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Exhibit No.: _____
Witness: Bruce M. Wetzel

Application of Southern California Gas Company
(U 904 G) and San Diego Gas & Electric Company
(U 902 G) for Authority to Revise their Natural Gas
Rates Effective January 1, 2017 in this Triennial
Cost Allocation Proceeding Phase 2

A.15-07-_____
(Filed July 8, 2015)

PREPARED DIRECT TESTIMONY OF
BRUCE M. WETZEL
SOUTHERN CALIFORNIA GAS COMPANY
AND
SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

July 8, 2015

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1 **PREPARED DIRECT TESTIMONY**
2 **OF BRUCE M. WETZEL**

3
4 **I. PURPOSE**

5 The purpose of my prepared direct testimony on behalf of Southern California Gas
6 Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) is to present the
7 demand forecast for the noncore market segments other than large electric generation (EG) and
8 cogeneration customers (with capacity greater than 20 megawatts (MW)), whose gas demand
9 forecasts are discussed in the prepared direct testimony of Mr. Huang. My testimony also
10 presents the consolidated gas demand forecasts for Average Year and Cold Year temperature
11 conditions, along with peak day and peak month demand forecasts, for the years 2017 through
12 2019 (TCAP period) for SoCalGas' and SDG&E's markets. My consolidated forecasts rely on
13 the forecasts of core commercial & industrial customer demand presented by Ms. Payan and on
14 forecasts of residential customer demand provided by Mr. Teplow. Further, Mr. Teplow
15 provides the underlying heating degree-day design scenarios for Average Year and Cold Year
16 temperature conditions, as well as the peak day temperature design conditions; his testimony
17 discusses these weather parameters for each of SoCalGas and SDG&E. Finally, I provide the
18 calculated allocations of core storage among key core market segments for SoCalGas and
19 SDG&E along with values for unaccounted-for gas and their allocation between core and
20 noncore markets for both Companies.

21 **II. SOCALGAS' NONCORE GAS DEMAND FORECASTS**

22 **A. Introduction**

23 SoCalGas' service to noncore markets is split between retail and wholesale service.
24 Retail service consists of transportation and distribution of gas directly for end-use consumption.

1 Wholesale service is provided to municipalities or other investor-owned utilities who re-deliver
 2 the gas to their end-use customers. SoCalGas' wholesale customers are the City of Long Beach
 3 (Long Beach), SDG&E, the City of Vernon (Vernon), and Southwest Gas Company (SWG).

4 Noncore retail customers typically represent those with much larger individual loads than
 5 are characteristic of core customers. Also, noncore customers are generally business
 6 establishments with many employees. SoCalGas' overall outlook for customer growth is
 7 summarized in Table 1 below. For the TCAP period, SoCalGas expects steady customer growth
 8 overall and stable customer counts in its retail noncore markets.

9 **Table 1**
SoCalGas Active Meters (annual averages)

	2017	2018	2019	3-Year Avg. 2017-2019
Core				
Total Core	5,766,654	5,825,815	5,886,248	5,826,239
Noncore				
Noncore C&I	619	621	624	622
Electric	285	285	284	285
EOR	29	29	29	29
Total Retail Noncore	933	935	937	935
Wholesale and International	5	5	5	5
System Total Active Meters	5,767,592	5,826,755	5,887,190	5,827,179

10 Noncore customer and meter counts are developed from base year 2014 data and
 11 projected forward based on observed trends and known activity and plans of existing customers
 12 from discussions with account executives. Customer/meter counts for the electric generation
 13 market segments developed by Mr. Huang are described in his prepared direct testimony.

Refinery industrial demand is comprised of gas consumption by petroleum refining customers, hydrogen producers and petroleum refined product transporters. Refinery industrial demand is forecast separately from other industrial demand because of the complex nature of these customers. These customers are characterized by a complex interaction of refinery operations, on-site production of alternate fuels, and changing regulatory requirements impacting the production of petroleum products. Refinery industrial demand is forecast to average 85,151 MDth per year for calendar years 2017 through 2019. This is 1,935 MDth lower than the 87,086 MDth recorded for 2014. This decrease is driven by the refineries' use of alternate fuels, such as propane during months when natural gas prices are forecast to be less competitive than the alternate fuel prices. The reduction of refinery gas demand also reflects savings from both Commission-mandated EE programs and other refinery process-related energy-efficient improvements that are ineligible for SoCalGas' EE programs. Additionally, implementation of Low Carbon Fuel Standards and greenhouse gas reduction regulation (Assembly Bill 32) are expected to reduce use of natural gas by refineries over the forecast horizon.

Table 3

Average Year Noncore Industrial Demand Forecast (MDth/yr)

	2017	2018	2019	3 Year Avg. 2017-2019
Noncore Industrial	50,892	50,043	49,235	50,057
Industrial Refinery	86,072	85,260	84,121	85,151
Total	136,965	135,303	133,357	135,208

3. Electric Power Generation

This sector includes the markets for all industrial/commercial cogeneration, and non-cogeneration EG. Small Industrial/Commercial and refinery cogeneration demand is included in

1 this testimony; the other sectors of electric power generation demand are discussed by Mr.
2 Huang.

3 **(a) Industrial/Commercial Cogeneration <20 MW**

4 Most of the cogeneration units in this noncore segment are installed mainly to generate
5 electricity for customers' internal consumption rather than for power sales to electric utilities or
6 to the California Independent System Operator. In 2014, gas deliveries to this market were
7 23,059 MDth. Small Industrial/Commercial cogeneration demand is projected to average 22,405
8 MDth per year during the TCAP period. The reduction in demand is due to the expected
9 increase in the burner-tip price of natural gas relative to retail electricity over the forecast period.

10 **(b) Refinery Cogeneration**

11 Refinery cogeneration units are installed primarily to generate electricity for internal use.
12 Refinery-related cogeneration is forecast to increase modestly through 2016/17 and then show
13 declines. The three-year TCAP average is 22,587. This average value turns out to be somewhat
14 higher than the recorded throughput of 22,287 MDth for year 2014.

15 **4. Enhanced Oil Recovery-Cogeneration and Steaming**

16 The Enhanced Oil Recovery (EOR) demand forecast is prepared based on historical
17 throughput, knowledge of customer operations, and general market conditions. For the 2017 to
18 2019 TCAP period, SoCalGas forecasts EOR—combined for cogeneration and steaming
19 usage—to average 23,157 MDth per year. This is the same as the 2014 recorded gas deliveries
20 of 23,157 MDth; SoCalGas expects this market to exhibit stable throughput throughout the
21 TCAP period.

22 **5. ECOGAS (Mexicali)**

23 For this forecast, SoCalGas has used a forecast updated from that provided in the *2014*
24 *California Gas Report (CGR)* forecast prepared by ECOGAS of Mexicali. Mexicali's natural

1 gas consumption is expected to increase from 7,940 MDth in 2014 to an average of 9,138 MDth
2 in the 2017-2019 TCAP period.

3 **6. Wholesale**

4 The forecast of wholesale gas demand includes transportation service to SDG&E, Long
5 Beach, SWG, and Vernon.

6 The non-electric generation (non-EG) gas demand forecast for SDG&E is made on a
7 customer class basis. Under average temperature conditions, total non-EG requirements for
8 SDG&E are expected to increase from 55,888 MDth in 2014 to an average of 56,720 MDth for
9 the TCAP period.

10 The forecast of electric generation (EG) gas demand in SDG&E's service area shows a
11 decrease in SDG&E's EG gas requirements from 72,768 MDth in 2014 to an average of 67,288
12 MDth for the TCAP period. During the TCAP period, EG demand is expected to decline about
13 4.0% per year, from 70,627 MDth in 2017 to 65,076 MDth in 2019.

14 For Long Beach, an updated forecast received from Long Beach was used. SoCalGas'
15 transportation deliveries to Long Beach are forecast at 7,352 MDth per year.

16 The demand forecast for SWG for SoCalGas deliveries to SWG was based on an updated
17 demand forecast from SWG for its southern California markets. The direct service load to SWG
18 is expected to grow 0.9% per year, from 6,481 MDth in 2017 to 6,592 MDth in 2019.

19 Vernon initiated municipal gas service to its electric power plant in June 2005 and to
20 noncore customers in December 2006. The forecast annual usage averages 9,514 MDth for the
21 TCAP period. Vernon's commercial and industrial load is based on recorded 2014 usage for
22 commercial and industrial customers already served by Vernon, plus those additional customers
23 who are expected to request retail service from Vernon. Results from the power market

1 simulation model (employed by Mr. Huang and described in his testimony) provided the basis
2 for our forecast of Vernon's EG gas demand.

3 **III. SOCALGAS CONSOLIDATED GAS DEMAND FORECASTS**

4 **A. Introduction**

5 For year 2014, SoCalGas' total gas demand, adjusted to Average Year HDD of 1,351
6 HDD, totaled 1,024,792 MDth, which is an average of 2,808 MDth/day. In the TCAP period,
7 SoCalGas expects its Average Year gas demand to decline from 2017 through 2019 at
8 approximately 0.6% annually. The average for the TCAP years is 964,857 MDth, a decrease of
9 5.9% from the 2014 Average Year value.

10 **B. Consolidated Gas Demand for Average Year and Cold Year**

11 Table 4 shows the composition of SoCalGas' throughput forecast for 2017, 2018 and
12 2019 under Average Year temperature conditions, and Table 5 shows demand under Cold Year
13 temperature conditions.²
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² Gas demand under Average Year temperature conditions is called Average Year Throughput (AYTP) and gas demand under Cold Year temperature conditions is called Cold Year Throughput (CYTP).

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Table 4
Composition of SoCalGas Throughput (MDth/Yr) Average Temperature Year

	2017	2018	2019	3-Year Avg. 2017-2019
Core				
Residential	244,825	243,608	242,115	243,516
Core C&I	103,342	102,434	101,179	102,319
Gas AC	77	77	77	77
Gas Engine	2,049	2,070	2,091	2,070
NGV	14,831	15,639	16,599	15,710
Total Core	365,131	363,882	362,061	363,691
Noncore				
Noncore C&I	154,392	152,639	150,571	152,534
EG	268,103	267,235	268,000	267,779
EOR	23,157	23,157	23,157	23,157
Total Retail Noncore	445,652	443,032	441,727	443,470
Wholesale and International				
Long Beach	7,309	7,389	7,358	7,352
SDG&E	128,524	124,059	122,885	125,156
SWG	6,481	6,537	6,592	6,537
Vernon	9,371	9,513	9,657	9,514
Mexicali	9,092	9,138	9,183	9,138
Total Wholesale & Intl.	160,777	156,635	155,675	157,696
Average Year Throughput (AYTP)	971,560	963,549	959,463	964,857

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Table 5
Composition of SoCalGas Throughput (MDth/Yr) 1-in-35 Cold Temperature Year

	2017	2018	2019	3-Year Avg. 2017- 2019
Core				
Residential	269,689	268,736	267,515	268,647
Core C&I	108,366	107,423	106,120	107,303
Gas AC	77	77	77	77
Gas Engine	2,049	2,070	2,091	2,070
NGV	14,837	15,693	16,599	15,710
Total Core	395,019	393,999	392,401	393,806
Noncore				
Noncore	154,824	153,072	151,004	152,967
EG	268,103	267,235	268,000	267,779
EOR	23,157	23,157	23,157	23,157
Total Retail Noncore	446,085	443,465	442,160	443,903
Wholesale and International				
Long Beach	7,965	8,049	8,019	8,011
SDG&E	132,642	128,222	127,090	129,318
SWG	6,519	6,575	6,631	6,575
Vernon	9,371	9,513	9,657	9,514
Mexicali	9,092	9,138	9,183	9,138
Total Wholesale & Intl.	165,590	161,497	160,579	162,555
Cold Year Throughput (CYTP)	1,006,694	998,960	995,141	1,000,265

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C. Consolidated Peak Day Gas Demand

SoCalGas uses the following consolidated peak day gas demand for cost allocation and rate design purposes. Table 6 below shows the peak day gas demand for each year of the TCAP period as well as the three-year average for that period.

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Table 6
SoCalGas' Peak Day Demand (MDth/d)

	2017	2018	2019	3-Year Avg. 2017-2019
Core				
Residential	2,430	2,428	2,424	2,427
Core C&I	589	584	578	584
Gas AC	0.1	0.1	0.1	0.1
Gas Engine	5	5	5	5
NGV	40	42	44	42
Total Core	3,063	3,059	3,051	3,058
Noncore				
Noncore C&I	425	421	415	420
EG	918	905	942	922
EOR	63	63	63	63
Total Retail Noncore	1,407	1,389	1,421	1,405
Wholesale and International				
Long Beach	53	53	53	53
SDG&E	627	635	630	631
SWG	51	52	52	52
Vernon	26	26	27	26
Mexicali	25	25	25	25
Total Wholesale & Intl.	782	791	786	787
Total Peak Day Demand	5,252	5,239	5,258	5,250

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For retail core HDD-sensitive market segments, peak day demand was calculated using

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the applicable 1-in-35 peak day temperature condition for SoCalGas or SDG&E. For the

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SoCalGas retail noncore HDD-sensitive market segment, peak day demand was calculated under

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a 1-in-10 peak day temperature condition. For the SoCalGas and SDG&E electric generation

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facilities included in Mr. Huang's testimony, power market simulation model, peak day demand

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was calculated as a coincident peak day for all these facilities. For all other market segments,

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peak day load was calculated as average daily December month's demand.

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D. Consolidated Peak Month Gas Demand

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SoCalGas uses gas demand for the month of December as the peak month for cost

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allocation and rate design purposes. Consolidated forecasts of peak month gas demand are

1 shown below in Table 7 for each year of the TCAP period as well as the three-year average for
 2 that period.

3 **Table 7**
SoCalGas' Peak Month Demand (MDth/Mo)

	2017	2018	2019	3-Year Avg. 2017-2019
Core				
Residential	40,407	40,264	40,081	40,250
Core C&I	11,965	11,866	11,733	11,855
Gas AC	3.7	3.7	3.7	4
Gas Engine	142	144	145	144
NGV	1,226	1,297	1,372	1,298
Total Core	53,744	53,574	53,334	53,551
Noncore				
Noncore C&I	12,632	12,501	12,323	12,485
EG	23,195	23,397	23,611	23,401
EOR	1,967	1,967	1,967	1,967
Total Retail Noncore	37,793	37,865	37,901	37,853
Wholesale and International				
Long Beach	1,001	1,003	1,003	1,002
SDG&E	14,215	14,127	13,962	14,101
SWG	1,051	1,060	1,069	1,060
Vernon	805	816	833	818
Mexicali	764	768	772	768
Total Wholesale & Intl.	17,836	17,775	17,639	17,750
Total Peak Month Demand	109,373	109,214	108,874	109,154

4 For HDD-sensitive market segments, December HDD for cold year temperature designs
 5 were used to calculate gas demand.

6 **IV. SDG&E'S NONCORE GAS DEMAND FORECASTS**

7 **A. SDG&E's Noncore Gas Demand**

8 This forecast presents noncore customer gas demand for SDG&E, with the exception of
 9 gas requirements for non-cogeneration EG demand discussed by Mr. Huang. Gas demand
 10 forecasts for commercial & industrial and cogeneration are derived by trending recorded data for

2007 through 2014 driven primarily by expected growth in commercial and industrial (C&I) employment in San Diego county. C&I non-cogeneration gas demand is adjusted to reflect decreases from expected implementation of mandated EE and DSM programs. The data in Table 8 below shows SDG&E's noncore throughput each year for the TCAP period, as well as the three-year average.

Table 8
Composition of SDG&E Noncore Throughput (MDth/Yr)

	2017	2018	2019	3-Year Avg. 2017-2019
NonCore				
Noncore C&I	4,590	4,608	4,618	4,605
Electric Generation	70,627	66,160	65,076	67,288
Total Retail Noncore	75,217	70,768	69,694	71,893

1. Noncore Commercial and Industrial

SDG&E's noncore commercial and industrial demand is expected to grow about 0.3% per year in the TCAP period, from 4,590 MDth in 2017 to 4,618 MDth by 2019. Noncore commercial and industrial load was 4,000 MDth for 2014.

2. Electric Power Generation

Cogeneration gas demand is included in this testimony; the other sources of electric power generation demand (power plant facilities) are discussed in the direct testimony of Mr. Huang. SDG&E's cogeneration load was 17,452 MDth in 2014. Cogeneration load is expected to grow 0.3% per year in the TCAP period, from 19,094 in 2017 to 19,191 MDth by 2019.

V. SDG&E CONSOLIDATED GAS DEMAND FORECASTS

A. Introduction

SDG&E's total throughput (gas sales and transportation), adjusted to Average Year HDD of 1,303 HDD, totaled 128,656 MDth for year 2014, an average of 352 MDth/day. In the 2017 to 2019 TCAP years, SDG&E expects Average Year throughput to decline at about 2.2%

1 annually from 2017 through 2019. Total Average Year throughput for the TCAP years is
 2 124,166 MDth, a decrease of 3.6% over the 2014 value.

3 SDG&E's noncore customer count is expected to be stable, while the number of core
 4 customers is expected to increase, as explained by Ms. Payan, over the three-year TCAP period.

5 **Table 9**
SDG&E Meters (Annual Averages)

	2017	2018	2019	3-Year Avg. 2017-2019
Core				
Total Core	901,551	914,860	928,370	914,927
Noncore				
Noncore C&I	52	52	52	52
EG	73	70	70	71
Total Retail Noncore	125	122	122	123
System Total Meters	901,676	914,982	928,492	915,050

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 7 **B. Consolidated Gas Demand for Average Year and Cold Year**

8 Tables 10 and 11 show the details of SDG&E's forecast annual gas demand under
 9 Average-Year and 1-in-35 Cold-Year temperature conditions, respectively.

10 **Table 10**
Composition of SDG&E Throughput (MDth/Yr) Average Temperature Year

	2017	2018	2019	3-Year Avg. 2017-2019
Core				
Residential	31,912	32,014	32,069	31,998
Core C&I	18,468	18,290	18,040	18,266
NGV	1,747	1,848	1,955	1,850
Total Core	52,127	52,152	52,063	52,114
Noncore				
Noncore C&I	4,590	4,608	4,618	4,605
Electric Generation	70,627	66,160	65,076	67,288
Total Retail Noncore	75,217	70,768	69,694	71,893
Average Year Throughput (AYTP)	127,345	122,921	121,757	124,008

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Table 11
Composition of SDG&E Throughput (MDth/Yr) 1-in-35 Cold Year Temperature

	2017	2018	2019	3-Year Avg. 2017-2019
Core				
Residential	35,283	35,435	35,542	35,420
Core C&I	19,178	18,994	18,734	18,969
NGV	1,747	1,848	1,955	1,850
Total Core	56,208	56,277	56,231	56,239
Noncore				
Noncore C&I	4,590	4,608	4,618	4,605
EG	70,627	66,160	65,076	67,288
Total Retail Noncore	75,217	70,768	69,694	71,893
Cold Year Throughput (CYTP)	131,426	127,046	125,924	128,132

C. Consolidated Peak Day Gas Demand

SDG&E uses the following consolidated peak day gas demand for cost allocation and rate design purposes. Table 12 below shows the peak day gas demand.

Table 12
SDG&E's Peak Day Demand (MDth/d)

	2017	2018	2019	3-Year Avg. 2017-2019
Core				
Residential	289	291	293	291
Core C&I	91	90	88	90
NGV	5	5	5	5
Total Core	385	386	387	386
Noncore				
Noncore C&I	13	13	13	13
Electric Generation	224	231	224	226
Total Retail Noncore	237	243	237	239
Total Peak Day Demand	622	630	624	625

For SDG&E's HDD-sensitive core market segments, peak day demand was calculated under a 1-in-35 peak day temperature condition. For the SDG&E (and SoCalGas) electric generation facilities included in Mr. Huang's power market simulation model, peak day demand

1 was calculated as a coincident peak day for all these facilities. For all other market segments,
 2 peak day load was calculated as average daily December month's demand.

3 **D. Consolidated Peak Month Gas Demand**

4 SDG&E uses gas demand for the month of December as the peak month for cost
 5 allocation and rate design purposes. Consolidated forecasts of peak month gas demand are
 6 shown in Table 13 below.

7 **Table 13**
SDG&E's Peak Month Demand (MDth/Mo)

	2017	2018	2019	3-Year Avg. 2017- 2019
Core				
Residential	5,133	5,155	5,171	5,153
Core C&I	2,061	2,041	2,013	2,038
NGV	152	160	170	161
Total Core	7,346	7,357	7,354	7,352
Noncore				
Noncore C&I	401	402	402	402
EG	6,338	6,239	6,078	6,219
Total Retail Noncore	6,739	6,641	6,481	6,620
Total Peak Month Demand	14,084	13,998	13,834	13,972

8
 9 For HDD-sensitive core market segments, December HDD for SDG&E's cold year
 10 temperature design was used to calculate gas demand.

11 **VI. Core Storage Allocations and Unaccounted-For Gas**

12 **A. Core Storage Allocations**

13 The following storage assets are allocated to serve the core customers of SoCalGas and
 14 SDG&E combined:

- 15 • Storage Inventory of 83 Bcf,
- 16 • Winter Months' Withdrawal Capacity of 2,225 MMcfd, and
- 17 • Summer Months' Injection Capacity of 388 MMcfd.

1 These storage assets are the ones recommended by Mr. Watson in his prepared direct
 2 testimony on p. 11 in Table 3 in A.14-12-017, the TCAP Phase 1 Application. The purpose of
 3 my testimony regarding these assets is to provide the accompanying allocation of these overall
 4 core asset levels to (1) SoCalGas and (2) SDG&E for each Company's respective core rate
 5 classes.

6 Table 14 shows the allocation of the storage assets for SoCalGas' core customers by
 7 customer class, and Table 15 shows the resulting storage asset allocation by customer class for
 8 SDG&E's core customers. These allocations are based on the monthly core demand forecasts
 9 presented in Mr. Teplow's and Ms. Payan's direct testimony. These core storage capacity
 10 allocations are used by Mr. Bonnett in allocating storage costs among SoCalGas' and SDG&E's
 11 core customers respectively.

12
 13 **Table 14**
SoCalGas Core Storage Allocations by Customer Class

Storage Asset	Residential	G-10	G-AC	G-EN	G-NGV	Total SoCalGas Core
Inventory (BCF)	60.9	11.0	0.0	0.3	0.9	73
Injection (MMcfd)	284.9	51.5	0.1	1.3	4.0	342
Withdrawal (MMcfd)	1,568.6	377.3	0.1	3.0	27.1	1,976

14
 15 **Table 15**
SDG&E Core Storage Allocations by Customer Class

Storage Asset	Residential	GN-3	G-NGV	Total SDG&E Core	Total SoCalGas and SDG&E Core
Inventory (BCF)	8.1	1.7	0.1	10	83
Injection (MMcfd)	37.7	8.1	0.5	46	388
Withdrawal (MMcfd)	187.9	57.8	3.3	249	2,225

B. Unaccounted-For (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 cumulative recorded UAF gas, for the months April through March production cycles in 2012-2013, 2013-2014, and 2014-2015 for SoCalGas and SDG&E are shown in Table 16 and Table 17 below, along with UAF gas as percentages of total gas receipts.

Table 16

SoCalGas UAF Allocations by Customer Class

36 Months' Total	Total Receipts (MMBtu)	Total Deliveries (MMBtu)	UAF (MMBtu)	UAF % of Receipts		
				System-Wide	Core	Noncore
Apr-12 - Mar-15	3,044,859,577	3,019,432,046	25,427,531	0.835%	0.594%	0.241%

Table 17

SDG&E UAF Allocations by Customer Class

36 Months' Total	Total Receipts (MMBtu)	Total Deliveries (MMBtu)	UAF (MMBtu)	UAF % of Receipts		
				System-Wide	Core	Noncore
Apr-12 - Mar-15	398,955,732	399,903,324	2,123,219	0.532%	0.408%	0.124%

SoCalGas and SDG&E currently have system-wide UAF gas factors of 0.752% and 1.178%, respectively, in rates for each utility. Of these UAF percentages, currently SoCalGas has a UAF gas allocation factor of 71.1% to the core and 28.9% to noncore usage, while SDG&E

1 has a UAF gas allocation factor of 59% to the core and 41% to the noncore. SoCalGas and
2 SDG&E propose that the UAF percentages for each utility be updated and based on the April
3 2012 to March 2015 three-year average of 0.835% for SoCalGas, shown in Table 16, and
4 0.532% for SDG&E as shown in Table 17. SoCalGas and SDG&E propose that the percentage
5 allocations between core and noncore for each Company be the values determined in the 2006
6 UAF studies for each respective Company. For SoCalGas, the core percentage is 71.1%
7 (noncore is then 28.9%), and, for SDG&E, the core percentage is 76.71% (noncore is then
8 23.29%). The monthly total of deliveries, receipts, and UAF are shown in detail in the
9 accompanying workpapers, along with a copy of the 2006 UAF Study covering both Companies.

10 The resulting core UAF factor for SoCalGas is 0.594% ($0.835\% \times 0.711 = 0.594\%$) and
11 0.241% for the noncore ($0.835 \times 0.289 = 0.241\%$). For SDG&E, the resulting factors are
12 0.408% ($0.532\% \times 0.7671 = 0.408\%$) for the core and 0.124% ($0.532\% \times 0.2329 = 0.124\%$) for
13 the noncore.

14 This concludes my prepared direct testimony.
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1 **VII. QUALIFICATIONS**

2 My name is Bruce M. Wetzel. My business address is 555 West Fifth Street,
3 Los Angeles, California 90013-1011. I am employed by SoCalGas as a Forecasting Advisor in
4 the Regulatory Affairs Department. I am responsible for the preparation and consolidation of
5 natural gas demand forecasts together with the acquisition and analysis of daily weather data
6 used to prepare gas demand forecasts for SoCalGas and SDG&E. I have been in this position
7 since March 2004.

8 My academic and professional qualifications are as follows: I earned an undergraduate
9 degree in mathematics from Drexel University, a Master of Science in Operations Research from
10 George Washington University, and a Ph.D. in Public Policy Analysis from the Pardee-RAND
11 Graduate School for Public Policy Analysis (formerly, the RAND Graduate School). In addition,
12 during the past 33 years, I have held analyst positions in the Regulatory Affairs, Commercial and
13 Industrial Services, and Gas Supply Departments of SoCalGas.

14 My employment outside of SoCalGas has been in the areas of public policy
15 analysis/research and applied mathematics and operations research at the RAND Corporation in
16 Santa Monica and for the U.S. Department of the Air Force in Washington D.C.

17 I have previously testified before the California Public Utilities Commission.
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