

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

SAN FRANCISCO, CA 94102-3298



October 7, 2010

Advice Letter 2197-E

Clay Faber, Director
Regulatory Affairs
San Diego Gas and Electric
8330 Century Park Court, CP32C
San Diego, CA 92123-1548

**Subject: Submittal of SDG&E Gas Supply Plan for DWR Tolling
Agreements Pursuant to D.03-04-029 & Resolution E-3854**

Dear Mr. Faber:

Advice Letter 2197-E is effective October 1, 2010.

Sincerely,

A handwritten signature in blue ink that reads "Julie A. Fitch".

Julie A. Fitch, Director
Energy Division

*



Clay Faber
Director – Regulatory Affairs
8330 Century Park Court
San Diego, CA 92123-1548

Tel: 858-654-3563
Fax: 858-654-1788
CFaber@semprautilities.com

September 1, 2010

ADVICE LETTER 2197-E
(U 902-E)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

SUBJECT: SUBMITTAL OF SDG&E GAS SUPPLY PLAN FOR DWR TOLLING AGREEMENTS PURSUANT TO DECISION 03-04-029 AND RESOLUTION E-3854

San Diego Gas & Electric Company (SDG&E) hereby submits for review and approval, the Gas Supply Plan (Plan) prepared by SDG&E after its review of the Supplier “default” Gas Supply Plans.¹ This Plan covers the twelve-month period of November 1, 2010 through October 31, 2011. This Plan has previously been submitted to the State of California Department of Water Resources (DWR) and SDG&E’s Procurement Review Group (PRG) for review and comment.

PURPOSE

SDG&E is making this filing in compliance with Ordering Paragraph 6 of California Public Utilities Commission (Commission) Decision (D.) 03-04-029 issued on April 3, 2003, and Ordering Paragraph 6 of Resolution E-3854 issued on November 13, 2003 in Rulemaking (R.) 01-10-024. D.03-04-029 directs SDG&E to file its Gas Supply Plan every six months for the term of the Operating Agreement. Subsequently, D.07-12-052 authorizes SDG&E to update the reporting frequency of its Plan to an annual process. Accordingly, as proposed and approved in SDG&E Advice Letter 1981-E-A, this filing submits SDG&E’s plan for gas supply to DWR tolling agreements for the twelve-month period of November 1, 2010 through October 31, 2011 for Commission review and approval.

The Plan contains confidential information and therefore is protected from disclosure under the statutory provisions of the IOU Matrix (Matrix) attached to D.06-06-066 (the Phase I Confidentiality decision) dated June 29th, 2006, and is subject to the provisions of the May 1, 2003 Revised Protective Order adopted in R.01-10-024. Therefore, the Plan attached hereto as Attachment A is the redacted (public) version and Attachment B is the unredacted (non-public) version. In accordance with D.08-04-023 dated April 10, 2008, SDG&E hereto refers to the

¹ Pursuant to Ordering Paragraph 5 of Decision 03-04-029, the Utility Gas Supply Plans should be subject to expedited Commission review and approval. Pursuant to Exhibit B of the Operating Order (D.02-12-069) and Exhibit B of the Operating Agreement (D.03-04-029), the Utility shall review each fuel plan prepared and submitted by Suppliers to DWR in accordance with the terms of each contract with fuel options, and forwarded to the Utility by DWR. Utility shall then advise DWR and the Commission of its recommendation regarding responsibility for supplying gas.

Declaration of Andy Scates filed with SDG&E Advice Letter 1964-E on February 1, 2008 to comply with D.06-06-066.

BACKGROUND

On December 19, 2002, the Commission issued D.02-12-069 ordering Pacific Gas and Electric Company, Southern California Edison Company, and SDG&E to perform certain contract administration services as limited agents on behalf of the DWR in conjunction with DWR power contracts that the Commission allocated to the utilities for operational purposes in D.02-09-053. In D.02-09-053, the Commission directed the utilities to negotiate their respective operating agreements addressing contract administration services with DWR and to file such agreements with the Commission.

Pursuant to D.03-04-029, an Operating Agreement was executed between SDG&E and DWR. The fuel management protocols in the Operating Agreement are designed to provide the necessary link between the administrative decision-making responsibility and the financial responsibility. DWR would retain legal and financial responsibility for gas and related services, while SDG&E would, as a limited agent acting for DWR, perform the administrative and operational activities required to ensure adequate gas supplies consistent with the tolling agreements in the contracts. The Operating Agreement requires (as does the Operating Order adopted in D.02-12-069) SDG&E to prepare a Gas Supply Plan, which is subject to Commission approval. In each plan, SDG&E will evaluate the default Gas Supply Plans submitted by the generators in each DWR tolling contract. SDG&E will present its recommendation whether to approve the current default plan or SDG&E's alternate Plan.

As recommended in D.03-04-029 (and ordered in Resolution E-3854), SDG&E provided an advance, unredacted copy of its Plan to the DWR and its PRG, via electronic mail, for their review and discussion. The PRG is a Commission-authorized (see D.02-08-071, pp. 24-26) review group whose members are non-market participants who have executed non-disclosure agreements.

This filing will not create any deviations from SDG&E's tariffs, cause withdrawal of service from any present customers, or impose any more restrictive conditions.

EFFECTIVE DATE

SDG&E believes that this Advice Letter is subject to Energy Division disposition and should be classified as Tier 2 (effective after staff approval) pursuant to GO 96-B. Therefore, SDG&E respectfully requests that this filing become effective on October 1, 2010, which is the commencement date of the Plan.

PROTEST

Anyone may protest this advice letter to the California Public Utilities Commission. The protest must state the grounds upon which it is based, including such items as financial and service impact, and should be submitted expeditiously. The protest must be made in writing and received by September 20, 2010 which is within 20 days of the date this advice letter was filed with the Commission. There is no restriction on who may file a protest. The address for mailing or delivering a protest to the Commission is:

CPUC Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102

Copies of the protest should also be sent via e-mail to the attention of both Maria Salinas (mas@cpuc.ca.gov) and Honesto Gatchallian (jnj@cpuc.ca.gov) of the Energy Division. A copy of the protest should also be sent via both e-mail and facsimile to the address shown below on the same date it is mailed or delivered to the Commission.

Attn: Megan Caulson
Regulatory Tariff Manager
8330 Century Park Court, Room 32C
San Diego, CA 92123-1548
Facsimile No. (858) 654-1788
E-Mail: mcaulson@semprautilities.com

NOTICE

A copy of this filing, including Attachment A (the redacted version), has been served on the utilities and interested parties shown on the attached list, including interested parties in R.01-10-024, by either providing them a copy electronically or by mailing them a copy hereof, properly stamped and addressed. The Commission, DWR and the members of SDG&E's PRG will receive this advice letter and Attachment B (the unredacted version) of the Plan.

Address changes should be directed to SDG&E Tariffs by facsimile at (858) 654-1788 or by e-mail at SDG&ETariffs@SempraUtilities.com.

CLAY FABER
Director - Regulatory Affairs

(cc list enclosed)

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

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

Company name/CPUC Utility No. **SAN DIEGO GAS & ELECTRIC (U 902)**

Utility type:

ELC GAS
 PLC HEAT WATER

Contact Person: Joff Morales

Phone #: (858) 650-4098

E-mail: jmorales@semprautilities.com

EXPLANATION OF UTILITY TYPE

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

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: 2197-E

Subject of AL: Submittal of SDG&E Gas Supply Plan for DWR Tolling Agreements

Pursuant to Decision 03-04-029 and Resolution E-3854

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.03-04-029

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL N/A

Summarize differences between the AL and the prior withdrawn or rejected AL¹: _____

Does AL request confidential treatment? If so, provide explanation: Supply Plan is confidential per the IOU Matrix attached to D.06-06-066

Resolution Required? Yes No

Tier Designation: 1 2 3

Requested effective date: 10/1/2010

No. of tariff sheets: 0

Estimated system annual revenue effect (%): _____

Estimated system average rate effect (%): _____

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 proposed¹: N/A

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

Protests 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

Attention: Tariff Unit

505 Van Ness Ave.,

San Francisco, CA 94102

mas@cpuc.ca.gov and jnj@cpuc.ca.gov

San Diego Gas & Electric

Attention: Megan Caulson

8330 Century Park Ct, Room 32C

San Diego, CA 92123

tcahill@semprautilities.com

¹ Discuss in AL if more space is needed.

General Order No. 96-B
ADVICE LETTER FILING MAILING LIST

cc: (w/enclosures)

Public Utilities Commission

DRA

D. Appling
S. Cauchois
J. Greig
R. Pocta
W. Scott

Energy Division

P. Clanon
S. Gallagher
H. Gatchalian
D. Lafrenz
M. Salinas

CA. Energy Commission

F. DeLeon
R. Tavares

Alcantar & Kahl LLP

K. Harteloo

American Energy Institute

C. King

APS Energy Services

J. Schenk

BP Energy Company

J. Zaiontz

Barkovich & Yap, Inc.

B. Barkovich

Bartle Wells Associates

R. Schmidt

Braun & Blaising, P.C.

S. Blaising

California Energy Markets

S. O'Donnell
C. Sweet

California Farm Bureau Federation

K. Mills

California Wind Energy

N. Rader

CCSE

S. Freedman
J. Porter

Children's Hospital & Health Center

T. Jacoby

City of Chula Vista

M. Meacham
E. Hull

City of Poway

R. Willcox

City of San Diego

J. Cervantes
G. Lonergan
M. Valerio

Commerce Energy Group

V. Gan

Constellation New Energy

W. Chen

CP Kelco

A. Friedl

Davis Wright Tremaine, LLP

E. O'Neill
J. Pau

Dept. of General Services

H. Nanjo
M. Clark

Douglass & Liddell

D. Douglass
D. Liddell
G. Klatt

Duke Energy North America

M. Gillette

Dynegy, Inc.

J. Paul

Ellison Schneider & Harris LLP

E. Janssen

Energy Policy Initiatives Center (USD)

S. Anders

Energy Price Solutions

A. Scott

Energy Strategies, Inc.

K. Campbell
M. Scanlan

Goodin, MacBride, Squeri, Ritchie & Day

B. Cragg
J. Heather Patrick
J. Squeri

Goodrich Aerostructures Group

M. Harrington

Hanna and Morton LLP

N. Pedersen

Itsa-North America

L. Belew

J.B.S. Energy

J. Nahigian

Luce, Forward, Hamilton & Scripps LLP

J. Leslie

Manatt, Phelps & Phillips LLP

D. Huard
R. Keen

Matthew V. Brady & Associates

M. Brady

Modesto Irrigation District

C. Mayer

Morrison & Foerster LLP

P. Hanschen

MRW & Associates

D. Richardson

OnGrid Solar

Andy Black

Pacific Gas & Electric Co.

J. Clark
M. Huffman
S. Lawrie
E. Lucha

Pacific Utility Audit, Inc.

E. Kelly

R. W. Beck, Inc.

C. Elder

School Project for Utility Rate
Reduction

M. Rochman
Shute, Mihaly & Weinberger LLP

O. Armi

Solar Turbines

F. Chiang

Sutherland Asbill & Brennan LLP

K. McCrea

Southern California Edison Co.

M. Alexander
K. Cini
K. Gansecki
H. Romero

TransCanada

R. Hunter

D. White

TURN

M. Florio
M. Hawiger

UCAN

M. Shames

U.S. Dept. of the Navy

K. Davoodi
N. Furuta
L. DeLaacruz

Utility Specialists, Southwest, Inc.

D. Koser

Western Manufactured Housing

Communities Association

S. Dey

White & Case LLP

L. Cottle

Interested Parties

R.01-10-024

SDG&E Advice Letter 2197-E

Attachment A

Redacted

1
2
3
4
5
6
7 **SAN DIEGO GAS & ELECTRIC COMPANY**

8
9 **GAS SUPPLY PLAN XIV**

10
11 *November 2010 through October 2011*

12
13
14
15
16 For:

17
18 CDWR Power Purchase Contracts With Fuel Provisions
19 Allocated to SDG&E
20

21
22
23
24
25 Prepared by:

26
27 SAN DIEGO GAS & ELECTRIC COMPANY
28 8306 Century Park Court, CP21D
29 San Diego, CA 92123
30

31
32
33 Sep 01, 2010

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1
2 **I. Executive Summary**
3

4 On September 19, 2002, the California Public Utilities Commission (“CPUC”) issued D. 02-09-053,
5 which allocated operationally to San Diego Gas & Electric Company (“SDG&E”) certain long-term
6 purchase agreements entered into by California Department of Water Resources (“CDWR”). CDWR
7 retains title to all the allocated power, as well as legal and financial responsibility for the allocated
8 contracts (D.02-09-053, p. 47). In D. 02-12-069, the Commission adopted an “Operating Order”
9 addressing contract administration services to be performed by SDG&E (as well as Pacific Gas and
10 Electric Company and Southern California Edison Company) acting as a limited agent on behalf of
11 CDWR. The CPUC also issued D. 03-04-029 adopting, with modifications, the Operating Agreement
12 between SDG&E and CDWR. In accordance with D.03-04-029 and the approved Operating Agreement,
13 as well as D.02-12-069 and the Operating Order, SDG&E in its role as limited agent for CDWR is
14 authorized to enter into transactions for the purchase or sale of gas, gas transmission services, gas
15 storage services and financial hedges, and to perform the operational and administrative responsibilities
16 for such purchases pursuant to the gas tolling provisions under the allocated contracts, including the
17 review of contact fuel supply plans and consideration of alternative fuel supply arrangements.
18

19 D.07-12-52 authorized SDG&E to prepare and file annually, for Commission and CDWR review and
20 approval, a “Gas Supply Plan” describing SDG&E’s recommended strategy for gas supply procurement
21 and management, including the use of risk management instruments. SDG&E received CDWR’s
22 concurrence and filed SDG&E AL 1981- E- A seeking Commission approval to update the reporting
23 frequency to annually, on June 3, 2008. SDG&E AL 1981-E-A was approved by letter dated July 3,
24 2008, by the Director of the Energy Division.
25

26 The last approved Gas Supply Plan, was filed as Advice Letter 2107-E, covering the period November
27 1, 2009 through October 31, 2010, was approved by letter dated October 22, 2009, by the Director of the
28 Energy Division. This is the current Plan in effect; it provides an assessment of the current market and
29 summarizes the current gas supply requirements and contracts pertaining to provision of gas for the
30 allocated contracts with fuel options, outlines SDG&E’s role and responsibilities, supply goals and plans
31 for developing and managing its gas supply portfolio, discusses price risk management alternatives,
32 describes necessary operational activities, and addresses other issues relating to gas procurement.
33 SDG&E will file annually on September 1, for the upcoming 12 month period of November 1 through
34 October 31.
35

36 This Gas Supply Plan describes SDG&E’s recommended fuel procurement and fuel management
37 functions for the CDWR power contracts with tolling provisions allocated to SDG&E for the period of
38 November 1, 2010 through October 31, 2011. A draft of this Plan was distributed to CDWR and
39 SDG&E’s Procurement Review Group for their comments on August, 20 2010.
40

41 The total cost to CDWR for the physical supply of gas under this Gas Supply Plan is expected to be
42 competitive with the market index-priced supplies proposed in the alternate Fuel Supply Plans of the
43 allocated contract power suppliers. SDG&E also expects to achieve additional cost savings based on
44 management of the Kern River Gas Company’s lower cost for fuel management services.
45 Implementation of SDG&E’s proposed gas strategy will provide for physical gas to be procured reliably
46 and at a price consistent with the market for all electric generation requirements. Price risk management

1 will be undertaken consistent with SDG&E's approved Long Term Procurement Plan¹ and with
2 procurement authority authorized by the CPUC in D.03-12-062, D.04-01-050, D.04-12-048, and
3 SDG&E's approved Gas Supply Plans.

4
5 A discussion of SDG&E's Risk Strategy contained in the Procurement Plan, which includes price
6 management for gas associated with CDWR tolling agreements, is included in this Plan². Additional
7 costs may be incurred to manage gas price risk consistent with the adopted and Commission approved
8 procedures which will be discussed further in this Plan.

9
10 A critical requirement for the successful implementation of this Gas Supply Plan is the need for CDWR
11 to maintain sufficient credit with suppliers for the minimum expected cost of the total aggregate contract
12 gas requirements. The Commission recognized this obligation of CDWR (D.02-12-069, p. 30). CDWR
13 currently has ample credit to meet Fuel Supply needs,
14

15 16 **II. Market Assessment**

17
18 As of July 30, 2010, the 2010 NYMEX Winter strip (November-March) is trading for \$5.209/dth. The
19 2011 NYMEX Summer strip (April-October) is trading for \$5.08. Prices are \$0.24 & \$0.62 lower than
20 the same time last year respectively. Gas Rig counts are 307 greater in the year-on-year survey
21 (however 285 lower vs. the 5 year average). Signs of La Nina rising in the Southern Pacific suggest
22 cooling temperatures. On the storage front, national inventories are now at 2.85 Tcf with a projected
23 Oct. 31 level of 3.788 Tcf. (max. 3.846 Tcf). LNG imports have decreased to under 1Bcf as arbitrage
24 continues to support European deliveries. For the upcoming hurricane season, early forecasts are
25 predicting a more active than normal season with 18 named storms and of which 10 are expected to
26 become hurricanes. Of these 10 hurricanes, 5 are expected to become major hurricanes (Category 3 or
27 greater).

28 California prices will generally reflect the North American market dynamics, although price differentials
29 are impacted by pipeline capacity expansions that allow for adequate supplies and gas market
30 competition between Canada, the Rockies, and the Southwest basins. Basis differentials between Henry
31 Hub and the SoCal Border/Opal markets for the period covered in this Plan are expected to stay negative
32 (with SoCal Border and Opal trading at a discount to Henry Hub), although this relationship is
33 dependent on market balances and transportation factors.

34 The current average SoCal Border market price for the remainder of the 2010 summer injection period is
35 averaging \$4.35 (Aug-October), rising to an average of \$4.94 for the entire 2010-2011 winter heating
36 season (November-March). Based on information obtained in external publications, gas prices for

¹ Long-Term Procurement Plan (LTPP) is SDG&E's 2006 LTPP, which was approved in D.07-12-052. Note that a conformed version of SDG&E's 2006 LTPP (conforming to modifications ordered in D.07-12-052) was filed as part of Advice Letter 1983-E, which was approved in Resolution E-4189.

² The CPUC approved, with modifications SDG&E's Long-Term Procurement Plan, in D.07-12-052. The LTPP decision was effective as of December 20, 2007 and as such SDG&E has reflected applicable revisions to its procurement strategy in this Gas Supply Plan. SDG&E filed its conformed LTPP in AL 1983-E as further supplemented in AL1983-E-A and 1983-E-B.

1 California during the remainder of summer are expected to range between \$3.50 and \$4.35. For the
2 upcoming winter, gas prices in California are expected to range between \$4.40 and \$5.09³.

3
4
5 **III. Alternate (CDWR Generator) Fuel Supply Plans**
6

7 Preparation of this Gas Supply Plan included an evaluation by SDG&E of the currently proposed (when
8 available) alternate Fuel Supply Plans provided by the CDWR contract power suppliers (“contract
9 supplier”) to assess the relative merit of those alternative fuel supply, fuel management and price risk
10 management plans. The following alternate Fuel Supply Plans are currently proposed in accordance with
11 the terms of each power supplier’s CDWR contract. As has been noted in previous Gas Supply Plans,
12 the timing of submittal of alternate Fuel Supply Plans by CDWR contract counterparties is not
13 coordinated with the timing of the submittal of the SDG&E Gas Supply Plan. Therefore, after approval
14 of the Commission, if an alternate Fuel Supply Plan is submitted during the twelve-month term of the
15 Plan currently in effect, SDG&E will continue to execute on the currently effective, Commission
16 approved Plan and will consider the alternate proposal in its next Gas Supply Plan submitted to CDWR
17 and the Commission. CDWR does not foresee changes to the fuel supply arrangements for the term of
18 this Gas Supply Plan.
19

20 ***Sunrise Power Company, LLC***
21

22 SDG&E is the fuel manager for the Sunrise facility. CDWR is responsible for all fuel costs and Seller
23 (Sunrise) is not subject to meeting any price standards as a result of Sunrise exercising a provision in the
24 PPA which relieved them of any obligation to supply or manage fuel for Sunrise dispatch, therefore
25 there is no Fuel Supply Plan submitted by Sunrise.
26

27 The Sunrise PPA includes a transportation capacity contract with Kern River Gas Transportation
28 (KRG T) for 85,000 MMBtu/day of firm capacity on the Kern River 2003 Expansion Project from Opal,
29 Wyoming to the Sunrise generation facility. The capacity contract became effective May 1, 2003 and
30 has a term of 10 years. CDWR has exclusive use of this pipeline capacity for the term of this Gas Supply
31 Plan, with priority use going to servicing the Sunrise gas requirement. CDWR assigned SDG&E as its
32 limited agent to manage the 85,000 MMBtu on KRG T.
33
34

35 ***CalPeak Power, LLC (El Cajon, Border, Escondido)***
36

37 The last proposed fuel supply plan from CalPeak covers a term of 4/01/2010 through 03/31/2011 (see
38 Attachment 4). The fuel supply plan has an option to extend the term of the FSP if mutually agreed upon
39 between CDWR and the seller. SDG&E’s evaluation is based on the provisions contained in this last
40 fuel supply plan. On the recommendation of SDG&E, CDWR has elected to supply its own fuel to the
41 CalPeak power plants. Therefore, this CalPeak plan is focused on the roles and responsibilities of the
42 parties related to Fuel Management provisions and contain no commodity provisions or mark-ups. On

³ SDG&E uses multiple sources and has licensing agreements with a number of sources including [REDACTED]. SDG&E’s licensing agreements with these publications prevent disclosure of specific quotes and information.

1 April 1, 2010 SDG&E assumed scheduling coordinator (SC) responsibilities for all three CalPeak
2 facilities. Concurrent with assumption of SC duties, SDG&E also commenced acting as the Fuel
3 Manager for the three plants, and will continue to do so during the period of this Fuel Supply Plan,
4 assuming a side letter extends the term of the Fuel Supply Plan Calpeak maintains its right to contract
5 with a Fuel Manager to provide fuel management services to the facility. As Fuel Manager, SDG&E is
6 now able to use the balancing provisions in the applicable SDG&E gas transportation tariff to manage
7 CalPeak's gas usage in the same pool as SDG&E's other gas-fired resources. [REDACTED]
8 [REDACTED]
9 [REDACTED]

10 11 **IV. Provisions of SDG&E's Gas Supply Plan**

12 13 *Fuel Supply*

14
15 SDG&E currently acts as Fuel Supplier for both allocated energy contracts (CalPeak and Sunrise) and
16 proposes to continue these arrangements for the term of this Gas Supply Plan. SDG&E will procure the
17 required gas supplies in accordance with the Operating Agreement Fuel Management Protocol (Exhibit
18 B) within the terms of these allocated contracts and additional CDWR requirements as appropriate or
19 Commission mandates. SDG&E has adopted the broad goals and guidance outlined in the Operating
20 Agreement, Exhibit B, as approved by the Commission in decision D.03-04-029 and incorporated those
21 goals into this Plan as the foundation for its Fuel Supply activities, as follows:

- 22
23 • SDG&E shall use reasonable commercial efforts to secure delivery of gas in a reliable manner
24 and consistent with gas requirements for producing scheduled energy.
- 25
26 • SDG&E shall develop a portfolio of gas supply for CDWR contracts that contains Fuel Options
27 and where SDG&E is to supply gas, acting as limited agent on behalf of CDWR, consistent with the
28 approved Gas Supply Plan. Such portfolio should be diversified in terms of price mechanism, period of
29 performance, and gas suppliers.
- 30
31 • SDG&E shall develop a portfolio of supply that is reasonably priced relative to the market and in
32 accordance with an approved Gas Supply Plan.

33
34 This Gas Supply Plan forecasts physical gas procurement to be priced at prevailing market prices for the
35 appropriate receipt/delivery point for each supply contract. Price risk management is discussed in the
36 Risk Management section below. Fuel procurement by SDG&E at prevailing market prices may also
37 result in delivered physical gas costs that are above the applicable index (SoCal Border, SoCal Citygate,
38 Opal) due primarily to operational issues and credit limitations. For example, the uncertainty of daily
39 dispatch decisions may result in purchasing gas at a premium to the daily index in the intraday market
40 (or selling gas at a discount). However, gas procurement at a lower cost than the current default fuel
41 supply plans is possible due to SDG&E's synergistic advantage achieved through operation of a gas
42 portfolio (CalPeak and Sunrise) that contains a diverse set of delivery points and fuel requirements.
43 These synergies are not available to the individual contract counterparties of CDWR which each would
44 operate only a piece of this portfolio absent SDG&E's management. The ability to deliver gas from Opal
45 through SoCal entry points (Wheeler Ridge and Kramer Junction via Kern River and Ehrenberg via Line
46 1903) may provide lower cost Rockies gas (relative to SoCal Border prices) to CalPeak for supporting

1 intraday dispatch decisions. Potential price advantages associated with a larger buyer may be realized, as
2 well as operational savings and optimization through the optionality that is inherent in portfolios with a
3 variety of assets. These beneficial factors should make this proposed plan reasonably priced relative to
4 the market and the Generator alternate fuel plans under the CDWR dispatchable power purchase
5 agreements.

6
7 Price risk management may require additional costs consistent with the objectives stated in SDG&E's
8 approved Long Term Procurement Plan. Costs associated with risk management of CDWR gas volumes
9 will be incurred directly by CDWR and will be recovered through its revenue requirement.

10
11 SDG&E's proposed gas procurement strategy will consider various components to develop a diversified
12 supply portfolio consisting of a mix of gas suppliers and sources, transportation and storage, and pricing
13 terms that are applicable to each generation unit's forecast dispatch schedules and are within the limits
14 set by CDWR contract arrangements.

15
16 SDG&E currently owns and procures gas for three generation facilities, Miramar I and II (45MW) and
17 Palomar (550MW). In addition, SDG&E has entered into tolling agreements for 960MW with NRG for
18 Cabrillo I, with Calpine for Otay Mesa (550MW), with LS power for Orange Grove Energy Center and
19 Wellhead for the El Cajon Energy Center. SDG&E acts as Fuel Manager for each of these facilities. In
20 2010/2011, SDG&E anticipates that gas needs for its own facilities; based on forecast economic
21 dispatch of the combined CDWR/SDG&E portfolio of resources will be greater than the needs for gas at
22 CDWR dispatchable units in the SDG&E portfolio.

23
24 Regardless of relative volumes, SDG&E has designed a business process for dealing with gas
25 requirements for itself and CDWR using the same personnel and system requirements for both but using
26 separate NAESB gas supply agreements. The following briefly describes how this single, integrated
27 portfolio, which is required by the Commission's Standard of Conduct #4, is operated jointly to
28 maximize synergies, while maintaining enough separation to allow for accurate accounting and invoice
29 processing.

- 30
31 a. Positions (gas volumes) - The portfolio will be one integrated gas book with underlying
32 gas positions tracked by physical demand at each plant. The various positions are:
33 1) SoCal Citygate. This includes all generation within SoCal (NRG/LS Power
34 /Wellhead Tolling Agreement - Cabrillo I/Orange Grove/El Cajon, CalPeak Units,
35 Otay Mesa, Miramar and Palomar).
36 2) Rockies. This position includes all gas required for Sunrise, or gas used to
37 monetize excess capacity of the CDWR transportation on KRGT or Line 1903.
38 3) Other positions as necessary, such as storage positions or hub positions.
39
40 b. Commercial Arrangements – SDG&E will divide the procurement transaction and
41 hedging volumes between CDWR and SDG&E based upon each entity's relative share of
42 forecast gas demand. For instance, if total gas demand for 2010/20011 is █████ SDG&E
43 will further detail this demand by plant and will transact as SDG&E for volumes which
44 are roughly equal to the forecast demands of SDG&E resources. The same personnel will
45 transact as limited agent for CDWR for volumes roughly equal to the demand forecast at
46 CDWR plants. This proportional buying of gas ensures that each entity bears an

1 appropriate amount of the financial burden of transactions, such as cash flow, margining
2 or collateral expenses.

3
4 All gas costs are eventually borne by SDG&E ratepayers. Gas purchased for SDG&E
5 plants is recovered from ratepayers through the SDG&E ERRRA account. Gas purchased
6 as agent for CDWR is recovered through the CDWR revenue requirement. Under the
7 CPUC adopted CDWR revenue requirement cost allocation, all variable costs “follow
8 contract” so that there is no possibility of inadvertently shifting costs from SDG&E
9 ratepayers to the ratepayers of another Investor Owned Utility.

10
11 Similar procurement and hedging strategies will be employed for both portfolios which
12 should result in the cost of gas (on a per MMBtu basis) being roughly the same.
13 However, as discussed above, all gas costs are eventually recovered from SDG&E
14 ratepayers so any small differences in cost that may arise through timing of transactions
15 is irrelevant.

- 16
17 c. Personnel – The same set of personnel will be used to transact and schedule gas for the
18 total gas demand of the integrated portfolio. As described elsewhere, this staff will be
19 working alternately as SDG&E employees and as limited agents for CDWR. The
20 SDG&E staff dedicated to this effort is part of the electric procurement group and
21 transacts gas solely for use as electric fuel.
22
23 d. Systems – Forecasting systems currently in place are used to forecast gas demand for
24 individual plants and “roll up” these volumes into locational positions described above or
25 into a single total gas demand number. Transactional systems are used to track and report
26 on gas deals in a similar manner: by owner (CDWR or SDG&E), plant, or location. Since
27 CDWR remains financially responsible for all gas transacted for use in their units,
28 settlements systems will continue to process CDWR gas invoices separately from
29 SDG&E gas invoices.
30
31

32 While the focus of this gas supply plan is solely CDWR gas volumes, SDG&E includes a table (Table 7)
33 showing the estimated volume of SDG&E gas positions for the term of this GSP XIV (November 2010
34 through October 2011).

35
36
37 *Fuel Supply for Specific CDWR Dispatchable Contracts*

38
39 **Sunrise** – SDG&E, (as limited agent of CDWR), will supply both baseload and daily gas to support
40 Sunrise dispatch schedules. [REDACTED]

41 [REDACTED]
42 [REDACTED]
43 [REDACTED]
44 [REDACTED]
45 [REDACTED]
46 SDG&E as a limited agent for CDWR has been managing the contract between CDWR and Kern River

1 Gas Transmission (KRGT) for 85,000 MMBtu/day of firm capacity on the Kern River pipeline
2 expansion. During Q2 2005, at SDG&E's behest, CDWR changed the primary delivery for the Kern
3 capacity to Wheeler Ridge and Kramer Junction. This allows SDG&E to use Kern capacity to serve the
4 CalPeak units with less risk of gas flow disruptions going into the SoCalGas system and to capture the
5 price differentials with less risk. In addition, SDG&E is managing the contract between CDWR and El
6 Paso's Pipeline for 15,000 MMBtu/day of firm capacity on Line 1903, at SDG&E's recommendation,
7 which runs between Daggett-Mojave and SoCal-Ehrenberg. The contract with El Paso expires at the end
8 of 2010. SDG&E will continue to manage both of these contracts to make any excess pipeline capacity
9 available to the CDWR Calpeak contract allocated to SDG&E for operational purposes as applicable
10 within the operational limit of the SoCalGas system or making economical use of excess capacity, when
11 it exists, through market sales. At times, price differentials between the Rocky Mountains and the SoCal
12 Border will dictate an outcome where the least cost alternative results in purchasing gas delivered
13 directly to Sunrise and using gas on Kern River to flow gas to other markets that pay a premium to the
14 cost of gas delivered to Sunrise.

15
16 **CalPeak** - SDG&E will purchase [REDACTED] to support CalPeak dispatch schedules. Since CalPeak
17 dispatch schedules are peaking in nature [REDACTED] CalPeak may be
18 dispatched on a day-ahead or intra-day basis. When SDG&E gas traders have sufficient notice that
19 CalPeak will be dispatched, they may procure the needed gas [REDACTED]
20 [REDACTED] If CalPeak is dispatched on an intra-day basis, SDG&E has the ability
21 [REDACTED]
22 [REDACTED]

23 On October 1, 2008 SoCalGas implemented the FAR OFF system. FAR (firm access rights) allows
24 participants to hold firm and/or interruptible access rights at receipt points into the SoCalGas/SDG&E
25 integrated gas transmission system. Since CalPeak dispatch schedules are peaking in nature, they do not
26 support holding firm rights. SDG&E will evaluate whether to purchase interruptible rights to deliver
27 SoCal Border gas to burn or to purchase gas that has already been delivered to the SoCal CityGate Pool
28 for CalPeak's needs.

29
30
31
32 **Plan Data**

33
34 Gas cost forecasts provided by SDG&E in this Gas Supply Plan are derived from the current market
35 forward curves, applied to the expected gas requirements to serve load and sales. Applicable dates for
36 the analysis are noted in each of the particular tables attached. The price risk is managed separately by
37 SDG&E at an incremental cost to the physical supply deliveries for this assessment. Actual usage and
38 costs will vary with market conditions and dispatch. Tables used in this GSP are summarized below:

- 39
40 • Table 1 (A,B,C) Williams Long-Term Gas Contract Allocation- The Commission, in D.03-10-
41 016, adopted CDWR's recommended allocation of the Williams long-term gas supply contract between
42 SDG&E and SCE. This gas supply contract is included in the CDWR gas portfolio as part of the
43 Williams contract renegotiation. Gas deliveries under the contract began flowing January 1, 2004 and
44 continue through December 31, 2010. Since the volumes of gas required to serve load are usually greater

1 than the volumes supplied under the Williams long-term supply contract, [REDACTED]
2 [REDACTED]
3 [REDACTED]
4

5 • Table 2 (A,B,C) Forecast Gas Requirements - shows, respectively, the estimated monthly gas
6 quantities required to meet SDG&E customer load, potential excess sales, and the total of customer load
7 plus potential excess sales for the period of this GSP and are aggregated by month for each dispatchable
8 contract.
9

10 • Table 3 Forecast Sources of Gas Supply- shows SDG&E's forecast of gas volumes purchased at
11 various delivery points for the contracts. Also included in this table are possible strategies to maximize
12 the potential economic value of the Kern River pipeline capacity. SDG&E allocates the contract
13 capacity as follows: firstly, to serve Sunrise load as required by contract then, the excess capacity is
14 allocated to serve CalPeak load, and secondly to serve surplus sales. [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]

18 This strategy will result
19 in savings of the gas costs related to power sales. Table 6A shows the value SDG&E expects to capture
20 by monetizing remaining Kern River excess capacity in the market after applicable variable costs based
21 on current forward prices. Table 6B shows expected savings for CalPeak based on this strategy and
22 quantify some of the synergies of operating a large, diverse portfolio of assets.

23 • Table 4 (A,B,C) Forecast Burner Tip Prices- shows forecast burner tip prices for the contracts
24 (\$/MMBtu). The burner tip prices for this forecast are calculated by adding recent NYMEX forward
25 contract prices and market quotes for the basis differential plus applicable LDC and/or transport charges
26 for all contract suppliers. Prices are provided for two different delivery points: Opal and SoCal Border.
27 The price of long-term Williams gas supply contract at SoCal Border, copied from Table 1C is also
28 shown.
29

30 • Tables 5 (A,B,C) SDG&E Projected Cost- shows the estimated costs for the gas requirements of
31 the contracts calculated using the burner tip prices contained in Table 4 and the forecast quantities
32 contained in Table 2. The total cost also takes into account Table 3, which shows the expected delivery
33 sources of the gas supply.
34

35 • Table 6 (A,B,C) Expected Savings- shows the estimated savings to be achieved through SDG&E
36 Fuel Supply compared to the alternative generator plans for fuel procurement and/or fuel management
37 activities. This forecast is based upon current forward curves (07/30/10) for gas and current forecasts of
38 the amount of daily excess capacity on Kern after supplying Sunrise; most of the forecast savings are
39 associated with monetizing this excess capacity.
40

41 • Table 7 (A,B,C) SDG&E Portfolio Forecast Gas Requirements- provided for information only,
42 and to give context to the CDWR gas data. This table shows the estimated volume of SDG&E gas
43 positions required to meet SDG&E customer load and potential excess sales.
44

45 • Attachment 2 Hedging Transaction Detail- lists details for every financial hedge transaction with
46 contract months covering the period of this GSP. A summary of these transactions shows the hedge

1 volumes by contract month and product type along with average prices. A hedge position graph
2 summarizes SDG&E's remaining exposure positions.

- 3
- 4 • Attachment 3 CDWR Fuels Protocols- CDWR's proposed guidelines for SDG&E when acting as
5 a limited agent for CDWR in fuel-related activities.
- 6
- 7 • Attachment 4 CalPeak Fuel Plan- plan submitted by CalPeak which provides details on fuel
8 management activities for the CalPeak dispatchable units.
- 9

10 **Fuel Management**

11
12 SDG&E, acting as limited agent for CDWR, manages the fuel for the Sunrise and Calpeak contracts,
13 includes managing CDWR's Kern River capacity assignment. When acting as Fuel Manager, SDG&E
14 is responsible for administrative and operational responsibility for scheduling and nominating gas
15 deliveries, whether to a specific facility or to/from storage. This function includes scheduling of
16 interstate and intrastate gas transportation and storage services, confirmation of invoices and all other
17 activities required to transport, schedule and account for gas from the supply delivery point to its
18 destination as determined by SDG&E.

19
20 For the purchase of natural gas supplies, pipeline transportation, storage, and associated services
21 procured by SDG&E as agent for CDWR, SDG&E has the responsibility for receiving invoices,
22 reviewing them for accuracy, approving or rejecting invoices for payment, and forwarding them to
23 CDWR for payment. SDG&E shall provide CDWR sufficient documentation to verify payment. CDWR
24 authorizes suppliers and pipelines to forward invoices to SDG&E on a timely basis. SDG&E shall make
25 a good faith effort to supply CDWR with invoices as early as possible, and whenever feasible, no later
26 than five days before the payment due date.

27
28 Should SDG&E's designation as limited agent for CDWR as Fuel Supplier and/or Fuel Manager
29 change during the term of this or any subsequent Gas Supply Plan, and should SDG&E not be
30 appointed the Fuel Supplier and/or Fuel Manager for a Contract under an approved Gas Supply Plan, all
31 duties and responsibilities of the Fuel Supplier and/or Manager, as outlined in the CDWR Contracts and
32 the Operating Agreement, shall become the responsibility of Fuel Supplier and/or Fuel Manager
33 appointed in that fuel supply plan.

34
35 When acting as Fuel Manager, SDG&E shall have administrative and operational responsibility for
36 monitoring and managing the daily and monthly gas imbalances. Per Exhibit B of the Operating
37 Agreement, SDG&E shall be responsible only for those penalties imposed by gas transportation
38 providers resulting from SDG&E's failure to exercise prudent gas management practices.

39
40 SDG&E, as agent for CDWR, manages daily and monthly imbalances related to CDWR dispatch of the
41 CalPeak units. Per the CalPeak-CDWR power purchase agreements, SDG&E's tariff provides for a 10%
42 monthly imbalance tolerance and no firm requirement for daily supply except when an OFO or winter
43 balancing order is issued. SDG&E, as agent for CDWR, manages the imbalance tolerance for
44 operational adjustments such as intra-day dispatches, plant outages and force majeure. The imbalance
45 management decision is based on the nature of the dispatched units, potential daily price loss, actual life-
46 to-date imbalance, and the relevant future market price.

1
2
3 **Credit Requirement**
4

5 In order for SDG&E to perform under the procurement strategy outlined herein, CDWR must continue
6 to have an adequate number of qualified counterparties who are willing and able to provide the
7 necessary gas supplies to CDWR, with SDG&E acting as the limited agent on behalf of CDWR. A
8 critical requirement is for CDWR to maintain a minimum level of credit acceptable to these suppliers for
9 the needed longer-term and financial trading, as it is required to do pursuant to D.02-12-069 as noted
10 above. Enabling agreements intended to cover all gas procurement activities shall be executed with
11 CDWR approved providers. While CDWR shall be the party of record, such agreements shall recognize
12 that SDG&E is authorized to act on behalf of CDWR as limited agent in negotiating specific prices,
13 quantities and delivery periods for specific purchases under such enabling agreements, within the limits
14 contained in the Operating Agreement. A list of qualified suppliers should be as large as practical to
15 provide variety and competition, but should have a minimum [REDACTED] to be
16 effective in providing competition. Currently CDWR has ample credit and counterparties to provide a
17 variety of counterparties and price diversity to meet SDG&E's procurement strategy
18

19 In order for SDG&E to procure gas as CDWR's limited agent, CDWR needs to maintain a minimum
20 total credit level from suppliers in order to supply the SDG&E-allocated tolling contracts based on
21 estimated gas costs for the highest two months of this Plan period. The liquidity required needs to be at a
22 level that allows SDG&E to transact with a larger number of counterparties in order to purchase gas at
23 the lowest available offer price. SDG&E will from time to time identify potential new suppliers and
24 notify CDWR so that the number of counterparties available to CDWR may be expanded.
25

26 **Storage Analysis**
27

28 Firm storage inventory, injection and withdrawal rights (term of 1 year or greater) may be obtained
29 through both SoCalGas and PG&E for annual terms effective each April 1. For the 2010-2011 contracts,
30 [REDACTED]
31 [REDACTED]
32 [REDACTED]
33 [REDACTED]

34 Kern River Pipeline has relatively stringent daily imbalance tolerance requirements for deliveries of
35 Rocky Mountain gas supplies from Opal on Kern River for the Sunrise plant. SDG&E continues to
36 evaluate, [REDACTED]
37 [REDACTED]
38 [REDACTED]
39 [REDACTED]

40 [REDACTED] The penalty for consistent imbalances on Kern River could result in
41 discontinuation of transportation on the pipeline. Buying/selling excess volumes at the market price as
42 necessary has consistently proven to be the most cost effective method of managing daily imbalances.

43 Imbalance management for CalPeak within the SDG&E service territory takes advantage of the
44 imbalance tolerance allowances as provided within SoCalGas for the gas deliveries. [REDACTED]
45 [REDACTED]

1 [REDACTED]
2
3
4 **RISK MANAGEMENT**
5

6 SDG&E’s risk management practices are generally described below. The practices described herein
7 are meant to summarize SDG&E’s risk management practices only. SDG&E’s risk management
8 practices are more fully described in SDG&E’s Long-Term Procurement Plan and as such should any
9 inadvertent differences between this summary and SDG&E’s Long-Term Procurement Plan exist, the
10 Long-Term Procurement Plan will control.
11

12 For the period covered in this Gas Supply Plan, SDG&E forecasts that the CDWR dispatchable
13 contracts, when used for serving bundled customers will burn [REDACTED] Bcf. Of this quantity, 1.2 Bcf has
14 been allocated from the Williams long-term gas contract [REDACTED] Bcf has been previously hedged using
15 fixed price products. The remaining [REDACTED] Bcf yet to be acquired for the plants or hedged or capped are
16 exposed to fluctuations in market price for natural gas. SDG&E manages this market price risk in the
17 manner described in the Risk Strategy section of its approved Procurement Plan.
18

19 SDG&E utilizes the Customer Risk Tolerance (“CRT”) (defined in CPUC Decision 03-12-062) as
20 guidance for monitoring and managing market price risk. In D.07-12-052, adopted by the Commission
21 on December 20, 2007, SDG&E was directed to modify its Procurement Plan related to reporting
22 metrics used to manage short-term risk. Specifically, D.07-12-052 required SDG&E to manage and
23 report on near-term risk on a rolling 12-month basis. On July 3, 2008, SDG&E filed its Compliance
24 Filing implementing changes to its Long-Term Procurement Plan in Advice Letter AL-1983-E⁴. As
25 part of SDG&E’s filed Long-Term Procurement Plan, SDG&E also proposes to include a second risk
26 metric as guidance for monitoring and managing market price risk up to the end of the first year of its 5
27 year hedge plan. SDG&E’s primary risk management objective is to manage the portfolio’s open
28 position such that any increases in gas and power costs due to adverse price volatility do not exceed the
29 CRT. The open positions include not only gas purchases for the CDWR contracts but also forecast
30 Utility Electric Generation (UEG) gas and power purchases and pricing of SRAC QF contracts (which
31 are dependent on monthly gas price indices).
32

33 In this Gas Supply Plan, SDG&E provides a discussion on hedging decisions made to control
34 commodity costs, and also discusses the advisability of using futures versus options. The framework
35 described below strikes an appropriate balance between maintaining flexibility and outlining a reasoned
36 decision-making process that addresses these two issues of interest to the Commission.
37

38 The basic elements of the Risk Strategy from the LTPP are as follows:
39

- 40 • Manage risk over a 5 year time horizon.
- 41
- 42 • SDG&E utilizes CRT as a primary metric to monitor risk factors. The CRT is defined as “the price
43 that an average consumer would be willing to pay to reduce the risk of higher prices in the future

⁴ SDG&E also submitted further updates to its 2006 LTPP to the Commission for approval in AL 1983-E-A and AL 1983-E-B. AL 1983-E, AL1983-E-A and AL 1983-E-B

1 (i.e., the cost-to-risk tradeoff).” Our understanding of the Commissions intent is as follows: CRT is
2 equal to a potential rate increase of [REDACTED] over a one year period.

- 3
- 4 • In accordance with D07-12-052, SDG&E has modified its metrics to reflect the CPUC’s
5 requirement for managing to 125% CRT- VaR to Expiration (VtE) at the 95% on a rolling 12
6 month basis. The purpose of the VtE metric at the 95th percentile is to estimate the 1 in 20 adverse
7 outcome for the portfolio cost over a rolling 12-month period.
- 8
- 9 • The risk to CRT is primarily due to open positions exposed to fluctuating energy prices.
10 Determination of the open positions of the combined annual portfolio (including both the UEG and
11 CDWR books) consists primarily of expected gas purchases, expected power purchases and SRAC
12 priced QF volumes.
- 13
- 14 • Determination of the mark-to-market (MtM) cost of filling these open positions by referencing
15 current forward market prices of the applicable energy products to establish a baseline of
16 forecasted costs.
- 17
- 18 • Determination of the customer Value at Risk (VaR) to Expiration (VtE), or probable extent of loss,
19 to the MtM cost of the open positions over the rolling 12-month time horizon using methods as
20 described below.
- 21
- 22 • Managing over time the portfolio’s 125% of CRT – VtE(95%) on a 12-month rolling basis for
23 PUC and PRG reporting.
- 24
- 25 • Determination of a second risk metric [REDACTED]
26 [REDACTED] to provide additional information to assist in hedge decisions during the first
27 calendar year.

28

29 [REDACTED] “Remaining CRT (RCRT)”, is defined as the CRT plus the baseline forecasted costs of the net
30 open [REDACTED]
31 [REDACTED] minus the current forecast of forecasted energy expenses (including the current
32 MtM cost of filling the open positions [REDACTED]
33 [REDACTED]

34 [REDACTED]
35 [REDACTED]
36 [REDACTED]
37 [REDACTED]
38 [REDACTED]

- 39
- 40 • The 125% of CRT – VtE(95%) metric, which is calculated on a rolling 12-month basis, fluctuates
41 over time based on the following:
 - 42 • Actual delivered accrued commodity costs;
 - 43 • Changes in the forecasted costs to fill open positions (based on market price
44 changes);
 - 45 • Changes in the open positions;
 - 46 • Changes in the hedge positions;

- Changes in the value of hedges implemented.

- As more fully described in SDG&E's LTPP, in the event that at any time the VtE (95%) value exceeds 125% of CRT for the current rolling 12 month period, SDG&E will call a special meeting of its PRG to review the causes of the high volatility, review the pre-existing hedge positions and discuss and decide whether new hedges are needed to bring 125% CRT - VtE (95%) back within the allowed threshold. Depending upon the level to which the primary metric has fallen below zero and how quickly SDG&E can arrange for a meeting with the PRG, SDG&E may decide that it must act immediately and hedge more aggressively to further reduce its open position, even before it can brief the PRG. SDG&E will continue to review its hedge positions and strategies with the PRG at least quarterly.
- For Year 2 and Years 3 through 5, manage risk on a volumetric basis as more fully described in SDG&E's LTPP.

As such SDG&E may, after reviewing the CRT – VtE(95%) results and its hedge position for Year 2, adjust its overall hedge position, if its actual hedge vs. target percentages is below the upper hedge target percentage. As with the strategy used for calendar years 3 through 5, as described below, the Year 2 period will move each year on a calendar year basis.

For years 2, 3, 4 & 5 of its 5 year plan, SDG&E's risk mitigation strategy is not tied to CRT, but is a formulaic approach to increasing portfolio hedge percentage. For Year 2, SDG&E will adopt an [REDACTED] of its total portfolio by adding fixed priced contracts, financial hedges or a combination of both. SDG&E will continually review its hedge position internally and decide whether additional financial hedging is necessary (this could occur even if SDG&E is at the high end of its range for Year 2), keeping in mind the goal of being able to maintain a positive metric as each of the months of Year 2 becomes part of the 12-month rolling period. SDG&E will hedge up to [REDACTED] of its portfolio in each of those years, or up to a limit [REDACTED] portfolio hedged in year 3/4/5 of the plan. SDG&E will periodically throughout each year review its annual hedge levels, factoring in [REDACTED] incremental hedges. As described in SDG&E's LTPP, should the overall portfolio hedge level(s) for any of the Years 3 through 5 remain [REDACTED] or more below the yearly cap level, SDG&E may take further action to incrementally hedge above the [REDACTED] annual level. Over this time period, SDG&E's portfolio is currently hedged to an average of roughly [REDACTED] by long term fixed price contracts such as SONGS, Williams Gas Contracts and renewable contracts.

From time to time SDG&E will develop a detailed plan of specific hedge transactions for managing the price risk of its combined CDWR/SDG&E portfolio, and will brief its PRG of such hedge plans. SDG&E will work actively with CDWR in undertaking hedging activity related to CDWR gas positions. The hedging plan may include the use of options (financial derivatives to cap the cost exposure or collars), basis swaps, fixed-price financial or physical forwards, other physical transactions, and other authorized risk management tools.

Under the Operating Agreement, CDWR and/or SDG&E may enter into price risk management hedges. CDWR may enter into such financial hedge transactions as advised by SDG&E, or CDWR may choose to hedge on its own, under Section 12 of Exhibit B to the Operating Agreement, if it feels that SDG&E

1 has not met hedge objectives which may be important to CDWR, such as hedging the gas costs in its
2 revenue requirement.

3
4 The cost for these price risk hedges, which is additional to the market-based supply costs for physical
5 gas, will be determined by hedge product prices at the time of procurement to manage the gas position.
6 Consistent with SDG&E's approved Procurement Plan and this Gas Supply Plan these costs incurred to
7 hedge CDWR gas positions will be recovered through the CDWR Revenue Requirement (costs to hedge
8 UEG positions will be recovered through SDG&E's ERRA). SDG&E has developed a forecast of gas
9 requirements in Table 2 for the period covered by this Gas Supply Plan in order to implement a
10 comprehensive price risk hedging strategy.

11
12 Wholesale electricity sales associated with excess CDWR generating capacity available for dispatch
13 may be made from time to time. Any costs directly hedged by CDWR based on SDG&E
14 recommendations are to be recovered through the CDWR revenue requirement.

17 Risk Management Decision-Making

18
19 Beginning with this year, SDG&E commenced measuring CRT and 125% CRT - VtE (95%) on a rolling
20 12 month basis. SDG&E monitors 125% CRT – VtE(95%) on a daily basis. However, when 125% CRT
21 – VtE(95%) is positive, SDG&E does not consider this an indicator that no hedging is needed. Rather,
22 SDG&E still manages the portfolio risk by hedging in an incremental manner over time. One example of
23 this type of hedging is baseload gas purchases.

24
25
26
27
28
29
30 As the rolling 12-month CRT metric erodes (approaches \$0) SDG&E would expect to increase hedging
31 activities to reduce portfolio exposure to price volatility. At the point when 125% of CRT – VtE(95%)
32 reaches \$0, SDG&E may choose to lock in prices for all remaining open positions, thereby protecting
33 ratepayers from the risk of further adverse price moves that would create losses against the Baseline
34 Costs by more than the amount of CRT. SDG&E also tracks

35 This second metric is more fully described in
36 SDG&E's LTTP. SDG&E will monitor the second metric formula and evaluate whether additional
37 hedging is appropriate should

38
39 On July 30th, 2010, the rolling 12-month 125% of CRT – VtE (95%) was and a forecast
40 of the remaining months 2010 125% RCRT –VtE (95%) was calculated for internal
41 management purposes. The 2010 RCRT indicates that estimated accrued costs plus forecasted costs for
42 the remainder of the year have decreased by about million since the Baseline Costs were set the
43 previous year as per the then approved Short-Term Procurement Plan. This reflects market conditions
44 where spot and forward prices for both gas and electricity have moved significantly lower since the 2010
45 Baseline was set in 2009.

1 SDG&E believes it is necessary to develop and follow a reasoned approach to achieving specific risk
2 management objectives. SDG&E's risk management objectives and decision making practices, are more
3 fully described in its LTPP.

4
5 SDG&E also periodically will meet and confer with SDG&E's RMC and PRG to review SDG&E's
6 hedge positions and risk metrics.

7
8
9 Attachment 2 outlines the CDWR hedging done to date for the forecast period of this GSP and
10 summarizes both the CDWR and UEG hedge positions. This attachment also identifies the net
11 remaining exposure positions for the period. Incremental hedges are undertaken in either the CDWR
12 book or the UEG book in a prorata manner where hedge activity in each book is approximately
13 proportional to the anticipated physical gas burn in each portfolio.

14
15 While some positions remain exposed to market prices [REDACTED] at the time of this
16 GSP writing SDG&E's strategy is to [REDACTED]
17 [REDACTED]

18
19 SDG&E plans to continue purchasing approximately [REDACTED] of its month ahead forecast CDWR gas
20 requirements to serve load in the baseload market. Baseload purchases are typically priced at a fixed
21 price or relative to the first-of-the-month index. This strategy greatly reduces the electric supply
22 portfolio exposure to potentially volatile daily prices, and is employed consistently regardless of CRT or
23 VaR. Baseload gas purchases also continue the price protection provided by financial instruments that
24 had been purchased for and expire prior to each month's delivery.

25
26 SDG&E notes that hedging costs incurred by CDWR do not have an immediate effect on ERRA account
27 balances because the Commission generally sets utility rates for remittance to CDWR on an annual
28 basis. However, since CDWR may request an increase in remittance rate due to higher gas costs, and
29 any such increase in remittances to CDWR would reduce the revenue that flows into ERRA, SDG&E
30 considers that any price increase for CDWR gas could potentially have the equivalent impact on its
31 ERRA balance as any other UEG cost increase.

32
33 Regardless of the hedging decision driver(s) used to make hedging decisions, SDG&E will review any
34 significant changes in its risk management strategy with its PRG, as time permits, and with CDWR, as
35 time permits.

36 37 **Risk Measurement – Value-at-Risk (VaR)**

38
39 The principal methodology SDG&E uses to measure the exposure of its electric portfolio open position
40 (comprised of both gas and electricity) to market price volatility is Value-at-Risk (VaR). SDG&E has
41 adopted VaR-to-Expiration as its primary risk measure calculation. VaR-to-Expiration is a statistical
42 measure that estimates the expected loss seen in the 5th worse case of 100 modeled cases (at 95%
43 confidence interval), associated with leaving the portfolio of unhedged positions exposed to price
44 volatility throughout their holding period until delivery. VaR-to-Expiration is recalculated each business
45 day. The VaR-to-Expiration modeling is described more fully in SDG&E's LTPP.

1 **Risk Management Products**
2

3 SDG&E will use the hedge products as described in its LTPP. The selection of a particular products and
4 product mix will take into account several factors including the effectiveness of the hedge to reduce VtE
5 or lock in CRT gains, cost relative to the hedge effectiveness, and product liquidity given complexity
6 and urgency of need. In addition, the ability to transact depends on the availability of sufficient credit
7 and collateral under CDWR's and SDG&E's physical and financial trading agreements with
8 counterparties, exchanges, and brokers such as NYMEX and over-the-counter ("OTC") brokerage
9 accounts.

10
11 SDG&E uses a combination of NYMEX natural gas options and futures, OTC natural gas swaps and
12 options, and fixed-price physical gas to manage price risk for CDWR open gas positions. These products
13 can be categorized into four types: futures, forwards, options and swaps (Derivatives). SDG&E
14 anticipates that these types of products will continue to be important risk management tools utilized
15 under this GSP. The decision to use one product over another is a function of the following primary
16 considerations: physical need, relative value and market availability.

17
18 **Physical Need** – SDG&E plans to procure approximately [REDACTED] of forecast gas requirements by
19 purchasing baseload gas at either fixed-price or monthly index. There are two primary benefits of buying
20 baseload gas: securing physical deliveries needed throughout the month and avoiding unnecessary
21 exposure to potentially extreme intra-month price fluctuations. Another use for baseload gas is
22 managing CDWR's imbalance accounts for the CalPeak and Sunrise units. SDG&E may from time to
23 time draft SoCal Gas or Kern River pipeline, creating a negative imbalance account, if burns exceed
24 forecast or if spot prices are higher than forward prices [REDACTED]
25 [REDACTED]
26 [REDACTED]
27 [REDACTED]

28
29 In lieu of physical baseload gas purchases, a financial baseload gas product called a swing swap may be
30 used. A swing swap is a contract-for-differences, typically for the balance of a month, in which
31 CDWR/SDG&E pays the counterparty a fixed or monthly index price, and the counterparty pays
32 CDWR/SDG&E the daily index price. Swing swaps are a financial alternative to baseload gas and may
33 be a more effective fit than physical baseload gas if daily gas requirements are forecast to be highly
34 variable due to unit outages or seasonal patterns. For example, during a typical spring run-off
35 hydroelectric generation depresses electricity prices and allows SDG&E to largely displace gas-fired
36 generation for a short period of time. For such months, swing swaps would protect the portfolio against
37 price spikes in the daily market but not obligate SDG&E to over-buy physical deliveries.

38
39 **Relative Value** – Another consideration in the selection of risk management products is the relative
40 value between options and fixed price derivatives. Relative value between options and fixed price
41 derivatives can be interpreted as the opportunity costs associated with locking in the fixed price position
42 and foregoing the chance to capture savings when market prices fall. This consideration is most relevant
43 when hedging the Henry Hub component of future gas price risk where both options and fixed price
44 derivatives can readily satisfy the hedging requirement.
45

1 Deciding on the appropriate product is a trade off between various attributes that each possesses. In
 2 addition, pricing relationships such as put-call parity suggest that no obvious arbitrage opportunities
 3 should exist between options. A table describing the qualitative advantages and disadvantages of
 4 purchasing call options and/or purchasing fixed price derivatives is presented below:
 5
 6

| | Call Options | Fixed-Price Derivatives |
|---------------|---|--|
| Advantages | <ul style="list-style-type: none"> • No margining requirements • Financial loss is limited to premium payment • Financial protection for price increases if above the strike price • No opportunity cost: customers benefit when market drops | <ul style="list-style-type: none"> • No up-front premium payments • One for one financial protection for price increases above the purchase price • Higher liquidity than options implies lower transaction costs |
| Disadvantages | <ul style="list-style-type: none"> • Premium payment can vary based on desired strike, time to expiration, and market conditions for price levels, volatility and interest rates. • Financial protection is typically less than one for one even for price movements above the strike price. • Lower liquidity than forwards implies higher transaction cost • No financial protection unless prices increase above the strike price. • Up front premium payment required. | <ul style="list-style-type: none"> • Marginable derivatives require cash outlays for price movements below the purchase price • One for one financial loss for price decreases below the purchase price |

7
 8
 9 There are two possible drawbacks with options, relative to fixed-price derivatives, that may be more or
 10 less significant depending on circumstances. The first is that up-front premiums must be paid to
 11 purchase options and this means incurring real costs, like paying for insurance premiums. The second
 12 issue, assuming options are held to expiration, is that they do not provide maximum financial value
 13 unless prices move beyond their strike price within the hedged time period. It is possible to accurately
 14 assess the direction of potential price movement but still lose money on options if the market price does
 15 not move past the strike price during the option term.
 16

17 Prior to using options, other information should be reviewed to ensure that options are the preferred risk
 18 management tool for each hedging decision. This other information includes impact of market factors
 19 such as liquidity, expected price volatility, underlying price trends, time to expiration, and impact on
 20 VtE reduction. These are described separately below, and illustrate the non-deterministic and fluid
 21 nature of executing trades when managing risk.
 22

23 Market Liquidity: Options are less liquid than futures/swaps, in part due to the large number of options
 24 strikes available on each futures contract. At times, especially during periods of volatile price moves, the
 25 quantity and the desired option strike may not be available or its price inflated above fair value relative
 26 to other option strikes

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 Price Volatility: In addition to potentially reduced liquidity for options, high price volatility also
5 increases the fair value of a given option chain on a futures contract. This relationship is based on the
6 fact that the likelihood of any given option expiring in the money is higher with higher price volatility,
7 and is captured mathematically in the numerous option pricing models such as the Black-Scholes model.
8 When the market has priced in an “implied” volatility in the option price that is high compared to actual
9 historical volatilities, it may be to the ratepayers benefit to lock in a fixed price using fixed price
10 derivatives, rather than pay the option premium that presumes a continued state of high price volatility.
11

12 Opportunity Costs: Opportunity cost represents the risk of loss on hedges due to adverse market
13 movements for those hedge products. However, to the extent that the SDG&E portfolio is less than 100
14 percent hedged, these opportunity costs will be countered with a certain amount of decreased acquisition
15 costs attributable to the Net Open Position. Based on the current and projected amount of exchange and
16 OTC hedges, net decreases to acquisition costs typically lead to lower overall consumer rates even when
17 factoring in the potential for opportunity costs.
18

19 *Margin Risk:* Concerns of SDG&E default are raised when transactions change in value and prices fall
20 prior to settlement and the counterparties are “in-the-money.” For marginable securities, contract terms
21 typically provide for SDG&E to make a margin call which requires posting of additional margin
22 (collateral). Margin risk would normally be interpreted as the risk of negative cash flow to support
23 potential margin calls associated with unrealized mark-to-market losses. Even when some limited value
24 of mark-to-market losses may be covered under negotiated credit lines, credit rating agencies do require
25 certain companies to hold financial resources to cover these losses as well as the risk of further loss
26 under a stress scenario. So, even if cash is not released to cover a margin call the margin risk will
27 almost always have a financial impact. This is true unless the risk of collateralization is fully eliminated
28 under the contract. Although not specifically required by the credit rating agencies, SDG&E has
29 adopted the Standard and Poor’s (S&P) liquidity methodology to manage its liquidity utilization and risk
30 for marginable transactions within its approved liquidity allocation.

1
2 Underlying Price Trends: Unlike certain options, if the gas market experiences an upward
3 price trend, then fixed price derivatives would have been a better risk management tool
4 because they avoid the up-front premium and cover risk immediately on a one-to-one
5 basis with price movement. However, it is impossible to reliably predict the price
6 direction of the market, and as such, SDG&E enters into fixed price derivatives or
7 options to manage overall rate volatility, lower VtE, maintain certain hedge percentage or
8 insurance levels or to finance overall hedging strategies.
9

10
11 Time To Expiration: Option premiums increase as the time to expiration increases
12 because a longer-life option has a greater probability of settling in-the-money. Therefore,
13 an option that is out-of-the-money may still be priced at a high premium if significant
14 time remains prior to expiration. In certain instances, it may be more reasonable to
15 purchase fixed price derivatives rather than to pay for the option “time value”.
16

17
18 Impact on VtE Reduction: When hedging is performed to reduce portfolio VaR, and even
19 when incrementally hedging over time, the impact of the hedge transaction on the
20 portfolio VtE becomes an important consideration. While out-of-the money options
21 remain a likely product choice, they may not reduce VtE as effectively as outright fixed
22 price products for the same notional volume. The direct price protection provided by the
23 out-of-the-money options only comes into play when the underlying contract price
24 exceeds the strike price of the option. However, unlike fixed price derivatives, certain
25 options are the only risk management tool to offset non-linear portfolio exposures to
26 volatility (vega), time to expiration (theta) and rate of price-change risk (gamma). .
27 Thus, depending on the urgency of reducing VtE (see next item), fixed price derivatives
28 may be more efficient and cost-effective risk management product for the portfolio at the
29 time.
30

31
32 **Market Liquidity** – Using the optimal mix of hedge products may not be possible due to
33 insufficient market liquidity. An example where market liquidity dictates the selection of
34 the hedge product is in managing basis exposure between NYMEX (priced at Henry
35 Hub) and the delivery points for CDWR gas. While options on NYMEX gas futures are
36 liquid and transparent, locational options or options on basis differentials at SoCal Border
37 and Opal gas are often less liquid. These locational options or basis options are not
38 available via an exchange such as NYMEX and must be procured via bilateral
39 negotiation or through an OTC broker with one of the ISDA counterparties with whom
40 CDWR can trade, assuming these counter-parties are even willing to offer a competitive
41 price. Further, SDG&E’s experience is that typical prices for OTC locational basis
42 options can be relatively higher than is supported by the price volatility. A different way
43 to protect the portfolio from basis risk is to lock in some portion of the open basis
44 position with basis swaps. Basis swaps tend to be more competitively priced due to
45 greater liquidity than locational options.
46

1 **Risk Management Systems**

2
3 SDG&E uses three primary applications in performing long term analyses described
4 above. Specifically, the VaR-to-Expiration calculations are performed using an off the
5 shelf model.. The position data that are required inputs to the VaR-to-Expiration model
6 are produced by SDG&E Energy Risk Management group using its own proprietary MS
7 Excel based Risk Engine. The software is also used to perform stress tests and sensitivity
8 analysis.

9
10 In this Risk Engine, SDG&E captures forecast load, hedges, and forward contracts
11 (including fixed price take or pay PPA's, QF's, etc.) and then simulates least cost
12 dispatch of its dispatchable resources and forecasts any market purchases. Dispatchable
13 generating units are valued as strip spread options, which are daily executable options on
14 the spark spread between the market price for power and the market price for gas.
15 CDWR and SDG&E generation units are dispatched on a least cost basis and are subject
16 to replacement by market purchases if doing so is more cost effective. Therefore, as the
17 spark spread narrows (as gas prices increase relative to electricity prices) dispatch of
18 generation units may be decreased in favor of market purchases which would reduce the
19 short forward gas position and increase the long forward power position, and vice versa.

20
21 Additionally, SDG&E uses an ETRM (Energy Trading & Risk Management) application
22 to perform hedge data capture/valuation counterparty credit risk analyses and other
23 controls-related analyses.

24
25 **Hedging Activity to Date**

26
27 In D.03-10-016 the Commission directed the allocation between SDG&E and SCE of the
28 Williams long-term gas contract with CDWR. As a fixed price supply contract, the
29 volumes represent a hedge of 1,200,005 MMBtu for short gas positions exposed to SoCal
30 Border prices during the period covered by this Plan. This represents less than 1% of
31 forecast CDWR gas requirements. The volume and price terms of this contract are
32 contained in Table 1.

33
34 As of July 30th, 2010, SDG&E has entered into a variety of financial gas hedges for this
35 Gas Supply Plan period, including the purchase of [REDACTED]

36
37 Attachment 2 shows transaction-by-transaction hedge details for CDWR. In summary,
38 [REDACTED] of gas has been hedged financially for CDWR and [REDACTED] of gas has been
39 hedged for UEG for the Gas Supply Plan period. Additionally, SDG&E purchased [REDACTED]
40 [REDACTED] of Opal Basis for CDWR and [REDACTED] of SoCal Basis for UEG.

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44
45 **Current Hedging Strategy**

1 Consistent with the risk management discussion in this Plan and the Risk Strategy
2 outlined in SDG&E's Long-Term Procurement Plan and Gas Supply Plans, SDG&E as
3 agent for CDWR plans to continue to monitor Remaining CRT and VaR levels and
4 monitor the effectiveness of the hedges that have been implemented. As market and
5 portfolio conditions change adjustments may periodically need to be made.

6
7 SDG&E's LTPP outlines a programmatic approach to risk management of years 2, 3, 4
8 and 5 of the rolling 5 year plan (currently years 2010/11/12/13 are years 2/3/4/5
9 respectively). SDG&E reviews hedge plans with CDWR quarterly for CDWR's
10 approval. In addition, SDG&E submits planned hedge activities to CDWR on a weekly
11 basis and discusses the plan as appropriate. Any gas hedging executed as a result of this
12 approved strategy will require that CDWR hedge its proportional share using its own
13 financial resources.

14 15 **CDWR Credit Risk Management**

16
17 SDG&E assumes that CDWR has taken direct responsibility for evaluating the efficacy
18 of hedging the credit risk associated with CDWR gas contracts, including the Williams
19 long-term gas contract, OTC hedging activity and forward fixed-price physical purchases.
20 SDG&E has not incorporated CDWR credit risk management into its overall risk
21 management strategy. When SDG&E either transacts on CDWR's behalf as agent or
22 recommends execution of a derivative product it assumes CDWR maintains effective
23 controls to mitigate credit risk as may be required by its bond-holders or as may be
24 prudent for the protection of the interests of SDG&E's customers.

25 26 **Regulatory Issues**

27 28 **MRTU**

29
30 The CAISO's Market Redesign and Technology Upgrade (MRTU) was implemented on
31 April 1, 2009. A key MRTU feature—directly related to SDG&E's procurement
32 activity—is the CAISO's new day-ahead Integrated Forward Market (IFM). SDG&E's
33 mandatory participation in the IFM has significantly reduced SDG&E's need to mitigate
34 the majority of its forecast day-ahead energy positions via brokered and bilateral trading.

35
36 Under MRTU, [REDACTED]
37 [REDACTED], because day ahead generation schedules are not known until after the day-ahead
38 IFM market is published by the CAISO, which is after the cycle 1 (Timely Nomination
39 Cycle) gas scheduling deadline of 9:30 am Pacific Time..

40
41 SDG&E will make [REDACTED]
42 [REDACTED]

43 44 ***Affiliate Transactions***

45
46 SDG&E may conduct transactions over the Intercontinental Exchange (ICE), which

1 could result in anonymous transactions with its regulated or non-utility affiliates
2 (provided that such affiliate had entered into a NAESB with CDWR in order to carry out
3 proposed transactions). Such anonymous transactions with regulated affiliates are
4 authorized in Resolution E-3838 and other Commission decisions, and such transactions
5 with non-utility affiliates are specifically authorized in D.03-06-076 and elsewhere.

6
7
8 CDWR has also executed a contract for
9 capacity products with Southern California Gas Company which would allow SDG&E to
10 engage in hub transactions, park-and-loan transactions, and short term storage
11 transactions with Southern California Gas Company. It is SDG&E's interpretation that
12 these transactions fall within the scope of "gas and transportation and storage services"
13 with SoCal Gas that the Commission has authorized in Resolution E-3838 and elsewhere.

14
15 In addition, in D.04-12-048 (ordering paragraph 27) the Commission stated: "By this
16 decision we lift the ban on long-term affiliate transactions for transactions entered into
17 through an open and transparent solicitation process. However, we maintain the ban on
18 short-term transactions because the short-term market moves too fast and there is too
19 great of a potential for abusive self-dealing, with little or no possibility for Commission
20 oversight of these types of transactions. The utilities, and in particular their respective
21 risk management committees, must maintain complete procurement planning
22 independence from their affiliates."

23 24 *CDWR Fuel Protocols*

25
26 The CDWR-SDG&E Operating Agreement outlines some of the responsibilities of
27 SDG&E as they relate to the procurement and management of gas for the Sunrise and
28 CalPeak dispatchable contracts. CDWR has also developed a Fuels Protocol that further
29 governs SDG&E's fuel-related activities when it acts as agent for CDWR.

30
31 In 2003, CDWR exchanged a new draft set of Gas Protocols to enhance or supplant the
32 existing protocols. The current version of these protocols is included in this Plan for
33 information purposes as Attachment 3 and represents significant change from the original
34 draft, with CDWR incorporating much of the feedback provided by SDG&E and the
35 other IOUs. In an e-mail dated 12/5/03, CDWR stated its expectation that these draft
36 Protocols would be effective as of 12/8/03. While there are some minor differences upon
37 which we continue to work with CDWR, there are a few major risk management
38 concerns that SDG&E would like to bring to the attention of the Commission. Any final
39 set of Protocols would be subject to Commission approval prior to taking effect.
40
41

TABLE 1 - WILLIAMS LONG-TERM GAS CONTRACT ALLOCATION
Period: November 2010 through December 2010.

A. Contract Term

| Month | Volume (MMBtu) | 2010 |
|-------------------|----------------|------------|
| | | Price (\$) |
| November-December | 1,200,000 | 4.39 |

B. DWR Allocation

| Quarterly Allocation | 2005-2010 |
|----------------------|-----------|
| | SDGE |
| Jan-Mar | 15% |
| Apr-Jun | 15% |
| Jul-Sept | 65% |
| Oct-Dec | 50% |

C. SDG&E Allocation - Volume &Price

| | Month | | |
|-------------------------|------------------|------------------|------------------|
| | Nov-10 | Dec-10 | Total |
| Contract Volume (MMBtu) | 1,200,000 | 1,200,000 | 2,400,000 |
| SDG&E Allocation (%) | 50% | 50% | 50% |
| SDG&E - Volume (MMBtu) | 600,000 | 600,000 | 1,200,000 |
| Price /MMBtu (\$) | 4.39 | 4.39 | 4.39 |
| Total Cost (\$) | 2,634,000 | 2,634,000 | 5,268,000 |

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**TABLE 2 - FORECAST GAS REQUIREMENTS
SUNRISE and CALPEAK
Period: November 2010 through October 2011
REDACT**

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**TABLE 3 - FORECAST SOURCES OF GAS SUPPLY
SUNRISE and CALPEAK
Period: November 2010 through October 2011
REDACT**

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TABLE 4- FORECAST BURNER TIP PRICES
Period: November 2010 through October 2011

A. Indicative Forward Prices

| Note | Forecast Prices/Fees (\$/MMBtu) | Month | | | | | | | | | | | | |
|------|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Nov-10 | Dec-10 | Jan-11 | Feb-11 | Mar-11 | Apr-11 | May-11 | Jun-11 | Jul-11 | Aug-11 | Sep-11 | | |
| 1 | Williams Contract Price | 4.39 | 4.39 | | | | | | | | | | | |
| 2 | NYMEX - Henry Hub | 5.01 | 5.21 | 5.34 | 5.30 | 5.20 | 4.99 | 5.00 | 5.03 | 5.08 | 5.12 | 5.14 | | |
| 3 | Opal - Henry Hub Basis | (0.77) | (0.44) | (0.44) | (0.44) | (0.44) | (0.62) | (0.62) | (0.62) | (0.62) | (0.62) | (0.62) | (0.62) | (0.62) |
| 4 | Socal - Henry Hub Basis | (0.49) | (0.15) | (0.24) | (0.24) | (0.22) | (0.26) | (0.30) | (0.22) | (0.13) | (0.10) | (0.23) | | |
| 5 | Opal - Socal Spread | (0.28) | (0.29) | (0.20) | (0.20) | (0.22) | (0.36) | (0.32) | (0.40) | (0.49) | (0.52) | (0.39) | | |
| | Commodity Charge | 0.0610 | 0.0610 | 0.0610 | 0.0610 | 0.0610 | 0.0610 | 0.0610 | 0.0610 | 0.0610 | 0.0610 | 0.0610 | 0.0610 | 0.0610 |
| | Daggett Compressor Charge | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| | Fuel Loss (Estimate) | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% |
| 6 | Forecast KRGT Transport Costs | 0.19 | 0.20 | 0.21 | 0.21 | 0.20 | 0.19 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | | |
| 7 | Opal Plus Transport to Socal Border | 4.43 | 4.97 | 5.10 | 5.08 | 4.96 | 4.57 | 4.58 | 4.61 | 4.66 | 4.70 | 4.72 | | |
| 8 | Socal Border Price | 4.52 | 5.06 | 5.09 | 5.07 | 4.98 | 4.73 | 4.71 | 4.81 | 4.95 | 5.02 | 4.91 | | |
| 9 | Socal Citygate Price | 4.57 | 5.11 | 5.14 | 5.12 | 5.03 | 4.78 | 4.76 | 4.86 | 5.00 | 5.07 | 4.96 | | |

Notes:

- 1 Per Table 1
- 2,3,4 Market price (NYMEX & Basis) determined on: July 30, 2010
- 6 Per KRGT firm contract with Sunrise - Commodity Charge plus Daggett Compressor Charge plus Fuel Loss
- 7 (2) plus (3) plus (6)
- 8 (2) plus (4)

B. Sunrise

| Note | Forecast Prices/Fees (\$/MMBtu) | Month | | | | | | | | | | | | |
|------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|------|
| | | Nov-10 | Dec-10 | Jan-11 | Feb-11 | Mar-11 | Apr-11 | May-11 | Jun-11 | Jul-11 | Aug-11 | Sep-11 | | |
| 1 | Fuel Management Fee | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | Forecast Delivered Price (Williams Long-Term Contract to Sunrise) | 4.39 | 4.39 | | | | | | | | | | | |
| 3 | Forecast Delivered Price (Opal to Sunrise) | 4.43 | 4.97 | 5.10 | 5.08 | 4.96 | 4.57 | 4.58 | 4.61 | 4.66 | 4.70 | 4.72 | | |
| 4 | Forecast Delivered Price (Socal Border to Sunrise) | 4.52 | 5.06 | 5.09 | 5.07 | 4.98 | 4.73 | 4.71 | 4.81 | 4.95 | 5.02 | 4.91 | | |

Notes:

- 1 Assuming SDG&E will continue to be the Fuel Manager for Sunrise
- 2 2010 Price for Williams Long-Term Contract

D. CalPeak

| Note | SDGE Tariffs | Est. Cost \$/MMBtu |
|------|---|--------------------|
| | CalPeak Power - El Cajon | |
| | Intrastate Transportation | 0.56 |
| | Estimate SDGE Franchise Fee Surcharge Fate | 0.06 |
| | Estimate SDGE State of California Regulatory Fee | 0 |
| | Total - Estimate SDGE Tariff Charges - Enterprise & El Cajon | 0.62 |
| | CalPeak Power - Enterprise | |
| | Intrastate Transportation | 0.2217 |
| | Estimate SDGE Franchise Fee Surcharge Fate | 0.06 |
| | Estimate SDGE State of California Regulatory Fee | 0 |
| | Total - Estimate SDGE Tariff Charges - Enterprise & El Cajon | 0.28 |
| | SDGE Tariffs - CalPeak Power - Border | |
| | Intrastate Transportation | 0.2217 |
| | Estimate City of San Diego Franchise Fee | 0.085 |
| | Estimate SDGE Franchise Fee Surcharge Fate | 0 |
| | Estimate SDGE State of California Regulatory Fee | 0 |
| | Total - Estimate SDGE Tariff Charges - Border | 0.31 |
| | | 0.40 |

| Note | Prices/Fees (\$/MMBtu) | Month | | | | | | | | | | | | |
|------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|------|
| | | Nov-10 | Dec-10 | Jan-11 | Feb-11 | Mar-11 | Apr-11 | May-11 | Jun-11 | Jul-11 | Aug-11 | Sep-11 | | |
| 3 | Fuel Management (FM) Fee | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | Forecast Delivered Price (Opal to CalPeak) | 4.87 | 5.41 | 5.55 | 5.52 | 5.41 | 5.01 | 5.02 | 5.05 | 5.10 | 5.14 | 5.16 | | |
| 2 | Forecast Delivered Price (Socal Border to CalPeak) | 4.96 | 5.50 | 5.54 | 5.51 | 5.42 | 5.17 | 5.15 | 5.26 | 5.40 | 5.46 | 5.35 | | |

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**TABLE 5 - SDG&E PROJECTED COST
CALPEAK, SUNRISE & WILLIAM
Period: November 2010 through October 2011
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TABLE 6- EXPECTED SAVINGS
Period: November 2010 through October 2011
REDACT

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TABLE 7 SDG&E PORTFOLIO - FORECAST GAS REQUIREMENT
Period: November 2010 through October 2011

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Attachment 2- Hedging Transaction Detail

REDACT

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Attachment 2 – Hedging Activity Summary
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Attachment 2 – Hedging Activity Summary

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Attachment 3: CDWR Fuels Protocol

California Department of Water Resources (DWR)

Fuels Protocols

Effective: 12/08/2003

Introduction

The California Department of Water Resources ("DWR") Fuels Protocols (the "Protocols") are intended as instructions from DWR to its limited agents, the Investor Owned Utilities ("IOUs"), with respect to the administration of its fuels program. Among other things, the Protocols describe the IOU actions and information required to enable DWR to (i) evaluate and determine whether to enter into gas transactions initiated and recommended by the IOUs, and (ii) monitor, review, verify, audit and evaluate actions taken by IOUs, as limited agents for DWR, in the area of fuels procurement and management. DWR and each IOU shall treat confidential information provided in compliance with these Protocols in the same manner that it treats "Proprietary Information" under section 11.01 of the Operating Agreements dated April 17, 2003 between DWR and SDG&E and PG&E, respectively and the Operating Order dated December 19, 2002 applicable to SCE.

In appropriate circumstances DWR may consent in writing to deviations from the Protocols. For example, if an IOU recommends that DWR enter into a transaction that does not conform to the Protocols, the IOU may still present it to DWR for its consideration, and in appropriate circumstances, DWR may consent to enter into a non-conforming transaction.

In the event of conflicting guidance between an IOU Fuel Supply Plan approved by the California Public Utilities Commission (the "CPUC") and these Protocols, then the IOU shall operate under the narrower or more restrictive parameters.

These Protocols supersede any contemporaneous or prior oral or written statements made by DWR or its representatives with respect to the subject matters addressed herein.

I. Physical Gas Transactions Not Requiring Prior DWR Review and Consent

A. Qualifying Transactions

Transactions that meet all of the following requirements do not require prior DWR review and consent:

1. Supplier is on DWR list of Approved Fuels Counterparties (See Exhibit A attached)
2. For interruptible transportation transactions, counterparty is on DWR list of Approved Fuels Counterparties (See Exhibit A attached). (For firm transportation transactions, see Section II below)
3. For storage transactions with a duration of 3 months or less, counterparty is on DWR list of Approved Fuels Counterparties (See Exhibit A attached). (For storage transactions with a duration exceeding 3 months, see Section II below)

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- a) This requirement also applies to park and lend arrangements
- 4. Aggregate purchase amount of the transaction is estimated to be less than \$10,000,000
 - a) For purposes of this section I(A)(4), transactions with substantially similar Commercial Terms (see Glossary) shall be deemed to be a single transaction
 - b) For requirement applicable to sale of gas transactions see Section VII of these Protocols
- 5. Term of purchase transaction does not exceed 3 months in length
 - a) For requirement applicable to sale of gas transactions see Section VII of these Protocols
- 6. Delivery must commence within 12 months of date of Transaction Confirmation
- 7. Transaction Confirmation must conform to DWR executed enabling agreement without modification and must not include any Non-Commercial Terms (see Glossary)
- 8. Market pricing conforms to the following:
 - a) For monthly purchases that are based on California Border, PG&E Citygate, AECO or other such trading point monthly index prices, any fixed premium shall not exceed 2¢ per MMBtu. (If warranted by market conditions, DWR may give prior written authorization allowing 2¢ limit to be exceeded).
 - b) Negotiated fixed prices shall be within the then current market price range and, where applicable, shall reflect the then current NYMEX price, plus then current basis differential.
- 9. Transaction does not require (at the time of the transaction) DWR to post collateral (IOU may still undertake such a transaction, however, in that event, IOU must follow Section II(A)(1)(e) below)
- 10. Transaction is not speculative in nature. For purposes of these Protocols, "speculation" is defined as taking a substantial incremental position with the objective of selling at a profit. Further, the following practices are deemed speculative by DWR and therefore do not qualify:
 - a) Any transaction that would increase the price risk to DWR such as increasing the short gas position of the DWR portfolio.
 - b) The overbuying of gas. In this context, "overbuying gas" means buying a greater quantity than the quantity currently anticipated to be needed for the DWR tolling contracts allocated to the IOU.

Note 1: overbuying gas maybe deemed to be acceptable in certain circumstances, such as avoiding or minimizing stranded capacity costs. However, such transactions do not qualify under this Section I of the Protocols. An IOU contemplating such a transaction, should present it to DWR for review and consent under Section II of these Protocols.

Note 2: Buying gas for storage is not considered overbuying gas. Depending on duration, storage transactions may be undertaken pursuant to Section I(A)(3) or II(A)(1)(C) of these Protocols.

B. Required IOU Actions

- 1. Request that supplier provide DWR with Transaction Confirmation or prepare Transaction Confirmation by deadline specified in applicable enabling

- 1 agreement.
- 2 2. If possible, provide IOU-generated Transaction Confirmation to DWR.
- 3 3. If requested, provide any further information or cooperation reasonably
- 4 necessary to allow DWR to review or verify that the transaction meets the
- 5 qualifications set forth in Section I(A) above.
- 6 4. If requested, provide any additional documentation reasonably necessary to
- 7 assist DWR in any just and reasonable determination conducted in connection
- 8 with DWR's revenue requirement.
- 9 5. In the event that market conditions or other exigent circumstances make timely
- 10 compliance with all of the requirements of Section I(A) impracticable, IOU may
- 11 still undertake transaction pursuant to Section I of these Protocols so long as IOU
- 12 provides DWR with notice, and any additional information requested by DWR, as
- 13 soon as possible after completion of the transaction.

14

15 **C. DWR Review and Actions**

- 16
- 17 1. Review and sign Transaction Confirmation.
- 18

19 **II. Physical Gas Transactions Requiring Prior DWR Review and Consent**

20

21 **A. Qualifying Transactions**

- 22
- 23 1. Types of transactions:
- 24
- 25 a) All physical gas purchase transactions other than those that
- 26 qualify under Section I(A) of the Protocols
- 27 (1) For requirement applicable to sale of gas transaction, see
- 28 Section VII of these Protocols b) All firm transportation
- 29 agreements with duration exceeding 3 months c) All storage
- 30 transactions with duration exceeding 3 months d) Any transaction
- 31 that, at the time of the transaction, requires DWR to post
- 32 collateral
- 33
- 34 2. Proposed transaction must be at the then current market price (as of the time
- 35 proposed transaction is submitted to DWR) based on IOU Market Survey (see
- 36 Glossary)

37

38 **B. Required IOU Actions**

- 39
- 40 1. Submit the following to DWR: a) Unexecuted final draft of proposed term sheet or
- 41 draft agreement, if applicable b) An IOU Market Survey (see Glossary). See also
- 42 Exhibit B for a sample IOU Market Survey. c) Any analysis / information as
- 43 required by sections II(B)(2)– (6) below
- 44 2. Alert DWR if proposed Transaction Confirmation or Agreement may contain any
- 45 Non-Commercial (see Glossary) or unusual terms
- 46 3. Alert DWR if proposed transaction may, at the time of transaction, require posting
- 47 of additional collateral by DWR and provide the proposed additional required
- 48 amounts under the proposed transaction.
- 49 4. Alert DWR as to the date and time when a DWR response is needed on various
- 50 components of proposed transaction. For example, alert DWR as to deadline for
- 51 signing Transaction Confirmation.
- 52 5. If requested, provide any further information or cooperation reasonably
- 53 necessary to allow DWR to review or verify that the transaction meets the

- 1 qualifications.
- 2 6. If requested, provide any additional documentation reasonably necessary to
- 3 assist DWR in any just and reasonable determination conducted in connection
- 4 with DWR's revenue requirement.
- 5 7. If proposed transaction is declined by DWR, the IOU may resubmit transaction
- 6 for reconsideration with terms that have been revised to comply with DWR's
- 7 requirements
- 8
- 9

10 **C. DWR Review and Actions**

- 11 1. In accordance with Section II(C)(2) below, verify that the proposed transaction
- 12 complies with requirements set forth in these Protocols
- 13 2. A proposed transaction shall be deemed in compliance with these Protocols so
- 14 long as:
- 15
- 16 a) It meets qualifications set forth in Section II(A);
- 17 b) IOU provided adequate information as part of IOU request for
- 18 proposed transaction and in response to any requests from DWR
- 19 c) Additional collateral or margin was approved by DWR Deputy
- 20 Controller
- 21 d) Documentation submitted by IOU includes a satisfactory IOU
- 22 Market Survey (see Glossary)
- 23
- 24 3. For transactions in compliance with these Protocols, sign Transaction
- 25 Confirmation or Agreement; provided that, unless DWR has already
- 26 communicated its consent to IOU, DWR reserves the right to decline any
- 27 transaction in its sole discretion.
- 28 4. If proposed transaction does not meet requirements set forth in Section II(C)(2)
- 29 or is otherwise declined, do not sign Transaction Confirmation or Agreement and
- 30 notify IOU in writing or via e-mail that the transaction is declined
- 31 5. DWR will respond promptly to IOU request and will make every effort to meet
- 32 deadlines specified by IOU in Section II(B)(4) above.
- 33

34 **III. Financial Transactions**

35 **A. Qualifying Transactions**

- 36
- 37
- 38 1. The proposed transaction must be for a qualified purpose. Qualified purposes
- 39 include, but are not limited to, the following: a) Fixing or limiting the gas price risk
- 40 exposure. b) Fixing the spark spread when the IOU is making forward power
- 41 sales. c) Complying with DWR portfolio hedge parameters set forth in these
- 42 Protocols (See Section VI below) Other purposes must be specified or approved
- 43 by DWR in writing as "qualified" before transactions may be entered into for such
- 44 purposes.
- 45 2. Unless IOU obtains prior consent from DWR, over-the-counter hedge
- 46 transactions may only be made within the established credit limits
- 47 3. Unless IOU obtains prior consent from DWR, proposed transaction must not
- 48 increase the price risk or volume risk to DWR
- 49 4. Unless IOU obtains prior consent from DWR, proposed transactions must not
- 50 increase the short gas position
- 51 5. Unless IOU obtains prior consent from DWR, proposed transactions must not
- 52 cause IOU to exceed its expected hedging expenses (see Section VI below)
- 53

54 **B. Required IOU Actions**

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1. Submit an unexecuted final draft of proposed term sheet or draft agreement, if applicable, to DWR
2. Alert DWR if counterparty has indicated that proposed transaction may require posting of additional collateral / margin by DWR and indicate the proposed additional required amounts under the proposed transaction
3. If proposed transaction is declined by DWR, the IOU may resubmit transaction with terms that have been revised to comply with DWR requirements
4. Provide any further information or cooperation reasonably necessary to allow DWR to review or verify that the transaction meets the qualifications.
5. If requested, provide any additional documentation reasonably necessary to assist DWR in any just and reasonable determination conducted in connection with DWR's revenue requirement.

C. DWR Review and Actions

1. In accordance with Section III(C)(2) below, verify that the proposed transaction complies with requirements set forth in these Protocols
2. A proposed transaction shall be deemed in compliance with these Protocols so long as:
 - a) It meets qualifications set forth in Section III(A);
 - b) IOU provided adequate information in response to any requests from DWR;
 - and
 - c) Additional collateral or margin was approved by DWR Deputy Controller;
3. For transactions in compliance with these Protocols, consent to transaction; provided that, unless DWR has already communicated its consent to IOU, DWR reserves the right to decline any transaction in its sole discretion.
4. If proposed transaction does not meet requirements set forth in these Protocols, or is otherwise declined, do not sign Transaction Confirmation or Agreement and notify IOU in writing or via e-mail that the transaction is declined

IV. IOU Reports

- A. By the 10th of each month, each IOU shall provide to DWR a "Monthly Report" that lists:
 1. All transactions undertaken by IOU for the prior (immediately preceding) month pursuant to Sections I through III of these Protocols
 2. Total cost and volume of physical gas deliveries in the prior month for DWR allocated contracts
- B. Each Monthly Report shall include a hedging section that lists:
 1. All transactions undertaken by IOU pursuant to Sections III of these Protocols
 2. Total realized financial hedging gains and losses for the prior month
- C. Each Monthly Report shall provide to DWR a calculation of the Weighted Average Cost of DWR Gas (WACOG) for the prior month, including all physical and financial transactions that impacted the cost of DWR gas for that month.
- D. Each Monthly Report shall include a forward position section that lists:
 1. Expected gas demand under DWR tolling contracts allocated to the utility, for the current month and the next six months or as far out as the IOU has hedged.

- 1 2. Quantity and price of physical purchases already made to supply the expected
2 demand for the current and following six months or as far out as the IOU has
3 hedged
- 4 3. Financial positions, including volume and price, taken to hedge gas price for the
5 current and next six months or as far out as the IOU has financial positions, with
6 opening value and current marked to market value or value at closing.
7
- 8 E. Following submission of the Monthly Report, each IOU shall meet, by telephone
9 or in person, with DWR staff to discuss the Monthly Report, market trends, and hedging
10 strategies.
11
- 12 1. The in-person meetings shall take place no less frequently than
13 quarterly.
14
- 15 F. DWR will consider reports already being prepared by each IOU for its own
16 management in lieu of those required by Sections IV(A)-(D) above.
17
- 18 1. IOU must submit samples of such reports to DWR so that DWR can
19 determine whether they will be deemed acceptable substitutes for the reports
20 required by Sections IV(A)-(D) above.
21

22 **V. Collateral Requests**

- 23 A. Funding of collateral requests
24
- 25
- 26 1. For bilateral contracts, where amount of unsecured credit extended to
27 DWR by counterparty may have been exceeded and where such
28 counterparty has indicated that it requires either a certain amount or form
29 of collateral, each IOU shall do the following:
30
- 31 a) Discuss with the counterparty ways to minimize the collateral
32 required, including, but not limited to, the possibility of having
33 DWR increase the frequency of payments to be made under the
34 contract,
- 35 b) Obtain market quotes and discuss the amount of collateral
36 with the counterparty in the case of mark to market
37 triggering collateral requirements.
- 38 c) Present options discussed with counterparty to DWR for
39 review and consent.
40

41 **VI. DWR Risk Management Policies**

- 42
- 43 A. DWR expects each IOU to address in detail, as part of each IOU's Fuel Supply
44 Plan, proposed strategies aimed at mitigating price risks. DWR is particularly
45 concerned with the risk that costs of natural gas for its tolling contracts will exceed
46 the costs assumed for purposes of calculating the DWR revenue requirement (see
47 the "Determination of Revenue Requirements" report at www.cers.water.ca.gov).
48 DWR expects the IOUs' strategies to describe specific contract types and
49 structures which the IOU believes constitute cost-effective means of mitigating
50 price risks. In addition, DWR expects each IOUs Fuel Supply Plan to explain how
51 its strategies are expected to impact overall gas portfolio costs. The goal of a
52 satisfactory program should be to provide price stability at reasonable and prudent
53 prices relative to DWR's stated revenue requirements and market conditions, both
54 current and forecast.

- 1
2 B. On a semi-annual basis, DWR will allocate a dollar amount to each IOU that is
3 intended to cover each IOU's expected hedging expenses for the next 6 months.
4 This expected hedging expenses figure represents the total amount of money that
5 the IOU may lose over the hedging period. The loss is calculated as the sum of
6 gains and losses of all hedging transactions for the period. DWR anticipates that
7 each IOU's hedging expenses figure will be sufficient to meet the needs of a
8 prudently managed hedging program. However, DWR understands that market
9 conditions play an important role in hedging expenses ultimately incurred by each
10 IOU. Consequently, DWR will periodically reevaluate the expected hedging
11 expenses number for each IOU, taking into account market conditions and actual
12 hedging expenses incurred by IOU to date.
13

14 **VII. Sales of Surplus Gas Transactions**

- 15
16 A. On occasion, DWR expects to have surplus physical gas due to unexpected
17 changes in weather, changes in scheduling of power plants under contract to
18 DWR, etc. Treatment of physical gas transactions under these Protocols will
19 depend on volume and duration and will be as follows:
20
21 1. Transactions in the amount of \$3,000,000 or less or with a term of 1
22 month or less may be undertaken by the IOUs so long as IOU complies
23 with Section I of these Protocols
24 2. Transactions exceeding \$3,000,000 or with a term of exceeding 1 month
25 may be undertaken by the IOUs so long as IOU complies with Section II
26 of these Protocols
27

28 **VIII. IOU Records and DWR Audit Rights**

- 29
30 A. Transactions undertaken on behalf of DWR should be conducted over a
31 recorded telephone line where practicable.
32 B. IOU must maintain records of market surveys and other activities conducted on
33 behalf of DWR. Further, IOU shall retain records in accordance with its own
34 record retention policies for its own records of a similar nature.
35 C. Routine audits by DWR will be done after reasonable notice to IOU and will be
36 conducted during normal business hours.
37 D. IOU shall provide DWR with telephone recordings and other DWR transaction
38 related records within 5 business days of request by DWR
39 E. DWR shall have the right to audit telephone recordings and other records
40 maintained by the IOUs in connection with transactions initiated by the IOUs on
41 behalf of DWR
42

43 **IX. Authorized Representatives**

- 44
45 A. Each IOU must provide DWR with a written list of representatives who are
46 authorized to initiate requests for Physical Gas Transactions and Financial Transactions. Each
47 IOU may change its list of authorized representatives upon delivery of written notice to DWR.
48 B. Except as otherwise stated above, the following representatives of DWR and
49 their official delegates are authorized to execute transactions on behalf of DWR. This list may be
50 changed at any time by DWR upon written notice to the IOUs.
51 1. Stu Chan
52 2. Bob Grow
53 3. Jim Varney
54

1 **X. Revision of Protocols**

- 2
- 3 A. DWR reserves the right to revise the Protocols as necessary. Where the need to
- 4 implement the revision is not immediate, DWR will provide advance written notice to
- 5 the IOUs and an opportunity for review and comment. Upon revising the Protocols,
- 6 DWR shall provide copies to each of the IOUs.
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Attachment 4
CalPeak Fuel Supply Plan
April 1, 2010-March 31, 2011

Fuel Supply Plan

Dated April 1, 2010

between

CALPEAK POWER – BORDER LLC

CALPEAK POWER – EL CAJON LLC

CALPEAK POWER – ENTERPRISE LLC

and

STATE OF CALIFORNIA

DEPARTMENT OF WATER RESOURCES

CALIFORNIA ENERGY RESOURCES SCHEDULING

covering the fuel supply period

of April 1, 2010 through March 31, 2011

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1. INTRODUCTION

This Fuel Supply Plan (“FSP”) was developed cooperatively by CalPeak Power – Border LLC, CalPeak Power – El Cajon LLC, CalPeak Power – Enterprise LLC (“CalPeak” or “Seller”), San Diego Gas and Electric Company (“SDG&E”), and the California Department of Water Resources (“Department”) in accordance with three existing Power Purchase Agreements (as described in Section 2.1 of this FSP). The purpose of this FSP is to provide the necessary operational details and procedures not specifically described in the Agreements regarding the fuel supply arrangements between the Parties.

This FSP includes provisions for:

- Designation of the Fuel Manager
- Description of the Facilities
- An option to make mutually agreeable modifications to the FSP

The Parties have developed this FSP in order to define the roles of and the relationship between the respective Parties regarding the supply and delivery of Fuel to the Facilities pursuant to the Agreements.

2. SCOPE OF THE FSP; DEFINITIONS

2.1 Agreements

This FSP makes reference to and applies to three existing Power Purchase Agreements:

- a. the Second Amended and Restated Power Purchase Agreement that was executed between CalPeak Power – Border LLC and the State of California Department of Water Resources on September 1, 2007, and as supplemented by the MRTU Protocol Agreement executed on October 6, 2009; and
- b. the Second Amended and Restated Power Purchase Agreement that was executed between CalPeak Power – El Cajon LLC and the State of California Department of Water Resources on September 1, 2007, and as supplemented by the MRTU Protocol Agreement executed on October 6, 2009.
- c. the Second Amended and Restated Power Purchase Agreement that was executed between CalPeak Power – Enterprise LLC and the State of California Department of Water Resources on September 1, 2007, and as supplemented by the MRTU Protocol Agreement executed on October 6, 2009.

2.2 Capitalized Terms

All capitalized terms used in the FSP shall have the meaning as defined in Section 2.7, "Definitions," of this FSP. All capitalized terms used in the FSP but not defined in Section 2.7, "Definitions," of the FSP shall have the same meaning as defined in the Agreements.

2.3 Order of Precedence

Nothing in this FSP shall be construed as modifying any of the terms of the Agreements. In the event of a conflict between the provisions of this FSP and the Agreements the provisions of the Agreements shall govern.

2.4 Fuel Manager

Pursuant to the Agreements, the Seller shall designate the Department (with SDG&E acting as the Department's limited agent) to serve as Fuel Manager for the term of this FSP.

2.5 Fuel Supplier

Pursuant to Section 2.05, "Fuel Supply Arrangements," of the Agreements, the Department has elected to supply Fuel. SDG&E, acting as the Department's limited agent, shall buy and sell Fuel on the Department's behalf.

2.6 Term of the FSP

- a. This FSP shall begin effective April 1, 2010 and ends on March 31, 2011.

b. Department and Seller have the option, by mutual agreement, to extend the term of this FSP up to the expiration date provided in Section 2.08, "Term," of the Agreements. Exercise of this option may be made by side letter signed by the Parties and no revised FSP is required.

2.7 Definitions

"DH Fuel" means Fuel delivered to the Seller for purposes of operating the Facility during Dedicated Hours.

"Facility Lateral" means a spur gas pipeline from its interconnection with the LDC's pipeline to the Facility.

"Fuel Delivery Point" means the Facility Lateral interconnection point with the LDC's pipeline.

"Gas Index Price, Midpoint" means the SoCal City-gate midpoint price as published daily in the *Gas Daily* by Platts, a division of The McGraw Hill Companies.

"LDC" means either: SoCal Gas acting as a natural gas Local Distribution Company; or SDG&E acting as a natural gas Local Distribution Company; or SDG&E and SoCal Gas acting together as an integrated gas transmission and storage system.

"Non-DH Fuel" means Fuel delivered to the Seller for purposes other than operating the Facility during Dedicated Hours.

"Non-OFO Gas Trading Day" means a natural gas trading day for which the utility system operator has not issued an operational flow order.

"SDG&E" means San Diego Gas & Electric Company acting on its own behalf as a utility, an LDC, and as a Qualified Electric Corporation.

"SDG&E, acting as Department's limited agent" means San Diego Gas & Electric Company in its role as Department's limited agent pursuant to CPUC Decision D. 03-04-029.

"SoCal City-gate" means a Fuel receipt point in the SoCal Gas virtual natural gas trading pool.

"SoCal Gas" means the Southern California Gas Company.

3. FACILITIES

3.1 Capacities and Heat Rates

The "Border" and "Enterprise" Facilities consist of Pratt & Whitney FT8-2 TwinPac 50 plants, while the "El Cajon" Facility is a Pratt & Whitney FT8-2 SwiftPac 50. The capacities, heat rates and nominal hourly gas flow for each Facility are shown on Table 1.

Table 1. Capacities, Heat Rates, and Nominal Hourly Gas Flows of the Facilities¹

| Facility | Capacity (kW) | Heat Rate (Btu/kWh) | Nominal Gas Flow (mmBtu/hr) |
|--------------------------------|----------------------|----------------------------|------------------------------------|
| CalPeak Power - Border LLC | 51,865 | 10,405 | 540 |
| CalPeak Power – El Cajon LLC | 51,257 | 10,463 | 536 |
| CalPeak Power – Enterprise LLC | 51,113 | 10,379 | 531 |
| <i>Average</i> | <i>51,412</i> | <i>10,416</i> | <i>535</i> |

4. FUEL MANAGEMENT, TRANSPORTATION, TARIFFS AND FEES

4.1 DH Fuel

During the term of this FSP and subject to Section 2.05, "Fuel Supply Arrangements," of the Agreement, the Department will procure, supply, nominate, balance, transport and deliver or otherwise make available Fuel at the Fuel Delivery Point, for Seller's use to generate Energy produced as a result of Facility operations during Dedicated Hours.

Seller shall have the obligation to receive DH Fuel as directed by Department.

4.2 Transportation and Delivery

The Department shall provide transportation or arrange for the delivery of all Fuel for use at the Facility, consisting of either DH Fuel or Non-DH Fuel, to the Fuel Delivery Point. The Department shall manage Fuel deliveries to the Facility within normal industry practices and all rules and tariffs of the LDC.

The Seller shall provide a dedicated Facility Lateral pipeline to transport all Fuel to the Facility's burner tips.

4.3 Agent Marketer

Seller shall authorize Department as Seller's agent and Agent Marketer², or take other measures as needed to transfer to Department the authority to exercise all of Seller's rights under agreements with SDG&E with respect to nominating, scheduling, balancing, or such other arrangements for the management of Fuel supply and deliveries to the Facilities.

¹ The Capacities and Heat Rates in this table come from recent Performance Tests conducted in accordance with Appendix F of the Agreements.

² As defined in SoCal Gas Co's Gas Rule 1, "Definitions."

4.4 Fuel Transportation and Distribution Agreements

Seller shall assign to the Fuel Manager all of Seller's rights under agreements with previous Contracted Marketers, SDG&E, or SoCal Gas with respect to nominating, scheduling, balancing, or such other arrangements for the management of Fuel supply and delivery.

4.5 Access to Data and Records

Seller shall provide the Department access to meter data, records and invoices associated with Department, SDG&E or SoCal Gas services to the Facility, including but not limited to ENVOY.

4.6 Title and Risk of Loss

Title to and risk of loss of Fuel shall transfer to Seller at the Fuel Delivery Point.

4.7 Tariffs and Rules

In accordance with the LDC's Gas Tariffs and Rules, Fuel deliveries are subject to:

- SDG&E Schedule TLS, "Intrastate Transportation Service for Transmission Level Customers," or SoCal Gas GT-TLS, "Intrastate Transportation Service for Transmission Level Customers," as applicable;
- SDG&E Schedule EG, "Natural Gas Intrastate Transportation Service for Electric Generation Customers," or SoCal Gas Schedule EG, "Gas Transportation Service To Electric Generation," as applicable;
- SDG&E Schedule GTNC, "Natural Gas Intrastate Transportation Service for Noncore Customers," or SoCal Gas Schedule GT-F, "Firm Intrastate Transmission Service," as applicable;
- SoCal Gas schedule G-POOL, "Pooling Service";

as well as all other applicable LDC Gas Tariffs and Rules.

In the event of additions to, modifications to, or deletions of LDC's Gas Tariffs and Rules, such changes are incorporated into this FSP by default.

4.8 Costs

- a. The Department shall procure and provide DH Fuel at SoCal City-gate at no cost to the Seller. For Non-DH Fuel, see Section 4.10 of this FSP. Costs incurred by Seller under LDC Schedules GTNC, TLS, GT-TLS, EG, GT-F, and G-POOL in effect at the time of Department's Dispatch will be reimbursed by the Department to the Seller, limited to costs attributable to the DH Fuel quantities used by the Facilities to produce Energy during Dedicated Hours.

- b. Seller shall pay all invoices from the LDC for the transportation and distribution of DH Fuel. The Department shall reimburse Seller for all costs related to the transportation and distribution of DH Fuel. Seller shall invoice Department monthly for those LDC costs allocable to Department. Department shall not be responsible for any charges that are not associated with the transportation or distribution of DH Fuel.
- c. Costs incurred by Seller related to the delivery of non-DH Fuel, including but not limited to costs under LDC Schedules GTNC, TLS, GT-TLS, EG, GT-F, and G-POOL, are borne by the Seller.
- d. Seller and Department shall each be responsible for any Fuel imbalances that each causes.

4.9 Pre-Existing Fuel Imbalances

Seller shall be responsible for any pre-existing Fuel imbalances that exist at the start of this Agreement.

4.10 Non-DH Fuel

- a. In the event Seller requests the delivery of Non-DH Fuel, Seller shall provide notice to the Fuel Manager of the quantities of Non-DH Fuel required and the date and time at which the Non-DH Fuel is required. Department shall procure, and the Fuel Manager shall arrange for the transportation of Non-DH Fuel to (or otherwise make non-DH Fuel available at) the Fuel Delivery Point, as requested by Seller.
- b. Seller shall pay an amount equal to the quantity of Non-DH Fuel delivered (exclusive of DH Fuel) multiplied by the Gas Index Price, Midpoint of the next Non-OFO Gas Trading Day plus \$0.02 per MMBtu plus all transportation and distribution charges that have been incurred by Department related to the Non-DH Fuel. With respect to the amount owing by Seller pursuant to this section Department shall either (i) net such amount out of the next monthly invoice payment or (ii) invoice Seller for such amount, to be paid within 10 days of receipt of such invoice by Seller.

5. MODIFICATION OF THE FSP; OPTION TO EXTEND TERM

Department and Seller may modify the terms of this FSP for any reason; provided that such changes shall be in the form of a revised FSP executed by the Parties. If both Parties agree the

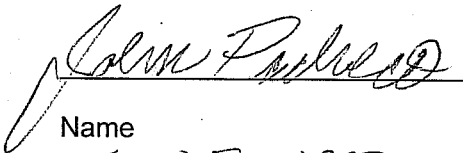
FSP modifications are needed due to an emergency or exigency, the modifications may be executed by a signed side letter which remains in effect until a revised FSP incorporating the modifications is signed and executed.

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6. EXECUTION OF FUEL SUPPLY PLAN

APPROVED BY:

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
CALIFORNIA ENERGY RESOURCES SCHEDULING


Name

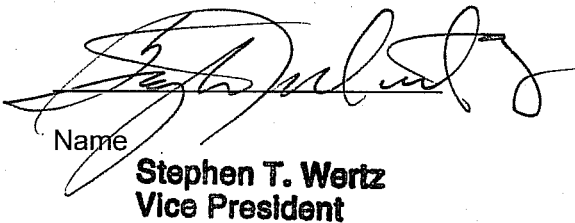
4-1-10
Date

JOHN PACHECO

Acting Deputy Director
Title

APPROVED BY:

CALPEAK POWER – BORDER, LLC
CALPEAK POWER – EL CAJON, LLC
CALPEAK POWER – ENTERPRISE, LLC


Name
Stephen T. Wertz
Vice President

3-31-2010
Date

Title

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