

Application of SOUTHERN CALIFORNIA GAS )  
COMPANY for authority to update its gas revenue )  
requirement and base rates )  
effective January 1, 2024 (U 904-G) )

Application No. 22-05-015

Exhibit No.: (SCG-04-WP-R)

REVISED WORKPAPERS TO  
PREPARED DIRECT TESTIMONY  
OF MARIO A. AGUIRRE  
ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA

AUGUST 2022



**2024 General Rate Case - REVISED  
INDEX OF WORKPAPERS**

**Exhibit SCG-04-WP-R - GAS DISTRIBUTION**

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**Overall Summary For Exhibit No. SCG-04-WP-R**

<b>Area:</b>	<b>GAS DISTRIBUTION</b>
<b>Witness:</b>	<b>Mario A. Aguirre</b>

Description	In 2021 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
<b>Non-Shared Services</b>	170,896	169,189	164,811	168,017
<b>Shared Services</b>	410	410	410	410
<b>Total</b>	<b>171,306</b>	<b>169,599</b>	<b>165,221</b>	<b>168,427</b>

*Note: Totals may include rounding differences.*

Southern California Gas Company  
 2024 GRC - REVISED  
 Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre

**Summary of Non-Shared Services Workpapers:**

Description	In 2021 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
A. Field Operations and Maintenance	143,027	140,091	134,543	136,577
B. Asset Management	13,119	14,068	14,879	15,691
C. Operations and Management	10,768	10,923	11,282	11,642
D. Regional Public Affairs	3,982	4,107	4,107	4,107
<b>Total</b>	<b>170,896</b>	<b>169,189</b>	<b>164,811</b>	<b>168,017</b>

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Workpaper: VARIOUS

**Summary for Category: A. Field Operations and Maintenance**

	In 2021\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Labor	86,218	83,448	81,291	82,568
Non-Labor	56,806	56,640	53,252	54,009
NSE	0	0	0	0
<b>Total</b>	<b>143,024</b>	<b>140,088</b>	<b>134,543</b>	<b>136,577</b>
FTE	817.4	792.9	793.4	814.9

**Workpapers belonging to this Category:**

**2GD000.000 Field Support**

Labor	14,396	15,146	16,531	16,984
Non-Labor	4,005	4,430	4,820	5,210
NSE	0	0	0	0
<b>Total</b>	<b>18,401</b>	<b>19,576</b>	<b>21,351</b>	<b>22,194</b>
FTE	146.8	156.8	174.0	182.5

**2GD001.000 Leak Survey**

Labor	10,422	7,522	7,522	7,522
Non-Labor	26	26	26	26
NSE	0	0	0	0
<b>Total</b>	<b>10,448</b>	<b>7,548</b>	<b>7,548</b>	<b>7,548</b>
FTE	103.9	75.0	75.0	75.0

**2GD002.000 R - Locate & Mark**

Labor	18,809	19,442	20,159	20,877
Non-Labor	283	351	388	425
NSE	0	0	0	0
<b>Total</b>	<b>19,092</b>	<b>19,793</b>	<b>20,547</b>	<b>21,302</b>
FTE	189.1	195.2	202.1	209.1

**2GD003.000 Main Maintenance**

Labor	2,727	1,477	1,477	1,477
Non-Labor	12,635	12,251	8,273	7,480
NSE	0	0	0	0
<b>Total</b>	<b>15,362</b>	<b>13,728</b>	<b>9,750</b>	<b>8,957</b>
FTE	27.1	14.7	14.7	14.7

**2GD004.000 Service Maintenance**

Labor	4,226	4,452	4,452	4,452
Non-Labor	1,563	552	552	552
NSE	0	0	0	0
<b>Total</b>	<b>5,789</b>	<b>5,004</b>	<b>5,004</b>	<b>5,004</b>
FTE	42.8	44.0	44.0	44.0

Note: Totals may include rounding differences.

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Workpaper: VARIOUS

	In 2021\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
<b>2GD005.000 Tools Fittings &amp; Materials</b>				
Labor	6	18	21	23
Non-Labor	20,549	22,010	23,358	24,705
NSE	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total</b>	<b>20,555</b>	<b>22,028</b>	<b>23,379</b>	<b>24,728</b>
FTE	0.0	0.1	0.1	0.1
<b>2GD006.000 Leakage</b>				
Labor	19,347	18,881	14,053	13,091
Non-Labor	6,290	5,563	4,362	4,123
NSE	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total</b>	<b>25,637</b>	<b>24,444</b>	<b>18,415</b>	<b>17,214</b>
FTE	152.0	149.1	120.2	115.8
<b>2GD007.000 Measurement &amp; Regulation</b>				
Labor	8,790	8,839	9,155	9,505
Non-Labor	1,612	1,614	1,630	1,645
NSE	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total</b>	<b>10,402</b>	<b>10,453</b>	<b>10,785</b>	<b>11,150</b>
FTE	81.0	81.5	84.4	87.6
<b>2GD008.000 Cathodic Protection</b>				
Labor	7,495	7,671	7,921	8,637
Non-Labor	9,843	9,843	9,843	9,843
NSE	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total</b>	<b>17,338</b>	<b>17,514</b>	<b>17,764</b>	<b>18,480</b>
FTE	74.7	76.5	78.9	86.1

Note: Totals may include rounding differences.

**Beginning of Workpaper**  
**2GD000.000 - Field Support**

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 1. Field Support  
 Workpaper: 2GD000.000 - Field Support

**Activity Description:**

Recorded to this work group are labor expenses for dispatch employees, and field employees' time attending meetings and skills training. Also included are non-labor expenses for office supplies, communication devices and materials, and other elements for field maintenance work. These labor and non-labor materials are necessary to support costs for completing field operations' maintenance and construction work.

**Forecast Explanations:**

**Labor - 3-YR Linear**

With projected increases in headcount in Gas Distribution there will be associated increases in training and meetings as well as additional needs for support functions such as Dispatch. Given these upward pressures, SoCalGas determined that a three-year (2019 through 2021) linear forecast best reflects future spending requirements for this workgroup. Using an average or base year forecasting method would not be appropriate for this work category as it would not provide sufficient funding for the level of work anticipated in the future. Therefore, a three-year linear forecast was used to calculate the labor requested for this group. Control Center Modernization (CCM) is a new activity that will begin during the forecast years. The Field Support workgroup will incur additional costs associated to the CCM project to account for additional training associated to the new program. These costs were incrementally added to the three-year linear forecast for the workpaper.

**Non-Labor - 3-YR Linear**

With projected increases in headcount in Gas Distribution there will be associated increases in training and meetings as well as additional needs for support functions such as Dispatch. Given these upward pressures, SoCalGas determined that a three-year (2019 through 2021) linear forecast best reflects future spending requirements for this workgroup. Using an average or base year forecasting method would not be appropriate for this work category as it would not provide sufficient funding for the level of work anticipated in the future. Therefore, a three-year linear forecast was used to calculate the non-labor requested for this group.

**NSE - 3-YR Linear**

NSE is not applicable to this workgroup.

**Summary of Results:**

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		12,591	12,552	12,870	12,657	14,396	15,146	16,532	16,984	
Non-Labor		4,292	3,364	3,224	3,719	4,005	4,430	4,820	5,210	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>16,883</b>	<b>15,916</b>	<b>16,094</b>	<b>16,377</b>	<b>18,401</b>	<b>19,576</b>	<b>21,352</b>	<b>22,194</b>	
FTE		127.3	109.0	123.9	122.3	146.8	156.8	174.0	182.5	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 1. Field Support  
 Workpaper: 2GD000.000 - Field Support

**Summary of Adjustments to Forecast:**

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	3-YR Linear	14,835	15,598	16,362	311	933	622	15,146	16,531	16,984
Non-Labor	3-YR Linear	4,430	4,820	5,210	0	0	0	4,430	4,820	5,210
NSE	3-YR Linear	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>19,265</b>	<b>20,418</b>	<b>21,572</b>	<b>311</b>	<b>933</b>	<b>622</b>	<b>19,576</b>	<b>21,351</b>	<b>22,194</b>
FTE	3-YR Linear	153.9	165.4	176.8	2.9	8.6	5.7	156.8	174.0	182.5

**Forecast Adjustment Details:**

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	259	0	0	259	2.7	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C01 Locate and Mark Training (MP).					
2022	20	0	0	20	0.2	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C02 Locate and Mark Training (HP).					
2022	32	0	0	32	0.3	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C05 Locate and Mark Annual Refresher Training and Competency Program (MP).					
2022	2	0	0	2	0.1	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C06 Locate and Mark Annual Refresher Training and Competency Program (HP).					
2022	341	0	0	341	3.5	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C27 Company Excavator Training (MP).					
2022	26	0	0	26	0.3	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C28 Company Excavator Training (HP).					
2022	-259	0	0	-259	-2.7	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C01 Locate and Mark Training (MP).					
2022	-20	0	0	-20	-0.2	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C02 Locate and Mark Training (HP).					
2022	-32	0	0	-32	-0.3	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C05 Locate and Mark Annual Refresher Training and Competency Program (MP).					

Note: Totals may include rounding differences.

SCG/GAS DISTRIBUTION/Exh No:SCG-04-WP-R/Witness: M. Aguirre

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 1. Field Support  
 Workpaper: 2GD000.000 - Field Support

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2022	-2	0	0	-2	-0.1	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C06 Locate and Mark Annual Refresher Training and Competency Program (HP).					
2022	-341	0	0	-341	-3.5	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C27 Company Excavator Training (MP).					
2022	-26	0	0	-26	-0.3	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C28 Company Excavator Training (HP).					
2022	111	0	0	111	1.2	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 5 Incident Involving an Employee, C06 Personal Protection Equipment (PPE).					
2022	-111	0	0	-111	-1.2	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 5 Incident Involving an Employee, C06 Personal Protection Equipment (PPE).					
2022	311	0	0	311	2.9	1-Sided Adj
<b>Explanation:</b>	Adjustment to show incremental costs to account for the incremental training associated to the new Control Center Modernization project.					
<b>2022 Total</b>	<b>311</b>	<b>0</b>	<b>0</b>	<b>311</b>	<b>2.9</b>	
2023	279	0	0	279	3.0	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C01 Locate and Mark Training (MP).					
2023	21	0	0	21	0.2	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C02 Locate and Mark Training (HP).					
2023	32	0	0	32	0.3	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C05 Locate and Mark Annual Refresher Training and Competency Program (MP).					
2023	2	0	0	2	0.1	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C06 Locate and Mark Annual Refresher Training and Competency Program (HP).					
2023	341	0	0	341	3.6	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C27 Company Excavator Training (MP).					
2023	26	0	0	26	0.3	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C28 Company Excavator Training (HP).					

Note: Totals may include rounding differences.

SCG/GAS DISTRIBUTION/Exh No:SCG-04-WP-R/Witness: M. Aguirre

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 1. Field Support  
 Workpaper: 2GD000.000 - Field Support

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj_Type</u>
2023	-279	0	0	-279	-3.0	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C01 Locate and Mark Training (MP).					
2023	-21	0	0	-21	-0.2	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C02 Locate and Mark Training (HP).					
2023	-32	0	0	-32	-0.3	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C05 Locate and Mark Annual Refresher Training and Competency Program (MP).					
2023	-2	0	0	-2	-0.1	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C06 Locate and Mark Annual Refresher Training and Competency Program (HP).					
2023	-341	0	0	-341	-3.6	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C27 Company Excavator Training (MP).					
2023	-26	0	0	-26	-0.3	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C28 Company Excavator Training (HP).					
2023	111	0	0	111	1.2	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 5 Incident Involving an Employee, C06 Personal Protection Equipment (PPE).					
2023	-111	0	0	-111	-1.2	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 5 Incident Involving an Employee, C06 Personal Protection Equipment (PPE).					
2023	933	0	0	933	8.6	1-Sided Adj
<b>Explanation:</b>	Adjustment to show incremental costs to account for the incremental training associated to the new Control Center Modernization project.					
<b>2023 Total</b>	<b>933</b>	<b>0</b>	<b>0</b>	<b>933</b>	<b>8.6</b>	
2024	299	0	0	299	3.2	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C01 Locate and Mark Training (MP).					
2024	22	0	0	22	0.2	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C02 Locate and Mark Training (HP).					
2024	32	0	0	32	0.3	1-Sided Adj

Note: Totals may include rounding differences.

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Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 1. Field Support  
 Workpaper: 2GD000.000 - Field Support

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj_Type</u>
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C05 Locate and Mark Annual Refresher Training and Competency Program (MP).					
2024	2	0	0	2	0.1	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C06 Locate and Mark Annual Refresher Training and Competency Program (HP).					
2024	341	0	0	341	3.7	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C27 Company Excavator Training (MP).					
2024	26	0	0	26	0.3	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C28 Company Excavator Training (HP).					
2024	-299	0	0	-299	-3.2	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C01 Locate and Mark Training (MP).					
2024	-22	0	0	-22	-0.2	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C02 Locate and Mark Training (HP).					
2024	-32	0	0	-32	-0.3	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C05 Locate and Mark Annual Refresher Training and Competency Program (MP).					
2024	-2	0	0	-2	-0.1	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C06 Locate and Mark Annual Refresher Training and Competency Program (HP).					
2024	-341	0	0	-341	-3.7	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C27 Company Excavator Training (MP).					
2024	-26	0	0	-26	-0.3	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C28 Company Excavator Training (HP).					
2024	111	0	0	111	1.2	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 5 Incident Involving an Employee, C06 Personal Protection Equipment (PPE).					
2024	-111	0	0	-111	-1.2	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 5 Incident Involving an Employee, C06 Personal Protection Equipment (PPE).					
2024	622	0	0	622	5.7	1-Sided Adj

Note: Totals may include rounding differences.

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Southern California Gas Company  
 2024 GRC - REVISED  
 Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 1. Field Support  
 Workpaper: 2GD000.000 - Field Support

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj_Type</u>
<b>Explanation:</b>	Adjustment to show incremental costs to account for the incremental training associated to the new Control Center Modernization project.					
<b>2024 Total</b>	<b>622</b>	<b>0</b>	<b>0</b>	<b>622</b>	<b>5.7</b>	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 1. Field Support  
Workpaper: 2GD000.000 - Field Support

**Determination of Adjusted-Recorded (Incurred Costs):**

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	9,673	9,950	10,246	11,420	12,237
Non-Labor	3,820	3,110	2,980	4,238	5,151
NSE	0	0	0	0	0
<b>Total</b>	<b>13,493</b>	<b>13,059</b>	<b>13,225</b>	<b>15,658</b>	<b>17,388</b>
FTE	108.2	93.2	104.0	102.5	123.4
<b>Adjustments (Nominal \$) **</b>					
Labor	-19	-83	-2	-970	0
Non-Labor	-6	-25	28	-783	-1,146
NSE	0	0	0	0	0
<b>Total</b>	<b>-25</b>	<b>-108</b>	<b>26</b>	<b>-1,753</b>	<b>-1,146</b>
FTE	-0.1	-0.6	-0.1	-0.2	0.0
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	9,654	9,867	10,244	10,450	12,237
Non-Labor	3,814	3,084	3,008	3,455	4,005
NSE	0	0	0	0	0
<b>Total</b>	<b>13,468</b>	<b>12,951</b>	<b>13,251</b>	<b>13,905</b>	<b>16,241</b>
FTE	108.1	92.5	103.8	102.3	123.5
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	1,636	1,698	1,942	1,841	2,160
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>1,636</b>	<b>1,698</b>	<b>1,942</b>	<b>1,841</b>	<b>2,160</b>
FTE	19.2	16.5	20.1	20.0	23.3
<b>Escalation to 2021\$</b>					
Labor	1,301	987	683	366	0
Non-Labor	478	280	217	264	0
NSE	0	0	0	0	0
<b>Total</b>	<b>1,779</b>	<b>1,266</b>	<b>900</b>	<b>630</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2021\$)</b>					
Labor	12,591	12,552	12,870	12,657	14,396
Non-Labor	4,292	3,364	3,224	3,719	4,005
NSE	0	0	0	0	0
<b>Total</b>	<b>16,883</b>	<b>15,916</b>	<b>16,094</b>	<b>16,377</b>	<b>18,401</b>
FTE	127.3	109.0	123.9	122.3	146.8

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 1. Field Support  
Workpaper: 2GD000.000 - Field Support

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	-19	-83	-2	-970	0
Non-Labor	-6	-25	28	-783	-1,146
NSE	0	0	0	0	0
<b>Total</b>	<b>-25</b>	<b>-108</b>	<b>26</b>	<b>-1,753</b>	<b>-1,146</b>
FTE	-0.1	-0.6	-0.1	-0.2	0.0

**Detail of Adjustments to Recorded:**

Year	Labor	NLbr	NSE	FTE	Adj Type
2017	-19	-6	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2017 Total</b>	<b>-19</b>	<b>-6</b>	<b>0</b>	<b>-0.1</b>	
2018	-83	-17	0	-0.6	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2018	0	0	0	0.0	CCTR Transf From 2200-0450.000
<b>Explanation:</b>	Adjusting NL charge from Locate and Mark Workpaper to Field Support Workpaper where costs are recorded. This is a follow up to a previous adjustment made by the Facilities witness to Gas Distribution.				
2018	0	-4	0	0.0	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2018	0	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2018	0	-7	0	0.0	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2018	0	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2018	0	3	0	0.0	CCTR Transf From 2200-0641.000
<b>Explanation:</b>	Transferring costs out of Chatsworth Facilities cost center for hotel charges related to employee training at Pico Rivera in 2018.				

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 1. Field Support  
 Workpaper: 2GD000.000 - Field Support

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
<b>2018 Total</b>	<b>-83</b>	<b>-25</b>	<b>0</b>	<b>-0.6</b>	
2019	-2	-3	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2019	0	31	0	0.0	CCTR Transf To 2200-8000.002
<b>Explanation:</b>	Adjustment to move credits associated to LTIP executive benefits from Gas Distribution to Corporate Center - Compensation & Benefits witness.				
<b>2019 Total</b>	<b>-2</b>	<b>28</b>	<b>0</b>	<b>-0.1</b>	
2020	0	0	0	0.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	-970	-783	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	0	0	0	-0.1	CCTR Transf To 2200-2011.001
<b>Explanation:</b>	Transfer costs to GOSI CC 2200-2011.001 related to SB1371 (BLP) Emissions Strategy Program				
2020	0	0	0	-0.1	CCTR Transf To 2200-2011.002
<b>Explanation:</b>	Transfer costs to GOSI CC 2200-2011.002 related to SB1371 (BLM) Emissions Strategy Program				
<b>2020 Total</b>	<b>-970</b>	<b>-783</b>	<b>0</b>	<b>-0.2</b>	
2021	0	-1,146	0	0.0	1-Sided Adj
<b>Explanation:</b>	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	0	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove non-GRC costs related to the SB1371 Emissions Strategy Program that are being recovered through a separate regulatory process.				
2021	0	-1	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding costs associated to dues. 2021: \$510				
<b>2021 Total</b>	<b>0</b>	<b>-1,146</b>	<b>0</b>	<b>0.0</b>	

Note: Totals may include rounding differences.

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 1. Field Support  
 Workpaper: 2GD000.000 - Field Support

**RAMP Item # 1**

**RAMP Activity**

RAMP Chapter: SCG-Risk-5 Incident Involving an Employee

RAMP Line Item ID: C06

RAMP Line Item Name: Personal Protection Equipment (PPE)

Tranche(/s): Tranche1: Non-Vehicle Incident

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	111	111	111	111	1,082	1,309

**Cost Estimate Changes from RAMP:**

2021 RAMP cost estimate was forecast for all field SCG work areas. Forecast represented here is exclusively Gas Distribution only.

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of employees supported - boot allowance	1,308.00	1,308.00	1,308.00	1,308.00	17.00	21.00

**Work Unit Changes from RAMP:**

2021 RAMP unit estimate was forecast for all field SCG work areas. Forecast represented here is exclusively Gas Distribution only.

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

**RSE Changes from RAMP:**

RSE was not calculated for this activity in both the 2021 RAMP Report and the GRC.

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 1. Field Support  
 Workpaper: 2GD000.000 - Field Support

**RAMP Item # 2**

**RAMP Activity**

RAMP Chapter: SCG-Risk-2 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: C01

RAMP Line Item Name: Locate & Mark Training (MP)

Tranche(/s): Tranche1: N/A

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	246	259	279	299	426	515

**Cost Estimate Changes from RAMP:**

Costs for this RAMP activity are split between multiple witness areas (Gas System Staff & Technology) and further split between O&M and Capital.

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of Hours - Training	4,995.00	5,400.00	5,939.00	6,478.00	6,363.00	7,702.00

**Work Unit Changes from RAMP:**

Units for this RAMP activity are split between O&M and Capital.

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

**RSE Changes from RAMP:**

RSE was not calculated for this activity in both the 2021 RAMP Report and the GRC.

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 1. Field Support  
 Workpaper: 2GD000.000 - Field Support

**RAMP Item # 3**

**RAMP Activity**

RAMP Chapter: SCG-Risk-2 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: C02

RAMP Line Item Name: Locate & Mark Training (HP)

Tranche(/s): Tranche1: N/A

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	19	20	21	22	36	43

**Cost Estimate Changes from RAMP:**

Costs for this RAMP activity are split between multiple witness areas (Gas System Staff & Technology and Gas Transmission Operations and Construction) and further split between O&M and Capital.

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of Hours - Training	375.00	406.00	447.00	488.00	543.00	657.00

**Work Unit Changes from RAMP:**

Units for this RAMP activity are split between O&M and Capital.

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

**RSE Changes from RAMP:**

RSE was not calculated for this activity in both the 2021 RAMP Report and the GRC.

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 1. Field Support  
 Workpaper: 2GD000.000 - Field Support

**RAMP Item # 4**

**RAMP Activity**

RAMP Chapter: SCG-Risk-2 Excavation Damage (Dig-In) on the Gas System  
 RAMP Line Item ID: C05  
 RAMP Line Item Name: Locate and Mark Annual Refresher Training and Competency Program (MP)  
 Tranche(/s): Tranche1: Overall

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	31	32	32	32	49	59

**Cost Estimate Changes from RAMP:**  
 Costs for this RAMP activity are split between O&M and Capital.

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of Hours - Training	575.00	609.00	631.00	653.00	863.00	1,044.00

**Work Unit Changes from RAMP:**  
 Units for this RAMP activity are split between O&M and Capital.

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	21.000	23.000

**RSE Changes from RAMP:**  
 General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology ,  
 as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex.  
 SCG-03/SDG&E-03, Chapter 2).

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 1. Field Support  
 Workpaper: 2GD000.000 - Field Support

**RAMP Item # 5**

**RAMP Activity**

RAMP Chapter: SCG-Risk-2 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: C06

RAMP Line Item Name: Locate and Mark Annual Refresher Training and Competency Program (HP)

Tranche(/s): Tranche1: Overall

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	2	2	2	2	14	16

**Cost Estimate Changes from RAMP:**

Costs for this RAMP activity are split between O&M and Capital.

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of Hours - Training	43.00	46.00	47.00	49.00	244.00	295.00

**Work Unit Changes from RAMP:**

Units for this RAMP activity are split between O&M and Capital.

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	53.000	121.000

**RSE Changes from RAMP:**

General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology, as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex. SCG-03/SDG&E-03, Chapter 2).

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 1. Field Support  
 Workpaper: 2GD000.000 - Field Support

**RAMP Item # 6**

**RAMP Activity**

RAMP Chapter: SCG-Risk-2 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: C27

RAMP Line Item Name: Company Excavator Training (MP)

Tranche(/s): Tranche1: N/A

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	341	341	341	341	321	411

**Cost Estimate Changes from RAMP:**

Costs for this RAMP activity are split between multiple witness areas (Gas System Staff & Technology) and further split between O&M and Capital.

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of Hours - Training	5,471.00	5,471.00	5,471.00	5,471.00	5,376.00	6,508.00

**Work Unit Changes from RAMP:**

Units for this RAMP activity are split between O&M and Capital.

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

**RSE Changes from RAMP:**

RSE was not calculated for this activity in both the 2021 RAMP Report and the GRC.

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 1. Field Support  
 Workpaper: 2GD000.000 - Field Support

**RAMP Item # 7**

**RAMP Activity**

RAMP Chapter: SCG-Risk-2 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: C28

RAMP Line Item Name: Company Excavator Training (HP)

Tranche(/s): Tranche1: N/A

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	26	26	26	26	36	47

**Cost Estimate Changes from RAMP:**

Costs for this RAMP activity are split between multiple witness areas (Gas System Staff & Technology and Gas Transmission Operations and Construction) and further split between O&M and Capital.

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of Hours - Training	412.00	412.00	412.00	412.00	620.00	750.00

**Work Unit Changes from RAMP:**

Units for this RAMP activity are split between O&M and Capital.

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

**RSE Changes from RAMP:**

RSE was not calculated for this activity in both the 2021 RAMP Report and the GRC.

**Beginning of Workpaper  
2GD001.000 - Leak Survey**

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 2. Leak Survey  
Workpaper: 2GD001.000 - Leak Survey

**Activity Description:**

Recorded to this workgroup are the labor and non-labor expenses associated with federal and state pipeline safety regulations, which require SoCalGas to survey its gas distribution system for leakage. SoCalGas pipelines are routinely leak surveyed at intervals of one or five years or multiple times per year. The frequency of this survey is determined by the pipe material involved (i.e., plastic or steel), the operating pressure, the cathodic protection of the pipe, and the proximity of the pipe to various population densities. SoCalGas currently has approximately 101,603 miles of main and service pipeline requiring leak survey.

**Forecast Explanations:**

**Labor - Base YR Rec**

SoCalGas has chosen a base year forecast to forecast the base spending for the leak survey work. SoCalGas increased the survey cycle frequency for DOT-T defined High Pressure pipelines to semi-annually and quarterly (depending on class location) from annual to comply with added requirements in GO 112-F. SoCalGas has also increased survey cycle requirements for all pre-1986 plastic pipe (Aldyl-A) from a five-year survey cycle to an annual cycle and increased the survey cycle for cathodically unprotected steel pipe from three years to one year. SoCalGas also made efforts to level the leak survey footage throughout the months of the year and between different years within the survey cycles to remove any spikes in survey footage from month to month and between different years. Additionally, SoCalGas anticipates efficiencies through improved scheduling processes which will lower overall costs in this workgroup. Given the previous efforts to create consistency within the activity group and efficiencies realized through scheduling improvements, a base year recorded forecast was used to forecast the base spending for the leak survey work and the incremental savings realized through scheduling improvements will reduce the costs below the base year recorded spending level.

**Non-Labor - Base YR Rec**

SoCalGas has chosen a base year forecast to forecast the base spending for the leak survey work. SoCalGas increased the survey cycle frequency for DOT-T defined High Pressure pipelines to semi-annually and quarterly (depending on class location) from annual to comply with added requirements in GO 112-F. SoCalGas has also increased survey cycle requirements for all pre-1986 plastic pipe (Aldyl-A) from a five-year survey cycle to an annual cycle and increased the survey cycle for cathodically unprotected steel pipe from three years to one year. SoCalGas also made efforts to level the leak survey footage throughout the months of the year and between different years within the survey cycles to remove any spikes in survey footage from month to month and between different years. Additionally, SoCalGas anticipates efficiencies through improved scheduling processes which will lower overall costs in this workgroup. Given the previous efforts to create consistency within the activity group and efficiencies realized through scheduling improvements, a base year recorded forecast was used to forecast the base spending for the leak survey work and the incremental savings realized through scheduling improvements will reduce the costs below the base year recorded spending level.

**NSE - Base YR Rec**

NSE is not applicable to this workgroup.

*Note: Totals may include rounding differences.*

Southern California Gas Company  
 2024 GRC - REVISED  
 Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 2. Leak Survey  
 Workpaper: 2GD001.000 - Leak Survey

**Summary of Results:**

		<b>In 2021\$ (000) Incurred Costs</b>								
		<b>Adjusted-Recorded</b>					<b>Adjusted-Forecast</b>			
<b>Years</b>		<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	
Labor		9,501	8,325	10,370	10,253	10,422	7,522	7,522	7,522	
Non-Labor		25	6	13	17	26	26	26	26	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>9,526</b>	<b>8,330</b>	<b>10,383</b>	<b>10,270</b>	<b>10,448</b>	<b>7,548</b>	<b>7,548</b>	<b>7,548</b>	
FTE		107.1	93.6	112.6	108.1	103.9	75.0	75.0	75.0	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 2. Leak Survey  
 Workpaper: 2GD001.000 - Leak Survey

**Summary of Adjustments to Forecast:**

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	10,422	10,422	10,422	-2,900	-2,900	-2,900	7,522	7,522	7,522
Non-Labor	Base YR Rec	26	26	26	0	0	0	26	26	26
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>10,448</b>	<b>10,448</b>	<b>10,448</b>	<b>-2,900</b>	<b>-2,900</b>	<b>-2,900</b>	<b>7,548</b>	<b>7,548</b>	<b>7,548</b>
FTE	Base YR Rec	103.9	103.9	103.9	-28.9	-28.9	-28.9	75.0	75.0	75.0

**Forecast Adjustment Details:**

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	-2,900	0	0	-2,900	-28.9	1-Sided Adj
<b>Explanation:</b>	RAMP Chapter 3 Incident Related to the Medium Pressure System (Excluding Dig-in), C08 Leak Survey. Including adjustment to account for efficiencies realized through scheduling improvements .					
<b>2022 Total</b>	<b>-2,900</b>	<b>0</b>	<b>0</b>	<b>-2,900</b>	<b>-28.9</b>	
2023	-2,900	0	0	-2,900	-28.9	1-Sided Adj
<b>Explanation:</b>	RAMP Chapter 3 Incident Related to the Medium Pressure System (Excluding Dig-in), C08 Leak Survey. Including adjustment to account for efficiencies realized through scheduling improvements .					
<b>2023 Total</b>	<b>-2,900</b>	<b>0</b>	<b>0</b>	<b>-2,900</b>	<b>-28.9</b>	
2024	-2,900	0	0	-2,900	-28.9	1-Sided Adj
<b>Explanation:</b>	RAMP Chapter 3 Incident Related to the Medium Pressure System (Excluding Dig-in), C08 Leak Survey. Including adjustment to account for efficiencies realized through scheduling improvements .					
<b>2024 Total</b>	<b>-2,900</b>	<b>0</b>	<b>0</b>	<b>-2,900</b>	<b>-28.9</b>	

Note: Totals may include rounding differences.

SCG/GAS DISTRIBUTION/Exh No:SCG-04-WP-R/Witness: M. Aguirre

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Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 2. Leak Survey  
Workpaper: 2GD001.000 - Leak Survey

**Determination of Adjusted-Recorded (Incurred Costs):**

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	7,285	6,544	8,254	8,465	8,858
Non-Labor	22	5	12	16	26
NSE	0	0	0	0	0
<b>Total</b>	<b>7,307</b>	<b>6,549</b>	<b>8,266</b>	<b>8,481</b>	<b>8,884</b>
FTE	90.9	79.3	94.3	90.4	87.4
<b>Adjustments (Nominal \$) **</b>					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	7,285	6,544	8,254	8,465	8,858
Non-Labor	22	5	12	16	26
NSE	0	0	0	0	0
<b>Total</b>	<b>7,307</b>	<b>6,549</b>	<b>8,266</b>	<b>8,481</b>	<b>8,884</b>
FTE	90.9	79.3	94.4	90.4	87.4
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	1,235	1,126	1,565	1,491	1,563
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>1,235</b>	<b>1,126</b>	<b>1,565</b>	<b>1,491</b>	<b>1,563</b>
FTE	16.2	14.3	18.2	17.7	16.5
<b>Escalation to 2021\$</b>					
Labor	981	654	551	296	0
Non-Labor	3	0	1	1	0
NSE	0	0	0	0	0
<b>Total</b>	<b>984</b>	<b>655</b>	<b>551</b>	<b>298</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2021\$)</b>					
Labor	9,501	8,325	10,370	10,253	10,422
Non-Labor	25	6	13	17	26
NSE	0	0	0	0	0
<b>Total</b>	<b>9,526</b>	<b>8,330</b>	<b>10,383</b>	<b>10,270</b>	<b>10,448</b>
FTE	107.1	93.6	112.6	108.1	103.9

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

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Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 2. Leak Survey  
 Workpaper: 2GD001.000 - Leak Survey

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
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*Note: Totals may include rounding differences.*

Southern California Gas Company  
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 Workpaper: 2GD001.000 - Leak Survey

**RAMP Item # 1**

**RAMP Activity**

RAMP Chapter: SCG-Risk-3 Incident Related to the Medium Pressure System (Excluding Dig-in)  
 RAMP Line Item ID: C08  
 RAMP Line Item Name: Leak Survey  
 Tranche(/s): Tranche1: High Pressure Supply Lines; Tranche2: Medium Pressure Mains - Plastic & Steel

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	3,342	2,414	2,414	2,414	7,180	8,690
Tranche 2 Cost Estimate	7,105	5,133	5,133	5,133	0	0

**Cost Estimate Changes from RAMP:**

The GRC forecast is outside the RAMP range due to forecast updates.

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 Miles inspected - leak survey	11,824.00	11,824.00	11,824.00	11,824.00	27,095.00	32,786.00
Tranche 2 Miles inspected - leak survey	24,183.00	24,183.00	24,183.00	24,183.00	0.00	0.00

**Work Unit Changes from RAMP:**

Units for GRC are being gathered from a newly created tool managed by Compliance Assurance , which was not available at the time of the RAMP filing.

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	0.350	23.000
Tranche 2	6.200	23.000

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Workpaper: 2GD001.000 - Leak Survey

**RSE Changes from RAMP:**

General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology , as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex. SCG-03/SDG&E-03, Chapter 2). For RSE purposes SCG-Risk-3-C08-Tranche 1 & C17-Tranche 1 are combined. For RSE purposes SCG-Risk-3-C08-Tranche 2 & C17-Tranche 2 & Tranche 3 are combined.

**Beginning of Workpaper**  
**2GD002.000 - R - Locate & Mark**

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Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 3. R - Locate & Mark  
Workpaper: 2GD002.000 - R - Locate & Mark

**Activity Description:**

The activities completed under this cost workgroup are preventative in nature and are required to avert damages caused by third-party excavators working near gas underground substructures. The work is primarily comprised of locating and marking SoCalGas's underground pipelines, conducting job observations, performing pothole operations, and performing depth checks.

**Forecast Explanations:**

**Labor - 3-YR Linear**

The activity in this workgroup is driven by the level of construction activity throughout the service territory and by public awareness of the requirement to contact the appropriate Regional Notification Center before commencing excavation work. SoCalGas expects Locate and Mark activities to continue to rise due to SB661 Protection of Subsurface Installations, SB 1198 Wade Kilpatrick Gas Safety and Workforce Adequacy act of 2021, and efforts from the Damage Prevention Department to raise awareness of these requirements with contractors and the general public. For this reason, the Locate and Mark forecast is based on the linear trend observed the last three years (2019 through 2021). Using an average or base year forecast would not appropriately account for the increase in work anticipated over the forecast period. Thus, to reflect these changing conditions and increase in Locate and Mark work, SoCalGas is projecting that forecasted expenses for this workgroup will follow the three-year historical linear trend. SoCalGas is requesting a two-way balancing account for this work group.

**Non-Labor - 3-YR Linear**

The activity in this workgroup is driven by the level of construction activity throughout the service territory and by public awareness of the requirement to contact the appropriate Regional Notification Center before commencing excavation work. SoCalGas expects Locate and Mark activities to continue to rise due to SB661 Protection of Subsurface Installations, SB 1198 Wade Kilpatrick Gas Safety and Workforce Adequacy act of 2021, and efforts from the Damage Prevention Department to raise awareness of these requirements with contractors and the general public. For this reason, the Locate and Mark forecast is based on the linear trend observed the last three years (2019 through 2021). Using an average or base year forecast would not appropriately account for the increase in work anticipated over the forecast period. Thus, to reflect these changing conditions and increase in Locate and Mark work, SoCalGas is projecting that forecasted expenses for this workgroup will follow the three-year historical linear trend. SoCalGas is requesting a two-way balancing account for this workgroup.

**NSE - 3-YR Linear**

NSE is not applicable to this workgroup.

*Note: Totals may include rounding differences.*

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 Workpaper: 2GD002.000 - R - Locate & Mark

**Summary of Results:**

		<b>In 2021\$ (000) Incurred Costs</b>								
		<b>Adjusted-Recorded</b>					<b>Adjusted-Forecast</b>			
<b>Years</b>		<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	
Labor		15,550	15,811	17,375	17,841	18,809	19,442	20,159	20,876	
Non-Labor		154	192	210	340	283	351	388	425	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>15,704</b>	<b>16,003</b>	<b>17,585</b>	<b>18,181</b>	<b>19,092</b>	<b>19,793</b>	<b>20,547</b>	<b>21,301</b>	
FTE		162.9	161.5	175.2	179.6	189.1	195.2	202.1	209.1	

*Note: Totals may include rounding differences.*

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 Category-Sub: 3. R - Locate & Mark  
 Workpaper: 2GD002.000 - R - Locate & Mark

**Summary of Adjustments to Forecast:**

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	3-YR Linear	19,442	20,159	20,877	0	0	0	19,442	20,159	20,877
Non-Labor	3-YR Linear	351	388	425	0	0	0	351	388	425
NSE	3-YR Linear	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>19,794</b>	<b>20,547</b>	<b>21,301</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19,794</b>	<b>20,547</b>	<b>21,301</b>
FTE	3-YR Linear	195.2	202.1	209.1	0.0	0.0	0.0	195.2	202.1	209.1

**Forecast Adjustment Details:**

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	-18,081	-327	0	-18,408	-181.5	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove RAMP Base from workpaper for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C03 Locate and Mark Activities (MP)					
2022	-1,361	-25	0	-1,386	-13.7	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove RAMP Base from workpaper for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C04 Locate and Mark Activities (HP).					
2022	18,081	327	0	18,408	181.5	1-Sided Adj
<b>Explanation:</b>	Adjustment to show RAMP Base for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C03 Locate and Mark Activities (MP).					
2022	1,361	25	0	1,386	13.7	1-Sided Adj
<b>Explanation:</b>	Adjustment to show RAMP Base for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C04 Locate and Mark Activities (HP).					
<b>2022 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	
2023	-18,748	-361	0	-19,109	-188.0	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove RAMP Base from workpaper for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C03 Locate and Mark Activities (MP).					
2023	-1,411	-27	0	-1,438	-14.1	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove RAMP Base from workpaper for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C04 Locate and Mark Activities (HP).					
2023	18,748	361	0	19,109	188.0	1-Sided Adj
<b>Explanation:</b>	Adjustment to show RAMP Base for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C03 Locate and Mark Activities (MP).					
2023	1,411	27	0	1,438	14.1	1-Sided Adj
<b>Explanation:</b>	Adjustment to show RAMP Base for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C04 Locate and Mark Activities (HP).					
<b>2023 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	

Note: Totals may include rounding differences.

SCG/GAS DISTRIBUTION/Exh No:SCG-04-WP-R/Witness: M. Aguirre

Southern California Gas Company  
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Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 3. R - Locate & Mark  
 Workpaper: 2GD002.000 - R - Locate & Mark

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2024	-19,415	-395	0	-19,810	-194.5	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove RAMP Base from workpaper for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C03 Locate and Mark Activities (MP).					
2024	-1,461	-30	0	-1,491	-14.6	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove RAMP Base from workpaper for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C04 Locate and Mark Activities (HP).					
2024	19,415	395	0	19,810	194.5	1-Sided Adj
<b>Explanation:</b>	Adjustment to show RAMP Base for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C03 Locate and Mark Activities (MP).					
2024	1,461	30	0	1,491	14.6	1-Sided Adj
<b>Explanation:</b>	Adjustment to show RAMP Base for RAMP activity Chapter 2 Excavation Damage (Dig-in) on the Gas System, C04 Locate and Mark Activities (HP).					
<b>2024 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	

Note: Totals may include rounding differences.

SCG/GAS DISTRIBUTION/Exh No:SCG-04-WP-R/Witness: M. Aguirre

Southern California Gas Company  
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Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 3. R - Locate & Mark  
Workpaper: 2GD002.000 - R - Locate & Mark

**Determination of Adjusted-Recorded (Incurred Costs):**

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	11,923	12,429	13,830	14,730	15,991
Non-Labor	137	176	196	315	292
NSE	0	0	0	0	0
<b>Total</b>	<b>12,060</b>	<b>12,605</b>	<b>14,026</b>	<b>15,045</b>	<b>16,283</b>
FTE	138.4	136.9	146.8	150.3	159.2
<b>Adjustments (Nominal \$) **</b>					
Labor	0	0	0	0	-3
Non-Labor	0	0	0	0	-8
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-12</b>
FTE	0.0	0.0	0.0	0.0	-0.1
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	11,923	12,429	13,830	14,730	15,987
Non-Labor	137	176	196	315	283
NSE	0	0	0	0	0
<b>Total</b>	<b>12,060</b>	<b>12,605</b>	<b>14,026</b>	<b>15,045</b>	<b>16,271</b>
FTE	138.4	136.9	146.8	150.3	159.2
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	2,021	2,139	2,622	2,595	2,822
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>2,021</b>	<b>2,139</b>	<b>2,622</b>	<b>2,595</b>	<b>2,822</b>
FTE	24.5	24.6	28.4	29.3	29.9
<b>Escalation to 2021\$</b>					
Labor	1,606	1,243	923	516	0
Non-Labor	17	16	14	24	0
NSE	0	0	0	0	0
<b>Total</b>	<b>1,624</b>	<b>1,259</b>	<b>937</b>	<b>540</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2021\$)</b>					
Labor	15,550	15,811	17,375	17,841	18,809
Non-Labor	154	192	210	340	283
NSE	0	0	0	0	0
<b>Total</b>	<b>15,704</b>	<b>16,003</b>	<b>17,585</b>	<b>18,181</b>	<b>19,092</b>
FTE	162.9	161.5	175.2	179.6	189.1

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

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Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 3. R - Locate & Mark  
 Workpaper: 2GD002.000 - R - Locate & Mark

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	0	0	0	0	-3
Non-Labor	0	0	0	0	-8
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-12</b>
FTE	0.0	0.0	0.0	0.0	-0.1

**Detail of Adjustments to Recorded:**

Year	Labor	NLbr	NSE	FTE	Adj Type
<b>2017 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	
2018	0	0	0	0.0	CCTR Transf To 2200-0461.000
<b>Explanation:</b>	Adjusting NL charge from Locate and Mark Workpaper to Field Support Workpaper where costs are recorded. This is a follow up to a previous adjustment made by the Facilities witness to Gas Distribution.				
2018	0	0	0	0.0	CCTR Transf From 2200-0641.000
<b>Explanation:</b>	Transferring costs incurred for hotel charges for employee taking training at Pico Rivera Facility in August 2018.				
<b>2018 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	
<b>2019 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	
<b>2020 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	
2021	-3	-8	0	-0.1	CCTR Transf From 2200-2296.001
<b>Explanation:</b>	Transfer costs from Gas Distribution to Integrity Management, WKP 2TD002; costs incurred for DIMP activity.				
<b>2021 Total</b>	<b>-3</b>	<b>-8</b>	<b>0</b>	<b>-0.1</b>	

*Note: Totals may include rounding differences.*

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 Category-Sub: 3. R - Locate & Mark  
 Workpaper: 2GD002.000 - R - Locate & Mark

**RAMP Item # 1**

**RAMP Activity**

RAMP Chapter: SCG-Risk-2 Excavation Damage (Dig-In) on the Gas System

RAMP Line Item ID: C03

RAMP Line Item Name: Locate and Mark Activities (MP)

Tranche(/s): Tranche1: Overall

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	17,756	18,408	19,109	19,810	19,062	23,076

**Cost Estimate Changes from RAMP:**

Costs for this RAMP activity are split between multiple witness areas (Gas System Staff & Technology).

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of inspections - locate mark USA tickets, MP	837,893.00	888,166.00	941,456.00	997,944.00	805,392.00	974,949.00

**Work Unit Changes from RAMP:**

None

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	14.000	767.000

**RSE Changes from RAMP:**

General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology, as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex. SCG-03/SDG&E-03, Chapter 2).

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Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 3. R - Locate & Mark  
 Workpaper: 2GD002.000 - R - Locate & Mark

**RAMP Item # 2**

**RAMP Activity**  
 RAMP Chapter: SCG-Risk-2 Excavation Damage (Dig-In) on the Gas System  
 RAMP Line Item ID: C04  
 RAMP Line Item Name: Locate and Mark Activities (HP)  
 Tranche(/s): Tranche1: Overall

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	1,336	1,386	1,438	1,491	4,346	5,261

**Cost Estimate Changes from RAMP:**  
 Costs for this RAMP activity are split between multiple witness areas (Gas System Staff & Technology and Gas Transmission Operations and Construction).

**GRC Work Unit/Activity Level Estimates**

	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
Unit of Measure					Low	High
Tranche 1 # of inspections - locate mark USA tickets, HP	63,067.00	66,851.00	70,862.00	75,114.00	192,324.00	232,813.00

**Work Unit Changes from RAMP:**  
 The number of USA tickets calculated for RAMP included the entire company. The number of USA tickets calculated in this workpaper represents Gas Distribution only.

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	98.000	55.000

**RSE Changes from RAMP:**  
 General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology, as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex. SCG-03/SDG&E-03, Chapter 2).

**Beginning of Workpaper**  
**2GD003.000 - Main Maintenance**

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 4. Main Maintenance  
Workpaper: 2GD003.000 - Main Maintenance

**Activity Description:**

Main maintenance work is generally corrective in nature and is required to keep the natural gas system operating safely and reliably. The work in this workgroup is designed to meet federal and state pipeline safety regulations and to extend the life of distribution main pipelines and related infrastructure. Main maintenance work is primarily comprised of compliance maintenance, miscellaneous main maintenance, and paving.

**Forecast Explanations:**

**Labor - Base YR Rec**

The primary driver for labor costs within the Main Maintenance workgroup are compliance maintenance activities such as Pipeline Patrol, Bridge and Span Survey, Unstable Earth Survey, and Valve Maintenance. The compliance maintenance activities are generally stable from year to year as they are based on the assets currently in the system. For this reason, SoCalGas considers the most recent activity level to be representative of future spending in this work category. Therefore, a base year forecast method was used to forecast the base level of future labor expense. Using an average forecasting method would not be appropriate for this work category as it would not fully fund future critical compliance and maintenance work. Using a linear trend would overstate costs beyond anticipated levels.

SoCalGas has implemented scheduling improvements which will bring costs down in this workgroup. A base year recorded forecast was used to forecast the base spending for Main Maintenance work and the incremental savings realized through scheduling improvements will reduce the costs below the base year recorded spending level.

**Non-Labor - Base YR Rec**

The primary driver for non-labor costs within the Main Maintenance workgroup are paving costs. Paving costs have steadily risen over the last several years due to increased efforts to reduce a historical backlog of paving orders. SoCalGas expects paving costs to plateau at current spending levels over the forecast years. For this reason, SoCalGas considers the most recent activity level to be representative of future spending in this work category. Therefore a base year forecast method was used to forecast the base level of future non-labor expense. Using an average forecasting method would not be appropriate for this work category as it would not fully fund future critical maintenance work. Using a linear trend would overstate costs beyond anticipated levels.

SoCalGas has been increasing its efforts to mitigate methane emissions through the SB 1371 Emissions Strategy Program (ESP). ESP is accelerating their leak abatement efforts, which will have an effect on the base O&M costs in the workgroup. The paving costs associated to the ESP orders that are typically included in this workgroup have been reduced in the forecast to reflect the accelerated leak abatement efforts.

See Supplemental Workpaper SCG-04-MAA-O&M-SUP-003 for calculation details.

**NSE - Base YR Rec**

NSE is not applicable to this workgroup.

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 4. Main Maintenance  
 Workpaper: 2GD003.000 - Main Maintenance

**Summary of Results:**

		<b>In 2021\$ (000) Incurred Costs</b>								
		<b>Adjusted-Recorded</b>					<b>Adjusted-Forecast</b>			
<b>Years</b>		<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	
Labor		2,762	2,309	2,814	2,595	2,727	1,477	1,477	1,477	
Non-Labor		7,291	9,997	7,843	8,575	12,635	12,251	8,273	7,480	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>10,053</b>	<b>12,305</b>	<b>10,657</b>	<b>11,170</b>	<b>15,362</b>	<b>13,728</b>	<b>9,750</b>	<b>8,957</b>	
FTE		27.6	23.7	26.7	25.0	27.1	14.7	14.7	14.7	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 4. Main Maintenance  
 Workpaper: 2GD003.000 - Main Maintenance

**Summary of Adjustments to Forecast:**

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	2,727	2,727	2,727	-1,250	-1,250	-1,250	1,477	1,477	1,477
Non-Labor	Base YR Rec	12,635	12,635	12,635	-384	-4,362	-5,155	12,251	8,273	7,480
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>15,362</b>	<b>15,362</b>	<b>15,362</b>	<b>-1,634</b>	<b>-5,612</b>	<b>-6,405</b>	<b>13,728</b>	<b>9,750</b>	<b>8,957</b>
FTE	Base YR Rec	27.1	27.1	27.1	-12.4	-12.4	-12.4	14.7	14.7	14.7

**Forecast Adjustment Details:**

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	0	-384	0	-384	0.0	1-Sided Adj
<b>Explanation:</b>	Adjustment to account for paving costs associated to SB1371 leak repair acceleration.					
2022	-1,250	0	0	-1,250	-12.4	1-Sided Adj
<b>Explanation:</b>	Adjustment to account for efficiencies realized through scheduling improvements.					
<b>2022 Total</b>	<b>-1,250</b>	<b>-384</b>	<b>0</b>	<b>-1,634</b>	<b>-12.4</b>	
2023	0	-4,362	0	-4,362	0.0	1-Sided Adj
<b>Explanation:</b>	Adjustment to account for paving costs associated to SB1371 leak repair acceleration.					
2023	-1,250	0	0	-1,250	-12.4	1-Sided Adj
<b>Explanation:</b>	Adjustment to account for efficiencies realized through scheduling improvements.					
<b>2023 Total</b>	<b>-1,250</b>	<b>-4,362</b>	<b>0</b>	<b>-5,612</b>	<b>-12.4</b>	
2024	0	-5,155	0	-5,155	0.0	1-Sided Adj
<b>Explanation:</b>	Adjustment to account for paving costs associated to SB1371 leak repair acceleration.					
2024	-1,250	0	0	-1,250	-12.4	1-Sided Adj
<b>Explanation:</b>	Adjustment to account for efficiencies realized through scheduling improvements.					
<b>2024 Total</b>	<b>-1,250</b>	<b>-5,155</b>	<b>0</b>	<b>-6,405</b>	<b>-12.4</b>	

Note: Totals may include rounding differences.

SCG/GAS DISTRIBUTION/Exh No:SCG-04-WP-R/Witness: M. Aguirre

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 4. Main Maintenance  
Workpaper: 2GD003.000 - Main Maintenance

**Determination of Adjusted-Recorded (Incurred Costs):**

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	2,161	2,048	2,239	2,143	2,322
Non-Labor	6,479	9,746	7,354	7,966	12,664
NSE	0	0	0	0	0
<b>Total</b>	<b>8,640</b>	<b>11,795</b>	<b>9,593</b>	<b>10,109</b>	<b>14,986</b>
FTE	23.6	21.6	22.2	20.8	23.1
<b>Adjustments (Nominal \$) **</b>					
Labor	-43	-233	1	0	-4
Non-Labor	-1	-581	-38	0	-29
NSE	0	0	0	0	0
<b>Total</b>	<b>-44</b>	<b>-815</b>	<b>-38</b>	<b>0</b>	<b>-34</b>
FTE	-0.3	-1.5	0.1	0.0	-0.2
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	2,117	1,815	2,240	2,143	2,318
Non-Labor	6,479	9,165	7,316	7,966	12,635
NSE	0	0	0	0	0
<b>Total</b>	<b>8,596</b>	<b>10,980</b>	<b>9,556</b>	<b>10,109</b>	<b>14,953</b>
FTE	23.4	20.1	22.4	20.9	22.8
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	359	312	425	378	409
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>359</b>	<b>312</b>	<b>425</b>	<b>378</b>	<b>409</b>
FTE	4.2	3.6	4.3	4.1	4.3
<b>Escalation to 2021\$</b>					
Labor	285	181	149	75	0
Non-Labor	812	832	527	609	0
NSE	0	0	0	0	0
<b>Total</b>	<b>1,097</b>	<b>1,013</b>	<b>676</b>	<b>684</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2021\$)</b>					
Labor	2,762	2,309	2,814	2,595	2,727
Non-Labor	7,291	9,997	7,843	8,575	12,635
NSE	0	0	0	0	0
<b>Total</b>	<b>10,053</b>	<b>12,305</b>	<b>10,657</b>	<b>11,170</b>	<b>15,362</b>
FTE	27.6	23.7	26.7	25.0	27.1

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 4. Main Maintenance  
Workpaper: 2GD003.000 - Main Maintenance

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	-43	-233	0.873	0	-4
Non-Labor	-0.643	-581	-38	0	-29
NSE	0	0	0	0	0
<b>Total</b>	<b>-44</b>	<b>-815</b>	<b>-38</b>	<b>0</b>	<b>-34</b>
FTE	-0.3	-1.5	0.1	0.0	-0.2

**Detail of Adjustments to Recorded:**

Year	Labor	NLbr	NSE	FTE	Adj Type
2017	-43	-1	0	-0.3	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2017 Total</b>	<b>-43</b>	<b>-1</b>	<b>0</b>	<b>-0.3</b>	
2018	-233	-581	0	-1.5	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2018 Total</b>	<b>-233</b>	<b>-581</b>	<b>0</b>	<b>-1.5</b>	
2019	1	-38	0	0.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2019 Total</b>	<b>1</b>	<b>-38</b>	<b>0</b>	<b>0.1</b>	
<b>2020 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	
2021	0	-16	0	0.0	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	-1	8	0	-0.1	CCTR Transf From 2200-2296.001
<b>Explanation:</b>	Transfer costs from Gas Distribution to Integrity Management for DIMP orders.				
2021	-4	-21	0	-0.1	CCTR Transf From 2200-2296.001
<b>Explanation:</b>	Transfer costs from Gas Distribution to Integrity Management, WKP 2TD002; costs incurred for DIMP activity.				
<b>2021 Total</b>	<b>-4</b>	<b>-29</b>	<b>0</b>	<b>-0.2</b>	

Note: Totals may include rounding differences.

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 4. Main Maintenance  
 Workpaper: 2GD003.000 - Main Maintenance

**RAMP Item # 1**

**RAMP Activity**

RAMP Chapter: SCG-Risk-3 Incident Related to the Medium Pressure System (Excluding Dig-in)

RAMP Line Item ID: C09/C10/C11

RAMP Line Item Name: Pipeline Monitoring (Pipeline Patrol, Bridge & Span Inspections, Unstable Earth Inspection)

Tranche(/s): Tranche1: High Pressure Supply Lines; Tranche2: Medium Pressure Mains - Plastic & Steel

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	146	146	146	146	160	195
Tranche 2 Cost Estimate	83	83	83	83	160	195

**Cost Estimate Changes from RAMP:**

The GRC forecast is outside the RAMP range due to forecast updates.

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of work orders issued	740.00	740.00	740.00	740.00	1,439.00	1,759.00
Tranche 2 # of work orders issued	632.00	632.00	632.00	632.00	1,439.00	1,759.00

**Work Unit Changes from RAMP:**

The GRC forecast is outside the RAMP range due to forecast updates.

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000
Tranche 2	0.000	0.000

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 4. Main Maintenance  
Workpaper: 2GD003.000 - Main Maintenance

**RSE Changes from RAMP:**

There are three different types of pipeline monitoring activities , each with a different cycle. The activities are treated as a single event for dollar and unit purposes but separately for RSE purposes to align with the different cycles. The activities have been further tranced since the RAMP filing. GRC and RAMP RSE values - (C09 Tranche 1 GRC RSE = 774 RAMP RSE = 21); (C09 Tranche 2 N/A); (C10 Tranche 1 GRC RSE = 262 RAMP RSE = 5); (C10 Tranche 2 GRC RSE = 14 RAMP RSE = 5); (C11 Tranche 1 N/A); (C11 Tranche 2 GRC RSE = 437 RAMP RSE = 105) General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology, as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex. SCG-03/SDG&E-03, Chapter 2).

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 4. Main Maintenance  
 Workpaper: 2GD003.000 - Main Maintenance

**RAMP Item # 2**

**RAMP Activity**

RAMP Chapter: SCG-Risk-3 Incident Related to the Medium Pressure System (Excluding Dig-in)  
 RAMP Line Item ID: C12  
 RAMP Line Item Name: Valve Inspection & Maintenance  
 Tranche(/s): Tranche1: High Pressure Supply Lines; Tranche2: Medium Pressure Mains - Plastic & Steel

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	602	602	602	602	1,215	1,475
Tranche 2 Cost Estimate	482	482	482	482	1,215	1,475

**Cost Estimate Changes from RAMP:**

The GRC forecast is outside the RAMP range due to forecast updates.

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of work orders issued	3,715.00	3,715.00	3,715.00	3,715.00	6,830.00	8,264.00
Tranche 2 # of work orders issued	3,155.00	3,155.00	3,155.00	3,155.00	6,830.00	8,264.00

**Work Unit Changes from RAMP:**

None

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	75.000	64.000
Tranche 2	40.000	64.000

**RSE Changes from RAMP:**

Southern California Gas Company  
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Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
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Category: A. Field Operations and Maintenance  
Category-Sub: 4. Main Maintenance  
Workpaper: 2GD003.000 - Main Maintenance

General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology , as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex. SCG-03/SDG&E-03, Chapter 2).

**Supplemental Workpapers for Workpaper 2GD003.000**

Southern California Gas Company  
 2024 GRC - REVISED  
 Non-Shared Service Workpapers  
 SCG-04-MAA-O&M-SUP-003  
 Southern California Gas Company - Gas Distribution - Witness Mario A. Aguirre  
 Supplemental Workpaper Calculations for cost related to SB1371 leak repairs  
 Field O&M - Main Maintenance Workgroup

Assumptions: [A] Estimated leaks to be worked through SB1371  
 [B] Average paving cost (Non-Labor) per order based on SB1371 historical repair costs  
 [C] Total cost

	[A]	[B]	[C] (AxB)
Forecast Year	Leaks (Code 2 & 3 Plastic)	Average Paving Cost (Non-Labor)	Total Cost
2022	339	\$ 1,133	\$ 384,087
2023	3850	\$ 1,133	\$ 4,362,050
2024	4550	\$ 1,133	\$ 5,155,150

**Beginning of Workpaper**  
**2GD004.000 - Service Maintenance**

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 5. Service Maintenance  
Workpaper: 2GD004.000 - Service Maintenance

**Activity Description:**

Service maintenance work is generally corrective in nature and is required to keep the natural gas system operating safely and reliably. The work in this workgroup is designed to meet federal and state pipeline safety regulations and to extend the life of the distribution service pipeline system. Service maintenance work is primary comprised of meter set assembly (MSA) alterations, riser maintenance, and miscellaneous service and MSA maintenance.

**Forecast Explanations:**

**Labor - 3-YR Average**

Service Maintenance activities are designed to meet federal and state pipeline safety regulations and serve to extend the life of the Distribution service pipeline system. Using a linear forecast would either significantly overestimate or significantly underestimate the expected costs during the forecast period. A three-year average forecast methodology best reflects the expected level of costs through the forecast years.

**Non-Labor - Zero-Based**

Service Maintenance activities are designed to meet federal and state pipeline safety regulations and serve to extend the life of the Distribution service pipeline system. Using a linear forecast would either significantly overestimate or significantly underestimate the expected costs during the forecast period. A three-year average forecast methodology best reflects the expected level of costs through the forecast years.

For the damage credits component of this workgroup, SoCalGas used a three-year (2019 through 2021) average. This option is best suited for these activities given the unpredictability of damages – both in terms of frequency and severity – and the timing of collecting funds from third parties. Furthermore, the collection of the damage credit can occur in a different year as the damage itself. Given this uncertainty and variability, a three-year (2019 through 2021) average for damage credits was applied. These non-labor components of this zero-based forecast are shown in Supplemental Workpaper SCG-04-MAA-O&M-SUP-001.

See Supplemental Workpaper SCG-04-MAA-O&M-SUP-001 for calculation details.

**NSE - 3-YR Average**

NSE is not applicable to this workgroup.

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 5. Service Maintenance  
 Workpaper: 2GD004.000 - Service Maintenance

**Summary of Results:**

		<b>In 2021\$ (000) Incurred Costs</b>								
		<b>Adjusted-Recorded</b>					<b>Adjusted-Forecast</b>			
<b>Years</b>		<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	
Labor		6,220	6,136	4,885	4,245	4,226	4,452	4,452	4,452	
Non-Labor		2,089	5,575	-1,425	1,518	1,563	552	552	552	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>8,309</b>	<b>11,711</b>	<b>3,460</b>	<b>5,763</b>	<b>5,790</b>	<b>5,004</b>	<b>5,004</b>	<b>5,004</b>	
FTE		64.6	64.3	47.8	41.3	42.8	44.0	44.0	44.0	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 5. Service Maintenance  
 Workpaper: 2GD004.000 - Service Maintenance

**Summary of Adjustments to Forecast:**

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	3-YR Average	4,452	4,452	4,452	0	0	0	4,452	4,452	4,452
Non-Labor	Zero-Based	0	0	0	552	552	552	552	552	552
NSE	3-YR Average	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>4,452</b>	<b>4,452</b>	<b>4,452</b>	<b>552</b>	<b>552</b>	<b>552</b>	<b>5,004</b>	<b>5,004</b>	<b>5,004</b>
FTE	3-YR Average	44.0	44.0	44.0	0.0	0.0	0.0	44.0	44.0	44.0

**Forecast Adjustment Details:**

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	0	552	0	552	0.0	1-Sided Adj
<b>Explanation:</b>	Forecast methodology for Service Maintenance non-labor. Forecasted using a three-year average for the non-labor excluding damage credits. The three-year average of the damage credits was then applied to the non-labor forecast.					
	See Supplemental Workpaper for calculation details.					
<b>2022 Total</b>	<b>0</b>	<b>552</b>	<b>0</b>	<b>552</b>	<b>0.0</b>	
2023	0	552	0	552	0.0	1-Sided Adj
<b>Explanation:</b>	Forecast methodology for Service Maintenance non-labor. Forecasted using a three-year average for the non-labor excluding damage credits. The three-year average of the damage credits was then applied to the non-labor forecast.					
	See Supplemental Workpaper for calculation details.					
<b>2023 Total</b>	<b>0</b>	<b>552</b>	<b>0</b>	<b>552</b>	<b>0.0</b>	
2024	0	552	0	552	0.0	1-Sided Adj
<b>Explanation:</b>	Forecast methodology for Service Maintenance non-labor. Forecasted using a three-year average for the non-labor excluding damage credits. The three-year average of the damage credits was then applied to the non-labor forecast.					
	See Supplemental Workpaper for calculation details.					
<b>2024 Total</b>	<b>0</b>	<b>552</b>	<b>0</b>	<b>552</b>	<b>0.0</b>	

Note: Totals may include rounding differences.

SCG/GAS DISTRIBUTION/Exh No:SCG-04-WP-R/Witness: M. Aguirre

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 5. Service Maintenance  
Workpaper: 2GD004.000 - Service Maintenance

**Determination of Adjusted-Recorded (Incurred Costs):**

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	4,878	5,295	3,890	3,506	3,593
Non-Labor	1,858	5,160	-1,163	1,410	1,638
NSE	0	0	0	0	0
<b>Total</b>	<b>6,736</b>	<b>10,454</b>	<b>2,727</b>	<b>4,916</b>	<b>5,231</b>
FTE	55.5	57.7	40.2	34.6	36.0
<b>Adjustments (Nominal \$) **</b>					
Labor	-109	-471	-2	-2	-1
Non-Labor	-2	-49	-165	0	-75
NSE	0	0	0	0	0
<b>Total</b>	<b>-111</b>	<b>-520</b>	<b>-167</b>	<b>-2</b>	<b>-76</b>
FTE	-0.7	-3.1	-0.1	-0.1	-0.1
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	4,769	4,824	3,888	3,505	3,592
Non-Labor	1,857	5,111	-1,329	1,410	1,563
NSE	0	0	0	0	0
<b>Total</b>	<b>6,626</b>	<b>9,935</b>	<b>2,559</b>	<b>4,915</b>	<b>5,156</b>
FTE	54.9	54.6	40.1	34.5	35.9
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	808	830	737	618	634
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>808</b>	<b>830</b>	<b>737</b>	<b>618</b>	<b>634</b>
FTE	9.7	9.7	7.7	6.8	6.9
<b>Escalation to 2021\$</b>					
Labor	643	482	259	123	0
Non-Labor	233	464	-96	108	0
NSE	0	0	0	0	0
<b>Total</b>	<b>875</b>	<b>946</b>	<b>164</b>	<b>230</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2021\$)</b>					
Labor	6,220	6,136	4,885	4,245	4,226
Non-Labor	2,089	5,575	-1,425	1,518	1,563
NSE	0	0	0	0	0
<b>Total</b>	<b>8,309</b>	<b>11,711</b>	<b>3,460</b>	<b>5,763</b>	<b>5,790</b>
FTE	64.6	64.3	47.8	41.3	42.8

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 5. Service Maintenance  
Workpaper: 2GD004.000 - Service Maintenance

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	-109	-471	-2	-2	-0.817
Non-Labor	-2	-49	-165	0	-75
NSE	0	0	0	0	0
<b>Total</b>	<b>-111</b>	<b>-520</b>	<b>-167</b>	<b>-2</b>	<b>-76</b>
FTE	-0.7	-3.1	-0.1	-0.1	-0.1

**Detail of Adjustments to Recorded:**

Year	Labor	NLbr	NSE	FTE	Adj Type
2017	-109	-2	0	-0.7	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2017 Total</b>	<b>-109</b>	<b>-2</b>	<b>0</b>	<b>-0.7</b>	
2018	-471	-49	0	-3.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2018 Total</b>	<b>-471</b>	<b>-49</b>	<b>0</b>	<b>-3.1</b>	
2019	-2	-165	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2019 Total</b>	<b>-2</b>	<b>-165</b>	<b>0</b>	<b>-0.1</b>	
2020	-2	0	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2020 Total</b>	<b>-2</b>	<b>0</b>	<b>0</b>	<b>-0.1</b>	
2021	-1	-75	0	-0.1	CCTR Transf From 2200-2296.001
<b>Explanation:</b>	Transfer costs from Gas Distribution to Integrity Management, WKP 2TD002; costs incurred for DIMP activity.				
<b>2021 Total</b>	<b>-1</b>	<b>-75</b>	<b>0</b>	<b>-0.1</b>	

Note: Totals may include rounding differences.

**Supplemental Workpapers for Workpaper 2GD004.000**

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers  
SCG-04-MAA-O&M-SUP-001  
Southern California Gas Company - Gas Distribution - Witness Mario A. Aguirre  
Supplemental Workpaper Calculations for Field O&M Service Maintenance Base Forecast for Non-Labor  
Field O&M - Service Maintenance Workgroup

**Calculation of Average Damage Credits applied to Non-Labor to determine the total forecast for Service Maintenance**

SoCalGas has experienced a wide variation in the damage credits applied to the Service Maintenance workgroup; therefore, an average forecasting methodology was used on the Damage Credits and then applied to the Non-Labor forecast. To accurately reflect the forecast, a three-year average was used on the labor and non-labor excluding damage credits. The three-year average of the damage credits was then applied to the non-labor forecast. The tables below show these calculations.

[H] Shows the Zero-Based Non-Labor Base Forecast

Historical Data

	Historical Dollars (1000s/With V&S in 2021\$)	2017	2018	2019	2020	2021
[A]	Field O&M - Service Maintenance - Labor	\$ 6,220	\$ 6,136	\$ 4,885	\$ 4,245	\$ 4,226
[B]	Field O&M - Service Maintenance - Non Labor	\$ 2,089	\$ 5,575	\$ (1,425)	\$ 1,518	\$ 1,563
[C]	Field O&M - Service Maintenance Non- Labor Damage Credits	\$ (1,389)	\$ 5,214	\$ (1,579)	\$ (885)	\$ (2,376)
[D]	Field O&M - Service Maintenance - Non-Labor Excluding Damage Credits([B]-[C])	\$ 3,478	\$ 361	\$ 155	\$ 2,403	\$ 3,939

3 Year Average of Damage Credits \$ (1,614)

		3Yr Average for Labor / Zero Base for Non-Labor			
		2022	2023	2024	
[E]	3-Yr Avg of A	Labor	\$ 4,452	\$ 4,452	\$ 4,452
[F]	3-Yr Avg of D	Non-Labor Excluding Damage Credits	\$ 2,166	\$ 2,166	\$ 2,166
[G]	3-Yr Avg of C	Non-Labor Damage Credits	\$ (1,614)	\$ (1,614)	\$ (1,614)
[H]	Sum of F and G	Non-Labor Subtotal	\$ 552	\$ 552	\$ 552
[I]	Sum of E and H	Total Base Forecast	\$ 5,004	\$ 5,004	\$ 5,004

Amounts are shown in thousands of 2021 dollars and include vacation and sick.

**Beginning of Workpaper**  
**2GD005.000 - Tools Fittings & Materials**

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 6. Tools Fittings & Materials  
 Workpaper: 2GD005.000 - Tools Fittings & Materials

**Activity Description:**

Recorded to this workgroup is the purchase of small tools, small pipe fittings, miscellaneous pipeline materials, and miscellaneous installation materials used during construction and maintenance activities and those held in inventory as vehicle truck stock. These materials are necessary to obtain complete and safe work results. Included within each category of materials are items such as small tools – screwdrivers, wrenches, etc., small pipe fittings – couplings, ells, nipples, etc., miscellaneous pipeline materials – bolts, stakes, pipe straps, traffic vests, etc., and miscellaneous installation materials – cold patch asphalt, pre-mixed concrete, etc. Also recorded to this workgroup are expenses for the rental and laundering of uniforms.

**Forecast Explanations:**

**Labor - 3-YR Linear**

Spending on Tools, Fittings, and Materials is driven by the increase in construction and maintenance work reflected in other workgroups of this testimony, as well as the increase in workforce needed to complete this work. Given the requirement to support an overall increase in construction and maintenance activities, increased regulatory pressures, as well as Gas Distribution workforce, and an assessment of historical expense in this workgroup, SoCalGas used a three-year (2019 through 2021) historical linear trend to forecast the non-labor needs for tools, fittings and materials.

**Non-Labor - 3-YR Linear**

Spending on Tools, Fittings, and Materials is driven by the increase in construction and maintenance work reflected in other workgroups of this testimony, as well as the increase in workforce needed to complete this work. Given the requirement to support an overall increase in construction and maintenance activities, increased regulatory pressures, as well as Gas Distribution workforce, and an assessment of historical expense in this workgroup, SoCalGas used a three-year (2019 through 2021) historical linear trend to forecast the non-labor needs for tools, fittings and materials.

**NSE - 3-YR Linear**

NSE is not applicable to this workgroup

**Summary of Results:**

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		3	4	1	33	6	18	20	23	
Non-Labor		11,688	10,256	17,855	19,544	20,549	22,010	23,358	24,704	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>11,691</b>	<b>10,260</b>	<b>17,856</b>	<b>19,578</b>	<b>20,555</b>	<b>22,028</b>	<b>23,378</b>	<b>24,727</b>	
FTE		0.0	0.0	0.0	0.4	0.0	0.1	0.1	0.1	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 6. Tools Fittings & Materials  
 Workpaper: 2GD005.000 - Tools Fittings & Materials

**Summary of Adjustments to Forecast:**

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	3-YR Linear	18	21	23	0	0	0	18	21	23
Non-Labor	3-YR Linear	22,010	23,358	24,705	0	0	0	22,010	23,358	24,705
NSE	3-YR Linear	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>22,029</b>	<b>23,378</b>	<b>24,728</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22,029</b>	<b>23,378</b>	<b>24,728</b>
FTE	3-YR Linear	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
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*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 6. Tools Fittings & Materials  
Workpaper: 2GD005.000 - Tools Fittings & Materials

**Determination of Adjusted-Recorded (Incurred Costs):**

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	3	3	1	27	5
Non-Labor	10,386	9,403	16,655	18,157	20,549
NSE	0	0	0	0	0
<b>Total</b>	<b>10,389</b>	<b>9,406</b>	<b>16,656</b>	<b>18,184</b>	<b>20,554</b>
FTE	0.0	0.0	0.0	0.3	0.0
<b>Adjustments (Nominal \$) **</b>					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	3	3	1	27	5
Non-Labor	10,386	9,403	16,655	18,157	20,549
NSE	0	0	0	0	0
<b>Total</b>	<b>10,389</b>	<b>9,406</b>	<b>16,656</b>	<b>18,184</b>	<b>20,554</b>
FTE	0.0	0.0	0.0	0.3	0.0
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	0	0	0	5	1
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>1</b>
FTE	0.0	0.0	0.0	0.1	0.0
<b>Escalation to 2021\$</b>					
Labor	0	0	0	1	0
Non-Labor	1,302	853	1,200	1,388	0
NSE	0	0	0	0	0
<b>Total</b>	<b>1,302</b>	<b>854</b>	<b>1,200</b>	<b>1,389</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2021\$)</b>					
Labor	3	4	1	33	6
Non-Labor	11,688	10,256	17,855	19,544	20,549
NSE	0	0	0	0	0
<b>Total</b>	<b>11,691</b>	<b>10,260</b>	<b>17,856</b>	<b>19,578</b>	<b>20,555</b>
FTE	0.0	0.0	0.0	0.4	0.0

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
 2024 GRC - REVISED  
 Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 6. Tools Fittings & Materials  
 Workpaper: 2GD005.000 - Tools Fittings & Materials

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
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*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2GD006.000 - Leakage**

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 7. Leakage  
Workpaper: 2GD006.000 - Leakage

**Activity Description:**

Leakage work is required to keep the natural gas system operating safely and reliably. The work in this workgroup is designed to meet federal, i.e., 49 CFR 192, and state, i.e. CPUC General Order 112-F, Pipeline safety regulations and to extend the life of Distribution main and service pipelines. Leakage work is primarily comprised of leak evaluations, main leak repairs, service leak repairs, meter set assembly (MSA) leak repairs, and service alterations.

**Forecast Explanations:**

**Labor - Base YR Rec**

Over the last several years, SoCalGas has been accelerating the rate of leak repairs and decreasing the time frame from identifying leaks to repairing leaks. As such, the number of leaks repaired per year has been increasing. SoCalGas expects the number of leaks repaired per year to remain fairly level at current levels over the forecast period. Therefore, a base year forecast method was used to forecast the base level of future expense. SoCalGas has been increasing its efforts to mitigate methane emissions through the SB1371 Emissions Strategy Program (ESP). ESP is accelerating their leak abatement efforts, which will have an effect on the base O&M costs in the workgroup. As such, SoCalGas has reduced costs to reflect the efforts of the ESP program. These labor components of this base year forecast are shown in Supplemental Workpaper SCG-04-MAA-O&M-SUP-004.

See Supplemental Workpaper SCG-04-MAA-O&M-SUP-004 for calculation details.

**Non-Labor - Zero-Based**

Over the last several years, SoCalGas has been accelerating the rate of leak repairs and decreasing the time frame from identifying leaks to repairing leaks. As such, the number of leaks repaired per year has been increasing. SoCalGas expects the number of leaks repaired per year to remain fairly level at current levels over the forecast period. Therefore, a base year forecast method was used to forecast the base level of future expense. SoCalGas has been increasing its efforts to mitigate methane emissions through the SB1371 Emissions Strategy Program (ESP). ESP is accelerating their leak abatement efforts, which will have an effect on the base O&M costs in the workgroup. As such, SoCalGas has reduced costs to reflect the efforts of the ESP program. These labor and non-labor components of this zero-based forecast are shown in Supplemental Workpaper SCG-04-MAA-O&M-SUP-004.

For the damage credits component of this workgroup, SoCalGas used a five-year (2017 through 2021) average. This option is best suited for these activities given the unpredictability of damages – both in terms of frequency and severity – and the timing of collecting funds from third parties. Furthermore, the collection of the damage credit can occur in a different year as the damage itself. Given this uncertainty and variability, a five-year (2017 through 2021) average for damage credits was applied. These non-labor components of this zero-based forecast are shown in Supplemental Workpaper SCG-04-MAA-O&M-SUP-002.

See Supplemental Workpaper SCG-04-MAA-O&M-SUP-002 for calculation details.  
See Supplemental Workpaper SCG-04-MAA-O&M-SUP-004 for calculation details.

**NSE - Base YR Rec**

NSE is not applicable to this workgroup.

*Note: Totals may include rounding differences.*

Southern California Gas Company  
 2024 GRC - REVISED  
 Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 7. Leakage  
 Workpaper: 2GD006.000 - Leakage

**Summary of Results:**

		<b>In 2021\$ (000) Incurred Costs</b>								
		<b>Adjusted-Recorded</b>					<b>Adjusted-Forecast</b>			
<b>Years</b>		<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	
Labor		19,929	20,968	21,343	20,695	19,347	18,882	14,054	13,092	
Non-Labor		2,794	-1,566	2,078	4,730	6,290	5,563	4,362	4,123	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>22,723</b>	<b>19,402</b>	<b>23,421</b>	<b>25,425</b>	<b>25,638</b>	<b>24,445</b>	<b>18,416</b>	<b>17,215</b>	
FTE		167.7	182.1	160.8	157.5	152.0	149.1	120.2	115.8	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 7. Leakage  
Workpaper: 2GD006.000 - Leakage

**Summary of Adjustments to Forecast:**

		In 2021 \$(000) Incurred Costs								
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	19,347	19,347	19,347	-466	-5,294	-6,256	18,881	14,053	13,091
Non-Labor	Zero-Based	0	0	0	5,563	4,362	4,123	5,563	4,362	4,123
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>19,347</b>	<b>19,347</b>	<b>19,347</b>	<b>5,097</b>	<b>-932</b>	<b>-2,133</b>	<b>24,444</b>	<b>18,415</b>	<b>17,214</b>
FTE	Base YR Rec	152.0	152.0	152.0	-2.9	-31.8	-36.2	149.1	120.2	115.8

**Forecast Adjustment Details:**

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	-466	-116	0	-582	-2.9	1-Sided Adj
<b>Explanation:</b>	Adjustment to show RAMP costs for RAMP activity Chapter 3 Medium Pressure Incident, C17 Main and Service Leak Repair. Including adjustment to account for costs associated to SB1371 leak repair acceleration. \$24,108,000 (RAMP Base) - \$582,000 (SB 1371 reduction) = 23,526,000.  See Supplemental Workpaper for calculation details.					
2022	0	5,679	0	5,679	0.0	1-Sided Adj
<b>Explanation:</b>	Forecast methodology for Leakage non-labor. Forecasted using a base year for the non-labor excluding damage credits. The five-year average of the damage credits was then applied to the non-labor forecast.  See Supplemental Workpaper for calculation details.					
<b>2022 Total</b>	<b>-466</b>	<b>5,563</b>	<b>0</b>	<b>5,097</b>	<b>-2.9</b>	
2023	-5,294	-1,317	0	-6,611	-31.8	1-Sided Adj
<b>Explanation:</b>	Adjustment to show RAMP costs for RAMP activity Chapter 3 Medium Pressure Incident, C17 Main and Service Leak Repair. Including adjustment to account for costs associated to SB1371 leak repair acceleration. \$24,108,000 (RAMP Base) - \$6,610,000 (SB 1371 reduction) = 17,498,000.  See Supplemental Workpaper for calculation details.					
2023	0	5,679	0	5,679	0.0	1-Sided Adj
<b>Explanation:</b>	Forecast methodology for Leakage non-labor. Forecasted using a base year for the non-labor excluding damage credits. The five-year average of the damage credits was then applied to the non-labor forecast.  See Supplemental Workpaper for calculation details.					
<b>2023 Total</b>	<b>-5,294</b>	<b>4,362</b>	<b>0</b>	<b>-932</b>	<b>-31.8</b>	
2024	-6,256	-1,556	0	-7,812	-36.2	1-Sided Adj

Note: Totals may include rounding differences.

SCG/GAS DISTRIBUTION/Exh No:SCG-04-WP-R/Witness: M. Aguirre

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 7. Leakage  
 Workpaper: 2GD006.000 - Leakage

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
<b>Explanation:</b>	Adjustment to show RAMP costs for RAMP activity Chapter 3 Medium Pressure Incident, C17 Main and Service Leak Repair. Including adjustment to account for costs associated to SB1371 leak repair acceleration. \$24,107,000 (RAMP Base) - \$7,812,000 (SB 1371 reduction) = 16,296,000.  See Supplemental Workpaper for calculation details.					
2024	0	5,679	0	5,679	0.0	1-Sided Adj
<b>Explanation:</b>	Forecast methodology for Leakage non-labor. Forecasted using a base year for the non-labor excluding damage credits. The five-year average of the damage credits was then applied to the non-labor forecast.  See Supplemental Workpaper for calculation details.					
<b>2024 Total</b>	<b>-6,256</b>	<b>4,123</b>	<b>0</b>	<b>-2,133</b>	<b>-36.2</b>	

Note: Totals may include rounding differences.

SCG/GAS DISTRIBUTION/Exh No:SCG-04-WP-R/Witness: M. Aguirre

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**Determination of Adjusted-Recorded (Incurred Costs):**

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	15,280	16,495	16,993	17,086	16,445
Non-Labor	2,483	-1,402	1,941	4,394	6,290
NSE	0	0	0	0	0
<b>Total</b>	<b>17,763</b>	<b>15,093</b>	<b>18,933</b>	<b>21,480</b>	<b>22,735</b>
FTE	142.4	154.5	134.7	131.7	127.9
<b>Adjustments (Nominal \$) **</b>					
Labor	0	-12	-4	0	0
Non-Labor	0	-33	-3	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>-45</b>	<b>-7</b>	<b>0</b>	<b>0</b>
FTE	0.0	-0.1	-0.1	0.0	0.0
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	15,280	16,483	16,988	17,086	16,445
Non-Labor	2,482	-1,435	1,938	4,394	6,290
NSE	0	0	0	0	0
<b>Total</b>	<b>17,763</b>	<b>15,048</b>	<b>18,927</b>	<b>21,480</b>	<b>22,735</b>
FTE	142.5	154.4	134.7	131.7	127.9
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	2,590	2,837	3,221	3,011	2,903
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>2,590</b>	<b>2,837</b>	<b>3,221</b>	<b>3,011</b>	<b>2,903</b>
FTE	25.2	27.7	26.1	25.8	24.1
<b>Escalation to 2021\$</b>					
Labor	2,059	1,648	1,133	598	0
Non-Labor	311	-130	140	336	0
NSE	0	0	0	0	0
<b>Total</b>	<b>2,370</b>	<b>1,518</b>	<b>1,273</b>	<b>934</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2021\$)</b>					
Labor	19,929	20,968	21,343	20,695	19,347
Non-Labor	2,794	-1,566	2,078	4,730	6,290
NSE	0	0	0	0	0
<b>Total</b>	<b>22,723</b>	<b>19,402</b>	<b>23,421</b>	<b>25,425</b>	<b>25,638</b>
FTE	167.7	182.1	160.8	157.5	152.0

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

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**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	0	-12	-4	0	0
Non-Labor	-0.257	-33	-3	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>-0.257</b>	<b>-45</b>	<b>-7</b>	<b>0</b>	<b>0</b>
FTE	0.0	-0.1	-0.1	0.0	0.0

**Detail of Adjustments to Recorded:**

Year	Labor	NLbr	NSE	FTE	Adj Type
2017	0	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2017 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	
2018	-12	-33	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2018 Total</b>	<b>-12</b>	<b>-33</b>	<b>0</b>	<b>-0.1</b>	
2019	-4	-3	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2019 Total</b>	<b>-4</b>	<b>-3</b>	<b>0</b>	<b>-0.1</b>	
<b>2020 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	
<b>2021 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	

*Note: Totals may include rounding differences.*

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**RAMP Item # 1**

**RAMP Activity**

RAMP Chapter: SCG-Risk-3 Incident Related to the Medium Pressure System (Excluding Dig-in)

RAMP Line Item ID: C17

RAMP Line Item Name: Main & Service Leak Repair

Tranche(/s): Tranche1: High Pressure Supply Lines; Tranche2: Medium Pressure Mains - Plastic & Steel;  
 Tranche3: Medium Pressure Service - Plastic & Steel

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	723	723	723	723	12,840	15,695
Tranche 2 Cost Estimate	12,394	12,086	8,891	8,254	12,840	15,695
Tranche 3 Cost Estimate	10,991	10,717	7,884	7,319	12,840	15,695

**Cost Estimate Changes from RAMP:**

The GRC forecast is outside the RAMP range due to forecast updates.

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of leak repairs	454.00	454.00	454.00	454.00	30,022.00	36,694.00
Tranche 2 # of leak repairs	14,547.00	14,414.00	13,041.00	12,767.00	30,022.00	36,694.00
Tranche 3 # of leak repairs	22,635.00	22,429.00	20,291.00	19,865.00	30,022.00	36,694.00

**Work Unit Changes from RAMP:**

None

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	0.350	23.200
Tranche 2	6.200	23.200

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Tranche 3	6.200	23.200
<b>RSE Changes from RAMP:</b> General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology , as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex. SCG-03/SDG&E-03, Chapter 2). For RSE purposes SCG-Risk-3-C08-Tranche 1 & C17-Tranche 1 are combined. For RSE purposes SCG-Risk-3-C08-Tranche 2 & C17-Tranche 2 & Tranche 3 are combined.		

**Supplemental Workpapers for Workpaper 2GD006.000**



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SCG-04-MAA-O&M-SUP-004  
Southern California Gas Company - Gas Distribution - Witness Mario A. Aguirre  
Supplemental Workpaper Calculations for cost related to SB1371 leak repairs  
Field O&M - Leakage Workgroup

- Assumptions: [A] Estimated leaks to be worked through SB1371  
[B] Average direct labor cost per order based on SB1371 historical repair costs  
[C] Total labor direct costs  
[D] V&S factor 2021  
[E] Estimated total V&S costs  
[F] Total labor costs including V&S  
[G] Average Non-Labor cost per order base on SB1371 historical repair costs  
[H] Total Non-Labor Cost  
[I] Total cost

	[A]	[B]	[C] (AxB)	[D]	[E] (CxD)	[F] (C+E)	[G]	[H] (AxG)	[I] (F+H)
Forecast Year	Leaks (Code 2 & 3 Plastic)	Average Labor (Direct Cost)	Total Labor (Direct Cost)	V&S	Total V&S	Total Labor w/V&S	Average Non-Labor Cost	Total Non-Labor Cost	Total Cost
2022	339	\$ 1,169	\$ 396,291	0.1765	\$ 69,945.36	\$ 466,236.36	\$ 342	\$ 115,938	\$ 582,174
2023	3850	\$ 1,169	\$ 4,500,650	0.1765	\$ 794,364.73	\$ 5,295,014.73	\$ 342	\$ 1,316,700	\$ 6,611,715
2024	4550	\$ 1,169	\$ 5,318,950	0.1765	\$ 938,794.68	\$ 6,257,744.68	\$ 342	\$ 1,556,100	\$ 7,813,845

**Beginning of Workpaper**  
**2GD007.000 - Measurement & Regulation**

Southern California Gas Company  
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Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
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 Category: A. Field Operations and Maintenance  
 Category-Sub: 8. Measurement & Regulation  
 Workpaper: 2GD007.000 - Measurement & Regulation

**Activity Description:**

Recorded to this workgroup are labor and non-labor expenses for maintaining and operating regulator stations, medium and large Meter Set Assemblies (MSAs), and associated components. Measurement and Regulation activities focus primarily on maintaining and operating approximately 1,975 regulator stations and approximately 102,000 medium and large customer MSAs in the SoCalGas service territory. Regulator stations reduce the pressure of gas entering the distribution system from high-pressure pipelines to provide the lower pressures used on the distribution pipeline system. Medium and large customer MSAs require routine maintenance of the meters, regulators, and other components to meet customers' capacity requirements and to measure gas volume accurately.

**Forecast Explanations:**

**Labor - Base YR Rec**

SoCalGas evaluated the historical expenditures for 2017 through 2021 for the Measurement and Regulation (M&R) workgroup. The expenses in this workgroup are mostly maintenance in nature and are based on the current assets in the system. For this reason, SoCalGas considers the most recent activity level to be representative of future spending in this work category. Therefore, a base year forecast method was used to forecast the base expenditures for this workgroup. Control Center Modernization (CCM) is a new activity that will begin during the forecast years. The Measurement and Regulation workgroup will incur additional costs associated to the CCM project. These costs are incrementally added to the base year forecast for the workpaper.

**Non-Labor - Base YR Rec**

SoCalGas evaluated the historical expenditures for 2017 through 2021 for the Measurement and Regulation (M&R) workgroup. The expenses in this workgroup are mostly maintenance in nature and are based on the current assets in the system. For this reason, SoCalGas considers the most recent activity level to be representative of future spending in this work category. Therefore, a base year forecast method was used to forecast the base expenditures for this workgroup. Control Center Modernization (CCM) is a new activity that will begin during the forecast years. The Measurement and Regulation workgroup will incur additional costs associated to the CCM project. These costs are incrementally added to the base year forecast for the workpaper.

**NSE - Base YR Rec**

NSE is not applicable to this workgroup.

**Summary of Results:**

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
		2017	2018	2019	2020	2021	2022	2023	2024	
<b>Years</b>										
	Labor	8,589	9,173	9,772	8,776	8,790	8,840	9,156	9,506	
	Non-Labor	2,405	1,969	1,448	2,419	1,612	1,614	1,630	1,645	
	NSE	0	0	0	0	0	0	0	0	
	<b>Total</b>	<b>10,994</b>	<b>11,142</b>	<b>11,220</b>	<b>11,195</b>	<b>10,402</b>	<b>10,454</b>	<b>10,786</b>	<b>11,151</b>	
	FTE	82.3	85.7	89.8	80.4	81.0	81.5	84.4	87.6	

*Note: Totals may include rounding differences.*

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**Summary of Adjustments to Forecast:**

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	8,790	8,790	8,790	49	365	715	8,839	9,155	9,505
Non-Labor	Base YR Rec	1,612	1,612	1,612	2	18	33	1,614	1,630	1,645
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>10,402</b>	<b>10,402</b>	<b>10,402</b>	<b>51</b>	<b>383</b>	<b>748</b>	<b>10,453</b>	<b>10,785</b>	<b>11,150</b>
FTE	Base YR Rec	81.0	81.0	81.0	0.5	3.4	6.6	81.5	84.4	87.6

**Forecast Adjustment Details:**

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	49	2	0	51	0.5	1-Sided Adj
<b>Explanation:</b>	Adjustment to show incremental costs to account for the incremental activities associated to the new Control Center Modernization project.					
<b>2022 Total</b>	<b>49</b>	<b>2</b>	<b>0</b>	<b>51</b>	<b>0.5</b>	
2023	365	18	0	383	3.4	1-Sided Adj
<b>Explanation:</b>	Adjustment to show incremental costs to account for the incremental activities associated to the new Control Center Modernization project.					
<b>2023 Total</b>	<b>365</b>	<b>18</b>	<b>0</b>	<b>383</b>	<b>3.4</b>	
2024	715	33	0	748	6.6	1-Sided Adj
<b>Explanation:</b>	Adjustment to show incremental costs to account for the incremental activities associated to the new Control Center Modernization project.					
<b>2024 Total</b>	<b>715</b>	<b>33</b>	<b>0</b>	<b>748</b>	<b>6.6</b>	

Note: Totals may include rounding differences.

SCG/GAS DISTRIBUTION/Exh No:SCG-04-WP-R/Witness: M. Aguirre

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Category-Sub: 8. Measurement & Regulation  
Workpaper: 2GD007.000 - Measurement & Regulation

**Determination of Adjusted-Recorded (Incurred Costs):**

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	6,587	7,221	7,779	7,246	7,667
Non-Labor	2,137	1,806	1,351	2,247	1,612
NSE	0	0	0	0	0
<b>Total</b>	<b>8,724</b>	<b>9,027</b>	<b>9,130</b>	<b>9,493</b>	<b>9,278</b>
FTE	70.0	72.7	75.3	67.2	69.7
<b>Adjustments (Nominal \$) **</b>					
Labor	-2	-10	-1	0	-195
Non-Labor	0	-1	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>-2</b>	<b>-11</b>	<b>-1</b>	<b>0</b>	<b>-195</b>
FTE	-0.1	-0.1	-0.1	0.0	-1.5
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	6,586	7,211	7,778	7,246	7,471
Non-Labor	2,137	1,805	1,351	2,247	1,612
NSE	0	0	0	0	0
<b>Total</b>	<b>8,723</b>	<b>9,016</b>	<b>9,129</b>	<b>9,493</b>	<b>9,083</b>
FTE	69.8	72.6	75.2	67.3	68.2
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	1,116	1,241	1,475	1,277	1,319
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>1,116</b>	<b>1,241</b>	<b>1,475</b>	<b>1,277</b>	<b>1,319</b>
FTE	12.5	13.1	14.6	13.1	12.8
<b>Escalation to 2021\$</b>					
Labor	887	721	519	254	0
Non-Labor	268	164	97	172	0
NSE	0	0	0	0	0
<b>Total</b>	<b>1,155</b>	<b>885</b>	<b>616</b>	<b>425</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2021\$)</b>					
Labor	8,589	9,173	9,772	8,776	8,790
Non-Labor	2,405	1,969	1,448	2,419	1,612
NSE	0	0	0	0	0
<b>Total</b>	<b>10,994</b>	<b>11,142</b>	<b>11,220</b>	<b>11,195</b>	<b>10,402</b>
FTE	82.3	85.7	89.8	80.4	81.0

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

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 Category-Sub: 8. Measurement & Regulation  
 Workpaper: 2GD007.000 - Measurement & Regulation

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	-2	-10	-0.554	0	-195
Non-Labor	-0.007	-0.830	0	0	-0.080
NSE	0	0	0	0	0
<b>Total</b>	<b>-2</b>	<b>-11</b>	<b>-0.554</b>	<b>0</b>	<b>-195</b>
FTE	-0.1	-0.1	-0.1	0.0	-1.5

**Detail of Adjustments to Recorded:**

Year	Labor	NLbr	NSE	FTE	Adj Type
2017	-2	0	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2017 Total</b>	<b>-2</b>	<b>0</b>	<b>0</b>	<b>-0.1</b>	
2018	-10	-1	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2018 Total</b>	<b>-10</b>	<b>-1</b>	<b>0</b>	<b>-0.1</b>	
2019	-1	0	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2019 Total</b>	<b>-1</b>	<b>0</b>	<b>0</b>	<b>-0.1</b>	
<b>2020 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	
2021	-195	0	0	-1.5	CCTR Transf From 2200-2296.001
<b>Explanation:</b>	Transfer costs from Gas Distribution to Integrity Management, WKP 2TD002; costs incurred for DIMP activity.				
<b>2021 Total</b>	<b>-195</b>	<b>0</b>	<b>0</b>	<b>-1.5</b>	

*Note: Totals may include rounding differences.*

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 Workpaper: 2GD007.000 - Measurement & Regulation

**RAMP Item # 1**

**RAMP Activity**

RAMP Chapter: SCG-Risk-3 Incident Related to the Medium Pressure System (Excluding Dig-in)

RAMP Line Item ID: C04

RAMP Line Item Name: Meter & Regulator (M&R) Station and Electronic Pressure Monitors (EPM) Inspection and Maintenance

Tranche(/s): Tranche1: High Pressure Supply Lines; Tranche2: Medium Pressure Mains - Plastic & Steel

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	720	720	720	720	3,395	4,150
Tranche 2 Cost Estimate	3,522	3,522	3,522	3,522	3,395	4,150

**Cost Estimate Changes from RAMP:**

The GRC forecast is outside the RAMP range due to forecast updates.

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of work orders issued	1,355.00	1,355.00	1,355.00	1,355.00	9,830.00	12,015.00
Tranche 2 # of work orders issued	6,274.00	6,274.00	6,274.00	6,274.00	9,830.00	12,015.00

**Work Unit Changes from RAMP:**

The GRC forecast is outside the RAMP range due to forecast updates.

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	630.000	92.000
Tranche 2	24.000	92.000

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Category: A. Field Operations and Maintenance  
Category-Sub: 8. Measurement & Regulation  
Workpaper: 2GD007.000 - Measurement & Regulation

**RSE Changes from RAMP:**

General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology , as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex. SCG-03/SDG&E-03, Chapter 2).

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 Category: A. Field Operations and Maintenance  
 Category-Sub: 8. Measurement & Regulation  
 Workpaper: 2GD007.000 - Measurement & Regulation

**RAMP Item # 2**

**RAMP Activity**

RAMP Chapter: SCG-Risk-3 Incident Related to the Medium Pressure System (Excluding Dig-in)

RAMP Line Item ID: C06

RAMP Line Item Name: Meter Set Assembly (MSA) Inspection and Maintenance

Tranche(/s): Tranche1: Meter and Beyond the Meter

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	1,447	1,447	1,447	1,447	1,455	1,780

**Cost Estimate Changes from RAMP:**

The GRC forecast is outside the RAMP range due to forecast updates.

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of work orders issued	7,683.00	7,683.00	7,683.00	7,683.00	7,549.00	9,227.00

**Work Unit Changes from RAMP:**

None

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	130.000	81.000

**RSE Changes from RAMP:**

General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology, as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex. SCG-03/SDG&E-03, Chapter 2).

**Beginning of Workpaper**  
**2GD008.000 - Cathodic Protection**

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 9. Cathodic Protection  
Workpaper: 2GD008.000 - Cathodic Protection

**Activity Description:**

In addition to the application of coating and electric isolation, Cathodic Protection (CP) is one method for mitigating external corrosion on steel pipelines. CP uses both magnesium anodes and rectifier stations to impose a negative charge on the pipeline. Additionally, test stations are installed to monitor the CP system and insulators are placed on the mains to isolate CP areas. This workgroup addresses the resulting identified field maintenance requirements. Examples of maintenance activities performed within this workgroup include, installing anodes, clearing underground shorts created by two pipelines touching each other, repairing or replacing broken wires to anodes or test stations, raising test station lids as a result of the re-pavement of streets adding test points on pipelines, and installing insulators on mains and services. The Cathodic Protection workpaper includes three RAMP activities supporting SCG RAMP Chapter 3 Incident Related to the Medium Pressure System. The identified RAMP activities are C01 Cathodic Protection Base Activities, C02 Cathodic Protection – CP10 Activities, and C03 Cathodic Protection – 100mV Requalification.

**Forecast Explanations:**

**Labor - Base YR Rec**

SoCalGas evaluated the historical expenditures for 2017 through 2021 for the Cathodic Protection workgroup. RAMP controls C01 and C02 represent activities that are maintenance in nature and are based on the current assets in the system. For this reason, SoCalGas considers the most recent activity level to be representative of future spending in this work category. Therefore, a base year forecast method was used to forecast the expenses related to C01 and C02. C03 is a new activity that has been identified that will begin during the forecast years. For the workpaper, SoCalGas has selected a base year forecast plus the incremental activities previously discussed to fund the activities in this workgroup through the forecasted years.

**Non-Labor - Base YR Rec**

SoCalGas evaluated the historical expenditures for 2017 through 2021 for the Cathodic Protection workgroup. RAMP controls C01 and C02 represent activities that are maintenance in nature and are based on the current assets in the system. For this reason, SoCalGas considers the most recent activity level to be representative of future spending in this work category. Therefore, a base year forecast method was used to forecast the expenses related to C01 and C02. C03 is a new activity that has been identified that will begin during the forecast years. For the workpaper, SoCalGas has selected a base year forecast plus the incremental activities previously discussed to fund the activities in this workgroup through the forecasted years.

**NSE - Base YR Rec**

NSE is not applicable to this workgroup.

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 9. Cathodic Protection  
 Workpaper: 2GD008.000 - Cathodic Protection

**Summary of Results:**

		<b>In 2021\$ (000) Incurred Costs</b>								
		<b>Adjusted-Recorded</b>					<b>Adjusted-Forecast</b>			
<b>Years</b>		<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	
Labor		7,112	7,113	7,053	7,026	7,495	7,671	7,921	8,637	
Non-Labor		5,775	9,048	6,520	7,783	9,843	9,843	9,843	9,843	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>12,887</b>	<b>16,161</b>	<b>13,573</b>	<b>14,809</b>	<b>17,339</b>	<b>17,514</b>	<b>17,764</b>	<b>18,480</b>	
FTE		73.6	73.0	71.1	69.8	74.7	76.5	78.9	86.1	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 9. Cathodic Protection  
 Workpaper: 2GD008.000 - Cathodic Protection

**Summary of Adjustments to Forecast:**

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	7,495	7,495	7,495	176	426	1,142	7,671	7,921	8,637
Non-Labor	Base YR Rec	9,843	9,843	9,843	0	0	0	9,843	9,843	9,843
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>17,339</b>	<b>17,339</b>	<b>17,339</b>	<b>176</b>	<b>426</b>	<b>1,142</b>	<b>17,515</b>	<b>17,765</b>	<b>18,481</b>
FTE	Base YR Rec	74.7	74.7	74.7	1.8	4.2	11.4	76.5	78.9	86.1

**Forecast Adjustment Details:**

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	176	0	0	176	1.8	1-Sided Adj
<b>Explanation:</b>	RAMP activity Chapter 3 Medium Pressure Incident, C03 Cathodic Protection - 100mV Requalification.					
<b>2022 Total</b>	<b>176</b>	<b>0</b>	<b>0</b>	<b>176</b>	<b>1.8</b>	
2023	426	0	0	426	4.2	1-Sided Adj
<b>Explanation:</b>	RAMP activity Chapter 3 Medium Pressure Incident, C03 Cathodic Protection - 100mV Requalification.					
<b>2023 Total</b>	<b>426</b>	<b>0</b>	<b>0</b>	<b>426</b>	<b>4.2</b>	
2024	1,142	0	0	1,142	11.4	1-Sided Adj
<b>Explanation:</b>	RAMP activity Chapter 3 Medium Pressure Incident, C03 Cathodic Protection - 100mV Requalification.					
<b>2024 Total</b>	<b>1,142</b>	<b>0</b>	<b>0</b>	<b>1,142</b>	<b>11.4</b>	

Note: Totals may include rounding differences.

SCG/GAS DISTRIBUTION/Exh No:SCG-04-WP-R/Witness: M. Aguirre

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 9. Cathodic Protection  
Workpaper: 2GD008.000 - Cathodic Protection

**Determination of Adjusted-Recorded (Incurred Costs):**

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	5,453	5,592	5,614	5,801	6,371
Non-Labor	5,132	8,295	6,082	7,231	9,843
NSE	0	0	0	0	0
<b>Total</b>	<b>10,585</b>	<b>13,887</b>	<b>11,696</b>	<b>13,031</b>	<b>16,214</b>
FTE	62.6	61.9	59.5	58.3	62.9
<b>Adjustments (Nominal \$) **</b>					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	5,453	5,592	5,614	5,801	6,371
Non-Labor	5,132	8,295	6,082	7,231	9,843
NSE	0	0	0	0	0
<b>Total</b>	<b>10,585</b>	<b>13,887</b>	<b>11,696</b>	<b>13,031</b>	<b>16,214</b>
FTE	62.5	61.9	59.6	58.4	62.9
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	924	962	1,064	1,022	1,124
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>924</b>	<b>962</b>	<b>1,064</b>	<b>1,022</b>	<b>1,124</b>
FTE	11.1	11.1	11.5	11.4	11.8
<b>Escalation to 2021\$</b>					
Labor	735	559	374	203	0
Non-Labor	643	753	438	553	0
NSE	0	0	0	0	0
<b>Total</b>	<b>1,378</b>	<b>1,312</b>	<b>813</b>	<b>756</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2021\$)</b>					
Labor	7,112	7,113	7,053	7,026	7,495
Non-Labor	5,775	9,048	6,520	7,783	9,843
NSE	0	0	0	0	0
<b>Total</b>	<b>12,887</b>	<b>16,161</b>	<b>13,573</b>	<b>14,809</b>	<b>17,339</b>
FTE	73.6	73.0	71.1	69.8	74.7

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
 2024 GRC - REVISED  
 Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 9. Cathodic Protection  
 Workpaper: 2GD008.000 - Cathodic Protection

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
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*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Operations and Maintenance  
Category-Sub: 9. Cathodic Protection  
Workpaper: 2GD008.000 - Cathodic Protection

**RAMP Item # 1**

**RAMP Activity**

RAMP Chapter: SCG-Risk-3 Incident Related to the Medium Pressure System (Excluding Dig-in)

RAMP Line Item ID: C01

RAMP Line Item Name: Cathodic Protection Base Activities

Tranche(/s): Tranche1: High Pressure Supply Lines; Tranche2: Medium Pressure Mains - Steel

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	1,205	1,205	1,205	1,205	10,850	13,130
Tranche 2 Cost Estimate	13,873	13,873	13,873	13,873	0	0

**Cost Estimate Changes from RAMP:**

The GRC forecast is outside the RAMP range due to forecast updates.

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of work orders issued	5,201.00	5,201.00	5,201.00	5,201.00	41,378.00	50,068.00
Tranche 2 # of work orders issued	39,724.00	39,724.00	39,724.00	39,724.00	41,378.00	50,068.00

**Work Unit Changes from RAMP:**

None

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	27.000	34.000
Tranche 2	2.300	34.000

**RSE Changes from RAMP:**

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 9. Cathodic Protection  
 Workpaper: 2GD008.000 - Cathodic Protection

General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology , as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex. SCG-03/SDG&E-03, Chapter 2).

**RAMP Item # 2**

**RAMP Activity**

RAMP Chapter: SCG-Risk-3 Incident Related to the Medium Pressure System (Excluding Dig-in)  
 RAMP Line Item ID: C02  
 RAMP Line Item Name: Cathodic Protection - CP10 Activities  
 Tranche(/s): Tranche1: Medium Pressure Services - Steel

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	2,174	2,174	2,174	2,174	875	1,160

**Cost Estimate Changes from RAMP:**  
 The GRC forecast is outside the RAMP range due to forecast updates.

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of work orders issued	13,480.00	13,480.00	13,480.00	13,480.00	9,999.00	13,224.00

**Work Unit Changes from RAMP:**  
 The GRC forecast is outside the RAMP range due to forecast updates.

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	6.200	115.000

**RSE Changes from RAMP:**  
 General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology , as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex. SCG-03/SDG&E-03, Chapter 2).

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Operations and Maintenance  
 Category-Sub: 9. Cathodic Protection  
 Workpaper: 2GD008.000 - Cathodic Protection

**RAMP Item # 3**

**RAMP Activity**

RAMP Chapter: SCG-Risk-3 Incident Related to the Medium Pressure System (Excluding Dig-in)

RAMP Line Item ID: C03

RAMP Line Item Name: Cathodic Protection - 100 mV Requalification Calculations

Tranche(/s): Tranche1: Medium Pressure Mains - Steel

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	74	250	500	1,216	1,105	1,335

**Cost Estimate Changes from RAMP:**  
None

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of work orders issued	0.00	75.00	103.00	529.00	230.00	282.00

**Work Unit Changes from RAMP:**  
Work units have been updated based on current progress of this new initiative.

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	29.000	51.000

**RSE Changes from RAMP:**  
General changes to risks scores or RSE values are primarily due to changes in the MAVF and RSE methodology, as discussed in the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex. SCG-03/SDG&E-03, Chapter 2).

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: B. Asset Management  
Workpaper: 2GD009.000

**Summary for Category: B. Asset Management**

	In 2021\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Labor	12,094	12,760	13,345	13,929
Non-Labor	1,025	1,307	1,535	1,762
NSE	0	0	0	0
<b>Total</b>	<b>13,119</b>	<b>14,067</b>	<b>14,880</b>	<b>15,691</b>
FTE	121.5	127.6	132.4	137.3

**Workpapers belonging to this Category:**

**2GD009.000 Asset Management**

Labor	12,094	12,760	13,345	13,929
Non-Labor	1,025	1,307	1,535	1,762
NSE	0	0	0	0
<b>Total</b>	<b>13,119</b>	<b>14,067</b>	<b>14,880</b>	<b>15,691</b>
FTE	121.5	127.6	132.4	137.3

*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2GD009.000 - Asset Management**

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: B. Asset Management  
 Category-Sub: 1. Asset Management  
 Workpaper: 2GD009.000 - Asset Management

**Activity Description:**

SoCalGas's PMO, Project Management, Planning, and Engineering departments provide many of the technical and administrative services needed for the successful and timely completion of the O&M activities in Gas Distribution. This workgroup records the labor and non-labor costs for services provided by these departments. Activities performed by PMO, Project Management, Planning, and Engineering include identifying construction design requirements, evaluating pressure specifications, conducting pipeline planning, providing project drawings, identifying material selection, preparing work order estimates, acquiring third-party contract services, and obtaining permits for construction from city, county, state, and federal agencies.

**Forecast Explanations:**

**Labor - 3-YR Linear**

As the level of maintenance work, general construction, municipality work and customer generated activity increases, so will the support provided by the departments that support the field operations. The increase in construction and maintenance work requires additional planning, permitting, and processing of orders. Given these upward pressures and a review of historical costs and underlying cost drivers SoCalGas determined that a three-year (2019 through 2021) linear trend best reflects future requirements for the labor activity in this workgroup. Using an average or base year forecasting method would not be appropriate for this workgroup, as it would not properly fund future work demands. Therefore, a three-year linear trend was used to calculate the labor for this group.

**Non-Labor - 3-YR Linear**

As the level of maintenance work, general construction, municipality work and customer generated activity increases, so will the support provided by the departments that support the field operations. The increase in construction and maintenance work requires additional planning, permitting, and processing of orders. Given these upward pressures and a review of historical costs and underlying cost drivers SoCalGas determined that a three-year (2019 through 2021) linear trend best reflects future requirements for the non-labor activity in this workgroup. Using an average or base year forecasting method would not be appropriate for this workgroup, as it would not properly fund future work demands. Therefore, a three-year linear trend was used to calculate the labor for this group.

**NSE - 3-YR Linear**

NSE is not applicable to this workgroup.

**Summary of Results:**

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		10,759	10,755	10,926	11,756	12,094	12,761	13,344	13,929	
Non-Labor		514	492	571	962	1,025	1,307	1,535	1,762	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>11,273</b>	<b>11,247</b>	<b>11,496</b>	<b>12,719</b>	<b>13,119</b>	<b>14,068</b>	<b>14,879</b>	<b>15,691</b>	
FTE		111.9	110.5	111.8	120.2	121.5	127.6	132.4	137.3	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: B. Asset Management  
 Category-Sub: 1. Asset Management  
 Workpaper: 2GD009.000 - Asset Management

**Summary of Adjustments to Forecast:**

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	3-YR Linear	12,760	13,345	13,929	0	0	0	12,760	13,345	13,929
Non-Labor	3-YR Linear	1,307	1,535	1,762	0	0	0	1,307	1,535	1,762
NSE	3-YR Linear	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>14,068</b>	<b>14,879</b>	<b>15,691</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14,068</b>	<b>14,879</b>	<b>15,691</b>
FTE	3-YR Linear	127.6	132.4	137.3	0.0	0.0	0.0	127.6	132.4	137.3

**Forecast Adjustment Details:**

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
<b>2022 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	
<b>2023 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	
2024	250	0	0	250	2.5	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity CFF-1 Asset and Records Management, 07.					
2024	-250	0	0	-250	-2.5	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity CFF -1 Asset and Records Management, 07.					
<b>2024 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	

Note: Totals may include rounding differences.

SCG/GAS DISTRIBUTION/Exh No:SCG-04-WP-R/Witness: M. Aguirre

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: B. Asset Management  
Category-Sub: 1. Asset Management  
Workpaper: 2GD009.000 - Asset Management

**Determination of Adjusted-Recorded (Incurred Costs):**

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	8,325	8,560	8,707	9,707	10,280
Non-Labor	457	472	592	894	1,025
NSE	0	0	0	0	0
<b>Total</b>	<b>8,782</b>	<b>9,032</b>	<b>9,300</b>	<b>10,601</b>	<b>11,305</b>
FTE	95.5	94.3	93.7	100.5	102.3
<b>Adjustments (Nominal \$) **</b>					
Labor	-75	-106	-11	-1	0
Non-Labor	0	-21	-60	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>-76</b>	<b>-127</b>	<b>-71</b>	<b>-1</b>	<b>0</b>
FTE	-0.5	-0.7	-0.1	0.1	0.0
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	8,249	8,454	8,697	9,706	10,280
Non-Labor	457	451	532	894	1,025
NSE	0	0	0	0	0
<b>Total</b>	<b>8,706</b>	<b>8,906</b>	<b>9,229</b>	<b>10,600</b>	<b>11,305</b>
FTE	95.1	93.7	93.6	100.6	102.2
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	1,398	1,455	1,649	1,710	1,814
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>1,398</b>	<b>1,455</b>	<b>1,649</b>	<b>1,710</b>	<b>1,814</b>
FTE	16.8	16.8	18.2	19.6	19.3
<b>Escalation to 2021\$</b>					
Labor	1,111	845	580	340	0
Non-Labor	57	41	38	68	0
NSE	0	0	0	0	0
<b>Total</b>	<b>1,169</b>	<b>886</b>	<b>618</b>	<b>408</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2021\$)</b>					
Labor	10,759	10,755	10,926	11,756	12,094
Non-Labor	514	492	571	962	1,025
NSE	0	0	0	0	0
<b>Total</b>	<b>11,273</b>	<b>11,247</b>	<b>11,496</b>	<b>12,719</b>	<b>13,119</b>
FTE	111.9	110.5	111.8	120.2	121.5

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: B. Asset Management  
Category-Sub: 1. Asset Management  
Workpaper: 2GD009.000 - Asset Management

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	-75	-106	-11	-0.837	-0.047
Non-Labor	-0.270	-21	-60	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>-76</b>	<b>-127</b>	<b>-71</b>	<b>-0.837</b>	<b>-0.047</b>
FTE	-0.5	-0.7	-0.1	0.1	0.0

**Detail of Adjustments to Recorded:**

Year	Labor	NLbr	NSE	FTE	Adj Type
2017	-75	0	0	-0.5	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2017	0	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2017	0	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2017	-1	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
<b>2017 Total</b>	<b>-75</b>	<b>0</b>	<b>0</b>	<b>-0.5</b>	
2018	-105	-21	0	-0.7	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2018	0	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2018	0	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2018	-1	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: B. Asset Management  
 Category-Sub: 1. Asset Management  
 Workpaper: 2GD009.000 - Asset Management

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
<b>2018 Total</b>	<b>-106</b>	<b>-21</b>	<b>0</b>	<b>-0.7</b>	
2019	-10	-60	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2019	0	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2019	0	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2019	-1	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
<b>2019 Total</b>	<b>-11</b>	<b>-60</b>	<b>0</b>	<b>-0.1</b>	
2020	0	0	0	0.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	0	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2020	0	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2020	-1	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
<b>2020 Total</b>	<b>-1</b>	<b>0</b>	<b>0</b>	<b>0.1</b>	
2021	0	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
<b>2021 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	

Note: Totals may include rounding differences.

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: B. Asset Management  
 Category-Sub: 1. Asset Management  
 Workpaper: 2GD009.000 - Asset Management

**RAMP Item # 1**

**RAMP Activity**

RAMP Chapter: SCG-CFF-1 Asset and Records Management  
 RAMP Line Item ID: 7  
 RAMP Line Item Name: Establish an Enterprise Asset Management Operating Model  
 Tranche(/s): Tranche1: N/A

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	0	0	0	250	1,890	2,730

**Cost Estimate Changes from RAMP:**

Costs for this RAMP activity are split between multiple witness areas (Gas System Staff & Technology and Gas Transmission Operations and Construction).

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 No feasible units	0.00	0.00	0.00	0.00	0.00	0.00

**Work Unit Changes from RAMP:**

Units were not calculated for this activity in both the 2021 RAMP Report and the GRC.

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

**RSE Changes from RAMP:**

RSE was not calculated for this activity in both the 2021 RAMP Report and the GRC.

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: C. Operations and Management  
 Workpaper: 2GD010.000

**Summary for Category: C. Operations and Management**

	In 2021\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Labor	9,985	10,038	10,416	10,794
Non-Labor	784	885	867	848
NSE	0	0	0	0
<b>Total</b>	<b>10,769</b>	<b>10,923</b>	<b>11,283</b>	<b>11,642</b>
FTE	84.5	84.9	88.5	92.0

**Workpapers belonging to this Category:**

**2GD010.000 Operations & Management**

Labor	9,985	10,038	10,416	10,794
Non-Labor	784	885	867	848
NSE	0	0	0	0
<b>Total</b>	<b>10,769</b>	<b>10,923</b>	<b>11,283</b>	<b>11,642</b>
FTE	84.5	84.9	88.5	92.0

*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2GD010.000 - Operations & Management**

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: C. Operations and Management  
Category-Sub: 1. Operations and Management  
Workpaper: 2GD010.000 - Operations & Management

**Activity Description:**

This work category includes costs for operations leadership, field management and operations support, all of which are necessary for SoCalGas to provide customers with safe and reliable service.

Operations leadership covers costs for company leaders responsible for setting the tone and direction of their organization.

Field management is responsible for overall management of the workforce dedicated to the planning and completion of Gas Distribution pipeline maintenance and installation activities.

**Forecast Explanations:**

**Labor - 4-YR Linear**

In projecting the future expense requirements for these functions, SoCalGas reviewed the 2017 through 2021 historical spending for this workgroup. In general, operations leadership and field management increase as levels of work and workforce increase: as new programs processes and technologies are implemented, and as regulatory or compliance requirements change. The review of the historical costs in this work category shows a generally consistent upward trend. As a foundational forecast, SoCalGas used the four-year (2018 through 2021) linear trend expense as the forecast for the level of leadership and management necessary to maintain current operations. Using an average or base year forecasting method would not be appropriate for this workgroup, as it would not properly fund future labor demands in the workgroup.

**Non-Labor - 4-YR Linear**

In projecting the future expense requirements for these functions, SoCalGas reviewed the 2017 through 2021 historical spending for this workgroup. In general, operations leadership and field management increase as levels of work and workforce increase: as new programs processes and technologies are implemented, and as regulatory or compliance requirements change. The review of the historical costs in this work category shows a generally consistent upward trend. As a foundational forecast, SoCalGas used the four-year (2018 through 2021) linear trend expense as the forecast for the level of leadership and management necessary to maintain current operations. Using an average or base year forecasting method would not be appropriate for this workgroup, as it would not properly fund future non-labor demands in the workgroup.

**NSE - 4-YR Linear**

NSE is not applicable to this workgroup.

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: C. Operations and Management  
 Category-Sub: 1. Operations and Management  
 Workpaper: 2GD010.000 - Operations & Management

**Summary of Results:**

		<b>In 2021\$ (000) Incurred Costs</b>								
		<b>Adjusted-Recorded</b>					<b>Adjusted-Forecast</b>			
<b>Years</b>		<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	
Labor		8,910	9,195	7,886	9,301	9,985	10,038	10,416	10,794	
Non-Labor		853	890	960	1,094	784	885	867	848	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>9,762</b>	<b>10,085</b>	<b>8,846</b>	<b>10,395</b>	<b>10,768</b>	<b>10,923</b>	<b>11,283</b>	<b>11,642</b>	
FTE		74.8	76.5	65.3	77.2	84.5	84.9	88.5	92.0	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: C. Operations and Management  
 Category-Sub: 1. Operations and Management  
 Workpaper: 2GD010.000 - Operations & Management

**Summary of Adjustments to Forecast:**

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	4-YR Linear	10,038	10,416	10,794	0	0	0	10,038	10,416	10,794
Non-Labor	4-YR Linear	885	867	848	0	0	0	885	867	848
NSE	4-YR Linear	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>10,923</b>	<b>11,282</b>	<b>11,642</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,923</b>	<b>11,282</b>	<b>11,642</b>
FTE	4-YR Linear	84.9	88.5	92.0	0.0	0.0	0.0	84.9	88.5	92.0

**Forecast Adjustment Details:**

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	-350	0	0	-350	-3.0	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 3 Medium Pressure Incident, C15 Company and Contractor Inspection on Gas Pipelines.					
2022	350	0	0	350	3.0	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 3 Medium Pressure Incident, C15 Company and Contractor Inspection on Gas Pipelines.					
<b>2022 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	
2023	-350	0	0	-350	-3.0	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 3 Medium Pressure Incident, C15 Company and Contractor Inspection on Gas Pipelines.					
2023	350	0	0	350	3.0	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 3 Medium Pressure Incident, C15 Company and Contractor Inspection on Gas Pipelines.					
<b>2023 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	
2024	-350	0	0	-350	-3.0	1-Sided Adj
<b>Explanation:</b>	Adjustment to remove costs from the base forecast related to RAMP activity Chapter 3 Medium Pressure Incident, C15 Company and Contractor Inspection on Gas Pipelines.					
2024	350	0	0	350	3.0	1-Sided Adj
<b>Explanation:</b>	Added costs for RAMP activity Chapter 3 Medium Pressure Incident, C15 Company and Contractor Inspection on Gas Pipelines.					
<b>2024 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	

Note: Totals may include rounding differences.

SCG/GAS DISTRIBUTION/Exh No:SCG-04-WP-R/Witness: M. Aguirre

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: C. Operations and Management  
Category-Sub: 1. Operations and Management  
Workpaper: 2GD010.000 - Operations & Management

**Determination of Adjusted-Recorded (Incurred Costs):**

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	6,833	7,278	6,281	7,681	8,487
Non-Labor	758	821	895	1,016	784
NSE	0	0	0	0	0
<b>Total</b>	<b>7,591</b>	<b>8,099</b>	<b>7,177</b>	<b>8,697</b>	<b>9,270</b>
FTE	63.5	65.2	54.9	64.5	71.1
<b>Adjustments (Nominal \$) **</b>					
Labor	-2	-49	-4	-2	0
Non-Labor	0	-5	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>-2</b>	<b>-54</b>	<b>-4</b>	<b>-2</b>	<b>0</b>
FTE	0.0	-0.3	-0.2	0.1	0.0
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	6,831	7,228	6,277	7,679	8,487
Non-Labor	758	816	895	1,016	784
NSE	0	0	0	0	0
<b>Total</b>	<b>7,589</b>	<b>8,045</b>	<b>7,173</b>	<b>8,695</b>	<b>9,270</b>
FTE	63.5	64.9	54.7	64.6	71.1
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	1,158	1,244	1,190	1,353	1,498
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>1,158</b>	<b>1,244</b>	<b>1,190</b>	<b>1,353</b>	<b>1,498</b>
FTE	11.3	11.6	10.6	12.6	13.4
<b>Escalation to 2021\$</b>					
Labor	920	723	419	269	0
Non-Labor	95	74	64	78	0
NSE	0	0	0	0	0
<b>Total</b>	<b>1,015</b>	<b>797</b>	<b>483</b>	<b>346</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2021\$)</b>					
Labor	8,910	9,195	7,886	9,301	9,985
Non-Labor	853	890	960	1,094	784
NSE	0	0	0	0	0
<b>Total</b>	<b>9,762</b>	<b>10,085</b>	<b>8,846</b>	<b>10,395</b>	<b>10,768</b>
FTE	74.8	76.5	65.3	77.2	84.5

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: C. Operations and Management  
Category-Sub: 1. Operations and Management  
Workpaper: 2GD010.000 - Operations & Management

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	-2	-49	-4	-2	0
Non-Labor	0	-5	-0.129	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>-2</b>	<b>-54</b>	<b>-4</b>	<b>-2</b>	<b>0</b>
FTE	0.0	-0.3	-0.2	0.1	0.0

**Detail of Adjustments to Recorded:**

Year	Labor	NLbr	NSE	FTE	Adj Type
2017	-2	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
<b>2017 Total</b>	<b>-2</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	
2018	-47	-5	0	-0.3	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2018	-2	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
<b>2018 Total</b>	<b>-49</b>	<b>-5</b>	<b>0</b>	<b>-0.3</b>	
2019	-2	0	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2019	0	0	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2019	-2	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
<b>2019 Total</b>	<b>-4</b>	<b>0</b>	<b>0</b>	<b>-0.2</b>	
2020	0	0	0	0.1	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				

Note: Totals may include rounding differences.

Southern California Gas Company  
 2024 GRC - REVISED  
 Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: C. Operations and Management  
 Category-Sub: 1. Operations and Management  
 Workpaper: 2GD010.000 - Operations & Management

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
2020	-2	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
<b>2020 Total</b>	<b>-2</b>	<b>0</b>	<b>0</b>	<b>0.1</b>	
<b>2021 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: C. Operations and Management  
 Category-Sub: 1. Operations and Management  
 Workpaper: 2GD010.000 - Operations & Management

**RAMP Item # 1**

**RAMP Activity**

RAMP Chapter: SCG-Risk-3 Incident Related to the Medium Pressure System (Excluding Dig-in)

RAMP Line Item ID: C15

RAMP Line Item Name: Company and Contractor Inspection on Gas Pipelines

Tranche(/s): Tranche1: Medium Pressure Mains - Plastic & Steel

**GRC Forecast Cost Estimates (\$000)**

	2021 Historical Embedded Cost (2021 \$)	2022 Forecast (2021 \$)	2023 Forecast (2021 \$)	2024 Forecast (2021 \$)	2024 RAMP Range (2020 Incurred \$)	
					Low	High
Tranche 1 Cost Estimate	350	350	350	350	305	405

**Cost Estimate Changes from RAMP:**

None

**GRC Work Unit/Activity Level Estimates**

Unit of Measure	2021 Historical Embedded Activities	2022 Forecast Activities	2023 Forecast Activities	2024 Forecast Activities	2024 RAMP Range Activities	
					Low	High
Tranche 1 # of inspections	7,811.00	7,811.00	7,811.00	7,811.00	6,792.00	8,983.00

**Work Unit Changes from RAMP:**

None

**Risk Spend Efficiency (RSE)**

	GRC RSE	RAMP RSE
Tranche 1	0.000	0.000

**RSE Changes from RAMP:**

RSE was not calculated for this activity in both the 2021 RAMP Report and the GRC.

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: D. Regional Public Affairs  
Workpaper: 2GD011.000

**Summary for Category: D. Regional Public Affairs**

	In 2021\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Labor	3,435	3,560	3,560	3,560
Non-Labor	546	546	546	546
NSE	0	0	0	0
<b>Total</b>	<b>3,981</b>	<b>4,106</b>	<b>4,106</b>	<b>4,106</b>
FTE	27.9	28.9	28.9	28.9

**Workpapers belonging to this Category:**

**2GD011.000 Regional Public Affairs**

Labor	3,435	3,560	3,560	3,560
Non-Labor	546	546	546	546
NSE	0	0	0	0
<b>Total</b>	<b>3,981</b>	<b>4,106</b>	<b>4,106</b>	<b>4,106</b>
FTE	27.9	28.9	28.9	28.9

*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2GD011.000 - Regional Public Affairs**

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: D. Regional Public Affairs  
 Category-Sub: 1. Regional Public Affairs  
 Workpaper: 2GD011.000 - Regional Public Affairs

**Activity Description:**

Regional Public Affairs (RPA) primarily supports field operations through its work with regional and local governments on issues regarding proposed regulations, franchises, permitting, and emergency preparedness and response. RPA also educates officials at the county and city levels about SoCalGas issues that could impact customers. RPA further serves as the point of contact in the communities SoCalGas serves, educating stakeholders about SoCalGas activities, programs and services, responding to customer and media inquiries, and resolving customer complaints.

**Forecast Explanations:**

**Labor - Base YR Rec**

SoCalGas evaluated the historical expenditures for 2017 through 2021 for the Regional Public Affairs (RPA) workgroup. The level of spending for this workgroup is primarily based on the salaries and non-labor expenses of the current RPA workgroup. Therefore, a base year forecast method was used to forecast the base level of future labor expense plus incremental funding needed to fund an additional Public Affairs Manager.

**Non-Labor - Base YR Rec**

SoCalGas evaluated the historical expenditures for 2017 through 2021 for the Regional Public Affairs (RPA) workgroup. The level of spending for this workgroup is primarily based on the salaries and associated non-labor expenses of the current RPA workgroup. Therefore, a base year forecast method was used to forecast the base level of future non-labor expense.

**NSE - Base YR Rec**

NSE is not applicable to this workgroup.

**Summary of Results:**

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		3,192	3,310	3,445	3,378	3,435	3,560	3,560	3,560	
Non-Labor		549	595	576	580	546	547	547	547	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>3,740</b>	<b>3,905</b>	<b>4,021</b>	<b>3,957</b>	<b>3,982</b>	<b>4,107</b>	<b>4,107</b>	<b>4,107</b>	
FTE		27.8	28.0	29.0	28.2	27.9	28.9	28.9	28.9	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
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Area: GAS DISTRIBUTION  
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 Category: D. Regional Public Affairs  
 Category-Sub: 1. Regional Public Affairs  
 Workpaper: 2GD011.000 - Regional Public Affairs

**Summary of Adjustments to Forecast:**

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	3,435	3,435	3,435	125	125	125	3,560	3,560	3,560
Non-Labor	Base YR Rec	546	546	546	0	0	0	546	546	546
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>3,982</b>	<b>3,982</b>	<b>3,982</b>	<b>125</b>	<b>125</b>	<b>125</b>	<b>4,107</b>	<b>4,107</b>	<b>4,107</b>
FTE	Base YR Rec	27.9	27.9	27.9	1.0	1.0	1.0	28.9	28.9	28.9

**Forecast Adjustment Details:**

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	125	0	0	125	1.0	1-Sided Adj
<b>Explanation:</b>	Public Affairs Manager - Regional Public Affairs will be adding 1 Public Affairs Manager in 2022. Labor cost will be 1 FTE x \$125K beginning in 2022.					
<b>2022 Total</b>	<b>125</b>	<b>0</b>	<b>0</b>	<b>125</b>	<b>1.0</b>	
2023	125	0	0	125	1.0	1-Sided Adj
<b>Explanation:</b>	Public Affairs Manager - Regional Public Affairs will be adding 1 Public Affairs Manager in 2022. Labor cost will be 1 FTE x \$125K beginning in 2022.					
<b>2023 Total</b>	<b>125</b>	<b>0</b>	<b>0</b>	<b>125</b>	<b>1.0</b>	
2024	125	0	0	125	1.0	1-Sided Adj
<b>Explanation:</b>	Public Affairs Manager - Regional Public Affairs will be adding 1 Public Affairs Manager in 2022. Labor cost will be 1 FTE x \$125K beginning in 2022.					
<b>2024 Total</b>	<b>125</b>	<b>0</b>	<b>0</b>	<b>125</b>	<b>1.0</b>	

Note: Totals may include rounding differences.

SCG/GAS DISTRIBUTION/Exh No:SCG-04-WP-R/Witness: M. Aguirre

Southern California Gas Company  
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Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: D. Regional Public Affairs  
Category-Sub: 1. Regional Public Affairs  
Workpaper: 2GD011.000 - Regional Public Affairs

**Determination of Adjusted-Recorded (Incurred Costs):**

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	2,537	2,692	2,832	2,879	2,926
Non-Labor	552	606	559	634	612
NSE	0	0	0	0	0
<b>Total</b>	<b>3,089</b>	<b>3,298</b>	<b>3,391</b>	<b>3,513</b>	<b>3,538</b>
FTE	24.1	24.2	24.8	24.2	23.6
<b>Adjustments (Nominal \$) **</b>					
Labor	-90	-90	-90	-91	-6
Non-Labor	-65	-60	-21	-95	-66
NSE	0	0	0	0	0
<b>Total</b>	<b>-154</b>	<b>-150</b>	<b>-111</b>	<b>-185</b>	<b>-72</b>
FTE	-0.6	-0.6	-0.6	-0.7	-0.1
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	2,447	2,602	2,742	2,789	2,920
Non-Labor	488	546	538	539	546
NSE	0	0	0	0	0
<b>Total</b>	<b>2,935</b>	<b>3,148</b>	<b>3,280</b>	<b>3,327</b>	<b>3,466</b>
FTE	23.5	23.6	24.2	23.5	23.5
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	415	448	520	491	515
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>415</b>	<b>448</b>	<b>520</b>	<b>491</b>	<b>515</b>
FTE	4.3	4.4	4.8	4.7	4.4
<b>Escalation to 2021\$</b>					
Labor	330	260	183	98	0
Non-Labor	61	50	39	41	0
NSE	0	0	0	0	0
<b>Total</b>	<b>391</b>	<b>310</b>	<b>222</b>	<b>139</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2021\$)</b>					
Labor	3,192	3,310	3,445	3,378	3,435
Non-Labor	549	595	576	580	546
NSE	0	0	0	0	0
<b>Total</b>	<b>3,740</b>	<b>3,905</b>	<b>4,021</b>	<b>3,957</b>	<b>3,982</b>
FTE	27.8	28.0	29.0	28.2	27.9

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
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Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: D. Regional Public Affairs  
Category-Sub: 1. Regional Public Affairs  
Workpaper: 2GD011.000 - Regional Public Affairs

**Summary of Adjustments to Recorded:**

		In Nominal \$ (000) Incurred Costs				
Years	2017	2018	2019	2020	2021	
Labor	-90	-90	-90	-91	-6	
Non-Labor	-65	-60	-21	-95	-66	
NSE	0	0	0	0	0	
<b>Total</b>	<b>-154</b>	<b>-150</b>	<b>-111</b>	<b>-185</b>	<b>-72</b>	
FTE	-0.6	-0.6	-0.6	-0.7	-0.1	

**Detail of Adjustments to Recorded:**

Year	Labor	NLbr	NSE	FTE	Adj Type
2017	0	-14	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding payments made to Chambers of Commerce. 2017: \$14,389 2018: \$8,830 2019: \$8,889 2020: \$3,370 2021: \$38,084				
2017	0	-6	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding costs associated to tickets. 2017: \$5,680 2018: \$12,014 2019: \$9,081 2020: \$4,488 2021: \$6,223				
2017	0	-2	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding costs associated to dues. 2017: \$2,385 2018: \$2,027 2019: \$2,817 2020: \$1,503 2021: \$2,650				
2017	0	-42	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding costs associated to sponsorships. 2017: \$42,148 2018: \$23,550 2019: \$14,307 2020: \$14,439 2021: \$10,700				
2017	-4	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2017	-30	0	0	-0.2	1-Sided Adj

*Note: Totals may include rounding differences.*

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Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
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 Workpaper: 2GD011.000 - Regional Public Affairs

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2017	-6	0	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2017	-6	0	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2017	-43	0	0	-0.2	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
<b>2017 Total</b>	<b>-90</b>	<b>-65</b>	<b>0</b>	<b>-0.6</b>	
2018	0	-14	0	0.0	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2018	0	-9	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding payments made to Chambers of Commerce. 2017: \$14,389 2018: \$8,830 2019: \$8,889 2020: \$3,370 2021: \$38,084				
2018	0	-12	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding costs associated to tickets. 2017: \$5,680 2018: \$12,014 2019: \$9,081 2020: \$4,488 2021: \$6,223				
2018	0	-2	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding costs associated to dues. 2017: \$2,385 2018: \$2,027 2019: \$2,817 2020: \$1,503 2021: \$2,650				
2018	0	-24	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding costs associated to sponsorships. 2017: \$42,148 2018: \$23,550 2019: \$14,307 2020: \$14,439 2021: \$10,700				
2018	-4	0	0	0.0	1-Sided Adj

Note: Totals may include rounding differences.

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Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: D. Regional Public Affairs  
 Category-Sub: 1. Regional Public Affairs  
 Workpaper: 2GD011.000 - Regional Public Affairs

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2018	-30	0	0	-0.2	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2018	-6	0	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2018	-6	0	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2018	-43	0	0	-0.2	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
<b>2018 Total</b>	<b>-90</b>	<b>-60</b>	<b>0</b>	<b>-0.6</b>	
2019	0	-7	0	0.0	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2019	0	-9	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding payments made to Chambers of Commerce. 2017: \$14,389 2018: \$8,830 2019: \$8,889 2020: \$3,370 2021: \$38,084				
2019	0	-9	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding costs associated to tickets. 2017: \$5,680 2018: \$12,014 2019: \$9,081 2020: \$4,488 2021: \$6,223				
2019	0	-3	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding costs associated to dues. 2017: \$2,385 2018: \$2,027 2019: \$2,817 2020: \$1,503 2021: \$2,650				
2019	0	-14	0	0.0	1-Sided Adj

Note: Totals may include rounding differences.

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Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: D. Regional Public Affairs  
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<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
<b>Explanation:</b>	Excluding costs associated to sponsorships. 2017: \$42,148 2018: \$23,550 2019: \$14,307 2020: \$14,439 2021: \$10,700				
2019	0	20	0	0.0	CCTR Transf To 2200-8000.002
<b>Explanation:</b>	Adjustment to move credits associated to LTIP executive benefits from Gas Distribution to Corporate Center - Compensation & Benefits witness.				
2019	-4	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2019	-30	0	0	-0.2	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2019	-6	0	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2019	-6	0	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2019	-43	0	0	-0.2	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
<b>2019 Total</b>	<b>-90</b>	<b>-21</b>	<b>0</b>	<b>-0.6</b>	
2020	0	-71	0	0.0	1-Sided Adj
<b>Explanation:</b>	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2020	0	-3	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding payments made to Chambers of Commerce. 2017: \$14,389 2018: \$8,830 2019: \$8,889 2020: \$3,370 2021: \$38,084				
2020	0	-4	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding costs associated to tickets. 2017: \$5,680 2018: \$12,014 2019: \$9,081 2020: \$4,488 2021: \$6,223				

Note: Totals may include rounding differences.

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Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: D. Regional Public Affairs  
 Category-Sub: 1. Regional Public Affairs  
 Workpaper: 2GD011.000 - Regional Public Affairs

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
2020	0	-2	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding costs associated to dues. 2017: \$2,385 2018: \$2,027 2019: \$2,817 2020: \$1,503 2021: \$2,650				
2020	0	-14	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding costs associated to sponsorships. 2017: \$42,148 2018: \$23,550 2019: \$14,307 2020: \$14,439 2021: \$10,700				
2020	-4	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2020	-30	0	0	-0.2	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2020	-6	0	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2020	-6	0	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2020	-43	0	0	-0.2	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2020	-1	0	0	-0.1	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4) and other advocacy related activities. This adjustment is in addition to other costs that have already been excluded based on other specific accounting attributes.				
<b>2020 Total</b>	<b>-91</b>	<b>-95</b>	<b>0</b>	<b>-0.7</b>	
2021	0	-8	0	0.0	1-Sided Adj
<b>Explanation:</b>	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
2021	0	-38	0	0.0	1-Sided Adj

Note: Totals may include rounding differences.

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Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: D. Regional Public Affairs  
 Category-Sub: 1. Regional Public Affairs  
 Workpaper: 2GD011.000 - Regional Public Affairs

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
<b>Explanation:</b>	Excluding payments made to Chambers of Commerce. 2017: \$14,389 2018: \$8,830 2019: \$8,889 2020: \$3,370 2021: \$38,084				
2021	0	-6	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding costs associated to tickets. 2017: \$5,680 2018: \$12,014 2019: \$9,081 2020: \$4,488 2021: \$6,223				
2021	0	-3	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding costs associated to dues. 2017: \$2,385 2018: \$2,027 2019: \$2,817 2020: \$1,503 2021: \$2,650				
2021	0	-11	0	0.0	1-Sided Adj
<b>Explanation:</b>	Excluding costs associated to sponsorships. 2017: \$42,148 2018: \$23,550 2019: \$14,307 2020: \$14,439 2021: \$10,700				
2021	0	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2021	-1	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2021	-1	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2021	0	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2021	-2	0	0	0.0	1-Sided Adj
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4). This adjustment is in addition to other costs that have already been excluded based other specific accounting attributes.				
2021	-1	0	0	-0.1	1-Sided Adj

Note: Totals may include rounding differences.

Southern California Gas Company  
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Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: D. Regional Public Affairs  
 Category-Sub: 1. Regional Public Affairs  
 Workpaper: 2GD011.000 - Regional Public Affairs

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
<b>Explanation:</b>	Exclude labor expenses associated with lobbying activities (FERC 426.4) and other advocacy related activities. This adjustment is in addition to other costs that have already been excluded based on other specific accounting attributes.				
<b>2021 Total</b>	-6	-66	0	-0.1	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
 2024 GRC - REVISED  
 Shared Services Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre

**Summary of Shared Services Workpapers:**

Description	In 2021 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
A. Field Services Leadership & Assessment	410	410	410	410
<b>Total</b>	<b>410</b>	<b>410</b>	<b>410</b>	<b>410</b>

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Shared Services Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Services Leadership & Assessment  
 Cost Center: 2200-0431.000

**Summary for Category: A. Field Services Leadership & Assessment**

	In 2021\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Labor	391	391	391	391
Non-Labor	19	19	19	19
NSE	0	0	0	0
<b>Total</b>	<b>410</b>	<b>410</b>	<b>410</b>	<b>410</b>
FTE	2.0	2.0	2.0	2.0

**Cost Centers belonging to this Category:**

**2200-0431.000 FIELD SERVICES LEADERSHIP & OPERATIONS ASSESSMENT**

Labor	391	391	391	391
Non-Labor	19	19	19	19
NSE	0	0	0	0
<b>Total</b>	<b>410</b>	<b>410</b>	<b>410</b>	<b>410</b>
FTE	2.0	2.0	2.0	2.0

*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2200-0431.000 - FIELD SERVICES LEADERSHIP & OPERATIONS ASSESSMENT**

Southern California Gas Company  
2024 GRC - REVISED  
Shared Services Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Services Leadership & Assessment  
 Category-Sub: 1. Field Services Leadership & Assessment  
 Cost Center: 2200-0431.000 - FIELD SERVICES LEADERSHIP & OPERATIONS ASSESSMENT

**Activity Description:**

Recorded to this cost center are the salary and employee non-labor expenses for the Vice President of the Gas Distribution Organization. Also charged are one-time expenses that benefit the entire organization.

**Forecast Explanations:**

**Labor - Base YR Rec**

The level of spending for this workgroup is primarily based on the salary of the current Vice President of Gas Distribution. The most recent spending levels represent the most accurate estimate of costs for the forecast years. Therefore, a base year forecast method was used to forecast the base level of future labor expense. Using an average forecasting method would not be appropriate for this work category as it would not fully fund the workgroup. Using a linear trend would overstate costs beyond anticipated levels.

**Non-Labor - Base YR Rec**

The level of spending for this workgroup is primarily based on the salary of the current Vice President of Gas Distribution. The most recent spending levels represent the most accurate estimate of costs for the forecast years. Therefore, a base year forecast method was used to forecast the base level of future labor expense. Using an average forecasting method would not be appropriate for this work category as it would not fully fund the workgroup. Using a linear trend would overstate costs beyond anticipated levels.

**NSE - Base YR Rec**

NSE is not applicable to this workgroup.

**Summary of Results:**

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		280	352	407	485	391	391	391	391	
Non-Labor		137	100	79	49	19	19	19	19	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>417</b>	<b>453</b>	<b>486</b>	<b>535</b>	<b>410</b>	<b>410</b>	<b>410</b>	<b>410</b>	
FTE		1.2	1.8	2.4	3.2	2.0	2.0	2.0	2.0	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Shared Services Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Services Leadership & Assessment  
 Category-Sub: 1. Field Services Leadership & Assessment  
 Cost Center: 2200-0431.000 - FIELD SERVICES LEADERSHIP & OPERATIONS ASSESSMENT

**Cost Center Allocations (Incurred Costs):**

	2021 Adjusted-Recorded					2022 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	0	0	0	0.0	0	0	0	0	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	391	19	0	410	2.0	391	19	0	410	2.0
<b>Total Incurred</b>	<b>391</b>	<b>19</b>	<b>0</b>	<b>410</b>	<b>2.0</b>	<b>391</b>	<b>19</b>	<b>0</b>	<b>410</b>	<b>2.0</b>
<b>% Allocation</b>										
Retained	87.42%	87.42%				87.42%	87.42%			
SEU	12.58%	12.58%				12.58%	12.58%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			

	2023 Adjusted-Forecast					2024 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	0	0	0	0.0	0	0	0	0	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	391	19	0	410	2.0	391	19	0	410	2.0
<b>Total Incurred</b>	<b>391</b>	<b>19</b>	<b>0</b>	<b>410</b>	<b>2.0</b>	<b>391</b>	<b>19</b>	<b>0</b>	<b>410</b>	<b>2.0</b>
<b>% Allocation</b>										
Retained	87.42%	87.42%				87.42%	87.42%			
SEU	12.58%	12.58%				12.58%	12.58%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			

Note: Totals may include rounding differences.

Southern California Gas Company  
2024 GRC - REVISED  
Shared Services Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre  
Category: A. Field Services Leadership & Assessment  
Category-Sub: 1. Field Services Leadership & Assessment  
Cost Center: 2200-0431.000 - FIELD SERVICES LEADERSHIP & OPERATIONS ASSESSMENT

**Cost Center Allocation Percentage Drivers/Methodology:**

**Cost Center Allocation Percentage for 2021**

The allocation method is based upon oversight of services that benefit customers, general management of the pipeline asset, and leadership to the employee base within Field Services. A ratio of miles of pipe, which is a standard assessment across both utilities, was used in calculating shared service allocation.

**Cost Center Allocation Percentage for 2022**

The allocation method is based upon oversight of services that benefit customers, general management of the pipeline asset, and leadership to the employee base within Field Services. A ratio of miles of pipe, which is a standard assessment across both utilities, was used in calculating shared service allocation.

**Cost Center Allocation Percentage for 2023**

The allocation method is based upon oversight of services that benefit customers, general management of the pipeline asset, and leadership to the employee base within Field Services. A ratio of miles of pipe, which is a standard assessment across both utilities, was used in calculating shared service allocation.

**Cost Center Allocation Percentage for 2024**

The allocation method is based upon oversight of services that benefit customers, general management of the pipeline asset, and leadership to the employee base within Field Services. A ratio of miles of pipe, which is a standard assessment across both utilities, was used in calculating shared service allocation.

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Shared Services Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Services Leadership & Assessment  
 Category-Sub: 1. Field Services Leadership & Assessment  
 Cost Center: 2200-0431.000 - FIELD SERVICES LEADERSHIP & OPERATIONS ASSESSMENT

**Summary of Adjustments to Forecast:**

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	391	391	391	0	0	0	391	391	391
Non-Labor	Base YR Rec	19	19	19	0	0	0	19	19	19
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>410</b>	<b>410</b>	<b>410</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>410</b>	<b>410</b>	<b>410</b>
FTE	Base YR Rec	2.0	2.0	2.0	0.0	0.0	0.0	2.0	2.0	2.0

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
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*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Shared Services Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Services Leadership & Assessment  
 Category-Sub: 1. Field Services Leadership & Assessment  
 Cost Center: 2200-0431.000 - FIELD SERVICES LEADERSHIP & OPERATIONS ASSESSMENT

**Determination of Adjusted-Recorded (Incurred Costs):**

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	217	278	324	396	333
Non-Labor	124	93	7	49	19
NSE	0	0	0	0	0
<b>Total</b>	<b>340</b>	<b>371</b>	<b>331</b>	<b>444</b>	<b>352</b>
FTE	0.9	1.5	2.0	2.7	1.7
<b>Adjustments (Nominal \$) **</b>					
Labor	0	0	0	0	0
Non-Labor	0	-1	68	-1	-1
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>-1</b>	<b>68</b>	<b>-1</b>	<b>-1</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	217	278	324	396	333
Non-Labor	124	93	75	47	19
NSE	0	0	0	0	0
<b>Total</b>	<b>340</b>	<b>371</b>	<b>399</b>	<b>443</b>	<b>351</b>
FTE	1.0	1.5	2.0	2.7	1.7
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	37	48	61	70	59
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>37</b>	<b>48</b>	<b>61</b>	<b>70</b>	<b>59</b>
FTE	0.2	0.3	0.4	0.5	0.3
<b>Escalation to 2021\$</b>					
Labor	27	27	22	20	0
Non-Labor	13	8	4	2	0
NSE	0	0	0	0	0
<b>Total</b>	<b>40</b>	<b>34</b>	<b>26</b>	<b>22</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2021\$)</b>					
Labor	280	352	407	485	391
Non-Labor	137	100	79	49	19
NSE	0	0	0	0	0
<b>Total</b>	<b>417</b>	<b>453</b>	<b>486</b>	<b>535</b>	<b>410</b>
FTE	1.2	1.8	2.4	3.2	2.0

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
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Shared Services Workpapers

Area: GAS DISTRIBUTION  
 Witness: Mario A. Aguirre  
 Category: A. Field Services Leadership & Assessment  
 Category-Sub: 1. Field Services Leadership & Assessment  
 Cost Center: 2200-0431.000 - FIELD SERVICES LEADERSHIP & OPERATIONS ASSESSMENT

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	0	0	0	0	0
Non-Labor	0	-0.543	68	-1	-0.625
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>-0.543</b>	<b>68</b>	<b>-1</b>	<b>-0.625</b>
FTE	0.0	0.0	0.0	0.0	0.0

**Detail of Adjustments to Recorded:**

Year	Labor	NLbr	NSE	FTE	Adj Type
<b>2017 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	
2018	0	-1	0	0.0	1-Sided Adj
<b>Explanation:</b>	Incremental costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2018 Total</b>	<b>0</b>	<b>-1</b>	<b>0</b>	<b>0.0</b>	
2019	0	68	0	0.0	CCTR Transf To 2200-8000.002
<b>Explanation:</b>	Adjustment to move credits associated to LTIP executive benefits from Gas Distribution to Corporate Center - Compensation & Benefits witness.				
<b>2019 Total</b>	<b>0</b>	<b>68</b>	<b>0</b>	<b>0.0</b>	
2020	0	-1	0	0.0	1-Sided Adj
<b>Explanation:</b>	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2020 Total</b>	<b>0</b>	<b>-1</b>	<b>0</b>	<b>0.0</b>	
2021	0	-1	0	0.0	1-Sided Adj
<b>Explanation:</b>	Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).				
<b>2021 Total</b>	<b>0</b>	<b>-1</b>	<b>0</b>	<b>0.0</b>	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre

**Appendix A: List of Non-Shared Cost Centers**

<b>Cost Center</b>	<b>Sub</b>	<b>Description</b>
2200-0209	000	NB CUST EXPERIENCE
2200-0224	000	PMO CAP PROG & DIMP DREAMS
2200-0254	000	GAS TRANSMISSION SKILLS TRAINING
2200-0423	000	Transforming Distribution Initiative Pro
2200-0432	000	GD SE RGN SP1 (REDR)
2200-0433	000	GD SE PLANNING AND ENGINEERING MGR
2200-0434	000	GD SE TSS-REDLANDS 3
2200-0435	000	GD SE SYST PROT SUPV-REDLANDS
2200-0436	000	GD SE TSS-REDLANDS 2
2200-0437	000	GD SE RGN DIRECTOR
2200-0438	000	GD SE REG ENGINEER-REDLANDS
2200-0439	000	GD SE M&R-REDLANDS
2200-0441	000	GD SE WORK ORDER CONTROL-REDLANDS
2200-0443	000	GD SOUTHEAST ARM
2200-0444	000	GD SE AREA MGR INLAND EAST
2200-0446	000	GD SE CREW SAN BERNARDINO
2200-0447	000	GD SE CREW CORONA
2200-0450	000	GD SE CREW CHINO
2200-0451	000	GD SE RGN SP10 (SNB)
2200-0453	000	GD SE CREW FONTANA
2200-0454	000	GD SE TSS-DIMP DREAM
2200-0456	000	GD SE CREW PALM DESERT
2200-0459	000	GD SE CREW RIVERSIDE
2200-0460	000	GD SE LEAKAGE-REDLANDS
2200-0461	000	GD SE CREW RAMONA
2200-0465	000	GD SE CREW EL CENTRO
2200-0466	000	GD SE LEAKAGE-ANAHEIM
2200-0468	000	GD SE CREW RIM FOREST
2200-0469	000	GD SE AREA MGR SAN GABRIEL VALLEY
2200-0471	000	GD SE CREW ALHAMBRA
2200-0472	000	GD SE RGN SPEC PROJ 5 (FKA AZU DOM)
2200-0474	000	GD SE CREW AZUSA
2200-0478	000	GD SE CREW PASADENA
2200-0480	000	GD NW PLANNING AND ENGINEERING MGR
2200-0481	000	GD NW SYS PROT SUPV - CHATSWORTH
2200-0482	000	GD NW WORK ORDER CONTROL - CHATSWORTH
2200-0483	000	GD NW M&R - SATICOY
2200-0484	000	GD NW REG PIPELINE PLNG DISTRICTS
2200-0485	000	GD NW REG ENGINEER - CHATSWORTH
2200-0486	000	GD NW TECH SUPV - CHATSWORTH 1
2200-0487	000	GD NW TECH SUPV - GOLETA
2200-0488	000	GD NW TECH SUPV - VISALIA
2200-0489	000	GD NW ASSET M&I MGR
2200-0490	000	GD NW HP CONSTRUCTION
2200-0491	000	GD NW AREA MGR SAN JOAQUIN

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Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre

**Appendix A: List of Non-Shared Cost Centers**

<b>Cost Center</b>	<b>Sub</b>	<b>Description</b>
2200-0492	000	GD NW CREW VISALIA
2200-0496	000	GD NW CREW BAKERSFIELD
2200-0499	000	GD NORTHWEST ARM
2200-0500	000	GD NW AREA MGR NORTH COAST
2200-0501	000	GD NW RGN CREW SLO/TEMPLETON
2200-0504	000	GD NW CREW SANTA MARIA
2200-0510	000	GD NW CREW VENTURA
2200-0511	000	GD NW AREA MGR CENTRAL COAST
2200-0512	000	GD NW CREW SANTA BARBARA
2200-0517	000	GD NW CREW CANOGA
2200-0518	000	GD NW LEAKAGE-CHATSWORTH
2200-0520	000	GD NW CREW SIMI VALLEY
2200-0521	000	GD NW AREA MGR SFV
2200-0523	000	GD NW CREW SATICOY
2200-0524	000	GD NW RGN SPEC PROJ 5 (FKA DOM)
2200-0526	000	GD NW CREW BRANFORD
2200-0527	000	GD NW RGN SPEC PROJ 4 (FKA DOM)
2200-0528	000	GD NW CREW GLENDALE
2200-0532	000	GD NW CREW VALENCIA
2200-0533	000	GD NW AREA MGR NORTH VALLEY
2200-0535	000	GD NW CREW LANCASTER
2200-0537	000	GD SE ENVIRONMENTAL
2200-0538	000	GD SE REG ENGINEER-ANAHEIM
2200-0539	000	GD SE TSS-ANAHEIM 3
2200-0540	000	GD SE TSS (PPA SUP)-ANAHEIM 1
2200-0541	000	GD SE SYST PROT SUPV-ANAHEIM
2200-0542	000	GD SE M&R ANAHEIM
2200-0543	000	GD SE WORK ORDER CONTROL-ANAHEIM
2200-0544	000	GD SE RGN FIELD OPERATIONS MGR
2200-0545	000	GD SE AREA MGR ORANGE NORTH
2200-0547	000	GD SE CREW DOWNEY
2200-0549	000	GD SE CREW WHITTIER
2200-0553	000	GD SE CREW ANAHEIM
2200-0555	000	GD SE CREW LA JOLLA
2200-0558	000	GD SE AREA MGR ORANGE COUNTY COAST
2200-0559	000	GD SE CREW ALISO VIEJO
2200-0562	000	GD SE CREW GARDEN GROVE
2200-0565	000	GD SE CREW SANTA ANA
2200-0567	000	GD NW TECH SUPV - CHATSWORTH 2
2200-0569	000	GD SE CREW INDUSTRY
2200-0571	000	GD NW REGION DIRECTOR
2200-0572	000	GD NW REGION FIELD OPERATIONS MGR
2200-0575	000	GD NW CREW BELVEDERE
2200-0576	000	GD NW AREA MGR MID CITY LA
2200-0577	000	GD NW CREW JUANITA

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Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre

**Appendix A: List of Non-Shared Cost Centers**

<b>Cost Center</b>	<b>Sub</b>	<b>Description</b>
2200-0579	000	GD SE RGN SP3 (CSEC)
2200-0580	000	GD SE RPPM-ANAHEIM
2200-0581	000	GD NW M&R - DO NOT USE
2200-0583	000	GD NW CREW HUNTINGTON PARK
2200-0586	000	GD NW CREW COMPTON
2200-0588	000	GD NW CREW CRENSHAW
2200-0590	000	GD NW AREA MGR SOUTH COAST
2200-0592	000	GD NW CREW SANTA MONICA
2200-0593	000	GD NW AREA MGR HARBOR CORRIDOR
2200-0595	000	GD NW CREW REDONDO BEACH
2200-0598	000	GD NW CREW SAN PEDRO
2200-0601	000	GD NW CREW HOLLYWOOD
2200-0604	000	GD NW PLNG OFFICE MGR/TECH SUPV - C2
2200-0605	000	GD NW SYS PROT SUPV - COMPTON
2200-0606	000	GD NW REG ENGINEER - COMPTON
2200-0608	000	GD NW M&R - COMPTON
2200-0609	000	GD NW WORK ORDER CONTROL - COMPTON
2200-0615	000	NEW BUSINESS
2200-0713	000	GD NW Distribution Construction Manager
2200-0763	000	GD NW MHP Project Manager
2200-0770	000	GD NW DIMP Dreams Project Manager
2200-0792	000	GD SE Anodeless Riser Project (DRIP)
2200-0793	000	Plan and Project Management - Director
2200-0801	000	MGR OPERATIONS SUPPORT
2200-0805	000	PUBLIC AFFAIRS MANAGER - OC
2200-0806	000	Dist Proj Mgr
2200-0808	000	NW DIMP Deploy
2200-0809	000	SE Const Mgr
2200-0810	000	GD SE DIMP Dreams/MHP Area Manager
2200-0811	000	PUBLIC AFFAIRS MANAGER - LA
2200-0812	000	GD SE MHP Project Manager
2200-0813	000	GD SE DIMP Dreams Project Manager
2200-0814	000	GD SE DIMP Deployment Area Manager
2200-0815	000	GD SE Residential Meter Protection (RMP)
2200-0816	000	GD SE Gas Infra. Protection Proj (GIPP)
2200-0817	000	GD SE Sewer Lateral Insp. Proj. (SLIP)
2200-0818	000	PUBLIC AFFAIRS MANAGER -INLAND
2200-0821	000	HP Recon
2200-0822	000	Res Build
2200-0823	000	SE RMS Mgr
2200-0824	000	Paving Inventory Elimination Project
2200-0825	000	PUBLIC AFFAIRS MANAGER -NORTH
2200-0847	000	NW RMS Mgr
2200-0855	000	TSS DIMP Chatsworth
2200-0856	000	NW Plng Mgr DIMP DREAMS

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Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre

**Appendix A: List of Non-Shared Cost Centers**

<b>Cost Center</b>	<b>Sub</b>	<b>Description</b>
2200-0857	000	GD NW TSS (PPA SUP) - Compton
2200-0858	000	TSS DIMP Anaheim
2200-0859	000	TSS DIMP Redlands
2200-0862	000	DRIP
2200-0863	000	Gas Infrastructure Protection(GIPP/RMPP)
2200-0864	000	Research Data
2200-0882	000	MHP Acct
2200-0883	000	DIMP Deploy
2200-1136	000	GD SE ROVING CONST CREW FIELD ANAHEIM
2200-1137	000	GD NW ROVING CONST CREW FIELD COMPTON
2200-1174	000	GD NW TECH SUPV - DREAMS
2200-1182	000	GD SE AREA MGR DESERT VALLEY
2200-1210	000	GD SE TSS (PPA SUP)-REDLANDS 1
2200-1340	000	GD SE PLANNING AND ENGINEERING PI
2200-2079	000	GD SE CREW MURRIETA
2200-2080	000	GD SE CREW BEAUMONT
2200-2084	000	GD NW TECH SUPV - COMPTON 1
2200-2085	000	GD SE TSS-ANAHEIM 2
2200-2092	000	VP GAS OPERATIONS NSS
2200-2107	000	GD SE HIGH PRESSURE CONST (EAST)
2200-2115	000	GD NW ENVIRONMENTAL
2200-2122	000	FIBRE IN GAS ADMIN COSTS & REVENUE
2200-2141	000	GD SE ASSET M&I MANAGER
2200-2145	000	GD SE SDGE PM - 2100-3459
2200-2149	000	GD NW RGN SPEC PROJ 3 (FKA DOM)
2200-2150	000	GD NW RGN SPEC PROJ 1 (FKA DOM)
2200-2183	000	VP GAS OPS MISC
2200-2191	000	GD NW TECH SUPV - CHATS/COMP
2200-2192	000	GD NW LEAKAGE-COMPTON
2200-2208	000	DIRECTOR PUBLIC AFFAIRS
2200-2218	000	GD SE AREA MGR MOUNTAIN PASS
2200-2219	000	GD SE RGN SPEC PROJ 9 (FKA BEAUM DOM)
2200-2220	000	GD SE RGN SPEC PROJ 6 (FKA CHINO DOM)
2200-2221	000	GD SE AREA MGR INLAND SOUTH
2200-2222	000	GD SE RGN SPEC PROJ 8 (FKA RAM DOM)
2200-2223	000	GD SE RCC FIELD
2200-2227	000	NW ROVING CONST CREW MGMT
2200-2228	000	GD NW ROVING CONST CREW FIELD
2200-2230	000	RES METER PROTECT PR
2200-2232	000	GD SE RGN SPEC PROJ 7 (FKA YUCCA DOM)
2200-2233	000	GD SE CREW YUCCA
2200-2236	000	GD SE RPPM-REDLANDS
2200-2259	000	GD NW REG PIPELINE PLNG - DO NOT USE
2200-2357	000	PROJ MGR-GAS INFRASTRUCTURE PROTN PROGRM
2200-2358	000	PROJ MGR-SEWER LATERAL INSPECTN PROGM

Southern California Gas Company  
2024 GRC - REVISED  
Non-Shared Service Workpapers

Area: GAS DISTRIBUTION  
Witness: Mario A. Aguirre

**Appendix A: List of Non-Shared Cost Centers**

<b>Cost Center</b>	<b>Sub</b>	<b>Description</b>
2200-2381	000	MHP PLANNING AND CONSTRUCTION
2200-2422	000	GD SE PSEP PROF TRAINING (EAST)
2200-2423	000	GD NW REG PSEP PROF N - DO NOT USE
2200-2424	000	GD NW REG PSEP PROF P - DO NOT USE
2200-2425	000	GD SE PSEP PROF TRAINING (SOUTH)
2200-2438	000	GD NW HP CONST - DO NOT USE
2200-2439	000	GD SE HIGH PRESSURE CONST (SOUTH)
2200-2471	000	Proj Mgr-Anodeless Riser Program
2200-2531	000	GAS DISTR. PLANNING & CAPITAL STRATEGY
2200-2532	000	DIMP DREAMS
2200-2541	000	MHP CUST PRG PMO MGR
2200-2545	000	MHP OUTREACH
2200-2546	000	MHP SUPPORT
2200-2611	000	DIR WORK PLNG & RESOURCE MGMT
2200-2612	000	CONT IMPROVEMENT OPS MGR
2200-2613	000	GAS OPS PROJECT MANAGER