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January 30, 2014

**ADVICE LETTER 2573-E**  
(U 902-E)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

**SUBJECT: SUBMITTAL OF SDG&E'S PROCUREMENT TRANSACTIONS FOR THE  
FOURTH QUARTER OF 2013 PURSUANT TO COMMISSION DECISION  
02-10-062**

**PURPOSE**

San Diego Gas & Electric Company (SDG&E) is making this filing in compliance with Ordering Paragraph 8 of California Public Utilities Commission (Commission) Decision (D.) 02-10-062 issued on October 24, 2002 in Rulemaking (R.) 01-10-024. D.02-10-062 directs Southern California Edison Company (SCE), Pacific Gas and Electric Company (PG&E), and SDG&E to file each quarter's procurement transactions that conform to their respective adopted short-term procurement plan by advice letter within 15 days from the end of the quarter. Ordering Paragraph 19 of D.03-12-062, issued on December 18, 2003, granted an extension of the due date from within 15 days of the end of the quarter to within 30 days of the end of the quarter. This Advice Letter contains all of the information in the Reformatted Master Data Request required by D.07-12-052. Quarterly compliance filings were first mandated in D.02-12-062, Appendix B, and were further clarified in D.03-06-076.

Accordingly, attached hereto is SDG&E's modified Master Data Response detailing the 4<sup>th</sup> Quarter 2013 Procurement Transactions. The extensive workpapers accompanying the report contain confidential information and therefore are 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 29<sup>th</sup>, 2006. In accordance with D.08-04-023, dated April 10, 2008, SDG&E is no longer required to attach a confidential declaration to each submittal of quarterly procurement transactions.<sup>1</sup> Therefore, SDG&E hereto refers to the Declaration of Ryan Miller filed with SDG&E Advice Letter 2062-E on February 6, 2009 to comply with D.06-06-066. In addition, SDG&E also hereto refers to the Declaration of Ryan Miller filed with SDG&E Advice Letter 2098-E on July 30, 2009, to include Attachment O - Purchases and Sales in IFM, the Declaration of Ryan Miller filed with SDG&E Advice Letter 2168-E, filed April 30, 2010, the confidential Declaration of Ryan Miller filed with SDG&E Advice Letter 2352-E on April 30, 2012,

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<sup>1</sup> Ordering Paragraph 6 in D.08-04-023 allows IOUs who seek and receive confidential treatment for a regular compliance filing to simply cite the prior ruling or motion when making subsequent compliance filings of the same type.

to include Attachment P – Convergence Bids, and the confidential Declaration of Ryan Miller filed with SDG&E Advice Letter 2456-E on January 30, 2013, to include Attachment Q – Q4 2012 GHG Transactions. In addition, SDG&E has filed with this Advice Letter a confidential Declaration of Ryan Miller to include the new Attachment R – Q4 2013 GHG Forecast and Limit Updates. This Advice Letter is also subject to the provisions of the May 1, 2002 Protective Order, as subsequently modified, that has been adopted in R.01-10-024.

## **BACKGROUND**

D.02-10-062 adopts the regulatory framework under which SCE, PG&E, and SDG&E shall resume full procurement responsibilities on January 1, 2003. The framework adopted by the Commission contains requirements for updating the utility procurement plans that conform to the statutory requirements of Assembly Bill (AB) 57.<sup>2</sup>

On November 15, 2002, SDG&E filed its modified short-term procurement plan for 2003 consistent with the provisions of D.02-10-062. On December 19, 2002, the Commission issued D.02-12-074, which approved SDG&E's short-term procurement plan for 2003, as modified by the Confidential Appendix C of D.02-12-074. That Appendix has been further modified in part by D.03-06-076, Ordering Paragraph 16. In addition, D.03-06-076 modified Appendix B to clarify that the title of the Master Data Request Response for these quarterly filings is "Adopted Master Data Request for Quarterly Advice Letters", and that the first sentence of Appendix B should delete the word "month's" and replace it with "quarter's" (see Ordering Paragraphs 8 and 16 of D.03-06-076).

In accordance with D.02-10-062, "[O]nce a utility's short-term procurement plan is approved; all transactions entered into in compliance with the procurement plan should be filed for tracking purposes in a quarterly advice letter with the Commission Energy Division. The advice letter should include all information in the adopted master data request in Appendix B."<sup>3</sup>

By this filing, SDG&E provides its 4th Quarter 2013 Procurement Transactions that conform to its approved short-term procurement plan for 2006. This filing will not create any deviations from SDG&E's tariffs, cause withdrawals of service from any present customer, or impose any more or less restrictive conditions. Pursuant to D.04-12-048 this filing may be approved by the Energy Division.

## **EFFECTIVE DATE**

SDG&E believes 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 compliance filing become effective on March 1, 2014, thirty days from the date filed.

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<sup>2</sup> AB 57 was approved by Governor Davis on September 24, 2002; see Public Utilities Code Section 454.5.

<sup>3</sup> D.02-10-062, page 47.

**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 must be received no later than February 19, 2014, which is 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 the Energy Division at [EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov). **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) 654-1879  
E-mail: [MCaulson@SempraUtilities.com](mailto:MCaulson@SempraUtilities.com)

**NOTICE**

A copy of this filing has been served on the utilities and interested parties shown on the attached list, including interested parties in R.01-10-024, R.11-10-023 and R.12-03-014, by either providing them a copy electronically or by mailing them a copy hereof properly stamped and addressed.

As discussed above, the workpapers to this Advice Letter are confidential and are being treated in accordance with the May 1, 2002 Protective Order in R.01-10-024 and provisions of the IOU Matrix attached to D.06-06-066.

Address changes should be directed to SDG&E Tariffs by facsimile at (858) 654-1879 or by e-mail at [SDG&ETariffs@semprautilities.com](mailto:SDG&ETariffs@semprautilities.com).

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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: Christina Sondrini

Phone #: (858) 636-5736

E-mail: CSondrini@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) #: 2573-E

Subject of AL: Submittal of SDG&E's Procurement Transactions for the Fourth Quarter of 2013  
Pursuant to Commission Decision 02-10-062

Keywords (choose from CPUC listing): Procurement

AL filing type:  Monthly  Quarterly  Annual  One-Time  Other \_\_\_\_\_

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #:  
D.02-10-062, D.03-06-076, D.07-12-052

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 AL: N/A

Does AL request confidential treatment? If so, provide explanation: Workpapers accompanying  
The Master Data Request are confidential per the IOU matrix attached to D.06-06-066

Resolution Required?  Yes  No                      Tier Designation:  1  2  3

Requested effective date: 3/1/14                      No. of tariff sheets: 0

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

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

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

Tariff schedules affected: N/A

Service affected and changes proposed<sup>1</sup>: N/A

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

**Protests 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  
 EDTariffUnit@cpuc.ca.gov

San Diego Gas & Electric  
 Attention: Megan Caulson  
 8330 Century Park Ct, Room 32C  
 San Diego, CA 92123  
 mcaulson@semprautilities.com

<sup>1</sup> 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

S. Cauchois  
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. Cameron

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

Children's Hospital & Health Center

T. Jacoby

City of Chula Vista

M. Meacham

City of Poway

R. Willcox

City of San Diego

J. Cervantes  
G. Lonergan  
M. Valerio

Commerce Energy Group

V. Gan

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

Dynergy, 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

Pacific Gas & Electric Co.

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

Pacific Utility Audit, Inc.

E. Kelly

San Diego Regional Energy Office

S. Freedman  
J. Porter

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. Hawiger

UCAN

D. Kelly

U.S. Dept. of the Navy

K. Davoodi  
N. Furuta

L. DeLacruz

Utility Specialists, Southwest, Inc.

D. Koser

Western Manufactured Housing

Communities Association

S. Dey

White & Case LLP

L. Cottle

Interested Parties In:

R.01-10-024  
R.11-10-023  
R.12-03-014

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

**DECLARATION  
OF RYAN MILLER**

I, Ryan Miller, do declare as follows:

1. I am the Manager of Energy Supply and Dispatch for San Diego Gas & Electric Company ("SDG&E"). I have reviewed the general request contained in "San Diego Gas & Electric Procurement Plan Compliance Report for The Fourth Quarter Of 2013," required by D. 03-12-062. Additionally, as Electric & Fuels Trading Manager, I am thoroughly familiar with the facts and representations in this declaration, and if called upon to testify I could and would testify to the following based upon personal knowledge.

2. I am providing this Declaration to demonstrate how the confidential information ("Protected Information") being provided in response to this Data Request is within the scope of data provided confidential treatment in the IOU Matrix of D.06-06-066. Pursuant to the procedure described in D.08-04-02 for "Information Provided to Staff Outside of Formal Proceeding," I am addressing each of the following five features of Ordering Paragraph 2, D.06-06-066:

- That the material constitutes a particular type of data listed in the Matrix,
- The category or categories in the Matrix the data correspond to,
- That SDG&E is complying with the limitations on confidentiality specified in the Matrix for that type of data,
- That the information is not already public, and
- That the data cannot be aggregated redacted summarized, masked or otherwise protected in a way that allows partial disclosure.

3. The confidential information contained in SDG&E's Data Request response constitutes material, market sensitive, electric procurement-related information that is within the scope of Section 454.5(g) of the Public Utilities Code.<sup>1</sup> As such, the Protected Information provided by SDG&E is allowed confidential treatment in

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<sup>1</sup> In addition to the details addressed herein, SDG&E believes that the information being furnished in response to the Data Request is governed by Public Utilities Code Section 583 and General Order 66-C. Accordingly, SDG&E seeks confidential treatment of this data under those provisions as applicable.

accordance with Appendix 1 – IOU Matrix of the Commission’s Confidentiality Decision 06-06-066.

Per D.08-04-023, most of the data in this response is already protected by previous declarations. This declaration covers an additional attachment in the responses to the Master Data Request for Quarterly Advice Letter Related to Activity in the Fourth Quarter of 2012.

Attachment R Q4 2012 GHG Forecast and Limit updates – Q4 2013 is confidential per the table below.

SDG&E GHG Direct Compliance Forecast Table (SDG&E Fuel Forecast)	I.A.3	Natural Gas Information: Forecasts (gas): Utility gas demand forecasts – consumption; confidential for three years
SDG&E GHG Direct Compliance Forecast Table (SDG&E GWh and GHG Forecast)	IV A, B, F, J	Resource Planning Information – Electric; confidential for three years
SDG&E GHG Direct Compliance Limit Forecast Table (SDG&E Fuel Forecast)	I.A.3	Natural Gas Information: Forecasts (gas): Utility gas demand forecasts – consumption; confidential for three years
SDG&E GHG Direct Compliance Limit Forecast Table (SDG&E GWh, GHG Forecast and 2013 actual/forecast blend)	IV A, B, F, J	Resource Planning Information – Electric; confidential for three years
SDG&E GHG Direct Compliance Limit Forecast Table (GHG Compliance Instrument purchases)	I.A.4	Natural Gas Information: Forecasts (gas): Long-term fuel (gas) buying and hedging plans; confidential for three years
SDG&E GHG Financial Exposure Limit Forecast Table (SDG&E GWh and GHG Forecast)	IV A, B, F, J I.A.4	Resource Planning Information – Electric; confidential for three years Natural Gas Information: Forecasts (gas): Long-term fuel (gas) buying and hedging plans; confidential for three years

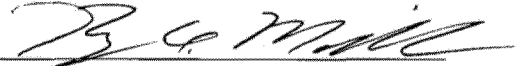
4. I am not aware of any instances where the Protected Information has been disclosed to the public.

5. I will comply with the limitations on confidentiality specified in the Matrix for the type of data that is provided herewith.

6. The Protected Information cannot be provided in a form that is aggregated, partially redacted, or summarized and continue to be responsive to the Commission’s

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

Executed this 30th day of January, 2014, at San Diego, California.

A handwritten signature in black ink, appearing to read "Ryan Miller", written over a horizontal line.

Ryan Miller  
Manager of Energy Supply and Dispatch  
San Diego Gas & Electric Company



**SAN DIEGO GAS & ELECTRIC COMPANY  
PROCUREMENT PLAN COMPLIANCE REPORT  
FOR THE FORTH QUARTER OF 2013**

**January 30, 2014**

## List of Attachments

- A. Confidential Attachment A  
Q4 2013 Transactions
- B. Confidential Attachment B  
Q4 2013 Counterparties Information
- C. Confidential Attachment C  
Q4 2013 Electric Transactions
- D. Confidential Attachment D  
Q4 2013 Natural Gas Transactions
- E. Confidential Attachment E  
Q4 2013 Other Transactions
- F. Confidential Attachment F  
Q4 2013 Key Briefing Packages
- G. Attachment G  
Q4 2013 Independent Evaluator Reports
- H. Confidential Attachment H  
Q4 2013 New Contracts Executed / Contracts Amended
- I. Attachment I  
Q4 2013 Summary of Retained Generation Investments
- J. Confidential Attachment J  
Q4 2013 Load Requirements and Conditions
- K. Confidential Attachment K  
Q4 2013 Risk Management Strategy Communications
- L. Confidential Attachment L  
Q4 2013 Description of Models
- M. Confidential Attachment M  
Q4 2013 Transactions Subject to Strong Showing
- N. Confidential Attachment N  
Timing of Q4 2013 Transactions
- O. Confidential Attachment O  
Q4 2013 Purchases and Sales in IFM
- P. Confidential Attachment P  
Q4 2013 Convergence Bids
- Q. Confidential Attachment Q  
GHG Transactions
- R. Confidential Attachment R  
GHG Forecast and Limit Updates

## Introduction

As required by Ordering Paragraph 8 of Decision (D.) 02-10-062, and clarified in D.03-06-076, D.03-12-062, D.04-07-028, D.04-12-048 and D.07-12-052, San Diego Gas & Electric Company (SDG&E) hereby provides its Quarterly Compliance Report (QCR) demonstrating that its procurement-related transactions during the period July 1, 2013 through September 30, 2013 (Q4) were in compliance with the latest CPUC-approved AB 57 Long-Term Procurement Plan (LTPP) adopted by the Commission in Resolution E-4189.

## Summary

During Q4, SDG&E executed transactions consistent with least cost dispatch, as described in its LTPP. All transactions were conducted using processes specified in the LTPP. Any transactions executed with affiliates are disclosed in confidential Attachment A, *Q4 2013 Transactions* or Attachment H, *Q4 2013 New Contracts Executed and Amended*. All non-investment grade counterparties that SDG&E transacted with during Q4 are shown in confidential Attachment B, *Q4 2013 Counterparty Information*. In addition, the top 10 counterparties transacted with by dollar value for both electric and gas transactions are listed in confidential Attachment B.

Confidential Attachments C, *Electric Transactions Summary*, and D, *Natural Gas Transactions Summary*, are summaries of the electric and gas transactions executed during Q4. Confidential Attachment E, *Q4 2013 Other Transactions*, is a description of any additional transactions that occurred during Q4. The quantities shown in these attachments are based on the delivery period specified in the transactions. Therefore, volumes received during Q4 pursuant to transactions executed in prior quarters are

excluded. Also excluded are transactions in the California Independent System Operator's (CAISO's) real-time and ancillary services markets, since these transactions are, for the most part, made by the CAISO on behalf of SDG&E and are made without regard to SDG&E's LTPP.

SDG&E's procurement activity is greatly influenced by its mandatory participation in the CAISO's Integrated Forward Market (IFM), which has significantly reduced SDG&E's need to mitigate the majority of its forecast day-ahead energy positions via brokered and bilateral trading. A summary of SDG&E's CAISO activity can be found in Attachment O.

## Master Data Request Documentation

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

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

All procurement-related activity during Q4 was approved and executed either by, or under the direction of both the Vice President of Electric and Fuel Procurement, and the Senior Vice President of Power Supply, consistent with the delegation of authority effective for the period.

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

The “decision maker” for a particular contemplated transaction depends on many factors, including term, volume, notional value, etc. For many of the transactions during Q4, the “decision maker” was a gas or power transaction employee executing transactions (*e.g.*, day-ahead or hour-ahead power purchases and sales) per the established LTPP or to achieve a particular objective (such as balancing the portfolio supply and demand). For such transactions, briefing packages are not prepared. Briefing packages which were prepared during Q4 for large or unusual transactions are listed in confidential Attachment F, *Q4 2013 Key Briefing Packages*, and included in the workpapers.

In addition, copies of presentations made by SDG&E to its Procurement Review Group (PRG) during Q4 are listed in Attachment F, and briefing packages are included in the workpapers.

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

*a) Electric*

*Description of Procurement Processes*

The approved procurement processes used during Q4 were as follows:

- Bilateral Contracts - Description can be found on sheets 24-25 of the LTPP.
- Voice brokers and Exchanges - Description can be found on sheets 29-30 of the LTPP.

*Justification for Procurement Processes*

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

SDG&E did not execute transactions for electric power as the result of competitive solicitations in Q4.

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

In Q4, SDG&E entered into market transactions of the following general types: 1) energy purchases; 2) energy sales; and 3) financial fixed price futures.. The details of these transactions can be found in confidential Attachment A, and a summary of the transactions can be found in confidential Attachment C, *Q4 2013 Electric Transactions*.

For all of the above products, SDG&E traders monitor voice brokers, electronic exchanges, and bilateral offers from counterparties, so as to facilitate transactions using the transaction method with the best available price.

In making trading decisions, SDG&E utilized two different models to forecast energy needs: (1) *GenTrader*, a dispatch model from Power Costs Inc. (PCI); and (2) Financial Engineering Associates (FEA), a financial option model. Both PCI and FEA are

described further in *Attachment L –Description of Models*. Included in confidential Attachment A, for comparison purposes, are the day-ahead Intercontinental Exchange (ICE) high and low prices for all standard deals. ICE information is only available for standard deals at liquid trading hubs. This type of transaction does not always best meet SDG&E’s needs. A portion of SDG&E’s purchases are non-standard deals for which there are no exchanges to compare, because these are not traded frequently enough to support exchange trading

SDG&E’s market transactions, including non-standard transactions, are summarized in Attachment C, *Q4 2013 Electric Transactions*. This attachment includes a comparison of SDG&E’s non-standard transactions with the CAISO’s IFM settled prices.

Please note the following regarding the comparison of: (1) the notional value of non-standard over-the-counter (OTC) transactions executed by SDG&E during Q4; and (2) the pricing of similar products subsequently transacted in the applicable CAISO markets:

- The non-standard transactions in the comparison include all physical and financial electric deals reported in the QCR in Confidential Attachment C that were not listed as standard day-ahead on-peak or off-peak products.
- DA OTC deals were compared with CAISO IFM hourly prices for the same OTC delivery hours using comparable delivery locations.
- Hour-ahead OTC deals were compared with CAISO real-time market (RTM) prices for the same delivery hours using comparable delivery locations.
- These after-the-fact comparisons are provided for illustrative and informational purposes only. Public Utilities Code section 454.5(d)(2) requires that the

Commission “[e]liminate the need for after-the-fact reasonableness reviews of an electrical corporation’s actions in compliance with an approved procurement plan.” To that end, section 454.5(b)(7) requires that a procurement plan include “upfront standards and criteria by which the acceptability and eligibility for rate recovery of a proposed procurement transaction will be known by the electrical corporation **prior to execution of the transaction.**” (emphasis added)

- Accordingly, comparisons of SDG&E’s executed over-the-counter transactions to transactions that occurred after-the-fact may not be used to determine whether SDG&E’s transactions complied with SDG&E’s Commission-approved AB 57 Procurement Plan.
- These cost comparisons ignore relevant market information known to traders at the time of OTC execution (*e.g.*, knowledge of transmission constraints at a particular delivery location).

### **Energy Purchases**

The structure of the CAISO market no longer requires SDG&E to rely on physical energy trades, but energy trades do play a role in protecting SDG&E from prices that clear in the IFM. SDG&E makes market energy purchases when it is less expensive than dispatchable generation in order reduce its exposure to the IFM. When buying such energy, SDG&E compares variable generation costs (*e.g.*, fuel, variable O&M for generation, and start up costs) to the delivered costs for market purchases. SDG&E may do this inside the CAISO as an Inter Scheduling Coordinator Trade (IST) or outside the CAISO and import the power.



In Q4, SDG&E purchased energy in the day-ahead markets that are executed within the Western Systems Power Pool (WSPP) scheduling guidelines (usually the day prior to delivery for weekdays and two or three days prior for weekends and holidays); month-ahead: balance of the month; and the hour-ahead trades that are executed after day-ahead trades and before the CAISO hour-ahead scheduling deadline. For day-ahead and hour-ahead markets, SDG&E compared market prices to actual generation costs.

### **Energy Sales**

In Q4, SDG&E had bilateral sales in the day-ahead and hour-ahead markets for least cost dispatch. Consistent with the LTPP, SDG&E has pursued a sales strategy that optimizes portfolio value and ratepayer benefit. In Q4, SDG&E made sales at then-current market prices. SDG&E will make sales to avoid congestion risk, monetize premium prices at trading locations, or at prices above the incremental cost of generation. From time to time, SDG&E may make sales that appear to be below the cost of the marginal generating unit. This is because when considering the cost associated with a unit shutdown and next-day start-up, the overall most cost-effective and least-cost dispatch decision was to carry the particular unit and sell the energy in the bilateral market at below the cost to generate and have the unit available to meet next-day expected demand.

### **Financial Fixed Price Futures and Swaps**

The physical power market inside of the CAISO has become fairly illiquid. As a result, SDG&E will also execute financial trades, which are much more actively traded than physical transactions in the CAISO. SDG&E's execution of these trades conforms to its LTPP. These trades are financially settled against the IFM. With the structure of

the CAISO market, SDG&E's exposure is to the day-ahead and/or real time market clearing prices. Since the CAISO now has the responsibility for matching demand with supply, SDG&E can reduce its exposure to CAISO IFM prices equally effectively with financial trades or physical trades. The economic decision to buy or sell is the same for financial products as for physical products described above. SDG&E monitors both physical and financial prices, and will select the product(s) that provide the best price for SDG&E's customers.

A further benefit to using financial futures is that financial futures can be cleared through ICE. This reduces potential credit problems since ICE acts as a clearing house with established margining provisions.

#### *b) Natural Gas*

##### *Description of Procurement Processes*

The approved procurement processes used during Q4 were as follows:

- Bilateral Contracts - description can be found on sheets 24-25 of the LTPP.
- Voice brokers and Exchanges - description can be found on sheets 29-30 of the LTPP.

##### *Justification for Procurement Processes*

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

SDG&E did not execute any transactions for natural gas as the result of competitive solicitations in Q4.

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

Gas transactions are made in order to supply gas, manage imbalances, and reduce price risk for the SDG&E-controlled gas fired power plants. The physical gas products

SDG&E transacted in Q4 were: (1) Baseload Gas; (2) Swing Gas; (3) Operational Gas; and (4) Financial Hedges. The details of these transactions can be found in confidential Attachment A, and a summary of the transactions can be found in confidential Attachment D, *Q4 2013 Gas Transactions*.

For all of the above products, as with the electric products, SDG&E traders monitor voice brokers, electronic exchanges, and bilateral offers from counterparties, transacting at the best available price.

### **Baseload Gas**

SDG&E baseloads part of its gas requirements as forecasted by FEA and PCI for generation which serves SDG&E customer load. Purchasing baseload gas assures that the major portion of gas to be used to serve bundled customers remains hedged after financial hedges expire, a few days prior to the delivery month.

### **Swing Gas**

SDG&E expects to meet the balance of its physical gas requirements throughout the month in the spot market at prevailing prices. These are purchases or sales made during normal trading hours to meet the daily expected gas requirement at the plants.

### **Operational Gas Trades**

Operational gas trades are trades to manage operational factors such as real-time dispatch and pipeline imbalances. Most operational trades occur during cycles 2 through 4 or late in cycle 1, where market liquidity is lower than cycle 1 trading. These trades were made for changes in operations that could potentially lead to penalties for operational flow orders (OFOs) or imbalances, or where the real-time economic dispatch of the generation units, taking into consideration the gas expense, warranted the trade.

The price for operational gas prices are accounted for in calculating generation cost at the dispatchable power plants (gas costs there will be discounted for electric dispatch purposes by any anticipated operational premium on that gas, if it were not consumed at the plant). Because these trades typically occur after normal time periods for trading activity, operational gas trades are usually transacted bilaterally.

SDG&E often needs to execute operational gas trades, because day-ahead generation schedules are not known until after the day-ahead IFM market is published by the CAISO, which is after the cycle one scheduling deadline.

### **Financial Hedges**

Financial hedges were made to reduce portfolio open positions or to close out previously executed financial hedges. Forward open positions are based on the volumes produced by SDG&E's FEA model. In Q4, the financial hedges transacted by SDG&E were futures, fixed price swaps and futures, basis swaps and futures, and call options.

The purpose of hedging is to add price stability and act as a hedge against adverse market price movements for the ratepayer. The deals were transacted based on market prices at the time of the transaction, and any price movements that occur after the execution of a term trade cannot be known at the time of purchase. Therefore, comparison of forward hedges to settlement prices does not provide meaningful information or comparison.

### *c) Other Commodities*

#### *Description of Procurement Processes*

The approved procurement processes used during Q4 were as follows:

- CRR Monthly Allocation - Description can be found on sheet 42-43 of the LTPP.
- Bilateral - Description can be found on sheet 33-35 of SDG&E's LTPP.
- Convergence Bids - Description can be found on sheet 36-37 of the LTPP.
- Auctions (GHG Allowances) - Description can be found on sheet 24 of the LTPP.

### *Justification for Procurement Processes*

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

During Q4 2013 SDG&E completed transactions for both Resource Adequacy and GHG offset credits from competitive solicitations. In general, the selection process involved: (i) a conformance screening process, (ii) a quantitative evaluation, and (iii) a qualitative evaluation. A more detailed discuss can be found in the Independent Evaluators' reports found in Attachment G.

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

### **Congestion Revenue Rights (CRRs)**

During Q4, CRR activity was limited to November, December and January monthly processes as well as the 2014 Tiers 2 & 3 annual process. SDG&E submitted its November nominations for the two allocation rounds on October 11 and October 18,, 2013. The monthly auction was held on October 24 through October 25. A global de-rate factor of 15% was applied to the allocation and auction process. The nomination limit for the first and second allocation rounds are the monthly limits less previously awarded CRRs.

December 2013 nomination for the second allocation round was submitted on November 14, and the auction was conducted on November 20 through November 21. A

global de-rate factor of 17.5% was applied to the allocation and auction process. The nomination limit for the first and second allocation rounds are the monthly limits less previously awarded CRRs.

January 2014 nominations for the two allocation rounds were submitted on December 9 and December 13, and the auction was conducted from December 19 through December 20. A global de-rate factor of 15% was applied to the allocation and auction process. The nomination limit for the first and second allocation rounds are the monthly limits less previously awarded CRRs.

After receiving its monthly allocations, SDG&E participated in the CRR auctions to further supplement its CRR position.

A further description of the CRRs that SDG&E procured can be found in Attachment E.

### **Resource Adequacy (RA)**

SDG&E issued an RA RFP for 2014 RA products in August. Five contracts were signed in Q4 as a result of the RFP. A description of the transactions can be found in Attachment E, and the details can be found in Attachment H

### **Convergence Bids**

A convergence bid (also known as a virtual bid) is not backed by any physical generation or load, and therefore is completely financial. Convergence bidding allows market participants to arbitrage expected price differences between the Day-Ahead and Real-Time markets. Using convergence bids, market participants can sell (buy) energy in the Day-Ahead market, with the explicit requirement to buy (sell) that energy back in the Real-Time market without intending to physically consume or produce energy in Real-

Time. Convergence bids that clear the Day-Ahead market will either earn, or lose, the difference between the Day-Ahead and Real-Time market prices at a specified node multiplied by the megawatt volume of their bids.

SDG&E has been an active participant in convergence bidding since its inception, and uses three possible strategies. The first convergence bidding strategy allows SDG&E to use convergence bids to hedge risks associated with generation outage and load uncertainty. The second convergence bidding strategy allows SDG&E to use convergence bids to hedge against uncertainty regarding renewable generation scheduling. The third strategy allows SDG&E to guard against market manipulation that can impact wholesale electricity prices. These three strategies allow SDG&E to take measures that will benefit ratepayers by mitigating market price volatility and improving the pricing of renewable resources in the CAISO's day-ahead market. Previously, convergence bids were reported through a separate report, but D.10-12-034 requires that convergence bidding information be reported in the Quarterly Compliance Report filings beginning with the Q1 2012 filings. The summary of SDG&E's Convergence Bids can be found in confidential *Attachment P Convergence Bids*.

During the period of 10/02/2013 through 10/23/2013, SDG&E inadvertently bid slightly above its forecasted MW value (PIRP forecast) for three resources (Borrego Solar, Cabazon Wind and Whitewater Wind). The overbidding occurred in only 6% of the hours during the period, and the average quantity overbid during that time was 3.6 MWs.

SDG&E uses a spreadsheet to generate the 24 hour convergence bids for all its resources. These convergence bids are input into PCI software which converts the bid

into a template that is uploaded to CAISO. The order in which the resources are listed in the spreadsheet must be kept consistent with the order in which the bids are generated. The error occurred when new intermittent resources were added to SDG&E's portfolio and the spreadsheet was updated to incorporate these new resources. The resource order was not kept consistent with the order in which PCI creates the bids. This caused the forecasted volumes for some of the resources to be paired with the wrong resource resulting in an incorrect bid volume for those resources.

As a result of this event, a new procedure was formulated to prevent any user from mixing up the order of the resources in the PIRP forecast that are used to generate the convergence bids. The procedure prevents the user from access to any other table within the spreadsheet that contains resource data not in the exact order required to generate proper bids. Going forward, SDG&E will maintain diligence in tracking and updating portfolio changes that affect the convergence bidding process.

SDG&E also had two instances on December 9<sup>th</sup> and 30<sup>th</sup> in which forecast volume changed over the weekend, causing the bids created on Friday to be higher than the most recent forecasted volume for the day which was being scheduled. SDG&E updated procedure to insure that bids would not be created until the most up to date forecast was available.

The overbidding in Q4 had only a minimal economic impact of \$1,416.25, and the corrective action SDG&E has implemented should prevent these issues from reoccurring.

## **GHG**

On January 1, 2013, The California Air Resource Board (CARB) started a GHG emissions allowance cap-and-trade system, with compliance obligations in the electricity



sector applicable to “first deliverers of electricity.” The regulation requires that first deliverers of electricity, except publicly-owned utilities, purchase all of the allowances and offsets required to meet their compliance obligations cap-and-trade system.

In November 2012, SDG&E started procurement of GHG compliance products by participating in CARB’s GHG auction. SDG&E’s procurement plan for GHG products is described in Appendix F of SDG&E’s current LTPP.

SDG&E has continued its procurement activities for GHG and the details of Q4 transactions can be found in *Attachment Q GHG Deals*. In addition to allowance procurement, in Q4 SDG&E also purchased GHG offset credits through an RFO process. The offset transactions are detailed in *Attachment Q GHG Deals* and the contracts are included in attachment H.

As per the Long Term Procurement Plan Decision D.12-04-046, SDG&E may update its greenhouse gas compliance forecasts and corresponding purchase limits as necessary. The Decision directs the utilities that “Forecast updates and corresponding revisions to the purchase limits, along with all greenhouse gas compliance instrument transactions, shall be reported at each utility’s quarterly PRG meetings and Quarterly Compliance Reports.” SDG&E filed a Tier 2 Advice Letter on December 4, 2013 updating its forecast and limit. These updates can be found in confidential *Attachment R - GHG Forecast and Limit updates - Q4 2013*.

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

Throughout Q4, SDG&E attempted to enter into electric transactions needed to match forecast supply and demand ahead of the deadline for submitting final hour-ahead

schedules to the CAISO. This objective was achieved by gradually reducing the forecasted open (*i.e.*, short or long) energy positions through the use of term, day-ahead, and hour-ahead transactions, etc., employing both standard and non-standard products. When selecting electric transactions to match forecast supply and demand, the best-priced bids/offers were selected first (merit-order selection) among those available for the required products at the time of the transaction, subject to credit and other limitations and operational constraints. Such operational constraints include the local area reliability requirements of the CAISO, as set forth in D.04-07-028.

The timing of gas transactions was largely driven by the requirement to ensure that the delivery of fuel to the gas-fired electric facilities managed by SDG&E matched such facilities' forecast burn, and to reduce exposure to the spot gas price.

Further explanation of the timing of SDG&E's transactions can be found in confidential Attachment N, *Q4 2013 Transaction Timing*.

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

Discussion of the monthly system conditions is included in confidential Attachment J, *Q4 2013 Load Requirements and Conditions*.

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

The goal of the LTPP's risk strategy is to produce stable rates by managing the portfolio's open position such that overall procurement costs do not exceed the baseline forecast of total procurement costs by more than the Consumer Risk Tolerance (CRT). Toward that end, SDG&E monitors the risk associated with market price movements and

its effect on the remaining open position and CRT. SDG&E's Risk Strategy is detailed in its LTPP. SDG&E may, after considering its overall hedge position and market condition, further increase or reduce its hedges as necessary in an attempt to mitigate the metric position(s).

Throughout Q4, SDG&E executed transactions in accordance with its risk management strategy and LTPP. SDG&E briefed the PRG on its open position and CRT. This information is included in the PRG briefing packages in confidential Attachment F. To the extent there were any notifications to the PRG of one of the metric triggers, the notifications are included in Attachment K, *Q4 2013 Risk Management Communication*.

**7. Copy of each contract.**

A list of contracts over three months executed and/or modified by SDG&E during Q4 is included in confidential Attachment H, along with references to the workpapers containing the contracts.

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

SDG&E provides the valuation results for the contracts filed via this QCR in Attachment H, *Q4 2013 New Contracts Executed and Amended*, with details of the valuation method contained in the workpapers.

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

SDG&E relies on a number of information sources to assess and make trading decisions. SDG&E has purchased licenses and subscriptions for the data services listed

in the categories below. The Commission is familiar with these information sources and subscribes to many of the same services used by SDG&E. Due to their large quantity, copyright restrictions, and relatively short-lived usefulness (e.g., weather forecasts, spot price and market data), electronic copies of these information sources have not been included. SDG&E will provide samples of any of the sources used to analyze transactions upon Commission request, to the extent that it is permitted to do so under its license agreement(s) with the relevant provider(s).

- *Gas Daily* – Gas industry news and daily price data
- *Megawatt Daily* – Power industry news and daily price data
- Reuters – Live market price data
- Bloomberg – Live market price data
- Intercontinental Exchange (ICE) – Live market price data
- Tullett Liberty – Forward price data
- CMEGroup.com – Gas futures and basis price data
- CAISO – State-wide load forecasts, unit curtailments, transmission capacity availability; energy prices

#### ***WEATHER FORECASTS***

- MDA Weather Services – Weather data and forecast

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

There were no follow up analyses requested by the Commission during Q4.

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

The Commission has not sought any further information pertaining to the transactions executed during Q4.

**Additional Reporting Requirement Pursuant To Decision 07-01-039**

As required by Ordering Paragraph 12 of D.07-01-039, SDG&E has included in confidential Attachment I, *Summary of Retained Generation Investments*, investments in retained generation that were completed during Q4, as well as any multiple contracts of less than five years with the “same supplier, resource or facility.” (See confidential Attachment I at Section 5.1, p. 152).

Below is a list of all attachments and workpapers submitted with this report.

<b>Description</b>	<b>File/Attachment Name</b>	<b>Attachment / Workpaper</b>
Gas transactions detail	Q4 2013 Transactions - Gas.xls	A
Electric transactions detail	Q4 2013 Transactions - Electric.xls	A
Counterparties - Top ten and Non-investment grade (includes embedded collateral agreements)	Q4 2013 Counterparty Information.xls	B
Electric transaction summary	Q4 2013 Electric Transactions.xls	C
RFO Valuation Method	RFO Valuation Method.docx	C
Gas transaction summary	Q4 2013 Gas Transactions.xls	D
Description of other transactions	Q4 2013 Other Transactions.docx	E
PRG briefing presentation	CONFIDENTIAL SDGE PRG 10.18.13 CHP RFO Supplemental.pptx	F
PRG briefing presentation	CONFIDENTIAL SDGE PRG 10.18.13.pptx	F
PRG briefing presentation	Summary Slide.pptx	F
PRG briefing presentation	CONFIDENTIAL SDGE PRG 11.15.13 CHP RFO.pptx	F
PRG briefing presentation	CONFIDENTIAL SDGE PRG 11.15.13.pptx	F
PRG briefing presentation	CONFIDENTIAL SDGE PRG 12.13.13 CHP RFO Supplemental.pptx	F
PRG briefing presentation	CONFIDENTIAL SDGE PRG 12.13.13.pptx	F
RA Filing Highlights	Dec Monthly RA Summary.xlsx	F
RA Filing Highlights	Jan Monthly RA Summary.xlsx	F
RA Filing Highlights	Feb Monthly RA Summary.xlsx	F
Hedge Plan	Q413 Hedge Plan.pptx	F
Independent Evaluator Reports	Q4 2013 Independent Evaluator Report (Attachment G).docx	G
List of New Contracts Executed and Amended	Q4 2013_New Contracts Executed and Amended_Final.docx	H
List of URG Investments & Multiple Contracts of Less than 5 years	Q4 2013 Summary of URG Investments.docx	I
Write-up on Load Requirements and Conditions	Q4 2013 Load Requirements and Conditions.docx	J
List of Risk Management Communication	Q4 2013 Risk Management Communication.xls	K
Write-up on Description of Models	Q4 2013 Description of Models.doc	L
Description of the FEA-based model	FEA-based model.doc	L
Description of the PCI GenTrader system	PCI GenTrader.pdf	L
List of Transactions Subject to Strong Showing	Q4 2013 Transactions Subject to Strong Showing (Attachment M).docx	M
Write-up on Timing of Transactions	Timing of Q4 2013 Transactions.docx	N
Summary of CAISO Day Ahead Market Transactions	Q4 2013 Purchases and Sales in IFM.xlsx	O
Summary of Convergence Bidding	Att P_Convergence Bidding_Q4-2013.xlsx	P
GHG Transaction Detail	Q4 2013 GHG Deals.xlsx	Q
GHG Forecast and Limit Updates	Attachment R - GHG Forecast and Limit updates - Q4 2013.docx	R