September 13, 2011

Advice Letter 3853-E

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

Subject: Submission of the 15th Gas Supply Plan (GSP-15) for the California Department of Water Resources (CDWR) Tolling Agreements (November 1, 2011, through October 31, 2012)

Dear Mr. Cherry:

Advice Letter 3853-E is effective November 1, 2011.

Sincerely,

Julie A. Fitch, Director
Energy Division
June 1, 2011

Advice 3853-E
(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Submission of the Fifteenth Gas Supply Plan (GSP-15) for the California Department of Water Resources (CDWR) Tolling Agreements (November 1, 2011, Through October 31, 2012)


Background

Decision (“D.”) 02-12-069 and D.03-04-029 direct PG&E to consolidate fuel procurement strategies for the CDWR contracts and to submit them to CDWR and the Commission as a “Gas Supply Plan.” These Gas Supply Plans for CDWR Tolling Agreements (“GSPs”) were originally submitted on a semi-annual basis. Starting with GSP-13, GSPs covered a period of one year from November through October of the following year, the traditional gas year. The move from a semi-annual to an annual GSP filing process was set forth in PG&E Advice Filing 3269-E and approved by the CPUC on June 11, 2008.

PG&E’s GSP-15 follows a format similar to PG&E’s previously approved plans and is consistent with PG&E’s updated Electricity and Gas Hedging Plan. PG&E’s Electricity and Gas Hedging Plan was last updated in Advice Letter 3699-E, which was approved by the CPUC and made effective on September 23, 2010 in Resolution E-4362.

GSP-15 contains volume and cost forecasts, hedging implementation projections and fuel supply and hedging implementation details for the CDWR tolling agreements. Pursuant to Ordering Paragraph (“O.P.”) 5 of Resolution E-3845, PG&E continues to provide detailed information concerning its analyses, tools and decision-making process concerning gas price volatility and its risk management strategies.
**Confidential Material**

This advice filing contains CONFIDENTIAL PROTECTED material under D.06-06-066 Appendix 1. It is also being submitted under California Public Utilities Code section 583. Concurrently with this Advice Filing and pursuant to the August 22, 2006, ALJ ruling clarifying interim procedures for complying with D.06-06-066, PG&E is providing the declaration of Michael Kowalewski to support confidential treatment for the confidential market-sensitive information in GSP-15 and to designate the specific protected material as required by O.P.s 2 and 3, as applicable, of D.06-06-066. The public version of GSP-15 contained in Attachment C has been partially redacted in accordance with D.06-06-066. Appendices 3A, 3B, 4, and 5 to GSP-15 are fully confidential per D.06-06-066 and therefore have been redacted in full.

**Protest Period**

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 **June 21, 2011**, which is 20 days after the date of this filing. Protests should be mailed to:

```
CPUC Energy Division
Attention: Tariff Unit, 4th Floor
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 (and electronically or by facsimile, if possible) to PG&E at the address shown below on the same date it is mailed or delivered to the Commission:

```
Pacific Gas and Electric Company
Attention: Brian K. Cherry
Vice President, Regulations and Rates
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California  94177

Facsimile:  (415) 973-6520
E-mail:  PGETariffs@pge.com
```
Effective Date

PG&E requests that this advice filing become effective on November 1, 2011. PG&E submits this as a Tier 2 advice filing.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and service lists Rulemaking (“R.”) 10-05-006, R.06-02-013 and R.04-04-003. Address changes to the General Order 96-B service list should be directed to e-mail PGETariffs@pge.com. For changes to any other service list, please contact the Commission’s Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. A public version of this Advice Letter filing can also be accessed electronically at: http://www.pge.com/tariffs.

Vice President – Regulation and Rates

Attachments:

Attachment A – Declaration of Michael S. Kowalewski Supporting the Confidential Treatment of Confidential Market-Sensitive Information

Attachment B – Confidentiality Matrix Supporting Confidential Market-Sensitive Information

Confidential Attachment C – Gas Supply Plan (GSP-15) for CDWR Tolling Agreements (redacted copy provided in public version)

cc: Service List R.10-05-006, R.06-02-013 and R.04-04-003 (w/o confidential attachments)
Company name/CPUC Utility No. Pacific Gas and Electric Company (ID U39 M)

Utility type: ☑ ELC ☑ GAS ☑ PLC ☑ HEAT ☑ WATER
Contact Person: Conor Doyle
Phone #: (415) 973-7817
E-mail: jcdt@pge.com

EXPLANATION OF UTILITY TYPE
ELC = Electric GAS = Gas
PLC = Pipeline HEAT = Heat WATER = Water

Advice Letter (AL) #: 3853-E Tier: 2
Subject of AL: Submission of the Fifteenth Gas Supply Plan (GSP-15) for the California Department of Water Resources (CDWR) Tolling Agreements (November 1, 2011, Through October 31, 2012)

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.02-12-069 and D.03-04-029

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: Yes

Is AL requesting confidential treatment? Yes
If so, what information is the utility seeking confidential treatment for: Attachment C – Gas Supply Plan (GSP-15) for CDWR Tolling Agreements (non-redacted copy)

Confidential information will be made available to those who have executed a nondisclosure agreement: All members of PG&E Procurement Review Group who have signed a nondisclosure agreement will receive the confidential information

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: Michael Kowalewski (415) 972-5589

Resolution Required? ☑ Yes ☐ No

Requested effective date: November 1, 2011
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: 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 Cherry, Vice President, Regulation and Rates
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177
E-mail: PGETariffs@pge.com
Attachment A
Declaration of Michael S. Kowalewski Supporting the Confidential Treatment of Confidential Market-Sensitive Information
I, Michael Kowalewski, declare:

1. I am presently employed by Pacific Gas and Electric Company (PG&E) and have been an employee since 1992. My current title is manager, working in the Electric Fuels group. In this position, my responsibilities include planning and procuring gas supply in support of PG&E’s electric generation needs. In carrying out these responsibilities, I have acquired knowledge of gas supplies and markets. I am responsible for the development of Gas Supply Plan 15 (GSP-15).

2. Pursuant to the requirements in Decision (D.) 06-06-066 and the Administrative Law Judge Ruling issued August 22, 2006, Clarifying Interim Procedures for Complying with D.06-06-066, I have prepared this declaration to support confidential treatment of market-sensitive, confidential information contained in Gas Supply Plan 15 (Protected Information). Based on my knowledge and experience with the contents of GSP-15 and the markets for physical and financial products for gas supply and hedging, I make this declaration seeking confidential treatment of the Protected Information contained in GSP-15. The Protected Information is material, market-sensitive, electric procurement related information within the scope of Public Utilities Code section 454.5(g) and is entitled to confidential treatment under the IOU Matrix, Appendix 1 (IOU Matrix) of D.06-06-066.
3. The following categories in the IOU Matrix apply to Protected Information in GSP-15:
   1. IOU Matrix category I. A. 4, “Long-term fuel (gas) buying and hedging plans”
   2. IOU Matrix category I. A. 5, “Monthly California Department of Water Resources gas position updates, including information about hedging activities”
   3. IOU Matrix category II. B. 2, “DWR contracts - variable cost of dispatchable resources”
   4. IOU Matrix category IV. G, “Forecast of DWR contracts”
   5. IOU Matrix category I.A. 2, “Utility gas price forecasts”

4. The IOU Matrix categories for the Protected Material in GSP-15 are detailed in the attached Identification of Confidential Information Matrix. GSP-15 Appendices 3A, 3B, 4, and 5 are confidential in their entirety and are also noted in the attached Identification of Confidential Information Matrix.

5. GSP-15 and its confidential appendices, like the previous Gas Supply Plans 1 through 14 and their confidential appendices, go into great depth on PG&E’s planning, assumptions, strategies, analyses, and implementation for cost-effectively meeting the multi-year gas supply needs of the CDWR tolling agreements. The requirement to file gas supply plans and the scope of the gas supply plan activities and responsibilities for fuel management and hedging for the CDWR tolling agreements are described in the PG&E Operating Agreement with CDWR (Operating Agreement), Exhibit B, Fuel Management Protocols. The gas supply plans are intended to give the Commission and CDWR a meaningful understanding of the fuel needs for CDWR’s tolling agreements, what

---

1. Section IV, Exhibit B to the Operating Agreement requires PG&E to submit the fuel procurement strategies, including risk management, and submit them to the Commission as a “Utility Gas Supply Plan.”
procurement and hedging strategy should be followed to meet those needs, why that strategy is best, what PG&E intends to do in the markets to execute the strategy, and when PG&E intends to be in the markets. Accordingly, the gas supply plans inherently include a large amount of confidential, market sensitive information. GSP-15 is no exception.

6. GSP-15 information is confidential and market sensitive because if other participants in the gas-related markets involved in the GSP were to obtain the information,\(^2\) PG&E’s ability to execute the strategy and obtain results cost-effectively could be impaired. If the detailed information in GSP-15 about PG&E’s strategy and plans is not kept confidential, PG&E would be de-positioned relative to other market participants who would have PG&E’s confidential, market sensitive data, when other market participants’ comparable confidential, market sensitive data would not be in the public domain.

7. The Protected Information in GSP-15 is primarily for CDWR tolling agreements. PG&E’s role under the Operating Fuel Management Protocols is as CDWR’s limited agent. The confidential treatment of Protected Information also should be maintained to avoid adverse impact to CDWR’s exposure for transactions undertaken pursuant to GSP-15.

8. The Protected Information in GSP-15 should remain confidential for more than three years. The analysis, strategies, assumptions and planning in the gas supply plans are part of a continuum that stretches over multiple years. In addition, the hedging strategy that is effective for CDWR tolling contracts may not change radically from one gas supply plan

\(^2\) The markets include natural gas, gas-derivative financial contracts, gas transportation, storage, and energy.
to the next. Therefore, releasing the Protected Information in GSP-15 or past gas supply plans may amount to releasing the same information as contained in the current gas supply plan. Therefore, Protected Information contained in GSP-15 should continue to be accorded confidential treatment for three years beyond the point in time when PG&E ceases to manage gas supply for the CDWR tolling agreements.

9. I am not aware of any instances where the Protected Information identified in this declaration has been disclosed to the public. The Protected Information cannot be provided in a more aggregated, partially redacted, or summarized form.

10. Attached to my declaration are both a confidential copy of GSP-15 with Protected Information unredacted and a non-confidential copy of GSP-15 with Protected Information removed.

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

Executed this thirty-first day of May 2011, at San Francisco, California.
Attachment B
Confidentiality Matrix Supporting Confidential Market-Sensitive Information
| Line No. | Redaction Reference | 1) Constitutes data listed in Appendix 1 to D.06-06-066 (Y/N) | 2) Data correspond to category in Appendix 1 | 3) Complies with limitations of D.06-06-066 (Y/N) | 4) Data not already public (Y/N) | 5) Lead to partial disclosure (Y/N) | PG&E’s Justification for Confidential Treatment | Length of Time |
|----------|---------------------|-------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------|---------------------------------|----------------------------------|------------------------------------------------|----------------|}
<p>| 1        | Document: Gas Supply Plan 15 for CDWR Tolling Agreements | | | | | | | |
| 2        | Page 1 | Y | I.A.4 and I.A.5 | Y | Y | Y | Long-term fuel (gas) buying and hedging plans and Monthly California Department of Water Resources gas position updates, including information about hedging activities | 3 years after PG&amp;E ceases to manage gas supply for the CDWR tolling agreements. |
| 3        | Page 3, Table 3-1 | Y | VII.B and II.B.2 | Y | Y | Y | Contracts and power purchase agreements between utilities and non-affiliated third parties, and DWR contracts – variable cost of dispatchable resources | 3 years after PG&amp;E ceases to manage gas supply for the CDWR tolling agreements. |
| 4        | Page 3 | Y | I.A.4 | Y | Y | Y | Long-term fuel (gas) buying and hedging plans | 3 years after PG&amp;E ceases to manage gas supply for the CDWR tolling agreements. |
| 5        | Page 4, Table 3-2 | Y | I.A.4 | Y | Y | Y | Long-term fuel (gas) buying and hedging plans | 3 years after PG&amp;E ceases to manage gas supply for the CDWR tolling agreements. |
| 6        | Page 5, Section 3.c | Y | I.A.4 and I.A.5 | Y | Y | Y | Long-term fuel (gas) buying and hedging plans and Monthly California Department of Water Resources gas position updates, including information about hedging activities | 3 years after PG&amp;E ceases to manage gas supply for the CDWR tolling agreements. |</p>
<table>
<thead>
<tr>
<th>Line No.</th>
<th>Redaction Reference</th>
<th>1) Constitutes data listed in Appendix 1 to D.06-06-066 (Y/N)</th>
<th>2) Data correspond to category in Appendix 1</th>
<th>3) Complies with limitations of D.06-06-066 (Y/N)</th>
<th>4) Data not already public (Y/N)</th>
<th>5) Lead to partial disclosure (Y/N)</th>
<th>PG&amp;E’s Justification for Confidential Treatment</th>
<th>Length of Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Pages 5-6, Section 3.d</td>
<td>Y</td>
<td>I.A.4, I.A.5 and IV.G</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Long-term fuel (gas) buying and hedging plans and Monthly California Department of Water Resources gas position updates, including information about hedging activities and forecasts of DWR contracts</td>
<td>3 years after PG&amp;E ceases to manage gas supply for the CDWR tolling agreements.</td>
</tr>
<tr>
<td>8</td>
<td>Page 6, Section 3.e</td>
<td>Y</td>
<td>I.A.4, I.A.5 and IV.G</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Long-term fuel (gas) buying and hedging plans and Monthly California Department of Water Resources gas position updates, including information about hedging activities and forecasts of DWR contracts</td>
<td>3 years after PG&amp;E ceases to manage gas supply for the CDWR tolling agreements.</td>
</tr>
<tr>
<td>9</td>
<td>Page 6, Section 3.f</td>
<td>Y</td>
<td>I.A.4, I.A.5 and IV.G</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Long-term fuel (gas) buying and hedging plans and Monthly California Department of Water Resources gas position updates, including information about hedging activities and forecasts of DWR contracts</td>
<td>3 years after PG&amp;E ceases to manage gas supply for the CDWR tolling agreements.</td>
</tr>
<tr>
<td>10</td>
<td>Appendix 3A: Tables 3A-1a, 3A-1b, 3A-2a, 3A-2b, 3A-3a, 3A-3b</td>
<td>Y</td>
<td>I.A.4, I.A.5 and IV.G</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Long-term fuel (gas) buying and hedging plans and Monthly California Department of Water Resources gas position updates, including information about hedging activities and forecasts of DWR contracts</td>
<td>3 years after PG&amp;E ceases to manage gas supply for the CDWR tolling agreements.</td>
</tr>
<tr>
<td>Line No.</td>
<td>Redaction Reference</td>
<td>1) Constitutes data listed in Appendix 1 to D.06-06-066 (Y/N)</td>
<td>2) Data correspond to category in Appendix 1</td>
<td>3) Complies with limitations of D.06-06-066 (Y/N)</td>
<td>4) Data not already public (Y/N)</td>
<td>5) Lead to partial disclosure (Y/N)</td>
<td>PG&amp;E's Justification for Confidential Treatment</td>
<td>Length of Time</td>
</tr>
<tr>
<td>---------</td>
<td>---------------------</td>
<td>--------------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------------</td>
<td>----------------------------------------</td>
<td>-----------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>11</td>
<td>Appendix 3B: Tables 3B-1a, 3B-1b, 3B-2a, 3B-2b</td>
<td>Y</td>
<td>I.A.4, I.A.5 and IV.G</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Long-term fuel (gas) buying and hedging plans and Monthly California Department of Water Resources gas position updates, including information about hedging activities and forecasts of DWR contracts</td>
<td>3 years after PG&amp;E ceases to manage gas supply for the CDWR tolling agreements.</td>
</tr>
<tr>
<td>12</td>
<td>Page 19, Section 4.a</td>
<td>Y</td>
<td>I.A.4</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Long-term fuel (gas) buying and hedging plans</td>
<td>3 years after PG&amp;E ceases to manage gas supply for the CDWR tolling agreements.</td>
</tr>
<tr>
<td>13</td>
<td>Appendix 4: Figures 4A-1, 4A-2, and 4A-3</td>
<td>Y</td>
<td>I.A.2</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Utility gas price forecasts</td>
<td>3 years after PG&amp;E ceases to manage gas supply for the CDWR tolling agreements.</td>
</tr>
<tr>
<td>14</td>
<td>Page 23, Section 5</td>
<td>Y</td>
<td>I.A.4</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Long-term fuel (gas) buying and hedging plans</td>
<td>3 years after PG&amp;E ceases to manage gas supply for the CDWR tolling agreements.</td>
</tr>
<tr>
<td>15</td>
<td>Pages 23-24, Section 6</td>
<td>Y</td>
<td>I.A.4 and IV.G</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Long-term fuel (gas) buying and hedging plans and Forecast of DWR contracts</td>
<td>3 years after PG&amp;E ceases to manage gas supply for the CDWR tolling agreements.</td>
</tr>
<tr>
<td>16</td>
<td>Appendix 5: Tables 5A and 5B</td>
<td>Y</td>
<td>I.A.4, I.A.5 and IV.G</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Long-term fuel (gas) buying and hedging plans and Monthly California Department of Water Resources gas position updates, including information about hedging activities and forecasts of DWR contracts</td>
<td>3 years after PG&amp;E ceases to manage gas supply for the CDWR tolling agreements.</td>
</tr>
</tbody>
</table>
Attachment C
Gas Supply Plan (GSP-15) for CDWR Tolling Agreements
(Redacted Copy provided in Public Version)
Gas Supply Plan 15
for
CDWR Tolling Agreements

November 1, 2011
through
October 31, 2012

Pacific Gas and Electric Company
June 1, 2011
# TABLE OF CONTENTS

1. Executive Summary ................................................................. 1

2. Introduction .............................................................................. 2

3. Needs Assessment ...................................................................... 2
   a. CDWR Tolling Agreements Allocated to PG&E ......................... 3
   b. Fuel Supply Options Under CDWR’s Tolling Agreements ........... 3
   c. Forecast of Gas Demand by Tolling Agreement ......................... 4
      i. Projected Monthly and Daily Gas Volume ............................ 4
   d. Forecast of Fuel Cost Under Generator Fuel Plans .................. 5
   e. Forecast of Fuel Cost Under PG&E Fuel Plan ......................... 6
   f. Comparison of Cost Under PG&E’s Fuel Plan With Cost Under
      Generators Fuel Plans .......................................................... 6

4. Market Assessment ................................................................. 9
   a. Gas Forward Prices .............................................................. 9
   b. Gas Supply Outlook ............................................................... 9
       i. Potential Supply Concerns .................................................. 9
       ii. Anticipated Pipeline Outages .............................................. 9

5. Procurement Strategy Overview ............................................. 11
   a. Management of Physical Supply and Financial Price Risk ......... 11
   b. Physical Supply Strategy ....................................................... 11
   c. Gas Hedging Strategy .......................................................... 11
       i. Hedging on behalf of CDWR ............................................ 11

6. Implementation Plan .............................................................. 11
   a. Recommended Gas Supply Portfolio ....................................... 12
       i. Physical Gas Supply ......................................................... 12
       ii. Distribution Pipeline Capacity ......................................... 12
iii. Storage Capacity ................................................................. 12
b. Proposed Hedge Transactions ............................................. 12
7. Miscellaneous Items .......................................................... 14
   a. CDWR-Approved Suppliers ............................................. 14
   b. Transactions for Use of Utility-Owned Facilities .............. 14
   c. Transactions Outside the Scope of the Gas Supply Plan .... 14
   d. Additional Information ....................................................... 15
   e. Physical Gas Trading Between PG&E and CDWR ............. 15
   f. Gas Operations Plan ........................................................ 15
8. Conclusion ........................................................................... 16
1. Executive Summary

This document represents Pacific Gas and Electric Company’s (PG&E) annual Gas Supply Plan (GSP) for California Department of Water Resources (CDWR) Tolling Agreements (GSP-15), covering the period November 1, 2011, through October 31, 2012. This GSP is consistent with PG&E’s experience managing these tolling agreements since January 1, 2003, and with PG&E’s currently approved 2006 Long-Term Procurement Plan (LTPP).1 PG&E will adhere to the CDWR Fuels Protocols, which were issued in completed form on December 8, 2003, and modified in August 2004. PG&E requests that the California Public Utilities Commission (CPUC or Commission) approve this GSP effective November 1, 2011.

PG&E’s goals for the term of GSP-15 are significantly reduced from past CDWR GSPs because all but one of the CDWR tolling agreements have been novated to PG&E or will expire by the end of the GSP-15 term. To manage price risk, PG&E will continue to manage its gas open position according to the gas hedging framework described in prior GSPs and consistent with PG&E’s Electric Portfolio Gas Hedging Plan, as updated.

By the beginning of 2012, only the Kings River Conservation District (KRCD or Kings River) tolling agreement will remain active in the CDWR portfolio. Because this agreement requires CDWR to provide and manage fuel, a comparison of seller and PG&E fuel supply costs is moot.

---

1 2006 Long-Term Procurement Plan (conformed), Resolution E-4177, June 27, 2008.
2 D.11-03-004, Attachment 5 (Attachment B to Attachment 5), and Attachment 1 modifying Attachment B to Attachment 5 to D.11-03-004.
3 PG&E’s Electric Portfolio Hedging Plan was last updated on October 29, 2009, when the CPUC approved updates to PG&E’s conformed 2006 LTPP filed in Advice Letter 3492 E. PG&E filed further updates to its hedging plan along with its Bundled Procurement Plan on March 25, 2011, in Rulemaking (R.) 10-05-006. The proposed changes to PG&E’s hedging plan are still pending in that proceeding.
2. Introduction

On June 27, 2008, the CPUC approved PG&E’s conformed 2006 LTPP (Resolution E-4177). PG&E’s 2006 LTPP explicitly discusses the contribution of fuel (natural gas) to the value and price sensitivity of PG&E’s open market position. Fuel management for the CDWR contracts is a part of the strategies discussed in PG&E’s procurement plans.

On April 3, 2003, the Commission approved the Operating Agreement between CDWR and PG&E (D.03-04-029). The Operating Agreement was subsequently modified on October 28, 2004, in D.04-10-020. The Operating Agreement enables PG&E to perform the operational, dispatch, and administrative functions for CDWR’s Long-Term Power Purchase Contracts as CDWR’s limited agent. The Operating Agreement requires PG&E to submit an annual gas supply plan for these gas-tolling arrangements to CDWR and the Commission for review and approval. These gas supply plans cover the annual period beginning November 1, and are filed June 1 of each year.

This document, GSP-15, covers the period November 1, 2011, through October 30, 2012. PG&E submitted a draft GSP-15 to its Procurement Review Group (PRG) and CDWR on May 3, 2011.5

The four CDWR contracts allocated to PG&E and active during some portion of the term of this plan all have unexpired provisions for gas tolling. The contracts active during GSP-15 are CalPeak Panoche, CalPeak Vaca Dixon, Coral, and Kings River Conservation District. Contracts with CalPeak and Kings River represent 199 megawatts (MW) of dispatchable capacity.

The Calpeak and Coral agreements include the option for CDWR to supply fuel (tolling) and/or to manage deliveries to the plants. CDWR must supply and manage the fuel under the KRCD contract. PG&E, as CDWR’s limited agent, is now supplying fuel for all of its allocated CDWR tolling agreements, except Coral.

3. Needs Assessment

The purpose of this section is to provide a brief description of the CDWR tolling agreements and the fuel supply options available to CDWR; to present PG&E’s forecast of the gas required to supply the CDWR tolling agreements allocated to PG&E; and to present a forecast of the cost of supplying physical gas under those agreements whether that gas is supplied by the generators under the provisions of

---

4 Prior to GSP-12, GSPs were submitted on a semiannual basis. Following PG&E and CDWR’s letter agreement modifying the Operating Agreement dated April 11, 2008, and Energy Division’s June 11, 2008, approval of Advice 3269-E, GSPs are now submitted on an annual rather than semiannual basis.

5 PG&E’s submittal of a draft allows CDWR and PG&E’s PRG the required two weeks to review the draft plan prior to the filing date established by the Commission in Resolution E-3845.
the tolling agreements or if supplied by CDWR with PG&E acting as CDWR’s limited agent.

**a. CDWR Tolling Agreements Allocated to PG&E**

Table 3-1 lists the CDWR tolling agreements allocated to PG&E.

<table>
<thead>
<tr>
<th>Counterparty</th>
<th>Agreement</th>
<th>Type</th>
<th>Capacity (MW)*</th>
<th>Heat Rate (MMBtu/MWh)*</th>
<th>Contract End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coral (Shell)</td>
<td>Coral System</td>
<td>System – Must Take</td>
<td>Varies</td>
<td>7.25</td>
<td>6/30/2012</td>
</tr>
<tr>
<td>Calpeak</td>
<td>Panoche Unit</td>
<td>Unit – Peaking</td>
<td>52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calpeak</td>
<td>Vaca Dixon Unit</td>
<td>Unit – Peaking</td>
<td>10.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kings River</td>
<td>Kings River Unit</td>
<td>Unit – Peaking</td>
<td>96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Capacities and Heat Rates are contracted quantities. Some contracted quantities reflect the results of annual performance tests.

**b. Fuel Supply Options Under CDWR’s Tolling Agreements**

Most of the tolling agreements allow CDWR to become the Fuel Supplier, the Fuel Manager, or both. The Fuel Supplier purchases gas and delivers it to the Fuel Manager. CDWR has captured the benefits of managing a large portfolio by becoming the Fuel Supplier for all of its tolling agreements allocated to PG&E except for its Coral contract. Taking such a role for the Coral contract is not recommended at this time because appreciable savings are not yet evident, as discussed in GSP-7.

The Fuel Manager schedules deliveries to the plant and manages monthly and daily balancing.

Table 3-2 summarizes PG&E’s role (as CDWR’s Limited Agent) as Fuel Manager and Supplier:

**Fuel Supplier:** Purchases gas and delivers it to the Fuel Manager at the PG&E Citygate or a predetermined location.

**Fuel Manager:** Receives gas from the Fuel Supplier and manages daily and monthly deliveries from the Citygate (or other point) to the plant.
Table 3-2
PG&E as CDWR’s Limited Agent Role Elections

<table>
<thead>
<tr>
<th>Generator</th>
<th>Fuel Supplier</th>
<th>Fuel Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coral</td>
<td>No</td>
<td>No (deliver to border only)</td>
</tr>
<tr>
<td>CalPeak</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Kings River</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 3-3 summarizes the general fuel supply arrangements offered by each generator under its tolling agreement with CDWR. The CalPeak tolling agreements require the generator to provide a Fuel Plan to CDWR for its review and approval. Per the Operating Agreement, when CDWR receives a fuel plan proposal from a generator it provides a copy to PG&E for its review. PG&E reviews the proposed plan and recommends to CDWR whether to accept or reject the plan and whether to elect to self-supply fuel under the tolling agreement.

Table 3-3 Generator Fuel Cost Arrangements

<table>
<thead>
<tr>
<th>Generator</th>
<th>Pricing Mechanism Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coral</td>
<td>Starting 1/1/06, Topock into SoCal Gas: Monthly NGI bidweek index only, no adders</td>
</tr>
<tr>
<td>CalPeak</td>
<td>PG&amp;E Citygate: Monthly, daily, and intraday indexes, adders for market risk (variable), LDC transport, fuel management and the option of risk management</td>
</tr>
<tr>
<td>Kings River</td>
<td>No generator fuel option</td>
</tr>
</tbody>
</table>

c. Forecast of Gas Demand by Tolling Agreement

i. Projected Monthly and Daily Gas Volume

PG&E forecasted gas volumes for each of the CDWR contracts using FEA @ENERGY/PowerGeneration, a software tool for power generation asset optimization produced by Financial Engineering Associates of Berkeley, California. @ENERGY/PowerGeneration simulates optimal dispatch of all PG&E resources, including the CDWR contracts, based on each resource’s specific operating constraints, flexibility and market prices. @ENERGY/PowerGeneration assists PG&E in minimizing generation costs and maximizing the value of generation assets, including CDWR contracts, utility-owned generation and market purchases. PG&E’s production simulation currently uses 10,000 trials and represents the expected case outcome.
The key assumptions underlying the forecast include:

- Current electric and gas forward curves.
- Operating characteristics of utility-owned generation including hydro and pumped storage.
- Operating characteristics and contract terms of the CDWR contracts.
- Operating characteristics and contract terms of PG&E contracts.

The forecast results are presented in Tables 3A-1 to 3A-3 in the appendix to this chapter. This forecast volume is the same whether the gas is provided by the generators or by PG&E as CDWR’s limited agent.

d. Forecast of Fuel Cost Under Generator Fuel Plans

PG&E forecasted the cost of fuel under each of CDWR’s tolling agreements by applying the fuel supply arrangements in each contract and the latest Generator Fuel Plan provisions to the volumes presented in the previous section. The results of these forecasts are presented in Tables 3B-1a and 3B-1b in Appendix 3B. Detailed supporting calculations for the figures in the tables are available upon request in PG&E’s confidential workpapers for GSP-15.

The estimated total gas cost under the generator fuel plans for the term of GSP-15 is presented in the last column of Line 13 in Table 3B-1a and represents...
The average PG&E Citygate gas price from GSP-14 was compared with for GSP-15.

e. **Forecast of Fuel Cost Under PG&E Fuel Plan**

PG&E forecasted the cost of fuel provided by PG&E as CDWR’s Limited Agent under GSP-15 and using the same forecast period and pricing date as Section 3d, above. The results of these forecasts are presented in Tables 3B-2a and 3B-2b in Appendix 3B.

The estimated total gas cost under the PG&E’s fuel plan\(^9\) for the term of this plan is presented in the last column of Line 13 of Table 3B-2a and represents...

f. **Comparison of Cost Under PG&E’s Fuel Plan With Cost Under Generators Fuel Plans**

As mentioned above, the Kings River contract requires CDWR to supply fuel and manage all fuel deliveries. For reasons discussed in GSP-7, PG&E continues to recommend the supplier provide fuel for the remaining duration of the Coral contract. This leaves only the CalPeak contracts for a comparison of costs between generator and PG&E fuel plans. However, the CalPeak contracts...

By the end of GSP-15, only Kings River will remain in the CDWR portfolio. Since CDWR must supply fuel for Kings River, a discussion of generator fuel costs for CDWR becomes moot.

---

\(^9\) This cost does not include PG&E’s administrative cost for procuring fuel for the CDWR contracts. Administrative costs are included in PG&E’s General Rate Case.
APPENDIX 3A

Appendix 3A has been redacted because it contains confidential, protected material.
APPENDIX 3B

Appendix 3B has been redacted because it contains confidential, protected material.
4. Market Assessment

This section provides an update on relevant market conditions for the term of this plan.

a. Gas Forward Prices

Rather than use a forecast of gas prices based on econometric models, PG&E prefers to use forward price quotes from financial markets. These prices reflect market conditions as of the end of the trading day. PG&E’s Utility Risk Management department updates these prices on a daily basis. The prices from this date were used for all of the analysis presented in this plan.

The forward gas prices presented in Figures 4A-1 through 4A-3 are based on financial market quotes on the observation dates indicated.

b. Gas Supply Outlook

i. Potential Supply Concerns

PG&E has no supply shortage concerns for the term of GSP-15.

ii. Anticipated Pipeline Outages

PG&E regularly monitors the pipelines’ Web sites for scheduled outages. Monitoring these and other pipeline notices is part of PG&E’s gas scheduler’s duties.
APPENDIX 4

Appendix 4 has been redacted because it contains confidential, protected material.
5. Procurement Strategy Overview

The purpose of this section is to provide the overarching strategy guiding PG&E’s management of gas supply, transportation, storage and price risk management on behalf of CDWR.

a. Management of Physical Supply and Financial Price Risk

b. Physical Supply Strategy

c. Gas Hedging Strategy

i. Hedging on behalf of CDWR

6. Implementation Plan

This section describes, in detail, the portfolio that PG&E as CDWR’s Limited Agent proposes to build to supply fuel for the CDWR contracts.

\[10^{10}\] To-expiration Value at Risk (TeVaR) is a statistical measure of the variation in cost for PG&E’s electric portfolio.
a. Recommended Gas Supply Portfolio

i. Physical Gas Supply

ii. Distribution Pipeline Capacity

Each of the facilities under contract with CDWR and allocated to PG&E has existing transportation contracts with their local distribution companies (LDC). The generators will continue to contract for distribution capacity with their LDC.

iii. Storage Capacity

b. Proposed Hedge Transactions

Based on the hedging strategies described in Section 5.C, PG&E proposes

Note that these representative transactions would be updated based on current market conditions prior to execution.
APPENDIX 5

Appendix 5 has been redacted because it contains confidential, protected material.
7. Miscellaneous Items

This section contains items not covered in any other section.

a. CDWR-Approved Suppliers

The list of gas suppliers approved by CDWR for use by PG&E, SCE and SDG&E is now part of CDWR’s Fuel Protocols. CDWR continues to add additional approved suppliers to the list.

PG&E will work closely with CDWR to ensure that CDWR remains within its credit limits and, if necessary, will request that CDWR increase credit limits.

b. Transactions for Use of Utility-Owned Facilities

PG&E will transact for utility-owned facilities or services subject to this presumption of reasonableness standard per Commission Resolution E-3825:

i. In cases where a Request for Offers is issued and offers are received, it is presumed that a reasonable price is paid if PG&E’s charge to CDWR for the use of the utility’s facilities or services is the same as or lower than the bid(s) received.

ii. In cases where there are no competitive alternatives for comparison, it is presumed that a reasonable price is paid if PG&E’s charge to CDWR for the use of the utility’s facilities or services is either: (1) the tariff recourse rate for the service; or (2) if the price is negotiated, no higher than the volume weighted average of the price the utility negotiated (except for CDWR) for each similar service in the same month and for the same period the service is provided. In addition, negotiated prices above this weighted average are not per se unreasonable, but require PG&E to show the Commission why they were reasonable.

c. Transactions Outside the Scope of the Gas Supply Plan

As authorized by the Commission in Resolution E-3825, PG&E may pursue activities outside the scope of the approved GSP, subject to Commission reasonableness review, in the event extraordinary circumstances arise and it is necessary for PG&E to meet its administrative and operational responsibilities consistent with Commission decisions and with the CDWR Fuels Protocols. PG&E shall document and describe these occurrences including an explanation of resulting ratepayer benefits. Additionally, PG&E is required to notify CDWR and the Commission’s Energy Division when contemplating taking such actions via a letter and obtain CDWR’s prior consent where such consent is required by CDWR’s Fuels Protocols.
d. **Additional Information**

As directed by the Commission in Resolution E-3825, PG&E will provide additional information regarding this plan to CDWR upon CDWR’s request. Also, as directed by the Commission in Resolution E-3845, PG&E will make available: “all pertinent information (e.g., prices, quantities, etc.) and supporting documentation concerning transactions as well as analyses, forecasts and related data used for decision making purposes pursuant to its approved GSPs to the Commission staff upon request.”

---

e. **Physical Gas Trading Between PG&E and CDWR**

From time to time PG&E finds itself trading opposite positions for its own portfolio and the CDWR portfolio. That is, one portfolio is short and the other is long. Balancing both portfolios requires two physical trades in which each portfolio incurs the cost of the bid-ask spread.

To reduce such costs, PG&E, with CDWR’s concurrence, requested in GSP-7 the authority to trade physical gas with CDWR under certain limited circumstances, such as the following:

- Trades are for portfolio balancing.
- Trades are limited to terms of one month or less, including imbalance gas.
- All trades will be priced at the Gas Daily index price for the date in question, with no adders.
- The CDWR side of the trade will be executed by an authorized CDWR employee.
- Trades will be executed under a North American Energy Standards Board (NAESB) Master Agreement between PG&E and CDWR.
- Such trades will be specifically identified in PG&E’s quarterly Energy Resource Recovery Account transaction filings.

This request was approved with GSP-7. If PG&E and CDWR agree on a NAESB Master Agreement specifying the limitations of trading between the two parties, PG&E will file that Agreement for CPUC approval prior to implementing physical gas trading between PG&E and CDWR.

---

f. **Gas Operations Plan**

Should the substance of PG&E’s operations change in the future, PG&E will include a revised Gas Operations Plan in future GSPs.
8. Conclusion

This GSP describes PG&E’s plans to manage gas supply and gas price risk for the CDWR tolling agreements allocated to PG&E. PG&E requests the CPUC approve this Gas Supply Plan effective November 1, 2011.
AT&T
Alcantar & Kahl LLP
Ameresco
Anderson & Poole
Arizona Public Service Company
BART
Barkovich & Yap, Inc.
Bartle Wells Associates
Bloomberg
Bloomberg New Energy Finance
Boston Properties
Braun Blaising McLaughlin, P.C.
Brookfield Renewable Power
CA Bldg Industry Association
CLECA Law Office
CSC Energy Services
California Cotton Ginners & Growers Assn
California Energy Commission
California League of Food Processors
California Public Utilities Commission
Calpine
Cardinal Cogen
Casner, Steve
Chris, King
City of Palo Alto
City of Palo Alto Utilities
Clean Energy Fuels
Coast Economic Consulting
Commercial Energy
Consumer Federation of California
Crossborder Energy
Davis Wright Tremaine LLP
Day Carter Murphy
Defense Energy Support Center
Department of Water Resources
Dept of General Services
Douglass & Liddell
Downey & Brand
Duke Energy
Dutcher, John
Economic Sciences Corporation
Ellison Schneider & Harris LLP
Foster Farms
G. A. Krause & Assoc.
GLJ Publications
GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz & Ritchie
Green Power Institute
Hanna & Morton
Hitachi
In House Energy
International Power Technology
Intestate Gas Services, Inc.
Lawrence Berkeley National Lab
Los Angeles Dept of Water & Power
Luce, Forward, Hamilton & Scripps LLP
MAC Lighting Consulting
MBMC, Inc.
MRW & Associates
Manatt Phelps Phillips
McKenzie & Associates
Merced Irrigation District
Modesto Irrigation District
Morgan Stanley
Morrison & Foerster
NLine Energy, Inc.
NRG West
Navigant Consulting
Norris & Wong Associates
North America Power Partners
North Coast SolarResources
Northern California Power Association
Occidental Energy Marketing, Inc.
OnGrid Solar
Praxair
R. W. Beck & Associates
RCS, Inc.
Recurrent Energy
SCD Energy Solutions
SCE
SMUD
SPURR
San Francisco Public Utilities Commission
Santa Fe Jets
Seattle City Light
Sempra Utilities
Sierra Pacific Power Company
Silicon Valley Power
Silo Energy LLC
Southern California Edison Company
Spark Energy, L.P.
Sun Light & Power
Sunshine Design
Sutherland, Asbill & Brennan
Tabors Caramanis & Associates
Tecogen, Inc.
Tiger Natural Gas, Inc.
TransCanada
Turlock Irrigation District
United Cogen
Utility Cost Management
Utility Specialists
Verizon
Wellhead Electric Company
Western Manufactured Housing
Communities Association (WMA)
eMeter Corporation