

**Southern California Gas Company and  
San Diego Gas & Electric  
2027 CAP**

**Chapter 12 Workpapers to the Prepared  
Direct Testimony of Michael Foster**

**Rate Design  
(SDG&E)**

SAN DIEGO GAS & ELECTRIC  
2020 TCAP

Section 3  
Submeter Credit Model

Workpapers to the Prepared Written Testimony of  
Michael Foster

**Submetering Avoided Cost Credit -GS**

>> For multi-family dwelling units supplied through one meter and submetered to all individual units (Schedule GS).

>> Due to Use of Subunit, Traditional Meter Capital and O&M Expenses Are Avoided. However, Savings Offset By Incurred Master Meter Capital and O&M Expenses.

>> Master Meter Capital and O&M Expenses are Quantified on a Per Subunit Basis.

>> Net Submetering Avoided Cost Credit = (Traditional Meter Capital and O&M) - (Master Meter Capital and O&M ÷ Average No. of Subunits Per Master Meter)

>> Adopted Proposal = Western Mobilehome Parkowners Association. From Exhibit No. 186, As Filed w/Scaling.

**SDG&E GS Submeter Discount  
2027 TCAP Illustrative Rates**

		Avoided Cost		Incurred Cost		Source
<u>Plant Costs</u>		Per Subunit (Single Family)		Per GS Master Meter		
		(\$/cst/yr.)		(\$/cst/yr.)		
1	Service/Regulation/Meter	\$0.00		\$0.00	1	SDGE LRMC Customer Cost
2	Distribution Main (High Pressure)	\$98.12		\$98.12	2	SDGE LRMC Distribution
3	<b>Net Annual Cost/Space</b>	\$98.12		\$98.12	3	SDGE LRMC Customer Cost
4	<u>Customer Expenses</u>				4	SDGE LRMC Customer Cost
5	O&M	\$65.96		\$82.21	5	SDGE LRMC Customer Cost
6	O&M Loaders	\$32.23		\$40.17	6	SDGE LRMC Customer Cost
7	<b>Net Customer Expenses</b>	\$98.19		\$122.38	7	SDGE LRMC Customer Cost
8	<b>Subtotal - Annual Costs</b>	\$196.31		\$220.50	8	
9	x EPAM Scaling Factor	100.24%		100.24%	9	SDGE Cost Allocation
10	= Avoided / Incurred Cost / Yr	\$196.78		\$221.03	10	
11	+ Number Months / Year	12		12	11	
12	= Avoided / Incurred Cost / Mo	\$16.40		\$18.42	12	
13	+ Avg No. of Subunits Per Master Meter Account	1		26.0000	13	Recorded 2024
14	= Incurred Cost Per Living Unit for Master Meter			\$0.70842	14	
15	<b>Net Avoided Cost / Month</b>	<b>\$15.69</b>			15	<< Net of (Avoided Subunit Costs) - (Incurred Master Meter Costs) Per Subunit.
16	- SDG&E Monthly Cust Charge	\$0.00			16	
17	<b>Submeter Credit / Month</b>	<b>\$15.69</b>			17	
18	x Number Months / Year	12			18	
19	<b>Submeter Credit / Year</b>	<b>\$188.28</b>			19	
19	Submeter Credit / Year				19	
20	+ Number Days / Year	365			20	
21	<b>= Submeter Credit / Day</b>	<b>\$0.51583</b>			21	
22	<b>Net Avoided Cost / Month</b>	<b>\$15.69</b>			22	
23	- SDG&E Monthly Cust Charge	\$0.00			23	
24	<b>Submeter Credit / Month</b>	<b>\$15.69</b>			24	
25	x Number Months / Year	12			25	
26	<b>Submeter Credit / Year</b>	<b>\$188.28</b>			26	
26	Submeter Credit / Year				26	
27	+ Number Days / Year	365			27	
28	<b>= Submeter Credit / Day</b>	<b>\$0.51583</b>			28	

**Submetering Avoided Cost Credit -GT - GRC**

>> For mobile home parks supplied through one meter and submetered to all individual units (Schedule GT).

>> Due to Use of Subunit, Traditional Meter Capital and O&M Expenses Are Avoided. However, Savings Offset By Incurred Master Meter Capital and O&M Expenses.

>> Master Meter Capital and O&M Expenses are Quantified on a Per Subunit Basis.

>> Net Submetering Avoided Cost Credit = (Traditional Meter Capital and O&M) - (Master Meter Capital and O&M ÷ Average No. of Subunits Per Master Meter)

>> Adopted Proposal = Western Mobilehome Parkowners Association. From Exhibit No. 186, As Filed w/Scaling.

**SDG&E GT Submeter Discount  
2027 TCAP Illustrative Rates**

		Avoided Cost	Incurred Cost		
		Per Subunit (Single Family)	Per GT Master Meter		
<u>Plant Costs</u>		(\$/cst/yr.)	(\$/cst/yr.)	Source	
1	Service/Regulation/Meter	\$0.00	\$0.00	1	SDGE LRMC Customer Cost
2	Distribution Main (High Pressure)	\$98.12	\$98.12	2	SDGE LRMC Distribution
3	Net Annual Cost/Space	\$98.12	\$98.12	3	SDGE LRMC Customer Cost
4	<u>Customer Expenses</u>			4	SDGE LRMC Customer Cost
5	O&M	\$65.96	\$82.21	5	SDGE LRMC Customer Cost
6	O&M Loaders	\$32.23	\$40.17	6	SDGE LRMC Customer Cost
7	Net Customer Expenses	\$98.19	\$122.38	7	SDGE LRMC Customer Cost
8	Subtotal - Annual Costs	\$196.31	\$220.50	8	
9	x EPAM Scaling Factor	100.24%	100.24%	9	SDGE Cost Allocation
10	= Avoided / Incurred Cost / Yr	\$196.78	\$221.03	10	
11	÷ Number Months / Year	12	12	11	
12	= Avoided / Incurred Cost / Mo	\$16.40	\$18.42	12	
13	÷ Avg No. of Subunits Per Master Meter Account	1	123	13	Recorded 2024
14	= Incurred Cost Per Living Unit for Master Meter		\$0.15015	14	
15	Net Avoided Cost / Month	\$16.25		15	<< Net of (Avoided Subunit Costs) - (Incurred Master Meter Costs) Per Subunit.
16	- SDG&E Monthly Cust Charge	\$0.00		16	
17	Submeter Credit / Month	\$16.25		17	
18	x Number Months / Year	12		18	
19	Submeter Credit / Year	\$194.98		19	
20	÷ Number Days / Year	365		20	
21	= Submeter Credit / Day	\$0.53418		21	
1	Net Avoided Cost / Month	\$16.25		1	<< Net of (Avoided Subunit Costs) - (Incurred Master Meter Costs) Per Subunit.
2	- SDG&E Monthly Cust/Min Charge	\$0.00		2	
3	Submeter Credit / Month	\$16.25		3	
4	x Number Months / Year	12		4	
5	Submeter Credit / Year	\$194.98		5	
6	÷ Number Days / Year	365		6	
7	= Submeter Credit / Day	\$0.53418		7	

**SAN DIEGO GAS & ELECTRIC  
2027 CAP**

**Section 2  
NGV Compression Rate Adder Model**

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**2027 CAP**  
**NGV Compression Adder Revenue Requirement**

		<b>Total Public &amp; Private Access</b>		<b>Public Access Station</b>		<b>Data Source</b>
<b>NGV Station Costs \$000's</b>		<b>\$000's/yr</b>	<b>\$/th</b>	<b>\$000's/yr</b>	<b>\$/th</b>	
NGV Station Rate Base		\$1,863	\$2.39	\$995	\$1.27	Return tab
Rate of Return %		3.77%		3.77%		Return tab
<b>Return on Ratebase</b>		<b>\$70</b>	<b>\$0.09</b>	<b>\$38</b>	<b>\$0.05</b>	
Income Taxes		\$0	\$0.00	\$0	\$0.00	Return Tab
Ad Valorem Taxes		\$1	\$0.00	\$1	\$0.00	Return Tab
Depreciation Expense		\$415	\$0.53	\$204	\$0.26	NGV Dept
<b>Capital Related Revenue Requirement</b>		<b>\$486</b>	<b>\$0.62</b>	<b>\$242</b>	<b>\$0.31</b>	
NGV Station Throughput in THERMS		780,117		780,117		
O&M Expense	\$/th = \$0.164	\$80	\$0.16	\$127.743	\$0.10	NGV Dept
Public O&M Expense	\$/th = \$0.103					
Electricity Expense	\$/th = \$0.062	\$48	\$0.06	\$48	\$0.06	NGV Dept
Public Electricity Expense	\$/th = \$0.062					
<b>Customer Related O&amp;M</b>		<b>\$128</b>	<b>\$0.16</b>	<b>\$176</b>	<b>\$0.23</b>	
<b>Effective NGV Station Revenue Requirement</b>		<b>\$614</b>	<b>\$0.79</b>	<b>\$418</b>	<b>\$0.54</b>	
Total NGV Station Throughput in therms		780,117		780,117		NGV Dept
Compression Throughput Mth/year		780	780	780	780	
<b>Compression Rate \$/therm</b>		<b>\$0.79</b>		<b>\$0.5357</b>		
Semptra Wide Compressor Adder \$/therm				\$0.44013	SDGE RD model/Rate tables	

**1.0258**

## 2027 CAP

### Calculation of Capital Related costs

Calculation of NGV Station Capital related Costs	Total Public & Private Access \$000's/yr	Public Access Station \$000's/yr	Data Source	Notes
NBV of NGV Stations	\$3,737	\$1,995	Recorded 2024	
Total NBV of Utility Gas Plant in Service	\$4,096,659	\$4,096,659	Net Plant	Updated from FERC form 2024
NBV Ratio	0.09%	0.05%		
Total Utility Rate Base	\$2,042,786	\$2,042,786	Recorded 2024	Updated from Accounting
NBV Ratio	0.09%	0.05%		
NGV Station Ratebase	\$1,863	\$995		
Total Utility Income & CNG Fuel taxes	\$40	\$40	FERC Form 1 p. 262, lines 9+17+21 (e)	Updated from FERC form 2024
NBV Ratio	0.09%	0.05%		
NGV Station Income & CNG Fuel taxes	\$0	\$0		
Total Utility AdValorem taxes	\$1,141	\$1,141	FERC Form 1 p. 262, lines 2,3, 4 (e)	Updated from FERC form 2024
NBV Ratio	0.09%	0.05%		
NGV Station Income & CNG Fuel taxes	\$1	\$1		

### Calculation of Authorized ROR% and Total Return on Ratebase:

	Capital Ratio	Rate	ROR%		
Long-Term Debt	45.25%	1.96%	0.89%	FERC Form 1 p. 123.18, cost of capital section	Updated from FERC form 2024
Preferred Stock	2.75%	0.17%	0.00%		
Common Equity	52.00%	5.54%	2.88%		
<b>Total ROR%</b>	<b>100%</b>		<b>3.77%</b>		

2027 CAP	
<b>Subtotal Net Utility Plant - Gas</b>	\$3,613,658
Common plant	\$1,848,452
Percentage of Common plant assigned to gas	26%
<b>Subtotal of Common Plant assigned to gas</b>	<u>\$483,000</u>
<b>Applicable Net Plant - Gas</b>	<u>\$4,096,659</u>

#### Data Source

FERC Form 1 p. 201, Column d Line 15

FERC Form 1 p. 201, Column h Line 15

FERC Form 1 p. 356.1