECOND QUARTER OF 2009**

**July 30, 2009**

## **List of Attachments**

- Confidential Attachment A: Second Quarter 2009 Transactions
- Confidential Attachment B: Second Quarter 2009 Counterparty Information
- Confidential Attachment C: Second Quarter 2009 Electric Transactions
- Confidential Attachment D: Second Quarter 2009 Natural Gas Transactions
- Confidential Attachment E: Second Quarter 2009 Other Transactions
- Confidential Attachment F: Second Quarter 2009 Key Briefing Packages
- Confidential Attachment G: Second Quarter 2009 Independent Evaluator Reports
- Confidential Attachment H: Second Quarter 2009 New Contracts Executed / Contracts Amended
- Confidential Attachment I: Summary of Retained Generation Investments Completed During Second Quarter 2009
- 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 April 1, 2009 through June 30, 2009, were in compliance with the latest California Public Utilities Commission (CPUC or Commission)-approved Assembly Bill 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, 2009 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 Second 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, *Second Quarter 2009 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)

Integrated Forward, 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.<sup>1</sup>

### **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 Management, 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, *Second Quarter 2009 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.

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<sup>1</sup> All CAISO real-time transactions are excluded from the Quarterly Compliance Report (QCR) process; other real-time transactions are included as applicable.

### 3. Description of and justification for the procurement processes used to select the transactions.

#### a) *Electric*

##### ***Description of Procurement Processes***

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

- 2008 Intermediate-term Request for Offer (RFO) – PG&E issued an RFO to procure intermediate-term RPS energy, Qualifying Facility (QF) capacity, operational flexibility and Resource Adequacy (RA) in Q4 2008. It shortlisted offers in Q1 2009 and began executing agreements in Q2 2009.
- CAISO 2009 Congestion Revenue Rights (CRR) Allocation and Auction Process – PG&E participated in the CAISO’s CRR release process to procure CRRs for May, June and July 2009.
- RA RFO – PG&E issued an RFO to procure 3Q-2009 System RA in order to meet its monthly RA obligation.
- Heat Rate Options RFO – PG&E issued an RFO to procure 3Q-2009 Energy Call Options to meet its energy obligations during high-load situations.
- 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 as well as standard products during Second Quarter 2009.
- 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 quarter in duration, monthly, balance of month (BOM), day-ahead, and hour-ahead transactions.

***b) Justification for Procurement Processes***

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

- 2008 Intermediate-term RFO – Offers in this RFO were ranked according to the RFO evaluation protocols which considered an offer’s market valuation, portfolio fit, credit, participant qualification, resource reliability, environmental leadership and conformance to non-price terms and conditions. Offers were shortlisted consistent with the RFO protocols considering each offers ranking and PG&E’s need. Winning offers to date were those high scoring offers with the amounts selected consistent with PG&E’s identified need. This RFO is ongoing.
- RA RFO – RA offers are ranked by price separately for system 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.
- Heat Rate Option RFO – Offers by Counter-parties to sell 3Q-2009 Heat-Rate Call Options were ranked by the net benefit that they provided in each month. Winning offers were those that provided the highest net benefit consistent with PG&E’s identified need.

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

- CAISO 2009 CRR Monthly Allocation and Auction Process – PG&E determined that with the implementation of Market Redesign and Technology Upgrade (MRTU), the Utility would be exposed to congestion risk on the electric transmission grid as power is delivered from its generating resources and imports to serve bundled customer load. PG&E estimated that a portion of its generation, imports and load in the months of May, June and July 2009 remained exposed to congestion risk, and therefore it participated in the CAISO’s 2009 Monthly

Allocation and 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; 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 actual congestion position, instead of seeking the CRRs with the highest market value irrespective of the Utility’s needs. Therefore, only known portfolio positions, including existing and executed supply arrangements, were considered in the selection of CRR candidates in 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 2009 CRR annual auction.

- 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 and Western Systems Power Pool, 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.

- Independent Evaluator Reports – Independent Evaluator (IE) Reports for the Second Quarter 2009, are contained in Confidential Attachment G.
- Transactions Subject to a Strong Showing – For Second Quarter 2009, PG&E did not execute transactions that were subject to a strong showing.
- Procurement Review Group Presentations – Presentations of those activities presented to the PRG are in Confidential Attachment F.
- Executed Agreements – The executed agreements are in Confidential Attachment H, *Second Quarter 2009 New Contracts Executed / Contracts Amended*.

**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 Intercontinental Exchange (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 bilateral 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).
- Voice Brokers - Gas Hedges – PG&E executed hedges (swaps and options) through voice brokers that resulted in bilateral and exchange-cleared trades. Brokers provide access to anonymous bids and offers from both bilateral 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 bilaterally or cleared through NYMEX or ICE. The broker market trades the same financial products as the bilateral market.
- Physical Call Options RFO – PG&E purchased physical call options (gas peaking products) for delivery in the third quarter of 2009. These call options on physical gas supply give PG&E the right but not the obligation to purchase natural gas at a particular location at a published index price for a specified number of days. Such options allow PG&E to modify its day-ahead gas transactions to meet unexpected changes in gas demand (normally caused by sudden changes in the electricity market) without impacting gas market prices. Confidential Attachment D provides the details of the products selected. The executed agreements are in Confidential Attachment H, *Second Quarter 2009 New Contracts Executed / Contracts Amended*.

- California Gas Transmission (CGT) Gas Pipeline Capacity Request for Bids (RFB) – In May 2009, PG&E’s CGT announced an open season for expansion Baja path capacity. Since CGT offered this capacity only at standard tariff rates, bidders could compete by bidding a longer term contract. In June, PG&E Electric Fuels consulted with its PRG, sharing its plans to participate in CGT’s Pipeline Capacity RFB. The RFB results are in Confidential Attachment D

**d) Justification for Procurement Processes**

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

- In response to PG&E’s RFO for Q3 Supply, issued May 18, 2009, PG&E received offers to provide physical call options from suppliers. PG&E selected the best offers based on conformance to the product requested and price.
- As mentioned above, PG&E Electric Fuels participated in PG&E CGT’s RFO for expansion Baja path capacity. The winning bidder was selected by CGT.

***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 bilateral 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).

- 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.
- Transactions Subject to a Strong Showing – For Second Quarter 2009, PG&E did not execute any transactions that were subject to a strong showing.
- Procurement Review Group Presentations – PG&E made several presentations on electric and gas hedging to the PRG during the record period. In addition, PG&E provided a written strategy for its proposed bid on PG&E CGT Baja pipeline capacity to the PRG. The presentations and written strategy are in Confidential Attachment F.
- Executed Agreements – The executed agreements are in Confidential Attachment H, *Second Quarter 2009 New Contracts Executed / Contracts Amended*.

**e) Other Commodities**

This section is not applicable to PG&E for Second Quarter 2009.

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

Throughout the Second Quarter, PG&E attempted to enter into electric transactions needed to match forecast supply and demand. This objective was achieved by gradually reducing the forecast open (i.e., short or long) energy positions through the use of products such as 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 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 the PG&E CGT Baja pipeline capacity was driven by CGT's open season schedule. 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 resources Power Purchase Agreements with dispatchability (e.g., Crockett), Tolling Arrangements with "Merchant Plants" (e.g., Dynegey 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 on the electrical system subsequent to day-ahead trading. On a daily basis, PG&E conducts a least-cost

analysis to forecast unit dispatch and determine 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 demand forecast and to establish specific exemptions to account for small or infrequent scheduling deviations. FERC accepted CAISO's filing, effective April 26, 2007. With the launch of the CAISO's MRTU market, the Amendment 72 requirement has now become moot. It was replaced with the requirement for scheduling coordinators to schedule at least 85% of their load in the CAISO's day-ahead Integrated Forward Market (IFM).

PG&E's day-ahead planning and procurement incorporates weather-adjusted load forecasts, resource availability, dispatch costs and current bilateral electric market and forecasts of the CAISO's IFM 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, QFs and existing bilateral contracts, and market purchases. In determining its trading strategy, PG&E will "dispatch" resources in its model whose variable costs are expected to be below the CAISO's IFM market price, hedge a portion of the open position subject to the CAISO's IFM market price at the bilateral energy market price or, alternatively, sell excess energy in the bilateral energy market via financial swaps or Inter-SC Trades (ISTs).

After the bilateral day-ahead energy market trading is complete, PG&E submits its bids and schedules to the CAISO for incorporation into the CAISO's day-ahead IFM that ultimately determines generation resource schedules for the next day.

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).

PG&E actively participates in the daily bilateral energy market using a combination of brokered transactions, exchange-based transactions and direct transactions with counterparties. Bilateral day-ahead trading generally occurs between 5:30 a.m. and 7 a.m. on the business day prior to the operating day. The bilateral day-ahead market continues to evolve in terms of participants, products and characteristics. The major change in the Second Quarter was the market's response to MRTU. A majority of the transactions executed were either financial swaps or ISTs. PG&E transacts both products. PG&E executed transactions in the bilateral day-ahead market and

participated in the CAISO's MRTU day-ahead market beginning on March 31, 2009 by bidding and scheduling its load and resources.

***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 bilateral hour-ahead market, while active, is far less transparent and dynamic than that of the bilateral day-ahead market. As there are few brokers operating in this market and limited electronic exchange opportunities, the bulk of transactions are executed directly with counterparties. Market opportunities have been further reduced with the advent of MRTU and the volatility of the CAISO's real-time energy market. Though bilateral market opportunities have been reduced, PG&E still constantly participates in the hour-ahead market via bidding and scheduling its resources into the CAISO's real-time market in order to optimize its generation and market transactions to reduce costs.

***d) Locational Spreads***

During Second Quarter 2009, PG&E did not engage in day-ahead locational spread transactions. This was primarily due to the MRTU market which reduced the need for PG&E to manage its physical position by executing locational spread transactions in the bilateral market.

***e) PG&E-Owned Generation Conditions During Second Quarter 2009***

The cumulative precipitation through June 30 (the tracking period is July 1 through June 30) was about 82 percent of normal. PG&E's conventional hydroelectric resources used natural runoff and withdrawals from storage to meet daily peak loads and to provide ancillary services.

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 3 continued a major overhaul which began at the end of September 2008 and didn't return to service until July 1, 2009. On February 28, 2009 the tunnel supplying water to Helms Powerhouse was taken out of service for inspection and maintenance making all three units unavailable for much of the quarter; Helms Unit 1 came back to service on May 2, Unit 2 on May 4, and Unit 3 on July 1.

Significant planned maintenance on conventional hydro in the quarter included work on Balch 1 (34 MW), Belden (112 MW), Bucks Creek Unit 1 (33 MW), Butt Valley (41 MW), Caribou Units 1 & 2 (24 MW each), Chicago Park (30 MW), Helms U1, U2 & U3 (404 MW each), James Black (84 MW each), Pit 1 Units 1 & 2 (32 MW each), Pit 3 U1 (23 MW), Pit 4 U2 (50 MW), Pit 5 U2 (41 MW), Salt Springs 2 (33 MW), and Tiger Creek (50 MW).

Significant forced outages on conventional hydro during the quarter included: Balch U1 (34 MW) for transmission and station work; Caribou U4 & U5 (47 MW derated) for stuck needle valve.

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 Conformed 2006 LTTP (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, if any are 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 Second Quarter is contained in the workpapers in Confidential Attachment K.

**10. Provide a reasonable number of analyses requested by the Commission or the 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 Second 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 Completed During Second Quarter 2009*, 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 Second Quarter 2009 applicable to this decision.

**E. Cost Allocation Mechanism**

If applicable, the costs and revenues associated with Cost Allocation Mechanism (CAM) resources should be identified. The IE report for CAM-elected resources should be included in Confidential Attachment G, *Second Quarter 2009 Independent Evaluator Reports*. For Second Quarter 2009, PG&E did not transact for any CAM-elected resources.

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

Alcantar & Kahl	Day Carter Murphy	Norris & Wong Associates
Ameresco	Defense Energy Support Center	North Coast SolarResources
Anderson & Poole	Department of Water Resources	Northern California Power Association
Arizona Public Service Company	Department of the Army	Occidental Energy Marketing, Inc.
BART	Dept of General Services	OnGrid Solar
BP Energy Company	Division of Business Advisory Services	Praxair
Barkovich & Yap, Inc.	Douglas & Liddell	R. W. Beck & Associates
Bartle Wells Associates	Douglass & Liddell	RCS, Inc.
C & H Sugar Co.	Downey & Brand	Recon Research
CA Bldg Industry Association	Duke Energy	SCD Energy Solutions
CAISO	Dutcher, John	SCE
CLECA Law Office	Ellison Schneider & Harris LLP	SMUD
CSC Energy Services	FPL Energy Project Management, Inc.	SPURR
California Cotton Ginners & Growers Assn	Foster Farms	Santa Fe Jets
California Energy Commission	G. A. Krause & Assoc.	Seattle City Light
California League of Food Processors	GLJ Publications	Sempra Utilities
California Public Utilities Commission	Goodin, MacBride, Squeri, Schlotz & Ritchie	Sierra Pacific Power Company
Calpine	Green Power Institute	Silicon Valley Power
Cameron McKenna	Hanna & Morton	Southern California Edison Company
Cardinal Cogen	Hitachi	Sunshine Design
Casner, Steve	International Power Technology	Sutherland, Asbill & Brennan
Chamberlain, Eric	Intestate Gas Services, Inc.	Tabors Caramanis & Associates
Chevron Company	Los Angeles Dept of Water & Power	Tecogen, Inc.
Chris, King	Luce, Forward, Hamilton & Scripps LLP	Tiger Natural Gas, Inc.
City of Glendale	MBMC, Inc.	Tioga Energy
City of Palo Alto	MRW & Associates	TransCanada
City of San Jose	Manatt Phelps Phillips	Turlock Irrigation District
Clean Energy Fuels	Matthew V. Brady & Associates	U S Borax, Inc.
Coast Economic Consulting	McKenzie & Associates	United Cogen
Commerce Energy	Merced Irrigation District	Utility Cost Management
Commercial Energy	Mirant	Utility Specialists
Consumer Federation of California	Modesto Irrigation District	Verizon
Crossborder Energy	Morgan Stanley	Wellhead Electric Company
Davis Wright Tremaine LLP	Morrison & Foerster	Western Manufactured Housing Communities Association (WMA)
	New United Motor Mfg., Inc.	eMeter Corporation