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Chapter: 8a

PREPARED DIRECT TESTIMONY OF

FRANK SERES

ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

AND SAN DIEGO GAS & ELECTRIC COMPANY

(EMBEDDED COSTS)

September 30, 2022
(Errata dated July 24, 2023)

TABLE OF CONTENTS

Page

CHAPTER 8

PREPARED DIRECT TESTIMONY OF FRANK SERES

(EMBEDDED COSTS)

I. PURPOSE

The purpose of my testimony is to present the embedded transmission and storage costs for Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) (jointly, Applicants). The embedded cost methodology uses recorded costs to allocate the backbone and local transmission, and storage costs of providing these services to the utilities' customers for the purposes of setting transportation rates. Embedded costs include the plant-in-service, operations and maintenance (O&M), and administrative and general (A&G) expenses that are needed to provide transmission and storage services to SoCalGas's and SDG&E's customers. My proposed costs are for four years to align with this Cost Allocation Proceeding (CAP), which will be 2024 through 2027.

My embedded cost methodology uses the latest available 2021 recorded data, is revised to comply with D.20-02-045, Ordering Paragraph (OP) 4[1], and is similar with the methodology used in the prior Triennial Cost Allocation Proceeding (TCAP).

After describing my data sources, my testimony will discuss the:

1. Embedded costs of SoCalGas's transmission and storage functions.
2. Embedded costs of SDG&E's transmission system.

[1] "San Diego Gas & Electric Company (SDG&E)and Southern California Gas Company (SoCalGas) are authorized to allocate transmission and storage costs in the following manner: a) use the most recent embedded costs from the Federal Energy Regulatory Commission 2 form; b) with respect to backbone transmission costs, SDG&E and SoCalGas shall allocate compressor station operation and management expenses based on mileage to both backbone transmission and local transmission; c) allocate 100 percent of the Administrative and General expenses using the key factor labor percentages; d) include asset retirement obligations in the embedded cost study; and e) assign Customer Advances for Construction amounts to distribution."

3. Allocation of SoCalGas's and SDG&E's transmission costs between the backbone and local transmission functions; and

4. Allocation of SoCalGas's storage costs among the core, balancing, and balancing + functions.

II. DATA SOURCE FOR EMBEDDED COST STUDY

The starting point for the embedded cost studies for SoCalGas and SDG&E is the total recorded costs for calendar year 2021. These costs are presented in SoCalGas's and SDG&E's 2021 Annual Report to the California Public Utilities Commission (CPUC), FERC Form 2.[2] From these FERC accounts, non-base[3] margin related costs are excluded. The results are the data used to determine plant-in-service (capital-related), O&M, and A&G expenses that comprise the cost of service for transmission and storage customers.

III. SOCALGAS EMBEDDED TRANSMISSION AND STORAGE COST STUDY

Table 1 in Appendix A shows the 2021 SoCalGas Utility Gas Plant in Service by FERC account, minus Pipeline Safety Enhancement (PSEP) provided by Plant Accounting.

PSEP costs are excluded from the embedded cost studies. PSEP costs are either allocated directly to customer classes through balancing account amortization or are removed from General Rate Case (GRC) base margin and reallocated functionally.

A. Capital-Related Costs

1. Depreciation

The first capital-related expense is depreciation. The cost of utility plant is recovered in

[2] FERC stands for Federal Energy Regulatory Commission. FERC Form 2 for year-end 2021 was the latest available report at the time I prepared my embedded cost studies.

[3] In a GRC, the CPUC establishes a base margin, which is the amount of revenue authorized to be collected from customers to recover authorized operating expenses (other than the cost of gas), depreciation, interest, taxes and return on rate base. Non-base margin are costs not part of base margin.

rates through an annual depreciation expense over the book life of the investment. The annual depreciation expense of a utility plant is specific to the type of facility or equipment in service. Table 1 in Appendix A shows the annual depreciation expense and total accumulated depreciation by FERC account category for 2021. Total transmission depreciation of $102.7 million includes $78.6 million from transmission plant plus $24.1 million[4] from general plant allocated based on a labor factor. Total underground storage depreciation of $69.1 million includes $56.1 million from storage depreciation plus $13 million[5] from general plant allocated based on a labor factor.

2. Return on Rate Base

The second capital-related expense is the annual authorized rate of return on rate base. This charge is associated with the utility's authorized cost of capital, which represents the cost to finance the investments made in utility plant and equipment, through debt and equity. SoCalGas's recorded weighted average rate base of $8,056 million in 2021 is shown in Appendix A, Table 1, note this is without Customer Advances for Construction per D.20-02-045, Ordering Paragraph 4. That rate base amount is multiplied by the authorized 7.3% rate of return (on rate base), which was adopted in D.19-12-056.[6] This authorized rate of return is used to calculate the return on rate base for each investment category. The total return on equity and cost of debt equals $588.036 million ($8,056 million x 7.30% = $588.036 million). Appendix A, Table 1 shows the components of SoCalGas's rate base based on the percentage of each category's net book value to total SoCalGas's net book value.

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4 *See* Appendix E, n.4.

5 *Id.,* n.5.

6 *See* D.19-12-056 at 55 (OP 5). This is SoCalGas's authorized rate of return for 2021.

Table 2 below summarizes the return on rate base for SoCalGas's transmission and storage assets. Transmission plant, which is recorded in FERC Accounts 365 through 372, represents $1,719.6 million of rate base, with a return of $125.5 million ($1,719.6 million x 7.30% = $125.5 million). An additional $3.9 million[7] of general plant return (which represents the rate of return on rate base allocated to general plant) is added to transmission, based on a labor factor, resulting in a total transmission return of $129.4 million.

Underground storage plant, which is recorded in FERC Accounts 117.1, and 350 through 358, represents $917.7 million of rate base, with a return of $ 66.9 million ($917.7 million x 7.30% = $ 66.9 million). An additional 2.1 million[8] from general plant return is allocated to storage based on a labor factor, resulting in total storage return of $69.1 million. Table 2 below summarizes this information.

Table 2
2021 SoCalGas Return on Rate Base

	(A)	(B)	(C)= (A)x(B)	(D)	(E)= (C)+(D)
	Rate Base	Authorized Rate of Return	Return on Rate Base	Allocated General Plant Return	Total Return
	($MM)	(%)	($MM)	($MM)	($MM)
Total SoCalGas	8,056.52	7.30%	588.0	N/A	588.0
Transmission	1,719.6	7.30%	125.5	3.9	129.4
Storage	917.7	7.30%	66.9	2.1	69.1

3. Taxes

The third capital-related expense is taxes, and specifically federal and state income taxes, and ad valorem (or property) tax.[9] Tax data that was used is contained in SoCalGas's Test Year

[7] *See* Appendix E, n.7.

[8] *Id.*, n.8.

[9] Payroll taxes are included in A&G.

2024 General Rate Case (GRC).[10] SoCalGas's 2021 recorded capital-related taxes comprised of federal and state income taxes, and property taxes were $182.5 million.[11] These taxes are allocated to transmission as follows: $182.5 million x 21.34%[12] = $38.9 million. In addition, taxes related to general plant of $1.2 million[13] are allocated to transmission resulting in a total of $ 40.2 million of transmission capital-related taxes.

For storage plant, SoCalGas's recorded capital-related taxes are allocated as follows: $182.5 million x 11.4%[14] = $20.8 million. In addition, taxes related to general plant of $0.7 million[15] are allocated to storage resulting in a total of $21.4 million of storage capital-related taxes. Table 3 below summarizes transmission and storage taxes.

Table 3
2021 SoCalGas Federal and State Income and Property Taxes

	($MM)
Transmission	40.2
Storage	21.4

[10] *See* A.22-05-015/016 (cons.) Exhibit SCG-33-R Revised Direct Testimony of Ragan G. Reeves - Tax (August 2022) (relevant excerpts attached in Appendix B).

[11] ($000) Federal income taxes = $60,270; State Income Taxes = $11,951; Ad Valorem taxes = $110,233. *See* Appendix B.

[12] Transmission's percent of total SoCalGas net book value from Appendix A, Table 1.

[13] *See* Appendix E, n.13.

[14] Storage's percent of total SoCalGas net book value from Appendix A, Table 1.

[15] *See* Appendix E, n.15.

Table 4 below shows SoCalGas capital-related costs for transmission and storage plant.

Table 4
2021 SoCalGas Capital-Related Costs

	Transmission ($MM)	Storage ($MM)
Depreciation[16]	102.7	69.1
Return[17]	129.4	69.1
Taxes[18]	40.2	21.4
Total	272.3	59.6

B. Gas O&M and A&G Items

1. Transmission O&M Expenses

SoCalGas's 2021 recorded transmission O&M expenses (recorded in FERC Accounts 850- 867) totaled $162.8 million. This total amount excludes non-base margin related costs from each FERC account. Details of transmission O&M costs by FERC Account are shown in Table 5 in Appendix A.

2. Storage O&M Expenses

SoCalGas's 2021 recorded storage O&M expenses (recorded in FERC Accounts 814-837) were $66.9 million. This total excludes non-base margin related costs from each FERC account. Details of storage O&M costs by FERC Account are shown in Table 6 in Appendix A.

3. A&G Expenses

SoCalGas's 2021 recorded A&G expenses (recorded in FERC Accounts 920 through 932), plus payroll taxes,[19] totaled $581.5 million. This total excludes non-base margin related costs from each FERC account. In addition, this excludes franchise fees recorded in FERC

[16] *See* Appendix A, Table 1; Appendix E, nn.4, 5.

[17] *See* Table 2.

[18] *See* Table 3.

[19] Payroll taxes = $41.3 million. *See* Appendix B.

Account 927 because these costs are accounted for in the franchise and uncollectible factor in the rate design process.[20] A&G details are shown in Table 7 in Appendix A.

A&G costs are allocated based on D.20-02-045, Ordering Paragraph 4. One hundred percent of the A&G expenses is allocated using the key factor labor percentages. Because company labor is a key factor that drives A&G costs, $581.5 million of A&G is allocated to the Storage and Transmission functions based on labor factors shown in Table 8. Table 8 shows Storage has 6.2% of SoCalGas's labor costs, and Transmission has 11.4 % of SoCalGas's labor costs, therefore $35.8 million of A&G ($581.5 x 6.2% x million) are allocated to storage, and $66.4 million of A&G ($581.5 x 11.4%) are also allocated to transmission.

Table 8[21]
2021 SoCalGas Labor Factors to Allocate A&G

		(A)	(B)	(A x B)
	Labor Costs[22]	Labor %	Total A&G	Allocated A&G
	($MM)		($MM)	($MM)
Storage	27.7	6.2%	581.5	35.8
Transmission	51.3	11.4%	581.5	66.4
Distribution; Customer Accounts; Service & Info; Gas Supply	370.1	82.4%	581.5	479.3
Total	449.1	100.0%		581.5

4. Miscellaneous Revenues

Miscellaneous revenues related to transmission and storage operations are recorded primarily in FERC Account 495. Such revenues include crude oil sales, storage emission credit revenues. These revenues are incorporated as a reduction in costs required to provide utility services, thereby lowering embedded costs of transmission and storage. Data used is from

[20] Witness Michael Foster (Chapter 13) is the rate design witness in this CAP.

[21] All figures are rounded to the nearest tenth decimal.

[22] Source: 2021 SoCalGas FERC Form 2, p. 355, lines 52-57, col. (b).

SoCalGas's Test Year 2024 GRC.[23] Miscellaneous revenues recorded for 2021 and associated with the storage function were $4.3 million and were credited directly to storage expenses. [24] The other $53.3 million[25] of miscellaneous revenues are not directly related to any single functional activity. These revenues are credited in the same manner that A&G expenses are allocated.

Table 9 summarizes the O&M, A&G expenses and Miscellaneous revenues for SoCalGas's transmission and storage functions.

Table 9
2021 SoCalGas O&M, A&G, Miscellaneous Revenues.

	Transmission	Storage
	($MM)	($MM)
O&M Expenses[26]	162.8	66.9
A&G Expenses[27]	66.5	35.8
Miscellaneous Rev.	(6.1)	(7.6)
Total	223.1	95.1

[23] *See* A.22-05-015/016 (cons.) Exhibit SCG-37-R, Revised Direct Testimony of Jackie L. Roberts (August 2022) (relevant excerpts attached in Appendix B).

[24] Crude oil sales, $3.624 million + Reclaim, $693,000 = $4.3 million. Shared Assets =$53.3 million. *See* Appendix B.

[25] *Id*.

[26] *See* Tables 5 and 6.

[27] *See* Table 8.

Finally, Table 10 summarizes SoCalGas's Embedded Transmission and Storage Costs.

Table 10
2021 SoCalGas Embedded Transmission and Storage Costs

	Transmission	Storage
	($MM)	($MM)
Capital-related Costs[28]	272.3	159.6
O&M, A&G Expenses[29]	223.1	95.1
Total	495.4	254.7

IV. SDG&E EMBEDDED TRANSMISSION COST STUDY

Table 11 in Appendix C shows 2021 SDG&E Utility Gas Plant in Service by FERC Account prepared by the Plant Accounting group.

A. Capital-Related Costs

1. Depreciation

Table 11 in Appendix C shows SDG&E's gas transmission depreciation expense is $10.8 million. An additional $3.3 million[30] from general/common plant is allocated to this for a total of $14.2 million.

2. Return on Rate Base

The components of SDG&E's weighted average rate base in Table 11 are based on the percentage of each category's net book value to SDG&E's total gas net book value. Table 11 shows that transmission's rate base is $160.7 million, or 11.8% of total recorded weighted average rate base of $1,368 million.

[28] *See* Table 4.

[29] *See* Table 9.

[30] *See* Appendix E, n.30.

This total rate base of $1,368 million is multiplied by the authorized rate of return (on rate base) of 7.55%, as adopted in D.19-12-056.[31] The total return on SDG&E's rate base is $103.3 million ($1,368 million x 7.55% = $103.3 million). Transmission's return on rate base is $12.1 million based on transmission's rate base of $160.7 million shown in Table 12 ($160.7 million x 7.55% = $12.14 million). An additional $1.4 million[32] from general/common plant return is allocated to transmission based on labor factor resulting in total transmission return of $13.5 million. Table 12 below summarizes SDG&E's return on rate base for gas operations.

Table 12
2021 SDG&E Return on Rate Base

	(A)	(B)	(C) = (A) x (B)	(D)	(E) = (C) +(D)
	Rate Base	Rate of Return	Return on Rate Base	Allocated General Plant Return	Total Return
	($MM)	(%)	($MM)	($MM)	($MM)
Total SDG&E	1,367.8	7.55%	103.3	N/A	103.3
Transmission	160.7	7.55%	12.14	1.4	13.5

3. Taxes

Tax data contained in SDG&E's 2024 GRC was used for the embedded transmission cost study. SDG&E's 2021 recorded federal and state income taxes for gas operations totaled $24.5 million.[33] In addition, SDG&E's 2021 recorded ad valorem (i.e., property) taxes were $26.2 million,[34] resulting in capital-related taxes of $50.7 million. These taxes are allocated to transmission as follows: $50.7 million x 11.8%[35] =$5.9 million. In addition, $0.7 million[36] of

[31] *See* D.19-12-056 at 55 (OP 3). This is SDG&E's authorized rate of return for 2021.

[32] *See* Appendix E, n.32.

[33] ($,000) State Income tax = $6,056 + Federal Income tax $18,441 = $24,497; or $24.5 million.

[34] *See* Appendix, A.22-05-015/016 (cons.) Exhibit SDG&E-37-R Revised Direct Testimony of Ragan G. Reeves at PGR-8, Table SDG&E RR-2-2.

[35] *See* Appendix C, Table 11, Transmission net book value = 11.8% of total SDG&E NBV.

[36] *See* Appendix E, n.36.

general/common plant taxes are allocated to transmission resulting in total transmission taxes of $6.6 million. Table 13 below shows that SDG&E gas transmission capital-related costs are $34.4 million.

Table 13
2021 SDG&E Capital-Related Costs

	($MM)
Depreciation [37]	14.2
Return[38]	13.5
Taxes	6.6
Total	34.4

B. Gas O&M and A&G Items

1. Transmission O&M Expenses

SDG&E's 2021 recorded transmission O&M expenses were $24.1 million as shown in Table 14 in Appendix C. This excludes FERC Account 855 (other fuel and power for compressor stations) since this cost is excluded from base margin.

2. A&G Expenses

SDG&E's 2021 recorded A&G expenses were $123.3 million as shown in Table 15 in Appendix C. FERC Account 927 (franchise fees) is excluded because this cost is handled in rate design process. A&G expenses include general management salaries and expenses; pensions and benefits; insurance expenses and outside service expenses.

SDG&E's A&G expenses are allocated in a manner consistent with D.20-02-045, OP 4. Since transmission labor costs represent 7.8% of SDG&E's labor costs, this percentage is applied to 123.3 million ($123.3 million A&G x 7.8%) = $9.6 million. Table 16 shows the transmission labor factor of 7.8%.

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[37] *See* Appendix C, Table 11; Appendix E, n.30.

[38] *See* Table 12.

Table 16				
2021 SDG&E's Labor Factors to Allocate A&G				
		(A)	(B)	(A x B)
	Labor Costs[39]	Labor %	Total A&G	Allocated A&G Costs
	($MM)		($MM)	($MM)
Storage	0.2	0.3%	N/A	N/A
Transmission	4.0	7.8%	123.3	9.6
Distribution, Customer Accounts/Service & Information	47.8	91.9%	N/A	N/A
Total	52.0	100.0%		

3. Miscellaneous Revenues

SDG&E's shared asset portion of gas-related miscellaneous revenues is recorded primarily in FERC Account 495. Data contained in SDG&E's Test Year 2024 GRC was used.[40] Miscellaneous revenues recorded for 2021 were $2.5 million. Applying the labor factor of 7.8% 2.5 million = $0.2 million.

Table 17 summarizes 2021 recorded O&M, A&G and miscellaneous revenues for SDG&E's gas transmission.

Table 17 **2021 SDG&E Transmission O&M, A&G, Miscellaneous Revenues**	
	($MM)
O&M Expenses[41]	24.1
A&G Expenses[42]	9.6
Miscellaneous Revenues	(0.2)
Total	33.5

[39] Source: 2021 SDG&E's FERC Form 2, p. 355, lines 55-59, col. (b).

[40] *See* A.22-05-015/016 (cons.) Exhibit SDG&E-42-R Revised Direct Testimony of Christine Fischer (August 2022) (relevant excerpts attached in Appendix D).

[41] *See* Table 14.

[42] *See* Table 16.

Finally, Table 18 summarizes SDG&E's embedded cost for gas transmission.

Table 18
2021 SDG&E Embedded Transmission Cost

	($MM)
Capital-related Costs[43]	34.4
O&M, A&G, Miscellaneous Expenses[44]	33.5
Total	67.8

V. BACKBONE AND LOCAL TRANSMISSION COSTS

A. Embedded Transmission Costs

Pipelines are classified as backbone transmission if they receive gas from receipt points and are used to transport gas to SoCalGas's storage fields and local transmission system. Local transmission pipelines transport gas from backbone pipelines and storage fields to the distribution system. The function of transporting supplies from receipts points to local transmission system is what defines a pipeline as backbone transmission pipeline. Similarly, the function of transporting supplies from backbone transmission system to distribution and end-use customers is what defines a pipeline as local transmission pipeline.

All of SoCalGas's and SDG&E's compressor stations are classified as backbone transmission facilities. SDG&E's gas transmission pipelines are classified as backbone pipelines, but a significant number of SoCalGas's transmission pipelines perform a local

[43] *See* Table 13.

[44] *See* Table 17.

transmission function. Appendix F identifies SoCalGas's backbone and local transmission pipelines by line number.

Table 19 below shows that SoCalGas's embedded transmission cost is $ 495.4 million,[45] comprised of $ 272.3 million capital-related costs and $223.1 million O&M and A&G expenses. The embedded cost of SDG&E's gas transmission system is $67.8 million,[46] comprised of $34.4 million capital-related costs and $33.5 million O&M and A&G expenses. The embedded cost of the integrated transmission system of SoCalGas and SDG&E is $563.2 million as shown in Table 19.

Table 19
2021 SoCalGas & SDG&E Transmission Costs

	(A)	(B)	(C) = (A) + (B)
	SoCalGas	SDG&E	Total
	($MM)	($MM)	($MM)
Capital-related Costs	272.3	34.4	~~e~~
O&M, A&G Expenses	223.1	33.5	256.6
Total	495.4	67.8	563.2

The backbone portion of capital-related costs is calculated from the transmission net book value and transmission depreciation expense of SoCalGas's backbone facilities. The net book values of these backbone transmission lines and compressor stations represents 73.7 % of SoCalGas's transmission net book value. The depreciation expense of these backbone lines and compressor stations represents 72.2% of SoCalGas's transmission depreciation expense. These percentages result in a weighted average of backbone capital-related cost of 73.2% or $199.2

[45] *See* Table 10.

[46] *See* Table 18.

million relative to SoCalGas's total transmission capital-related cost of $ 272.3 million, see Table 20 below.

SoCalGas's transmission O&M and A&G expenses are $223.1 million.[47] Pipeline mileage is used to allocate O&M and A&G costs between the backbone (70.2%)[48] and local (29.8%)[49] transmission pipelines. The resulting backbone transmission portion of O&M and A&G expenses is $156.5 million. The embedded cost of backbone transmission for SoCalGas is therefore $357.5 million, and $425.3 million for the two utilities combined, as shown in Table 20.

Table 20
2021 Total Backbone Transmission Costs

	(A)	(B)	(C) = (A) x (B)	(D)	(E) = (C) + (D)
	SoCalGas Transmission	Backbone Transmission	SoCalGas Backbone	SDG&E Transmission[50]	Combined Backbone Transmission
	($MM)	(%)	($MM)	($MM)	($MM)
Capital-related Costs	272.3	73.-2	~~200.9~~ 199.2	34.4	233.5
O&M, A&G Expenses	223.1	70.2	156.5	33.5	190
Total	495.4		~~e~~	67.8	e

To accurately represent the costs of the backbone transmission function SoCalGas adjusted for the portion of backbone pipelines that serve a local transmission function. A considerable number of larger customers are served directly off the backbone transmission system without using local transmission lines. In other words facilities that are identified as backbone serve a local transmission function as well. The rationale for reassigning a portion of

[47] *See* Table 9.

[48] Backbone transmission is approximately 2,060 miles.

[49] Local transmission is approximately 875 miles.

[50] *See* Table 18.

the costs of backbone transmission to the local transmission function is to accurately represent the costs of the backbone transmission function.

Since SoCalGas's CPUC-mandated design standard of service from its transmission system to core and noncore customers is the 1-in-10 year cold day it will be appropriate to use this demand condition to determine the percent reallocation, in conjunction with the cold year annual average throughput used for rate design. SoCalGas looks at the same customers in both environments to calculate the direct demand off the backbone system.

A similar approach was first introduced in A.08-02-001, direct testimony of Rodger Schwecke pg. 31-32, and in A.11-11-002 revised updated direct testimony of Sim-Cheng Fung pg. 14. SoCalGas stopped using this method because of TURN's direct testimony[51] namely that, and because PG&E at the time did not reallocate backbone facility cost to the local transmission function.

SoCalGas agrees with TURN that a backbone pipeline does not lose its character, however, it does perform the additional service of a local transmission function for a significant number of larger customers on a 1-in-10 year peak[52] day event and on cold year annual average day, and the cost allocation should reflect that reality.

SoCalGas determined the portion of the backbone transmission costs that should be allocated to local transmission using the cold year annual average throughput for years 2024 -

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[51] "It is not readily apparent why a facility would lose its character as a backbone line simply because some of the gas flowing out of it goes into distribution lines or directly to customer facilities, rather than flowing solely into local transmission lines.", A.11-11-002 witness Sim-Cheng Fung Revised Updated Direct Testimony at 14, *available at:* Revised Updated Prepared Direct Testimony of Sim-Cheng Fung dated March 15, 2013.pdf (socalgas.com).

[52] SoCalGas, *2020 California Gas Report (CGR)* (October 2020) at 144-146, *available at:* 2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf (socalgas.com).

2027, which is (2,452 MMcfd). Furthermore, SoCalGas uses the same customers[53], which serve directly from the backbone under both cold year annual average and 1-in-10 peak day demand conditions resulting in 16% of backbone throughput allocated to local transmission function, see Table 21 below.

Table 21

% of Backbone Allocated to Local Transmission Function

(A)	(B)	C = A x B	(D)	(E)= C /D
Cold Year Annual Average Demand (MMcfd) 2024 -2027	Demand Served Directly from Backbone (%)	Demand Served Directly from Backbone (MMcfd)	Envoy Total [54]Backbone Receipt Capacity (MMcfd)	% of Backbone Allocated to Local Transmission Function
2,452	22.3%	546	3,435	16%

Table 21 A

% of Backbone Allocated to Local Transmission Function

	(A)	(B)	C = (A) + (B)	From table 21 (E) D = (1- 0.16) x C
	SoCalGas	SDG&E	Combined Backbone Costs	Final Backbone Cost
	($MM)	($MM	($MM)	($MM)
Backbone Transmission Costs	355.7	67.8	423.5	356.3

[53] SoCalGas emphasis this point in D.11-04-032 at 22, *available at:* D.11-04-032 (ca.gov) "It is not possible to verify SDG&E's/SoCalGas's assumption that customers served directly from the backbone comprise the same percentage of system demand under both average and cold year peak day demand conditions. However, that this assumption cannot be verified does not justify allocating zero transmission system costs to local transmission. To do so will continue to include local transmission costs that should not be included in the backbone transmission revenue requirement."

In this paragraph "average" is analogues with cold year annual average. SoCalGas verified this assumption to be correct and calculated the % of customers serving directly off the backbone.

[54] *See* 2020 CGR at 145, projected capacity. Capacity may vary from that shown over the span of the CGR timeframe.

Total combined backbone costs are $ 423.5 million from Table 20, this amount is adjusted by 16% for the portion of backbone pipelines that serve a local transmission function. This translates to $ 356.3 million of final combined backbone costs, see Table 21 A above.

SoCalGas and SDG&E will be adding to the backbone transmission cost, incremental 2021 balancing costs related to PSEP, amortization of Backbone Transmission Balancing Account (BTBA), and GRC PSEP costs of total $99.3 million.[55] Therefore, the total backbone transmission cost is $ 455.6 million ($356.3 million + $99.3million).[56] Prior to implementation of BTS rates in 2024, PSEP costs and throughput denominator will be updated to reflect average BTS contracts/utilization for the 12 months of the prior October through September as authorized TCAP decision.[57]

The illustrative Firm BTS Rate is calculated in Table 21 B.

Table 21 B
Illustrative Firm BTS Rate

Total Backbone Costs[58]	Proposed Throughput Assumption[59]	Proposed Annual Throughput Assumption	Proposed BTS Rate
($MM)	MDth/d	MDth	$/Dth
e	2,532	924,292	0.492

B. Possible Changes to BTS Methodology

Based on the testimony of Paul Borkovich (Chapter 11), concerning a BTS Reservation Charge Credit Mechanism, SoCalGas proposes to offer a new rate option, G-BTS5. This new

[55] *See* SoCalGas AL 5915, SoCalGas AL 5884, and AL 5884-B.

[56] All figures are rounded to the first decimal.

[57] D.16-10-004, Attachment A at A-8, II C.4.b.

[58] Including PSEP related costs of $99.3 mill.

[59] Throughput October 1, 2020 through September 30, 2021, AL 5884, Oct 15, 2021.

rate option is for firm service under a 100% scheduled volumetric rate for the applicable BTS open season term in recognition of the difficulty of predicting required maintenance outages with date-specific precision across a 3- year BTS term.

Currently, BTS denominator factors are represented as an estimated average based on BTS firm Straight Fixed Variable (SFV) contracts, Scheduled Modified Fixed Variable (MFV) contracts, and interruptible throughput. If BTS-5 proposal is accepted, the BTS denominator factors will be reviewed and, if necessary, the estimated average denominator would take into consideration the BTS-5 rate option.[60]

C. Changes to Transmission and Storage cost levels for CAP years 2024 through 2027

SoCalGas's embedded cost of transmission and storage is based on 2021 transmission costs. These costs are expected to be frozen from 2024 through 2027, one year longer than in previous 2020 TCAP. To manage the increase in costs and equity between customer classes within CAP years, SoCalGas proposes an attrition rate increase for each attrition year 2025 through 2027 in the embedded cost of transmission and storage. This adjustment is proposed to be based on the escalation rates presented in 2024 GRC SCG-40-WP of Khai Nguyen[61], and for SDG&E escalation rates are based on Scott Wilder 2024 GRC Cost Escalation testimony.[62]

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[60] One possible scenario is that 100% of SFV customers would migrate to the BTS-5 option, in that case the BTS rate would approximately increase 0.1% based on data from Table 21B. See workpapers for reference.

[61] SCG-40-WP_Khai_Nguyen_Post_Test_Year_Ratemaking (socalgas.com)

Table 2. O&M Escalation Rate 2025 = 2.14%, 2026 = 2.36%, 2027 = 2.45%.

Table 6. Capital Escalation Rate 2025 = -0.89%, 2026 = 1.71%, 2027 =2.24%.

[62] SDG&E Capital Escalation rates is the same as for SoCalGas escalation rate, Table 6.

SDGE O&M Escalation Rate 2025= 1.67%, 2026=2.11%, 2027=2.26%

VI. UNDERGROUND STORAGE COSTS

A. Aliso Canyon Turbine Replacement (ACTR)

In the 2019 GRC, SoCalGas sought and was approved cost recovery of $74.6 million in costs that exceeded the previously authorized cost of $200.9 million for the ACTR Project. The Commission authorized recovery in rates of the $74.6 million and found it reasonable to continue the Aliso Canyon Memorandum Account (ACMA) and that any recovery sought for these amounts would be subject to a reasonableness review in a future GRC:

> *"Based on our review and analysis of the above, we find that the testimony presented supports the reasonableness of the $275.5 million in capital expenditures to complete the Aliso Canyon Turbine Replacement Project and that SoCalGas should be authorized to recover in rates the $74.6 million in costs which exceed the previously authorized amount in D.13-11-023. We also find that the request to continue the Aliso Canyon Memorandum Account (ACMA) to record additional capital-related costs in excess of $275.5 million is reasonable. Any recovery sought for such amounts should be subject to a reasonableness review in SoCalGas's next GRC.*[63]

In addition to the embedded storage cost shown earlier in Table 10, SoCalGas will ask to recover revenue requirement above what was authorized for ACTR in 2019 GRC ($275.5 million) to be part of the proposed embedded storage cost allocation. The incremental ACTR $2.1 million revenue requirement shown in Table 22 is the average of the 2024-2027 revenue

[63] D.19-09-051 at 173-174.

requirements based on the 2021 year end Aliso Canyon Memorandum Account (ACMA) balance of $18.4 million cost.[64]

SoCalGas recommends that the total storage cost be maintained at the level shown in Table 22 until another embedded cost study is performed for the next CAP, which is consistent with prior TCAP decisions D.20-02-045 and D.16-06-039.

Table 22	
2021 SoCalGas Embedded Storage Cost	
	($MM)
	2020-2022
Capital-related Cost	~~e~~
O&M, A&G Expenses	95.1
Total Existing Storage	254.7
ACTR[65]	2.1
Total Embedded Storage Cost	256.8

B. Underground Storage Cost Allocation

Appendix G presents the percentage allocation for injection, inventory, and withdrawal of 34.9%, 30.4%, and 34.7%, respectively. Those percentages were used to allocate the embedded storage cost of $256.8 million into the injection, inventory, and withdrawal functions. Storage costs allocated to the injection, inventory, and withdrawal functions are subsequently allocated to core, load balancing, and based on the seasonalized capacities, where injection and withdrawal capacities are weighted by the relative number of days in the winter or summer seasons.

Table 23 summarizes the allocation of the total storage cost of $256.8 million to core, load balancing, and balancing + categories.

[64] This amount is the 2021 year end ACMA balance. In the 2024 GRC the cost is $21.6 million to complete the ACTR project; *see* A.22-05-015/016 (cons.) Exhibit SCG-10-R Revised Direct Testimony of Larry T. Bittleston and Steve Hruby at LTB SH-36.

[65] A conservative assumption is to keep ACTR cost flat since currently we don't have GRC 2024 Post Test Year (PTY) mechanism in place.

Table 23				
	Injection	Inventory	Withdrawal	Total Storage
Storage Service Allocation	34.9%	30.4%	34.7%	100.0%
2024-2027 Embedded Storage Cost Allocation				
	Allocated Capacity	Total Capacity	Units	Costs($MM)
Core Reservation				
Inventory	74.2	92.1	Bcf	$ 62.8
Injection(summer)	346.0	700	MMcfd	$ 34.7
Injection(winter)	129.0	550	MMcfd	
Withdrawal(winter)	1,174.0	1,400	MMcfd	$ 45.9
Withdrawal(summer)	258.0	900	MMcfd	
Total Core				$ 143.4
Load Balancing				
Inventory	9.6	92.1	Bcf	$ 8.1
Injection(summer)	300.0	700	MMcfd	$ 46.1
Injection(winter)	350.0	550	MMcfd	
Withdrawal(winter)	226.0	1,400	MMcfd	$ 35.0
Withdrawal(summer)	500.0	900	MMcfd	
Total Load Balancing				$ 89.3
Balancing +				
Inventory	8.3	92.1	Bcf	$ 7.0
Injection(summer)	54.0	700	MMcfd	$ 8.8
Injection(winter)	71.0	550	MMcfd	
Withdrawal(winter)	-	1,400	MMcfd	$ 8.2
Withdrawal(summer)	142.0	900	MMcfd	
Total Balancing +				$ 24.1
Total Storage Cost				$ 256.8

The allocation of storage capacities is proposed and presented the testimony of Manuel Rincon and Jimmy Yen (Chapter 1). Table 23 shows that in 2024, 74.2 billion cubic feet (Bcf) of underground storage inventory will be allocated to the core function. In addition, 346 million cubic feet per day (MMcfd) of summer injection, 129 MMcfd of winter injection, 1,174 MMcfd

of winter withdrawal capacity, and 258 MMcfd of summer withdrawal will also be allocated to core customers, at a total cost of $143.4 million. Load balancing costs of $89.3 million, with 8% monthly balancing, are based on 9.6 Bcf of inventory, 300 MMcfd of summer injection, 350 MMcfd of winter injection, 226 MMcfd of winter withdrawal, and 500 MMcfd of summer withdrawal capacities. The remaining storage inventory capacity of 8.3 Bcf is allocated to balancing + function, with a 54 MMcfd summer injection, 71 MMcfd winter injection, and 142 MMcfd summer withdrawal at a total cost of $24.1 million.

This concludes my prepared direct testimony.

VII. QUALIFICATIONS

My name is Frank Seres. My business address is 555 West Fifth Street, Los Angeles, California, 90013-1011. I have been employed by SoCalGas since October 2016 as Sr. Resource Planner, and I have been in my current position as a Lead Business Financial Advisor in the Transmission and Storage Strategy business group since March 2022.

My academic and professional qualifications are as follows: I hold Bachelor's degree in Mathematics from Cal State University Northridge in 2003. I hold a Master's degree in Statistics from Cal State University Long Beach in 2006. A Master's degree in Finance from Claremont Graduate University- Drucker School of Management in 2008, and a Master's degree in Economics from Cal State Polytechnic University Pomona in 2014.

Prior to joining SoCalGas, I worked at Nestle USA as a Sr. Financial Analyst from (2014 – 2016) and a Supply Chain Demand Planner from (2012 - 2014). I worked as a Statistical Analyst from (2010 – 2012) for Southern California Edison in Regulatory Affairs business group. I also worked as an Adjunct Mathematics and Statistics instructor at Cerritos College from (2005 -2016).

I have not previously testified before the California Public Utilities Commission.

APPENDIX A

SoCalGas Embedded Cost Tables

APPENDIX A

SoCalGas Embedded Cost Tables

Table 1

SOUTHERN CALIFORNIA GAS COMPANY
2021 Utility Gas Plant in Service - Table 1
By FERC Account for FERC Form 2
(Thousands of Dollars)

	ACCOUNT	ACCT NO.	As of December 31, 2021 INVESTMENT	ACCUM DEP	NET BOOK VALUE	Book Value Allocator	12/31/21 Weighted Avg Rate Base	For the Year Ended 2021 DEPRECIATION EXPENSE
Intangible								
		301	76	-	76			-
		302	587	-	587			-
		303	640	-	640			-
	Total Intangible		1,304	-	1,304	0%	804.7	-
Gas Production								
		325	-	-	-			-
		330	-	-	-			-
		331	-	-	-			-
		332	-	-	-			-
		334	-	-	-			-
		336	-	-	-			-
	Total Gas Prod		-	-	-	0%	-	-
Underground Storage								
		117.1	61,422	-	61,422			-
		350	23,634	(17,599)	6,035			41
		351	130,031	(35,053)	94,978			4,174
		352	600,466	107,229	707,695			25,828
		353	191,172	(60,654)	130,518			4,284
		354	460,994	(97,897)	363,096			12,043
		355	18,152	(4,418)	13,735			730
		356	170,916	(92,670)	78,246			4,857
		357	80,356	(26,891)	53,465			4,155
		358	211,318	(233,522)	(22,204)			-
	Total Underground Storage		1,948,461	(461,475.3)	1,486,986	11%	917,734.2	56,113
Transmission								
		365	33,279	(16,865)	16,414			448
		366	141,052	(22,134)	118,918			3,059
		367	2,483,632	(699,263)	1,784,369			59,660
		368	511,598	(134,029)	377,569			7,682
		369	216,291	(37,160)	179,131			5,751
		370	28,386	(5,843)	22,543			1,649
		371	11,122	(4,687)	6,435			389
		372	211,750	69,057	280,807			-
	Total Transmission		3,637,109	(850,923.3)	2,786,186	21%	1,719,571.4	78,638
Distribution								
		374	32,627	(2,237)	30,391			47
		375	361,067	(97,104)	263,963			9,360
		376	5,121,067	(2,657,144)	2,463,923			126,067
		378	139,426	(87,387)	52,039			4,922
		380	3,447,397	(2,259,912)	1,187,485			96,752
		381, 382	1,625,478	(547,243)	1,078,235			66,514
		383	188,890	(85,142)	103,747			5,275
		387	76,152	(30,401)	45,751			2,361
		388	964,699	1,830,255	2,794,953			-
	Total Distribution		11,956,803	(3,936,315.3)	8,020,487	61%	4,950,065.1	311,300
General Plant								
		389	1,417	(44)	1,373			2
		390	256,831	(196,850)	59,980			6,858
		391	1,669,460	(1,195,601)	473,859			180,624
		392	149	(77)	72			21
		393	113	(81)	32			3
		394	117,282	(33,142)	84,140			4,328
		395	8,370	(1,822)	6,547			339
		396	1	2	3			1
		397	214,146	(89,139)	125,006			18,195
		398	1,445	(288)	1,156			109
		399	5,993	694	6,687			-
	Total General Plant		2,275,206	(1,516,350.2)	758,856	6%	468,348.7	210,479
	Other Storage Plant		-	-	-			-
	Total Utility Gas Plant In Service		19,818,882	(6,765,064.1)	13,053,818	100.0%	8,056,524.2	656,529
	Total Investment		19,818,882					
	Less: Cushion Gas 117.1		(61,422)					
	Adj. Utility Plant - FERC Form 2		19,757,460					
	Total Ratebase at 12-31-2021		8,056,524					

Table 5 **2021 SoCalGas Transmission O&M Expenses**	
Transmission*	($MM)
850 Tran Op-Supervision & Engineering	42.592
851 Tran Op-System Control & Load Dispatching	5.654
852 Tran Op-Communication System Expenses	0.017
853 Tran Op-Compressor Station Labor & Expenses	3.902
854 &855 Tran Op-Gas From Comp Sta Fuel (GRC Excluded))	0.000
856 Tran Op-Mains Expenses	9.796
857 Tran Op-Measuring & Regulating Station Expenses	4.397
858 Tran Op-Transmission & Compression of Gas By Other	0.000
859 Tran Op-Other Expenses	3.614
860 Tran Op-Rents	0.002
861 Maintenance Supervision & Engineering	0.078
862 Tran Mnt-Structures & Improvements	0.008
863 Tran Mnt-Mains	83.914
864 Tran Mnt-Compressor Station Equipment	7.410
865 Tran Mnt-Measuring & Regulating Station Equipment	0.479
866 Tran Mnt-Communication Equipment	0.001
867 Tran Mnt-Other Equipment	0.912
Total	162.776

*Source: FERC Form 2, non-base margin costs including PSEP are excluded from accounts.

Table 6 **2021 SoCalGas Storage O&M Expenses**	
Storage*	($MM)
814 UndStr Op-Supervision & Engineering	17.951
815 UndStr Op-Maps & Records	0.227
816 UndStr Op-Wells Expenses	7.219
817 UndStr Op-Lines Expense	0.592
818 UndStr Op-Compressor Station Expense	2.280
819 UndStr Op-Compress Station Fuel & Power (GRC excluded)	0.000
820 UndStr Op-Meas & Reg Station Expenses	0.044
821 UndStr Op-Purification Expenses	0.772
823 UndStr Op-Gas Losses (GRC excluded)	0.000
824 UndStr Op-Other Expenses	9.650
825 UndStr Op-Storage Well Royalties	1.081
826 UndStr Op-Rents	0.293
830 Maintenance Supervision & Engineering	0.007
831 UndStr Mnt-Structures & Improvements	1.435
832 UndStr Mnt-Reservoirs & Wells	13.029
833 UndStr Mnt-Lines	3.890
834 UndStr Mnt-Compressor Station Equipment	3.814
835 UndStr Mnt-Meas & Reg Station Equipment	1.501
836 UndStr Mnt-Purification Equipment	2.045
837 UndStr Mnt-Other Equipment	1.085
	66.916

Table 7 2021 SoCalGas A&G Expenses	
A&G FERC Account*	($MM)
920 AdmGen Op-Salaries (Incl. Payroll Taxes)	72.837
921 AdmGen Op-Office Supplies & Expenses	25.861
922 AdmGen Op-(Less) Administrative Exp Transferred	(10.710)
923 AdmGen Op-Outside Services Employed – General	142.812
924 AdmGen Op-Property Insurance	0.279
925 AdmGen Op-Injuries & Damages	51.187
926 AdmGen Op-Employee Pensions & Benefits	227.742
927 AdmGen Op-Franchise Requirements (GRC excluded)	-
928 AdmGen Op-Regulatory Commission Expenses	6.468
930.2 + 930.1 A&G Op-MiscGen Exp	18.565
931 AdmGen Op-Rents	21.872
932 AdmGen Mnt-General Plant	24.572
	581.486

*Source: FERC Form 2, non-base margin costs including PSEP are excluded from accounts.

APPENDIX B

Excerpts of Referenced SoCalGas GRC Testimonies

Company: Southern California Gas Company (U 904 G)
Proceeding: 2024 General Rate Case
Application: A.22-05-015
Exhibit: SCG-33-R

REVISED

PREPARED DIRECT TESTIMONY OF

RAGAN G. REEVES

(TAX)

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

August 2022

4. Methodology Used to Estimate Tax Expense

Payroll taxes are a function of taxable wages and applicable tax rates. The computation of the estimated payroll taxes begins with the 2021 taxable wages stratified into salary increments. The annual wage base in effect for the year for each type of payroll tax was applied to total wages so that wages up to, but not exceeding, the wage base cap were subject to the tax.

Thus, wages up to the salary increment where the annual wage is closest to the wage base cap are subject to the tax. Wages above the wage base cap for any particular type of payroll tax were derived from multiplying the number of employees in each stratum above the cap by the wage base cap. The resulting taxable wages for each tax type were totaled and the applicable statutory tax rate was then applied to the total taxable wages.

The Medicare portion of the FICA tax is computed without respect to a wage base since all wages are subject to that tax. A companywide composite tax rate was computed based on total forecasted payroll taxes using the above methodology divided by total forecasted wages. The composite payroll tax rate for each year was applied to labor dollars applicable to this Application to determine the employer's payroll tax expense.

C. Summary of Estimated Payroll Taxes

Table SCG-RR-1 below summarizes the amount of payroll taxes on all non-capitalized wages applicable to this filing.

Table SCG-RR-1
Summary of Estimated Payroll Taxes
($ in Thousands)

Line No.	*2021 Forecast*	*2022 Forecast*	*2023 Forecast*	*2024 Test Year*
1	41,282	50,384	55,201	58,478

D. Results

The increase in payroll taxes from 2021 to 2024 reflects the impacts of staffing level changes presented by other witnesses in their direct testimonies, the impact of labor cost escalation on those changes, and the increase in the composite payroll tax rate resulting from the OASDI wage base increase as discussed above.

historical rate increases to forecast the escalation in ad valorem rates in several prior GRCs, and this methodology has been accepted in prior GRCs without exception.

The estimated ad valorem taxes for SoCalGas's Las Vegas Data Center, which is located in Nevada, are added to California ad valorem taxes as an "Other Adjustment" on the Ad Valorem summary table, Table SCG-RR-2 below.

The estimated ad valorem tax expense for TY 2024 is comprised of the second installment payment from fiscal year 2023-2024 plus the first installment payment for fiscal year 2024-2025.

C. Summary of Estimated Ad Valorem Tax Expenses

Table SCG-RR-2 below summarizes SoCalGas's estimated ad valorem tax expenses.

TABLE SCG-RR-2
Southern California Gas Company
Summary of Estimated Ad Valorem Tax Expenses
($ in Thousands)

Line No.	*Description*	*2021 Recorded*	*2022 Estimated*	*2023 Estimated*	*2024 Test Year*
1	Taxable Plant in Service	18,248,384	19,954,139	21,836,353	23,532,512
2	Taxable Reserve for Depreciation	(7,175,871)	(7,562,471)	(8,009,696)	(8,521,599)
3	Taxable Net Plant	11,072,513	12,391,668	13,826,657	15,010,913
4	Taxable Reserve for Def. Inc. Tax	(1,539,396)	(1,527,226)	(1,539,518)	(1,524,029)
5	Adjustment for Income Approach	(598,717)	(682,329)	(771,680)	(847,029)
6	Assessed Value - Non-Unitary	65,559	74,714	84,498	92,749
7	Net Assessable Value	8,999,959	10,256,828	11,599,956	12,732,604
8	Ad Valorem Tax Rate	1.4080395%	1.4320957%	1.4561520%	1.4802082%
9	Ad Valorem Tax - Fiscal Year	126,723	146,888	168,913	188,469
10	Other Adjustments	200	200	200	200
	Fiscal Year				
11	Total Operating Ad Valorem Tax	126,923	147,088	169,113	188,669
12	Capitalized Ad Valorem Tax	(10,708)	(11,838)	(12,473)	(12,796)
13	Net Operating Ad Valorem Tax	116,215	135,250	156,640	175,873
	Calendar Year (Note 1)				
14	Total Operating Ad Valorem Tax	120,487	136,255	157,350	178,141
15	Capitalized Ad Valorem Tax	(10,254)	(10,727)	(11,448)	(11,997)
16	Net Operating Ad Valorem Tax	110,233	125,528	145,902	166,144

(Note 1) - Calendar year total operating ad valorem tax = ½ of the current fiscal year total ad valorem tax plus ½ of the prior fiscal year total ad valorem tax.

treatment to amortize the excess ADFIT associated with the cost of removal tax deduction in its 2024 GRC forecasts.

D. Summary Tables

The following summary tables reflect the federal and state income taxes applicable to this filing.

TABLE SCG-RR-3-1
Southern California Gas Company
Calculation of Federal & State Income Taxes
($ in Thousands)

Line No.	*Description*	*2021 Recorded*	*2022 Estimated*	*2023 Estimated*	*2024 Test Year*
1	Total Operating Revenue	3,208,109	3,665,205	3,937,149	4,397,503
2	O&M Expenses	(1,595,480)	(1,811,057)	(1,882,540)	(2,035,446)
3	Taxes Other than Income Taxes	(151,516)	(175,912)	(201,103)	(224,622)
4	Book Income Before Depr. & Income Taxes	1,461,113	1,678,235	1,853,506	2,137,436
5	State Tax Adjustments	(1,325,921)	(1,461,886)	(1,590,265)	(1,623,197)
6	Taxable Income	135,192	216,349	263,241	514,239
7	CCFT Rate	8.84%	8.84%	8.84%	8.84%
8	**California Corporate Franchise Tax**	11,951	19,125	23,271	45,459
9	Book Income Before Depr. & Income Taxes (Line 4, above)	1,461,113	1,678,235	1,853,506	2,137,436
10	Federal Tax Adjustments	(1,114,227)	(1,035,457)	(1,128,049)	(1,372,214)
11	Taxable Income	346,886	642,778	725,458	765,221
12	Federal Income Tax Rate	21%	21%	21%	21%
13	Federal Income Tax Before Credits	72,846	134,983	152,346	160,697
14	Investment Tax Credit Amortization	(1,053)	(967)	(884)	(684)
15	Amortization of Excess Deferred Taxes	(10,350)	(9,915)	(10,038)	(9,926)
16	Other	(1,174)	(1,131)	(1,131)	(1,131)
17	**Total Federal Income Tax**	60,270	122,970	140,293	148,955

Company: Southern California Gas Company (U 904 G)
Proceeding: 2024 General Rate Case
Application: A.22-05-015
Exhibit: SCG-37-R

REVISED

PREPARED DIRECT TESTIMONY OF

JACKIE L. ROBERTS

(MISCELLANEOUS REVENUES)

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

SoCalGas

August 2022

Revenue for Non-Seismic Restores – This activity is to restore gas service after a third party turns the gas off or when service is interrupted for the customer to make upgrades or changes to their system.[13] A five-year average was used to forecast this activity to account for normal year-to-year fluctuation. SoCalGas does not anticipate any significant change in revenue for this activity.

Revenue for Third-Party Pole Attachments - Pole attachment fees reflect charges received from communication infrastructure providers for the use of SoCalGas's advanced meter poles, not including rights of way. The third-party pole attachment fees are $780 per attachment for the 20-year term of the agreement. SoCalGas is a new entrant into the third-party pole attachment space and 2022 will be the first year it collects revenues from this activity. Accordingly, it is difficult to judge interest in the program at this time and SoCalGas's forecast for this item is limited to requests it has already received for this service.

B. Rent From Gas Property – Account 493

1. Rent from Property Used in Operations ($ in 000's)

2021 Recorded	2024 Test Year	Net Change
411	531	120

SoCalGas receives rent from outside parties for use of utility-owned properties. The rent agreements are primarily for telecommunication equipment at existing SoCalGas communication sites. The TY 2024 forecast is based on the rents received from existing lease agreements and anticipated lease renewals, adjusted for applicable escalation clauses.

C. Other Gas Revenue – Account 495

1. Shared Assets ($ in 000's)

2021 Recorded	2024 Test Year	Net Change
53,267	70,109	16,842

Revenue from shared assets reflects the use of SoCalGas assets, primarily hardware, software, and communication equipment, by San Diego Gas & Electric Company (SDG&E) and Sempra Energy (Sempra) and its unregulated affiliates. The company that receives the majority of the benefit from a shared asset shall own such asset and bill other affiliates for its use.[14]

[13] *Id.*

[14] *See* Shared Services testimony of Paul Malin and Angel Le (Ex. SCG-30/SDG&E-34).

The shared assets miscellaneous revenue forecast for TY 2024 reflects the development of a revenue requirement associated with these assets, including depreciation, property taxes, federal and state income taxes, and a return on rate base. The portion of the shared asset costs allocated to SDG&E, Sempra, and its unregulated affiliates is based on methodologies used to measure utilization. For each type of shared asset, an assignment of a casual/beneficial relationship is determined (e.g., number of users, square footage, etc.). The asset is then allocated to affiliates based on their share of the benefit from that asset according to the applicable utilization methodology. More detailed information on the nature of the shared assets and the methodology used to allocate the charges between SDG&E, Sempra, and its unregulated affiliates, is presented in the testimony of Angel Le/Paul Malin (Ex. SCG-30/SDG&E-34). The amounts billed to the affiliates are recorded as SoCalGas miscellaneous revenue and are net of the billings to Sempra charged back to SoCalGas. Since these assets are established on SoCalGas's financial records, a significant revenue requirement is allocated back to SDG&E.

2. Crude Oil Sales ($ in 000's)

2021 Recorded	2024 Test Year	Net Change
3,624	3,916	292

Crude oil sales represent the revenue from the sale of crude oil produced at SoCalGas's Aliso Canyon, Honor Rancho, and Playa Del Rey underground storage fields. Production volume forecasts are based on assumptions on the utilization of the fields' gas withdrawal capacities and anticipated work on production wells. The TY 2024 production volume forecast assumes similar levels of utilization of the storage fields as in 2021 and an oil production decrease of 3% per year.

The TY 2024 oil price forecast is based on the January 1, 2022 New York Mercantile Exchange (NYMEX) futures strip for West Texas Intermediate (WTI) crude oil, adjusted for the historical differentials between the benchmark WTI price and the effective price received at the various storage fields. The price varies by storage field because of the differences in the quality of oil.

The forecast includes administrative fee reimbursement for all costs and expenses incurred in the operation of the Playa del Rey storage field including, without limitation, lifting, reworking, and redrilling expenses, and improvement and maintenance of surface equipment

efforts. Additionally, the cancellation of customers that were not able to be cancelled due to the COVID-19 emergency customer protections is applied in the second quarter of 2022.[15]

7. Federal Energy Retrofit Program (FERP) ($ in 000's)

2021 Recorded	2024 Test Year	Net Change
455	113	(342)

SoCalGas currently performs project management under federal infrastructure improvement contracts.[16] The amount recorded to miscellaneous revenues pursuant to these contracts reflects the difference between the revenues collected from the government agencies less the costs incurred to perform the work. The TY 2024 forecast is based on the forecasted net revenue from a current Utility Energy Service Contract (UESC) and 2021 recorded revenues. For background, SoCalGas has executed two UESC contracts since September 2018. The work pursuant to one of the contracts has since been completed. SoCalGas is still performing work pursuant to the other contract, which was used to forecast the TY2024 revenue.

8. Miscellaneous Other Gas Revenues ($ in 000's)

2021 Recorded	2024 Test Year	Net Change
693	725	32

Miscellaneous other gas revenues consist of items not reflected in any other miscellaneous revenue section and includes revenues from Geographic Services revenue, Gas Land Services Right of Way revenue, Aliso Canyon property revenue, and revenues from the South Coast Air Quality Management District (SCAQMD) Regional Clean Air Incentives Market (RECLAIM) credits. Forecasts for these revenues are based on available historical information for each activity as described below.

Geographic Services revenue is collected from miscellaneous customer map and service-related requests and customer will serve letters. These are builder services used in developer

[15] *See* Resolution M-4842 (suspending reconnection charges as of March 4, 2020); Resolution M-4849 (extending emergency customer protections through June 30, 2021); D.21-06-036 at 50 (Ordering Paragraph [OP] 1) (extending the moratorium on residential and small business customers until September 30, 2021); D.21-04-015 at 40-41 (OP 1) (adopting the temporary COVID-19 disconnection moratorium for medium-large commercial and industrial customers through the same length of time as the residential/small-business moratorium, including any extensions).

[16] Pursuant to 42 U.S.C. § 8256, SoCalGas has entered into federal contracts to work with third parties to implement cost-effective energy and water conservation measures.

APPENDIX C

SDG&E Embedded Cost Tables

APPENDIX C

SDG&E Embedded Cost Tables

Table 11
SAN DIEGO GAS & ELECTRIC COMPANY
2021 Utility Gas Plant in Service
By FERC Account for FERC Form 2
($000)

ACCOUNT	As of December 31, 2021 INVESTMENT	ACCUM DEP	NET BOOK VALUE	Book Value Allocator	12/31/2021 Weighted Average Rate Base	For the Year Ended 2021 DEPRECIATION EXPENSE
Transmission						
365.1- Land	4,649	-	4,649			
365.2- Rights-of-way	3,501	(1,707)	1,793			
366- Structures & Improvements	22,928	(12,154)	10,774			
367- Mains	255,461	(97,343)	158,118			
368- Compressor Station Eq	105,008	(77,018)	27,991			
369- Meas & Reg Station Eq	26,962	(19,039)	7,923			
371- Other Equipment	2,725	(364)	2,361			
372- Asset Retirement Costs for Transmission F	27,034	(4,666)	22,368			
Total Transmission	448,268	(212,292)	235,977	11.8%	160,725	10,826
Distribution						
374.2- Land and Land Rights	8,357	(7,587)	770			
374.1- Land and Land Rights	102	-	102			
375- Structures & Improvements	43	(61)	(18)			
376- Mains	1,112,568	(425,953)	686,615			
378- Meas & Reg Stations	21,183	(10,232)	10,950			
380- Services	517,389	(311,072)	206,317			
381- Meters & Regulators	188,053	(85,185)	102,869			
382- Meter Installations	116,787	(50,995)	65,792			
385- Industrial Meas & Reg Station Eq	1,517	(1,349)	167			
387.11- Other Equipment	994	(877)	117			
387- CNG Sta on SDGE Property	9,745	(5,509)	4,236			
388- Asset Retirement Costs for Distribution Pl	125,979	219,756	345,735			
Distribution Net Plant Total	$2,102,717	($679,064)	$1,423,653	70.9%	969,656	47,065
General Plant						
392- Transportation Eq	-	(26)	(26)			
394- Tools, Shop, & Garage Eq	24,597	(5,329)	19,268			
395- Laboratory Eq	-	7	7			
396- Power Operated Eq	-	1	1			
397- Communication Eq	2,256	(1,127)	1,130			
398- Misc Equipment	466	(193)	273			
General Plant Total	27,319	(6,665)	20,654			1,113
Common Plant			$327,956	17.4%	237,440	$42,023
Total Utility Gas Plant In Service	2,578,304	(898,021)	2,008,240	100.0%	1,367,820	101,028
					rate base	

Excludes values for PSEP and Mobile Home Park Bridge Projects
Pipeline Safety Enhancement Plan

APPENDIX C

SDG&E Embedded Cost Tables

Table 14 **2021 SDG&E Gas Transmission Expenses**	
Transmission	($MM)
850- Oper Supervision & Eng	5.674
851- Sys Control & Load Dispatching	0.919
852- Communication Sys Exp	0.00
853- Compr Station Labor & Exp	3.893
854- Gas Comp Sta Fuel-(GRC excluded)	0
855- Other Fuel & Power for Compr Stations (GRC-excluded)	0
856- Mains Expenses	1.203
857- Meas & Reg Station Exp	0.561
858- Trans & Compression of Gas by Others	0
859- Other Expenses	1.288
860- Rents	0.004
861- Maint Supervision & Eng	0.394
862- Maint Structure & Improvements	0
863- Maint of Mains	8.930
864- Maint of Compr Station Eq	0.767
865- Maint of Meas & Reg Station Eq	0.135
866- Maint Comm Equip	0
867- Maint of Other Eq	0.325
Total	24.092

Source: FERC Form 2

Table 15 **2021 SDG&E A&G Expenses**	
A&G FERC Account	**(**$MM)
920- A&G Salaries (Incl. Payroll Taxes)	25.96
921- Office Sply & Exp	12.073
922- Transferred Admin Exp (less)	(6,815)
923- Outside Services Employed	37.655
924- Property Insurance	1.445
925- Injuries & Damages	8.516
926- Employee Pensions	19.656
928- Reg Commission Exp	7.370
930.1 + 930.2- Gen. Advertising & Misc General Exp	7.416
931- Rents	3.643
932- Maint.of General Plant	6.367
Total A&G	123.288

Source: FERC Form 2

APPENDIX D

Excerpts of Referenced SDG&E GRC Testimonies

Company: San Diego Gas & Electric Company (U 902 M)
Proceeding: 2024 General Rate Case
Application: A.22-05-016
Exhibit: SDG&E-37-R

REVISED

PREPARED DIRECT TESTIMONY OF

RAGAN G. REEVES

(TAX)

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

August 2022

4. Methodology Used to Estimate Tax Expense

Payroll taxes are a function of taxable wages and applicable tax rates. The computation of the estimated payroll taxes begins with the 2021 taxable wages stratified into salary increments. The annual wage base in effect for the year for each type of payroll tax was applied to total wages so that wages up to, but not exceeding, the wage base cap were subject to the tax. Thus, wages up to the salary increment where the annual wage is closest to the wage base cap are subject to the tax. Wages above the wage base cap for any particular type of payroll tax were derived from multiplying the number of employees in each stratum above the cap by the wage base cap. The resulting taxable wages for each tax type were totaled and the applicable statutory tax rate was then applied to the total taxable wages. The Medicare portion of the FICA tax is computed without respect to a wage base since all wages are subject to that tax. A companywide composite tax rate was computed based on total forecasted payroll taxes using the above methodology divided by total forecasted wages. The composite payroll tax rate for each year was applied to labor dollars applicable to this Application to determine the employer's payroll tax expense.

C. Summary of Estimated Payroll Taxes

Table SDG&E-RR-1 below summarizes the amount of payroll taxes on all non-capitalized wages applicable to this filing.

Table SDG&E-RR-1
Summary of Estimated Payroll Taxes
($ in Thousands)

	Line No.	*2021 Estimated*	*2022 Estimated*	*2023 Estimated*	*2024 Test Year*
Electric Distribution	1	9,459	10,530	11,477	13,585
Gas Distribution	2	4,877	6,036	6,520	6,960
Electric Generation	3	0	1,531	1,618	1,644

and $43,900 in 2024. The Nevada SUI has been included in SDG&E's payroll tax forecast for SDG&E's Nevada-based employees, but the impact is not material.

Table SDG&E-RR-2-2
San Diego Gas & Electric Company
Summary of Estimated Ad Valorem Tax Expenses
Gas Distribution
($ in Thousands)

Line No.	*Description*	*2021 Recorded*	*2022 Estimated*	*2023 Estimated*	*2024 Test Year*
1	Taxable Plant in Service	3,076,791	3,371,055	3,661,011	3,973,809
2	Taxable Reserve for Depreciation	(1,167,395)	(1,222,015)	(1,294,532)	(1,374,891)
3	Taxable Net Plant	1,909,396	2,149,040	2,366,479	2,598,918
4	Taxable Reserve for Def. Inc. Tax	(185,316)	(186,558)	(188,177)	(189,440)
5	Adjustment for Income Approach	(4,138)	(4,710)	(5,228)	(5,783)
6	Assessed Value - Non-Unitary	3,784	4,307	4,781	5,288
7	Net Assessable Value	1,723,726	1,962,079	2,177,855	2,408,984
8	Ad Valorem Tax Rate	1.7869464%	1.8464608%	1.9059752%	1.9654897%
9	Ad Valorem Tax - Fiscal Year	30,802	36,229	41,509	47,348
10	Other Adjustments	13	13	13	13
	Fiscal Year				
11	Total Operating Ad Valorem Tax	30,815	36,242	41,522	47,361
12	Capitalized Ad Valorem Tax	(2,237)	(2,232)	(3,839)	(5,049)
13	Net Operating Ad Valorem Tax	28,578	34,010	37,683	42,313
	Calendar Year (Note 1)				
14	Total Operating Ad Valorem Tax	28,426	33,416	38,769	44,329
15	Capitalized Ad Valorem Tax	(2,186)	(1,684)	(2,555)	(4,898)
16	Net Operating Ad Valorem Tax	26,240	31,732	36,214	39,431

(Note 1) - Calendar year total operating ad valorem tax = ½ of the current fiscal year total ad valorem tax plus ½ of the prior fiscal year total ad valorem tax.

Table SDG&E-RR-3-2
Gas Distribution
Calculation of Federal & State Income Taxes
($ in Thousands)

Line No.	*Description*	*2021 Recorded*	*2022 Estimated*	*2023 Estimated*	*2024 Test Year*
1	Total Operating Revenue	489,255	556,318	602,438	663,594
2	O&M Expenses	(202,223)	(225,786)	(236,634)	(255,787)
3	Taxes Other than Income Taxes	(31,117)	(37,768)	(42,735)	(46,391)
4	Book Income Before Depr. & Income Taxes	255,915	292,764	323,069	361,415
5	State Tax Adjustments	(187,409)	(211,208)	(235,646)	(259,813)
6	Taxable Income	68,506	81,556	87,424	101,602
7	CCFT Rate	8.84%	8.84%	8.84%	8.84%
8	**California Corporate Franchise Tax**	6,056	7,210	7,728	8,982
9	Book Income Before Depr. & Income Taxes (Line 4, above)	255,915	292,764	323,069	361,415
10	Federal Tax Adjustments	(161,184)	(163,656)	(188,517)	(226,316)
11	Taxable Income	94,731	129,108	134,552	135,099
12	Federal Income Tax Rate	21%	21%	21%	21%
13	Federal Income Tax Before Credits	19,894	27,113	28,256	28,371
14	Investment Tax Credit Amortization	-	-	-	-
15	Amortization of Excess Deferred Taxes	(1,448)	(1,433)	(1,522)	(1,290)
16	Other	(5)	(1)	(1)	(1)
17	**Total Federal Income Tax**	18,441	25,679	26,733	27,080

Company: San Diego Gas & Electric Company (U 902 M)
Proceeding: 2024 General Rate Case
Application: A.22-05-016
Exhibit: SDG&E-42-R

REVISED

PREPARED DIRECT TESTIMONY OF

CHRISTINE FISCHER

(MISCELLANEOUS REVENUES)

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

August 2022

26. Shared Assets ($000s)

2021 Recorded	2024 Test Year	Net Change
2,477	4,804	2,327

Revenue from shared assets is allocated to both electric and gas departments. The nature of these charges and the methodology used to develop the TY 2024 forecast are described above.

IV. CONCLUSION

This concludes my prepared direct testimony.

APPENDIX E

Testimony Footnotes

Testimony Footnotes

General Plant and Common Plant (SDG&E common allocation to gas) are primarily comprised of office furniture & equipment, structures & improvement, tools and communication equipment, all of which are directly linked to labor. As such, allocation of general/common plant costs is consistent with that of administrative and general (A&G) expenses described in Section III.

Footnote		General Plant **Depreciation** ($MM)	Labor %	Allocated General Plant Depreciation ($MM)
4	SoCalGas Transmission	$210.5	11.4	$24.1
5	SoCalGas Storage	$210.5	6.2	$13
30	SDG&E Transmission	$43.14	7.8	$3.3

Footnote		General Plant **Return** ($MM)	Labor %	Allocated General Plant Return ($MM)
7	SoCalGas Transmission	$34.2	11.4	$3.9
8	SoCalGas Storage	$34.2	6.2	$2.1
32	SDG&E Transmission	$17.9	7.8	$1.4

Footnote		General Plant **Taxes** ($MM)	Labor %	Allocated General Plant Taxes ($MM)
13	SoCalGas Transmission	$10.6	11.4	$1.2
15	SoCalGas Storage	$10.6	6.2	$0.7
36	SDG&E Transmission	$8.8	7.8	$0.7

APPENDIX F

Classification of SoCalGas's Backbone and Local Transmission Pipelines

APPENDIX F

Classification of SoCalGas's Backbone and Local Transmission Pipelines

2021 Classification of SoCalGas's Backbone and Local Transmission Pipelines

SoCalGas's Backbone Pipelines	
85	3000
103	3003
119	3003
127	3008
203	3011
225	4000
235	4002
245	5000
247	5010
293	5012
294	5034
300	5036
303	5041
309	5043
324	6900
335	6901
404	6904
406	6905
963	6906
1004	6916
1005	7039
1027	7053
1028	7200
1030	8100
1031	8105
1180	8106
1181	8107
1185	8108
1186	8109
1187	8110
1192	8123
1201	
1221	
1229	
2000	
2001	
2005	
2051	

SoCalGas's Local Pipelines		
12	1026	3005
85	1029	3007
104	1129	5002
115	1132	6000
133	1167	6001
145	1170	6902
160	1171	6903
173	1172	6908
202	1173	6911
214	1174	6913
222	1175	6914
317	1176	6915
324	1177	6919
325	1202	6921
404	1203	7000
406	1205	7025
407	1207	7042
408	1211	7043
512	1218	7044
765	1219	7049
767	1230	7051
775	1233	7052
800	1234	7054
1003	1236	7055
1010	1241	7056
1011	1242	7058
1013	1244	7059
1014	2000	7067
1015	2001	8032
1016	2002	8038
1017	2003	8045
1018	2006	8115
1019	2007	8116
1020	3000	8119
1021	3001	
1022	3002	
1023	3003	
1024	3004	

APPENDIX G

Storage Allocation by Function

APPENDIX G

Storage Allocation by Function

	Storage Allocation by Function									
2021 FERC Account		NBV ($000)	INJ %	WD %	INV %		INJ ($000)	WD ($000)	INV ($000)	Capital-Rel Cost($000)
350	Land/Rights-of-Way	6,035	0%	0%	100%	100%	$0	$0	$6,035	$ 146,199
351	Structures & Improvements	94,978	0%	0%	100%	100%	$0	$0	$94,978	
352	Wells	707,695	25%	50%	25%	100%	$176,924	$353,847	$176,924	
353	Lines	130,518	25%	50%	25%	100%	$32,629	$65,259	$32,629	
354	Compressor Station Equipment	363,096	100%	0%	0%	100%	$363,096	$0	$0	
355	Meas. & Reg Equipment	13,735	25%	25%	50%	100%	$3,434	$3,434	$6,867	
356	Purification Equipment	78,246	0%	100%	0%	100%	$0	$78,246	$0	
357	Other Equipment	53,465	0%	0%	100%	100%	$0	$0	$53,465	
117.1	Cushion Gas	61,422	0%	67%	33%	100%	$0	$41,153	$20,269	
	Total NBV	1,509,189					$576,083	$541,939	$391,167	$ 1,509,189
	Capital-Related Costs %						38%	36%	26%	100%
	Capital-Related Costs						$55,807	$52,499	$37,893	$146,199
		O&M ($000)	INJ %	WD %	INV %		INJ ($000)	WD ($000)	INV ($000)	
814	Operation Supervision & Engineering	17,951	33%	33%	34%	100%	$5,924	$5,924	$6,103	
815	Maps & Records	227	0%	0%	100%	100%	$0	$0	$227	
816	Wells Expenses	7,219	25%	50%	25%	100%	$1,805	$3,610	$1,805	
817	Line Expenses	592	25%	50%	25%	100%	$148	$296	$148	
818	Compressor Station Expenses	2,280	100%	0%	0%	100%	$2,280	$0	$0	
820	Measuring & Regulating Station Expenses	44	25%	25%	50%	100%	$11	$11	$22	
821	Purification Expenses	772	0%	100%	0%	100%	$0	$772	$0	
824	Other Expenses	9,650	0%	0%	100%	100%	$0	$0	$9,650	
825	Storage Well Royalties	1,081	0%	0%	100%	100%	$0	$0	$1,081	
826	Rents	293	0.0%	0%	100%	100%	$0	$0	$293	
	Total Operation	40,109					$ 10,168	$ 10,612	$ 19,329	$ 40,109
							INJ ($000)	WD ($000)	INV ($000)	
830	Maintenance Supervision & Engineering	7	33%	33%	34%	100%	$2	$2	$2	
831	Maintenance of Structures & Improvements	1,435	0%	0%	100%	100%	$0	$0	$1,435	
832	Maintenance of Reservoirs & Wells	13,029	25%	50%	25%	100%	$3,257	$6,515	$3,257	
833	Maintenance of Lines	3,890	25%	50%	25%	100%	$973	$1,945	$973	
834	Maintenance of Compressor Station Equipment	3,814	100%	0%	0%	100%	$3,814	$0	$0	
835	Maintenance of Measuring & Regulating Station Equipment	1,501	25%	25%	50%	100%	$375	$375	$750	
836	Maintenance of Purification Equipment	2,045	0%	100%	0%	100%	$0	$2,045	$0	
837	Maintenance of Other Equipment	1,085	0%	0%	100%	100%	$0	$0	$1,085	
	Total Maintenance	26,806					$8,421	$10,882	$7,503	$ 26,806
	Storage O&M Excl. Fuel	66,916					$ 18,589	$ 21,494	$ 26,832	$ 66,916
							INJ ($000)	WD ($000)	INV ($000)	Total ($000)
	Capital and O&M Costs						$ 74,396	$ 73,993	$ 64,726	$ 213,114
							INJ	WD	INV	
	% Allocation Inj, WD, Inv.						34.91%	34.72%	30.37%	100%