Company: Southern California Gas Company (U 904 G)

Proceeding: 2019 General Rate Case

Application: A.17-10-008 Exhibit: SCG-43-2R

SECOND REVISED SOCALGAS DIRECT TESTIMONY OF RYAN HOM (SUMMARY OF EARNINGS)

APRIL 6, 2018

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA



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SUMMARY

Southern California Gas Company (SoCalGas) proposes \$2,930,792,000 for its Test Year (TY) 2019 revenue requirement.

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SOCALGAS SECOND REVISED DIRECT TESTIMONY OF RYAN HOM (SUMMARY OF EARNINGS)

I. INTRODUCTION

My testimony adopts the Summary of Earnings revised direct testimony of Khai Nguyen (Exhibit SCG-43-R) and further revises it herein in this second revised version.

Pursuant to the Assigned Commissioner's Scoping Memorandum and Ruling issued on January 29, 2018 (Scoping Memo), this exhibit has been revised to reflect the impact of the Tax Cuts and Jobs Act (TCJA) on the SoCalGas TY 2019 General Rate Case. The TCJA was signed into federal law on December 22, 2017 and is discussed in the testimony of the Taxes witness Ragan Reeves (Exhibit SCG-37-2R), served concurrently with this exhibit. A roadmap of this TCJA-related submission and impacts on other witnesses' areas is provided in the Case Management Exhibit SCG-49/SDG&E-49. Incorporating the result of these changes into SoCalGas' revenue requirement request results in a net decrease in the overall revenue requirement of \$58.685M.1

Table 1 **Summary of GRC Revenue Requirement Changes** (Thousands of Dollars)

	2019
Revised Testimony	2,989,477
TCJA Reduction	(58,685)
Total Revenue Requirement	2,930,792

SoCalGas forecasted expenses, taxes, depreciation, return, and rate base are in Tables KN-1 through 14 (see Appendix A). The resulting 2019 revenue requirement is \$2,930,792,000 and is shown on Table KN-1, Line 3. This table summarizes TY 2019 revenue and costs at both present and at proposed rates. The revenue at present rates is the authorized base margin

¹ Throughout the April 6, 2018 TCJA-related submission by impacted witnesses' testimonies, SoCalGas maintained the comparison point of "2018 Expected" consistent with those witnesses' prior testimony exhibits served in this proceeding on October 6 and December 20, 2017. Maintaining the "2018 expected" comparison point isolates the impact of the TCJA. In my testimony herein, Appendix C has been added to show the impact of the updated Results of Operations Report testimony of Ryan Hom (Present Rate Revenues, Ex. SCG-48) served on January 16, 2018 and the TCJA on the 2019 revenue requirement increase over 2018 authorized. In Appendix C, the expected 2018 revenue requirement has been revised to reflect actual 2018 revenue requirement (effective January 1, 2018).

revenues effective as of January 1, 2018. See the Present and Proposed Gas Transportation Revenues & Rates testimony of Sharim Chaudhury (Exhibit SCG-46-2R) for details on revenues at present and proposed rates.

SoCalGas forecasts these expenditures to continue to safely provide utility service to customers, to maintain adequate system reliability, to provide responsive customer services, and to comply with governmental regulations and orders applicable to SoCalGas, as discussed by various witnesses. SoCalGas also seeks to recover costs for taxes and depreciation associated with plant investments. The Tax and Depreciation testimonies are sponsored by Ragan Reeves (Exhibit SCG-37-2R) and Flora Ngai (Exhibit SCG-36), respectively. In addition, this request includes revenue necessary to compensate investors for their capital investment in the utility.

II. SCOPE

Accumulated balances for regulatory accounts (balancing, tracking, or memorandum) included in the Regulatory Accounts testimony of Rae Marie Yu (Exhibit SCG-42) are not included in the TY 2019 revenue requirement described in my testimony. There are no deferred revenues included in the TY 2019 estimates. Commodity costs for gas are not addressed in the General Rate Case (GRC).

III. RESULTS OF OPERATIONS (RO) SUMMARY TABLES

The RO calculation compiles all of the cost estimates put before the California Public Utilities Commission (CPUC or Commission) in this proceeding into an income statement format to estimate the amount of revenue needed for SoCalGas to earn an authorized rate of return on its investment.

IV. ELEMENTS OF THE RO CALCULATION

A. Revenue Requirement

Total operations and maintenance (O&M) and capital-related costs necessary to support SoCalGas' rate base is called a revenue requirement. The revenue requirement is collected in two components: 1) miscellaneous revenues, discussed below, and 2) base margin. The base margin portion of the revenue requirement is collected in gas transportation service revenues from SoCalGas' ratepayers.

B. Miscellaneous Revenues

Miscellaneous revenues consist of fees and revenues collected by SoCalGas for the provision of specific products or services from non-rate sources and any revenues returned to the ratepayers pursuant to previous Commission decisions.² Miscellaneous revenues reduce the amount of gas sales revenues to be collected from customers for gas utility services (*i.e.*, base margin), as explained by the Miscellaneous Revenues testimony of Annette Steffen (Exhibit SCG-41-2R).

C. O&M Expense Estimates

The testimonies addressing operating expenses in this Application describe the estimating methods used and the significant events reflected in forecasts for each expense area. This Application uses cost center structures and project structures consistent with internal budgeting methods in the development of the test year revenue requirement. All summary tables for O&M are presented using a cost center format.³

For purposes of calculating overheads and escalation, operating expenses are categorized in the RO model calculations between labor expense and materials and services (also known as non-labor) expense.

O&M expense estimates for each category of expense are summarized for the 2016 recorded and 2019 estimated year in constant 2016 dollars. As described in the Cost Escalation testimony of Scott Wilder (Exhibit SCG-40), labor and non-labor escalation rates were applied to the 2016 constant dollar estimates to determine the estimated test year O&M expense in 2019dollar terms. Certain non-labor O&M expense estimates are not subject to escalation rates and are presented in nominal dollars. These costs are referred to throughout this Application as "Non-Standard Escalation" or NSE. An example of NSE costs is certain contractual costs set forth by existing agreements.

O&M expense forecasts are presented in testimonies in two groupings: Shared Services and Non-Shared Services. Shared Services (SS) are O&M expenses incurred by SoCalGas and billed to San Diego Gas & Electric Company (SDG&E) or Corporate Center, as the entity or entities receiving those services (or SS can be billed to SoCalGas if SDG&E incurs O&M expenses for the benefit of SoCalGas). The second group of O&M expenses is Non-Shared

² Decision (D.) 13-05-010 at 955.

³ D.08-07-046, Ordering Paragraph (OP) 22.

Services (NSS), which are expenses incurred by SoCalGas that are not subject to billing. Costs have been separated in this manner so that cross-company billings include appropriate overheads and are properly allocated. The O&M SS billing policy and process are explained in the Shared Services & Shared Assets Billing, Segmentation & Capital Reassignments testimony of James Vanderhye (Exhibit SCG-34-2R). In the Summary of Earnings Tables of my testimony, O&M expenses summarized on line 20 of Table KN-1 include SS and NSS.⁴ Details of the NSS and SS costs are found in Table KN-2. Certain O&M expense forecasts are subject to capitalization and must be partially allocated to capital. In order to properly reassign costs from O&M to capital, the cost center forecasts must first be translated from the cost center format to Federal Energy Regulatory Commission (FERC) Uniform System of Accounts format. The translation is based on 2016 recorded FERC settlements with adjustments made by various witnesses to reflect 2019 forecasted O&M activities. The finalized cost center factors ensure O&M forecasts are appropriately mapped to FERC accounts to produce the proper basis to apply reassignment ratios. Please see Appendix B for a Cost Center to FERC mapping, which provides the ratio of each cost center's O&M forecasted allocation to a FERC account. Please see the testimony of Mr. Vanderhye (Ex. SCG-34-2R) for details on the development of reassignments factors.

D. Capital-Related Costs

Capital-related costs include depreciation, income taxes, ad valorem taxes, and return on investment. The driver of these costs is the capital investment in utility rate base. Capital investments forecasts are sponsored by various SoCalGas witnesses and the utility rate base total is sponsored by the Rate Base testimony of Pat Moersen (Exhibit SCG-35-2R).

E. Rate of Return

The TY 2019 revenues at Proposed Rates reflect an authorized rate of return of 7.34% based on 10.05% return on equity (ROE).⁵

V. RECORDED DATA

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Adjustments have been made to the 2016 O&M data to exclude all revenues and expenses that are recovered through separate filings before the Commission or the FERC.

⁴ As discussed in the Accounting and Finance/Legal/Regulatory Affairs/External Affairs testimony of Stacey Lee (Exhibit SCG-33), Meals and Entertainment has been excluded from the TY2019 revenue requirement. A topside adjustment of \$736,000 (2019\$) was reduced out of cost center 2AG008-000 to reflect the exclusion.

⁵ SoCalGas Advice Letter 5192 "Update to Authorized Rate of Return on Ratebase Pursuant to Decision (D.) 17-07-005, Effective January 1, 2018," approved on October 30, 2017.

Examples of excluded costs are Demand Side Management (DSM), Energy Savings Assistance
Program (ESAP), and California Alternate Rates for Energy (CARE) costs.

VI. RO MODEL ENHANCEMENTS
There were no major modifications made to the RO model since the TY 2016 GRC filing.
This concludes my prepared direct testimony.

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VII. WITNESS QUALIFICATIONS

My name is Ryan Hom. My business address is 555 West Fifth Street, Los Angeles, California, 90013-1011. I am currently employed by SoCalGas as a Manager in the General Rate Case Financial Analysis group responsible for developing the revenue requirement forecasts for both SDG&E and SoCalGas.

I received a Bachelor of Science Degree in Economics and a minor in Management from University California, Irvine. I was first employed by SoCalGas in 2006 and have held various positions in the Customer Services, Regulatory Affairs and Accounting and Finance areas of the company.

I have not previously testified before the Commission.

LIST OF ACRONYMS

ACRONYM DEFINITION

CARE California Alternate Rates for Energy

CPUC California Public Utilities Commission

DSM Demand Side Management

ESAP Energy Savings Assistance Program

FERC Federal Energy Regulatory Commission

GRC General Rate Case

NSE Non-Standard Escalation

NSS Non-Shared Services

O&M Operations and maintenance

PSEP Pipeline Safety Enhancement Plan

RO Results of Operations

ROE Return on Equity
SS Shared Services

TCJA Tax Cuts and Jobs Act

TY Test Year

APPENDIX A – SUMMARY OF EARNINGS TABLES

Table KN-1 SOCALGAS TEST YEAR 2019 SUMMARY OF EARNINGS

(Thousands of Dollars)

	(Thousands	s of Dollars				
			2019		2019	
Line		Present Rates		Proposed Rates		
No.	Description		(2019\$)		(2019\$)	
1	Base Margin	\$	2,357,456	\$	2,847,682	
2	Miscellaneous Revenues		98,685		83,110	
3	Revenue Requirement	\$	2,456,141	\$	2,930,792	
	Operating and Maintenance Expenses					
4	Gas Distribution		157,111		157,111	
5	Transmission		88,812		88,812	
6	Underground Storage		60,074		60,074	
7	Engineering		112,629		112,629	
8	PSEP		83,156		83,156	
9	Procurement		4,230		4,230	
10	Customer Services	314,564			314,564	
11	Information Technology	33,636			33,636	
12	Support Services	154,514			154,514	
13	Administrative and General		627,057		627,057	
14	Subtotal (2016\$)	\$	1,635,783	\$	1,635,783	
15	Shared Services Adjustments		54,143		54,143	
16	Reassignments		(185,523)		(185,523)	
17	Escalation		77,760		77,760	
18	Uncollectibles (0.316%)		7,276		8,789	
19	Franchise Fees (1.372%)		32,365		39,091	
20	Total O&M (2019\$)	\$	1,621,803	\$	1,630,042	
21	Depreciation & Amortization		606,830		606,830	
22	Taxes on Income	(90,960)			48,173	
23	Taxes Other Than on Income		132,197		132,197	
24	Total Operating Expenses		2,269,869		2,417,241	
25	Return		186,272		513,551	
26	Rate Base		6,989,025		6,996,605	
27	Rate of Return		2.67%		7.34%	

Table KN-2 SOCALGAS TEST YEAR 2019

(Thousands of Dollars)

		2019	2019	2019
		Non-Shared Services	Shared Services	Total
Line		Proposed Rates	Proposed Rates	Proposed Rates
No.	Description	(2016\$)	(2016\$)	(2016\$)
1	Base Margin			
2	Miscellaneous Revenues			
3	Revenue Requirement			
	OPERATING & MAINTENANCE EXPENSES			
4	Distribution	150,850	6,261	157,111
5	Transmission	70,490	18,322	88,812
6	Underground Storage	59,640	434	60,074
7	Engineering	94,935	17,694	112,629
8	PSEP	83,156	, -	83,156
9	Procurement	4,230	-	4,230
10	Customer Services	299,060	15,504	314,564
11	Information Technology	21,077	12,559	33,636
12	Support Services	125,963	28,551	154,514
13	Administrative and General	618,342	8,715	627,057
14	Subtotal (2016\$)	1,527,743	108,040	1,635,783
Α	Shared Services Billed Out	-	(20,231)	(20,231)
B C	Shared Services Billed In Shared Services Overhead Credit	-	44,251	44,251
D	Shared Services Overhead Credit Shared Services Billed In Overheads	-	(15,752) 22,980	(15,752) 22,980
Ē	Corporate Reallocation	2,381	-	2,381
F	Subtotal	2,381	31,249	33,630
G	Shared Asset Expense	5,127	-	5,127
Н	Billed Capital Overhead Credit	-	(875)	(875)
I	SOP 98 Expense	16,261	-	16,261
15	Total Shared Services Adjustments	23,769	30,374	54,143

Table KN-3 SOCALGAS TEST YEAR 2019 GAS DISTRIBUTION (Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Gina Orozco-Mejia	2GD000	Field Support	70,433	95,907	103,611
Gina Orozco-Mejia	2GD001	Asset Management	8,172	6,964	7,564
Gina Orozco-Mejia	2GD002	Measurement & Regulation	13,832	14,888	16,124
Gina Orozco-Mejia	2GD003	Cathodic Protection	14,403	18,321	19,690
Gina Orozco-Mejia	2GD004	Operations and Management	5,646	7,378	7,907
Gina Orozco-Mejia	2GD005	Regional Public Affairs	3,460	4,420	4,784
•		Gas Distribution Total	115,946	147,878	159,680
Devin K. Zornizer	2GS000	Storage Products Manager	146	157	170
Devin K. Zornizer	2GS001	Emergency Services	640	2,815	3,029
		Gas Systems Total	786	2,972	3,198
		Total NSS	116,732	150,850	162,878
Gina Orozco-Mejia	2200-0431	FIELD SERVICES LEADERSHIP & OPERATIONS ASSESSMENT	689	275	294
		Gas Distribution Total	689	275	294
Devin K. Zornizer	2200-0246	Energy Markets & Capacity Products - Director	328	316	338
Devin K. Zornizer	2200-0328	Energy Markets & Capacity Products - Support	610	619	662
Devin K. Zornizer	2200-0330	Energy Markets & Capacity Products - Manager	615	615	658
Devin K. Zornizer	2200-2158	Gas Scheduling	600	724	775
Devin K. Zornizer	2200-2289	GAS CONTROL & SCADA OPERATION GROUP - USS	2,479	3,021	3,231
Devin K. Zornizer	2200-2329	Gas Transmission Planning	606	692	740
		Gas Systems Total	5,238	5,986	6,402
		Total SS	5,927	6,261	6,697
		Total Gas Distribution	\$ 122,659	\$ 157,111	\$ 169,575

Table KN-4 SOCALGAS TEST YEAR 2019 TRANSMISSION (Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Elizabeth A. Musich	2GT000	Pipeline Operations	17.692	14.463	15.620
Elizabeth A. Musich	2GT001	Compressor Station Operations	9,732	9,989	10,715
Elizabeth A. Musich	2GT002	Technical Services	1,886	26,467	27,545
		Gas Transmission Total	29,310	50,919	53,880
Michael A. Bermel	2MP001	MAJOR PROJECTS MANAGEMENT & OUTREACH	933	3,646	3,926
Michael A. Bermel	2MP002	PROJECT & CONSTRUCTION MANAGEMENT	201	201	215
Michael A. Bermel	2MP003	PROJECT CONTROLS AND ESTIMATING	124	124	134
		Major Projects Total	1,258	3,971	4,275
Omar Rivera	2SI001	GAS OPERATIONS TRAINING & DEVELOPMENT	1,072	4,735	5,069
Omar Rivera	2SI002	PIPELINE SAFETY & COMPLIANCE	699	2,890	3,142
Omar Rivera	2SI003	PUBLIC AWARENESS	398	1,641	1,731
Omar Rivera	2SI004	ASSET MANAGEMENT	2,087	2,504	2,715
Omar Rivera	2SI005	GAS CONTRACTOR CONTROLS	521	3,830	4,121
		Systems Integrity Total	4,777	15,600	16,778
		Total NSS	35,345	70,490	74,933
Elizabeth A. Musich	2200-0253	DIRECTOR GAS TRANSMISSION - USS	198	240	256
Elizabeth A. Musich	2200-0265	Field Operations Managers - USS	272	419	448
Elizabeth A. Musich	2200-2172	TECHNICAL SERVICES MANAGER - USS	480	357	381
		Gas Transmission Total	950	1,015	1,086
Omar Rivera	2200-0225	USS - VP GAS SYSTEM INTEGRITY	362	629	673
Omar Rivera	2200-0302	BUSINESS PROCESS ESS IMPLEMENTATION AND ESS MOBILE SOLUTIONS	189	302	323
Omar Rivera	2200-0303	APPLICATIONS	231	478	511
Omar Rivera	2200-0305	ESS PRODUCTION SUPPORT	272	666	713
Omar Rivera	2200-0306	WRK MGMT & DATABASES	992	1,858	1,987
Omar Rivera	2200-0308	CONTRACT & MAINTENCANCE	843	559	598
Omar Rivera	2200-2023	FIELD TECHNOLOGIES	211	415	444
Omar Rivera	2200-2144	GAS SYSTEM INTEGRITY STAFF &PROGRAMS	273	320	342
Omar Rivera	2200-2344	OPERATOR QUALIFICATION	1,157	1,952	2,088
Omar Rivera	2200-2345	PIPELINE SYSTEM CONSTRUCTION POLICY	699	1,846	1,975
Omar Rivera	2200-2360	QUALITY & RISK	900	1,215	1,299
Omar Rivera	2200-2376	ENTERPRISE GEOGRAPHIC INFORMATION SYSTEM (EGIS)	1,119	2,553	2,730
Omar Rivera	2200-2417	SHARED PUBLIC AWARNESS ACTIVITIES	117	537	575
Omar Rivera	2200-2473	PIPELINE SAFETY & COMPLIANCE MANAGER	535	853	913
Omar Rivera	2200-2551	PIPELINE SAFETY OVERSIGHT	295	573	613
Omar Rivera	2200-7242	RECORDS MANAGEMENT - from 2200-2361		2,550	2,727
		Systems Integrity Total	8,195	17,307	18,510
		Total SS	9,145	18,322	19,595
		Total Transmission	\$ 44,490	\$ 88,812	\$ 94,528

Table KN-5 SOCALGAS TEST YEAR 2019 UNDERGROUND STORAGE

(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Neil P. Navin	2US000	Underground Storage	33,323	38,699	41,496
Neil P. Navin	2US001	Storage Risk Management	479	2,031	2,209
Neil P. Navin	2US002	Underground Storage - RSIMP	12,051	18,910	20,057
		SoCalGas Underground StorageTotal	45,853	59,640	63,762
		Total NSS	45,853	59,640	63,762
Neil P. Navin	2200-2594	VICE PRESIDENT OF TRANSMISSION & STORAGE	455	434	464
		SoCalGas Underground Storage Total	455	434	464
		Total SS	455	434	464
		Total Underground Storage	\$ 46,308	\$ 60,074	\$ 64,226

Table KN-6 SOCALGAS TEST YEAR 2019 ENGINEERING (Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Deanna R. Haines	2EN000	GAS ENGINEERING ANALYSIS CENTER NGV and ELECTRICAL FIELD MAINTENANCE	5,539	6,083	6,565
Deanna R. Haines	2EN001	LAND SERVICES & RIGHT OF WAY	2,106	3,625	3,853
Deanna R. Haines	2EN002	CIVIL STRUCTURAL & HAZARD MITIGATION ENGINEERING	142	2,517	2,665
		Engineering Total	7,787	12,225	13,082
Maria T. Martinez	2TD000	TIMP & DIMP	74,393	82,710	88,297
		TIMP & DIMP Total	74,393	82,710	88,297
		Total NSS	82,180	94,935	101,379
Deanna R. Haines	2200-0300	DIR ENG & TECH SERVICES	388	808	865
Deanna R. Haines	2200-0309	MRC MANAGEMENT & SPECIAL PROJECTS	862	898	960
Deanna R. Haines	2200-0310	MEASUREMENT & DESIGN	861	1,165	1,246
Deanna R. Haines	2200-0311	MEASUREMENT TECHNOLOGIES	806	1,280	1,369
Deanna R. Haines	2200-0312	MEASUREMENT FIELD SUPPORT	688	1,251	1,337
Deanna R. Haines	2200-0318	ENGINEERING DESIGN MANAGEMENT, PROCESS ENGINEERING & DESIGN DRAFTING	757	2,080	2,224
Deanna R. Haines	2200-0320	RESEARCH & MATERIALS	398	398	425
Deanna R. Haines	2200-0321	MECHANICAL DESIGN	57	180	192
Deanna R. Haines	2200-0322	PIPELINE ENGINEERING	600	672	718
Deanna R. Haines	2200-0323	RESEARCH PLANNING & DEVELOPMENT	92	40	43
Deanna R. Haines	2200-0799	MRC - INTRUMENTATION REPAIR AND FIELD SUPPORT	1,098	1,325	1,417
Deanna R. Haines	2200-1178	ENGINEERING ANALYSIS CENTER - CHEMICAL LAB	1,500	2,134	2,282
Deanna R. Haines	2200-2248	MRC STANDARDS	611	730	781
Deanna R. Haines	2200-2377	HIGH PRESSURE & DISTRIBUTION ENGINEERING	558	1,290	1,380
Deanna R. Haines	2200-2487	ELECTRICAL DESIGN	154	154	165
		Engineering Total	9,430	14,404	15,405
Maria T. Martinez	2200-7000	TIMP Project Support for SDG&E	967	1,649	1,764
Maria T. Martinez	2200-7001	DIMP Project Support for SDG&E	298	1,641	1,755
		TIMP & DIMP Total	1,265	3,290	3,519
		Total SS	10,695	17,694	18,923
		Total Engineering	\$ 92,875	\$ 112,629	\$ 120,302

Table KN-7 SOCALGAS TEST YEAR 2019 PROCUREMENT (Thousands of Dollars)

Witness Name	Workpaper Group No.	Description		2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Martin F. Lazarus	2SP000	Gas Acquisition		3,913	4,230	4,596
			Total	3,913	4,230	4,596
			Total NSS	3,913	4,230	4,596
			Total SS	-	-	-
			Total Procurement	3,913	4,230	4,596

Table KN-8 SOCALGAS TEST YEAR 2019 CUSTOMER SERVICES (Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Rene F. Garcia	2AM002	Advanced Meter Operations		10,477	11,180
		CS Advanced Meter Total	-	10,477	11,180
Gwen R. Marelli	2FC001	Customer Services Field - Operations	112,435	111,576	121,324
Gwen R. Marelli	2FC002	Customer Services Field - Supervision	11,400	11,070	12,037
Gwen R. Marelli	2FC003	Customer Services Field - Dispatch	9,806	8,689	9,456
Gwen R. Marelli	2FC004	Customer Services Field - Support	16,435	17,443	18,881
Gwen R. Marelli	2FC005	MSA Inspection Program	5,867	16,702	18,174
Gwen R. Marelli	2FC006	Meter Reading - Operations	7,032	2,219	2,416
Gwen R. Marelli	2FC007	Meter Reading - Clerical	514	148	161
Gwen R. Marelli	2FC008	Meter Reading - Supervision & Training	1,180	355	386
Gwen R. Marelli	2FC009	Meter Reading - Support	1,337	305	332
		CS - Field & Meter Reading Total	166,006	168,507	183,167
Andrew Cheung	2IN001	CI-Customer Strategy and Engagement -	5,184	7,102	7,576
Andrew Cheung	2IN002	CI-Customer Assistance Programs	1,967	3,437	3,631
Andrew Cheung	2IN004	CI-Customer Segment Services	8,372	10,018	10,836
		CS - Information Total	15,523	20,557	22,043
Michael H. Baldwin	200000	CCC - Operations	30,143	29,872	32,531
Michael H. Baldwin	200001	CCC - Support	7,782	9,024	9,717
Michael H. Baldwin	200002	Branch Offices	11,591	12,011	12,992
Michael H. Baldwin	200003	Billing Services	6,967	6,264	6,822
Michael H. Baldwin	200004	Credit and Collections	5,216	5,095	5,418
Michael H. Baldwin	200005	Remittance Processing	21,939	17,806	18,083
Michael H. Baldwin	200006	Customer Service Other Office Ops and Technology	2,064	3,179	3,456
Michael H. Baldwin	200007	Measurement Data Ops (MDO)	1,313	1,042	1,131
		CS - Office Operations Total	87,015	84,293	90,150

Table KN-8 SOCALGAS TEST YEAR 2019 CUSTOMER SERVICES (Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Lisa M. Larroque	2RD001	Research Development and Demonstration (RD&D) Technology Development	10,643	14,329	15,188
Lisa M. Larroque	2RD002	Policy & Environmental Solutions NSS	767	897	972
		CS - Technologies, Policies & Solutions Total	11,410	15,226	16,160
		Total NSS	279,954	299,060	322,699
Gwen R. Marelli	2200-0942	CS FIELD STAFF MANAGER	1,194_	1,514_	1,619
		CS - Field & Meter Reading Total	1,194	1,514	1,619
Andrew Cheung	2200-0234	CLEAN TRANSPORTATION BUSINESS DEVELOPMENT	833	2,178	2,329
Andrew Cheung	2200-2286	RENEWABLE GAS - MARKET DEVELOPMENT	423	954	1,020
Andrew Cheung	2200-2560	CLEAN TRANSPORTATION - BUS DEV	1,047	1,358	1,452
		CS - Information Total	2,303	4,490	4,802
Michael H. Baldwin	2200-0354	MAJOR MARKET CREDIT and COLLECTIONS	1,608	1,604	1,715
Michael H. Baldwin	2200-0355	PAYMENT PROCESSING	3,484	3,511	3,755
Michael H. Baldwin	2200-2247	MANAGER OF REMITTANCE PROCESSING	309	377	403
		CS - Office Operations Total	5,401	5,492	5,873
Lisa M. Larroque	2200-2229	BUSINESS STRATEGY AND DEVELOPMENT	1,190	1,500	1,604
Lisa M. Larroque	2200-2288	ENVIRONMENTAL AFFAIRS	512	647	692
Lisa M. Larroque	2200-2396	ENERGY & ENVIRONMENTAL POLICY	1,303	1,641	1,755
Lisa M. Larroque	2200-2504	PUBLIC POLICY & PLANNING	-	-	-
Lisa M. Larroque	2200-2505	PLANNING & LEGISLATIVE ANALYSIS	210	220	236
		CS - Technologies, Policies & Solutions Total	3,215	4,008	4,286
		Total SS	12,113	15,504	16,581
		Total Customer Services	\$ 292,067	\$ 314,564	\$ 339,280

Table KN-9 SOCALGAS TEST YEAR 2019 INFORMATION TECHNOLOGY (Thousands of Dollars)

(housand	s of	Dol	lars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Christopher R. Olmsted	2IT001	IT Applications NSS	5,442	8,040	8,522
Christopher R. Olmsted	2IT002	IT Infrastructure NSS	8,368	14,677	15,524
Christopher R. Olmsted	2IT003	IT Support NSS	152	(1,640)	(1,797)
·		Information Technology Total	13,962	21,077	22,248
		Total NSS	13,962	21,077	22,248
Christopher R. Olmsted	2200-2047	IT ACCOUNT MANAGEMENT	119	119	127
Christopher R. Olmsted	2200-2372	DIRECTOR IT SOCALGAS APPLICATIONS	250	251	268
Christopher R. Olmsted	2200-2406	DIRECTOR - COMPUTING INFRASTRUCTURE	383	383	409
Christopher R. Olmsted	2200-2418	DIRECTOR - SCG APPLICATIONS SERVICES	213	1,258	1,345
Christopher R. Olmsted	2200-2444	SCG SUPPLY CHAIN SERVICES	232	231	247
Christopher R. Olmsted	2200-2445	SCG WORK MANAGEMENT SERVICES	1,213	1,213	1,297
Christopher R. Olmsted	2200-2446	SCG GIS & CAD SERVICES	172	171	183
Christopher R. Olmsted	2200-2447	SCG SOFTWARE DEV - DATABASE	571	572	611
Christopher R. Olmsted	2200-2451	SCG APPS MAJ MRK APP - SCG	1,449	1,449	1,550
Christopher R. Olmsted	2200-2453	CLNT TECH & DEPOT SVC-SCG	328	328	351
Christopher R. Olmsted	2200-2455	IT BUSINESS INSIGHT - SCG	349	350	374
Christopher R. Olmsted	2200-2458	SCALABLE PLATFORM SERVS - SCG	477	478	511
Christopher R. Olmsted	2200-2463	CI OPERATIONS SERVICES SCG	-	0	0
Christopher R. Olmsted	2200-2464	CI COMPUTE SUPPORT SCG	1,039	1,039	1,111
Christopher R. Olmsted	2200-2466	CI COMPUTE PROVISIONING SCG	639	638	682
Christopher R. Olmsted	2200-2467	CI STANDARDS	511	511	547
Christopher R. Olmsted	2200-2470	SCG IT COMPLIANCE MANAGEMENT	697	697	746
Christopher R. Olmsted	2200-2490	ENTERPRISE ARCHITECTURE	264	264	282
Christopher R. Olmsted	2200-2493	IT PORTFOLIO MANAGEMENT	569	603	645
Christopher R. Olmsted	2200-2494	IT TELECOM PMO	131	276	295
Christopher R. Olmsted	2200-2495	IT PORTFOLIO MANAGEMENT	-	0	0
Christopher R. Olmsted	2200-2496	SCG IT ASSOCIATE PROGRAM	358	358	383
Christopher R. Olmsted	2200-2503	ARCHITECTURE AND INTEGRATION - SCG	528	528	564
Christopher R. Olmsted	2200-2565	IT TELECOM PMO	93	94	100
Christopher R. Olmsted	2200-2596	SCG IT QUALITY ASSURANCE	41	41_	44
		Information Technology Total	10,626	11,851	12,674
Gavin H. Worden	2200-2469	IT INFORMATION SECURITY SCG	239	708	758
		Cyber Security Total	239	708	758
		Total SS	10,865	12,559	13,432
		Total Information Technology	24,827	33,636	35,680

Table KN-10 SOCALGAS TEST YEAR 2019 SUPPORT SERVICES (Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Darrell R. Johnson	2EV000	ENVIRONMENTAL	5,990	6,973	7,518
Darrell R. Johnson	2EV001	RNERBA-Subpart W	5,037	9,634	10,169
		Environmental Total	11,027	16,607	17,687
Denita A. Willoughby	2SS001	LOGISTICS & SHOPS - POOL WAREHOUSING	6,715	7,666	8,336
Denita A. Willoughby	2SS002	METER SHOP & RECORDS	1,756	2,417	2,620
Denita A. Willoughby	2SS003	FABRICATION & REPAIR	2,889	3,260	3,485
Denita A. Willoughby	2SS004	PROCUREMENT	1,425	(2,466)	(2,544)
Denita A. Willoughby	2SS005	SUPPLIER EXCELLENCE	1,112	1,266	1,359
Denita A. Willoughby	2SS006	OFFICE SERVICES	2,486	2,910	3,069
Denita A. Willoughby	2SS007	SUPPLIER DIVERSITY	687	1,151	1,231
Denita A. Willoughby	2SS008	PSEP PORTFOLIO MGMT Supply Management & Supplier Diversity Total	(15) 17.055	16.204	17.556
		, , ,	,	-, -	,
Carmen L. Herrera	2RF001	Director	67	115	124
Carmen L. Herrera	2RF002	Maintenance Operations	21,110	25,845	27,542
Carmen L. Herrera	2RF003	Maintenance Management	20,843	46,661	46,673
Carmen L. Herrera	2RF004	Facility Operations	15,103	18,131	19,278
		Fleet & Facilities Total	57,123	90,752	93,617
Richard D. Tattersall	2RE001	SCG RENTS	2,199	2,194	2,194
Richard D. Tattersall	2RE002	SCG CORPORATE REAL ESTATE	211	206	224
		Real Estate Total	2,410	2,400	2,418
		Total NSS	87,615	125,963	131,277
Darrell R. Johnson	2200-2012	SCG ENVIRONMENTAL SERVICE DIRECTOR	68	75	80
Darrell R. Johnson	2200-2176	SCG ENVIRONMENTAL PROGRAMS	258	284	304
Darrell R. Johnson	2200-2554	TECH SUPP-AIR QUAL	398_	277	296
		Environmental Total	724	636	680
Denita A. Willoughby	2200-2562	VP SUPPLY MANAGEMENT & LOGISTICS	328	334	358
Denita A. Willoughby	2200-2573	SUPPLY CHAIN POLICY & INTEGRATION	165	186	199
		Supply Management & Supplier Diversity Total	493	521	557
Carmen L. Herrera	2200-0696	FACILITIES-MONTEREY PARK MGR	2,301	2,332	2,494
Carmen L. Herrera	2200-0735	FACILITIES GCT	1,200	1,513	1,618
Carmen L. Herrera	2200-2018	FLEET MANAGEMENT & SUPPORT	1,955	2,261	2,418
Carmen L. Herrera	2200-2148	FLEET SERVICES DIRECTOR - SCG	281	239	255
		Fleet & Facilities Total	5,737	6,345	6,786
Richard D. Tattersall	2200-0618	GCT RENTS	10,213	19,539	19,539
Richard D. Tattersall	2200-2284	SCG MICROWAVE RENTS	1,447	1,511	1,511
		Real Estate Total	11,660	21,050	21,050
		Total SS	18,614	28,551	29,073
		Total Support Services	\$ 106,229	\$ 154,514	\$ 160,350

Table KN-11 SOCALGAS TEST YEAR 2019 ADMINISTRATIVE AND GENERAL (Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Stacey Lee	2AG001	INCIDENT SUPPORT & ANALYSIS	-	1.101	1,196
Stacey Lee	2AG002	ACCOUNTING OPERATIONS	3,785	3,755	4,077
Stacey Lee	2AG003	ACCOUNTING SYSTEMS & COMPLIANCE	1,084	1.154	1,250
Stacey Lee	2AG004	FINANCE	1,549	1,437	1,564
Stacey Lee	2AG005	FINANCIAL & OPERATIONAL PLANNING	3,603	3,764	4,093
Stacey Lee	2AG007	LEGAL	6,651	6,967	7,575
Stacey Lee	2AG008	REGULATORY TARIFFS & INFO	662	(59)	(11)
Stacey Lee	2AG010	CLAIMS PAYMENTS AND RECOVERY	14,434	7,401	7,807
Stacey Lee	2AG011	EXTERNAL AFFAIRS	1,864	1,976	2,140
Stacey Lee	2AG013	VP - ACCOUNTING & FINANCE	303	352	383
•		A&G - Accounting & Finance, Legal, Reg Affairs & Ext Affairs Total	33,935	27,848	30,071
Debbie S. Robinson	2CP000	COMPENSATION - VARIABLE PAY (GRC USE ONLY)	74,806	90,743	97,901
Debbie S. Robinson	2PB000	HEALTH BENEFITS - MEDICAL	114,478	139,076	139,076
		A&G - Compensation & Benefits Total	189,284	229,819	236,977
Mary Gevorkian	2HR001	SCG CEO President & COO and Chief of Human Resources & CAO	2,758	2,758	2,969
Mary Gevorkian	2HR002	SCG Business Partners	1,862	1,943	2,112
Mary Gevorkian	2HR003	SCG Manager Perf & Orgnl Strategy	1,160	1,532	1,667
Mary Gevorkian	2HR004	SCG Director HR Services	3,913	5,186	5,629
Mary Gevorkian	2HR005	SCG Director Labor Relations	821	1,025	1,107
Mary Gevorkian	2HR006	SCG Director Safety & Wellness	21,531	28,572	29,359
Mary Gevorkian	2HR007	SCG Director Org Effectiveness	2,160	3,823	4,131
		A&G - HR, Disability, Workers Comp & Safety Total	34,205	44,839	46,975
Debbie S. Robinson	2PN000	EMPLOYEE PENSION	70,621	202,830	202,830
		A&G - Pension & Other Post Retirement Benefits Total	70,621	202,830	202,830
Mia L. DeMontigny	2SE000	SECC OUTSIDE SERVICES EMPLOYES - F923.1	60,270	74,446	74,446
		A&G - Sempra Corp General Total	60,270	74,446	74,446
Neil K. Cayabyab	2SN000	SECC PROPERTY INSURANCE NON-NUCLEAR - 924.0	36,184	38,560	38,560
		A&G - Sempra Corp Insurance Total	36,184	38,560	38,560
		Total NSS	424,499	618,342	629,859

Table KN-11 SOCALGAS TEST YEAR 2019 ADMINISTRATIVE AND GENERAL (Thousands of Dollars)

2016 2019 2019 Witness Workpaper Group Adjusted-Recorded Estimated Estimated (2016\$)(2016\$)(2019\$)Name No. Description 2200-1334 AFFILIATE BILLING & COSTING NORTH 373 391 418 Stacey Lee Stacey Lee 2200-2075 717 1,094 1,170 REGULATORY CASE MANAGEMENT Stacey Lee 2200-2095 **CLAIMS MANAGEMENT - NORTH** 1,304 1,579 1,689 Stacey Lee VP - CONTROLLER & CFO 2200-2186 695 551 589 Stacey Lee 2200-2305 **DIRECTOR - REGULATORY AFFAIRS SCG** 215 230 186 Stacey Lee 2200-2307 GAS RATES ANALYSIS 171 322 345 Stacey Lee 2200-2308 GAS FORECASTING & ANALYSIS 805 877 938 Stacey Lee 2200-2462 **GRC & REVENUE REQUIREMENTS** 825 1,304 1,395 Stacey Lee 2200-2489 **CLIENT SUPPORT-SS** 74 55 59 335 Stacey Lee 2200-2575 ASSISTANT CONTROLLER 358 A&G - Accounting & Finance, Legal, Reg Affairs & Ext Affairs Total 5,150 6,723 7,190 Diana L. Day 2200-2547 OPER RISK MGMT-SCG 292 292 313 A&G - Risk Management Total 292 292 313 Mary Gevorkian HR DIVERSITY-SCG 557 596 2200-2337 409 Mary Gevorkian 2200-2397 **ECS System Reporting** 281 171 183 Mary Gevorkian 2200-2398 **ECS Operations** 542 543 581 Mary Gevorkian 2200-2399 ECS Regulations & Training 428 429 459 A&G - HR, Disability, Workers Comp & Safety Total 1,660 1,700 1,818

Total SS

Total A&G

7,102

431,601

8,715

627,057

9,321

639,180

\$

Table KN-12 SOCALGAS TEST YEAR 2019

PIPELINE SAFETY ENHANCEMENT PROGRAM

(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Richard D. Phillips	2PS000	PIPELINE SAFETY ENHANCEMENT PROGRAM PSEP Total	4,956 4,956	83,156 83,156	87,917 87,917
		Total NSS	4,956	83,156	87,917
		Total SS	-	-	-
		Total PSEP	\$ 4,956	\$ 83,156	\$ 87,917

Table KN-13
SOCALGAS
Working Cash Adjustment to Rate Base (Net Working Cash Requirement)
(\$ in Thousands)

			2016 Recorded	
Line	Description	Expenses	Average No.	Dollar-Days
No.	<u> </u>	Ехропосо	of Days Lag	Lag
1	Commodities - Gas	956,791	41.58	39,783,388
2	Payroll Expense	597,759	13.05	7,799,671
3	F. I. C. A	43,071	12.38	533,422
4	Federal/State Unemployment Insurance	1,775	76.05	135,002
5	Incentive Compensation Plan	39,175	257.50	10,087,678
6	Employee Benefits	228,922	15.84	3,626,127
7	Goods & Services	586,584	34.00	19,943,864
8	Corporate Charges	97,389	21.15	2,060,194
9	Real Estate Rental	16,133	(21.28)	(343,308)
10	Materials Issued from Stores	12,954	0.00	0
11	Property/Ad Valorem/Franchise Taxes	257,358	87.06	22,405,603
12	Federal Income Taxes - Current	(745)	(255.20)	190,181
13	State Income Taxes - Current	41,807	(66.25)	(2,769,701)
14	Income Taxes Deferred	60,295	0.00	0
15	Depreciation Provision	463,398	0.00	0
16	Amortization of Insurance Premiums	30,108	0.00	0
17	Sub-total	2,475,985	25.71	63,668,734
18	Total Expenses Incl. Commodities	3,432,776	30.14	103,452,122
.0	Total Exponess mei. Commediae	0,102,110	00.11	100,102,122
19	Revenue Lag Days		44.49	
20	Expense Lag Days (Line 18, Dollar-Days Lag / Expenses)		30.14	
21	Excess Lag Days (Line 19 - Line 20)		14.35	
22	Total Expenses Incl. Commodities (Line 18 Expenses)		3,432,776	
23	Lead/Lag Working Capital (Line 21 * Line 22 / 365)		134,986	
24	Operational Cash Requirement		227,212	
25	Working Capital Not Supplied by Investors		(221,156)	
26	Working Cash Adjustment to Rate Base (Line 23 to Line 25)		141,043	
0	g cas agastinont to rate bass (Ento 20 to Ento 20)		111,010	

2019 Proposed							
Expenses	Average No.	Dollar-Days					
	of Days Lag	Lag					
980,961	41.58	40,788,366					
3,009,943	25.71	77,399,218					
3,990,904	29.61	118,187,585					
	44.49						
	29.61						
	14.88						
	3,990,904						
	162,644						
	243,003						
	(236,526)						
	169,122						

Table KN-14 SOCALGAS

Test Year 2019

Net-to-Gross Multiplier

			Test Year 2019	
Line No.	Description	Uncollectible and Franchise Fee Factor	State & Federal Tax Factor	Net-to-Gross Multiplier
1	Revenues	1.000000	1.000000	1.000000
2	Uncollectible Tax Rate	0.003160	0.000000	0.003160
3	Uncollectible Amount Applied	1.000000	1.000000	1.000000
4	Less: Uncollectible (Line 2 * Line 3)	0.003160	0.000000	0.003160
5	Subtotal (Line 3 - Line 4)	0.996840	1.000000	0.996840
6	Franchise Fees Tax Rate	0.013720	0.000000	0.013720
7	Franchise Fees Amount Applied (Line 5)	0.996840	1.000000	0.996840
8	Less: Franchise Fees (Line 6 * Line 7)	0.013677	0.000000	0.013677
9	Subtotal (Line 7 - Line 8)	0.983163	1.000000	0.983163
10	S.I.T. Rate		0.088400	0.088400
11	S.I.T. Amount Applied (Line 9)		1.000000	0.983163
12	Less: S.I.T. (Line 10 * Line 11)		0.088400	0.086912
13	Subtotal (Line 11 - Line 12)		0.911600	0.896252
14	F.I.T. Rate		0.210000	0.210000
15	F.I.T. Amount Applied (Line 13)		0.911600	0.896252
16	Less: F.I.T. (Line 14 * Line 15)		0.191436	0.188213
17	Net Operating Revenues (Line 15 - Line 16)		0.720164	0.708039
18	Uncollectible and Franchise Fee Factor (1 / Line 9)	1.017125		
19	State & Federal Tax Factor (1 / Line 17)		1.388573	
20	N-T-G Multiplier (1 / Line 17)			1.412352

APPENDIX B – COST CENTER TO FERC MAPPING

	% of Cost				% of Cost	
	Center				Center	
Cost Center	Forecast	FERC		Cost Center	Forecast	FERC
	Mapped to				Mapped to	
	FERC				FERC	
2AG001-000	100.00%	920.0		2EV001-002	100.00%	880.0
2AG001-000 2AG002-000	91.72%	920.0		2EV001-002 2EV001-003	15.00%	824.5
2AG002-000 2AG002-000	8.28%	920.0		2EV001-003	15.00%	859.5
2AG002-000 2AG003-000	100.00%	920.0		2EV001-003	70.00%	880.0
2AG003-000 2AG004-000	100.00%	920.0		2EV001-003	100.00%	880.0
2AG004-000 2AG005-000	6.11%	814.0		2FC001-000	92.24%	879.0
2AG005-000 2AG005-000	5.57%	870.0		2FC001-000	7.76%	903.1
2AG005-000	6.39%	870.6		2FC002-000	100.00%	879.0
2AG005-000	10.64%	870.7		2FC003-000	100.00%	880.3
2AG005-000	63.52%	920.0		2FC004-000	54.60%	870.5
2AG005-000	7.77%	921.0		2FC004-000	19.90%	870.6
2AG007-000	94.59%	920.0		2FC004-000	9.40%	879.3
2AG007-000	5.41%	921.0		2FC004-000	16.10%	880.4
2AG008-000	100.00%	928.0		2FC005-000	13.10%	879.0
2AG010-000	100.00%	925.0		2FC005-000	86.90%	893.2
2AG011-000	35.00%	832.0		2FC006-000	54.86%	902.0
2AG011-000	58.73%	920.0		2FC006-000	20.27%	902.1
2AG011-000	6.27%	921.0		2FC006-000	24.87%	902.3
2AG013-000	96.02%	920.0		2FC007-000	100.00%	902.1
2AG013-000	3.98%	921.0		2FC008-000	100.00%	902.5
2AM002-000	82.00%	902.0		2FC009-000	6.54%	879.0
2AM002-000	18.00%	910.0		2FC009-000	23.90%	902.0
2CP000-000	100.00%	920.4		2FC009-000	69.56%	902.5
2CP000-001	100.00%	920.1		2GD000-000	32.25%	870.7
2CP000-002	100.00%	920.0		2GD000-000	11.30%	880.3
2CP000-003	13.88%	870.6		2GD000-000	56.45%	880.4
2CP000-003	14.56%	870.7		2GD000-001	100.00%	874.1
2CP000-003	21.35%	903.1		2GD000-002	100.00%	874.3
2CP000-003	7.56%	921.0		2GD000-003	8.83%	874.4
2CP000-003	24.37%	926.2		2GD000-003	91.17%	887.0
2CP000-003	18.28%	930.2		2GD000-004	100.00%	892.0
2EN000-000	14.71%	814.0		2GD000-005	6.90%	184.6
2EN000-000	6.73%	824.5		2GD000-005	63.24%	184.7
2EN000-000	40.29%	850.0		2GD000-005	29.86%	892.4
2EN000-000	7.38%	870.0		2GD001-000	61.03%	870.7
2EN000-000	30.89%	935.6		2GD001-000	38.97%	880.4
2EN001-000	25.43%	920.0		2GD002-000	11.86%	870.7
2EN001-000	8.53%	921.0		2GD002-000	9.47%	875.0
2EN001-000	66.04%	931.6		2GD002-000	19.58%	880.1
2EN002-000	50.00%	814.0		2GD002-000	6.99%	880.4
2EN002-000	50.00%	850.0		2GD002-000 2GD002-000	18.55%	889.0
2EV000-000	6.30%	814.0			12.89%	892.0
2EV000-000	14.26%	880.0		2GD002-000	11.61%	893.1
2EV000-000 2EV000-000	24.39% 40.03%	880.5 920.0		2GD002-000 2GD003-000	9.05% 7.32%	893.5 870.7
2EV000-000 2EV000-000	9.35%	920.0		2GD003-000 2GD003-000	7.32% 10.56%	880.4
2EV000-000 2EV000-000	9.33% 5.67%	921.0		2GD003-000 2GD003-000	6.55%	887.0
2EV000-000 2EV001-001	46.98%	824.5		2GD003-000 2GD003-000	20.62%	887.1
2EV001-001	32.70%	859.5		2GD003-000 2GD003-000	54.95%	887.2
2EV001-001	20.32%	880.5		2GD003-000 2GD004-000	7.05%	184.7
v oo i=00 i	20.02/0	555.5		2000-000	1.0070	.57.1

			-			
	% of Cost				% of Cost	
	Center				Center	
Cost Center	Forecast	FERC		Cost Center	Forecast	FERC
	Mapped to				Mapped to	
	FERC				FERC	
2GD004-000	19.11%	859.0	•	2IT002-000	37.47%	920.0
2GD004-000	21.17%	870.0		2IT002-000	62.53%	921.0
2GD004-000	40.73%	870.7		2IT003-000	54.95%	920.0
2GD004-000	11.94%	920.0		2IT003-000	45.05%	921.0
2GD005-000	82.68%	920.5		2MP001-000	30.00%	814.0
2GD005-000	17.32%	921.5		2MP001-000	60.00%	850.0
2GS000-000	94.50%	814.0		2MP001-000	10.00%	921.0
2GS000-000	5.17%	824.0		2MP002-000	7.33%	814.0
2GS000-000	0.33%	921.0		2MP002-000	42.06%	850.0
2GS001-000	35.59%	832.0		2MP002-000	35.19%	856.0
2GS001-000	1.93%	921.0		2MP002-000	7.07%	863.0
2GS001-000	62.48%	925.1		2MP002-000	8.35%	921.0
2GT000-000	46.31%	856.0		2MP003-000	60.04%	850.0
2GT000-000	11.60%	857.0		2MP003-000	20.23%	870.0
2GT000-000 2GT000-000	30.51%	860.0		2MP003-000 2OO000-000	19.73%	870.7
2GT000-000 2GT001-000	11.58% 5.55%	863.0 850.0		200001-000	100.00% 100.00%	903.1 903.1
2GT001-000 2GT001-000	27.03%	853.0		200001-000	100.00%	903.1
2GT001-000 2GT001-000	67.42%	864.0		200002-000	100.00%	903.1
2GT001-000 2GT002-000	35.90%	850.0		200003-000	100.00%	903.1
2GT002-000 2GT002-000	5.48%	859.0		200004-000	100.00%	903.7
2GT002-000	58.62%	863.0		200005-000	91.40%	903.3
2HR001-000	44.52%	920.0		200005-000	8.60%	903.4
2HR001-000	18.26%	920.2		200005-001	100.00%	903.7
2HR001-000	8.49%	921.0		200006-000	91.04%	903.1
2HR001-000	28.73%	930.2		200006-000	8.96%	920.0
2HR002-000	93.22%	920.2		200007-000	89.77%	902.2
2HR002-000	6.78%	921.0		200007-000	10.23%	903.3
2HR003-000	90.00%	920.0		2PB000-000	100.00%	926.3
2HR003-000	10.00%	921.0		2PB000-001	100.00%	926.3
2HR004-000	56.53%	920.2		2PB000-002	100.00%	926.3
2HR004-000	7.02%	921.0		2PB000-003	100.00%	926.3
2HR004-000	20.70%	925.0		2PB000-004	100.00%	926.3
2HR004-000	15.75%	926.0		2PB000-005	100.00%	926.3
2HR005-000	15.26%	920.0		2PB000-006	100.00%	926.3
2HR005-000	72.23%	920.2		2PB000-007	100.00%	926.3
2HR005-000	12.51%	921.0		2PB000-008	100.00%	926.3
2HR006-000	14.25%	923.0		2PB000-009	100.00%	926.4
2HR006-000 2HR006-001	85.75%	925.1		2PB000-010	100.00%	926.4
2HR006-001	75.39% 24.61%	925.1 926.0		2PB000-011 2PB000-012	100.00% 100.00%	926.4 926.5
2HR007-000	7.15%	920.0		2PB000-012 2PB000-013	100.00%	926.5
2HR007-000	75.30%	920.0		2PB000-014	100.00%	926.0
2HR007-000 2HR007-000	17.55%	920.2		2PB000-015	100.00%	926.5
2IN007-000 2IN001-000	100.00%	908.0		2PB000-016	100.00%	926.0
2IN001-000 2IN002-000	100.00%	908.0		2PB000-017	100.00%	926.0
2IN004-000	100.00%	908.0		2PB000-018	100.00%	926.0
2IT001-000	57.14%	903.0		2PN000-000	100.00%	926.1
2IT001-000	13.57%	920.0		2PN000-001	100.00%	926.2
2IT001-000	29.29%	921.0		2PS000-000	100.00%	863.0

	% of Cost				% of Cost	
	Center				Center	
Cost Center	Forecast	FERC		Cost Center	Forecast	FERC
	Mapped to				Mapped to	
	FERC				FERC	
2PS000-001	100.00%	863.0		2TD000-000	54.52%	863.7
2RD001-000	100.00%	188.0		2TD000-000	14.13%	887.7
2RD001-000 2RD002-000	84.00%	920.0		2TD000-000	15.01%	870.7
2RD002-000 2RD002-000	16.00%	921.0		2TD000-001	7.03%	880.7
2RE001-000	100.00%	931.6		2TD000-001	77.96%	892.7
2RE002-000	86.15%	920.0		2US000-001	15.64%	814.0
2RE002-000	13.85%	921.0		2US000-000	12.28%	816.0
2RF001-000	100.00%	920.0		2US000-000	0.79%	816.7
2RF002-000	100.00%	184.2		2US000-000	6.39%	816.8
2RF002-001	100.00%	184.2		2US000-000	0.76%	817.0
2RF003-000	100.00%	184.2		2US000-000	6.81%	818.0
2RF003-001	100.00%	184.2		2US000-000	1.68%	821.0
2RF003-002	100.00%	184.2		2US000-000	8.92%	824.0
2RF003-003	100.00%	184.2		2US000-000	3.21%	824.5
2RF003-004	100.00%	184.2		2US000-000	1.80%	825.0
2RF004-000	5.52%	921.0		2US000-000	0.52%	826.0
2RF004-000	5.99%	921.6		2US000-000	5.07%	831.0
2RF004-000	88.49%	935.6		2US000-000	9.11%	832.0
2SE000-001	100.00%	923.1		2US000-000	5.34%	833.0
2SE000-002	100.00%	923.4		2US000-000	13.09%	834.0
2SI001-000	100.00%	930.2		2US000-000	2.40%	835.0
2SI002-000	1.68%	832.0		2US000-000	1.92%	836.0
2SI002-000	2.76%	870.0		2US000-000	4.27%	837.0
2SI002-000	1.17%	909.0		2US001-000	100.00%	814.0
2SI002-000	88.21%	920.0		2US002-000	100.00%	832.0
2SI002-000	2.13%	921.0	2	200-0225-000	100.00%	920.0
2SI002-000	4.05%	930.2	2	200-0234-000	100.00%	910.0
2SI003-000	100.00%	909.0	2	200-0246-000	86.73%	907.0
2SI004-000	100.00%	930.2	2	200-0246-000	13.27%	908.0
2SI005-000	100.00%	930.2	2	200-0253-000	100.00%	850.0
2SN000-000	100.00%	924.0		200-0265-000	86.71%	850.0
2SN000-002	100.00%	925.0		200-0265-000	5.66%	856.0
2SN000-003	100.00%	925.1		200-0265-000	7.63%	921.0
2SN000-004	100.00%	925.3		200-0300-000	100.00%	850.0
2SN000-006	100.00%	930.2		200-0302-000	70.10%	850.0
2SP000-000	100.00%	807.5		200-0302-000	29.90%	870.0
2SS001-000	70.79%	163.1		200-0303-000	20.86%	814.0
2SS001-000	29.21%	163.2		200-0303-000	25.56%	850.0
2SS002-000	13.49%	878.1		200-0303-000	40.53%	870.0
2SS002-000	79.75%	893.2		200-0303-000	13.05%	921.3
2SS002-000	6.76%	930.2		200-0305-000	8.78%	814.0
2SS003-000	73.31%	184.3		200-0305-000	26.33%	850.0
2SS003-000	26.69%	184.7		200-0305-000	23.39%	870.0
2SS004-000	100.00%	163.2		200-0305-000	5.31%	921.0
2SS005-000	100.00%	163.2		200-0305-000	36.19%	930.2
2SS006-000	100.00%	921.0		200-0306-000	22.57%	814.0
2SS007-000	100.00%	163.2		200-0306-000	30.29%	850.0
2SS008-000	62.80%	920.2		200-0306-000	29.58%	870.0
2SS008-000	37.20%	921.0		200-0306-000	17.56%	880.2
2TD000-000	31.35%	850.7	2	200-0308-000	16.28%	850.0

			1			
	% of Cost				% of Cost	
040	Center	EED0		0	Center	FFDO
Cost Center	Forecast	FERC		Cost Center	Forecast	FERC
	Mapped to				Mapped to	
0000 0000 000	FERC	070.0		2222 1172 222	FERC	270.0
2200-0308-000	64.19%	870.0		2200-1178-000	36.88%	870.0
2200-0308-000	8.68%	921.0		2200-1334-000	100.00%	920.0
2200-0308-000 2200-0309-000	10.85%	921.3		2200-2012-000	10.00%	832.0
2200-0309-000	25.68% 36.56%	850.0 870.6		2200-2012-000 2200-2018-000	90.00% 100.00%	920.0 184.2
2200-0309-000	28.39%	893.2		2200-2016-000	100.00%	870.7
2200-0309-000	9.37%	935.6		2200-2023-000	100.00%	920.0
2200-0309-000	7.82%	814.0		2200-2047-000	100.00%	928.0
2200-0310-000	57.99%	850.0		2200-2075-000	100.00%	920.0
2200-0310-000	34.19%	870.6		2200-2144-000	100.00%	870.7
2200-0311-000	19.98%	850.0		2200-2148-000	100.00%	184.2
2200-0311-000	80.02%	870.6		2200-2158-000	100.00%	851.0
2200-0312-000	10.88%	850.0		2200-2172-000	100.00%	850.0
2200-0312-000	80.97%	870.6		2200-2176-000	12.77%	832.0
2200-0312-000	8.15%	935.6		2200-2176-000	31.35%	920.0
2200-0318-000	41.39%	814.0		2200-2176-000	55.88%	923.0
2200-0318-000	28.79%	850.0		2200-2186-000	34.63%	920.0
2200-0318-000	10.93%	870.0		2200-2186-000	65.37%	923.0
2200-0318-000	18.89%	870.7		2200-2229-000	56.00%	920.0
2200-0320-000	37.78%	850.0		2200-2229-000	44.00%	921.0
2200-0320-000	62.22%	870.0		2200-2247-000	9.79%	903.3
2200-0320-001	40.00%	850.0		2200-2247-000	90.21%	903.4
2200-0320-001	60.00%	870.0		2200-2248-000	100.00%	870.6
2200-0321-000	57.91%	814.0		2200-2284-000	100.00%	931.6
2200-0321-000	33.25%	850.0		2200-2286-000	100.00%	908.0
2200-0321-000	8.84%	921.0		2200-2288-000	100.00%	908.0
2200-0322-000	8.27%	814.0		2200-2289-000	100.00%	851.0
2200-0322-000	53.32%	850.0		2200-2305-000	100.00%	928.0
2200-0322-000	38.41%	870.0		2200-2307-000	100.00%	928.0
2200-0323-000	26.09%	814.0		2200-2308-000	100.00% 27.03%	928.0
2200-0323-000 2200-0328-000	73.91% 86.83%	870.0 850.0		2200-2329-000 2200-2329-000	27.03% 72.97%	814.0 850.0
2200-0328-000	13.17%	908.0		2200-2329-000	72.97% 72.20%	920.2
2200-0320-000	45.21%	814.0		2200-2337-000	27.80%	920.2
2200-0330-000	54.79%	850.0		2200-2344-000	80.57%	870.7
2200-0350-000	100.00%	903.1		2200-2344-000	7.69%	921.0
2200-0355-000	100.00%	903.4		2200-2344-000	11.74%	930.2
2200-0431-000	23.29%	870.0		2200-2345-000	100.00%	870.7
2200-0431-000	62.11%	920.0		2200-2360-000	100.00%	870.7
2200-0431-000	14.60%	920.2		2200-2372-000	100.00%	920.0
2200-0618-000	100.00%	931.6		2200-2376-000	100.00%	870.7
2200-0696-000	100.00%	935.6		2200-2377-000	100.00%	870.0
2200-0735-000	100.00%	935.6		2200-2396-000	100.00%	908.0
2200-0799-000	32.81%	893.2		2200-2397-000	70.55%	925.0
2200-0799-000	5.59%	930.2		2200-2397-000	29.45%	926.0
2200-0799-000	61.60%	935.6		2200-2398-000	70.74%	925.0
2200-0942-000	100.00%	870.6		2200-2398-000	29.26%	926.0
2200-1178-000	8.10%	814.0		2200-2399-000	24.23%	920.2
2200-1178-000	46.70%	850.0		2200-2399-000	53.67%	925.0
2200-1178-000	8.32%	859.5		2200-2399-000	22.10%	926.0

	% of Cost			% of Cost	
	Center			Center	
Cost Center	Forecast	FERC	Cost Center	Forecast	FERC
	Mapped to			Mapped to	
	FERC			FERC	
2200-2406-000	59.69%	920.0	2200-2554-000	8.77%	923.0
2200-2406-000	40.31%	920.0	2200-2554-000	17.38%	908.0
2200-2400-000	100.00%	909.0	2200-2560-000	82.62%	910.0
2200-2417-000	100.00%	920.0	2200-2562-000	93.09%	920.0
2200-2416-000	73.46%	920.0	2200-2562-000	6.91%	920.0
2200-2444-000	26.54%	920.0	2200-2565-000	94.72%	920.0
2200-2445-000	93.83%	920.0	2200-2565-000	5.28%	920.0
2200-2445-000	6.17%	920.0	2200-2503-000	100.00%	163.2
2200-2446-000	92.68%	920.0	2200-2575-000	87.22%	920.0
2200-2446-000	7.32%	921.0	2200-2575-000	5.34%	921.0
2200-2447-000	100.00%	920.0	2200-2575-000	7.44%	930.2
2200-2451-000	100.00%	903.0	2200-2575-000	49.08%	920.0
2200-2451-000	100.00%	920.0	2200-2594-000	50.92%	920.0
2200-2455-000	100.00%	920.0	2200-2596-000	100.00%	920.0
2200-2458-000	53.09%	920.0	2200-2390-000	100.00%	863.7
2200-2458-000	46.91%	921.0	2200-7000-000	100.00%	892.7
2200-2462-000	100.00%	928.0	2200-7001-000	100.00%	870.7
2200-2463-000	100.00%	921.0	2200-7242-000	100.00%	923.0
2200-2464-000	100.00%	920.0	2200-8904-000	100.00%	923.0
2200-2466-000	77.86%	920.0	2200-8909-000	100.00%	923.0
2200-2466-000	22.14%	921.0	2200-8909-000	100.00%	923.0
2200-2467-000	100.00%	920.0	2200-8910-000	50.82%	910.0
2200-2469-000	42.67%	920.0	2200-8910-000	49.18%	928.0
2200-2469-000	57.33%	921.0	2200-8910-000	50.82%	910.0
2200-2470-000	78.72%	920.0	2200-8910-000	49.18%	928.0
2200-2470-000	21.28%	921.0	2200-8918-000	5.00%	832.0
2200-2473-000	100.00%	925.1	2200-8918-000	95.00%	923.0
2200-2487-000	28.65%	814.0	2200-8918-000	5.00%	832.0
2200-2487-000	71.35%	850.0	2200-8918-000	95.00%	923.0
2200-2489-000	50.00%	908.0	2200-8919-000	0.29%	879.1
2200-2489-000	50.00%	920.0	2200-8919-000	0.38%	902.0
2200-2490-000	100.00%	920.0	2200-8919-000	6.92%	923.0
2200-2493-000	11.45%	892.0	2200-8919-000	13.99%	935.0
2200-2493-000	40.81%	920.0	2200-8919-000	78.42%	935.1
2200-2493-000	47.74%	921.0	2200-8919-000	0.29%	879.1
2200-2494-000	56.52%	920.0	2200-8919-000	0.38%	902.0
2200-2494-000	43.48%	921.0	2200-8919-000	6.92%	923.0
2200-2495-000	100.00%	921.0	2200-8919-000	13.99%	935.0
2200-2496-000	100.00%	920.0	2200-8919-000	78.42%	935.1
2200-2503-000	59.49%	920.0	2200-8921-000	100.00%	870.1
2200-2503-000	40.51%	921.0	2200-8921-000	100.00%	870.1
2200-2504-000	100.00%	920.0	2200-8925-000	0.48%	903.0
2200-2505-000	92.00%	920.0	2200-8925-000	99.42%	923.0
2200-2505-000	8.00%	921.0	2200-8925-000	0.10%	930.2
2200-2547-000	94.43%	920.0	2200-8925-000	0.48%	903.0
2200-2547-000	5.57%	921.0	2200-8925-000	99.42%	923.0
2200-2551-000	46.66%	850.0	2200-8925-000	0.10%	930.2
2200-2551-000	53.34%	870.0	2200-8926-000	100.00%	184.2
2200-2554-000	49.89%	920.0	2200-8926-000	100.00%	184.2
2200-2554-000	41.34%	921.0	2200-8927-000	90.70%	163.2

Cost Center	% of Cost Center Forecast Mapped to FERC	FERC
2200-8927-000	0.59%	879.1
2200-8927-000	8.71%	923.0
2200-8927-000	90.70%	163.2
2200-8927-000	0.59%	879.1
2200-8927-000	8.71%	923.0
2200-8929-000	0.29%	903.3
2200-8929-000	4.30%	908.0
2200-8929-000	50.80%	923.0
2200-8929-000	44.61%	928.0
2200-8929-000	0.29%	903.3
2200-8929-000	4.30%	908.0
2200-8929-000	50.80%	923.0
2200-8929-000	44.61%	928.0
2200-8937-000	100.00%	923.0
2200-8937-000	100.00%	923.0
2200-BUCU-DXX	100.00%	923.2
2200-BUCU-OHX	100.00%	923.2

APPENDIX C – REVENUE REQUIREMENT INCREASE RECONCILIATION
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Revenue Requirement Increase Reconciliation (Millions of \$)

2018 2019

	2010	2010	2019 Increase	
	Present Rates	Proposed Rates	over 2018	% Increase
Application ¹	2,509	2,989	480	19.1%
Revised Testimony ¹	2,509	2,989	480	19.1%
PRR Testimony ²	2,456	2,989	533	21.7%
Second Revised Testimony (Tax Reform) ²	2,456	2,931	475	19.3%

Notes:

¹ Present rates reflect 2018 as-expected revenue requirement

² Present rates reflect 2018 authorized revenue requirement per Advice Letter 5202 (2018 Annual Regulatory Gas Account Balance Update for Rates)

SoCalGas 2019 GRC Testimony Revision Log – April 2018

Exhibit	Witness	Page	Line or Table	Revision Detail
SCG-43	Ryan Hom	Cover	N/A	Replaced "KHAI NGUYEN" with "RYAN HOM"
SCG-43	Ryan Hom	RH-ii	N/A	Replaced "2,989,477,000" with "2,930,792,000"
SCG-43	Ryan Hom	RH-1	1	Replaced "REVISED SOCALGAS DIRECT TESTIMONY OF KHAI NGUYEN" with "SOCALGAS SECOND REVISED DIRECT TESTIMONY OF RYAN HOM"
SCG-43	Ryan Hom	RH-1	4	Added "My testimony adopts the Summary of Earnings revised direct testimony of Khai Nguyen (Exhibit SCG-43-R) and further revises it herein in this second revised version."
SCG-43	Ryan Hom	RH-1	6	Removed "This exhibit reflects no change to the total SoCalGas TY 2019 revenue requirement submitted with the initial Application. SoCalGas has incorporated into testimony and workpapers a number of corrections and revisions that were not feasible to submit in time with the initial Application, or were identified after the Application's submission. These changes would have resulted in a net increase in the overall revenue requirement. However, SoCalGas has decided to maintain the same revenue requirement as the initial Application by including an offsetting adjustment (-\$1.387 million) to workgroup 2AG008-000 (Administrative and General)."
				Added "Pursuant to the Assigned Commissioner's Scoping Memorandum and Ruling issued on January 29, 2018 (Scoping Memo), this exhibit has been revised to reflect the impact of the Tax Cuts and Jobs Act (TCJA) on the SoCalGas TY 2019 General Rate Case. The TCJA was signed into federal law on December 22, 2017 and is discussed in the testimony of the Taxes witness Ragan Reeves (Exhibit SCG-37-2R), served concurrently with this exhibit. A roadmap of this TCJA-related submission and impacts on other witnesses' areas is provided in the Case Management Exhibit SCG-49/SDG&E-49. Incorporating the
SCG-43	Ryan Hom	RH-1	6	result of these changes into SoCalGas'

				revenue requirement request results in a net decrease in the overall revenue requirement of \$58.685M."
SCG-43	Ryan Hom	RH-1	14	Added Footnote 1 regarding Appendix C"
				Added Table 1 – Summary of GRC Revenue
SCG-43	Ryan Hom	RH-1	15	Requirement Changes
				Replaced "2,989,477,000" with
SCG-43	Ryan Hom	RH-1	17	"2,930,792,000"
				Replaced "August 1, 2017" with "January
SCG-43	Ryan Hom	RH-2	1	1, 2018"
				Updated references to other witnesses'
SCG-43	Ryan Hom	Various	Various	second revised testimonies (-2R).
SCG-43	Ryan Hom	RH-6	2	Replaced "Khai Nguyen" with "Ryan Hom"
				Replaced Khai Nguyen's witness
				qualifications with Ryan Hom's witness
SCG-43	Ryan Hom	RH-6	6	qualifications
				Replaced SOE Tables KN-1, KN-2, KN-11,
SCG-43	Ryan Hom	Appendix A	N/A	KN-13 and KN-14
SCG-43	Ryan Hom	RH-C-1	N/A	Added Appendix C