In the Matter of the Application of San Diego Gas & ) Electric Company (U 902 G) and Southern California ) Gas Company (U 904 G) for Authority to Revise ) Their Rates Effective January 1, 2013, in Their ) Triennial Cost Allocation Proceeding )

A.11-11-(Filed November 1, 2011)

## PREPARED DIRECT TESTIMONY

## **OF HERBERT S. EMMRICH**

# SAN DIEGO GAS & ELECTRIC COMPANY

# AND

# SOUTHERN CALIFORNIA GAS COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

November 1, 2011

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# PREPARED DIRECT TESTIMONY

# **OF HERBERT S. EMMRICH**

#### I. **QUALIFICATIONS**

My name is Herbert S. Emmrich. My business address is 555 West Fifth Street, Los Angeles, California 90013-1011. I am employed by Southern California Gas Company (SoCalGas) as Gas Demand Forecasting and Economic Analysis Manager in the Regulatory Affairs Department. I am responsible for the development of natural gas demand and gas price forecasts for San Diego Gas & Electric Company (SDG&E) and SoCalGas. I have been in this position since March 2011. I have previously testified before the California Public Utilities Commission (Commission).

My academic and professional qualifications are as follows: I earned an undergraduate degree in Economics and Behavioral Sciences from California State University at Dominguez Hills in 1970 and a Master of Arts Degree in Economics from California State University at Long Beach in 1974. In addition, during the past 26 years, I held analyst, manager and director level positions in the Regulatory Affairs, Planning, Customer Services, Marketing, Gas Supply and Commercial and Industrial Services Departments of SoCalGas.

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#### II. **PURPOSE & OVERVIEW OF COST ALLOCATION**

The purpose of my testimony is to allocate the storage capacities settled in the 2009 18 BCAP Settlement (Settlement) and adopted by the Commission in Decision (D.) 08-12-020 19 20 between SoCalGas' and SDG&E's core customers and among the core customer classes in each utility based on the core demand forecasts sponsored by Ms. Payan in this proceeding. As stated by Ms. Musich in her direct testimony, SoCalGas and SDG&E propose a continuation of the 22 23 storage proposals settled in Phase 1 of the 2009 BCAP for the duration of the TCAP period. My

1	testimony also presents the gas prices used to forecast demand by customer segment, the Core
2	Brokerage Fee, SDG&E's and SoCalGas' Unaccounted-For (UAF) gas percentages and their
3	allocation to the core and noncore customer classes.
4	A. Core Storage
5	In the Settlement, the core was assigned the following storage capacities indicated in
6	Section 5:
7 8 9 10 11 12	5. The combined core customers of SDG&E/SoCalGas shall initially be allocated 79 Bcf of storage inventory capacity and 369 MMcfd of storage injection capacity, with proportionate annual increases to match the growth in inventory capacity addressed below up to a total of 388 MMcfd of storage injection capacity, and 2225 MMcfd of storage withdrawal capacity.
13	In addition, the core and the unbundled storage program were to receive the following
14	additional capacities once they became available:
15 16 17	7. 1.0 Bcf of the 7.0 Bcf expansion capacity shall be added to the combined core's inventory capacity in each of the four years 2010-2013.
18	Consistent with the provisions of D.08-12-020, the core currently has 81 Bcf of
19	inventory, 379 MMcfd of injection and 2,225 MMcfd of firm withdrawal capacities. Based on
20	the 2009 BCAP Phase I Settlement, the core will have 83 Bcf of inventory, 388 MMcfd of
21	injection, and 2,225 of firm withdrawal capacities assigned to it by April 1, 2013. Since the
22	2009 BCAP Settlement extends only through 2014, as Ms. Musich states, SoCalGas and SDG&E
23	propose that the 2014 capacity amounts be continued through 2015 to encompass the entire
24	TCAP period. This extension is reasonable because the core demand forecast sponsored by Ms.
25	Payan shows that core gas demand is not expected to grow over the TCAP period. Table 1
26	shows the allocation of the storage assets for SoCalGas' core customers by customer class and
27	Table 2 shows the resulting storage asset allocation by customer class for SDG&E's core

customers. These allocations are based on the monthly core demand forecasts presented in Ms. 1

Payan's testimony. These core storage capacity allocations are used by Mr. Mock and Mr. 2

Lenart in allocating storage costs to SoCalGas' and SDG&E's core customers respectively. 3

#### Table 1

SoCalGas Core Storage Allocations by Customer Class							
SoCalGas		Nonresidentia	Total				
	Residential	G-10	G-AC	G-GE	G-NGV	SoCalGas Core	
Inventory Allocation BCF	61.8	11.4	0.0	0.0	0.5	73.7	
Injection MMcfd	289.1	53.1	0.0	0.0	2.1	344.3	
Withdrawal MMcfd	1,287.7	680.0	0.0	0.0	22.3	1,990	

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### Table 2

### SDG&E Core Storage Allocations by Customer Class

SDG&E	Nonresidential Core			Total	SoCalGas & SDG&E
	Residential	GN-3	G-NGV	SDG&E Core	Core Totals
Inventory Allocation BCF	7.6	1.8	0.0	9.3	83
Injection MMcfd	35.3	8.3	0.0	43.6	388
Withdrawal MMcfd	154.1	79.1	1.8	235.0	2,225

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#### B. **Gas Price Forecast**

The natural gas price forecast used to develop the demand forecasts for SoCalGas and 7 SDG&E in this proceeding was prepared using New York Mercantile Exchange ("NYMEX")-8 based natural gas futures prices and other forecast sources. This forecast was prepared in 9 February 2011. Consistent with the gas price forecast methodology used to develop demand 10 forecasts used in the 2009 BCAP Settlement, SoCalGas and SDG&E used this methodology to 12 forecast the cost of gas to be used for determining the cost of Company Use (CU) fuel and UAF. In preparing this forecast, SoCalGas and SDG&E used the methodology approved by the 13 Commission in Resolution E-4214 for establishing the Market Price Referent by forecasting the 14 near term natural gas prices at the Southern California Border based on NYMEX Henry Hub 15 ClearPort Basis Swap futures prices. The natural gas price forecast at Henry Hub from 2013 16 through 2015 is based on the then most recent 22-day trading average of NYMEX futures prices 17 18 from March 1, 2011 to March 31, 2011. Basis swaps trading contract settlements from NYMEX

ClearPort<sup>1</sup> were then added to the Henry Hub futures prices to arrive at the natural gas price 1 forecasts used to forecast gas demand for SoCalGas and SDG&E's customers, UAF and CU fuel. 2 Consistent with the integration of the gas procurement function for both SoCalGas and SDG&E 3 set forth in D.07-12-019, a combined core Weighted Average Cost of Gas (WACOG) for both 4 utilities was estimated using 2010 purchase weights by production basin and interstate pipeline 5 receipt points. The final WACOG for purchase also includes the integrated interstate pipeline 6 and Backbone Transmission Service (BTS) charges. The futures-based forecasted gas price used 7 to forecast TCAP gas demand is \$5.48/MMBtu. 8

Table 3
SoCalGas and SDG&E Combined SoCalGas Citygate WACOG
\$/MMBtu

2013	4.94
2014	5.24
2015	<u>6.25</u>
Three-Year Average (2013-2015)	5.48

The actual cost of UAF gas purchases will be balanced through the appropriate regulatory 10 accounts. To minimize the likelihood of undercollections or overcollections over the TCAP 11 12 period, the underlying gas price will be updated through the annual October adjustment to transportation rates using a forecast of Southern California Citygate gas prices for the next year 13 that is based on then current NYMEX ClearPort futures prices at the Southern California Border. 15

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C. **Core Brokerage Fee** 

The SoCalGas and SDG&E Core Brokerage Fee is currently 0.148 cents/therm. Based 16 on the updated Core Brokerage Fee study, the proposed updated TCAP Core Brokerage Fee is 17 18 0.166 cents/therm.

<sup>&</sup>lt;sup>1</sup> New York Mercantile Exchange. NYMEX ClearPort Clearing and NYMEX ClearPort Trading Contract Settlements https://www.services.nymex.com/otcsettlement/OTCSettle.jsp.

Table	4
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Brokerage Fee Summary						
Current Brokerage						
Fee*	0.148	cents per therm				
Proposed Brokerage						
Fee*						
(SoCalGas+SDG&E)	0.166	cents per therm				
*Before FF&U						

This Brokerage Fee is based on a total cost of \$6,525,087 to provide core gas acquisition
services to SoCalGas and SDG&E's retail core class of customers. The costs of Gas
Acquisition, Demand Forecasting, Case Management, Tariffs, Human Resources, Commercial &
Industrial Sales, Information Technology Support and Legal Services are included in the total
cost to provide gas acquisition services. The breakdown of these costs is shown in Table 5
below. The complete study is shown in my workpapers.

Total Brokerage Fee Costs								
Labor NonLabor Overheads Direct Cost Rent Total								
Gas Acquisition	\$2,657,744	\$481,115	\$1,702,851	\$4,841,710	\$495,004	\$5,336,715		
Demand Forecasting	\$67,283	\$8,989	\$64,115	\$140,387	\$8,353	\$148,740		
Case Management	\$14,426	\$1,567	\$26,041	\$42,034	\$1,856	\$43,890		
Regulatory Tariff	\$8,246	\$171	\$17,082	\$25,499	\$1,547	\$27,045		
Human Resources	\$25,056	\$1,028	\$33,195	\$59,279	\$6,188	\$65,467		
C&I Sales	\$9,116	\$1,216	\$38,378	\$48,710	\$1,083	\$49,793		
IT	\$509,017	\$46,142	\$226,851	\$782,011	\$46,407	\$828,417		
Law	\$14,126	\$1,319	\$9,050	\$24,495	\$524	\$25,019		
Total	\$3,305,013	\$541,546	\$2,117,565	\$5,964,125	\$560,962	\$6,525,087		

# Table 5

# D. UAF Gas

The calculation of the volumes related to UAF gas is comprised of the following major elements: accounting corrections and prior period adjustments; measurement adjustments;

leakage; theft; and other unexplained unaccounted-for volumes of gas. The recorded UAF gas,

as percentages of total gas receipts for the years' April through March production cycle in 2008-

2009, 2009-2010 and 2010-2011 for SoCalGas and SDG&E are as shown in Table 6 below.

#### Table 6

# Southern California Gas Company UAF WACOG Comparison April 2008 - March 2011

					<b>Percent</b>	<u>Percent</u>	
Dates	Total	Total	UAF	UAF %	<u>Core</u>	<u>Non-</u>	
<u> Apr 2008- Mar 2011</u>	<u>Receipts</u>	<b>Deliveries</b>	(MMBtu)	of Receipts	<u>71%</u>	<u>Core</u> 29%	
36 Months' Total	2,992,550,150	2,970,046,866	22,503,284	0.752%	0.534%	0.218%	
* Core - noncore percentages per the 2009 BCAP Settlement							

SoCalGas and SDG&E currently have a system-wide UAF gas factor of 0.892 % and 0.880 % respectively in rates for each utility. Of these UAF percentages, currently SoCalGas has a UAF gas allocation factor of 71% to the core and 29% to noncore usage, while SDG&E has a UAF gas allocation factor of 59% to the core and 41% to the noncore. SoCalGas and SDG&E propose that the UAF percentages for each utility be updated and based on the April 2008 to March 2011 three-year average of 0.752% for SoCalGas and 1.178% for SDG&E as shown in Table 7 and that the same percentage allocations between core and noncore, as were approved in D.08-12-020, be used for the TCAP period. The monthly total of deliveries, receipts, and UAF are shown in detail in my workpapers.

The resulting core UAF factor for SoCalGas is 0.534% (.752 x .71 = .534%) and 0.218%for the noncore (.752 x .29 = .218%). For SDG&E, the resulting factors are 0.665% (1.178 x .59 = .695%) for the core and 0.483% (1.178 x .41 = .483%) for the noncore. These percentage allocations to the core and noncore were approved in D.08-12-020 and since SoCalGas and SDG&E propose that the Settlement be extended for the duration of the TCAP period, SoCalGas

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1 and SDG&E propose that these percentage allocations be continued to be used to allocate UAF

to the core and noncore classes of customers.

# Table 7

# San Diego Gas and Electric UAF WACOG Comparison April 2008 - March 2011

					Percent	<u>Percent</u>
Dates	Total	Total	UAF	UAF %	<u>Core*</u>	Non-
<u>Apr 2008- Mar</u> <u>2011</u>	<u>Receipts</u>	<u>Deliveries</u>	(MMBtu)	<u>of</u> <u>Receipts</u>	<u>59%</u>	<u>Core*</u> <u>41%</u>
36 Months' Total	351,969,919	347,760,700	4,147,836	1.178%	0.695%	0.483%

\* Core - Noncore percentages per the 2009 BCAP Settlement

SoCalGas will use the SoCalGas Citygate price in determining the SoCalGas and

SDG&E UAF fuel costs. Since UAF fuel costs include BTS charges, it makes more sense for

the UAF fuel costs to be based upon the SoCalGas Citygate price instead of the Border price.

This concludes my prepared direct testimony.

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