

Application of SAN DIEGO GAS & ELECTRIC)
COMPANY for authority to update its gas and)
electric revenue requirement and base rates)
effective January 1, 2024 (U 902-M))

Application No. 22-05-___

Exhibit No.: (SDG&E-30-WP)

WORKPAPERS TO
PREPARED DIRECT TESTIMONY
OF PETER H. ANDERSEN
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

May 2022



2024 General Rate Case - APP
INDEX OF WORKPAPERS

Exhibit SDG&E-30-WP - CORPORATE CENTER - PENSION & PBOP

DOCUMENT	PAGE
Overall Summary For Exhibit No. SDG&E-30-WP	1
<i>Summary of Non-Shared Services Workpapers</i>	2
Category: A. Employee Pension-PBOP	3
..1PN000.000 - EMPLOYEE PENSION	4
..1PN000.001 - EMPLOYEE PBOP	16
<i>Appendix A: List of Non-Shared Cost Centers</i>	25

Overall Summary For Exhibit No. SDG&E-30-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	50,668	50,668	50,668	34,529
Shared Services	0	0	0	0
Total	50,668	50,668	50,668	34,529

Note: Totals may include rounding differences.

San Diego Gas & Electric 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	50,668	50,668	50,668	34,529
Total	50,668	50,668	50,668	34,529

Note: Totals may include rounding differences.

San Diego Gas & Electric 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	50,668	0	0	0
NSE	0	50,668	50,668	34,529
Total	50,668	50,668	50,668	34,529
FTE	0.0	0.0	0.0	0.0

Workpapers belonging to this Category:

1PN000.000 EMPLOYEE PENSION

Labor	0	0	0	0
Non-Labor	50,668	0	0	0
NSE	0	50,668	50,668	34,182
Total	50,668	50,668	50,668	34,182
FTE	0.0	0.0	0.0	0.0

1PN000.001 EMPLOYEE PBOP

Labor	0	0	0	0
Non-Labor	0	0	0	0
NSE	0	0	0	347
Total	0	0	0	347
FTE	0.0	0.0	0.0	0.0

Note: Totals may include rounding differences.

Beginning of Workpaper
1PN000.000 - EMPLOYEE PENSION

San Diego Gas & Electric 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: 1PN000.000 - EMPLOYEE PENSION

Activity Description:

This is SDG&E's qualified retirement benefits plan, also known as the San Diego Gas & Electric Company Cash Balance 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		22,259	35,180	54,475	54,601	50,668	0	0	0	
NSE		0	0	0	0	0	50,668	50,668	34,182	
Total		22,259	35,180	54,475	54,601	50,668	50,668	50,668	34,182	
FTE		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric 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: 1PN000.000 - 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	50,668	50,668	34,182	50,668	50,668	34,182
Total		0	0	0	50,668	50,668	34,182	50,668	50,668	34,182
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	50,668	50,668	0.0	1-Sided Adj
Explanation: 2022 Pension Projection						
2022 Total						
	0	0	50,668	50,668	0.0	
2023	0	0	50,668	50,668	0.0	1-Sided Adj
Explanation: 2023 Pension Projection						
2023 Total						
	0	0	50,668	50,668	0.0	
2024	0	0	34,182	34,182	0.0	1-Sided Adj
Explanation: 2024 Pension Projection						
2024 Total						
	0	0	34,182	34,182	0.0	

Note: Totals may include rounding differences.

SDG&E/CORPORATE CENTER - PENSION & PBOP/Exh No:SDG&E-30-WP/Witness: P. Andersen

San Diego Gas & Electric 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: 1PN000.000 - 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	19,581	29,841	29,346	30,632	34,723
NSE	0	0	0	0	0
Total	19,581	29,841	29,346	30,632	34,723
FTE	0.0	0.0	0.0	0.0	0.0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	2,118	21,322	20,036	15,945
NSE	0	0	0	0	0
Total	0	2,118	21,322	20,036	15,945
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	0	0	0	0	0
Non-Labor	19,581	31,959	50,668	50,668	50,668
NSE	0	0	0	0	0
Total	19,581	31,959	50,668	50,668	50,668
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	2,678	3,221	3,807	3,932	0
NSE	0	0	0	0	0
Total	2,678	3,221	3,807	3,932	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	0	0	0	0	0
Non-Labor	22,259	35,180	54,475	54,601	50,668
NSE	0	0	0	0	0
Total	22,259	35,180	54,475	54,601	50,668
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.

San Diego Gas & Electric 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: 1PN000.000 - 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	2,118	21,322	20,036	15,945
NSE	0	0	0	0	0
Total	0	2,118	21,322	20,036	15,945
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	2,118	0	0.0	1-Sided Adj
Explanation:	Transfer Pension costs to correct work group				
2018 Total	0	2,118	0	0.0	
2019	0	21,322	0	0.0	1-Sided Adj
Explanation:	Transfer Pension costs to correct work group				
2019 Total	0	21,322	0	0.0	
2020	0	20,036	0	0.0	1-Sided Adj
Explanation:	Transfer Pension costs to correct work group				
2020 Total	0	20,036	0	0.0	
2021	0	15,945	0	0.0	1-Sided Adj
Explanation:	Transfer Pension costs to correct work group.				
2021 Total	0	15,945	0	0.0	

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper 1PN000.000

San Diego Gas & Electric
 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	\$ 50,668,000	\$ 50,668,000	\$ 34,182,000

See attached projection from Willis Towers Watson

San Diego Gas & Electric Company Cash Balance Plan
General Rate Case Forecast
10-Year Forecast of Projected ASC Accounting Costs and Contributions Reflecting Projected Headcount
(\$ in millions)

Willis Towers Watson 

Pension	San Diego Gas & Electric Company Cash Balance Plan									
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
• ASC 715 Cost	15.86	22.67	25.27	26.66	28.06	29.52	31.19	32.93	34.73	36.65
• Minimum Required Contribution	-	-	-	-	-	-	-	-	-	-
• PPA Funded Percentage										
Actuarial Value of Assets (including Receivables)	824.62	877.06	906.89	916.33	929.34	947.10	966.80	990.31	1,016.35	1,044.19
<u>Funding Target</u>	<u>630.76</u>	<u>635.34</u>	<u>642.39</u>	<u>651.74</u>	<u>662.79</u>	<u>680.06</u>	<u>699.72</u>	<u>722.52</u>	<u>746.26</u>	<u>791.86</u>
Funded Percentage	131%	138%	141%	141%	140%	139%	138%	137%	136%	132%
• Funding Policy Contribution	50.67	50.67	34.24	34.24	34.24	34.24	34.64	34.64	34.64	34.64
• PBO Funded Percentage										
Fair Value of Assets	860.65	884.46	906.89	916.33	929.35	947.11	966.81	990.31	1,016.36	1,044.20
<u>PBO</u>	<u>858.72</u>	<u>851.25</u>	<u>849.35</u>	<u>853.54</u>	<u>862.75</u>	<u>878.20</u>	<u>897.13</u>	<u>921.09</u>	<u>949.29</u>	<u>981.10</u>
Funded Percentage	100%	104%	107%	107%	108%	108%	108%	108%	107%	106%
• ASC 715 Discount rate	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

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 San Diego Gas & Electric Company Cash Balance Plan**

Key Assumptions

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
ASC 715 Discount rate	See forecast exhibit									
PPA Effective Discount Rate - SDG&E qualified plan	5.39%	5.22%	5.08%	4.98%	4.92%	4.85%	4.79%	4.75%	4.75%	4.50%
Expected Return for Determining ASC 715 Benefit Cost for SDG&E qualified plan ⁽¹⁾	5.50%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%
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 plans	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age 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	Semptra 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 Semptra on March 15, 2022)	<u>12/31/2021</u>	<u>12/31/2022</u>	<u>12/31/2023</u>	<u>12/31/2024</u>	<u>12/31/2025</u>	<u>12/31/2026</u>	<u>12/31/2027</u>	<u>12/31/2028</u>	<u>12/31/2029</u>	<u>12/31/2030</u>
	6,035	6,209	6,436	6,436	6,436	6,436	6,436	6,436	6,436	6,436

⁽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 Semptra 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.

San Diego Gas & Electric Company Cash Balance 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	858,724	851,254	849,348	853,541	862,754	878,196	897,126	921,089	949,293	981,098
2. Fair value of assets	860,650	884,457	906,888	916,333	929,346	947,107	966,806	990,313	1,016,356	1,044,196
3. Shortfall (1. - 2.)	(1,926)	(33,203)	(57,540)	(62,792)	(66,592)	(68,911)	(69,680)	(69,224)	(67,063)	(63,098)
4. Discount rate			3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
5. 7-year amortization factor			6.4172				6.4172			
6. Present value of remaining payments			-				(26,124)			
7. Shortfall amortization amount ((3. - 6.) / 5.)			(8,966)				(6,788)			
8. Shortfall amortization at 1/1/2024			(8,966)				(8,966)			
9. Shortfall amortization at 1/1/2028							(6,788)			
10. Service Cost at Base Year			42,212				49,382			
11. Shortfall amortization (8. + 9.)			(8,966)				(15,754)			
12. Base Policy Amount (10. + 11.)			33,246				33,628			
13. EOY Base Policy Amount 12. * 1.030 (2022 - 2023 reflect 2019 GRC base amount)	50,668	50,668	34,243	34,243	34,243	34,243	34,637	34,637	34,637	34,637
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	630,761	635,339	642,389	651,739	662,795	680,061	699,717	722,518	746,264	791,865
2. 85% of 1.	536,147	540,038	546,031	553,978	563,376	578,052	594,759	614,140	634,324	673,085
3. Actuarial Value of Assets	824,623	877,056	906,887	916,331	929,343	947,104	966,803	990,309	1,016,352	1,044,192
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	936,379	934,283	938,895	949,029	966,016	986,839	1,013,198	1,044,222	1,079,208	1,118,035
2. Fair value of assets at t+1 (prior to contribution at t)	832,758	854,534	880,956	893,970	911,732	931,431	954,531	980,575	1,008,415	1,037,832
3. Maximum contribution (end of year) (1. - 2.) (includes interest on contributions made during year)	103,621	79,749	57,939	55,059	54,284	55,408	58,667	63,647	70,793	80,203
E. Funding Policy Contribution										
1. Funding policy amount (greater of A.13, B.1, and C.5, not no more than D.3)	50,668	50,668	34,243	34,243	34,243	34,243	34,637	34,637	34,637	34,637

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

San Diego Gas & Electric Company Cash Balance Plan
Additional Projection Details
Projected Minimum Required Contributions

WillisTowersWatson 

	Projected Minimum Required Contribution (\$thousand)									
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
A. Funding Shortfall										
1. Effective Interest Rate (EIR)	5.39%	5.22%	5.08%	4.98%	4.92%	4.85%	4.79%	4.75%	4.75%	4.50%
2. Funding Target Liability	630,761	635,339	642,389	651,739	662,795	680,061	699,717	722,518	746,264	791,865
3. Actuarial value of assets	824,623	877,056	906,887	916,331	929,343	947,104	966,803	990,309	1,016,352	1,044,192
4. Prefunding balance	-	-	-	-	-	-	-	-	-	-
5. Funding shortfall / (surplus) (2. - [3. -4.])	(193,862)	(241,717)	(264,498)	(264,592)	(266,548)	(267,043)	(267,086)	(267,791)	(270,088)	(252,327)
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	27,443	29,814	32,513	34,123	35,652	37,291	38,969	40,649	42,231	45,019
2. Adjusted Target Normal Cost (1. + A.5. if surplus)	(166,419)	(211,903)	(231,985)	(230,469)	(230,896)	(229,752)	(228,117)	(227,142)	(227,857)	(207,308)
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.

San Diego Gas & Electric Company Cash Balance Plan
Additional Projection Details
Projected Assets

WillisTowers Watson 

	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	860,650	884,457	906,888	916,333	929,346	947,107	966,806	990,313	1,016,356	1,044,196
2. Employer contributions (adjusted for timing and interest)	50,668	50,668	34,243	34,243	34,243	34,243	34,637	34,637	34,637	34,637
3. Benefit payments	(69,803)	(66,757)	(63,813)	(60,705)	(56,622)	(55,496)	(53,023)	(51,558)	(50,928)	(50,592)
4. Administrative expenses from trust	(1,441)	(1,464)	(1,492)	(1,526)	(1,539)	(1,552)	(1,565)	(1,584)	(1,603)	(1,623)
5. Investment return	44,383	39,985	40,508	41,002	41,679	42,503	43,458	44,548	45,734	46,994
6. FVA at end of year (sum 1 through 5)	884,457	906,889	916,334	929,347	947,107	966,805	990,313	1,016,356	1,044,196	1,073,612
7. Assumed investment return	5.25%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
B. Actuarial Asset Value for Minimum Purposes										
1. Market value of assets (MVA), without receivables	860,650	884,457	906,888	916,333	929,346	947,107	966,806	990,313	1,016,356	1,044,196
2. Present value of receivables	-	-	-	-	-	-	-	-	-	-
3. MVA including receivables (1. + 2.)	860,650	884,457	906,888	916,333	929,346	947,107	966,806	990,313	1,016,356	1,044,196
4. Asset gain or (loss) from prior year	22,203	-	1	2	3	3	4	4	4	5
5. Asset gain or (loss) from two years prior	63,677	22,203	-	1	2	3	3	4	4	4
6. Asset deferral	36,027	7,401	1	2	3	3	3	4	4	4
7. Actuarial value of assets (AVA) prior to corridor (3. - 6.)	824,623	877,056	906,887	916,331	929,343	947,104	966,803	990,309	1,016,352	1,044,192
8. Lower corridor 90% of MVA	774,585	796,011	816,199	824,700	836,411	852,396	870,125	891,282	914,720	939,776
9. Upper corridor 110% of MVA	946,715	972,903	997,577	1,007,966	1,022,281	1,041,818	1,063,487	1,089,344	1,117,992	1,148,616
10. Final AVA (limited to 90% to 110% of MVA)	824,623	877,056	906,887	916,331	929,343	947,104	966,803	990,309	1,016,352	1,044,192
Note: The projections for 2022 through 2031 are based on ASC 715 accounting information and include all participants under the Plan.										

Beginning of Workpaper
1PN000.001 - EMPLOYEE PBOP

San Diego Gas & Electric 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: 1PN000.001 - EMPLOYEE PBOP

Activity Description:

SDG&E provides post-retirement benefits other than pensions (PBOP) such as health and life insurance benefits, also known as the San Diego Gas & Electric Company Postretirement Health and Life Plans. 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		5,673	1,806	0	0	0	0	0	0	
NSE		0	0	0	0	0	0	0	347	
Total		5,673	1,806	0	0	0	0	0	347	
FTE		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric 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: 1PN000.001 - 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	347	0	0	347
Total		0	0	0	0	0	347	0	0	347
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 Total	0	0	0	0	0.0	
2023 Total	0	0	0	0	0.0	
2024	0	0	347	347	0.0	1-Sided Adj
Explanation:	2024 PBOP Projection					
2024 Total	0	0	347	347	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric 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: 1PN000.001 - 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	4,990	4,471	3,682	3,948	5,082
NSE	0	0	0	0	0
Total	4,990	4,471	3,682	3,948	5,082
FTE	0.0	0.0	0.0	0.0	0.0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	-2,830	-3,682	-3,948	-5,082
NSE	0	0	0	0	0
Total	0	-2,830	-3,682	-3,948	-5,082
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	0	0	0	0	0
Non-Labor	4,990	1,641	0	0	0
NSE	0	0	0	0	0
Total	4,990	1,641	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	683	165	0	0	0
NSE	0	0	0	0	0
Total	683	165	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	5,673	1,806	0	0	0
NSE	0	0	0	0	0
Total	5,673	1,806	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.

San Diego Gas & Electric 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: 1PN000.001 - 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	0	-2,830	-3,682	-3,948	-5,082
NSE	0	0	0	0	0
Total	0	-2,830	-3,682	-3,948	-5,082
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	-2,830	0	0.0	1-Sided Adj
Explanation:	Transfer PBOP costs to correct work group				
2018 Total	0	-2,830	0	0.0	
2019	0	-3,682	0	0.0	1-Sided Adj
Explanation:	Transfer PBOP costs to correct work group				
2019 Total	0	-3,682	0	0.0	
2020	0	-3,948	0	0.0	1-Sided Adj
Explanation:	Transfer PBOP costs to correct work group				
2020 Total	0	-3,948	0	0.0	
2021	0	-5,082	0	0.0	1-Sided Adj
Explanation:	Transfer PBOP costs to correct work group				
2021 Total	0	-5,082	0	0.0	

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper 1PN000.001

San Diego Gas & Electric
 PBOP Contribution Projection
 For Years 2022-2024

ASSUMPTIONS
<p>1. PBOP contribution amounts based on estimates provided by Willis Towers Watson, a global actuarial services firm.</p> <p>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.</p>

	Projected		
	2022	2023	2024
PBOP Contributions	\$ -	\$ -	\$ 347,000

See attached projection from Willis Towers Watson

San Diego Gas and Electric Company PBOP

General Rate Case Forecast

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

(\$ in millions)

	SDG&E PBOP ¹									
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
• ASC 715 Cost	(0.96)	(0.41)	0.35	0.85	1.32	1.71	2.11	2.47	2.79	3.10
• Contributions										
Contributions to trust	0.00	0.00	0.00	0.18	0.66	1.05	1.44	1.80	2.12	2.42
Pay-as-you-go	0.66	0.67	0.67	0.67	0.66	0.66	0.67	0.67	0.67	0.68
Total contributions	0.66	0.67	0.67	0.85	1.32	1.71	2.11	2.47	2.79	3.10
• APBO funded percentage (alternative)										
Fair value of assets	212.75	212.88	212.91	212.96	213.17	213.91	215.07	216.57	218.57	220.89
APBO	188.44	190.22	192.42	195.11	198.11	201.46	205.08	208.90	213.06	217.41
Funded Percentage	113%	112%	111%	109%	108%	106%	105%	104%	103%	102%
• 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 SDGE, forecast total contributions are the greater of the pay-as-you-go benefits or forecast ASC 715 Cost. 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.

San Diego Gas and Electric Company PBOP
10-Year Forecast of Projected ASC Accounting Costs and Contributions Reflecting Projected Headcount
Other Key Assumptions and Methodology: PBOP

<u>Other Key Assumptions</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>Ultimate</u>
ASC 715 Discount rate	See forecast exhibits										
Expected Return for Determining ASC 715 Benefit Cost for the SDG&E PBOP ⁽¹⁾	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%
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	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age Based	Age 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	<u>12/31/2021</u>	<u>12/31/2022</u>	<u>12/31/2023</u>	<u>12/31/2024</u>	<u>12/31/2025</u>	<u>12/31/2026</u>	<u>12/31/2027</u>	<u>12/31/2028</u>	<u>12/31/2029</u>	<u>12/31/2030</u>	<u>12/31/2031</u>
(provided by Sempra on March 15, 2022) ⁽²⁾	4,940	5,137	5,394	5,394	5,394	5,394	5,394	5,394	5,394	5,394	5,394

⁽¹⁾ Sempra selected an expected return on plan assets (EROA) of 5.00% for the SDG&E 401(h) account and 4.50% for the VEBAs, resulting in a weighted average EROA of 4.80%.

⁽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

- 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.

San Diego Gas & Electric 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
2100-0375	000	EMPLOYEE PENSION