

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-___

Exhibit No.: (SCG-26-WP)

WORKPAPERS TO
PREPARED DIRECT TESTIMONY
OF PETER H. ANDERSEN
ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

May 2022



2024 General Rate Case - APP
INDEX OF WORKPAPERS

Exhibit SCG-26-WP - CORPORATE CENTER - PENSION & PBOP

DOCUMENT	PAGE
Overall Summary For Exhibit No. SCG-26-WP	1
Summary of Non-Shared Services Workpapers	2
Category: A. Employee Pension-PBOP	3
..2PN000.000 - EMPLOYEE PENSION	4
..2PN000.001 - EMPLOYEE PBOP	16
Appendix A: List of Non-Shared Cost Centers	25

Overall Summary For Exhibit No. SCG-26-WP

Area:	CORPORATE CENTER - PENSION & PBOP
Witness:	Peter H. Andersen

Description	In 2021 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Non-Shared Services	150,465	150,465	150,465	170,718
Shared Services	0	0	0	0
Total	150,465	150,465	150,465	170,718

Note: Totals may include rounding differences.

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

Area: CORPORATE CENTER - PENSION & PBOP
 Witness: Peter H. Andersen

Summary of Non-Shared Services Workpapers:

Description	In 2021 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
A. Employee Pension-PBOP	150,465	150,465	150,465	170,718
Total	150,465	150,465	150,465	170,718

Note: Totals may include rounding differences.

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

Area: CORPORATE CENTER - PENSION & PBOP
Witness: Peter H. Andersen
Category: A. Employee Pension-PBOP
Workpaper: VARIOUS

Summary for Category: A. Employee Pension-PBOP

	In 2021\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Labor	0	0	0	0
Non-Labor	150,465	0	0	0
NSE	0	150,465	150,465	170,718
Total	150,465	150,465	150,465	170,718
FTE	0.0	0.0	0.0	0.0

Workpapers belonging to this Category:

2PN000.000 EMPLOYEE PENSION

Labor	0	0	0	0
Non-Labor	150,465	0	0	0
NSE	0	150,465	150,465	170,718
Total	150,465	150,465	150,465	170,718
FTE	0.0	0.0	0.0	0.0

2PN000.001 EMPLOYEE PBOP

Labor	0	0	0	0
Non-Labor	0	0	0	0
NSE	0	0	0	0
Total	0	0	0	0
FTE	0.0	0.0	0.0	0.0

Note: Totals may include rounding differences.

Beginning of Workpaper
2PN000.000 - EMPLOYEE PENSION

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

Area: CORPORATE CENTER - PENSION & PBOP
 Witness: Peter H. Andersen
 Category: A. Employee Pension-PBOP
 Category-Sub: 1. Employee Pension
 Workpaper: 2PN000.000 - EMPLOYEE PENSION

Activity Description:

This is SCG's qualified retirement benefits plan, also known as the Southern California Gas Company Pension Plan. Represented and non-represented employees participate in the plan.

Forecast Explanations:

Labor - Zero-Based

Please see NSE below

Non-Labor - Zero-Based

Please see NSE below

NSE - Zero-Based

Zero Based method chosen as pension contributions are provided by the Company's certified actuary Willis Towers Watson.

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		0	0	0	0	0	0	0	0	
Non-Labor		103,806	112,350	161,305	161,964	150,465	0	0	0	
NSE		0	0	0	0	0	150,465	150,465	170,718	
Total		103,806	112,350	161,305	161,964	150,465	150,465	150,465	170,718	
FTE		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Note: Totals may include rounding differences.

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

Area: CORPORATE CENTER - PENSION & PBOP
 Witness: Peter H. Andersen
 Category: A. Employee Pension-PBOP
 Category-Sub: 1. Employee Pension
 Workpaper: 2PN000.000 - EMPLOYEE PENSION

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	Zero-Based	0	0	0	0	0	0	0	0	0
Non-Labor	Zero-Based	0	0	0	0	0	0	0	0	0
NSE	Zero-Based	0	0	0	150,465	150,465	170,718	150,465	150,465	170,718
Total		0	0	0	150,465	150,465	170,718	150,465	150,465	170,718
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Forecast Adjustment Details:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	0	0	150,465	150,465	0.0	1-Sided Adj
Explanation: 2022 Pension Projection						
2022 Total						
	0	0	150,465	150,465	0.0	
2023	0	0	150,465	150,465	0.0	1-Sided Adj
Explanation: 2023 Pension Projection						
2023 Total						
	0	0	150,465	150,465	0.0	
2024	0	0	170,718	170,718	0.0	1-Sided Adj
Explanation: 2024 Pension Projection						
2024 Total						
	0	0	170,718	170,718	0.0	

Note: Totals may include rounding differences.

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

Area: CORPORATE CENTER - PENSION & PBOP
Witness: Peter H. Andersen
Category: A. Employee Pension-PBOP
Category-Sub: 1. Employee Pension
Workpaper: 2PN000.000 - EMPLOYEE PENSION

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	0	0
Non-Labor	92,242	80,821	68,057	85,459	96,991
NSE	0	0	0	0	0
Total	92,242	80,821	68,057	85,459	96,991
FTE	0.0	0.0	0.0	0.0	0.0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	22,181	82,408	65,006	53,474
NSE	0	0	0	0	0
Total	0	22,181	82,408	65,006	53,474
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	0	0	0	0	0
Non-Labor	92,242	103,002	150,465	150,465	150,465
NSE	0	0	0	0	0
Total	92,242	103,002	150,465	150,465	150,465
FTE	0.0	0.0	0.0	0.0	0.0
Vacation & Sick (Nominal \$)					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Escalation to 2021\$					
Labor	0	0	0	0	0
Non-Labor	11,564	9,347	10,840	11,499	0
NSE	0	0	0	0	0
Total	11,564	9,347	10,840	11,499	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	0	0	0	0	0
Non-Labor	103,806	112,350	161,305	161,964	150,465
NSE	0	0	0	0	0
Total	103,806	112,350	161,305	161,964	150,465
FTE	0.0	0.0	0.0	0.0	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 - APP
Non-Shared Service Workpapers

Area: CORPORATE CENTER - PENSION & PBOP
 Witness: Peter H. Andersen
 Category: A. Employee Pension-PBOP
 Category-Sub: 1. Employee Pension
 Workpaper: 2PN000.000 - EMPLOYEE PENSION

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	22,181	82,408	65,006	53,474
NSE	0	0	0	0	0
Total	0	22,181	82,408	65,006	53,474
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year	Labor	NLbr	NSE	FTE	Adj Type
2017 Total	0	0	0	0.0	
2018	0	22,181	0	0.0	1-Sided Adj
Explanation:	Transfer Pension costs to correct work grup				
2018 Total	0	22,181	0	0.0	
2019	0	82,408	0	0.0	1-Sided Adj
Explanation:	Transfer Pension costs to correct work group				
2019 Total	0	82,408	0	0.0	
2020	0	65,006	0	0.0	1-Sided Adj
Explanation:	Transfer Pension costs to correct work group				
2020 Total	0	65,006	0	0.0	
2021	0	53,474	0	0.0	1-Sided Adj
Explanation:	Transfer Pension costs to correct work group				
2021 Total	0	53,474	0	0.0	

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper 2PN000.000

Southern California Gas Company
 Pension Contribution Projection
 For Years 2022-2024

ASSUMPTIONS
1. Pension contribution amounts based on estimates provided by Willis Towers Watson, a global actuarial services firm.
2. Forecasted TY 2024 costs exclude executive officer costs, as defined under Resolution E-4963, pursuant to California Public Utilities Code Section 706 (as modified by Senate Bill 901). Willis Towers Watson projected 2022 and 2023 amounts based on contributions authorized in CPUC Decision (D.) 19-09-051 prior to removal of executive officer costs.

	Projected		
	2022	2023	2024
Pension Contributions	\$ 150,465,000	\$ 150,465,000	\$ 170,718,000

See attached projection from Willis Towers Watson

Southern California Gas Company Pension Plan

WillisTowersWatson | P P P P

General Rate Case Forecast

10-Year Forecast of Projected ASC Accounting Costs and Contributions Reflecting Projected Headcount

(\$ in millions)

Pension	Southern California Gas Company Pension Plan									
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
• ASC 715 Cost	76.51	69.07	74.44	71.22	74.76	85.46	83.55	90.87	91.26	109.22
• Minimum Required Contribution	-	-	-	-	-	-	-	-	-	-
• PPA Funded Percentage										
Actuarial Value of Assets (including Receivables)	1,963.44	2,164.12	2,329.74	2,478.82	2,633.36	2,794.10	2,950.83	3,103.10	3,259.50	3,424.15
<u>Funding Target</u>	<u>1,608.43</u>	<u>1,640.87</u>	<u>1,682.06</u>	<u>1,721.58</u>	<u>1,760.29</u>	<u>1,807.10</u>	<u>1,859.94</u>	<u>1,909.58</u>	<u>1,957.17</u>	<u>2,075.03</u>
Funded Percentage	122%	132%	139%	144%	150%	155%	159%	163%	167%	165%
• Funding Policy Contribution	150.47	150.47	170.89	170.89	170.89	170.89	157.51	157.51	157.51	157.51
• PBO Funded Percentage										
Fair Value of Assets	2,105.12	2,216.90	2,337.80	2,480.84	2,635.22	2,795.56	2,951.10	3,103.10	3,259.51	3,424.16
<u>PBO</u>	<u>2,612.32</u>	<u>2,623.90</u>	<u>2,653.86</u>	<u>2,696.98</u>	<u>2,749.66</u>	<u>2,813.12</u>	<u>2,884.73</u>	<u>2,966.86</u>	<u>3,062.17</u>	<u>3,167.46</u>
Funded Percentage	81%	84%	88%	92%	96%	99%	102%	105%	106%	108%
• ASC 715 Discount rate	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%

Note: The projections for 2022 through 2031 are based on ASC 715 accounting information and include all participants under the Plan.

**General Rate Case Forecast
Forecast of Projected ASC Accounting Costs and Contributions
for Southern California Gas Company Pension Plan**

Willis Towers Watson

Key Assumptions

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
ASC 715 Discount rate	See forecast exhibit									
PPA Effective Discount Rate - SoCalGas qualified plan	5.43%	5.26%	5.11%	5.01%	4.94%	4.87%	4.79%	4.75%	4.75%	4.50%
Expected Return for Determining ASC 715 Benefit Cost for SoCalGas qualified plan ⁽¹⁾	6.75%	6.25%	5.75%	5.75%	5.50%	5.00%	5.00%	4.75%	4.75%	4.25%
Assumed Return other than from unrealized and realized gains / (losses) for Market Related Value of Assets (MRVA) purposes	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Salary Scale - Qualified plan, excluding SoCalGas Union	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based
Salary Scale - SoCalGas Union	Service Based	Service Based	Service Based	Service Based	Service Based	Service Based	Service Based	Service Based	Service Based	Service Based
Cash Balance Crediting Rate	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%
Lump sum conversion interest rate	Segment Rates	Segment Rates	Segment Rates	Segment Rates	Segment Rates	Segment Rates	Segment Rates	Segment Rates	Segment Rates	Segment Rates
Pre-retirement Mortality	Pri-2012 Employee table with MP-2021 generational projection scale									
Post-retirement Mortality	Sempra specific table, base year of 2016, with MP-2021 generational projection scale from 2016									
Lump Sum Mortality	RP-2018 Healthy Annuitant table with MP-2018 generational mortality projection scale, rates are blended 50% M/F									
Retirement and Termination Rates	Same as those used for the 2021 year-end disclosures									
Number of projected headcount (provided by Sempra on March 15, 2022)	12/31/2021 11,696	12/31/2022 12,279	12/31/2023 12,583	12/31/2024 12,583	12/31/2025 12,583	12/31/2026 12,583	12/31/2027 12,583	12/31/2028 12,583	12/31/2029 12,583	12/31/2030 12,583

⁽¹⁾ The Expected Return on Assets (EROA) assumption under US GAAP captures anticipated changes in the asset allocation due to de-risking under the Glide Path.

Methodology

- Unless stated otherwise, data, assumptions, methods, models, plan provisions and other information are consistent with those used in the Utility's accounting disclosures under ASC-715 as of December 31, 2021.

Pension Funding Rules and Funding Method

- Based on Pension Protection Act (PPA) updated by the Highway and Transportation Funding Act (HATFA) and Bipartisan Budget Act of 2015, and the American Rescue Plan Act (ARPA), including Infrastructure Investment and Jobs Act (IIJA).
- Based on PPA segment rates, September look-back, asset smoothing.

Assets

- Reflects audited trust information through December 31, 2021.
- Assets are projected at the Expected Return for ASC 715 Benefit Cost calculation less 25 basis points to reflect the compounded nature of returns.

Data and Demographics

- January 1, 2021 participant census, reflecting expected headcount changes based on information provided by Sempra on March 15, 2022.

Plan Design

- Includes all plan changes described with December 31, 2021 disclosure.

Contribution Amounts

- Contributions for qualified pension plans equal to sum of contributions to trusts.

Contribution Policy

- Qualified Plan: Service cost plus an amortization of the PBO deficit, limited to keep plan assets from exceeding 110% of the PBO as a result of the contribution, and no less than the minimum required or such amount as required to maintain an 85% Adjusted Funding Target Attainment Percentage (AFTAP). Amortization bases are reset in 2024 based on a seven-year amortization period.

Southern California Gas Company Pension Plan
Additional Projection Details
Projected Funding Policy Contributions

Willis Towers Watson

Projected Funding Policy Contribution (\$thousand)										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
A. Policy Base Amount										
1. Projected Benefit Obligation	2,612,321	2,623,895	2,653,863	2,696,977	2,749,662	2,813,119	2,884,733	2,966,863	3,062,169	3,167,464
2. Fair value of assets	2,105,123	2,216,898	2,337,795	2,480,838	2,635,218	2,795,565	2,951,100	3,103,102	3,259,507	3,424,160
3. Shortfall (1. - 2.)	507,198	406,997	316,068	216,139	114,444	17,554	(66,367)	(136,239)	(197,338)	(256,696)
4. Discount rate			3.05%	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%
5. 7-year amortization factor			6.4082				6.4082			
6. Present value of remaining payments			-				143,631			
7. Shortfall amortization amount ((3. - 6.) / 5.)			49,322				(32,770)			
8. Shortfall amortization at 1/1/2024			49,322				49,322			
9. Shortfall amortization at 1/1/2028							(32,770)			
10. Service Cost at Base Year			116,505				136,295			
11. Shortfall amortization (8. + 9.)			49,322				16,552			
12. Base Policy Amount (10. + 11.)			165,827				152,847			
13. EOY Base Policy Amount 12. * 1.0305 (2022 - 2023 reflect 2019 GRC base amount)	150,465	150,465	170,885	170,885	170,885	170,885	157,509	157,509	157,509	157,509
B. Minimum Required Contribution										
1. MRC (Exhibit 2, C.6)	-	-	-	-	-	-	-	-	-	-
C. 85% Adjusted Funding Target Attainment Percentage (AFTAP) Minimum										
1. Funding Target Liability at 1/1	1,608,429	1,640,867	1,682,058	1,721,577	1,760,290	1,807,104	1,859,942	1,909,581	1,957,171	2,075,028
2. 85% of 1.	1,367,165	1,394,737	1,429,749	1,463,340	1,496,247	1,536,038	1,580,951	1,623,144	1,663,595	1,763,774
3. Actuarial Value of Assets	1,963,436	2,164,118	2,329,735	2,478,817	2,633,362	2,794,098	2,950,829	3,103,098	3,259,502	3,424,154
4. Minimum Required Contribution reflecting payment timing	-	-	-	-	-	-	-	-	-	-
5. 85% AFTAP Minimum at the end of the year	-	-	-	-	-	-	-	-	-	-
D. 110% of PBO Cap										
1. 110% of PBO at t+1	2,886,285	2,919,249	2,966,675	3,024,628	3,094,431	3,173,206	3,263,549	3,368,386	3,484,210	3,609,587
2. Fair value of assets at t+1 (prior to contribution at t)	2,062,635	2,180,647	2,302,992	2,457,373	2,618,037	2,774,205	2,940,058	3,096,754	3,261,408	3,416,060
3. Maximum contribution (end of year) (1. - 2.) (includes interest on contributions made during year)	823,650	738,602	663,683	567,255	476,394	399,001	323,491	271,632	222,802	193,527
E. Funding Policy Contribution										
1. Funding policy amount (greater of A.13, B.1, and C.5, not no more than D.3)	150,465	150,465	170,885	170,885	170,885	170,885	157,509	157,509	157,509	157,509

Note: The projections for 2022 through 2031 are based on ASC 715 accounting information and include all participants under the Plan.

Southern California Gas Company Pension Plan
Additional Projection Details
Projected Minimum Required Contributions

Willis Towers Watson

Projected Minimum Required Contribution (\$thousand)

2022 2023 2024 2025 2026 2027 2028 2029 2030 2031

A. Funding Shortfall

1. Effective Interest Rate (EIR)	5.43%	5.26%	5.11%	5.01%	4.94%	4.87%	4.79%	4.75%	4.75%	4.50%
2. Funding Target Liability	1,608,429	1,640,867	1,682,058	1,721,577	1,760,290	1,807,104	1,859,942	1,909,581	1,957,171	2,075,028
3. Actuarial value of assets	1,963,436	2,164,118	2,329,735	2,478,817	2,633,362	2,794,098	2,950,829	3,103,098	3,259,502	3,424,154
4. Prefunding balance	-	-	-	-	-	-	-	-	-	-
5. Funding shortfall / (surplus) (2. - [3. -4.])	(355,007)	(523,251)	(647,677)	(757,240)	(873,072)	(986,994)	(1,090,887)	(1,193,517)	(1,302,331)	(1,349,126)

B. Shortfall Amortization Payments

1. Starting 1/1/2022	-	-	-	-	-	-	-	-	-	-
2. Starting 1/1/2023	-	-	-	-	-	-	-	-	-	-
3. Starting 1/1/2024	-	-	-	-	-	-	-	-	-	-
4. Starting 1/1/2025	-	-	-	-	-	-	-	-	-	-
5. Starting 1/1/2026	-	-	-	-	-	-	-	-	-	-
6. Starting 1/1/2027	-	-	-	-	-	-	-	-	-	-
7. Starting 1/1/2028	-	-	-	-	-	-	-	-	-	-
8. Starting 1/1/2029	-	-	-	-	-	-	-	-	-	-
9. Starting 1/1/2030	-	-	-	-	-	-	-	-	-	-
10. Starting 1/1/2031	-	-	-	-	-	-	-	-	-	-
11. Total (Sum of 1. through 10.)	-	-	-	-	-	-	-	-	-	-

C. Minimum Required Contribution

1. Target Normal Cost at 1/1	70,507	78,086	84,616	89,333	93,865	98,641	103,848	108,623	112,857	122,381
2. Adjusted Target Normal Cost (1. + A.5. if surplus)	(284,500)	(445,165)	(563,061)	(667,907)	(779,207)	(888,353)	(987,039)	(1,084,894)	(1,189,474)	(1,226,745)
3. Shortfall amortization (B.11.)	-	-	-	-	-	-	-	-	-	-
4. Prefunding balance (A.4)	-	-	-	-	-	-	-	-	-	-
5. Minimum Required Contribution (2. + 3. - 4., no less than \$0)	-	-	-	-	-	-	-	-	-	-
6. Minimum Required Contribution reflecting payment timing	-	-	-	-	-	-	-	-	-	-

Note: The projections for 2022 through 2031 are based on ASC 715 accounting information and include all participants under the Plan.

Southern California Gas Company Pension Plan
Additional Projection Details
Projected Assets

WillisTowersWatson 

Projected Assets (\$thousand)										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
A. Fair Value of Assets (FVA)										
1. FVA at beginning of year	2,105,123	2,216,898	2,337,795	2,480,838	2,635,218	2,795,565	2,951,100	3,103,102	3,259,507	3,424,160
2. Employer contributions (adjusted for timing and interest)	150,465	150,465	170,885	170,885	170,885	170,885	157,509	157,509	157,509	157,509
3. Benefit payments	(170,337)	(160,914)	(155,528)	(152,125)	(148,017)	(147,006)	(144,119)	(139,142)	(137,921)	(138,505)
4. Administrative expenses from trust	(3,448)	(3,524)	(3,577)	(3,602)	(3,627)	(3,652)	(3,677)	(3,715)	(3,753)	(3,791)
5. Investment return	135,096	134,869	131,263	139,222	141,106	135,308	142,290	141,752	148,818	138,857
6. FVA at end of year (sum 1 through 5)	2,216,899	2,337,794	2,480,838	2,635,218	2,795,565	2,951,100	3,103,103	3,259,506	3,424,160	3,578,230
7. Assumed investment return	6.50%	6.00%	5.50%	5.50%	5.25%	4.75%	4.75%	4.50%	4.50%	4.00%
B. Actuarial Asset Value for Minimum Purposes										
1. Market value of assets (MVA), without receivables	2,105,123	2,216,898	2,337,795	2,480,838	2,635,218	2,795,565	2,951,100	3,103,102	3,259,507	3,424,160
2. Present value of receivables	-	-	-	-	-	-	-	-	-	-
3. MVA including receivables (1. + 2.)	2,105,123	2,216,898	2,337,795	2,480,838	2,635,218	2,795,565	2,951,100	3,103,102	3,259,507	3,424,160
4. Asset gain or (loss) from prior year	134,244	12,048	6,066	(1)	2,784	808	3	4	5	6
5. Asset gain or (loss) from two years prior	156,571	134,244	12,048	6,066	(1)	2,784	808	3	4	5
6. Asset deferral	141,687	52,780	8,060	2,021	1,856	1,467	271	4	5	6
7. Actuarial value of assets (AVA) prior to corridor (3. - 6.)	1,963,436	2,164,118	2,329,735	2,478,817	2,633,362	2,794,098	2,950,829	3,103,098	3,259,502	3,424,154
8. Lower corridor 90% of MVA	1,894,611	1,995,208	2,104,016	2,232,754	2,371,696	2,516,009	2,655,990	2,792,792	2,933,556	3,081,744
9. Upper corridor 110% of MVA	2,315,635	2,438,588	2,571,575	2,728,922	2,898,740	3,075,122	3,246,210	3,413,412	3,585,458	3,766,576
10. Final AVA (limited to 90% to 110% of MVA)	1,963,436	2,164,118	2,329,735	2,478,817	2,633,362	2,794,098	2,950,829	3,103,098	3,259,502	3,424,154
Note: The projections for 2022 through 2031 are based on ASC 715 accounting information and include all participants under the Plan.										

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

Beginning of Workpaper
2PN000.001 - EMPLOYEE PBOP

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

Area: CORPORATE CENTER - PENSION & PBOP
 Witness: Peter H. Andersen
 Category: A. Employee Pension-PBOP
 Category-Sub: 2. Employee PBOP
 Workpaper: 2PN000.001 - EMPLOYEE PBOP

Activity Description:

SCG provides post-retirement benefits other than pensions (PBOP) such as health and life insurance benefits, also known as the Southern California Gas Company Postretirement Welfare Plan. Represented and non-represented employees participate in the plan.

Forecast Explanations:

Labor - Zero-Based

Please see NSE below

Non-Labor - Zero-Based

Please see NSE below

NSE - Zero-Based

Zero Based method chosen as PBOP contributions are provided by the Company's certified actuary Willis Towers Watson.

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		0	0	0	0	0	0	0	0	
Non-Labor		3,173	0	0	0	0	0	0	0	
NSE		0	0	0	0	0	0	0	0	
Total		3,173	0	0	0	0	0	0	0	
FTE		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Note: Totals may include rounding differences.

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

Area: CORPORATE CENTER - PENSION & PBOP
 Witness: Peter H. Andersen
 Category: A. Employee Pension-PBOP
 Category-Sub: 2. Employee PBOP
 Workpaper: 2PN000.001 - EMPLOYEE PBOP

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	Zero-Based	0	0	0	0	0	0	0	0	0
Non-Labor	Zero-Based	0	0	0	0	0	0	0	0	0
NSE	Zero-Based	0	0	0	0	0	0	0	0	0
Total		0	0	0	0	0	0	0	0	0
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
-------------	--------------	-------------	------------	--------------	------------	-----------------

Note: Totals may include rounding differences.

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

Area: CORPORATE CENTER - PENSION & PBOP
Witness: Peter H. Andersen
Category: A. Employee Pension-PBOP
Category-Sub: 2. Employee PBOP
Workpaper: 2PN000.001 - EMPLOYEE PBOP

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	0	0
Non-Labor	2,403	14,688	12,152	13,564	16,891
NSE	0	0	0	0	0
Total	2,403	14,688	12,152	13,564	16,891
FTE	0.0	0.0	0.0	0.0	0.0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	417	-14,688	-12,152	-13,564	-16,891
NSE	0	0	0	0	0
Total	417	-14,688	-12,152	-13,564	-16,891
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	0	0	0	0	0
Non-Labor	2,820	0	0	0	0
NSE	0	0	0	0	0
Total	2,820	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Vacation & Sick (Nominal \$)					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Escalation to 2021\$					
Labor	0	0	0	0	0
Non-Labor	353	0	0	0	0
NSE	0	0	0	0	0
Total	353	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	0	0	0	0	0
Non-Labor	3,173	0	0	0	0
NSE	0	0	0	0	0
Total	3,173	0	0	0	0
FTE	0.0	0.0	0.0	0.0	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 - APP
Non-Shared Service Workpapers

Area: CORPORATE CENTER - PENSION & PBOP
 Witness: Peter H. Andersen
 Category: A. Employee Pension-PBOP
 Category-Sub: 2. Employee PBOP
 Workpaper: 2PN000.001 - EMPLOYEE PBOP

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2017	2018	2019	2020	2021
Labor	0	0	0	0	0
Non-Labor	417	-14,688	-12,152	-13,564	-16,891
NSE	0	0	0	0	0
Total	417	-14,688	-12,152	-13,564	-16,891
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year	Labor	NLbr	NSE	FTE	Adj Type
2017	0	417	0	0.0	1-Sided Adj
Explanation:	Transfer PBOP costs to correct work group				
2017 Total	0	417	0	0.0	
2018	0	-14,688	0	0.0	1-Sided Adj
Explanation:	Transfer PBOP costs to correct work group				
2018 Total	0	-14,688	0	0.0	
2019	0	-12,152	0	0.0	1-Sided Adj
Explanation:	Transfer PBOP costs to correct work group				
2019 Total	0	-12,152	0	0.0	
2020	0	-13,564	0	0.0	1-Sided Adj
Explanation:	Transfer PBOP costs to correct work group				
2020 Total	0	-13,564	0	0.0	
2021	0	-16,891	0	0.0	1-Sided Adj
Explanation:	Transfer PBOP costs to correct work group				
2021 Total	0	-16,891	0	0.0	

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper 2PN000.001

Southern California Gas Company
 PBOP Contribution Projection
 For Years 2022-2024

ASSUMPTIONS
1. PBOP contribution amounts based on estimates provided by Willis Towers Watson, a global actuarial services firm.
2. Forecasted TY 2024 costs exclude executive officer costs, as defined under Resolution E-4963, pursuant to California Public Utilities Code Section 706 (as modified by Senate Bill 901). Willis Towers Watson projected 2022 and 2023 amounts based on contributions authorized in CPUC Decision (D.) 19-09-051 prior to removal of executive officer costs.

	Projected		
	2022	2023	2024
PBOP Contributions	\$ -	\$ -	\$ -

See attached projection from Willis Towers Watson

Southern California Gas Company PBOP

WillisTowersWatson 

General Rate Case Forecast

10-Year Forecast of Projected ASC Accounting Costs and Contributions Reflecting Projected Headcount

(\$ in millions)

	SoCalGas PBOP ¹									
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
• ASC 715 Cost	(29.77)	(30.64)	(28.61)	(27.27)	(26.05)	(24.99)	(24.05)	(23.13)	(21.65)	(19.17)
• Contributions										
Contributions to trust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pay-as-you-go	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Total contributions	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
• APBO funded percentage (alternative)										
Fair value of assets	1,184.71	1,201.75	1,219.37	1,237.54	1,256.52	1,276.37	1,296.96	1,318.46	1,340.81	1,364.07
APBO	707.24	713.61	721.47	730.29	740.13	751.03	762.73	775.34	788.86	803.31
Funded Percentage	168%	168%	169%	169%	170%	170%	170%	170%	170%	170%
• FAS Discount Rate	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%	3.05%

¹ The Utility recovers ASC 715 Cost (not less than zero or more than the maximum tax deductible amount) and first uses this towards pay-as-you-go benefits, and then contributes any excess to the Trust. For SoCalGas, there are no contributions to the trust expected during the forecast period. The Utility may use the prepayment balance from prior contributions in excess of recoverable amount to cover some or all contributions in excess of the pay-as-you-go benefits.

Note: The projections for 2022 through 2031 are based on ASC 715 accounting information and include all participants under the Plan.

**Southern California Gas Company PBOP
10-Year Forecast of Projected ASC Accounting Costs and Contributions Reflecting Projected Headcount
Other Key Assumptions and Methodology: PBOP**

Willis Towers Watson 

Key Assumptions	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Ultimate
ASC 715 Discount rate	See forecast exhibits										
Expected Return for Determining ASC 715 Benefit Cost for the SoCalGas PBOP ⁽¹⁾	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%
Assumed Return other than from unrealized and realized gains / (losses) for Market Related Value of Assets (MRVA) purposes	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Healthcare Cost Trend (Pre-age 65)	6.00%	6.00%	6.00%	5.50%	5.25%	5.00%	4.75%	4.75%	4.75%	4.75%	4.75%
Healthcare Cost Trend (Post-age 65)	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Salary Scale - Qualified plans, excluding SoCalGas Union	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based
Salary Scale - SoCalGas Union	Service Based	Service Based	Service Based	Service Based	Service Based	Service Based	Service Based	Service Based	Service Based	Service Based	Service Based
Cash Balance Crediting Rate/Interest Crediting Rate for HRA	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%
Pre-retirement Mortality	Pri-2012 Employee table with MP-2021 generational projection scale										
Post-retirement Mortality	Sempra specific table, base year of 2016, with MP-2021 generational projection scale from 2016										
Retirement and Termination Rates	Same as those used for the 2021 year-end disclosures										
Number of projected headcount	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025	12/31/2026	12/31/2027	12/31/2028	12/31/2029	12/31/2030	12/31/2031
(provided by Sempra on March 15, 2022) ⁽²⁾	9,099	9,748	10,087	10,087	10,087	10,087	10,087	10,087	10,087	10,087	10,087

⁽¹⁾ Sempra selected an expected return on plan assets (EROA) of 5.00% for the SoCalGas 401(h) account and 4.50% for the VEBAs, resulting in a weighted average EROA of 4.71%.

⁽²⁾ The counts provided include employees who may not be eligible for PBOP benefits. Therefore, future plan eligible counts were estimated by applying the rate of growth in counts to the January 1, 2021 active valuation count.

Methodology

- Unless stated otherwise, data, assumptions, methods, models, plan provisions and other information are consistent with those used in the Utility's accounting disclosures under ASC-715 as of December 31, 2021.

Assets

- Reflects audited trust information through December 31, 2021.
- Assets are projected at the Expected Return for ASC 715 Benefit Cost calculation less 50 basis points for PBOPs (net of admin expense).

Data and Demographics

- January 1, 2021 participant census, reflecting expected headcount changes based on information provided by Sempra on March 15, 2022.

Plan Design

- Includes all plan changes described with December 31, 2021 disclosure.

Contribution Amounts

- Contributions for PBOPs equal to sum of contributions to trusts plus expected benefit payments.

Contribution Policy

- SoCalGas and SDG&E PBOP: Expected Utility Paid benefits plus trust contributions, if any. Trust contributions are equal to the postretirement benefit cost less Utility Paid benefits, not to exceed the maximum tax-deductible limits.

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

Area: CORPORATE CENTER - PENSION & PBOP
Witness: Peter H. Andersen

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-8001	000	EMPLOYEE PENSION