

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

Tel. No. (415) 703-1691



July 14, 2005

Advice Letter 2620-E|E-A

Ms Rose de la Torre
Pacific Gas and Electric Company
77 Beale Street, Room 1088
Mail Code B10C
San Francisco, CA 94105

Subject: Fifth Gas Supply Plan for the State of California Department of Water Resources Tolling Agreements

Dear Ms de la Torre:

Advice Letter 2620-E|E-A is effective July 14, 2005. A copy of the advice letter is included herewith for your records.

The sixth Gas Supply Plan should be submitted August 1, 2005 for the October 2005 through March 2006 period.

A draft of the sixth Gas Supply Plan should be provided to the Procurement Review Group and the California Department of Water Resources at least two weeks prior to August 1, 2005.

Sincerely,

A handwritten signature in black ink, appearing to read "S H Gallagher".

Sean H. Gallagher
Director
Energy Division

Cc: Mr. Peter S. Garris, Deputy Director
California Energy Resources Scheduling
California Department of Water Resources
3310 El Camino Avenue, Suite 120
Sacramento, CA 95821



Brian K. Cherry
Director
Regulatory Relations

77 Beale Street, Room 1087
San Francisco, CA 94105

Mailing Address
Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177

February 1, 2005

415.973.4977
Internal: 223.4977
Fax: 415.973.7226
Cellular: 415.517.5067
Internet: BKC7@pge.com

**Advice 2620-E
(Pacific Gas and Electric Company ID U 39 E)**

Public Utilities Commission of the State of California

Subject: Submission of the Fifth Gas Supply Plan for the California Department of Water Resources (CDWR) Tolling Agreements (April 1, 2005 through September 30, 2005)

Pacific Gas and Electric Company (PG&E) hereby submits to the California Public Utilities Commission (Commission or CPUC) its fifth Gas Supply Plan (GSP-5), as required by the Commission letter dated December 15, 2004.¹ That letter approved PG&E's Advice Filing 2536-E, PG&E's fourth Gas Supply Plan (GSP-4). The letter instructed PG&E to file its fifth Gas Supply Plan (GSP-5) on February 1, 2005 (for the period April 2005 through September 2005).

Purpose

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" on a semi-annual basis. PG&E submitted its first Gas Supply Plan (GSP-1) on March 25, 2003 for the period March 1, 2003 through August 31, 2003. The Commission adopted GSP-1 in Resolution E-3825, with modifications. PG&E submitted its second Gas Supply Plan (GSP-2) on August 15, 2003 for the period October 1, 2003 through March 31, 2004. The Commission adopted GSP-2 in Resolution E-3845, with modifications and ordered PG&E to submit GSP-3 no later than February 1, 2004 for the period April 1, 2004 through September 30, 2004. The Commission adopted GSP-3 on May 24, 2004, and ordered the submission of GSP-4 on August 2, 2004. The Commission approved GSP-4 effective December 14, 2004, and ordered the submission of GSP-5 on February 1, 2005, for the April 2005 through September 2005 period.

¹ See December 15, 2004, letter from CPUC Energy Division Director Paul Clanon approving GSP-4 effective December 14, 2004.

Pursuant to Ordering Paragraph (O.P.) 5 of Resolution E-3845, PG&E continues to provide detailed information concerning its analyses used in its decision making process and provides a thorough discussion concerning the analytical tools and resources used to assess future gas market price volatility in connection with its risk management strategies.

PG&E provides a confidential copy of GSP-5 in Attachment A to this Advice Letter. Attachments B through E are appendices to GSP-5. Confidential Appendices A, B, C and D contain Sample Calculations, additional volume and cost forecasts, additional hedging strategies, and an addition to CDWR's Fuels Protocols to facilitate inter-utility trading on behalf of CDWR.

Protest Period

Anyone wanting to protest this filing may do so by sending a letter by **February 22, 2005**, which is 21 days from 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:

IMC Branch Chief – Energy Division
California Public Utilities Commission
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102
Facsimile: (415) 703-2200
E-mail: jjr@cpuc.ca.gov

Copies should also be mailed to the attention of the Director, Energy Division, Room 4005 and Jerry Royer, Energy Division, at the address shown above. It is also requested that a copy of the protest be sent via postal mail and facsimile to Pacific Gas and Electric Company on the same date it is mailed or delivered to the Commission at the address shown below.

Pacific Gas and Electric Company
Attention: Brian Cherry
Director, Regulatory Relations
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California 94177
Facsimile: (415) 973-7226
E-mail: RxDd@pge.com

Effective Date

PG&E requests that this advice filing become effective on **April 1, 2005**.

Notice

In accordance with General Order 96-A, Section III, Paragraph G, 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 list for Rulemakings (R.) 01-10-024 and R.04-04-003. Non-market participants who are members of PG&E's Procurement Review Group and have signed appropriate Non-Disclosure Certificates will also receive the advice letter and accompanying confidential attachments by overnight mail.

The portions of this advice letter so marked Confidential Protected Material are in accordance with the May 20, 2003, Modified Protective Order in R.01-10-024 regarding Confidentiality of Pacific Gas and Electric Company (PG&E) Power Procurement Information. As required by that Order, reviewing representatives of Market Participating Parties will not be granted access to Protected Material, but will instead be limited to reviewing redacted versions of documents that contain Protected Material.

Address change requests should be directed to Rose De La Torre at (415) 973-4716. Advice letter filings can also be accessed electronically at:

<http://www.pge.com/tariffs/>

Ruam H. Cherry

Director - Regulatory Relations

cc: Service List – R.01-10-024, R.04-04-003

Attachments

Confidential Attachment A: Gas Supply Plan (GSP-5) for CDWR Tolling Agreements

Confidential Attachment B: GSP-5 Confidential Appendix A

Confidential Attachment C: GSP-5 Confidential Appendix B

Confidential Attachment D: GSP-5 Confidential Appendix C

Confidential Attachment E: GSP-5 Confidential Appendix D

**PG&E Electric Advice Filing List
General Order 96-A, Section III(G)**

ABAG Power Pool
Aglet Consumer Alliance
Agnews Developmental Center
Ahmed, Ali
Alcantar & Elsesser
Anderson Donovan & Poole P.C.
Applied Power Technologies
APS Energy Services Co Inc
Arter & Hadden LLP
Avista Corp
Barkovich & Yap, Inc.
BART
Bartle Wells Associates
Blue Ridge Gas
Bohannon Development Co
BP Energy Company
Braun & Associates
C & H Sugar Co.
CA Bldg Industry Association
CA Cotton Ginners & Growers Assoc.
CA League of Food Processors
CA Water Service Group
California Energy Commission
California Farm Bureau Federation
California ISO
Calpine
Calpine Corp
Calpine Gilroy Cogen
Cambridge Energy Research Assoc
Cameron McKenna
Cardinal Cogen
Cellnet Data Systems
Childress, David A.
City of Glendale
City of Healdsburg
City of Palo Alto
City of Redding
CLECA Law Office
Constellation New Energy
Cooperative Community Energy
CPUC
Creative Technology
Crossborder Inc
CSC Energy Services
Davis, Wright Tremaine LLP
Davis, Wright, Tremaine, LLP
Defense Fuel Support Center
Department of the Army
Department of Water & Power City
DGS Natural Gas Services
DMM Customer Services
Douglass & Liddell
Downey, Brand, Seymour & Rohwer
Duke Energy

Duke Energy North America
Duncan, Virgil E.
Dutcher, John
Dynegy Inc.
Ellison Schneider
Energy Law Group LLP
Energy Management Services, LLC
Enron Energy Services
Exeter Associates
Foster, Wheeler, Martinez
Franciscan Mobilehome
Future Resources Associates, Inc
G. A. Krause & Assoc
Gas Transmission Northwest Corporation
GLJ Energy Publications
Goodin, MacBride, Squeri, Schlotz &
Hanna & Morton
Heeg, Peggy A.
Hitachi Global Storage Technologies
Hogan Manufacturing, Inc
House, Lon
Imperial Irrigation District
Integrated Utility Consulting Group
International Power Technology
J. R. Wood, Inc
JTM, Inc
Kaiser Cement Corp
Korea Elec Power Corp
Marcus, David
Masonite Corporation
Matthew V. Brady & Associates
Maynor, Donald H.
McKenzie & Assoc
McKenzie & Associates
Meek, Daniel W.
Mirant California, LLC
Modesto Irrigation Dist
Morrison & Foerster
Morse Richard Weisenmiller & Assoc.
New United Motor Mfg, Inc
Norris & Wong Associates
North Coast Solar Resources
Northern California Power Agency
PG&E National Energy Group
Pinnacle CNG Company
PITCO
PPL EnergyPlus, LLC
Praxair, Inc.
Price, Roy
Product Development Dept
R. M. Hairston & Company
R. W. Beck & Associates
Recon Research
Regional Cogeneration Service

RMC Lonestar
Sacramento Municipal Utility District
SCD Energy Solutions
Seattle City Light
Sempra
Sempra Energy
Sequoia Union HS Dist
SESCO
Sierra Pacific Power Company
Silicon Valley Power
Simpson Paper Company
Smurfit Stone Container Corp
Southern California Edison
SPURR
St. Paul Assoc
Stanford University
Sutherland, Asbill & Brennan
Tabors Caramanis & Associates
Tansev and Associates
Tecogen, Inc
TFS Energy
Transwestern Pipeline Co
Turlock Irrigation District
U S Borax, Inc
United Cogen Inc.
URM Groups
Utility Cost Management LLC
Utility Resource Network
Wellhead Electric Company
Western Hub Properties, LLC
White & Case
WMA

Attachment A

Gas Supply Plan (GSP-5) for CDWR Tolling Agreements

(Redacted Version)

Gas Supply Plan 5
for
CDWR Tolling Agreements

April 1, 2005
through
September 30, 2005

REDACTED



***Pacific Gas and
Electric Company™***

February 1, 2005

Contents

1. Executive Summary.....	3
2. Introduction.....	5
3. CDWR Tolling Agreements Managed by PG&E	6
a. For Contracts Where Generator Provides Gas	6
i. Period of Supply	6
ii. Projected Monthly and Daily Gas Volume	7
iii. Gas Pricing Mechanisms	10
iv. Projected Monthly and Seasonal Gas Costs	10
b. For Contracts Where PADLA Provides Gas.....	11
i. Period of Supply	11
ii. Projected Monthly and Daily Gas Volume	11
iii. Projected Monthly and Seasonal Gas Costs	12
4. Gas Supply Strategies Where PADLA Supplies Gas.....	13
a. Six-Month Goals	13
b. Recommended Gas Supply Portfolio	13
i. Contractual Periods	13
ii. Approved Suppliers	15
iii. Supply Basin Mix	16
iv. Interstate Pipeline Mix	16
v. Pricing Mechanisms.....	18
vi. CDWR's Fuels Protocols	18
c. Recommended Interstate/Canadian Pipeline Plan	19
d. Recommended Intrastate/Distribution Pipeline Plan	19
i. Intrastate Pipeline Capacity	19
ii. Distribution Pipeline Capacity	19
e. Recommended Storage Plan.....	19
5. Recommended Gas Price Risk Management Strategies.....	20
a. Risk Assessment Over Next Six Months.....	20
b. Risk Management Goals	22
c. CDWR Prior Review and Consent.....	23
d. Risk Management Budget.....	23
e. Hedging Strategy.....	25
f. [REDACTED].....	26
g. Recommended Use of Risk Management Products.....	27
i. Illustrative Examples	29
6. Gas Operations Plan.....	30

7. Market Assessment for the Next Twelve Months	30
a. Gas Price Forecasts	30
i. Basin and Border Prices.....	30
b. Gas Supply Outlook	31
i. Production Outlook for Gas Basins.....	31
ii. Potential Supply Concerns.....	33
iii. Anticipated Pipeline Outages.....	33
c. Regulatory Outlook Not Specific to PG&E	34
i. California Public Utilities Commission.....	34
ii. Federal Energy Regulatory Commission.....	34
d. Regulatory Cases Involving PG&E	38
i. California Public Utilities Commission.....	38
ii. Federal Energy Regulatory Commission.....	40
e. Transactions for use of Utility-Owned Facilities	41
f. Transactions Outside the Scope of the Gas Supply Plan	42
g. Additional Information	42

Appendix

Appendix A – Sample Calculations	A-1
Appendix B – Projected Gas Volume and [REDACTED].....	B-1
Appendix C – [REDACTED].....	C-1
Appendix D – Inter-utility Transactions	D-1

1. Executive Summary

On July 9, 2004, PG&E filed its Long Term Procurement Plan and the California Public Utilities Commission (Commission) subsequently approved this plan with modifications on December 16, 2004 (D.04-12-048). The long-term plan decision requires PG&E to file an update to its plan by March 25, 2005. While PG&E's procurement plan focuses on the procurement of electricity, it also discusses the contribution of fuel (natural gas) to the value and price sensitivity of Pacific Gas and Electric Company's (PG&E) open market position. Fuel management for the California Department of Water Resources (CDWR) contracts is a part of the strategy generally discussed in PG&E's procurement plan.

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 as a result of a Joint Petition to Modify by SDG&E and PG&E which was adopted by the Commission on October 28, 2004 (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 a semi-annual fuel plan for these gas-tolling arrangements to CDWR and the Commission for review and approval.

PG&E submitted its fourth Gas Supply Plan (GSP-4, October 1, 2004 through March 31, 2005) on August 2, 2004 (Advice Letter 2536-E). That plan was approved by the Commission's Energy Division through a simplified process¹ on December 15, 2004. This document represents PG&E's fifth semi-annual Gas Supply Plan (GSP-5), covering the period April 1, 2005 through September 30, 2005 (PG&E [REDACTED])

[REDACTED] The contents of this plan are consistent with the format used in PG&E's first four gas supply plans. PG&E is scheduled to submit its next plan, GSP-6, on August 1, 2005.

As discussed in previous gas supply plans, PG&E has concluded that it is [REDACTED]

[REDACTED] In addition, PG&E concluded that it is cost effective and appropriate for PG&E in its role as CDWR's limited agent, [REDACTED]

[REDACTED] (The Fuel Supplier is responsible for purchasing gas and delivering it to the Fuel Manager, whereas the Fuel Manager is responsible for

¹ The simplified process is described in Res. E-3845, p. 14-15.

delivering gas to the plant and balancing gas supplies with consumption on a daily and a monthly basis.) PG&E, as CDWR's limited agent, is [REDACTED]

[REDACTED]

- The PPM Energy contract does not allow CDWR to become the Fuel Manager.
- The Coral contract, which becomes a tolling agreement on January 1, 2006, only allows CDWR to deliver gas to the California border.

PG&E has recommended [REDACTED]

[REDACTED] anticipates [REDACTED]

PG&E

PG&E has set a number of goals for the term of GSP-5. In general, it will continue to build a flexible gas portfolio to manage the fluctuating gas loads from the tolling agreements. This strategy is consistent with PG&E's experience managing these agreements since January 1, 2003. PG&E will adhere to the CDWR Fuels Protocols, which were issued in completed form on December 8, 2003, and modified in August 2004 (see Appendix D). PG&E proposes to conduct a Request for Offers (RFO) for firm gas storage service for the term April 1, 2005 through March 31, 2006, with the changes approved in GSP-4. PG&E will execute its risk management strategy for CDWR gas as described in this plan. And finally, PG&E will implement an upgrade to its Panorama gas management system.

[REDACTED]

PG&E is monitoring the fuel price risk of the CDWR portfolio as part of PG&E's net open position. If needed, PG&E will use risk management tools on the electric or gas portfolios to reduce its exposure to price movements.

[REDACTED]



2. Introduction

On July 9, 2004, PG&E filed its Long Term Procurement Plan and the California Public Utilities (Commission) subsequently approved this plan with modifications on December 16, 2004 (D.04-12-048). The long-term plan decision requires PG&E to file an update to its plan by March 25, 2005. While PG&E's plan focuses on the procurement of electricity, it also 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 strategy generally discussed in PG&E's procurement plan.

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 as a result of a Joint Petition to Modify by SDG&E and PG&E which was adopted by the Commission on October 28, 2004 (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 a semi-annual fuel plan for these gas-tolling arrangements to CDWR and the Commission for review and approval.

PG&E submitted its fourth Gas Supply Plan (GSP-4, October 1, 2004 through March 31, 2005) on August 2, 2004 (Advice Letter 2536-E). That plan is pending approval at the Commission. This document represents PG&E's fifth semi-annual Gas Supply Plan (GSP-5), covering the period April 1, 2005 through September 30, 2005 (PG&E 

. The contents of this plan are consistent with the format used in PG&E's first four gas supply plans. PG&E is scheduled to submit its next plan, GSP-6, on August 1, 2005.

Of the 21 CDWR contracts allocated to PG&E, 11, representing six different counterparties, have unexpired provisions for gas tolling. The six counterparties include Calpine, CalPeak, Coral, GWF, PPM Energy, and Wellhead. These contracts represent 1,583 MW of dispatchable contract capacity for 2005. There are no changes to these agreements for 2005.

Each of the CDWR tolling agreements has a variety of options for CDWR including the options to supply fuel (tolling) and to manage deliveries to the plants. 

[REDACTED]

PG&E submitted a draft of GSP-5 to its Procurement Review Group (PRG) and CDWR on January 3 and 4, 2005.²

On January 14, 2005, PG&E met with its PRG and CDWR to discuss GSP-5 and its hedging strategies for CDWR. The session began with an overview of the changes from GSP-4 to GSP-5. The PRG presentation was followed by a question and answer session. Following the PRG meeting, PG&E sent an email to the PRG with meeting minutes and requested concurrence with the plan and the hedging strategies presented in the plan. PG&E subsequently placed a follow-up call to CDWR to gather feedback on the draft plan.

3. CDWR Tolling Agreements Managed by PG&E

In its three previous gas supply plans, PADLA (PG&E As CDWR's Limited Agent) elected to supply fuel under its allocated CDWR tolling agreements. This section compares the generator fuel portfolios with PADLA's proposed fuel supply portfolio. PG&E will continue to estimate CDWR's cost under the generators' fuel plans as a benchmark for comparison to PADLA's portfolio.

a. For Contracts Where Generator Provides Gas

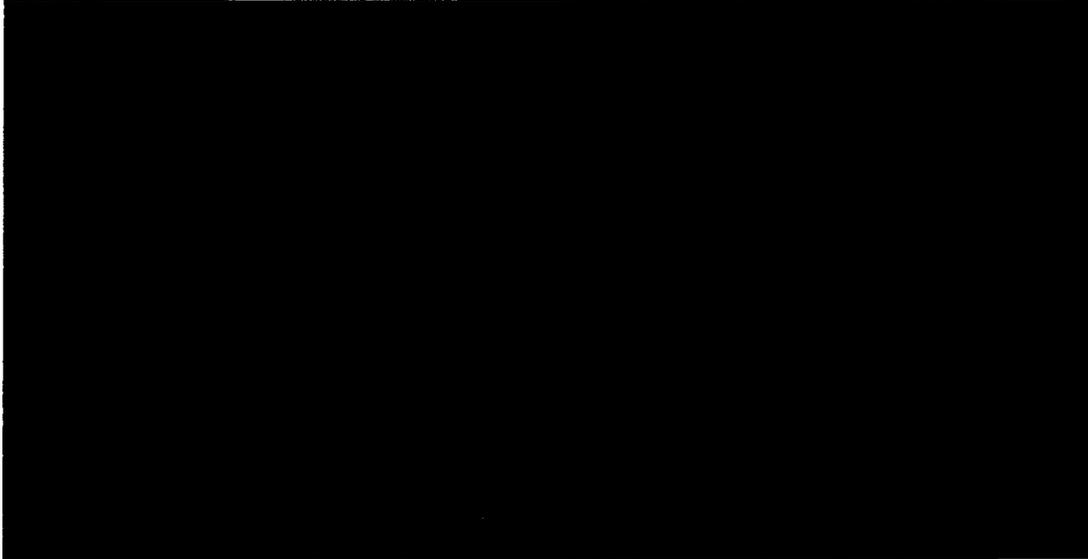
This section provides a brief description of the terms of the generator contracts and fuel plans and a forecast of the expected cost of fuel provided under these plans for the period April 1, 2005 through September 30, 2005, based on market conditions as of [REDACTED]

i. Period of Supply

The following chart shows the responsibility for fuel supply for each contract. The months shaded in black [REDACTED]



² PG&E submitted GSP-5 to DWR on January 3, 2005, to allow DWR and PG&E's PRG nearly 30 days to review the draft plan and then to meet the February 1, 2005 filing date established by the Commission in Resolution E-3845.



ii. Projected Monthly and Daily Gas Volume

Gas volumes for each of the CDWR contracts were forecasted using GenTrader, a software tool for power generation asset optimization (produced by Power Costs, Inc., of Norman, Oklahoma). GenTrader simulates optimal dispatch of all PG&E resources, including the CDWR contracts, based on each resource's specific operating constraints, flexibility and market prices. The system enables PG&E to minimize generation costs and maximize the value of generation assets, including CDWR contracts, Utility Retained Generation (URG) and market purchases.

The key assumptions behind the forecast include:

- Current electric and gas forward curves
- Operating characteristics of URG including hydro and pumped storage
- Operating characteristics and contract terms of the CDWR contracts

Pacific Gas and Electric Company							
Table 1							
Million MMBtu							
Contract	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Total
Calpine 3	█	█	█	█	█	█	█
Calpine 4	█	█	█	█	█	█	█
CalPeak Panoche	█	█	█	█	█	█	█
CalPeak Vaca Dixon	█	█	█	█	█	█	█
GWF Hanford/Henrietta	█	█	█	█	█	█	█
GWF Tracy	█	█	█	█	█	█	█
PPM Energy	█	█	█	█	█	█	█
Wellhead Gates	█	█	█	█	█	█	█
Wellhead Panoche	█	█	█	█	█	█	█
Wellhead Fresno	█	█	█	█	█	█	█
Totals	█	█	█	█	█	█	█

The volumes included in Tables 1, 2, and 3 were forecasted [REDACTED].
 Table 1 includes the [REDACTED].
 Table 2 includes [REDACTED].
 and Table 3 includes [REDACTED].
 [REDACTED]
 PG&E has run this model under a range of assumptions and has found that the [REDACTED].
 [REDACTED]

³ [REDACTED]

⁴ [REDACTED] is in-the-money, that is, the incremental cost of generation is lower than the current market price of power.

⁵ Delta-equivalent volumes take into account the optionality embedded in electric supply resources. Rather than modeling these resources as simply on or off, the delta-equivalent volume represents the resources dispatched according to their option delta (delta is the percentage likelihood that the option will expire in-the-money). [REDACTED]

Pacific Gas and Electric Company
Table 2

Million MMBtu

Contract	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Total
Calpine 3							
Calpine 4							
CalPeak Panoche							
CalPeak Vaca Dixon							
GWF Hanford/Henrietta							
GWF Tracy (III)							
PPM Energy							
Wellhead Gates							
Wellhead Panoche							
Wellhead Fresno							
Totals							

Pacific Gas and Electric Company
Table 3

Million MMBtu

Contract	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Total
Calpine 3							
Calpine 4							
CalPeak Panoche							
CalPeak Vaca Dixon							
GWF Hanford/Henrietta							
GWF Tracy (III)							
PPM Energy							
Wellhead Gates							
Wellhead Panoche							
Wellhead Fresno							
Totals							

iii. Gas Pricing Mechanisms

Complete descriptions of the generator fuel cost mechanisms are included in Appendix A of PG&E's GSP-2⁶ and are incorporated in this plan by reference because they have not changed. Below is a summary table that describes the approach of each mechanism by generator:

Pacific Gas and Electric Company Table 4 Generator Fuel Cost Mechanisms	
Generator	Pricing Mechanism Approach
CalPeak	PG&E Citygate: Monthly, daily, and intra-day indexes, adders for market risk (variable), LDC transport, fuel management and risk management
Calpine	PG&E Citygate: Daily and intra-day indexes, adders for market risk (fixed) and LDC transport
Coral	Starting 1/1/06, Topock into SoCal: Monthly index only, no adders
GWF	PG&E Citygate: Monthly and daily indexes, adders for market risk (fixed daily, variable monthly), LDC transport, fuel management, taxes & fees
PPM Energy	Alberta (AECO 'C'): Monthly & daily indexes (C\$), adders for pipeline variable charges and shrinkage, and heat rate (based on dispatch levels)
Wellhead	PG&E Citygate: Monthly, daily and intra-day indexes, adders for fuel management, risk management, LDC transport, mainline extension, taxes & fees

iv. Projected Monthly and Seasonal Gas Costs

Table 5 provides the results of applying the gas pricing mechanism in each contract and Generator Fuel Plan to the volumes forecasted with [REDACTED] PG&E calculated the cost through the end of [REDACTED] (see Appendix A for sample calculations). The estimated six-month total gas cost under this scenario is [REDACTED] of higher gas prices.

⁶ Gas Supply Plan 2 for DWR Tolling Agreements, November 13, 2003 through March 31, 2004, Pacific Gas and Electric Company, August 15, 2003 (Supplemental Filing November 24, 2003), Appendix A.

Pacific Gas and Electric Company
Table 5
(Million \$)

Contract	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Total
Calpine 3							
Calpine 4							
CalPeak Panoche							
CalPeak Vaca Dixon							
GWF Hanford/Henrietta							
GWF Tracy (III)							
PPM Energy							
Wellhead Gates							
Wellhead Panoche							
Wellhead Fresno							
Totals							

b. For Contracts Where PADLA Provides Gas

This section provides a [REDACTED] Again, the forecast is for the period April 1, 2005 through September 30, 2005, and is based on market conditions as of [REDACTED] This plan assumes that PG&E [REDACTED] The remainder of this plan is devoted to presenting the details of [REDACTED]

i. Period of Supply

In this section, PG&E presents the [REDACTED]

ii. Projected Monthly and Daily Gas Volume

The projected monthly and daily gas volumes [REDACTED] listed in Tables 1, 2 and 3. [REDACTED]

iii. Projected Monthly and Seasonal Gas Costs

Table 6 is the result of applying PG&E's [REDACTED]. The estimated six-month total gas cost [REDACTED].

Pacific Gas and Electric Company Table 6 (Millions \$)							
Contract	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Total
Calpine 3	[REDACTED]						
Calpine 4	[REDACTED]						
CalPeak Panoche	[REDACTED]						
CalPeak Vaca Dixon	[REDACTED]						
GWF Hanford/Henrietta	[REDACTED]						
GWF Tracy (III)	[REDACTED]						
PPM Energy	[REDACTED]						
Wellhead Gates	[REDACTED]						
Wellhead Panoche	[REDACTED]						
Wellhead Fresno	[REDACTED]						
Totals	[REDACTED]						



⁷ Note: 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.

⁸ The availability of this capacity was confirmed by a letter agreement between CDWR and PPM Energy on November 10, 2003. [REDACTED]

4. Gas Supply Strategies Where PADLA Supplies Gas

This section describes, in detail, the portfolio [REDACTED]

a. Six-Month Goals

PG&E has established the following goals for the term of GSP-5:

- Update the physical position of the CDWR portfolio including mark-to-market at the end of each trading day.
[REDACTED]
- Work with CDWR to reduce its role in invoice reconciliation and billing.⁹
[REDACTED]
- Adhere to the CDWR Fuels Protocols (see Appendix B of GSP-3 for the first release of the completed protocols).
- Implement an upgrade of the Panorama gas management system.

b. Recommended Gas Supply Portfolio

i. Contractual Periods

[REDACTED]

[REDACTED]

In addition, it is important to note that 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.

[REDACTED]

⁹ PADLA provides billing statements when it sells excess natural gas. The majority of this excess gas is from [REDACTED]

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

[Redacted]

[Redacted]

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

Fuel Manager: Receives gas from the Fuel Supplier and manages daily and monthly deliveries from the Citygate (or other point) to the plant.

Based on these benefits, PADLA intends to take over the following roles:

Pacific Gas and Electric Company		
Table 7		
PADLA Role Elections		
Generator	Fuel Supplier	Fuel Manager
Calpine 3 & 4	[Redacted]	[Redacted]
PPM Energy	[Redacted]	[Redacted]
GWF	[Redacted]	[Redacted]
Wellhead	[Redacted]	[Redacted]
CalPeak	Yes	Yes (receive the benefits)
Coral	[Redacted]	[Redacted]

PADLA will build its supply portfolio for the term of GSP-5 to match the generation forecast shown in Section 3.a.ii.

¹⁰ By "receiving the benefits of being Fuel Manager" PADLA retains balancing rights of the Fuel Manager without physically nominating gas to the generating facility on a daily basis.

Pacific Gas and Electric Company				
Table 8				
PADLA Supply Portfolio				
Supplier	Term	Volume	Location	Pricing
Calpine 3 & 4				
PPM Energy				
Wellhead				
CalPeak				
GWF				
Balancing				



ii. 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 (see Appendix B of GSP-3). PG&E will also work with CDWR to add additional approved suppliers to the list as necessary.

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.

PG&E will use CDWR-approved counterparties for financial trading per Resolution E-3825.

In addition, CDWR is using NYMEX Over-the-Counter (OTC) clearing services through a brokerage account to reduce counter-party credit risk and to reduce collateral requirements.

iii. Supply Basin Mix

PG&E has no particular supply basin preference. Philosophically, it is better to build basin diversity into the portfolio; however, the same diversity benefits can be achieved by choosing particular suppliers (based on their supply portfolios) for gas purchased at the California Border or PG&E Citygate [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

iv. Interstate Pipeline Mix

As stated above, PADLA's pipeline choices will be driven by market conditions at the PG&E Citygate, California border and in the supply basins. The results of PADLA's needs analysis dictates the choice of pipeline path.

The first consideration in evaluating interstate pipeline capacity is the

[REDACTED]

PG&E reviewed the market value of interstate and intrastate capacity for the year beginning April 1, 2005. The results (in Table 9) show that the market prices [REDACTED]

[REDACTED] (see Appendix A, page A-3 for a sample calculation) [REDACTED]

[REDACTED]

[REDACTED]

Pacific Gas and Electric Company
Table 9

Path	Pipelines	Basis Differential (Oct - Sep)	Pipeline Variable Charges, Fees & Fuel	Implied Reservation	Implied Reservation % of Full Tariff
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Notes: All prices and costs are US \$/MMBtu as of January 3, 2005.
Rates on California Gas Transmission (CGT) Baja and Redwood are MFV.

That said, the PPM Energy contract includes 51,840 MMBtu/day of firm capacity on TransCanada Alberta, TransCanada British Columbia (BC) and Gas Transmission Northwest (GTN). The full reservation charges for each pipeline are included in the fixed capacity charge under CDWR's Power Purchase Agreement with PPM Energy. If PPM Energy supplies fuel under the contract, it has the benefit of the pipeline capacity when the plant is not dispatched. If CDWR supplies fuel, it has the option to receive the benefit of the capacity when the plant is not dispatched (this is the main benefit of supplying fuel under this contract).

[REDACTED]

Note that PPM Energy is the shipper of record on GTN and will not release the capacity to CDWR, per CDWR's letter agreement with PPM Energy. PPM will deliver CDWR gas to the plant when it is dispatched or to CDWR at Malin when the plant is not dispatched.

In order for PADLA to operationally capture the benefits of this capacity, PG&E filed a Petition to Modify D.02-10-062 to enable it to transact with Gas Transmission Northwest Corporation on behalf of CDWR. The Commission approved this petition on June 9, 2004 (D.04-06-003), with modifications proposed by PG&E in response to the draft decision. Since that time and as part of National Energy Group's (formerly PG&E National Energy Group) bankruptcy proceeding, GTN was acquired by TransCanada Corporation. As of November 1, 2004, GTN is no longer an affiliate of PG&E.

v. Pricing Mechanisms

There are several standard pricing mechanisms that are accepted practice in the gas industry. PG&E adheres to these practices. The choice of a particular pricing method is based on the risk position of PG&E's electric portfolio, the nature of the load that the gas is supplying, and the amount of credit consumed by the method.

PADLA intends to use the following pricing methods for the majority of gas purchases (Table 10). Other methods may be added as market conditions change. PADLA may use a combination of these methods to buy gas transportation at a floating price.

Pacific Gas and Electric Company Table 10 Pricing Methods	
Pricing Method	Description
Intra-day Fixed	Fixed price for nominations during cycles 2 – 4
Daily Fixed	Fixed price for gas the following day (cycle 1)
Monthly Fixed	Fixed price for a fixed daily volume for a calendar month
Daily Index	Floating price for a single day, published on the day of flow by <i>Gas Daily</i> (or Monday for Sat, Sun & Mon)
Monthly Index	Floating price for a fixed daily volume for a calendar month, published after the close of the NYMEX contract for the month of flow by <i>Natural Gas Intelligence</i> (NGI)

vi. CDWR's Fuels Protocol

CDWR issued the first completed version of its Fuels Protocols on December 8, 2003, and they were implemented immediately. The protocols were included in GSP-3 as Appendix B.

In the resolution approving PG&E's GSP-1 (Res. E-3825), the Commission directed PG&E to work with CDWR and the other utilities to develop "a proposal showing how unused pipeline or storage capacity can be made available to the other utilities in connection with their CDWR contract related duties or brokered." Since this process will involve all three utilities and CDWR, PG&E proposes to add it to CDWR's Fuel Protocols. In the resolution approving PG&E's GSP-2 (Res. E-3845), the Commission stated:

In response, PG&E suggests that such a proposal is better suited for DWR's Fuels Protocols because it would involve the other utilities as well as DWR. We agree with PG&E's premise that coordination with the other utilities is necessary to implement such a proposal and, thus, find the utility's response to this issue satisfactory. We will expect PG&E to actively pursue these

matters in the course of their discussions with DWR concerning the Fuels Protocols or other appropriate forum. (Res. E-3845, p. 12)

On August 12, 2004, CDWR held a teleconference with representatives of Southern California Edison, San Diego Gas & Electric and PG&E to discuss a proposed process for trading unused storage, pipeline capacity and gas between the utilities on behalf of CDWR. Subsequent to that meeting, CDWR issued an amendment to its Fuels Protocols authorizing to utilities to exchange products and services on behalf of CDWR and outlining the process for facilitating such an exchange. This amendment and the accompanying transaction confirmation form are included as Appendix D to this plan.

c. Recommended Interstate/Canadian Pipeline Plan

As stated above, PADLA's pipeline choices will be driven by market conditions and the needs of its portfolio. [REDACTED]

d. Recommended Intrastate/Distribution Pipeline Plan

i. Intrastate Pipeline Capacity

[REDACTED]

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 (LDCs). The generators will continue to contract for distribution capacity with their LDC.

e. Recommended Storage Plan

In GSP-4, PG&E presented the results of its firm storage Request for Offers (RFO) conducted on behalf of CDWR under GSP-3. While that storage RFO did not result in a storage agreement, PG&E used the results of that RFO to propose revisions to the RFO process in GSP-4. With the approval of this revised process by the Commission, PG&E will conduct another firm storage RFO on behalf of CDWR for the term April 1, 2005 through March 31, 2006. This RFO was discussed with PG&E's

Procurement Review Group (PRG) in January and is expected to be complete by March 15, 2005.

5. Recommended Gas Price Risk Management Strategies

The gas price risk management strategy associated with the dispatchable CDWR contracts is part of the overall PG&E electric and electric fuels portfolio management program. In its approved Generation Procurement Plans, PG&E describes its management of the total dollar exposure of its electric, PG&E fuel and CDWR fuel positions.¹¹ Starting in 2004, PG&E began measuring the exposure of its electric portfolio against a risk tolerance limit using a to-expiration value-at-risk (TeVAr) measure. From a regulatory perspective, the approved risk notification level for 2004 as measured by TeVaR for the entire portfolio is [REDACTED]

A contributor to TeVaR is price risk exposure. Price risk occurs when there are open positions (long or short), created by a mismatch between load obligations and contracted or owned supplies. To PG&E, the CDWR dispatchable contracts on their own represent a long spark spread¹² option position. Simplistically, the contracts can be viewed as a long position in electricity and a short position in fuel when the tolling arrangement is "in-the-money."¹³

a. Risk Assessment Over Next Six Months

For the six-month term of this plan PG&E is focused on assessing when it is appropriate to [REDACTED]

¹¹ Pacific Gas and Electric Company Generation Short-Term Procurement Plans, last updated January 18, 2005. AL. 2615-E.

¹² The difference between the market price for power and the equivalent cost of power generated with natural gas at the current market price.

¹³ A contract where the forward market price for power is greater than the forward cost of generation.

[REDACTED]

[REDACTED]

Quantifying Dispatched Gas Volumes

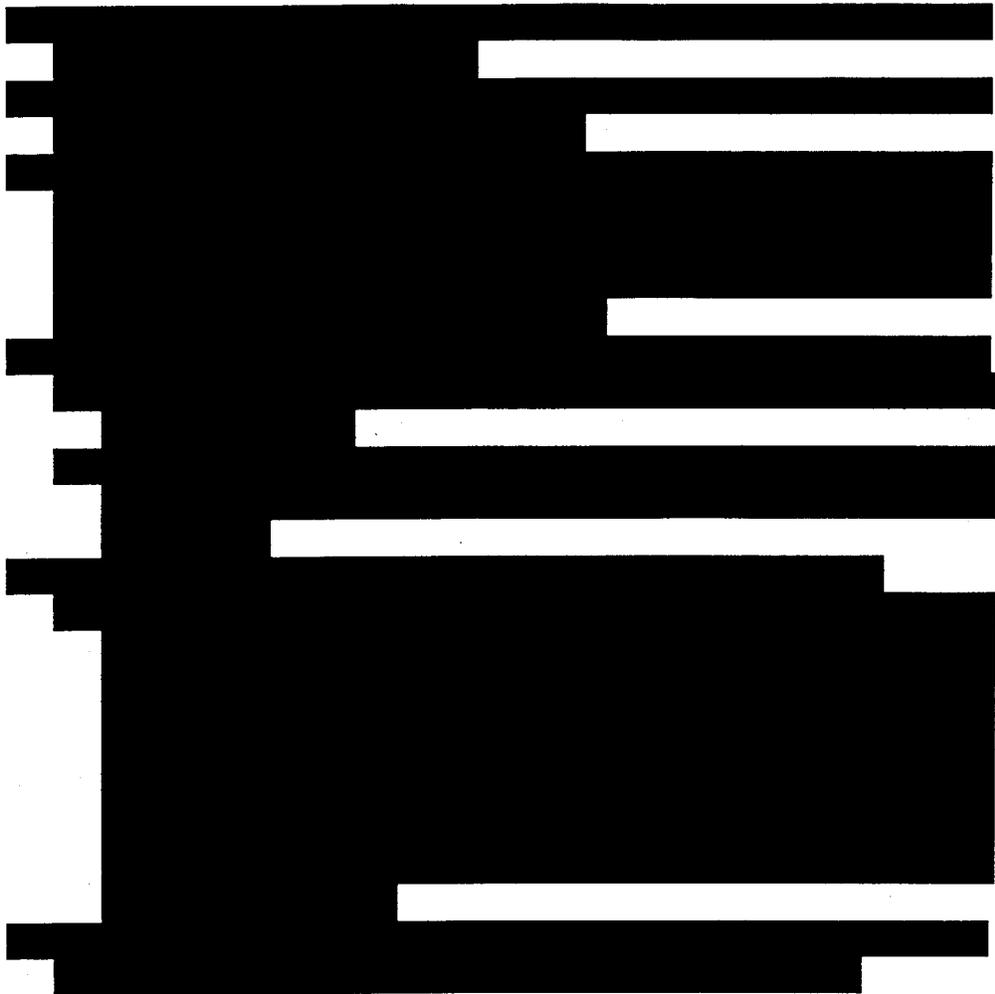
The first consideration in quantifying expected gas volumes is to understand the terms and conditions regarding the dispatchability of specific CDWR power contracts. This takes into account defined contractual and physical constraints.

[REDACTED]

[REDACTED]

¹⁴ No need to fix the price based on a heat rate that is higher than the market price for energy. However, a delta-equivalent assessment captures the potential for the market heat rate to change over time, which is why some portion of the notional MW amount might be covered on a forward basis.

¹⁵ Economic surplus is when a contract is "in-the-money," but contributes to a long market position because the output exceeds current obligations.



b. Risk Management Goals

PG&E has established the following risk management goals for the term of GSP-5:

- Evaluate the risk position of PG&E's electric portfolio and the contribution of CDWR's tolling agreements to that position on a weekly basis.
- Measure the electric portfolio TeVaR as described in PG&E's 2005 Procurement Plan on a weekly basis and manage TeVaR within the levels described above.
- Review all risk management procedures and controls to ensure that they reflect implementation of the Panorama gas management system.



c. CDWR Prior Review and Consent

To date, all of CDWR's counterparties for financial transactions have required CDWR to consent to and execute each transaction. As long as these counterparties maintain this requirement, PG&E will continue to submit all financial transactions to CDWR for review, approval and execution, as described in CDWR's Fuels Protocols.¹⁶

d. Risk Management Budget

PG&E's hedging activities support the management of its entire electric portfolio as described in its Short-Term Procurement Plans. The hedging strategies and tactics described in this section are only for management of the risk contribution by the CDWR tolling agreements to PG&E's electric portfolio. PG&E's forecast of the amount needed for hedging activities over the period covered by the GSP-5 will change through time. The deviations between actual conditions and forecast planning conditions will affect the open position and where PG&E stands in relation to its authorized portfolio risk tolerance level at any given point in time. Consequently, although PG&E can provide CDWR with a dollar amount for hedging on a planning basis, the actual amounts needed will vary as conditions change.

Hedging expenses have two main sources, exchange and broker fees from NYMEX OTC Clearing and call option premiums. Hedging expenses do not include collateral to provide security to the counterparty for a transaction or any financial or physical settlement loss (because either would be offset by a corresponding physical gain).

The following tables list



¹⁶ Gas Supply Plan 3 for DWR Tolling Agreements, April 1, 2004 through September 30, 2005, Pacific Gas and Electric Company, February 2, 2004, AL. 2471-E, Appendix B.

Pacific Gas and Electric Company						
Table 12						
Estimated CDWR Gas Requirements (Planning Basis Only)						
	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Pacific Gas and Electric Company		
Table 13		
[REDACTED]	[REDACTED]	[REDACTED]
Hedging Products	Estimated Fees	Estimated Premiums
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

Assumptions:

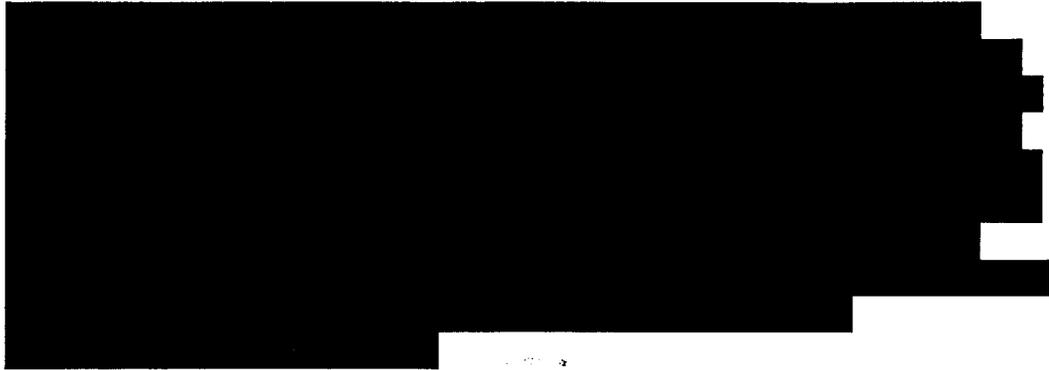
[REDACTED]

[REDACTED]

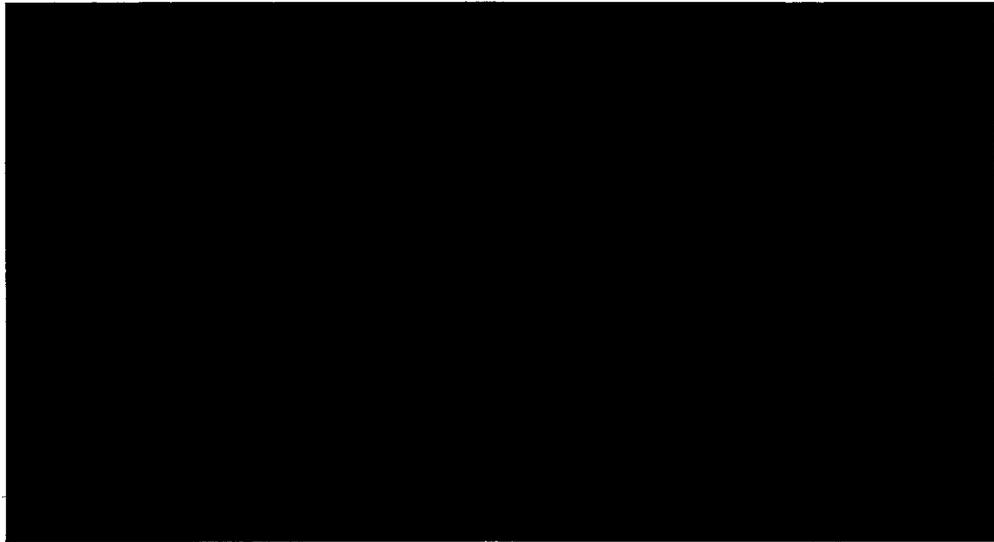
17

[REDACTED] See Table 12.

e. Hedging Strategy



Pacific Gas and Electric Company
Figure 2



¹⁸ Please see Appendix D, page D-4 of GSP-3 for more discussion of the target hedge percentages.

[REDACTED]

Pacific Gas and Electric Company
Table 14

	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Total
[REDACTED]							
[REDACTED]							
[REDACTED]							
[REDACTED]							
[REDACTED]							
[REDACTED]							
[REDACTED]							

Assumptions: [REDACTED]

[REDACTED]

f. [REDACTED]

Based on the successful outcome of CDWR's negotiations with PPM regarding the benefits of firm gas pipeline capacity from Alberta to Malin, PG&E added this asset to its electric portfolio. Since the value of the pipeline capacity is the difference in market price between Malin and AECO, its value fluctuates. The market value of this capacity as of January 3, 2005, is shown in Table 15.

[REDACTED]

[REDACTED]

Pacific Gas and Electric Company Table 16 Risk Management Tools		
Tools	Physical Product Use	Financial Product Use
Fixed Price ²⁰ (daily, balance of month, monthly)	Buy forward gas at a fixed price	None
Index/Swap for Fixed ²¹	Buy forward at monthly index	Swap floating price for fixed
Index/Futures+Basis ²²	Buy forward at monthly index	Long futures & Long basis swap
Swing Swap ²³	Buy forward at monthly index	Swap monthly floating price for daily floating price
Index/Buy Call Option ²⁴	Buy forward at monthly index	Buy call option
Index/Buy Collar ²⁵	Buy forward at monthly index	Buy collar (sell put, buy call)
Call Spread ²⁶	Buy forward at monthly index	Buy call option, sell call option at a higher strike price
Synthetic Call Option ²⁷	Buy forward at monthly index	Swap floating price for fixed and Buy put option

Table 17 lists the most common hedging objectives PG&E anticipates using during the term of GSP-5 and ranks its choice of tools to achieve these objectives. The locations listed in the objectives [REDACTED]

²⁰ Referred to as "Gas Purchases" in Authorized Procurement Products table in D.03-12-062.

PG&E, like SCE, needs the ability to transact daily gas products.

²¹ Referred to as "Financial Swap" in Authorized Procurement Products table in D.03-12-062.

²² *Ibid.*

²³ *Ibid.*

²⁴ Referred to as "Financial call (or put) option" in Authorized Procurement Products table in D.03-12-062.

²⁵ *Ibid.*

²⁶ *Ibid.*

²⁷ See Section 5.g.i for a description of this tool.

Pacific Gas and Electric Company Table 17		
Objectives	Physical/Financial Tools	Notes
[REDACTED]	[REDACTED]	[REDACTED]

i. Illustrative Examples

In order to streamline this plan, the illustrative examples of hedge transactions provided in GSP-2 are not repeated here but are incorporated by reference, since they will not change.²⁸ The example of a hedge using a synthetic call option was provided in GSP-4 is not repeated here but is incorporated by reference.²⁹

²⁸ Gas Supply Plan 2 for DWR Tolling Agreements, November 13, 2003 through March 31, 2004, Pacific Gas and Electric Company, August 15, 2003 (Supplemental Filing November 24, 2003), pp. 32-35.

²⁹ Gas Supply Plan 4 for DWR Tolling Agreements, October 1, 2003 through March 31, 2004, Pacific Gas and Electric Company, August 15, 2003.

6. Gas Operations Plan

In order to streamline this plan, the Gas Operations Plan provided in GSP-2 is not repeated here but is incorporated by reference from GSP-2.³⁰ Should the substance of PG&E's operations change in the future, PG&E will include a revised Gas Operations Plan in future Gas Supply Plans.

One subject discussed in the Gas Operations section of GSP-2 has changed during the term of GSP-4: PG&E developed a more detailed procedures guide for its implementation of the Panorama gas management system. This guide includes detailed instructions for the primary Panorama functions implemented by PG&E including: physical and financial trade entry, gas scheduling, confirmations, settlements, and system administration. The guide will be completed in January 2005.

7. Market Assessment for the Next Twelve Months

This section provides the background information needed to produce this plan and to assess the costs and risks of the strategies.

a. Gas Price Forecasts

Rather than use a forecast of gas prices based on econometric models, PG&E prefers to use forward price quotes from physical and financial markets. The following forward gas prices are based on a combination of physical and financial market quotes from market makers. These prices reflect market conditions as of the end of the trading day, [REDACTED]

[REDACTED] The prices listed here were used for all of the analysis presented in this plan.

i. Basin and Border Prices

Pacific Gas and Electric Company Table 18a Basin Forward Prices All prices are in U.S. \$/MMBtu							
Basin	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05
Alberta							
Rocky Mountain							
Permian							
San Juan							

³⁰ Gas Supply Plan 2 for DWR Tolling Agreements, November 13, 2003 through March 31, 2004, Pacific Gas and Electric Company, August 15, 2003 (Supplemental Filing November 24, 2003), pp. 36-41.

Pacific Gas and Electric Company Table 18b Basin Forward Prices All prices are in U.S. \$/MMBtu						
Basin	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	
Alberta						
Rocky Mountain						
Permian						
San Juan						

Pacific Gas and Electric Company Table 19a Border Forward Prices All prices are in U.S. \$/MMBtu							
Border	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05
PG&E Citygate							
Topock							
Malin							
Sumas (BC)							

Pacific Gas and Electric Company Table 19b Border Forward Prices All prices are in U.S. \$/MMBtu					
Border	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06
PG&E Citygate					
Topock					
Malin					
Sumas (BC)					

b. Gas Supply Outlook

i. Production Outlook for Gas Basins

Rocky Mountain and San Juan Basins

Gas production in the Rockies continues to grow, offsetting modest declines in the San Juan and Permian basins. Rockies regional exports reached 4.7 billion cubic feet per day (Bcf/day) in May 2004, an increase of 1 Bcf per day over 2003. Significant portions of these new volumes are being delivered to California through the Kern River pipeline. Drilling activity in the Rockies region continues a pace 40% higher than the rate in 2000.

Rockies gas has traded at a \$1.31/MMBtu discount to the NYMEX Henry Hub contract for winter to date 2004/5 and traded at a \$0.48/MMBtu discount to NYMEX for summer 2004. Looking forward, Rockies gas is currently trading at a [REDACTED] discount to the NYMEX for summer 2005 and at a [REDACTED] discount for winter 2005/6.

San Juan production is expected to decline to 3.75 Bcf/day in 2004 and to continue to decline at a rate of 100 MMcf/day per year until 2010. San Juan gas has traded at a \$1.38/MMBtu discount to NYMEX for winter to date 2004/5 and traded at a \$0.83/MMBtu discount to NYMEX for summer 2004. San Juan gas is currently trading at a [REDACTED] discount to NYMEX for summer 2005 and at a [REDACTED] discount for winter 2005/6.

Sources: PIRA, North American Gas Production and Western Basis, June 2004, CERA Decision Brief: The Continental Divide, Pricing Dynamics Between Western and Eastern Natural Gas Markets, June 2004.

Permian Basin

Permian gas has traded at a \$1.25/MMBtu discount to NYMEX for winter to date 2004/5 and traded at a \$0.55/MMBtu discount to NYMEX for summer 2004. The Permian basin is currently trading at a [REDACTED] discount to NYMEX for summer 2005 and at a [REDACTED] discount for winter 2005/6. Permian gas has been largely displaced in California by Rockies gas flowing through the Kern River Pipeline. Currently, Permian gas flows to California [REDACTED]

Sources: PIRA, North American Gas Production and Western Basis, June 2004, CERA The Worst is Yet to Come, Diverging Fundamentals Challenge the North American Gas Market, Spring 2004.

California Production

California production is expected to remain flat at slightly over 1 Bcf/day. Nearly 800 MMcf/day of this production is located in southern California (Occidental Energy), and the remaining 200 MMcf/day resides in northern California. Drilling activity continues at an average of 22 rigs. This trend is expected to continue through 2012.

Sources: CEC Natural Gas Supply and Infrastructure Assessment, Baker Hughes Inc.

Alberta and British Columbia

Canadian supplies continue to play an important role in California and the U.S. as a whole.

In Alberta, the Western Canadian Supply Basin (WCSB) gas production has made a turn around. A year ago production rates were declining even though rig counts were increasing. Today, production remains at 16.5 Bcf per day, which is the same production level as in 2003. [REDACTED]

[REDACTED]

In the near term, Canadian rig counts (WCSB and BC) reached 586 rigs in February 2004, the highest level in 10 years. Coal bed methane production in the WCSB is starting to have an impact with production likely to double to 50 MMcf/day in 2004.

Other factors are putting negative pressure on Alberta prices including: the Kern River 2003 Expansion to California, and uncontracted capacity on TransCanada's mainline. Gas from the 2003 Kern River pipeline expansion continues to displace gas volumes from GTN, and thus Alberta. [REDACTED]

[REDACTED]. Uncontracted capacity on TransCanada's mainline changes Alberta export economics from netback to netforward for volumes using that capacity. Netforward pricing includes pipeline capacity as a variable charge, which puts negative pressure on prices in the basin.

WCSB gas at the AECO 'C' hub gas has traded at a \$1.34/MMBtu discount to NYMEX to date for winter 2004/5 and traded at a \$0.89/MMBtu discount to NYMEX for summer 2004. Gas at AECO continues to trade at a [REDACTED] discount to Henry Hub for summer 2005 and at a [REDACTED] discount for winter 2005/6.

[REDACTED]

Sources: CERA The Worst is Yet to Come, Diverging Fundamentals Challenge the North American Gas Market, Spring 2004, Baker Hughes Inc., PG&E Utility Risk Management forward curves.

ii. Potential Supply Concerns

PG&E has no supply shortage concerns for the term of GSP-5.

iii. 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.

c. Regulatory Outlook Not Specific to PG&E

i. California Public Utilities Commission

Application 04-12-004

On December 2, 2004, SDG&E and Southern California Gas Company filed an application to revise their rates for gas service. Specifically, this Application proposes to revise SoCalGas and SDG&E's rates to combine the transmission costs of the integrated SoCalGas and SDG&E transmission systems, to establish a separate reservation charge for firm access rights into the systems (which will be credited back to customer rates), and to establish an in-kind fuel charge for transmission service. The Application also proposes new service offerings for off system deliveries

source: www.socalgas.com

ii. Federal Energy Regulatory Commission

There are a number of cases at the federal level that may impact fuel purchases over the next twelve months. Cases involving PG&E directly are discussed in Section d. Regulatory Cases Involving PG&E. The remaining federal cases include:

1. Standard Market Design (SMD) Notice of Proposed Rulemaking (NOPR) (RM01-12-000) – FERC's proceeding regarding standardizing the rules for power markets. The FERC issued its white paper on its proposed SMD in April 2003 and is currently engaging in regional conferences to discuss regional flexibilities that may be encoded into the final rule. The Energy Bill legislation currently before Congress mandates that FERC may not issue any final SMD rule before 2007.
2. Natural Gas Pipeline Negotiated Rate Policies and Practices, Docket No. PL02-6-000. The Commission issued a policy statement in July 2003 modifying its negotiated rate policy. The FERC has modified its Policy concerning negotiated rates to continue to permit the flexible, efficient pricing of pipeline capacity in a transparent manner, while ensuring the mitigation of market power. The modifications include a new prohibition of the use of gas basis differentials to price negotiated rate transactions.
3. California Independent System Operator (CAISO) Market Design 2002 (MD2002) Plan (ER02-1656) – This case continued western

price mitigation and established a bid cap of \$250/MWh and set up the Automated Mitigation Provision (AMP) that applies only if prices are greater than \$91.87/MWh. The MD02 plan has yet to be fully implemented by the CAISO. The Commission recently issued an order substantially resolving seven elements of California's MD02 proposal representing both reliability tools and market efficiency improvements. The seven issues addressed are the following: (1) The Flexible Offer Obligation; (2) the Residual Unit Commitment Process; (3) the Simplified Hour-Ahead Market; (4) Ancillary Services; (5) Marginal Losses; (6) Constrained Output Generators; and (7) Virtual Bidding. The major unresolved issue is that of Resource Adequacy. The order defers ruling on that issue to wait and see the CPUC's ruling on that issue which is to come out sometime this summer. The order also defers ruling on remaining market redesign issues including Market Mitigation until after the CPUC's Resource Adequacy decision is made public. Other unresolved issues include Allocation of Congestion Revenue Rights, Existing Transmission Contracts (ETCs), and Seller's Choice Contracts (SCCs). The draft order directs additional information be submitted on ETCs and recognizes that there will be transitional issues with incorporating existing contracts including SCCs into the new market design. The draft order also directs the FERC Staff to hold a technical conference on Congestion Revenue Rights (CRRs).

4. Price Discovery in Natural Gas and Electric Markets, Docket No. PL03-3-000. The Commission voted on a policy statement that takes steps to encourage further voluntary participation in the index building process by identifying certain minimum practices that if followed by data providers, would establish a "safe harbor" for any errors that may occur in data submission. The submitters would be protected from any FERC penalties should they follow these minimum practices. The practices include: (1) requiring data providers to report the information through someone other than the traders; (2) having a code of conduct; (3) having an error resolution process in place; and (4) reporting transaction specific data (i.e., price volume, buy/sell indicators, location, date/time, term), and having a data retention and review process. In addition, the policy statement states that index developers should have a code of conduct/confidentiality provision in place, require the above information be reported on a transaction level basis, have data verification, error correction and monitoring procedures, and allow access to the data by FERC.
5. 2003/2004 Winter Gas Market Assessment (No Docket Number) – On November 13, 2003, the FERC heard a presentation from the Office of Market Oversight and Investigation on the pricing of gas

for the upcoming winter months. The presentation illustrated the projected difference between the cost of gas in storage (\$5.25) and project futures strip for this winter (\$5.03) and the estimated cost of gas in storage in 2002-03 winter (\$3.33) vs. the average cash price of gas during that heating season (\$5.49). This caught Chairman Wood's eye as illustrating the value of storage as insurance even if that insurance comes at a cost of \$0.22 this year because last year it resulted in \$2 in customers' favor. Given the correlation between the level of gas in storage and the price of gas (FERC staff was actually clear to discuss this more as a barometer than a direct correlation), the value of storage is well-worth the cost of the "insurance." Chairman Wood wanted to ensure state commissions got this message.

6. Standards of Conduct for Transmission Providers Docket No. RM01-10-000 (Order No. 2004) – On November 25, 2003, the Commission issued a final rule, Order No. 2004, adopting new standards of conduct for Transmission Providers when dealing with their "energy affiliates." Within 60 days after Federal Register publication, each Transmission Provider must post on the OASIS or its Internet website a compliance plan. All Transmission Providers must comply with the standards of conduct by June 1, 2004. The standards of conduct are designed to prevent Transmission Providers (interstate natural gas pipeline and public electric utilities) from giving undue preferences to any of their Energy Affiliates to ensure that transmission is provided on a non-discriminatory basis. The final rule addresses many of the concerns of the industry, including retaining the existing exemption for local distribution companies; continuing already granted exemptions from the existing affiliate rule; allowing the sharing of corporate officers, directors and senior manager so long as they do not act as a conduit of information among affiliates; allowing exemptions from the rule for foreign affiliates, affiliated Transmission Providers (interstate gas pipelines or electric public utilities), a holding, parent or service company not involved in transmission or commodity transactions; permitting Transmission Providers to share support employees and field and maintenance employees with their Marketing and Energy Affiliates; and ensuring system reliability by explicitly allowing Transmission Providers to take whatever steps are necessary in an emergency to ensure reliable operations, including, if necessary, sharing of employees otherwise barred. Major Industry proposals that were not accepted included continuation of the exemption for producer, gatherers and processors, and requests that intrastate pipelines, Hinshaw pipelines and trading and financial affiliates be exempt. Rehearing or clarification requests are due to be filed by December 24, 2003.

7. Amendments to Blanket Sales Certificates, Docket No. RM03-10-000 (Order No. 6). The FERC voted on a final rule that issues a set of market behavior rules designed to help prevent market abuse, provide a more stable marketplace and create an environment that will attract needed investment capital in the electric and natural gas industries. The market behavior rules will alert sellers to various types of prohibited behavior. The rules also contain flexibility to allow for new and unexpected practices. The rule contains provisions relating to: market manipulation, reporting, and record retention. If a seller is found to have engaged in prohibited behavior, the seller will be subject to disgorgement of unjust profits and non-monetary remedies such as revocation of the seller's market-based rate authority or blanket certificate authority. Commissioner Massey went on record to state that he believes that the Commission should not limit itself to disgorgement of profits as its only remedy. The new rules are designed to provide more effective remedies on behalf of customers and to provide those entities with market-based rates or blanket gas certificates appropriate rules respecting market conduct with a time-limited third-party complaint window. The rule becomes effective on December 26, 2003, and entities must inform FERC whether they report their transactions to index publishers by January 8, 2004.
8. Kern River Gas Transmission Company, Docket No. RP04-274-000. The Commission has issued an order setting Kern River's April 30, 2004, Section 4 rate case filing for hearing. Kern River's proposal involves a \$40.1 million increase in its jurisdictional cost of service, to approximately a \$347.4 million overall cost of service. The cost of service is based on a base period ending January 31, 2004 through October 31, 2004, and consists of \$34.1 million in total Operation and Maintenance expenses, plus depreciation, depletion and amortization of gas and general plant in service, income and other taxes, and an overall after-tax return of 9.59%. The proposed return reflects an overall cost of debt of 6.62% annually and a rate of return on equity of 15.1%. Further, Kern River proposes a rate base of \$1,803.8 million and a decrease in projected throughput from 630,415 MDth to 572,174 MDth based on actual quantities transported. Kern River also proposed a separate subclass of transmission plant consisting of compressor engines and to establish an annual depreciation accrual rate of 9.92%. Kern River also wants to increase the annual depreciation accrual rates for transmission plant other than compressors for book accounting purposes only from 2.0% to 3.39% and to implement a negative salvage rate of 0.21 percent.

9. Reporting by Transmission Providers on Vegetation Management Practices Related to Designated Transmission Facilities, Docket No. EL04-52-000. The Commission issued a vegetation management order requiring all entities that own, operate or control designated transmission facilities to report on their vegetation management practices by June 17, 2004. The order was directed to transmission providers, regardless of whether they are subject to the FERC's jurisdiction as a public utility. Designated transmission facilities are power lines of 230 kilovolts or higher as well as tie-line interconnection facilities between control areas or balancing authority areas (regardless of voltage rating) and "critical" lines as previously designated by a regional reliability council. The order directed transmission providers to do the following: (1) Describe in detail the vegetation management practices and standards that the provider uses for vegetation control near designated transmission facilities; (2) list those designated facilities under the provider's control; (3) indicate how often the facilities are inspected for vegetation management purposes and indicate when the most recent survey was completed; (4) indicate whether any necessary remediation has been completed as of June 14, 2004; and (5) describe any factors that prevent or unduly delay adequate vegetation management.

d. Regulatory Cases Involving PG&E

i. California Public Utilities Commission

Gas Transmission and Storage 2005 Rate Case

On March 19, 2004, PG&E filed its Gas Transmission and Storage 2005 Rate Case Application (A.04-03-021), as ordered by Gas Accord II Decision (D.03-12-061). The Decision ordered PG&E to file for gas rates effective January 1, 2005, and a cost of service for the company's natural gas storage business effective April 1, 2005. PG&E also presented several rate design proposals that provide a "backbone level" rate structure and eligibility criteria for qualified noncore end-use customers.

On December 16, 2004, the CPUC issued a decision approving, without modifications, the all-party "Gas Accord III Settlement Agreement" (Settlement) and the associated tariff changes. The Settlement maintains the current Gas Accord market structure and service options and also adds a new backbone level end-use rate option, as ordered by D.03-12-061. All other market structure changes are minor.

This Settlement: (1) resolves all issues in this proceeding; (2) sets PG&E's gas transmission and storage rates and market structure for a three-year term (2005-2007), commencing January 1, 2005; (3) provides a gas transmission and storage revenue requirement of \$427.4 million for 2005, \$435.5 million for 2006, and \$443.7 million for 2007; (4) supersedes and extinguishes PG&E's obligation under D.03-12-061 to file a new application addressing rates and market structure for 2006 and beyond; and (5) requires PG&E to file the next gas rate case no later than February 2007 for rates to be in effect by January 1, 2008.

This Settlement will result in a decrease of \$2.5 million over the Gas Accord II – 2004 revenues in rates today. PG&E has filed end-of-year advice letters to implement gas rates and other provisions of the Gas Accord III Settlement Agreement along with changes from other proceedings, for rates to go in effect January 1, 2005.

California Gas Capacity Rulemaking

On January 22, 2004, the CPUC issued its "Order Instituting Rulemaking to Establish Policies and Rules to Ensure Reliable, Long-Term Supplies of Natural Gas to California" (R.04-01-025) out of a concern that California's long-term natural gas supplies and infrastructure may be insufficient. PG&E, SDG&E, SoCalGas, and Southwest Gas are respondents in this proceeding, which will have two phases.

Phase I Decision 04-09-022 was issued on September 2, 2004. The key points of the Decision are set forth below:

- Interstate Pipeline Capacity Contracts – The Decision authorized respondent utilities to expand their portfolios to access gas from multiple gas producing basins, to negotiate reduced capacity, and to terminate expiring contracts.
- Contract Approval Procedures – The CPUC created a pre-approval process for interstate pipeline capacity contracts for transactions that cannot be accommodated under the time limits of an expedited advice letter process, providing that: (1) the contract length must be three years or less; (2) the capacity is limited to 100 MMcf/d; and (3) the aggregate capacity of the pre-approved contracts, excluding right of first refusal, cannot exceed 50 percent of the core interstate pipeline capacity portfolio.
- Storage – The CPUC ordered PG&E to file an application by March 2, 2005, to address how much, and by what process, incremental gas storage needs for the core should be put out to competitive bid, as well as any necessary implementation issues.

- Liquefied Natural Gas (LNG) – PG&E filed open access tariffs on October 4, 2004, in accordance with the decision order that PG&E, SoCalGas and SDG&E submit non-discriminatory open access tariffs for “all new sources of supply, including potential LNG supplies.” LNG suppliers will pay the actual system infrastructure and interconnection costs associated with their projects, but this issue may be reconsidered on a case-by-case basis.

PG&E is awaiting the issuance of a Phase II decision, which will adopt rules providing guidelines for: (1) how utilities should provide emergency reserves consisting of slack intrastate pipeline capacity, contracts for additional firm interstate pipeline transportation rights, and supplies of natural gas in storage dedicated for emergency needs; (2) the process by which the utilities should keep the CPUC informed of whether or not they would need to perform a backstop function to secure enough additional firm transportation rights if noncore customers do not subscribe to sufficient interstate pipeline firm capacity rights; and (3) new ratemaking policies that will be consistent with Commission goals.

ii. Federal Energy Regulatory Commission

El Paso Capacity Allocation Case (RP00-336) – FERC ordered Full Requirements (FR) conversion to Contract Demand (CD) and capacity allocation changes to resolve the CD shipper complaint issues. In a July 2003 order, the FERC affirmed its conclusion that Full Requirements (FR) contracts must be converted to Contract Demand (CD) by September 1, 2003. After the contracts are converted, the FR customers will no longer be bound to take all of their transportation service from El Paso and will be free to contract with other pipelines for additional service. The FERC also affirmed that the capacity that will become available from El Paso’s Power-Up project must be included in the initial allocation to the converting FR shippers. FERC turned the case back to the parties for settlement discussions, which are ongoing. PG&E is directly involved in this case as a firm shipper on El Paso.

CPUC v. El Paso (RP00-241) – A FERC ALJ found that El Paso Pipeline did in fact withhold substantial capacity that it could have made available to its California delivery points during the power crisis, a clear exercise of market power. This decision is yet to be confirmed by FERC. PG&E is involved in the case as a buyer of natural gas during the crisis. On November 14, 2003, the FERC approved a \$1.6 billion settlement between the affiliates of El Paso Corp. and the California Public Utilities Commission. Under the deal, El Paso admitted to no wrongdoing and agreed to provide cash and stock to customers and will also deliver \$900 million of natural gas to California over the next 20 years and will reduce the price of power deliveries to the California DWR. The Commission did, however, reject a proposal for dual primary firm delivery points in the settlement. That proposal was designed to maintain California's primary delivery point rights when capacity is resubscribed to upstream points.

e. 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:

a) In cases where an RFO 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.

b) 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.

f. 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 Gas Supply Plan, 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, the 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.

g. 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 Gas Supply Plans to the Commission staff upon request."

Appendix

Appendix A: Sample Calculations

Appendix B: Projected Gas Volume and [REDACTED]

Appendix C: [REDACTED]

Appendix D: Inter-utility Transactions

Appendix A: Sample Calculations

[Redacted in Full]

Appendix B: Projected Gas Volume and

[Redacted in Full]

Appendix C:



[Redacted in Full]

Appendix D: Inter-utility Transactions

[Redacted in Full]