

TaExhibit No.: _____
Application: A.25-09-XXX
Witnesses: F. Seres and M. Schmidt-Pines
Chapter: 8

PREPARED DIRECT TESTIMONY OF
FRANK SERES AND MARJORIE SCHMIDT-PINES
ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY
AND SAN DIEGO GAS & ELECTRIC COMPANY
(COST ALLOCATION AND EMBEDDED COSTS)

September 30, 2025

TABLE OF CONTENTS

	<u>Page</u>
I. PURPOSE	1
II. OVERVIEW OF COST ALLOCATION	2
III. COST ALLOCATION PRINCIPLES	4
IV. DATA SOURCE FOR EMBEDDED COST STUDY	5
V. SOCALGAS EMBEDDED COST STUDY.....	6
A. Capital-Related Costs.....	6
1. Depreciation.....	6
2. Return on Rate Base.....	6
3. Taxes	8
B. Gas O&M and A&G Items	9
1. Transmission O&M Expenses	9
2. Storage O&M Expenses.....	10
3. Customer Cost Expense	10
4. Distribution- High Pressure Expense.....	10
5. Distribution- Medium Pressure Expense	10
6. A&G Expenses.....	11
7. Miscellaneous Revenues	12
VI. SDG&E EMBEDDED COST STUDY	13
A. Capital-Related Costs.....	13
1. Depreciation.....	13
2. Return on Rate Base.....	13
3. Taxes	15
B. Summary of SDG&E Capital-Related Costs	16
C. Gas O&M and A&G Items	16
1. Transmission O&M Expenses	16
2. Customer Related Expense	17
3. High Pressure Distribution Expense	17
4. Medium Pressure Distribution Expense.....	17
5. A&G Expenses.....	17
6. Miscellaneous Revenues	18

D.	Summary of SDGE Embedded Costs	19
VII.	COMBINED EMBEDDED COST SUMMARY (SOCALGAS & SDG&E).....	20
VIII.	BACKBONE AND LOCAL TRANSMISSION COSTS	21
A.	Embedded Transmission Costs	21
B.	Backbone to Local Reallocation Methodology:	24
C.	Backbone to Local Reallocation Findings:	25
IX.	UNDERGROUND STORAGE COSTS.....	29
A.	Underground Storage Cost Allocation.....	29
X.	RESULTS OF THE EMBEDDED COST ALLOCATION STUDIES.....	31
XI.	COMPARISON OF PROPOSED COST ALLOCATION AND TRANSITION ADJUSTMENT TO COST-BASED RATES.....	36
XII.	QUALIFICATIONS	40
APPENDIX A – SOCALGAS EMBEDDED COST TABLE FS-MSP-1		FS-MSP A-1
APPENDIX B – SDG&E EMBEDDED COST TABLE FS-MSP-9		FS-MSP B-1
APPENDIX C – TESTIMONY FOOTNOTES.....		FS-MSP C-1
APPENDIX D – CLASSIFICATION OF SOCALGAS’S BACKBONE AND LOCAL TRANSMISSION PIPELINES		FS-MSP D-1
APPENDIX E – STORAGE ALLOCATION BY FUNCTION		FS-MSP E-1

1 **CHAPTER 8**

2 **PREPARED DIRECT TESTIMONY OF**

3 **FRANK SERES AND MARJORIE SCHMIDT-PINES**

4 **COST ALLOCATION AND EMBEDDED COSTS**

5 **I. PURPOSE**

6 The purpose of our testimony is to present the allocation of the authorized revenue
7 requirement to customer classes for Southern California Gas Company (SoCalGas) and San
8 Diego Gas & Electric (SDG&E) (jointly, Applicants). Our testimony ultimately proposes full
9 embedded cost study of Customer-related, Medium Pressure Distribution-related, High Pressure
10 Distribution-related, Transmission, and Storage costs for SoCalGas and SDG&E. Embedded
11 costs include the plant-in-service, operations and maintenance (O&M), and administrative and
12 general (A&G) expenses that are needed to provide services to SoCalGas's and SDG&E's
13 customers. Our proposed cost allocation is for three years, from 2027 to 2029, to align with the
14 2024 Cost Allocation Proceeding (CAP).

15 The proposed embedded cost methodology uses the latest available 2024 recorded data
16 and is revised to comply with Decision (D.) 24-07-009, Ordering Paragraph (OP) 2, and
17 Attachment A¹ Agreement A(6), which states:²

18 The next Cost Allocation Proceeding application will contain, at a minimum,
19 a fully embedded cost study based on 2024 FERC Form 2, as well as a
20 benchmark cost allocation utilizing Long Run Marginal Cost (LRMC) studies
21 for the customer-related and distribution functions. The benchmark cost

¹ D.24-07-009, Attachment A (Settlement Agreement Amongst Southern California Gas Company, San Diego Gas & Electric Company, The Utility Reform Network, Indicated Shippers, Southern California Generation Coalition, The Public Advocates Office at The California Public Utilities Commission, Southwest Gas Corporation, California Manufacturers & Technology Association, Shell Energy North America (US), L.P., Long Beach Utilities, Clean Energy, And Western Manufactured Housing Community Association To Resolve Certain Issues In Applicants' Cost Allocation Proceeding (A.22-09-015)).

² *Id.* at 3.

1 allocation may leverage underlying LRMC data presented in this cost
2 allocation proceeding, updated to account for changes in line extension
3 allowance policy, loaders, and demand projections, and scaled to
4 representative dollars in the corresponding test year. Additionally, in the next
5 Cost Allocation Proceeding, Applicants will include a detailed capital/O&M
6 storage allocation percentage study to determine the proportional allocation of
7 storage costs by function (injection, withdrawal, and inventory) (see A.18-07-
8 024, Chapter 8, Appendix G^[3])[^[4]].

9 After describing the data sources, our testimony will discuss:

- 10 1. An overview of cost allocation principles;
- 11 2. Embedded costs allocation of SoCalGas's customer related, high pressure
12 distribution and medium pressure distribution, transmission, and storage
13 functions;
- 14 3. Embedded cost allocation of SDG&E's customer related, high pressure
15 distribution and medium pressure distribution, and transmission system;
- 16 4. Allocation of SoCalGas's and SDG&E's transmission costs between backbone
17 and local transmission functions;
- 18 5. Allocation of SoCalGas's storage costs across core reservation, balancing, and
19 unbundled storage functions; and
- 20 6. Summary and implications of the Cost Allocation results.

21 **II. OVERVIEW OF COST ALLOCATION**

22 Cost allocation refers to the process of determining the cost of each utility function and
23 allocating these functional costs to customer classes. This allocation is essential to ensure rates
24 reflect the projected actual cost of service provided. Specifically, cost allocation involves first

³ In CAP 2027 this is Appendix E.

⁴ D. 24-07-009 at 35 (OP 2), *see also Id.*, Attachment A at 3 (Agreement A(6)).

1 assigning the authorized Base Margin⁵, to distinct functional categories integral to natural gas
2 service delivery. Base Margin includes all costs authorized for recovery through customer rates
3 and excluding costs that are recovered through separate balancing accounts or other rate
4 mechanisms. These functions are:

- 5 (i) Customer-related: Including service lines delivering gas directly to
6 customers from the distribution main to the end-use customers' home or
7 business, regulators to maintain a constant pressure, meters, customer
8 support services;
- 9 (ii) Medium Pressure Distribution: Pipeline system distributing gas that
10 operate at medium pressure and transport gas to service lines;
- 11 (iii) High Pressure Distribution: Pipeline system distributing gas that operate at
12 high pressure and transport gas to service lines and medium pressure
13 pipelines;
- 14 (iv) Backbone Transmission: Pipelines which receive gas supply from
15 interstate pipelines and local California producers, and redeliver that
16 supply to the local transmission system and storage;
- 17 (v) Local Transmission: Pipelines which receive gas supply from the
18 backbone transmission system or storage, and redeliver that supply to the
19 distribution system and end-use customers.⁶

⁵ Applicants Base Margin is authorized in a General Rate Case (GRC). Pipeline Safety Enhancement Plan (PSEP) cost components that are not in Base Margin are not included in the Embedded Cost study and they are functionally allocated to High Pressure Distribution and Transmission functions per D.14-06-007 and D.16-12-063. AB32 Administrative fees (CARB fee) are allocated on an Equal Cents Per Therm (ECPT) basis. PSEP included in Base Margin are part of the Embedded Cost Studies for Transmission and High Pressure Distribution functions.

⁶ *Id.*

(vi) Storage: Facilities for gas injection, inventory (storage), and withdrawal.

Once the functional allocation is complete, the next step involves allocating the determined functional costs across customer classes, categorized broadly as:

(i) Core (residential, commercial/industrial, natural gas vehicle (NGV), gas air conditioning, gas engine);

(ii) Noncore (commercial/industrial, electric generation, wholesale, enhanced oil recovery); and

(iii) Other (backbone transportation service).

Our testimony concludes with a summary of these allocations, providing clarity and transparency regarding cost causation within various customer groups.

III. COST ALLOCATION PRINCIPLES

The Applicants' cost allocation methodology is grounded in the following principles⁷:

1. Cost Causation: Allocating cost based on identifying which customers or customer groups are responsible for specific utility costs. Establishing a clear, causal link between customer usage patterns and the resulting utility expenses ensuring equitable rate-setting practices.
2. Consistency: Maintain alignment with established cost allocations practices to ensure predictability and regulatory consistency.
3. Minimize Rate Volatility: Strive to keep rates stable and predictable over time.

On September 15, 2022, the California Public Utilities Commission (CPUC) issued D.22-09-026 as part of Rulemaking (R.) 19-01-011, Order Instituting Rulemaking (OIR) Regarding Building

⁷ National Association of Regulatory Utility Commissioners (NARUC). Module III: Guidelines on Determining the process for allocating cost among customer classes. Sec 1.1.1 Principles and Key Terms of Cost Management and Allocation.

Decarbonization. Starting July 1, 2023, Residential New Construction Builders no longer receive allowances for natural gas line extensions.⁸ The embedded cost study is based on historical costs. Shifting to a more universal embedded cost approach for ratemaking would better align gas rates with Commission policy. This is especially true since the Long Run Marginal Cost (LRMC) study is based on the cost of the last marginal unit. The residential cost has significantly decreased with the capital cost going to zero.⁹ Thus, SoCalGas and SDG&E advocate continued reliance on the fully embedded costing methods across all functional categories: Transmission, Storage, Customer-related services, Medium Pressure Distribution-related, and High Pressure Distribution-related.

IV. DATA SOURCE FOR EMBEDDED COST STUDY

The starting point for the embedded cost studies for SoCalGas and SDG&E is total recorded costs for calendar year 2024. These costs are extracted from each utility's respective 2024 Annual Report to the CPUC, FERC Form 2.¹⁰ From these recorded costs, costs not associated with Base Margin i.e., non-base margin¹¹ related costs are excluded. The resultant costs, after these exclusions, form the basis for determining each utility's plant-in-service (capital-related), O&M, and A&G expenses used to derive the embedded cost of providing gas services across the identified functional categories: Transmission, Storage, Customer-related,

⁸ SoCalGas Rule No. 20, C2, SDG&E Rule No. 15, C3

⁹ See direct testimony of Marjorie Schmidt-Pines (Cost Allocation and Long Run Marginal Cost Study) (Chapter 9).

¹⁰ FERC stands for Federal Energy Regulatory Commission. FERC Form 2 for year-end 2024 is the latest available report for embedded cost studies for this filing.

¹¹ In a GRC, the CPUC establishes a base margin (the amount of revenue requirement minus miscellaneous revenues) to be collected from customers, which include authorized operating & maintenance (O&M) and administrative & general (A&G) expenses, capital-related costs such as depreciation, return on rate base, and taxes. Non-base margin costs are excluded from GRC and are recovered in applicants' other regulatory proceedings/mechanisms.

1 Medium Pressure Distribution-related, and High Pressure Distribution-related.

2 **V. SOCALGAS EMBEDDED COST STUDY**

3 **A. Capital-Related Costs**

4 The capital-related costs consist of three primary elements: depreciation, return on rate
5 base, and taxes.

6 **1. Depreciation**

7 Depreciation reflects the systematic allocation of the initial cost of the utility plant
8 investment across their estimated useful lives. These depreciation expenses are recovered in
9 rates through annual charges corresponding to each category of plant or equipment.

10 Table FS-MSP-1 in Appendix A provides the annual depreciation expenses and total
11 accumulated depreciation for 2024, organized by FERC account categories. Comprehensive
12 depreciation allocations, including general plant depreciation apportioned by labor factors, are
13 detailed further in the testimony's supporting tables and workpapers.

14 **2. Return on Rate Base**

15 Return on Rate Base represents the authorized annual recovery of the utility's financing
16 cost for its invested capital. Specifically, this covers the cost of debt and equity financing
17 associated with plant and equipment in utility service. For 2024, SoCalGas's recorded weighted
18 average rate base is \$11,809.9 million as detailed in Appendix A, Table FS-MSP-1.

19 Table FS-MSP-2 below summarizes the calculation of SoCalGas's Return on Rate Base
20 by function for 2024.

Table FS-MSP-2			
2024 SoCalGas Return on Rate Base			
	(A)	(B)	(C)= (A)x(B)
	Rate Base	Authorized Rate of Return	Return on Rate Base
	(\$MM)	%	(\$MM)
Total SoCalGas	11,809.9	7.67%	906.3
Storage	1,372.2	7.67%	105.3
Transmission	3,011.6	7.67%	231.1
Customer	4,735.8	7.67%	363.4
HP Distribution	562.0	7.67%	43.1
MP Distribution	2,128.4	7.67%	163.3

The rate base amount for each function, as detailed above, is multiplied by the 2024 CPUC's authorized rate 7.67%¹² to determine the functional return on investment. The total authorized return of SoCalGas is approximately \$906.3 million (\$11,809.9 million x 7.67% = \$906.3 million).

Table FS-MSP-3 summarizes the allocation of the total rate base across functional categories, Storage, Transmission, Distribution, Customer Costs: Customer Accounts, Customer Service & Information and Distribution, reflecting general plant allocations via labor factors. Distribution, allocation between customer costs, high pressure and medium pressure distribution, are assigned based on actual expenditures, as shown in Table FS-MSP-3 columns C and D. Distribution costs are allocated between high pressure and medium pressure based on 2024 capital investment.

¹² Advice Letter 6207-G that allowed for Cost of Capital Mechanism CCM adjustment under D.08-05-035.

Table FS-MSP-3							
2024 Allocation of Rate Base							
	(A)	(B)	(C)	(D)	(E) = (B) + (D)	(F)	(G) = (E) + (F)
	General Plant Reallocation		Distribution Reallocation		Total Reallocated General Plant and Distribution	Directly Allocated Rate Base	Total Rate Base
	%	(\$MM)	%	(\$MM)	(\$MM)	(\$MM)	(\$MM)
Total Amount Allocated		779.1		6,786.7	7,565.8	4,244.1	11,809.9
Storage	6%	47.2	0%	-	47.2	1,325.0	1,372.2
Transmission	12%	92.4	0%	-	92.4	2,919.1	3,011.6
Customer-related	58%	455.2	63%	4,280.6	4,735.8	-	4,735.8
HP Distribution	5%	38.5	8%	523.5	562.0	-	562.0
MP Distribution	19%	145.8	29%	1,982.6	2,128.4	-	2,128.4

3. Taxes

Capital-related tax expense primarily comprises federal and state income taxes, and ad valorem (or property) tax. For the calendar year 2024, SoCalGas's recorded capital-related taxes comprised of federal and state income taxes, and property taxes were \$144.4 million.¹³ These taxes are allocated proportionally across functional categories based on the relative rate base percentages. For example, Transmission cost \$144.4 million x 24.7%¹⁴ = \$35.68 million. In addition, tax related to general plant of \$ 1.1 million¹⁵ are allocated to transmission resulting in a total of \$ 36.8 million of transmission capital-related taxes.

¹³ (\$000) Federal Income Taxes = \$10,836; State Income Taxes = (\$28,644); Ad Valorem taxes = \$162,159.

¹⁴ Transmission's percent of total SoCalGas net book value from Appendix A, Table FS-MSP-1.

¹⁵ See Appendix C, n.2.

Table FS-MSP-4 summarizes these allocated tax amounts:

Table FS-MSP-4	
2024 SoCalGas Federal and State Income and Property Taxes ¹⁶	
	(\$MM)
Storage	16.8
Transmission	36.8
Customer-related	57.9
HP Distribution	6.9
MP Distribution	26.0

Table FS-MSP-5 consolidates SoCalGas’s capital-related cost components for each functional category.

Table FS-MSP-5					
2024 SoCalGas Capital-Related Costs					
	Storage	Transmission	Customer	HP Distribution	MP Distribution
	(\$MM)	(\$MM)	(\$MM)	(\$MM)	(\$MM)
Depreciation ¹⁷	91.9	162.0	401.9	43.3	163.9
Return ¹⁸	105.3	231.1	363.4	43.1	163.3
Taxes	16.8	36.8	57.9	6.9	26.0
Total	214.0	429.9	823.2	93.3	353.3

B. Gas O&M and A&G Items

1. Transmission O&M Expenses

In 2024, SoCalGas recorded \$198.8 million in transmission O&M expenses under FERC Accounts 850 through 867. This amount excludes non-base margin costs. Detailed FERC account-level cost information is documented in the supporting workpapers, tab “Embedded Cost Summary”¹⁹

¹⁶ *Id.*, General Plant Allocation Summary, Allocated Taxes.

¹⁷ See Appendix A, Table FS-MSP-1 and Appendix C, General Plant Allocation Summary, Allocated Depreciation.

¹⁸ See Appendix C, General Plant Allocation Summary, Allocated Return.

¹⁹ Full Embedded Cost Excel Workpapers, tab “Embedded Cost Summary”

1 **2. Storage O&M Expenses**

2 In 2024, SoCalGas recorded \$69.5 million in storage O&M expenses under FERC
3 Accounts 814 through 837. This figure excludes non-base margin-related costs. A detailed
4 accounting by FERC account is provided in the supporting workpapers.²⁰

5 **3. Customer Cost Expense**

6 In 2024, SoCalGas recorded \$530.3 million in distribution O&M expenses, of which
7 \$316.8 million are customer costs, under FERC Accounts 870 through 894. In 2024, SoCalGas
8 recorded \$230.0 million in Customer Accounts and Customer Services O&M expenses under
9 FERC Accounts 901 through 910. The total Customer Cost O&M is \$546.8 million. This
10 amount excludes non-base margin costs. Detailed FERC account-level cost information is
11 documented in the supporting workpapers.²¹

12 **4. Distribution- High Pressure Expense**

13 In 2024, SoCalGas recorded \$530.3 million in distribution O&M expenses, of which
14 \$44.6 million are Distribution High Pressure (HP) costs, under FERC Accounts 870 through 894.
15 This amount excludes non-base margin- costs. Detailed FERC account-level cost information is
16 documented in the supporting workpapers.²²

17 **5. Distribution- Medium Pressure Expense**

18 In 2024, SoCalGas recorded \$530.3 million in distribution O&M expenses, of which
19 \$168.9 million are Distribution – Medium Pressure (MP) costs, under FERC Accounts 870

²⁰ *Id.*

²¹ *Id.*

²² *Id.*

through 894. This amount excludes non-base margin costs. Detailed FERC account-level cost information is documented in the supporting workpapers.²³

6. A&G Expenses

SoCalGas's recorded A&G expenses for 2024 totaled approximately \$739.3 million (including FERC Accounts 920 through 932, plus payroll taxes,²⁴ excluding non-base margin costs and franchise fees recorded in FERC Account 927). A&G expenses are allocated based on labor allocation percentages, as company labor constitutes the primary driver of these costs, and expenses are allocated among the various utility functions as presented in Table FS-MSP-6 below. A&G costs are allocated between customer costs and distribution based on 2024 actual A&G expenditures. Distribution costs are allocated between high pressure and medium pressure based on 2024 capital investment.

Table FS-MSP-6 shows how SoCalGas allocated \$739.3 million in A&G expenses across functional areas based on labor cost percentages.

Table FS-MSP-6				
2024 SoCalGas Labor Factors to Allocate A&G				
		(A)	(B)	(A x B)
	Labor Costs ²⁵	Labor %	Total A&G	Allocated A&G
	(\$MM)	%	(\$MM)	(\$MM)
Storage	30.2	6.1%	739.3	44.8
Transmission	59.0	11.9%	739.3	87.7
Customer Costs	290.7	58.4%	739.3	431.9
HP Distribution	24.6	4.9%	739.3	36.5
MP Distribution	93.1	18.7%	739.3	138.3
Total	497.6	100.00%		739.3

²³ *Id.*

²⁴ *Id.* Payroll SCG Taxes = \$52.93 million.

²⁵ Source: 2024 SoCalGas FERC Form 2 at 355, lines 52-57, col (b).

7. Miscellaneous Revenues

Miscellaneous revenues related to Transmission, Storage, Customer-related, Medium Pressure Distribution-related, and High Pressure Distribution operations are recorded in FERC 488 through 495.²⁶ Miscellaneous revenues are allocated by applicable function to offset recorded costs, consistent with GRC base margin.

Table FS-MSP-7: SoCalGas 2024 O&M, A&G expenses, and Miscellaneous Revenues

Table FS-MSP-7					
2024 SoCalGas O&M, A&G, Miscellaneous Revenues					
	Storage	Transmission	Customer Cost	Distribution – HP	Distribution - MP
	(\$MM)	(\$MM)	(\$MM)	(\$MM)	(\$MM)
O&M Expenses	69.5	198.8	546.8	44.6	168.9
A&G Expenses	44.8	87.7	431.9	36.5	138.3
Miscellaneous Rev.	(8.0)	(8.5)	(76.8)	(3.5)	(13.3)
Total	106.3	278.1	901.9	77.6	293.9

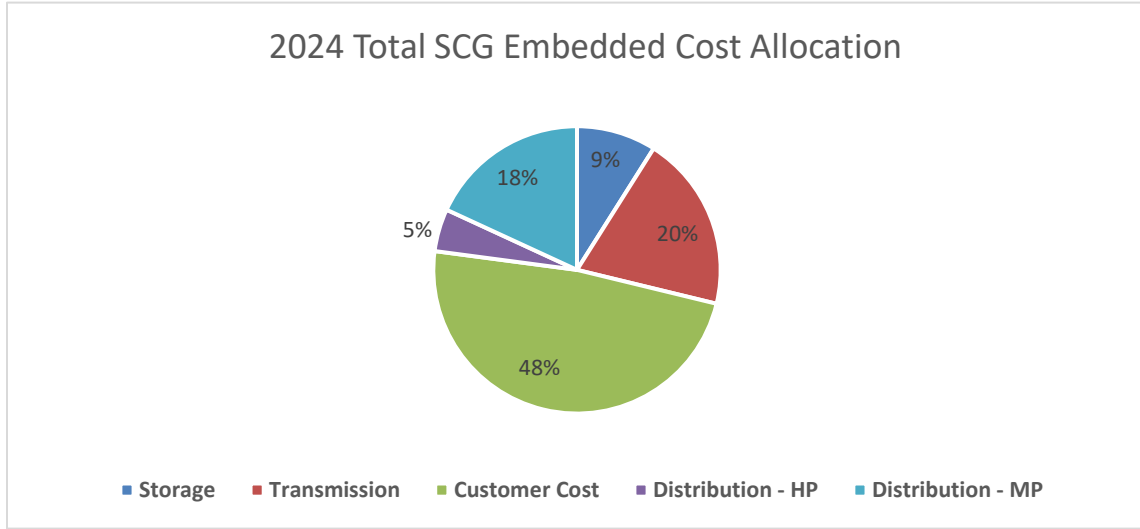
Summary of embedded costs by functional category for SoCalGas (Capital-Related Costs and O&M and A&G Expenses, Net of Miscellaneous Revenues), is presented in Table FS-MSP-8, & Chart FS-MSP-8A

Table FS-MSP-8: SoCalGas 2024 Embedded Cost Summary

Table FS-MSP-8					
2024 SoCalGas Embedded Costs					
	Storage	Transmission	Customer Cost	Distribution - HP	Distribution - MP
	(\$MM)	(\$MM)	(\$MM)	(\$MM)	(\$MM)
Capital-related Costs	214.0	429.9	823.2	93.3	353.30
O&M, A&G Expenses	106.3	278.1	901.9	77.6	293.9
Total	320.3	708.0	1,725.1	170.9	647.2

²⁶ Full Embedded Cost Excel Workpapers, tab “Embedded Cost Summary”.

Chart FS-MSP-8A: Total SoCalGas Embedded Cost Allocation by Functional Category



VI. SDG&E EMBEDDED COST STUDY

The following provides an embedded cost analysis specific to SDG&E's Transmission, Customer-related, HP Distribution, MP Distribution system for 2024.

A. Capital-Related Costs

SDG&E's capital-related costs consist of depreciation, return on rate base, and taxes.

1. Depreciation

Depreciation expenses for SDG&E's gas transmission, distribution, and general plant are detailed in Table FS-MSP-9 of Appendix B. General & Common plant depreciation costs are allocated using labor percentages consistent with SoCalGas's approach,²⁷ and are included to ensure cost-allocation consistency between utilities.

2. Return on Rate Base

The calculation of SDG&E's return on rate base follows the same methodology employed for SoCalGas, using a recorded weighted average rate base of approximately \$2,042.8 million for 2024, as shown in Appendix B, Table FS-MSP-9.

²⁷ See Appendix C, SDG&E General & Common Plant Allocation Summary.

Table FS-MSP-10 below summarizes the authorized Return on Rate Base for SDG&E's gas functions.

Table FS-MSP-10			
2024 SDG&E Return on Rate Base			
	(A)	(B)	(C)= (A)x(B)
	Rate Base	Authorized Rate of Return	Return on Rate Base
	(\$MM)	%	(\$MM)
Total SDG&E	2,042.8	7.67%	156.7
Transmission	298.8	7.67%	22.9
Customer	905.0	7.67%	69.4
HP Distribution	40.0	7.67%	3.1
MP Distribution	799.0	7.67%	61.3

The allocation of SDG&E Rate Base across functional categories is detailed in Table FS-MSP-11 below. General & Common Plant costs are apportioned using the labor allocator, while Distribution, allocation among customer costs, high pressure and medium pressure distribution, are assigned based on actual expenditures.

Table FS-MSP-11 – SDG&E 2024 Allocation of Rate Base

Table FS-MSP-11							
2024 Allocation of Rate Base							
	(A) (B)		(C) (D)		(E) = (B) + (D)	(F)	(G) = (E) +(F)
	General Plant Reallocation		Distribution Reallocation		Total Reallocated General Plant and Distribution	Directly Allocated Rate Base	Total Rate Base
	%	(\$MM)	%	(\$MM)	(\$MM)	(\$MM)	(\$MM)
Total Amount Allocated	285.1		1,479.7		1,764.8	278.0	2,042.8
Transmission	7%	20.8	0%		20.8	278.0	298.8
Customer-related	48%	137.1	52%	767.9	905.0	-	905.0
HP Distribution	2%	6.1	2%	34.0	40.0	-	40.0
MP Distribution	42%	121.1	46%	677.9	799.0	-	799.0

1 Consistent with established methodology, SDG&Es total weighted average rate base is
2 multiplied by the authorized CPUC rate of return (7.67%) to yield the total authorized return of
3 approximately \$156.7 million.

4 For example, Transmission's allocated rate base of \$298.8 million results in an
5 authorized return of rate base of \$22.9 million (\$298.8 million x 7.67%), reflecting the costs
6 attributable to Transmission assets.²⁸

7 **3. Taxes**

8 SDG&E's recorded capital-related taxes for calendar year 2024, which include federal
9 and state income taxes as well as ad valorem (property) taxes associated with gas operations.
10 The recorded federal and state income taxes totaled (\$41.6 million), offset by property taxes of
11 \$39.8 million, resulting in total net capital-related taxes of approximately (\$1.8 million).²⁹ These
12 taxes are allocated across functional categories proportionally to the applicable function's
13 allocated rate base. For example, Transmission's allocation is calculated as (\$1.8) million ×
14 13.6% = (\$0.25) million. An additional \$(0.019) million in general & common plant taxes are
15 allocated to Transmission, resulting in a total transmission tax component of rounded (\$0.3)
16 million.

²⁸ Includes \$1.6 million SDG&E General & Common Plant Allocation Return, *see* Appendix C, n.6.

²⁹ (\$000) Federal Income Taxes = (\$28,126); State Income Taxes = (\$13,554); Ad Valorem taxes = \$39,846.

Table FS-MSP-12 – SDG&E 2024 Federal, State Income, and Property Taxes summarizes SDG&E’s recorded income and property taxes.

Table FS-MSP-12	
2024 SDGE Federal and State Income and Property Taxes (\$MM)	
Transmission	(0.3)
Customer-related	(0.8)
HP Distribution	(0.0)
MP Distribution	(0.7)

B. Summary of SDG&E Capital-Related Costs

Table FS-MSP-13 below consolidates the capital-related costs, including depreciation, authorized return, and taxes, for each of SDG&E’s gas functions in 2024.

Table FS-MSP-13				
2024 SDG&E Capital-Related Costs				
	Transmission	Customer-related	HP Distribution	MP Distribution
	(\$MM)	(\$MM)	(\$MM)	(\$MM)
Depreciation ³⁰	18.7	63.3	2.8	55.9
Return ³¹	22.9	69.4	3.1	61.3
Taxes	(0.3)	(0.8)	(0.0)	(0.7)
Total	41.4	132.0	5.8	116.5

C. Gas O&M and A&G Items

1. Transmission O&M Expenses

For 2024, SDG&E recorded \$19.2 million in transmission O&M expenses, excluding non-base margin costs in FERC 850 through FERC 867. A detailed FERC account level breakdown is provided in the supporting workpapers.³²

³⁰ See Appendix B Table FS-MSP-9, and Appendix C, SDG&E General and Common Plant Summary, Allocated Depreciation.

³¹ See Appendix C, SDG&E General and Common Plant Summary, Allocated Return.

³² SDG&E Full Embedded Cost Excel workpaper, tab “Embedded Cost Summary”.

1 **2. Customer Related Expense**

2 In 2024, SDG&E recorded \$82.7 million in distribution O&M expenses, of which \$50.5
3 million are customer costs, under FERC Accounts 870 through 894. In 2024, SDG&E recorded
4 \$49.0 million in Customer Accounts and Customer Services O&M expenses under FERC
5 Accounts 901 through 910. The total Customer Cost O&M is \$99.5 million. This amount
6 excludes non-base margin costs. Detailed FERC account-level cost information is documented
7 in the supporting workpapers.³³

8 **3. High Pressure Distribution Expense**

9 In 2024, SDG&E recorded \$82.7 million in distribution O&M expenses, of which \$1.6
10 million are Distribution High Pressure (HP) costs, under FERC Accounts 870 through 894. This
11 amount excludes non-base margin costs. Detailed FERC account-level cost information is
12 documented in the supporting workpapers.³⁴

13 **4. Medium Pressure Distribution Expense.**

14 In 2024, SDG&E recorded \$82.7 million in distribution O&M expenses, of which \$30.5
15 million are Distribution – Medium Pressure (MP) costs, under FERC Accounts 870 through 894.
16 This amount excludes non-base margin- costs. Detailed FERC account-level cost information is
17 documented in the supporting workpapers.³⁵

18 **5. A&G Expenses**

19 SDG&E recorded total A&G expenses of approximately \$119.8 million for 2024.³⁶
20 These expenses exclude franchise fees, and non-base margin costs. A&G expenses are allocated

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.*

³⁶ *Id.*

among functional categories using labor-based allocation factors, consistent with established methodologies.

For example, Transmission labor represents 7.3 % of SDG&Es total labor base; applying this factor to the \$119.8 million in A&G expenses yields a transmission allocation of \$8.8 million ($\$119.8 \text{ million} \times 7.3 \%$). All other functions follow the same labor-factor methodology. Customer costs include Customer Accounts, Customer Service and a portion of Distribution. The remainder of Distribution is allocated by High Pressure and Medium Pressure capital investment occurred in 2024.

Table FS-MSP-14 summarizes these labor allocation factors and resultant allocated A&G expenses.

Table FS-MSP-14				
2024 SDG&E's Labor Factors to Allocate A&G				
		(A)	(B)	(A x B)
	Labor Costs ³⁷	Labor %	Total A&G	Allocated A&G Costs
	(\$MM)		(\$MM)	(\$MM)
Transmission	5.0	7.3%	119.8	8.8
Customer Related	32.7	48.1%	119.8	57.6
HP Distribution	1.4	2.1%	119.8	2.5
MP Distribution	28.9	42.5%	119.8	50.9
Total	68.1	100.0%		119.8

6. Miscellaneous Revenues

SDG&E recorded miscellaneous revenues associated with gas operations under FERC Accounts 488 through 495.³⁸ Miscellaneous revenues are allocated by applicable function to offset recorded costs, consistent with GRC base margin. Table FS-MSP-15 summarizes SDG&E's recorded O&M, A&G expenses, and miscellaneous revenues:

³⁷ Source: 2024 SDG&E FERC Form 2 at 355, lines 55-59, col. (b).

³⁸ SDG&E Full Embedded Cost Excel Workpapers, tab "Embedded Cost Summary"

Table FS-MSP-15				
2024 SDG&E Embedded O&M, A&G, Miscellaneous Revenues				
	Transmission	Customer Cost	Distribution - HP	Distribution - MP
	(\$MM)	(\$MM)	(\$MM)	(\$MM)
O&M Expenses	19.2	99.5	1.6	30.5
A&G Expenses	8.8	57.6	2.5	50.9
Miscellaneous Revenues	(0.4)	(1.8)	(0.1)	(2.4)
Total	27.5	153.4	4.1	79.0

D. Summary of SDGE Embedded Costs

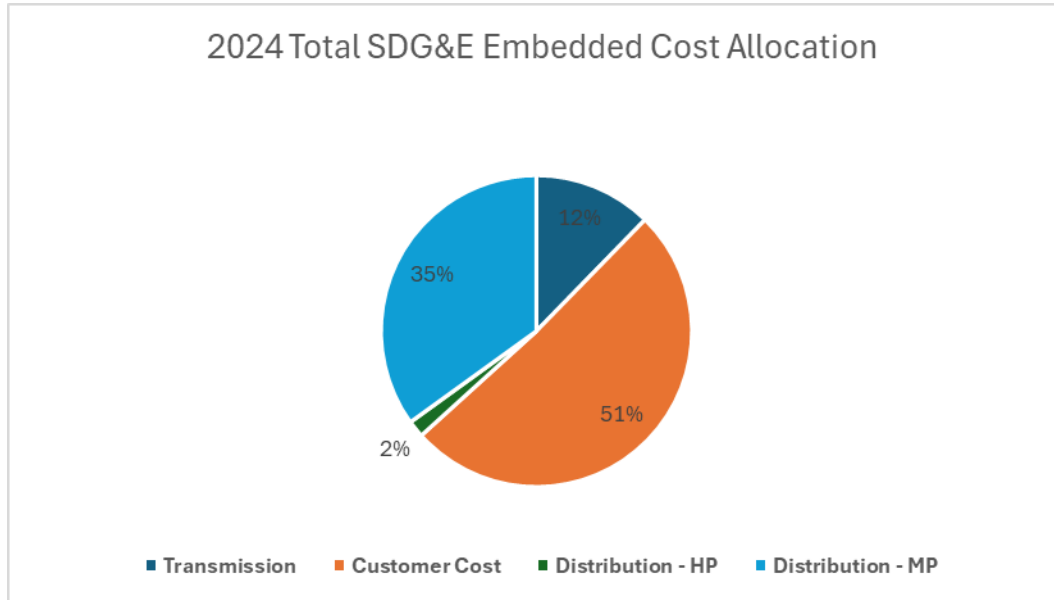
Table FS-MSP-16 provides a comprehensive summary of SDG&E's embedded costs by functional categories, distinguishing between capital-related costs and total expenses (O&M and A&G, net of miscellaneous revenues)

Table FS-MSP-16				
2024 SDG&E Embedded Cost				
	Transmission	Customer Cost	Distribution – HP	Distribution - MP
	(\$MM)	(\$MM)	(\$MM)	(\$MM)
Capital-related Costs ³⁹	41.4	132.0	5.8	116.5
O&M, A&G, Miscellaneous Expenses ⁴⁰	27.5	153.4	4.1	79.0
Total	68.9	285.3	9.9	195.5

³⁹ See Table FS-MSP-13.

⁴⁰ See Table FS-MSP-15.

Chart FS-MSP-16A: Total SDG&E Embedded Cost Allocation by Functional Category



VII. COMBINED EMBEDDED COST SUMMARY (SOCALGAS & SDG&E)

Table FS-MSP-17 presents the combined embedded costs for SoCalGas and SDG&E, differentiating costs by functional categories.

Table FS-MSP-17						
2024 SoCalGas & SDG&E Embedded Costs						
	Storage	Transmission	Customer Cost	Distribution - HP	Distribution - MP	Total All Functions
	(\$MM)	(\$MM)	(\$MM)	(\$MM)	(\$MM)	(\$MM)
SoCalGas						
Capital-related Costs	214.0	429.9	823.2	93.3	353.3	1,913.7
O&M, A&G Expenses	106.3	278.1	901.9	77.6	293.9	1,657.8
Total	320.3	708.0	1,725.1	170.9	647.2	3,571.5
SDG&E						
Capital-related Costs	-	41.4	132.0	5.8	116.5	295.7
O&M, A&G Expenses	-	27.5	153.4	4.1	79.0	264.0
Total	-	68.9	285.3	9.9	195.5	559.7
Total SoCalGas + SDG&E						
Capital-related Costs	214.0	471.3	955.2	99.1	469.8	2,209.4
O&M, A&G Expenses	106.3	305.6	1,055.3	81.7	372.9	1,921.8
Total	320.3	777.0	2,010.5	180.8	842.7	4,131.2

VIII. BACKBONE AND LOCAL TRANSMISSION COSTS

A. Embedded Transmission Costs

The transmission assets of SoCalGas and SDG&E are classified into two distinct functional categories: Backbone Transmission and Local Transmission. These classifications are determined solely by the function performed by the respective assets:

- Backbone Transmission (BBT) pipelines transport gas supply from interstate or local supplies to local transmission assets or underground storage assets.
- Local Transmission (LT) pipelines transport gas from backbone transmission and storage assets directly to end-use customers.

The function of transporting supplies from interstate pipelines to the local transmission system or underground storage assets is what defines a pipeline as a backbone transmission pipeline. Similarly, the function of transporting supplies from the backbone transmission system to distribution and end-use customers is what defines a pipeline as a local transmission pipeline. No other criteria, such as diameter, pressure, length, or number of customers served, figure into the classification of a pipeline as backbone or local transmission.

Figure FS-MSP-18 illustrates these definitions:⁴¹

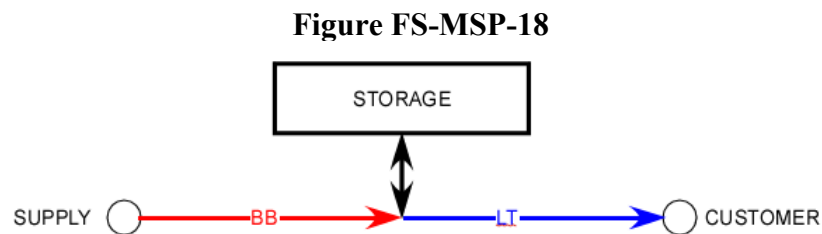
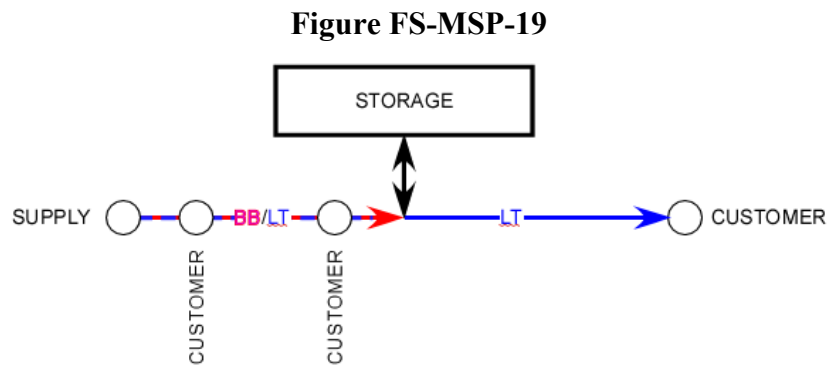


Figure FS-MSP-18 represents a perfect or ideal BBT and LT transmission system. Supplies are delivered to the BBT system, which transports them to the LT system for redelivery

⁴¹ *Id.*

1 to customers. Storage sits at the interface between BBT and LT, and can receive supply from
2 BB or provide it to LT. In reality, however, there are end-use customers served directly from the
3 Applicants' BBT assets, as shown in Figure FS-MSP-19 below.

4 Figure FS-MSP-19 below illustrates a hybrid system:



6
7 This indicates that the BBT assets also provide some LT function, in effect functioning as
8 hybrid transmission system: primarily providing the BBT function but also providing an LT
9 function. Since the BBT system partially provides an LT function, some of its costs should
10 properly be allocated to the LT system costs.

11 All of SoCalGas's and SDG&E's compressor stations are classified as backbone
12 transmission facilities. And all SDG&E's gas transmission pipelines are classified as backbone
13 pipelines.⁴²

⁴² To determine the primary function of a particular pipeline, SoCalGas's engineers, the engineers responsible for the long-term plan and design of the transmission system examined every pipeline in the transmission plant account for both utilities, and used their knowledge of the design, operation, and flow on the SoCalGas and SDG&E system to classify each pipeline. The backbone and local transmission pipelines are listed in Appendix D.

Note that these functional definitions for transmission assets have been used by SoCalGas and SDG&E since A.11-11-002 Supplemental Direct Testimony David Bisi, and approved by the Commission in D.14-06-007, Attachment III at 4. Furthermore, PG&E has used definitions for its backbone and local transmission system that are similar to those used by SoCalGas and SDG&E since approval of their first Gas Accord in D.97-08-055.

Table FS-MSP-20 below shows that SoCalGas’s embedded transmission cost is \$708 million,⁴³ comprised of \$430 million capital-related costs and \$ 278 million O&M and A&G expenses. The embedded cost of SDG&E’s gas transmission system is \$68.9 million,⁴⁴ comprised of \$41.4 million capital-related costs and \$ 27.5million O&M and A&G expenses. The embedded cost of the integrated transmission system of SoCalGas and SDG&E is \$777 million as shown in Table FS-MSP-20.

	Table FS-MSP-20		
	2024 Total Transmission Costs (\$000)		
	(A)	(B)	C = (A) + (B)
	SoCalGas	SDG&E	Total
Capital-related Costs	429,946	41,393	471,339
O&M, A&G Expenses	278,083	27,540	305,623
Total	708,029	68,933	776,961

SoCalGas’s backbone capital-related costs are derived from the transmission net book value and transmission depreciation expense of SoCalGas’s backbone facilities. The net book value of these backbone transmission lines and compressor stations represents 72.2% of SoCalGas’s transmission net book value.⁴⁵ The depreciation expense of these backbone lines and compressor stations represents 71.3% of SoCalGas’s transmission depreciation expense.⁴⁶ These percentages result in a weighted average of backbone capital-related percent,⁴⁷ of 71.9% and a cost of $(\$429,946 \times 71.9\%) = 309.2$ million relative to SoCalGas’s total transmission capital-related cost, *see* Table FS-MSP-21 below.

⁴³ See Table FS-MSP-8.

⁴⁴ See Table FS-MSP-16.

⁴⁵ SCG Full Embedded Cost Excel Workpapers, tab “BBT LT Margin”

⁴⁶ *Id.*

⁴⁷ *Id.*

Table FS-MSP-21A	SoCalGas's Backbone Transmission Costs (\$000)		
	(A)	(B)	C = (A) x (B)
	SoCalGas Transmission	Backbone Transmission	SoCalGas Backbone
Capital-related Costs	429,946	71.9%	309,156
O&M, A&G Expenses	278,083	68.8%	191,234
Total	708,029		500,390

Table FS-MSP-21B	Backbone Transmission Costs (\$000)		
	(A)	(B)	C = (A) + (B)
	SoCalGas	SDG&E	Combined Backbone Costs
Backbone Transmission Costs	500,390	68,933	569,323

SoCalGas's transmission O&M and A&G expenses are 278.1 million.⁴⁸ Pipeline mileage is used to allocate O&M and A&G costs between the backbone (68.8%) and local transmission (31.2%) pipelines.⁴⁹ The resulting backbone transmission portion of O&M and A&G expenses is \$191.2 million (\$278.1 x 68.8%). The embedded cost of backbone transmission is \$500.4 million, and \$569.3 million for the two utilities combined.

As previously discussed, the backbone transmission system also partially provides a local transmission function, and SoCalGas has performed an analysis with the underlying rationale of reassigning a portion of BBT costs to the LT function to ensure that the costs better align with the actual services provided by the transmission infrastructure.

B. Backbone to Local Reallocation Methodology:

For a segment of customers, primarily Electric Generation (EG) facilities directly served by BBT assets, the backbone infrastructure performs both its primary backbone role and an additional local transmission role.

⁴⁸ See Table FS-MSP-7.

⁴⁹ SCG Full Embedded Cost Excel Workpapers, tab "LT & BBT", column z.

1 SoCalGas's methodology involves identifying and quantifying the gas supply provided to
2 power plants. A crucial element of this methodology is the use of summer peak day data which
3 more accurately represents the true need of power plants for the gas system than annual data.
4 Unlike the winter season, when other electricity demand is lower and other sources of power
5 may be more readily available, the summer season significantly stresses the electric
6 infrastructure. Analyzing a summer peak day is vital to understanding how SoCalGas/SDG&E's
7 EG customers' facilities are used to their maximum extent.

8 The first step in this analysis was to identify and quantify the gas supply provided to
9 those EG facilities served from LT assets. To this end, SoCalGas examined how much of the
10 recorded summer peak EG demand was attributed to the LT EG facilities for the years 2022
11 through 2024. This was then compared against the total EG demand on the system.

12 **C. Backbone to Local Reallocation Findings:**

13 Our analysis of summer peak day data found that on a summer peak day, about 69% of
14 total power-plant gas usage is served from LT pipelines on the SoCalGas transmission system.⁵⁰
15 An examination of the California Gas Report 2022 through 2024 also found that EG demand on
16 the SoCalGas system made up about 30% of the entire system demand on average.⁵¹

17 Based on these findings, SoCalGas has applied a factor of 20% (i.e. 69% of 30%) to
18 represent the functional percentage of LT service provided by the BBT assets and to reallocate
19 some costs from BBT to LT to account for the local transmission function that those BBT assets
20 are providing.⁵²

⁵⁰ Workpaper SCG Full Embedded Cost, Tab "2022-24 BB to LT calculations" Formula A.

⁵¹ *Id.* Analysis B.

⁵² *Id.* Analysis C.

Table FS-MSP-22A Backbone to Local Transmission Calculation		
A	B	A x B = C
Percent of Power Plants in use on Local Transmission on a Peak Summer Day	The Percent of Total System Throughput that are Power Plants	Percent of Backbone cost that functionally belongs to Local Transmission function.
69%	29.5%	20%

Table FS-MSP-22B Percent of Backbone Allocated to Local Transmission Function					
	SoCalGas	SDG&E	Combined BB Costs	BB costs minus C % out of BB costs. Final BB	Reallocation of BB to LT function
Backbone Transmission Costs	500,390	68,933	569,323	\$452,875	\$116,447

SoCalGas has undertaken a detailed analysis to align costs with the actual services provided by its backbone pipelines, identifying the portion that inherently serves a local transmission function. By reallocating \$116.4 million (20 % of the \$569.3 million combined backbone base) to Local Transmission and retaining \$452.9 million in the Backbone function, SoCalGas upholds cost causation principles while ensuring correct cost allocation.

As part of the BTS firm rate calculation presented in Table FS-MSP-23 below, Applicants propose to include \$77.8 million in incremental costs from 2024 balancing accounts. These costs are associated with the Pipeline Safety Enhancement Plan (PSEP) and the Transmission Integrity Management Program (TIMP) and are added to the finalized backbone transmission cost.

1 The backbone transmission revenue requirement is \$482.5 million.⁵³ The Backbone
2 Transmission Balancing Account (BTBA) amortization is zero in the Present and Proposed
3 column.
4 Costs related to Base Margin PSEP (including GRC and GRCMA PSEP) are incorporated into
5 the Embedded Cost Study and also reflected as zero in the Proposed column of Table FS-MSP-
6 23. The resulting illustrative total backbone transmission cost is \$560.6 million.

7 Prior to implementation of BTS rates in 2027, PSEP costs and throughput denominator
8 will be updated to reflect average BTS contracts/utilization for the 12 months of the prior
9 October through September as authorized TCAP decision.⁵⁴

⁵³ Scaled to Base Margin 2024.

⁵⁴ D.16-10-004, Attachment A at A-8, II C.4.b. Scaled to 2024 Base Margin.

Table FS-MSP-23 below shows the illustrative 2024 BTS firm rate calculation:

Table FS-MSP-23

	Present Sept, 2025 - Normalized⁵⁵	Proposed⁵⁶	increase (decrease)
Unbundled BTS Revenues w/FFU (\$000's)	\$499,324	\$482,468	(\$16,856)
PSRMA-BBT SCG w/o FFU \$000	\$0	\$0	\$0
PSRMA-BBT SDG&E w/o FFU \$000	\$0	\$0	\$0
SECCBA-BBT SCG w/o FFU \$000	(\$705)	(\$705)	\$0
SECCBA-BBT SDG&E w/o FFU \$000	\$52,347	\$52,347	\$0
SEEBA-BBT SCG w/o FFU \$000	\$558	\$558	\$0
EEBA-BBT SDG&E w/o FFU \$000	\$392	\$392	\$0
SECCBA-BBT SCG-Phase1b w/o FFU \$000	\$1,235	\$1,235	\$0
SECCBA-BBT SDG&E - Phase 1b	\$0	\$0	\$0
SEEBA-BBT SCG - Phase 1b	\$0	\$0	\$0
SEEBA-BBT SDG&E - Phase 1b	\$0	\$0	\$0
SECCBA-BBT SCG - Phase 2 w/o FFU \$000	\$196	\$196	\$0
SECCBA-BBT SDG&E - Phase 2	\$0	\$0	\$0
SEEBA-BBT SCG - Phase 2	\$0	\$0	\$0
SEEBA-BBT SDG&E - Phase 2	\$0	\$0	\$0
TIMPBA-BBT SCG w/o FFU \$000	\$0	\$0	\$0
TIMPBA-BBT SDG&E w/o FFU \$000	\$22,587	\$22,587	\$0
BTBA w/o FFU (\$000's)	\$0	\$0	\$0
FFU Rate	1.0162	1.0162	(\$16,856)
Balancing Accounts w/ FFU (\$000's)	\$77,854	\$77,854	\$0
SoCalGas PSEP GRC	\$111,125	\$0	(\$111,125)
SoCalGas PSEP GRCMA	\$3,497	\$0	(\$3,497)
SDG&E PSEP GRCMA	\$46	\$0	(\$46)
SDG&E PSEP GRCMA	\$31	\$0	(\$31)
BTS Revenue w/FFU (\$000's)	\$691,877	\$560,622	(\$131,555)
BTS Demand Dth/Day	2,406,361	2,406,361	\$0
BTS rate w/FFU \$/dth day	\$0.78773	\$0.63795	(\$0.14978)

⁵⁵ See Direct Testimony of Michael Foster (Chapter 12) at Appendix A.

⁵⁶ CAP 2027 illustrative rate, Regulatory Account balances and throughput will be updated prior to CAP 2027 implementation. The Regulatory Account balances and throughput are updated at the October Regulatory Account Update annual filing. Includes Scalar.

IX. UNDERGROUND STORAGE COSTS

SoCalGas's embedded storage cost is \$320.3 million, without scalar,⁵⁷ shown in Table FS-MSP-24. These costs reflect 2024 recorded data.

Table FS-MSP-24	
2024 SoCalGas Embedded Storage Cost	
<i>(\$000)</i>	2027-2029
Capital-related Cost	\$ 213,969
O&M, A&G Expenses	\$ 106,293
Total Embedded Storage Cost	\$ 320,263

A. Underground Storage Cost Allocation

Appendix E presents the percentage allocation for injection, inventory, and withdrawal of 29.8% for injection, 32.9% for withdrawal, and 37.3% for inventory. These percentages were revised, see Appendix E for Storage allocation percentage study. Those percentages were used to allocate the embedded storage cost into the injection, inventory, and withdrawal functions. Storage costs allocated to the injection, inventory, and withdrawal functions are subsequently allocated to core reservation, balancing, and UBS based on the seasonalized capacities, where injection and withdrawal capacities are weighted by the relative number of days in the winter or summer seasons.

⁵⁷ Scalar includes FF&U.

Table FS-MSP-25 below summarizes the allocation of the total storage cost to Core Reservation, Balancing, and Unbundled Storage (UBS) categories

Table FS-MSP-25

Embedded Storage Cost Allocation				
	Injection	Inventory	Withdrawal	Total Storage
Storage Allocation	29.8%	37.3%	32.9%	100.0%
2027-2029 Embedded Storage Cost Allocation, 2024 Recorded Cost				
	Allocated Capacity	Total Capacity	Units	Costs(\$MM)
Core Reservation				
Inventory	78.8	118.8	Bcf	\$ 79.2
Injection(summer)	259	458	MMcfd	\$ 42.0
Injection(winter)	140	529	MMcfd	
Withdrawal(winter)	1,555	1,826	MMcfd	\$ 56.6
Withdrawal(summer)	560	1,787	MMcfd	
Total Core				\$ 177.8
Balancing				
Inventory	12	118.8	Bcf	\$ 12.1
Injection(summer)	184	458	MMcfd	\$ 50.3
Injection(winter)	374	529	MMcfd	
Withdrawal(winter)	256	1,826	MMcfd	\$ 48.1
Withdrawal(summer)	1,212	1,787	MMcfd	
Total Balancing				\$ 110.5
UBS				
Inventory	28	118.8	Bcf	\$ 28.1
Injection(summer)	15.0	458	MMcfd	\$ 2.9
Injection(winter)	15.0	529	MMcfd	
Withdrawal(winter)	15.0	1,826	MMcfd	\$ 0.9
Withdrawal(summer)	15.0	1,787	MMcfd	
Total UBS				\$ 32.0
Total Storage Cost				\$ 320.3

The seasonal allocation of storage capacities used in Table FS-MSP-25 and their related functions: Core Reservation, Balancing, and UBS, are outlined in the direct testimony of Michelle Dandridge (Chapter 1).

Table FS-MSP-25 above shows that 78.8 billion cubic feet (Bcf) of underground storage inventory will be allocated to the Core Reservation function. In addition, 259 million cubic feet per day (MMcfd) of summer injection, 140 MMcfd of winter injection, 1,555 MMcfd of winter withdrawal capacity, and 560 MMcfd of summer withdrawal will also be allocated to core reservation, at a total cost of \$177.8 million. Balancing costs of \$110.5 million, with 10% monthly balancing are based on 12 Bcf of inventory, 184 MMcfd of summer injection, 374 MMcfd of winter injection, 256 MMcfd of winter withdrawal, and 1,212 MMcfd of summer withdrawal capacities. The remaining storage inventory capacity of 28 Bcf is allocated to UBS, with a 15 MMcfd summer injection, 15 MMcfd winter injection, 15 MMcfd winter withdrawal, and 15 MMcfd summer withdrawal at a total cost of \$32 million.

X. RESULTS OF THE EMBEDDED COST ALLOCATION STUDIES

Upon completing the Embedded cost study to allocate costs to functional categories, SoCalGas allocates each functional cost to customer classes using the consolidated demand measures presented in the direct testimony of Eduardo Martinez (Chapter 5). The demand measures include number of customers for the customer costs, peak day demand for Medium Pressure Distribution costs, peak month demand for High Pressure Distribution costs, cold year demand for Backbone costs, peak month for Local Transmission, Equal Cents per Therm (ECPT) for Storage Balancing and Core Storage by injection, withdrawal and inventory (as described in direct testimony of Eduardo Martinez from Chapter 5). Customer costs are allocated among customer classes by the meters' investment (Number of meters multiplied by the cost of the meters for each customer class), by Data Analysis Reporting Tools (DART) system track orders hours (DART tracks time to complete each activity by customer class), service line footage and Customer Service and information costs activities. Each FERC O&M Account, A&G FERC Account and Capital: Functionalized Return, Depreciation and Taxes are

1 allocated by the appropriate allocator. For example, Meter Investment is used for Distribution
2 O&M, Accounts 878, 893, and 894, Meter and Regulator Expenses and Functionalized Return,
3 Depreciation and Taxes: Meters.

4 In D.92-12-058, the Commission stated that “marginal cost revenues need to be scaled to
5 the embedded-based authorized revenue requirement under our ratemaking procedures.”⁵⁸ The
6 scalar is employed to adjust the proposed marginal cost revenues to the base margin, excluding
7 costs directly allocated to the Uncollectible,⁵⁹ and NGV Public Access functions.⁶⁰ In this CAP,
8 SoCalGas marginal costs are scaled at a rate of 108% in order to reconcile to the base margin of
9 \$3,860 million.⁶¹ In this CAP, SDG&E marginal costs are scaled at a rate of 100% in order to
10 reconcile to the base margin of \$547 million. SoCalGas Table FS-MSP-26 and SDG&E Table
11 FS-MSP-28 show this process.

12 Finally, for SoCalGas scaled Embedded costs are combined with Uncollectible, NGV
13 Public Access costs and the Transition Adjustment to determine the proposed cost allocation of
14 authorized base margin. The Transition Adjustment is discussed in Section XI. This is shown in
15 SoCalGas Table FS-MSP-27. For SDG&E scaled Embedded costs are combined with NGV
16 Public Access costs determine the proposed cost allocation of authorized base margin. This is
17 shown in SDG&E Table FS-MSP-29.

⁵⁸ D.92-12-058 at 50.

⁵⁹ Uncollectible (not collected revenues) are treated separately because SoCalGas’s wholesale customers do not have any uncollectibles. For SoCalGas only.

⁶⁰ Direct testimony of Michael Foster (Chapter 12).

⁶¹ *Id.*

Table FS-MSP-26: SOCALGAS EMBEDDED COST SCALED REVENUES (\$000)

Customer Class	Customer Cost A	Medium Pressure Distribution B	High Pressure Distribution C	Local Transmission and Backbone Transportation Service (BTS)* D	Storage E	Unscaled Embedded Costs Revenues F=A+B+C+D+E	Scalar G	Scaled Embedded Costs Revenues H=F*G
Residential	\$1,486,457	\$485,704	\$101,029	\$107,176	\$156,187	\$2,336,553	108%	\$2,511,938
Core C/I	\$210,309	\$122,636	\$32,838	\$35,056	\$39,088	\$439,928	108%	\$472,950
Gas A/C	\$0	\$0	\$0	\$0	\$0	\$0	108%	\$0
Gas Engine	\$5,088	\$468	\$242	\$273	\$977	\$7,049	108%	\$7,578
NGV	\$3,645	\$8,846	\$5,963	\$6,953	\$5,151	\$30,559	108%	\$32,852
Total Core	\$1,705,501	\$617,654	\$140,073	\$149,457	\$201,403	\$2,814,089	108%	\$3,025,318
Noncore C/I	\$9,269	\$22,474	\$21,241	\$43,962	\$20,494	\$117,440	108%	\$126,255
Small EG	\$3,061	\$4,644	\$2,621	\$2,780	\$1,386	\$14,491	108%	\$15,579
Large EG	\$2,236	\$2,427	\$4,943	\$5,244	\$2,591	\$17,441	108%	\$18,751
EG Transmission	\$3,534			\$57,075	\$26,396	\$87,006	108%	\$93,536
EOR	\$1,280	\$7	\$2,025	\$2,980	\$1,406	\$7,697	108%	\$8,275
Total Retail Noncore	\$19,381	\$29,552	\$30,830	\$112,039	\$52,273	\$244,075	108%	\$262,396
Long Beach	\$61	\$0	\$0	\$3,610	\$1,123	\$4,794	108%	\$5,154
SDG&E	\$59	\$0	\$0	\$34,393	\$29,342	\$63,794	108%	\$68,583
Southwest Gas	\$66	\$0	\$0	\$4,299	\$1,185	\$5,550	108%	\$5,966
Vernon	\$49	\$0	\$0	\$2,375	\$1,127	\$3,550	108%	\$3,817
Ecogas	\$26	\$0	\$0	\$3,814	\$1,833	\$5,673	108%	\$6,099
Total Wholesale	\$261	\$0	\$0	\$48,490	\$34,611	\$83,362	108%	\$89,619
UBS	\$0	\$0	\$0	\$0	\$31,976	\$31,976	108%	\$34,376
BTS	\$0	\$0	\$0	\$398,042	\$0	\$398,042	108%	\$427,920
Total Noncore	\$19,642	\$29,552	\$30,830	\$558,572	\$118,859	\$757,455	108%	\$814,310
Total SoCalGas	\$1,725,142	\$647,206	\$170,903	\$708,029	\$320,262	\$3,571,543	108%	\$3,839,628
*BTS not allocated to customer classes								
Calculation of Scalar:								
Scalar = 3,839,628 divided by 3,571,543								

Table FS-MSP-27: SOCALGAS ALLOCATION OF BASE MARGIN

\$000's

Customer Class	Scaled EC Revenues A	Uncollectibles B	NGV Public Access C	Transition Adjustment D	Allocated Base Margin E = A + B + C + D
Residential	\$2,511,938	\$9,824	\$0	(\$150,000)	\$2,371,762
Core C/I	\$472,950	\$2,662	\$0	\$150,000	\$625,612
Gas A/C	\$0	\$0	\$0	\$0	\$0
Gas Engine	\$7,578	\$34	\$0	\$0	\$7,611
NGV	\$32,852	\$181	\$5,629	\$0	\$38,662
Total Core	\$3,025,318	\$12,700	\$5,629	\$0	\$3,043,647
Noncore C/I	\$126,255	\$810	\$0	\$0	\$127,065
Small EG	\$15,579	\$83	\$0	\$0	\$15,661
Large EG	\$18,751	\$113	\$0	\$0	\$18,864
EG Transmission	\$93,536	\$768	\$0	\$0	\$94,304
EOR	\$8,275	\$0	\$0	\$0	\$8,275
Retail Noncore	\$262,396	\$1,774	\$0	\$0	\$264,170
Long Beach	\$5,154	\$0	\$0	\$0	\$5,154
SDG&E	\$68,583	\$0	\$0	\$0	\$68,583
Southwest Gas	\$5,966	\$0	\$0	\$0	\$5,966
Vernon	\$3,817	\$0	\$0	\$0	\$3,817
Ecogas	\$6,099	\$0	\$0	\$0	\$6,099
Total Wholesale	\$89,619	\$0	\$0	\$0	\$89,619
UBS	\$34,376	\$0	\$0	\$0	\$34,376
BTS	\$427,920	\$0	\$0	\$0	\$427,920
Total Noncore	\$814,310	\$1,774	\$0	\$0	\$816,084
Total SoCalGas	\$3,839,628	\$14,474	\$5,629	\$0	\$3,859,731

TABLE FS-MSP-28 SDG&E EMBEDDED COST SCALED COSTS \$000's							
Customer Class	Customer Cost	Medium Pressure Distribution	High Pressure Distribution	BTS	Unscaled Embedded Costs Revenues	Scalar	Scaled Embedded Cost Revenues
Residential	\$254,934	\$125,658	\$6,069	\$0	\$386,661	100%	\$387,580
Core C/I	\$29,888	\$55,229	\$2,693	\$0	\$87,810	100%	\$88,019
NGV	\$70	\$3,544	\$297	\$0	\$3,911	100%	\$3,920
Total Core	\$284,892	\$184,431	\$9,059	\$0	\$478,382	100%	\$479,518
Noncore C/I - D	\$220	\$7,128	\$365	\$0	\$7,714	100%	\$7,732
Noncore C/I - T	\$26	\$0	\$0	\$0	\$26	100%	\$26
Small EG Distribution	\$121	\$3,335	\$232	\$0	\$3,688	100%	\$3,697
Large EG Distribution	\$20	\$623	\$232	\$0	\$874	100%	\$876
EG Transmission	\$59	\$0	\$0	\$0	\$59	100%	\$59
Total Noncore	\$445	\$11,086	\$829	\$0	\$12,360	100%	\$12,390
BTS	\$0	\$0	\$0	\$54,833	\$54,833	100%	\$54,963
Total SDG&E	\$285,337	\$195,517	\$9,888	\$54,833	\$545,575	100%	\$546,871

TABLE FS-MSP-29 SDG&E ALLOCATION OF BASE MARGIN \$000's			
Customer Class	Scaled EC Revenue	NGV Public Access	Unadjusted Allocated Base Margin
Residential	\$387,580	\$0	\$387,580
Core C/I	\$88,019	\$0	\$88,019
NGV	\$3,920	\$428	\$4,348
Total Core	\$479,518	\$428	\$479,946
Noncore C/I - D	\$7,732	\$0	\$7,732
Noncore C/I - T	\$26	\$0	\$26
Small EG	\$3,697	\$0	\$3,697
Large EG	\$876	\$0	\$876
EG Transmission	\$59	\$0	\$59
Total Noncore	\$12,390	\$0	\$12,390
BTS	\$54,963	\$0	\$54,963
Total SDG&E	\$546,871	\$428	\$547,299

1 **XI. COMPARISON OF PROPOSED COST ALLOCATION AND TRANSITION**
2 **ADJUSTMENT TO COST-BASED RATES**

3 The following are comparisons of the proposed 2027 cost allocation to the current
4 allocation effective September 2025. For SoCalGas, the difference of \$198 million is due to
5 PSEP costs included in Base Margin. For SDG&E, the difference of \$15 million is due to PSEP
6 costs included in Base Margin. The PSEP costs are included in the studies and not allocated
7 separately as is in current rates.

8 SDG&E and SoCalGas seek rates that are fully cost-based for all customers. In moving
9 toward that objective, Applicants follow customer-focused principles of minimizing rate
10 volatility and maintain consistent practices.

11 The Embedded Cost allocation method remains the foundation of Applicants' proposal.
12 However, an immediate move to fully cost based rates can produce inter-class bill changes. To
13 minimize near-term volatility and support affordability, particularly for residential customers,
14 Applicants propose a Transition Adjustment for this cost allocation period. D.20-07-032 adopted
15 affordability metrics by which the California Public Utilities Commission could assess the
16 relative affordability of essential utility service across industries and proceedings, including
17 examination of how different geographic areas of California are impacted. The metrics use the
18 residential essential bill.

19 The Transition Adjustment modifies allocated costs, without changing total authorized
20 Base Margin, to smooth the path toward fully cost-based rates. At SoCalGas, the proposed
21 adjustment is approximately \$150 million,⁶² reducing Residential allocated Base Margin and
22 increasing Core C&I allocated Base Margin. As shown in direct testimony of Michael Foster

⁶² See direct testimony of Michael Foster (Chapter 12).

1 (Chapter 12) and Table MF-1, the proposed amount aligns the percentage rate changes for
2 Residential and Core C&I, promoting predictability while we transition to fully cost-based rates.

3 The Commission has long recognized the need for measured adjustments to promote
4 affordability and rate stability when implementing cost-based outcomes. Consistent with that
5 practice, the Commission has approved non-cost-based allocation adjustments in multiple
6 decisions, including the 2024 CAP settlement decision (D.24-07-009), the 2016 CAP decision
7 (D.16-10-004), the 2013 BCAP decision (D.14-06-007), the 2009 BCAP Phase II decision
8 (D.09-11-006), and the Core-Averaging adjustments approved in D.86-12-009. Applicants'
9 proposal follows this established approach to minimize volatility while advancing cost causation.

10 The comparisons underlying SoCalGas Table FS-MSP-30 and SDG&E Table FS-MSP-
11 31 are pre-System Integration⁶³ and pre-BTS unbundling,⁶⁴ as discussed in the direct testimony
12 of Michael Foster (Chapter 12).

⁶³ Shows rates pre-System Integration. Under System Integration, the costs of local transmission facilities are recovered on a common (or integrated) basis from customers of both SDG&E and SoCalGas. This integration reflects the splitting of total local transmission costs between the utilities by the % share of cold-year peak month throughput.

⁶⁴ Shows allocation pre-BTS unbundling. BTS represents the costs of SoCalGas's and SDG&E's transmission lines from the California Border receipt points to SoCalGas's Citygate.

TABLE FS-MSP-30
SOCALGAS COST ALLOCATION COMPARISON

\$000's

Customer Class	Proposed Allocation of Base Margin		Current Allocation of Base Margin	
	A	% Total B	C	% Total D
Residential	\$2,371,762	61.4%	\$2,280,942	62.3%
Core C/I	\$625,612	16.2%	\$538,916	14.7%
Gas A/C	\$0	0.0%	\$61	0.0%
Gas Engine	\$7,611	0.2%	\$12,599	0.3%
NGV	\$38,662	1.0%	\$40,058	1.1%
Total Core	\$3,043,647	78.9%	\$2,872,577	78.5%
Noncore C/I	\$127,065	3.3%	\$143,801	3.9%
Small EG	\$15,661	0.4%	\$22,702	0.6%
Large EG	\$18,864	0.5%	\$20,771	0.6%
EG Transmission	\$94,304	2.4%	\$61,354	1.7%
EOR	\$8,275	0.2%	\$10,281	0.3%
Total Retail Noncore	\$264,170	6.8%	\$258,910	7.1%
Long Beach	\$5,154	0.1%	\$5,285	0.1%
SDG&E	\$68,583	1.8%	\$59,347	1.6%
Southwest Gas	\$5,966	0.2%	\$4,417	0.1%
Vernon	\$3,817	0.1%	\$3,576	0.1%
Ecogas	\$6,099	0.2%	\$4,234	0.1%
Total Wholesale	\$89,619	2.3%	\$76,859	2.1%
UBS	\$34,376	0.9%	\$30,850	0.8%
BTS	\$427,920	11.1%	\$422,225	11.5%
Total Noncore	\$816,084	21.1%	\$788,844	21.5%
Total SoCalGas	\$3,859,731	100.0%	\$3,661,421	100.0%

TABLE FS-MSP-31 SDG&E COST ALLOCATION COMPARISON \$000's				
Customer Class	Proposed Allocation of Base Margin	% Total	Current Allocation of Base Margin	% Total
Residential	\$387,580	70.8%	\$377,156	70.9%
Core C/I	\$88,019	16.1%	\$66,501	12.5%
NGV	\$4,348	0.8%	\$2,536	0.5%
Total Core	\$479,946	87.7%	\$446,193	83.9%
Noncore C/I - D	\$7,732	1.4%	\$3,901	0.7%
Noncore C/I - T	\$26	0.0%	\$23	0.0%
Small EG	\$3,697	0.7%	\$2,845	0.5%
Large EG	\$876	0.2%	\$1,131	0.2%
EG Transmission	\$59	0.0%	\$37	0.0%
Total Noncore	\$12,390	2.3%	\$7,937	1.5%
Backbone Transmission	\$54,963	10.0%	\$77,685	14.6%
Total SDG&E	\$547,299	100%	\$531,815	100%

Relative to the current allocation, the SoCalGas proposed CAP allocation of base margin across customer classes remain relatively stable. These allocations reflect the impacts of the updated Embedded cost studies for customer-related, distribution, transmission and storage functions, the transition adjustments and updated overall lower demand forecasts.

Relative to the current allocation, the SDG&E proposed CAP allocation of base margin across customer classes is relatively stable, except for an increase of the Core Commercial and Industrial class. These allocation changes reflect the updated Embedded cost studies for customer-related, distribution, and transmission functions and updated lower core demand forecasts offset by higher noncore demand forecasts.

This concludes our prepared direct testimony.

XII. QUALIFICATIONS

Frank Seres

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 a Sr. Resource Planner and have since advanced to the role of Lead Business Financial Advisor in March 2022 in the Transmission and Storage Strategy business group.

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.

Before joining SoCalGas, I held roles at Nestlé USA as a Senior Financial Analyst and a Supply Chain Demand Planner. I also worked at Southern California Edison as a Load Research Analyst.

I have previously submitted testimony before the California Public Utilities Commission.

Marjorie Schmidt-Pines

My name is Marjorie Schmidt-Pines. My business address is 555 West Fifth Street, Los Angeles, California, 90013-1011. I am Senior Principal Regulatory Economic Advisor in the CPUC/FERC Gas Regulatory Affairs Department for SoCalGas and SDG&E.

I hold a Bachelor of Science degree in Business Administration with an emphasis in Accounting from California State University at Northridge, California. I have been employed by SoCalGas since 1981 and held positions of increasing responsibilities as an Accountant and Senior Accountant in the Accounting & Finance department, as an Analyst and a Budget

1 Coordinator in the Gas Supply department, as a Sr. Market Analyst and Market Advisor for the
2 Marketing and Customer Services departments and Principal Regulatory Economic Advisor in
3 the Regulatory Affairs Department.



4 As Senior Principal Regulatory Economic Advisor, I represent the Gas Rate Design
5 Team for both SoCalGas and SDG&E in the role of Project Manager, Senior Analyst and witness
6 in various major regulatory proceedings and filings dealing with allocating authorized revenue
7 requirements to functions and customer rate classes, developing rate design for each class,
8 calculating customer rate changes, and computing customers' bill impacts.

9 I have previously testified before the California Public Utilities Commission.

Appendix A

SoCalGas Embedded Cost Tables

APPENDIX A
SoCalGas Embedded Cost Tables
Table FS-MSP-1

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: left;">   </div> <div style="text-align: center;"> SOUTHERN CALIFORNIA GAS COMPANY 2024 Utility Gas Plant in Service By FERC Account for FERC Form 2 (Thousands of Dollars) </div> </div>								
Line	ACCOUNT	ACCT NO.	As of December 31, 2024			Book Value Allocator	12/31/24 Weighted Avg Rate Base	For the Year Ended 2024 DEPRECIATION EXPENSE
			INVESTMENT	ACCUM DEP	NET BOOK VALUE			
1								
2								
3		301	76	-	76			-
4		302	592	-	592			-
5		303	136,098	(22,723)	113,375			13,845
6	Total Intangible		136,767	(22,723)	114,044	0.6%	76,083	13,845
7								
8								
9		325	-	-	-			-
10		330	-	-	-			-
11		331	-	-	-			-
12		332	-	-	-			-
13		334	-	-	-			-
14		336	-	-	-			-
15	Total Gas Production		-	-	-	0%	-	-
16								
17								
18		117.1	61,422	-	61,422			-
19		350	4,565	(17,729)	(13,164)			43
20		351	197,710	(44,142)	153,568			6,219
21		352	787,191	258,582	1,045,773			36,448
22		353	244,049	(31,881)	212,167			6,239
23		354	515,416	(105,767)	409,650			13,610
24		355	19,322	(5,839)	13,483			750
25		356	181,632	(100,717)	80,915			5,548
26		357	150,077	(39,920)	110,157			6,922
27		358	222,042	(309,994)	(87,953)			-
28								
29	Total Underground Storage		2,383,425	(397,407)	1,986,018	11.2%	1,324,956	75,779
30								
31								
32		365	139,185	(30,398)	108,787			3,078
33		366	302,992	(33,642)	269,350			6,090
34		367	3,641,333	(902,657)	2,738,676			89,630
35		368	651,651	(131,540)	520,111			13,514
36		369	396,609	(56,565)	340,043			12,209
37		370	91,186	(24,131)	67,054			5,108
38		371	18,669	(6,745)	11,924			845
39		372	243,902	75,727	319,629			
40	Total Transmission		5,485,527	(1,109,952)	4,375,575	24.7%	2,919,128	130,475
41								
42								
43		374	33,175	(2,412)	30,763			59
44		375	456,359	(101,877)	354,483			12,416
45		376	6,741,340	(3,187,287)	3,554,053			166,758
46		378	223,823	(105,385)	118,438			7,999
47		380	4,216,587	(2,510,437)	1,706,150			123,331
48		381, 382	1,804,477	(724,584)	1,079,893			72,080
49		383	210,483	(99,284)	111,199			5,713
50		387	80,165	(37,568)	42,597			2,571
51		388	1,070,111	2,105,168	3,175,279			
52	Total Distribution		14,836,520	(4,663,665)	10,172,855	57.5%	6,786,735	390,928
53								
54								
55		389	1,417	(49)	1,368			2
56		390	250,947	(194,516)	56,431			8,636
57		391	2,342,804	(1,662,468)	680,337			220,920
58		392	1,945	(397)	1,548			188
59		393	311	(99)	212			10
60		394	159,492	(40,404)	119,088			6,645
61		395	10,426	(1,813)	8,613			432
62		396	(0)	-	(0)			-
63		397	312,050	(133,931)	178,119			29,234
64		398	1,603	(153)	1,450			(181)
65		399	3,898	2,685	6,582			
66	Total General Plant		3,084,894	(2,031,146)	1,053,748	6.0%	702,999	265,885
67								
68	Other Storage Plant		-	-	-			-
69								
70	Total Utility Gas Plant In Service		25,927,133	(8,224,893)	17,702,240	100.0%	11,809,901	876,911
71								
72	Total Investment		25,927,133					
73	Less: Cushion Gas 117.1		(61,422)					
74	Adj. Utility Plant - FERC Form 2		25,865,711					
75								
76	Total Ratebase at 12-31-2024		11,809,901					

Appendix B

SDG&E Embedded Cost Table

APPENDIX B

SDG&E Embedded Cost Table

Table FS-MSP-9

Table 9
SAN DIEGO GAS & ELECTRIC COMPANY
2024 Utility Gas Plant in Service
By FERC Account for FERC Form 2
(\$000)

As of December 31, 2024				12/31/2024		For the Year Ended 2024
ACCOUNT	INVESTMENT	ACCUM DEP	NET BOOK VALUE	Book Value Allocator	Weighted Average Rate Base	DEPRECIATION EXPENSE
Transmission						
365.1- Land	4,649	-	4,649			
365.2- Rights-of-way	3,493	(1,904)	1,589			
366- Structures & Improvements	23,726	(13,761)	9,964			
367- Mains	369,157	(115,161)	253,995			
368- Compressor Station Eq	143,971	(85,850)	58,121			
369- Meas & Reg Station Eq	30,934	(21,478)	9,456			
371- Other Equipment	2,846	(705)	2,140			
372- Asset Retirement Costs for Transmission Plant	43,806	9,453	53,259			
Total Transmission	622,582	(229,407)	393,175	13.6%	278,013	14,504
Distribution						
374.2- Land and Land Rights	8,361	(7,825)	535			
374.1- Land and Land Rights	1,083	-	1,083			
375- Structures & Improvements	43	(61)	-18			
376- Mains	1,551,477	(492,516)	1,058,961			
378- Meas & Reg Stations	21,620	(11,547)	10,073			
380- Services	792,856	(344,701)	448,155			
381- Meters & Regulators	215,470	(108,436)	107,034			
382- Meter Installations	152,496	(68,563)	83,933			
385- Industrial Meas & Reg Station Eq	1,517	(1,427)	90			
387.11- Other Equipment	994	(911)	82			
387- CNG Sta on SDGE Property	8,910	(4,993)	3,917			
388- Asset Retirement Costs for Distribution Plant	145,739	233,075	378,814			
Distribution Net Plant Total	\$2,900,566	(\$807,906)	\$2,092,660	72.4%	1,479,713	68,390
General Plant						
392- Transportation Eq	-	-	-			
394- Tools, Shop, & Garage Eq	28,128	(7,472)	20,656			
395- Laboratory Eq	-	-	-			
396- Power Operated Eq	-	-	-			
397- Communication Eq	2,248	(1,575)	673			
398- Misc Equipment	1,161	(241)	919			
General Plant Total	31,536	(9,288)	22,248			1,292
Common Plant			\$380,894	14.0%	285,061	\$56,580
Total Utility Gas Plant In Service	3,554,685	(1,046,602)	2,888,977	100.0%	2,042,786	140,766

rate base

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

Appendix C

Testimony Footnotes

APPENDIX C

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 and common plant costs is consistent with that of administrative and general (A&G) expenses described in pg. 11 and Table FS-MSP-6

SoCalGas General Plant Allocation Summary (\$MM)

Footnote	Category	Depreciation	Return	Taxes	Labor ¹	Allocated Depreciation	Allocated Return	Allocated Taxes
1	Storage	\$265.88	\$59.79	\$9.52	6%	\$16.11	\$3.62	\$0.58
2	Transmission	\$265.88	\$59.79	\$9.52	12%	\$31.55	\$7.09	\$1.13
3	Customer-related	\$265.88	\$59.79	\$9.52	58%	\$155.34	\$34.93	\$5.56
4	HP-Distribution	\$265.88	\$59.79	\$9.52	5%	\$13.14	\$2.95	\$0.47
5	MP Distribution	\$265.88	\$59.79	\$9.52	19%	\$49.75	\$11.19	\$1.78

SDG&E General & Common Plant Allocation Summary (\$MM)

Footnote	Category	Depreciation	Return	Taxes	Labor ²	Allocated Depreciation	Allocated Return	Allocated Taxes
6	Transmission	\$56.58	\$21.87	\$(0.26)	7%	\$4.13	\$1.60	\$(0.02)
7	Customer-related	\$56.58	\$21.87	\$(0.26)	32%	\$27.22	\$10.52	\$(0.12)
8	HP-Distribution	\$56.58	\$21.87	\$(0.26)	2%	\$1.20	\$0.47	\$(0.01)
9	MP Distribution	\$56.58	\$21.87	\$(0.26)	58%	\$24.03	\$9.29	\$(0.11)

¹ Rounded to the nearest whole percent.

² *Id.*

Appendix D

2024 Classification of SoCalGas's Backbone and
Local Transmission Pipelines 2024

APPENDIX D

2024 Classification of SoCalGas's Backbone and Local Transmission Pipelines 2024

SoCalGas's Backbone Pipelines			SoCalGas's Local Pipelines		
85	2000	8116	12	1023	3001
103	2001	8123	85	1024	3002
119	2005	6908	104	1026	3003
127	2051		115	1029	3004
160	3000		133	1129	3005
203	3003		145	1132	3007
225	3006		173	1167	4000
235	3008		202	1170	5002
245	4000		214	1171	6000
247	4002		222	1172	6001
293	5000		317	1173	6902
294	5010		324	1174	6903
303	5012		325	1175	6914
309	5034		404	1176	6915
324	5036		406	1202	6921
335	5041		407	1203	7000
404	5043		408	1205	7025
406	6900		512	1207	7030
963	6901		765	1211	7042
1004	6904		767	1218	7043
1005	6905		775	1219	7044
1027	6906		800	1230	7049
1028	6913		1003	1233	7051
1030	6916		1010	1234	7052
1031	7039		1011	1236	7054
1180	7053		1013	1241	7055
1181	7200		1014	1242	7056
1185	8100		1015	1244	7058
1186	8105		1016	2000	7059
1187	8106		1017	2001	7067
1192	8107		1018	2002	8032
1201	8108		1019	2003	8038
1220	8109		1020	2006	8045
1221	8110		1021	2007	8119
1229	8115		1022	3000	1177
					6919

Appendix E

Storage Allocation by Function

APPENDIX E

Storage Allocation by Function

	Storage Allocation by Function									
2024		NBV (\$000)	INJ %	WD %	INV %		INJ (\$000)	WD (\$000)	INV (\$000)	Capital-Rel
350	Land/Rights-of-Way	(13,164)	0%	0%	100%	100%	\$0	\$0	-\$13,164	\$ 193,654
351	Structures & Improvements	153,568	35%	34%	31%	100%	\$53,749	\$52,213	\$47,606	
352	Wells	1,045,773	11%	39%	50%	100%	\$115,936	\$406,950	\$522,887	
353	Lines	212,167	11%	39%	50%	100%	\$23,521	\$82,563	\$106,084	
354	Compressor Station Equipment	409,650	100%	0%	0%	100%	\$409,650	\$0	\$0	
355	Meas. & Reg Equipment	13,483	25%	25%	50%	100%	\$3,371	\$3,371	\$6,742	
356	Purification Equipment	80,915	0%	100%	0%	100%	\$0	\$80,915	\$0	
357	Other Equipment	110,157	35%	34%	31%	100%	\$38,555	\$37,453	\$34,149	
117.1	Cushion Gas	61,422	0%	100%	0%	100%	\$0	\$61,422	\$0	
	Total NBV	2,073,971					\$644,781	\$724,887	\$704,302	\$ 2,073,971
	Capital-Related Costs %						31%	35%	34%	100%
	Capital-Related Costs						\$60,205	\$67,685	\$65,763	\$193,654
		O&M (\$000)	INJ %	WD %	INV %		INJ (\$000)	WD (\$000)	INV (\$000)	
814	Operation Supervision &	21,026	33%	33%	34%	100%	\$6,939	\$6,939	\$7,149	
815	Maps & Records	27	0%	0%	100%	100%	\$0	\$0	\$27	
816	Wells Expenses	8,812	11%	39%	50%	100%	\$977	\$3,429	\$4,406	
817	Line Expenses	1,177	11%	39%	50%	100%	\$131	\$458	\$589	
818	Compressor Station Expenses	3,389	100%	0%	0%	100%	\$3,389	\$0	\$0	
820	Measuring & Regulating Station	20.2	25%	25%	50%	100%	\$5	\$5	\$10	
821	Purification Expenses	986	0%	100%	0%	100%	\$0	\$986	\$0	
824	Other Expenses	10,624	0%	0%	100%	100%	\$0	\$0	\$10,624	
825	Storage Well Royalties	1,133	0%	0%	100%	100%	\$0	\$0	\$1,133	
826	Rents	283	0.0%	0%	100%	100%	\$0	\$0	\$283	
	Total Operation	47,479					\$ 11,440	\$ 11,817	\$ 24,221	\$ 47,479
							INJ (\$000)	WD (\$000)	INV (\$000)	
830	Maintenance Supervision &	72	33%	33%	34%	100%	\$24	\$24	\$25	
831	Maintenance of Structures &	325	35%	34%	31%	100%	\$114	\$111	\$101	
832	Maintenance of Reservoirs &	10,186	11%	39%	50%	100%	\$1,129	\$3,964	\$5,093	
833	Maintenance of Lines	3,588	11%	39%	50%	100%	\$398	\$1,396	\$1,794	
834	Maintenance of Compressor	4,287	100%	0%	0%	100%	\$4,287	\$0	\$0	
835	Maintenance of Measuring &	1,778	25%	25%	50%	100%	\$445	\$445	\$889	
836	Maintenance of Purification	971	0%	100%	0%	100%	\$0	\$971	\$0	
837	Maintenance of Other Equipment	823	35%	34%	31%	100%	\$288	\$280	\$255	
	Total Maintenance	22,030					\$6,684	\$7,190	\$8,156	\$ 22,030
	Storage O&M Excl. Fuel	69,509					\$ 18,124	\$ 19,007	\$ 32,378	\$ 69,509
							INJ (\$000)	WD (\$000)	INV (\$000)	Total (\$000)
	Capital and O&M Costs						\$ 78,329	\$ 86,692	\$ 98,141	\$ 263,162
							INJ	WD	INV	
	% Allocation Inj, WD, Inv.						29.8%	32.9%	37.3%	100%

In compliance with D.24-07-009 OP 2 and Attachment A, Agreement A(6):

The next Cost Allocation Proceeding application will contain, at a minimum, a fully embedded cost study based on 2024 FERC Form 2, as well as a benchmark cost allocation utilizing Long Range Marginal Cost (LRMC) studies for the customer-related and distribution functions. The benchmark cost allocation may leverage underlying LRMC data presented in this cost allocation proceeding, updated to account for changes in line extension allowance policy, loaders, and demand projections, and scaled to representative dollars in the corresponding test year. Additionally, in the next Cost Allocation Proceeding, Applicants will include a detailed capital/O&M storage allocation percentage study to determine the proportional allocation of storage costs by function (injection, withdrawal, and inventory) (see, A.18-07-024, Chapter 8, Appendix G).

SoCalGas relied upon its storage operations experts to thoroughly evaluate the various activities and compiled the detailed information required to form the basis for the functionalization and allocation of the 2024 storage recorded costs to reflect cost causation concepts. The results of this study are summarized in Appendix A, Table FS-MSP-1 above.

In many instances, these functional allocations remain unchanged from A.18-07-024 Ch.8 study, as the allocation percentages are still accurate. In other instances, these functional allocations are adjusted to reflect their current and future operational use. The determinations for each FERC Account category are as follows:

FERC Account 350 – Land/Rights-of-Way.

- This account includes the cost of all interests in land on which are located underground lines, telephone poles, their associated lines, and like property used in connection with underground gas storage operations. Gas storage fields occupy large open areas of land, and these costs are incurred to secure the surface and subsurface areas. Subsequently, this account remains 100% allocated to the inventory function.

FERC Account 351- Structures and Improvements, and FERC Account 831-Maintenance of Structures and Improvements.

- The proposed allocations are based on how actual labor hours are charged to other FERC accounts. Since structures and improvements provide work areas for employees who charge labor to other FERC accounts, the allocation of total costs should be distributed to how labor is allocated to these other FERC accounts. Thus, costs associated with

structures & improvements will not be 100% allocated to inventory, but rather split between inventory, withdrawal, and injection in accordance with how labor is charged.

FERC Account 352 -Wells, FERC Account 353-Lines, FERC Account 832- Maintenance of Reservoirs & Wells, FERC Account 833- Maintenance of Lines, FERC Account 816 -Wells Expenses, FERC Account 817 -Line Expenses.

- The purpose of wells and lines is to provide for injection and withdrawal, but also equally for the purpose of utilizing the inventory, thus it is reasonable to allocate 50 % of the wells and lines accounts to inventory and 50% to injection/withdrawal capacity. Further, the allocations to injection/withdrawal are based on the percentage of withdrawal or injection capacity, respectively, to total throughput capacity. Total throughput capacity defined here is the sum of injection capacity based on compressors, and withdrawal capacity based on dehydration facilities. The Summer and Winter 2024 Technical Assessment shows that withdrawal capacity represents 78% of total throughput capacity and injection capacity represents 22% of total throughput capacity. Based on this reasoning, allocations are 50% inventory, 39% withdrawal, and 11% injection.

FERC Account 354 – Compressor Station Equipment.

- The purpose of compressor station equipment is to increase the pressure of natural gas so it can be injected into the underground reservoirs, and as such, continues to be 100% allocated to the injection category.

FERC Account 355 – Measuring & Regulating Equipment.

- This account includes installed gas pipelines used for the purposes of measuring and regulating deliveries of gas to underground storage, and withdrawals of gas from underground storage. As such, allocations are weighted heavier to support inventory functions, with an equal allocation between injection and withdrawal functions.

FERC Account 356 – Purification Equipment.

- This equipment is used primarily for the removal of impurities from, or the conditioning of, natural gas withdrawn from storage and as such, continues to be 100% allocated to the withdrawal category. Examples of equipment included in this account would include dehydrators, coolers, scrubbers, boilers, pumps, valves, piping, power supply, controls, and instrumentation.

FERC Account 357- Other Equipment, and FERC Account 837 -Maintenance of Other Equipment.

- The proposed allocation is similar to above and is based on how actual labor hours are charged to other FERC accounts. Thus, costs associated with other equipment will not be 100% allocated to inventory, but rather split between inventory, withdrawal, and injection in accordance with how labor is charged to FERC 357 and FERC 837 accounts.

FERC Account 117.1- Cushion Gas.

- The allocation of cushion gas is entirely to withdrawal. The amount of cushion gas in a storage reservoir sets the lower pressure boundary to meet a minimum withdrawal capacity, thus the allocation of 100% to withdrawal.

FERC Account 814 – Operation Supervision & Engineering.

- Personnel resources were allocated equally among all three functions of injection, withdrawal, and inventory as a reasonable proxy.

FERC Account 815 – Maps & Records.

- These costs are similarly associated with FERC Account 350, and excludes well records which are charged to FERC Account 832. Therefore, FERC Account 815 is allocated 100% to inventory.

FERC Account 818 – Compressor Station Expenses.

- The purpose of compressor stations and their operation in underground storage is to increase the pressure of natural gas so it can be injected into the underground reservoirs, and as such, continues to be 100% allocated to the injection category.

FERC Account 820 – Measuring & Regulating Station Expenses.

- This account includes the operational costs of components used for measuring and regulating deliveries of gas to underground storage and withdrawal of gas from underground storage. As such, allocations are weighted heavier to support inventory functions, with an equal allocation between injection and withdrawal functions.

FERC Account 821 – Purification Expenses.

- The operation of purification is used primarily for the removal of impurities from, or the conditioning of, natural gas withdrawn from storage and as such, continues to be 100% allocated to the withdrawal category.

FERC Account 824 – Other Expenses.

- This account includes operational expenses not assignable to any of the foregoing accounts and typically excludes functions associated with injection or withdrawal. Subsequently, it is reasonable to assume an allocation of 100% to the inventory function.

FERC Account 825 – Storage Well Royalties.

- This account includes royalty payments associated with gas wells and land acreage located at underground storage properties and typically is representative of 100% inventory functions.

FERC Account 826 – Rents.

- Property rental costs for land acreage associated with maintaining underground storage properties is reasonably allocated 100% to the inventory function.

FERC Account 830 – Maintenance Supervision & Engineering.

- Maintenance expenses were allocated equally among all three functions of injection, withdrawal, and inventory as a reasonable proxy.

FERC Account 834 – Maintenance of Compressor Station Equipment.

- The purpose of compressor stations and their operation and maintenance in underground storage is to increase the pressure of natural gas so it can be injected into the underground reservoirs, and as such, continues to be 100% allocated to the injection category.

FERC Account 835 – Maintenance of Measuring & Regulating Station Equipment.

- This account includes the maintenance costs for components used for measuring and regulating deliveries of gas to underground storage and withdrawal of gas from underground storage. As such, allocations are weighted heavier to support inventory functions, with an equal allocation between injection and withdrawal functions.

FERC Account 836 – Maintenance of Purification Equipment.

- The maintenance of purification equipment is used primarily for the removal of impurities from, or the conditioning of, natural gas withdrawn from storage and as such, continues to be 100% allocated to the withdrawal category.

Combining the percentage allocation of capital-related and O&M costs of existing storage assets resulted in the percentage allocation of injection, withdrawal and inventory functions % respectively, shown in Appendix A, Table FS-MSP-1.

These percentages are used to allocate SoCalGas's embedded storage cost shown in Table FS-MSP-25