

SDG&E 2024 TCAP

**Section 1
Customer Costs Model for LRMC Studies**

SDG&E Cost Allocation LRM Customer Costs Results

A	Residential B	NGV D	CCI C	Total Core E	Total NCCI F	EG Tier 1 G	EG Tier 2 H	Total EG I	Total NonCore J	System Total K
Customer Costs Rental Method	\$269.40	\$1,603.23	\$589.78	\$255.16	\$3,409.03	\$1,588.34	\$4,251.10	\$2,021.63	\$2,539.09	\$279.99
Customer Costs NCO Method	\$100.93	\$410.97	\$233.32	\$80.39	\$1,106.61	\$638.53	\$1,939.44	\$777.84	\$897.70	\$100.75
Customer Costs NCO RCA	\$305.39	\$1,036.98	\$496.60	\$286.72	\$1,039.34	\$601.12	\$1,897.88	\$761.21	\$867.54	\$70.59
Customer Costs 50/50 NCO/RECC	\$287.39	\$1,320.10	\$543.19	\$270.94	\$2,224.19	\$1,094.73	\$3,074.49	\$1,391.42	\$1,703.32	\$175.29

LRMC O&M Loader Model

	Input	Source (1)
O&M w/o A&G HPD	\$1,210.03	LF-O&M Tab
O&M w/o A&G MPD	\$20,501.34	LF-O&M Tab
Marginal Percent of O&M HPD	91.08%	Dist O&M MC
Marginal Percent of O&M MPD	90.38%	Dist O&M MC
Marginal A&G/Payroll Taxes Loading Factor as a % of O&M expenses	27.94%	LF-A&G Tab
General Plant Loading Factor as a % of O&M expenses	24.95%	LF-GPL Tab
Annualized M&S Customer Related Costs \$000/yr	\$419,448.67	LF-M&S Tab
Annualized M&S HDP Distribution Load Related Costs \$000/yr	\$156,567.14	LF-M&S Tab
Annualized M&S MDP Distribution Load Related Costs \$000/yr	\$606,163.43	LF-M&S Tab
O&M WEF for Escalation	1.06	O&M WEF Tab
Marginal Cust-Rel O&M		
870 - Operation Supervision & Engineering	\$3,782	Dist O&M MC
871 - Distribution Load Dispatching	\$19	Dist O&M MC
874 - Mains & Services Expenses	\$5,421	Dist O&M MC
875 - Measuring & Regulating Station Expenses	\$0	Dist O&M MC
878 - Meter & House Regulator Expenses	\$5,510	Dist O&M MC
879 - Customer Installations Expenses	\$8,727	Dist O&M MC
880 - Other Expenses	\$8,447	Dist O&M MC
881 - Rents	\$0	Dist O&M MC
885 - Maint Supervision & Engineering	\$0	Dist O&M MC
887 - Maintenance of Mains	\$1,237	Dist O&M MC
888 - Maintenance Of Compressor Station Eq	\$0	Dist O&M MC
889 - Maintenance of Meas. & Reg Station Eq	\$0	Dist O&M MC
892 - Maintenance of Services	\$2,998	Dist O&M MC
893 - Maint of Meters & House Regulators	\$2,258	Dist O&M MC
894 - Maintenance of Other Equipment	\$385	Dist O&M MC

Notes:

(1) from "SDGE OM Loaders" file:

TABLE 11 - LPMC Customer Cost

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A	Res					Total Res	NGV	GN-3	Total Core
	G-R	G-M	G-S	G-T					
B	C	D	E	F	G	H	I		
Annualized SRM Cost \$/customer/yr 2020\$s	\$202.44	\$202.41	\$202.35	\$202.44	\$202.44	\$1,249.81	\$398.30	\$209.17	
O&M \$/customer/yr									
FERC 870 - 894: Distribution O&M (M\$)	\$33,635	\$822	\$23	\$45	\$34,525	\$10	\$3,040	\$24,165	
FERC 901 - 910: Customer O&M (M\$)	\$819	\$16	\$0	\$0	\$836	\$0	\$26	\$862	
Total Cust-Rel O&M (M\$)	\$34,454	\$838	\$23	\$46	\$35,361	\$10	\$3,066	\$25,027	
2016 Number of Customers	847,801	16,309	219	176	864,505	45	26,214	890,764	
Cust-Rel O&M per Customer (2016 \$'s)	\$41	\$51	\$105	\$259	\$41	\$216	\$117	\$28	
escalator 2016\$'s to 2020\$'s	1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063	
O&M \$/customer/yr 2020\$s	\$43.21	\$54.62	\$111.25	\$275.36	\$43.49	\$229.53	\$124.35	\$29.87	
O&M Loaders:									
Materials & Supplies Loader:									
allocator = total Customer Related O&M as % of total	89.5%	2.2%	0.1%	0.1%	91.8%	0.0%	8.0%	65.0%	
Allocated Materials & Supplies Loader (\$'s) \$419,449	\$375,260	\$9,125	\$250	\$496	\$385,131	\$106	\$33,396	\$272,577	
2016 Number of Customers	847,801	16,309	219	176	864,505	45	26,214	890,764	
M&S Loader per Customer (2016 \$'s)	\$0.44	\$0.56	\$1.14	\$2.82	\$0.45	\$2.35	\$1.27	\$0.31	
escalator 2016\$'s to 2020\$'s	1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063	
M&S Loader \$/customer/yr 2020\$s	\$0.47	\$0.59	\$1.21	\$3.00	\$0.47	\$2.50	\$1.35	\$0.33	
Administrative & General as % of O&M	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	
Administrative & General \$/customer/yr 2020\$'s	\$12.07	\$15.26	\$31.08	\$76.93	\$12.15	\$64.13	\$34.74	\$8.35	
General Plant as % of O&M	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	
General Plant \$/customer/yr 2020\$'s	\$10.78	\$13.62	\$27.75	\$68.69	\$10.85	\$57.26	\$31.02	\$7.45	
TOTAL O&M LOADERS \$/customer/yr	\$23.32	\$29.48	\$60.05	\$148.63	\$23.47	\$123.89	\$67.12	\$16.12	
LRMC Rental Customer Cost \$/customer/year	\$268.97	\$286.50	\$373.65	\$626.43	\$269.40	\$1,603.23	\$589.78	\$255.16	
					\$22.45				
NCO Method:									
LRMC Rental Customer Cost \$/customer/year					\$269.40	\$1,603.23	\$589.78	\$255.16	
less annualized SRM rental					(\$202.44)	(\$1,249.81)	(\$398.30)	(\$209.17)	
plus annualized SRM NCO					\$33.97	\$57.55	\$41.85	\$34.40	
NCO Customer Cost \$/customer/year					\$100.93	\$410.97	\$233.32	\$80.39	
					\$8.41				
NCO with Replacement Cost Adder Method:									
LRMC Rental Customer Cost \$/customer/year					\$269.40	\$1,603.23	\$589.78	\$255.16	
less annualized SRM rental					(\$202.44)	(\$1,249.81)	(\$398.30)	(\$209.17)	
plus annualized SRM					\$238.43	\$683.56	\$305.12	\$240.73	
NCO w/ Replacement Customer Cost \$/cstmr/yr					\$305.39	\$1,036.98	\$496.60	\$286.72	
					\$25.45				

GTNC			EG			Total Noncore	System Total
MPD	HPD	Total	< 3 MM	> 3 MM	Total		
J	K	L	M	N	O	P	Q
\$2,098.99	\$3,693.07	\$2,369.69	\$987.22	\$2,353.22	\$1,260.42	\$1,671.55	\$209.40
\$22	\$8	\$30	\$18	\$10	\$28	\$57	\$37,633
\$5	\$2	\$7	\$8	\$1	\$9	\$16	\$878
\$27	\$10	\$37	\$26	\$12	\$38	\$74	\$38,512
48	10	58	71	10	81	139	890,903
\$565	\$1,016	\$635	\$367	\$1,159	\$465	\$530	\$43
1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063
\$600.48	\$1,079.74	\$675.01	\$390.40	\$1,232.60	\$494.38	\$563.43	\$45.96
0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.2%	100.0%
\$295	\$111	\$401	\$284	\$126	\$410	\$802	\$273,380
48	10	58	71	10	81	139	890,903
\$6.15	\$11.06	\$6.92	\$4.00	\$12.63	\$5.06	\$5.77	\$0.31
1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063
\$6.54	\$11.76	\$7.35	\$4.25	\$13.42	\$5.38	\$6.14	\$0.33
27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%
\$167.77	\$301.67	\$188.59	\$109.07	\$344.37	\$138.12	\$157.42	\$12.84
24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%
\$149.80	\$269.36	\$168.39	\$97.39	\$307.49	\$123.33	\$140.56	\$11.46
\$324.11	\$582.78	\$364.33	\$210.72	\$665.29	\$266.84	\$304.11	\$24.63
\$3,023.58	\$5,355.59	\$3,409.03	\$1,588.34	\$4,251.10	\$2,021.63	\$2,539.09	\$279.99
\$3,023.58	\$5,355.59	\$3,409.03	\$1,588.34	\$4,251.10	\$2,021.63	\$2,539.09	\$279.99
(\$2,098.99)	(\$3,693.07)	(\$2,369.69)	(\$987.22)	(\$2,353.22)	(\$1,260.42)	(\$1,671.55)	(\$209.40)
\$67.99	\$63.70	\$67.26	\$37.41	\$41.56	\$16.62	\$30.16	\$30.16
\$992.58	\$1,726.22	\$1,106.61	\$638.53	\$1,939.44	\$777.84	\$897.70	\$100.75
\$3,023.58	\$5,355.59	\$3,409.03	\$1,588.34	\$4,251.10	\$2,021.63	\$2,539.09	\$279.99
(\$2,098.99)	(\$3,693.07)	(\$2,369.69)	(\$987.22)	(\$2,353.22)	(\$1,260.42)	(\$1,671.55)	(\$209.40)
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$924.59	\$1,662.52	\$1,039.34	\$601.12	\$1,897.88	\$761.21	\$867.54	\$70.59

**TABLE LRMCC-1
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**METER SET ASSEMBLY (MSA) EXPENSE
2024 TCAP**

	Max Meter Flow Range	Meter Type	Meter, Regulator & Fitting Costs	Installation Costs	Total MSA Costs	
	A	B	C	E	F	
	Cfh		(Dollars)	(Dollars)	(Dollars)	
1	<i>Medium Pressure</i>					1
2	0-275	250	\$201.92	\$79.05	\$280.97	2
3	276 - 425	425	\$552.79	\$147.95	\$700.73	3
4	426-630	630	\$942.70	\$147.95	\$1,090.64	4
5	631 - 800	8C	\$1,184.83	\$295.89	\$1,480.72	5
6	801 - 1,100	11C	\$1,272.08	\$295.89	\$1,567.97	6
7	1,101 - 1,500	15C	\$1,959.59	\$965.32	\$2,924.91	7
8	1,501 - 2,000	2M	\$3,004.61	\$1,521.50	\$4,526.11	8
9	2,001 - 3,000	3M	\$2,876.82	\$1,521.50	\$4,398.32	9
10	3,001 - 5,000	5M	\$3,818.62	\$1,521.50	\$5,340.12	10
11	5,001 - 7,000	7M	\$4,135.22	\$1,521.50	\$5,656.72	11
12						12
13	<i>High Pressure</i>					13
14	0 - 940	400	\$1,560.80	\$965.32	\$2,526.12	14
15	941 - 1,050	8C	\$3,326.33	\$1,521.50	\$4,847.83	15
16	1,051 - 1,500	630	\$1,950.71	\$965.32	\$2,916.03	16
17	1,501 - 2,700	2M	\$3,498.37	\$1,521.50	\$5,019.87	17
18	2,701 - 4,000	3M	\$3,370.57	\$1,521.50	\$4,892.07	18
19	4,001 - 6,600	5M	\$4,823.01	\$1,736.02	\$6,559.03	19
20	6,601 - 9,200	7M	\$5,428.28	\$1,736.02	\$7,164.29	20
21	9,201 - 14,500	11M	\$5,971.25	\$2,040.68	\$8,011.93	21
22	14,501 - 21,400	16M	\$6,100.56	\$2,040.68	\$8,141.24	22
23	21,401 - 24,000	11M-HP	\$11,792.33	\$4,360.50	\$16,152.84	23
24	24,001 - 46,000	16M-HP	\$12,722.16	\$4,406.99	\$17,129.15	24
25	46,001 - 79,000	23M-HP	\$21,019.90	\$8,145.67	\$29,165.57	25
26	79,001 - 377,000	8" Turbine	\$41,020.86	\$12,055.79	\$53,076.65	26
27	377,001 - 600,000	Turbine			\$0.00	27
28	600,001 - 4,250,000	Turbine			\$0.00	28
29	> 4,250,000	Turbine			\$0.00	29

Notes:

1. Col. (F) = Col. (C) + Col. (D) + Col. (E).
2. MSA costs expressed in Year 2020 \$'s.
3. Data Source: SDG&E Gas Distribution Engineering Department.

**TABLE LRMCC-2
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**WEIGHTED MSA RECC FACTOR
2024 TCAP**

	Max Meter Flow Range	Meter, Regulator, & Fitting Costs	Meter & Regulator RECC Factor	Installation Costs	Installation Costs RECC Factor	Weighted Average RECC Factor	
	A	B	C	D	E	F	
	Cfh	(Dollars)	(Percent)	(Dollars)	(Percent)	(Percent)	
1	<i>Medium Pressure</i>						1
2	0-275	\$201.92	8.02%	\$79.05	8.36%	8.12%	2
3	276 - 425	\$552.79	8.02%	\$147.95	8.36%	8.09%	3
4	426-630	\$942.70	8.02%	\$147.95	8.36%	8.07%	4
5	631 - 800	\$1,184.83	8.02%	\$295.89	8.36%	8.09%	5
6	801 - 1,100	\$1,272.08	8.02%	\$295.89	8.36%	8.08%	6
7	1,101 - 1,500	\$1,959.59	8.02%	\$965.32	8.36%	8.13%	7
8	1,501 - 2,000	\$3,004.61	8.02%	\$1,521.50	8.36%	8.13%	8
9	2,001 - 3,000	\$2,876.82	8.02%	\$1,521.50	8.36%	8.14%	9
10	3,001 - 5,000	\$3,818.62	8.02%	\$1,521.50	8.36%	8.12%	10
11	5,001 - 7,000	\$4,135.22	8.02%	\$1,521.50	8.36%	8.11%	11
12							12
13	<i>High Pressure</i>						13
14	0 - 940	\$1,560.80	8.02%	\$965.32	8.36%	8.15%	14
15	941 - 1,050	\$3,326.33	8.02%	\$1,521.50	8.36%	8.13%	15
16	1,051 - 1,500	\$1,950.71	8.02%	\$965.32	8.36%	8.13%	16
17	1,501 - 2,700	\$3,498.37	8.02%	\$1,521.50	8.36%	8.12%	17
18	2,701 - 4,000	\$3,370.57	8.02%	\$1,521.50	8.36%	8.13%	18
19	4,001 - 6,600	\$4,823.01	8.02%	\$1,736.02	8.36%	8.11%	19
20	6,601 - 9,200	\$5,428.28	8.02%	\$1,736.02	8.36%	8.10%	20
21	9,201 - 14,500	\$5,971.25	8.02%	\$2,040.68	8.36%	8.11%	21
22	14,501 - 21,400	\$6,100.56	8.02%	\$2,040.68	8.36%	8.10%	22
23	21,401 - 24,000	\$11,792.33	8.02%	\$4,360.50	8.36%	8.11%	23
24	24,001 - 46,000	\$12,722.16	8.02%	\$4,406.99	8.36%	8.11%	24
25	46,001 - 79,000	\$21,019.90	8.02%	\$8,145.67	8.36%	8.11%	25
26	79,001 - 377,000	\$41,020.86	8.02%	\$12,055.79	8.36%	8.10%	26
27	377,001 - 600,000					8.10%	27
28	600,001 - 4,250,000					8.10%	28
29	> 4,250,000					8.10%	29

Notes:

1. Col. (F) = [Col (B) x Col. (C)] + [Col. (D) x Col. (E)] ÷ [Col. (B) + Col. (D)]
2. Rows (27) - (29): Weighted Average RECC Factor meter & installation weights from Row (26).
3. Data Source: RECC Factors from Finance Group

TABLE LRMCC-3
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
ANNUALIZED SERVICE, REGULATOR & METER (SRM) MARGINAL INVESTMENT
2024 TCAP

	Max Meter Flow Range	Meter & Regulator				Pipe & Installation				Total SRM Annualized Marg. Invstmt.
		Meter Type	M&R Cost	RECC Factor	Annualized Marg. Invstmt.	Service Type	Service Cost	RECC Factor	Annualized Marg. Invstmt.	
	A	B	C	D	E	F	G	H	I	J
	Cfh		(Dollars)	(Percent)	(Dollars)		(Dollars)	(Percent)	(Dollars)	(Dollars)
1	<i>Medium Pressure</i>									
2	0-275	250	\$281	8.12%	\$23	Poly-1"	\$3,357	7.37%	\$247	\$270
3	276 - 425	425	\$701	8.09%	\$57	Poly-1"	\$3,357	7.37%	\$247	\$304
4	426-630	630	\$1,091	8.07%	\$88	Poly-1"	\$3,357	7.37%	\$247	\$335
5	631 - 800	8C	\$1,481	8.09%	\$120	Poly-1"	\$3,357	7.37%	\$247	\$367
6	801 - 1,100	11C	\$1,568	8.08%	\$127	Poly-1"	\$3,357	7.37%	\$247	\$374
7	1,101 - 1,500	15C	\$2,925	8.13%	\$238	Poly-1"	\$3,357	7.37%	\$247	\$485
8	1,501 - 2,000	2M	\$4,526	8.13%	\$368	Poly-1"	\$3,357	7.37%	\$247	\$616
9	2,001 - 3,000	3M	\$4,398	8.14%	\$358	Poly-1"	\$3,357	7.37%	\$247	\$605
10	3,001 - 5,000	5M	\$5,340	8.12%	\$433	Poly-2"	\$7,059	7.37%	\$520	\$954
11	5,001 - 7,000	7M	\$5,657	8.11%	\$459	Poly-2"	\$7,059	7.37%	\$520	\$979
12										
13	<i>High Pressure</i>									
14	0 - 940	400	\$2,526	8.15%	\$206	Poly-1"	\$3,357	7.37%	\$247	\$453
15	941 - 1,050	8C	\$4,848	8.13%	\$394	Poly-1"	\$3,357	7.37%	\$247	\$641
16	1,051 - 1,500	630	\$2,916	8.13%	\$237	Poly-1"	\$3,357	7.37%	\$247	\$485
17	1,501 - 2,700	2M	\$5,020	8.12%	\$408	Poly-1"	\$3,357	7.37%	\$247	\$655
18	2,701 - 4,000	3M	\$4,892	8.13%	\$397	Poly-2"	\$7,059	7.37%	\$520	\$918
19	4,001 - 6,600	5M	\$6,559	8.11%	\$532	Poly-2"	\$7,059	7.37%	\$520	\$1,052
20	6,601 - 9,200	7M	\$7,164	8.10%	\$580	Poly-2"	\$7,059	7.37%	\$520	\$1,101
21	9,201 - 14,500	11M	\$8,012	8.11%	\$649	Poly-3"	\$12,815	7.37%	\$944	\$1,594
22	14,501 - 21,400	16M	\$8,141	8.10%	\$660	Poly-3"	\$12,815	7.37%	\$944	\$1,604
23	21,401 - 24,000	11M-HP	\$16,153	8.11%	\$1,310	Poly-4"	\$15,533	7.37%	\$1,145	\$2,455
24	24,001 - 46,000	16M-HP	\$17,129	8.11%	\$1,389	Poly-4"	\$15,533	7.37%	\$1,145	\$2,533
25	46,001 - 79,000	23M-HP	\$29,166	8.11%	\$2,367	Steel-4"	\$27,696	7.37%	\$2,041	\$4,408
26	79,001 - 377,000	8" Turbine	\$53,077	8.10%	\$4,298	Steel-6"	\$42,055	7.37%	\$3,099	\$7,397
27	377,001 - 600,000	Turbine	\$0	8.10%	\$0	Steel-8"	\$0	7.37%	\$0	\$0
28	600,001 - 4,250,000	Turbine	\$0	8.10%	\$0	Steel-16"	\$0	7.37%	\$0	\$0
29	> 4,250,000	Turbine	\$0	8.10%	\$0	Steel-24"	\$0	7.37%	\$0	\$0

- Notes:
- Col. (E) = Col. (C) x Col. (D). Col. (I) = Col. (G) x Col. (H).
 - Col. (J) = Col. (E) + Col. (I).
 - Service Line installation cost (column F & G) provided by SDG&E Gas Distribution Engineering Department

Data Sources: MSA Cost, MSA RECC

Line Extension Credit, Rule 15, 11/20/2020	
Water Heating	\$1,138
Oven/Range	\$201
Space Heating	\$987
Dryer Stub	\$289
Total	\$2,615

TABLE LRMCC-4
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
MSA ASSIGNMENT FACTORS BY CUSTOMER CLASS
2024 TCAP

	Max Meter Flow Range	Meter Type	Res					NGV	GN-3	Total Core	GTNC			EG			Total Noncore	System Total
			G-R	G-M	G-S	G-T	Total				MPD	HPD	Total	< 3 MM	> 3 MM	Total		
	A	B	C					D	E	F	G	H	I	J	K	L	N	O
	Cfh																	
1	Medium Pressure		98%	2%	0%	0%												1
2	0-275	250	803,776	12,932	85	5	816,798	11	12,290	829,099	-	-	-	1	-	1	1	829,100
3	276 - 425	425	20,676	1,047	29	2	21,754	-	2,071	23,825	-	-	-	-	-	-	-	23,825
4	426-630	630	11,102	608	6	7	11,723	-	2,099	13,822	-	-	-	-	-	-	-	13,822
5	631 - 800	8C	7,706	545	18	4	8,273	1	2,137	10,411	-	-	-	-	-	-	-	10,411
6	801 - 1,100	11C	3,127	467	29	4	3,627	2	1,887	5,516	-	-	-	-	-	-	-	5,516
7	1,101 - 1,500	15C	990	206	5	4	1,205	-	1,253	2,458	-	-	-	-	-	-	-	2,458
8	1,501 - 2,000	2M	298	88	6	2	394	-	1,255	1,649	-	-	-	34	-	34	34	1,683
9	2,001 - 3,000	3M	95	252	17	30	394	2	1,650	2,046	-	-	-	8	-	8	8	2,054
10	3,001 - 5,000	5M	17	83	7	52	159	3	756	918	1	-	1	10	-	10	11	929
11	5,001 - 7,000	7M	8	27	5	22	62	5	324	391	7	-	7	7	-	7	14	405
12																		
13	High Pressure																	
14	0 - 940	400	0	0	0	0	-	-	1	1	-	-	-	1	-	1	1	2
15	941 - 1,050	8C	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
16	1,051 - 1,500	630	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
17	1,501 - 2,700	2M	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
18	2,701 - 4,000	3M	0	0	0	0	-	-	-	-	-	-	-	1	-	1	1	1
19	4,001 - 6,600	5M	0	0	0	0	-	-	-	-	1	-	1	-	-	1	1	1
20	6,601 - 9,200	7M	0	0	0	0	-	1	1	2	1	-	1	-	4	4	5	7
21	9,201 - 14,500	11M	2	27	8	31	68	-	269	337	7	2	9	3	-	3	12	349
22	14,501 - 21,400	16M	4	24	3	13	44	11	147	202	15	-	15	1	-	1	16	218
23	21,401 - 24,000	11M-HP	0	3	1	0	4	3	11	18	4	-	4	-	1	1	5	23
24	24,001 - 46,000	16M-HP	0	0	0	0	-	5	52	57	7	4	11	3	1	4	15	72
25	46,001 - 79,000	23M-HP	0	0	0	0	-	1	9	10	3	2	5	3	3	6	11	21
26	79,001 - 377,000	8" Turbine	0	0	0	0	-	-	2	2	2	2	4	-	-	-	4	6
27	377,001 - 600,000	Turbine	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
28	600,001 - 4,250,000	Turbine	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
29	> 4,250,000	Turbine	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
30																		
31	Total Customers		847,801	16,309	219	176	864,505	45	26,214	890,764	48	10	58	71	10	81	139	890,903

TABLE MISC-1
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

DEMAND DETERMINANT SUMMARY
2024 TCAP

Billing Determinants	Res					Total	NGV	GN-3	Core	GINC			EG			Power Plants	Noncore	System
	G-R	G-M	G-S	G-T	MPD					HPD	Total	< 3 MM	> 3 MM	Total				
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
TCAP Customers	857,179	16,489	221	178	874,067	28	30,937	905,032	44	9	53	72	18	90	-	143	905,175	
2021Customers	847,801	16,309	219	176	864,505	45	26,214	890,764	48	10	58	71	10	81	-	139	890,903	

Demand Forecast per 2017 TCAP in Mtherms		Res	NGV	Core C&I	Total Core	C&I	EG Tier 1	EG Tier 2	Total EG	Core	Total System
1	DIRECT Demand										
2	Transmission										
3	Average Year Throughput (MTh)	0	0	0	0	17,569	5,074	456,289	461,363	478,932	478,932
4	Cold Year Throughput (1-in-35) (MTh)	0	0	0	0	17,569	5,074	456,289	461,363	478,932	478,932
5	Cold Year Peak Month (December) (MTh)	0	0	0	0	1,477	191	35,479	35,670	37,147	37,147
6	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	0	0	0	0	48	6	1,684	1,690	1,738	1,738
7	Number of Customers	0	0	0	0	9	3	12	15	24	24
8	High Pressure										
9	Average Year Throughput (MTh)	67	8,874	3,116	12,057	7,497	3,531	36,209	39,740	47,237	59,294
10	Cold Year Throughput (1-in-35) (MTh)	74	8,874	3,251	12,199	7,497	3,531	36,209	39,740	47,237	59,436
11	Cold Year Peak Month (December) (MTh)	11	721	373	1,105	630	287	3,027	3,314	3,944	5,049
12	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	1	23	18	42	20	9	98	107	127	169
13	Number of Customers	2	4	5	11	9	5	4	9	18	29
14	Medium Pressure										
15	Average Year Throughput (MTh)	313,167	15,255	191,661	520,083	21,879	21,131	7,997	29,127	51,006	571,089
16	Cold Year Throughput (1-in-35) (MTh)	343,334	15,255	199,985	558,574	21,879	21,131	7,997	29,127	51,006	609,580
17	Cold Year Peak Month (December) (MTh)	50,177	1,239	22,957	74,374	1,839	1,767	669	2,435	4,275	78,649
18	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	2,943	40	1,098	4,081	59	57	22	79	138	4,219
19	Number of Customers	874,065	24	30,932	905,021	35	64	2	66	101	905,122
20	CUMULATIVE Demand										
21	Transmission										
22	Average Year Throughput (MTh)	313,234	24,129	194,777	532,140	46,945	29,736	500,494	530,230	577,175	1,109,315
23	Cold Year Throughput (1-in-35) (MTh)	343,408	24,129	203,236	570,773	46,945	29,736	500,494	530,230	577,175	1,147,948
24	Cold Year Peak Month (December) (MTh)	50,188	1,960	23,331	75,479	3,947	2,244	39,175	41,419	45,366	120,845
25	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	2,944	63	1,115	4,123	127	72	1,803	1,876	2,003	6,126
26	Number of Customers	874,067	28	30,937	905,032	53	72	18	90	143	905,175
27	High Pressure										
28	Average Year Throughput (MTh)	313,234	24,129	194,777	532,140	29,376	24,662	44,206	68,867	98,243	630,384
29	Cold Year Throughput (1-in-35) (MTh)	343,408	24,129	203,236	570,773	29,376	24,662	44,206	68,867	98,243	669,016
30	Cold Year Peak Month (December) (MTh)	50,188	1,960	23,331	75,479	2,470	2,053	3,696	5,749	8,219	83,698
31	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	2,944	63	1,115	4,123	80	66	119	185	265	4,388
32	Number of Customers	874,067	28	30,937	905,032	44	69	6	75	119	905,151
33	Medium Pressure										
34	Average Year Throughput (MTh)	313,167	15,255	191,661	520,083	21,879	21,131	7,997	29,127	51,006	571,089
35	Cold Year Throughput (1-in-35) (MTh)	343,334	15,255	199,985	558,574	21,879	21,131	7,997	29,127	51,006	609,580
36	Cold Year Peak Month (December) (MTh)	50,177	1,239	22,957	74,374	1,839	1,767	669	2,435	4,275	78,649
37	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	2,943	40	1,098	4,081	59	57	22	79	138	4,219
38	Number of Customers	874,065	24	30,932	905,021	35	64	2	66	101	905,122

TABLE LRMCC-5
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
MSA ASSIGNMENT FACTORS BY CUSTOMER CLASS
2020 TCAP

	Max Meter Flow Range	Meter Type	Res					NGV	GN-3	Total Core	GTNC			EG			Total Noncore	System Total
			G-R	G-M	G-S	G-T	Total				MPD	HPD	Total	< 3 MM	> 3 MM	Total		
	A	B	C					D	E	F	G	H	I	J	K	L	N	O
	Cfh																	
1	<i>Medium Pressure</i>																	1
2	0-275	250	94.81%	79.29%	38.81%	2.84%	94.48%	24.44%	46.88%	93.08%	0.00%	0.00%	0.00%	1.41%	0.00%	1.23%	0.72%	93.06%
3	276 - 425	425	2.44%	6.42%	13.24%	1.14%	2.52%	0.00%	7.90%	2.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.67%
4	426-630	630	1.31%	3.73%	2.74%	3.98%	1.36%	0.00%	8.01%	1.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.55%
5	631 - 800	8C	0.91%	3.34%	8.22%	2.27%	0.96%	2.22%	8.15%	1.17%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.17%
6	801 - 1,100	11C	0.37%	2.86%	13.24%	2.27%	0.42%	4.44%	7.20%	0.62%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.62%
7	1,101 - 1,500	15C	0.12%	1.26%	2.28%	2.27%	0.14%	0.00%	4.78%	0.28%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.28%
8	1,501 - 2,000	2M	0.04%	0.54%	2.74%	1.14%	0.05%	0.00%	4.79%	0.19%	0.00%	0.00%	0.00%	47.89%	0.00%	41.98%	24.46%	0.19%
9	2,001 - 3,000	3M	0.01%	1.55%	7.76%	17.05%	0.05%	4.44%	6.29%	0.23%	0.00%	0.00%	0.00%	11.27%	0.00%	9.88%	5.76%	0.23%
10	3,001 - 5,000	5M	0.00%	0.51%	3.20%	29.55%	0.02%	6.67%	2.88%	0.10%	2.08%	0.00%	1.72%	14.08%	0.00%	12.35%	7.91%	0.10%
11	5,001 - 7,000	7M	0.00%	0.17%	2.28%	12.50%	0.01%	11.11%	1.24%	0.04%	14.58%	0.00%	12.07%	9.86%	0.00%	8.64%	10.07%	0.05%
12																		
13	<i>High Pressure</i>																	
14	0 - 940	400	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.41%	0.00%	1.23%	0.72%	0.00%
15	941 - 1,050	8C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
16	1,051 - 1,500	630	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
17	1,501 - 2,700	2M	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
18	2,701 - 4,000	3M	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	1.23%	0.72%	0.00%	
19	4,001 - 6,600	5M	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.08%	0.00%	1.72%	0.00%	0.00%	0.00%	0.72%	0.00%
20	6,601 - 9,200	7M	0.00%	0.00%	0.00%	0.00%	0.00%	2.22%	0.00%	0.00%	2.08%	0.00%	1.72%	0.00%	40.00%	4.94%	3.60%	0.00%
21	9,201 - 14,500	11M	0.00%	0.17%	3.65%	17.61%	0.01%	0.00%	1.03%	0.04%	14.58%	20.00%	15.52%	4.23%	0.00%	3.70%	8.63%	0.04%
22	14,501 - 21,400	16M	0.00%	0.15%	1.37%	7.39%	0.01%	24.44%	0.56%	0.02%	31.25%	0.00%	25.86%	1.41%	0.00%	1.23%	11.51%	0.02%
23	21,401 - 24,000	11M-HP	0.00%	0.02%	0.46%	0.00%	0.00%	6.67%	0.04%	0.00%	8.33%	0.00%	6.90%	0.00%	10.00%	1.23%	3.60%	0.00%
24	24,001 - 46,000	16M-HP	0.00%	0.00%	0.00%	0.00%	0.00%	11.11%	0.20%	0.01%	14.58%	40.00%	18.97%	4.23%	10.00%	4.94%	10.79%	0.01%
25	46,001 - 79,000	23M-HP	0.00%	0.00%	0.00%	0.00%	0.00%	2.22%	0.03%	0.00%	6.25%	20.00%	8.62%	4.23%	30.00%	7.41%	7.91%	0.00%
26	79,001 - 377,000	8" Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	4.17%	20.00%	6.90%	0.00%	0.00%	0.00%	2.88%	0.00%
27	377,001 - 600,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
28	600,001 - 4,250,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
29	> 4,250,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
30																		
31	Total Customers		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Notes:

- Factors derived from meter capacity analysis results in Table "LRMCC-4" (tab MSAIlocv1)
 Data Sources: Tabs: MSA Cost, MSAIloc v1

TABLE LRMCC-6
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
FORECAST CUSTOMERS BY METER TYPE BY CUSTOMER CLASS
2020 TCAP

	Max Meter Flow Range	Meter Type	Res				Total	NGV	GN-3	Total Core	GTNC			EG			Power Plant	Total Noncore	System Total
			G-R	G-M	G-S	G-T					MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C				D	E	F	G	H	I	J	K	L	M	N	O	
1	<i>Medium Pressure</i>																		1
2	0-275	250	812,667	13,075	86	5	825,833	7	14,504	840,344	-	-	-	1	-	1	-	840,345	
3	276 - 425	425	20,905	1,059	29	2	21,995	-	2,444	24,439	-	-	-	-	-	-	-	24,439	
4	426-630	630	11,225	615	6	7	11,853	-	2,477	14,330	-	-	-	-	-	-	-	14,330	
5	631 - 800	8C	7,791	551	18	4	8,365	1	2,522	10,887	-	-	-	-	-	-	-	10,887	
6	801 - 1,100	11C	3,162	472	29	4	3,667	1	2,227	5,895	-	-	-	-	-	-	-	5,895	
7	1,101 - 1,500	15C	1,001	208	5	4	1,218	-	1,479	2,697	-	-	-	-	-	-	-	2,697	
8	1,501 - 2,000	2M	301	89	6	2	398	-	1,481	1,879	-	-	-	34	-	34	-	1,914	
9	2,001 - 3,000	3M	96	255	17	30	398	1	1,947	2,347	-	-	-	8	-	8	-	2,355	
10	3,001 - 5,000	5M	17	84	7	53	161	2	892	1,055	1	-	1	10	-	10	-	1,066	
11	5,001 - 7,000	7M	8	27	5	22	63	3	382	448	6	-	6	7	-	7	-	462	
12	<i>High Pressure</i>																		12
13	0 - 940	400	-	-	-	-	-	-	1	1	-	-	-	1	-	1	-	2	
14	941 - 1,050	8C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
15	1,051 - 1,500	630	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	1,501 - 2,700	2M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
17	2,701 - 4,000	3M	-	-	-	-	-	-	-	-	-	-	-	2	-	2	-	2	
18	4,001 - 6,600	5M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
19	6,601 - 9,200	7M	-	-	-	-	-	-	1	1	1	-	1	-	7	7	-	8	
20	9,201 - 14,500	11M	2	27	8	31	69	-	317	386	6	2	8	3	-	3	-	397	
21	14,501 - 21,400	16M	4	24	3	13	44	7	173	225	14	-	14	1	-	1	-	239	
22	21,401 - 24,000	11M-HP	-	3	1	-	4	2	13	19	4	-	4	-	2	2	-	5	
23	24,001 - 46,000	16M-HP	-	-	-	-	-	3	61	64	6	4	10	3	2	5	-	79	
24	46,001 - 79,000	23M-HP	-	-	-	-	-	1	11	11	3	2	5	3	5	8	-	24	
25	79,001 - 377,000	8" Turbine	-	-	-	-	-	-	2	2	2	2	4	-	-	-	-	6	
26	377,001 - 600,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
27	600,001 - 4,250,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
28	> 4,250,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
29																			29
30																			30
31	Total Customers		857,179	16,489	221	178	874,067	28	30,937	905,032	44	9	53	72	18	90	-	143	905,175

- Notes:
- Row (31) = forecast annual average number of customers during proposed 2020 - 2022 TCAP period
 - Rows (2) - (29) = Row (31) x MSA assignment factors for each market segment for each flow range.

verify 857,179 16,489 221 178 874,067 28 30,937 905,032 44 9 53 72 18 90 - 143 905,175
 Data Sources: tabs: MSA Cost, MSAlloc v2

**TABLE LRMCC-7
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**ANNUALIZED SRM MARGINAL INVESTMENT BY CUSTOMER CLASS
2020 TCAP**

	Max Meter Flow Range	Meter Type	Res					NGV	GN-3	Total Core	GTNC			EG			Power Plant	Total Noncore	System Total	
			G-R	G-M	G-S	G-T	Total				MPD	HPD	Total	< 3 MM	> 3 MM	Total				
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
	Cfh																			
	(Dollars)																			
1	<i>Medium Pressure</i>																			1
2	0-275	250	\$164,536,836	\$2,647,243	\$17,400	\$1,024	\$167,202,502	\$1,825	\$3,918,606	\$171,122,933	\$0	\$0	\$0	\$274	\$0	\$274	\$0	\$274	\$171,123,207	2
3	276 - 425	425	\$4,225,978	\$213,997	\$5,927	\$409	\$4,446,311	\$0	\$743,179	\$5,189,491	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,189,491	3
4	426-630	630	\$2,265,392	\$124,064	\$1,224	\$1,428	\$2,392,109	\$0	\$830,690	\$3,222,799	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,222,799	4
5	631 - 800	8C	\$1,574,644	\$111,365	\$3,678	\$817	\$1,690,504	\$225	\$925,892	\$2,616,622	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,616,622	5
6	801 - 1,100	11C	\$638,815	\$95,404	\$5,924	\$817	\$740,960	\$460	\$833,158	\$1,574,578	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,574,578	6
7	1,101 - 1,500	15C	\$202,874	\$42,214	\$1,025	\$820	\$246,932	\$0	\$717,510	\$964,442	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$964,442	7
8	1,501 - 2,000	2M	\$61,075	\$18,036	\$1,230	\$410	\$80,750	\$0	\$911,643	\$992,394	\$0	\$0	\$0	\$21,222	\$0	\$21,222	\$0	\$21,222	\$1,013,616	8
9	2,001 - 3,000	3M	\$19,474	\$51,658	\$3,485	\$6,150	\$80,768	\$744	\$1,178,617	\$1,260,128	\$0	\$0	\$0	\$4,910	\$0	\$4,910	\$0	\$4,910	\$1,265,038	9
10	3,001 - 5,000	5M	\$3,480	\$16,992	\$1,433	\$10,645	\$32,551	\$1,757	\$850,884	\$885,192	\$874	\$0	\$874	\$9,671	\$0	\$9,671	\$0	\$10,545	\$895,737	10
11	5,001 - 7,000	7M	\$1,637	\$5,526	\$1,023	\$4,502	\$12,688	\$3,007	\$374,373	\$390,068	\$6,282	\$0	\$6,282	\$6,950	\$0	\$6,950	\$0	\$13,232	\$403,301	11
12																				12
13	<i>High Pressure</i>																			13
14	0 - 940	400	\$0	\$0	\$0	\$0	\$0	\$0	\$535	\$535	\$0	\$0	\$0	\$460	\$0	\$460	\$0	\$460	\$995	14
15	941 - 1,050	8C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	15
16	1,051 - 1,500	630	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	16
17	1,501 - 2,700	2M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	17
18	2,701 - 4,000	3M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,652	\$1,652	\$0	\$1,652	\$1,652	18
19	4,001 - 6,600	5M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$964	\$0	\$964	\$0	\$0	\$0	\$0	\$964	\$964	19
20	6,601 - 9,200	7M	\$0	\$0	\$0	\$0	\$0	\$676	\$1,299	\$1,975	\$1,009	\$0	\$1,009	\$0	\$7,925	\$7,925	\$0	\$8,934	\$10,909	20
21	9,201 - 14,500	11M	\$409	\$5,524	\$1,637	\$6,342	\$13,912	\$0	\$505,998	\$519,910	\$10,227	\$2,869	\$13,096	\$4,849	\$0	\$4,849	\$0	\$17,945	\$537,855	21
22	14,501 - 21,400	16M	\$818	\$4,910	\$614	\$2,659	\$9,001	\$10,839	\$278,311	\$298,150	\$22,058	\$0	\$22,058	\$1,627	\$0	\$1,627	\$0	\$23,685	\$321,836	22
23	21,401 - 24,000	11M-HP	\$0	\$614	\$205	\$0	\$819	\$4,524	\$31,870	\$37,212	\$9,002	\$0	\$9,002	\$0	\$4,419	\$4,419	\$0	\$13,421	\$50,633	23
24	24,001 - 46,000	16M-HP	\$0	\$0	\$0	\$0	\$0	\$7,780	\$155,474	\$163,254	\$16,256	\$9,120	\$25,377	\$7,707	\$4,560	\$12,268	\$0	\$37,644	\$200,898	24
25	46,001 - 79,000	23M-HP	\$0	\$0	\$0	\$0	\$0	\$2,707	\$46,817	\$49,524	\$12,121	\$7,934	\$20,055	\$13,409	\$23,802	\$37,211	\$0	\$57,266	\$106,790	25
26	79,001 - 377,000	8" Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$17,459	\$17,459	\$13,561	\$13,314	\$26,875	\$0	\$0	\$0	\$0	\$26,875	\$44,334	26
27	377,001 - 600,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	27
28	600,001 - 4,250,000	Turbine																		28
29	> 4,250,000	Turbine																		29
30	Total		\$173,531,434	\$3,337,546	\$44,805	\$36,024	\$176,949,808	\$34,543	\$12,322,315	\$189,306,666	\$92,356	\$33,238	\$125,593	\$71,080	\$42,358	\$113,438	\$0	\$239,031	\$189,545,697	30
31	Forecast Customers		857,179	16,489	221	178	874,067	28	30,937	905,032	44	9	53	72	18	90	-	143	905,175	31
32																				32
33	Average SRM Cost		\$202	\$202	\$202	\$202	\$202	\$1,250	\$398	\$209	\$2,099	\$3,693	\$2,370	\$987	\$2,353	\$1,260	\$0	\$1,672	\$209	33

- Notes:
1. Rows (2) - (29) = SRM Annualized Marginal Investment x Number of MSA's per Customer Segment for each particular flow range.
 2. Row (33) = Row (30) ÷ Row (31).

Data Sources: tabs: MSA Fcst, MSA Rental, Factors

TABLE LRMCC-8
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

ALLOCATION OF CUSTOMER-RELATED DISTRIBUTION O&M EXPENSES BY CUSTOMER CLASS
2024 TCAP

	Distribution O&M Account	Marginal O&M	G-R	G-M	Res G-S	G-T	Total	NGV	GN-3	Total Core	GTNC			EG			Total Noncore	System Total
											MPD	HPD	Total	< 3 MM	> 3 MM	Total		
	A	B					C	D	E	F	G	H	I	J	K	L	N	O
1																		
2	Allocator - Total of other Distribution O&M Operating	56%	87%	2%	0%	0%	89%	0%	8%	55%	0%	0%	0%	0%	0%	0%	0%	98%
3	Allocation (M\$)	\$3,782	\$3,297	\$80	\$2	\$4	\$3,384	\$1	\$304	\$2,098	\$2	\$1	\$3	\$2	\$1	\$3	\$5	\$3,694
4	871 - Distribution Load Dispatching = Non-Marginal Designation																	
5																		
6	Allocator - Customers Wtd by Services costs	100%	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%
7	Allocation (M\$)	\$5,421	\$5,110	\$100	\$2	\$2	\$5,214	\$0	\$203	\$5,418	\$1	\$0	\$1	\$1	\$0	\$1	\$3	\$5,421
8	875 - Meas & Reg Station Exp = 100% Demand-Related																	
9																		
10	Allocator - Customers Wtd by Meters & Regs costs	100%	82%	3%	0%	0%	85%	0%	14%	100%	0%	0%	0%	0%	0%	0%	0%	100%
11	Allocation (M\$)	\$5,510	\$4,517	\$161	\$7	\$15	\$4,699	\$3	\$782	\$5,485	\$9	\$4	\$13	\$8	\$5	\$12	\$25	\$5,510
12																		
13	Allocator - Customer Service Expense	0%	86%	2%	0%	0%	88%	0%	7%	0%	0%	0%	0%	0%	0%	0%	0%	95%
14	Allocation (M\$)	\$8,727	\$7,507	\$157	\$3	\$5	\$7,673	\$1	\$593	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$0	\$8,268
15																		
16	Allocator - Total of other Distribution O&M Operating	56%	87%	2%	0%	0%	89%	0%	8%	55%	0%	0%	0%	0%	0%	0%	0%	98%
17	Allocation (M\$)	\$8,447	\$7,362	\$180	\$5	\$10	\$7,557	\$2	\$678	\$4,685	\$5	\$2	\$6	\$4	\$2	\$6	\$12	\$8,249
18	881 - Rents = Non-Marginal Designation																	
19																		
20	Allocator - Total Other Distribution O&M Maintenance	100%	90%	2%	0%	0%	92%	0%	7%	100%	0%	0%	0%	0%	0%	0%	0%	100%
21	Allocation (M\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
22																		
23	Allocator - Customers Wtd by Services costs	100%	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%
24	Allocation (M\$)	\$1,237	\$1,166	\$23	\$0	\$1	\$1,189	\$0	\$46	\$1,236	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$1,237
25	888 - Maint. Of Compressor Station Eq = 100% Demand-Related																	
26	889 - Maint. of Meas. & Reg Station Eq = 100% Demand-Related																	
27																		
28	Allocator - Customers Wtd by Services costs	100%	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%
29	Allocation (M\$)	\$2,998	\$2,826	\$55	\$1	\$1	\$2,884	\$0	\$112	\$2,996	\$1	\$0	\$1	\$0	\$0	\$1	\$2	\$2,998
30																		
31	Allocator - Customers Wtd by Meters & Regs costs	100%	82%	3%	0%	0%	85%	0%	14%	100%	0%	0%	0%	0%	0%	0%	0%	100%
32	Allocation (M\$)	\$2,258	\$1,851	\$66	\$3	\$6	\$1,926	\$1	\$320	\$2,248	\$4	\$1	\$5	\$3	\$2	\$5	\$10	\$2,258
33	894 - Maint. of Other Eq = Non-Marginal Designation																	
34	Total 870 - 894 O&M Allocation (M\$)	\$38,379	\$33,635	\$822	\$23	\$45	\$34,525	\$10	\$3,040	\$24,165	\$22	\$8	\$30	\$18	\$10	\$28	\$57	\$37,633
35	Allocation %	100%	88%	2%	0%	0%	90%	0%	8%	63%	0%	0%	0%	0%	0%	0%	0%	98%

- Notes:
- Col. (B) from Customer-Related expense section of Workpapers Table "LF-3". (tab Loader Input)
 - Allocation Factors for FERC Accounts 870 - 894 from Workpapers Table "LRMCC-9" (tab 870-894 Fctrs)

Data Sources: tab: Loader Input, 870-894 Fctrs

**TABLE LRMCC-9
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
Allocation Factors for Distribution O&M Expenses
2020 TCAP**

Allocation Method	G-R	G-M	Res G-S	G-T	Total	NGV	GN-3	Total Core	GTNC			EG			Total Noncore	System Total
									MPD	HPD	Total	< 3 MM	> 3 MM	Total		
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1 874, 887, 892 - Services																1
2 Allocator - Customers Wtd by Services costs (M\$)	\$2,877,322	\$56,284	\$906	\$1,295	\$2,935,806	\$252	\$114,464	\$3,050,523	\$633	\$205	\$838	\$455	\$269	\$724	\$1,562	\$3,052,084
3 Alloc %	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%
4 878, 893 - Meters & House Regulators O&M Expense																4
5 Allocator - Customers Wtd by Meters & Regs costs (M\$)	\$276,621	\$9,843	\$414	\$942	\$287,820	\$197	\$47,900	\$335,917	\$564	\$224	\$788	\$462	\$278	\$740	\$1,528	\$337,445
6 Alloc %	82%	3%	0%	0%	85%	0%	14%	100%	0%	0%	0%	0%	0%	0%	0%	100%
7 879 - Customer Installations (M\$)																7
8 Allocator - Customer Service	\$9,991	\$209	\$4	\$7	\$10,211	\$2	\$789	\$11,003	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,615
9 Alloc %	86.0%	1.8%	0.0%	0.1%	87.9%	0.0%	6.8%		0.0%	0.0%	\$0	0.0%	0.0%	0.0%	0.0%	95%

Data Sources: tab: M&HR Alloc

TABLE LRMCC-10
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
ALLOCATION OF CUSTOMER O&M EXPENSES BY CUSTOMER CLASS
2020 TCAP

O&M Operational Activity	Total O&M	Res	NGV	GN-3	Total Core	GTNC			EG		IPP	Total Noncore	System Total	
						MPD	HPD	Total	< 3 MM	> 3 MM				
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1 FIELD SERVICES Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2 CUSTOMER CONTACT Total	\$9,845	\$9,269	\$0	\$576	\$9,845	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,845
3 METER READING Total	\$120,838	\$117,160	\$6	\$3,652	\$120,818	\$7	\$2	\$9	\$10	\$1	\$11	\$0	\$20	\$120,838
4 BILLING SERVICES Total	\$397,794	\$370,009	\$18	\$11,535	\$381,562	\$5,339	\$1,741	\$7,079	\$8,063	\$1,089	\$9,152	\$0	\$16,232	\$397,794
5 CREDIT & COLLECTIONS Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6 BUSINESS ANALYSIS Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7 CUSTOMER RESEARCH & COMMUNICATION Total	\$157,128	\$152,347	\$8	\$4,749	\$157,104	\$8	\$2	\$10	\$13	\$2	\$14	\$0	\$24	\$157,128
8 CUSTOMER SERVICE TECHNOLOGY & SUPPORT Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9 C&I CUSTOMER SERVICE Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10 CONSUMER PROGRAMS & SERVICES Total	\$192,630	\$186,767	\$9	\$5,822	\$192,599	\$10	\$3	\$14	\$15	\$2	\$18	\$0	\$31	\$192,630
11 FEDERAL ACCOUNTS MANAGEMENT Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12 CUSTOMER SERVICES SUPPORT STAFF Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13 COMMUNITY OUTREACH & INFO SERVICES Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14 OTHER Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15 SVP COST CENTERS Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16														
17 Total	\$878,235	\$835,552	\$41	\$26,335	\$861,928	\$5,364	\$1,748	\$7,112	\$8,101	\$1,094	\$9,196	\$0	\$16,307	\$878,235
18 Allocation %	100%	95%	0%	3%	98%	1%	0%	1%	1%	0%	1%	0%	2%	100%

Note:
1. O&M Operational Activities cost assigned using allocation methods identified for each SDG&E department in the Customer Operations division.
Source: From file: SDGE 2020TCAP LRMCC OM Loaders.xls Tab: LRMCC-O&M Summary

TABLE LRMCC-backup.1
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
O&M ALLOCATION FACTOR: Number of Customers Weighted by Service Line Cost
2020 TCAP

	Max Meter Flow Range	Meter Type	Services Plant Investment	Res				Total	NGV	GN-3	Total Core	GTNC			EG		Total Noncore	System Total		
				G-R	G-M	G-S	G-T					MPD	HPD	Total	< 3 MM	> 3 MM				
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
	(Thousand Dollars)																			
1	Medium Pressure																			1
2	0-275	250	\$3	\$2,727,764	\$43,887	\$288	\$17	\$2,771,956	\$23	\$48,684	\$2,820,663	\$0	\$0	\$0	\$3	\$0	\$3	\$3	\$2,820,667	2
3	276 - 425	425	\$3	\$70,168	\$3,553	\$98	\$7	\$73,826	\$0	\$8,204	\$82,030	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$82,030	3
4	426-630	630	\$3	\$37,677	\$2,063	\$20	\$24	\$39,784	\$0	\$8,315	\$48,099	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48,099	4
5	631 - 800	8C	\$3	\$26,152	\$1,850	\$61	\$14	\$28,076	\$2	\$8,465	\$36,543	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36,543	5
6	801 - 1,100	11C	\$3	\$10,612	\$1,585	\$98	\$14	\$12,309	\$4	\$7,475	\$19,788	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,788	6
7	1,101 - 1,500	15C	\$3	\$3,360	\$699	\$17	\$14	\$4,089	\$0	\$4,964	\$9,053	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,053	7
8	1,501 - 2,000	2M	\$3	\$1,011	\$299	\$20	\$7	\$1,337	\$0	\$4,971	\$6,309	\$0	\$0	\$0	\$116	\$0	\$116	\$116	\$6,424	8
9	2,001 - 3,000	3M	\$3	\$322	\$855	\$58	\$102	\$1,337	\$4	\$6,536	\$7,877	\$0	\$0	\$0	\$27	\$0	\$27	\$27	\$7,905	9
10	3,001 - 5,000	5M	\$7	\$121	\$592	\$50	\$371	\$1,135	\$13	\$6,298	\$7,446	\$6	\$0	\$6	\$72	\$0	\$72	\$78	\$7,524	10
11	5,001 - 7,000	7M	\$7	\$57	\$193	\$36	\$157	\$443	\$22	\$2,699	\$3,164	\$45	\$0	\$45	\$50	\$0	\$50	\$95	\$3,259	11
12																				12
13	High Pressure																			13
14	0 - 940	400	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$4	\$4	\$0	\$0	\$0	\$3	\$0	\$3	\$3	\$7	14
15	941 - 1,050	8C	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	15
16	1,051 - 1,500	630	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	16
17	1,501 - 2,700	2M	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	17
18	2,701 - 4,000	3M	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13	\$13	\$13	\$13	18
19	4,001 - 6,600	5M	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6	\$0	\$6	\$0	\$0	\$6	\$6	\$6	19
20	6,601 - 9,200	7M	\$7	\$0	\$0	\$0	\$0	\$0	\$4	\$8	\$13	\$6	\$0	\$6	\$0	\$51	\$51	\$57	\$70	20
21	9,201 - 14,500	11M	\$13	\$26	\$350	\$104	\$402	\$881	\$0	\$4,068	\$4,949	\$82	\$23	\$105	\$39	\$0	\$39	\$144	\$5,094	21
22	14,501 - 21,400	16M	\$13	\$52	\$311	\$39	\$168	\$570	\$87	\$2,223	\$2,880	\$176	\$0	\$176	\$13	\$0	\$13	\$189	\$3,069	22
23	21,401 - 24,000	11M-HP	\$16	\$0	\$47	\$16	\$0	\$63	\$29	\$202	\$293	\$57	\$0	\$57	\$0	\$28	\$28	\$85	\$378	23
24	24,001 - 46,000	16M-HP	\$16	\$0	\$0	\$0	\$0	\$0	\$48	\$953	\$1,001	\$100	\$56	\$156	\$47	\$28	\$75	\$231	\$1,232	24
25	46,001 - 79,000	23M-HP	\$28	\$0	\$0	\$0	\$0	\$0	\$17	\$294	\$311	\$76	\$50	\$126	\$84	\$150	\$234	\$360	\$671	25
26	79,001 - 377,000	8" Turbine	\$42	\$0	\$0	\$0	\$0	\$0	\$0	\$99	\$99	\$77	\$76	\$153	\$0	\$0	\$0	\$153	\$252	26
27	377,001 - 600,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	27
28	600,001 - 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	28
29	> 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	29
30	Total			\$2,877,322	\$56,284	\$906	\$1,295	\$2,935,806	\$252	\$114,464	\$3,050,523	\$633	\$205	\$838	\$455	\$269	\$724	\$1,562	\$3,052,084	31

Note:
1. Rows (2) - (31) = Gross Service Line Capital Investment Cost (Table LRMCC-3) x Number of Services per Customer Segment for each particular flow range (Table LRMCC-6).

Data Sources: tabs: MSA Cost, MSA Fcst MSA Rental

TABLE LRMCC-backup.2
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
O&M ALLOCATION FACTOR: Number of Customers Weighted by MSA Cost
2020 TCAP

	Max Meter Flow Range	Meter Type	MSA Capital Investment	Res					Total	NGV	GN-3	Total Core	GTNC			EG		Total Noncore	System Total
				G-R	G-M	G-S	G-T						MPD	HPD	Total	< 3 MM	> 3 MM		
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
	(Thousand Dollars)																		
1	<i>Medium Pressure</i>																		
2	0-275	250	\$0	\$228,336	\$3,674	\$24	\$1	\$232,035	\$2	\$4,075	\$236,112	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$236,112
3	276 - 425	425	\$1	\$14,649	\$742	\$21	\$1	\$15,412	\$0	\$1,713	\$17,125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,125
4	426-630	630	\$1	\$12,242	\$670	\$7	\$8	\$12,927	\$0	\$2,702	\$15,629	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,629
5	631 - 800	8C	\$1	\$11,537	\$816	\$27	\$6	\$12,386	\$1	\$3,734	\$16,121	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,121
6	801 - 1,100	11C	\$2	\$4,957	\$740	\$46	\$6	\$5,750	\$2	\$3,492	\$9,244	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,244
7	1,101 - 1,500	15C	\$3	\$2,928	\$609	\$15	\$12	\$3,564	\$0	\$4,325	\$7,889	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,889
8	1,501 - 2,000	2M	\$5	\$1,364	\$403	\$27	\$9	\$1,803	\$0	\$6,704	\$8,507	\$0	\$0	\$0	\$156	\$0	\$156	\$156	\$8,663
9	2,001 - 3,000	3M	\$4	\$422	\$1,121	\$76	\$133	\$1,752	\$5	\$8,565	\$10,322	\$0	\$0	\$0	\$36	\$0	\$36	\$36	\$10,358
10	3,001 - 5,000	5M	\$5	\$92	\$448	\$38	\$281	\$858	\$10	\$4,764	\$5,633	\$5	\$0	\$5	\$54	\$0	\$54	\$59	\$5,692
11	5,001 - 7,000	7M	\$6	\$46	\$154	\$29	\$126	\$355	\$17	\$2,163	\$2,535	\$36	\$0	\$36	\$40	\$0	\$40	\$76	\$2,611
12																			
13	<i>High Pressure</i>																		
14	0 - 940	400	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$3	\$3	\$0	\$0	\$0	\$3	\$0	\$3	\$3	\$6
15	941 - 1,050	8C	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	1,051 - 1,500	630	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
17	1,501 - 2,700	2M	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	2,701 - 4,000	3M	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9	\$9	\$9	\$9
19	4,001 - 6,600	5M	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6	\$0	\$6	\$0	\$0	\$6	\$6	\$6
20	6,601 - 9,200	7M	\$7	\$0	\$0	\$0	\$0	\$0	\$4	\$8	\$13	\$7	\$0	\$7	\$0	\$52	\$52	\$58	\$71
21	9,201 - 14,500	11M	\$8	\$16	\$219	\$65	\$251	\$551	\$0	\$2,544	\$3,094	\$51	\$14	\$66	\$24	\$0	\$24	\$90	\$3,185
22	14,501 - 21,400	16M	\$8	\$33	\$198	\$25	\$107	\$362	\$55	\$1,412	\$1,830	\$112	\$0	\$112	\$8	\$0	\$8	\$120	\$1,950
23	21,401 - 24,000	11M-HP	\$16	\$0	\$49	\$16	\$0	\$65	\$30	\$210	\$305	\$59	\$0	\$59	\$0	\$29	\$29	\$88	\$393
24	24,001 - 46,000	16M-HP	\$17	\$0	\$0	\$0	\$0	\$0	\$53	\$1,051	\$1,104	\$110	\$62	\$172	\$52	\$31	\$83	\$255	\$1,358
25	46,001 - 79,000	23M-HP	\$29	\$0	\$0	\$0	\$0	\$0	\$18	\$310	\$328	\$80	\$52	\$133	\$89	\$157	\$246	\$379	\$707
26	79,001 - 377,000	8" Turbine	\$53	\$0	\$0	\$0	\$0	\$0	\$0	\$125	\$125	\$97	\$96	\$193	\$0	\$0	\$0	\$193	\$318
27	377,001 - 600,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
28	600,001 - 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
29	> 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
30																			
31	Total		N/A	\$276,621	\$9,843	\$414	\$942	\$287,820	\$197	\$47,900	\$335,917	\$564	\$224	\$788	\$462	\$278	\$740	\$1,528	\$337,445

Note:
1. Rows (2) - (31) = Gross MSA Capital Investment Cost (Table LRMCC-1) x Number of MSA's per Customer Segment for each particular flow range (Table LRMCC-6).

Data Sources: tabs: MSA Cost, MSA Fcst

**TABLE LRMCC-nco.1
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**WEIGHTED MSA PVRR FACTOR
2024 TCAP**

	Max Meter Flow Range	Meter, Regulator, & Fitting Costs	Meter & Regulator PVRR Factor	Installation Costs	Installation Costs PVRR Factor	Weighted Average PVRR Factor	
	A	B	C	D	E	F	
	Cfh	(Dollars)	(Percent)	(Dollars)	(Percent)	(Percent)	
1	<i>Medium Pressure</i>						1
2	0-275	\$201.92	132.96%	\$79.05	124.49%	130.58%	2
3	276 - 425	\$552.79	132.96%	\$147.95	124.49%	131.17%	3
4	426-630	\$942.70	132.96%	\$147.95	124.49%	131.81%	4
5	631 - 800	\$1,184.83	132.96%	\$295.89	124.49%	131.27%	5
6	801 - 1,100	\$1,272.08	132.96%	\$295.89	124.49%	131.36%	6
7	1,101 - 1,500	\$1,959.59	132.96%	\$965.32	124.49%	130.17%	7
8	1,501 - 2,000	\$3,004.61	132.96%	\$1,521.50	124.49%	130.11%	8
9	2,001 - 3,000	\$2,876.82	132.96%	\$1,521.50	124.49%	130.03%	9
10	3,001 - 5,000	\$3,818.62	132.96%	\$1,521.50	124.49%	130.55%	10
11	5,001 - 7,000	\$4,135.22	132.96%	\$1,521.50	124.49%	130.68%	11
12							12
13	<i>High Pressure</i>						13
14	0 - 940	\$1,560.80	132.96%	\$965.32	124.49%	129.72%	14
15	941 - 1,050	\$3,326.33	132.96%	\$1,521.50	124.49%	130.30%	15
16	1,051 - 1,500	\$1,950.71	132.96%	\$965.32	124.49%	130.16%	16
17	1,501 - 2,700	\$3,498.37	132.96%	\$1,521.50	124.49%	130.39%	17
18	2,701 - 4,000	\$3,370.57	132.96%	\$1,521.50	124.49%	130.33%	18
19	4,001 - 6,600	\$4,823.01	132.96%	\$1,736.02	124.49%	130.72%	19
20	6,601 - 9,200	\$5,428.28	132.96%	\$1,736.02	124.49%	130.91%	20
21	9,201 - 14,500	\$5,971.25	132.96%	\$2,040.68	124.49%	130.80%	21
22	14,501 - 21,400	\$6,100.56	132.96%	\$2,040.68	124.49%	130.84%	22
23	21,401 - 24,000	\$11,792.33	132.96%	\$4,360.50	124.49%	130.67%	23
24	24,001 - 46,000	\$12,722.16	132.96%	\$4,406.99	124.49%	130.78%	24
25	46,001 - 79,000	\$21,019.90	132.96%	\$8,145.67	124.49%	130.60%	25
26	79,001 - 377,000	\$41,020.86	132.96%	\$12,055.79	124.49%	131.04%	26
27	377,001 - 600,000					131.04%	27
28	600,001 - 4,250,000					131.04%	28
29	> 4,250,000					131.04%	29

Notes:

- Col. (F) = [Col (B) x Col. (C)] + [Col. (D) x Col. (E)] + [Col. (B) + Col. (D)]
- Rows (27) - (29): Weighted Average PVRR Factor meter & installation weights from Row (26).

**TABLE LRMCC-nco.2
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**NCO ANNUAL SERVICE, REGULATOR & METER (SRM) NEW HOOKUP INVESTMENT
2020 TCAP**

	Max Meter Flow Range	Meter & Regulator			Pipe & Installation			Residential Cost Line X	PVRR Factor	NCO Hookup Investment	NCO Residential Cost Line X	Forecast New Hookups
		Meter Type	M&R Cost	PVRR Factor	NCO Hookup Investment	Service Type	Service Cost					
	A	B	C	D	E	F	G	H	I	J		
	Cfh	(Dollars)	(Percent)	(Dollars)	(Dollars)	(Dollars)	(Percent)	(Dollars)				
1	<i>Medium Pressure</i>											
2	0-275	250	\$281	130.58%	\$367	Poly-0.5"	\$3,357	\$2,615	125.07%	\$4,198	\$3,271	7,811
3	276 - 425	425	\$701	131.17%	\$919	Poly-0.5"	\$3,357	\$2,615	125.07%	\$4,198	\$3,271	211
4	426-630	630	\$1,091	131.81%	\$1,438	Poly-1"	\$3,357	\$2,615	125.07%	\$4,198	\$3,271	115
5	631 - 800	8C	\$1,481	131.27%	\$1,944	Poly-1"	\$3,357	\$2,615	125.07%	\$4,198	\$3,271	82
6	801 - 1,100	11C	\$1,568	131.36%	\$2,060	Poly-1"	\$3,357	\$2,615	125.07%	\$4,198	\$3,271	38
7	1,101 - 1,500	15C	\$2,925	130.17%	\$3,807	Poly-1"	\$3,357	\$2,615	125.07%	\$4,198	\$3,271	14
8	1,501 - 2,000	2M	\$4,526	130.11%	\$5,889	Poly-1"	\$3,357	\$2,615	125.07%	\$4,198	\$3,271	6
9	2,001 - 3,000	3M	\$4,398	130.03%	\$5,719	Poly-1"	\$3,357	\$2,615	125.07%	\$4,198	\$3,271	6
10	3,001 - 5,000	5M	\$5,340	130.55%	\$6,971	Poly-2"	\$7,059	\$2,615	125.07%	\$8,829	\$3,271	3
11	5,001 - 7,000	7M	\$5,657	130.68%	\$7,392	Poly-2"	\$7,059	\$2,615	125.07%	\$8,829	\$3,271	1
12												
13	<i>High Pressure</i>											
14	0 - 940	400	\$2,526	129.72%	\$3,277	Poly-1"	\$3,357	\$2,615	125.07%	\$4,198	\$3,271	0
15	941 - 1,050	8C	\$4,848	130.30%	\$6,317	Poly-1"	\$3,357	\$2,615	125.07%	\$4,198	\$3,271	-
16	1,051 - 1,500	630	\$2,916	130.16%	\$3,795	Poly-1"	\$3,357	\$2,615	125.07%	\$4,198	\$3,271	-
17	1,501 - 2,700	2M	\$5,020	130.39%	\$6,546	Poly-1"	\$3,357	\$2,615	125.07%	\$4,198	\$3,271	-
18	2,701 - 4,000	3M	\$4,892	130.33%	\$6,376	Poly-2"	\$7,059	\$2,615	125.07%	\$8,829	\$3,271	-
19	4,001 - 6,600	5M	\$6,559	130.72%	\$8,574	Poly-2"	\$7,059	\$2,615	125.07%	\$8,829	\$3,271	-
20	6,601 - 9,200	7M	\$7,164	130.91%	\$9,379	Poly-2"	\$7,059	\$2,615	125.07%	\$8,829	\$3,271	0
21	9,201 - 14,500	11M	\$8,012	130.80%	\$10,480	Poly-3"	\$12,815	\$2,615	125.07%	\$16,028	\$3,271	1
22	14,501 - 21,400	16M	\$8,141	130.84%	\$10,652	Poly-3"	\$12,815	\$2,615	125.07%	\$16,028	\$3,271	1
23	21,401 - 24,000	11M-HP	\$16,153	130.67%	\$21,108	Poly-4"	\$15,533	\$2,615	125.07%	\$19,428	\$3,271	0
24	24,001 - 46,000	16M-HP	\$17,129	130.78%	\$22,402	Poly-4"	\$15,533	\$2,615	125.07%	\$19,428	\$3,271	0
25	46,001 - 79,000	23M-HP	\$29,166	130.60%	\$38,089	Steel-4"	\$27,696	\$2,615	125.07%	\$34,640	\$3,271	0
26	79,001 - 377,000	8" Turbine	\$53,077	131.04%	\$69,550	Steel-6"	\$42,055	\$2,615	125.07%	\$52,599	\$3,271	0
27	377,001 - 600,000	Turbine	\$0	131.04%	\$0	Steel-8"	\$0	\$0	125.07%	\$0	\$0	-
28	600,001 - 4,250,000	Turbine	\$0	131.04%	\$0	Steel-16"	\$0	\$0	125.07%	\$0	\$0	-
29	> 4,250,000	Turbine	\$0	131.04%	\$0	Steel-24"	\$0	\$0	125.07%	\$0	\$0	-

- Notes:
1. Col. (E) = Col. (C) x Col. (D).
 2. Col. (I) = Col. (G) x Col. (H).
 3. Col. (K) = [Col. (E) + Col. (I)] x Col. (J).

**TABLE LRMCC-nc0.3
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**WEIGHTED MSA BOOK LIFE
2024 TCAP**

	Max Meter Flow Range	Meter, Regulator, & Fitting Costs	Meter & Regulator Book Life	Installation Costs	Installation Costs Book Life	Weighted Average PVRR Factor	
	A	B	C	D	E	F	
	Cfh	(Dollars)	(Years)	(Dollars)	(Years)	(Percent)	
1	<i>Medium Pressure</i>						1
2	0-275	\$201.92	41.0	\$79.05	35.0	39.3	2
3	276 - 425	\$552.79	41.0	\$147.95	35.0	39.7	3
4	426-630	\$942.70	41.0	\$147.95	35.0	40.2	4
5	631 - 800	\$1,184.83	41.0	\$295.89	35.0	39.8	5
6	801 - 1,100	\$1,272.08	41.0	\$295.89	35.0	39.9	6
7	1,101 - 1,500	\$1,959.59	41.0	\$965.32	35.0	39.0	7
8	1,501 - 2,000	\$3,004.61	41.0	\$1,521.50	35.0	39.0	8
9	2,001 - 3,000	\$2,876.82	41.0	\$1,521.50	35.0	38.9	9
10	3,001 - 5,000	\$3,818.62	41.0	\$1,521.50	35.0	39.3	10
11	5,001 - 7,000	\$4,135.22	41.0	\$1,521.50	35.0	39.4	11
12							12
13	<i>High Pressure</i>						13
14	0 - 940	\$1,560.80	41.0	\$965.32	35.0	38.7	14
15	941 - 1,050	\$3,326.33	41.0	\$1,521.50	35.0	39.1	15
16	1,051 - 1,500	\$1,950.71	41.0	\$965.32	35.0	39.0	16
17	1,501 - 2,700	\$3,498.37	41.0	\$1,521.50	35.0	39.2	17
18	2,701 - 4,000	\$3,370.57	41.0	\$1,521.50	35.0	39.1	18
19	4,001 - 6,600	\$4,823.01	41.0	\$1,736.02	35.0	39.4	19
20	6,601 - 9,200	\$5,428.28	41.0	\$1,736.02	35.0	39.5	20
21	9,201 - 14,500	\$5,971.25	41.0	\$2,040.68	35.0	39.5	21
22	14,501 - 21,400	\$6,100.56	41.0	\$2,040.68	35.0	39.5	22
23	21,401 - 24,000	\$11,792.33	41.0	\$4,360.50	35.0	39.4	23
24	24,001 - 46,000	\$12,722.16	41.0	\$4,406.99	35.0	39.5	24
25	46,001 - 79,000	\$21,019.90	41.0	\$8,145.67	35.0	39.3	25
26	79,001 - 377,000	\$41,020.86	41.0	\$12,055.79	35.0	39.6	26
27	377,001 - 600,000					39.6	27
28	600,001 - 4,250,000					39.6	28
29	> 4,250,000					39.6	29

Notes:

1. Col. (F) = [Col. (B) x Col. (C)] + [Col. (D) x Col. (E)] ÷ [Col. (B) + Col. (D)]
2. Rows (27) - (29): Weighted Average Book Life meter & installation weights from Row (26).

Data Sources: MSA Cost tab and Finance Group for Book Life

TABLE LRMCC-nc0.4
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
NCO ANNUAL SERVICE, REGULATOR & METER (SRM) REPLACEMENT COST
2024 TCAP

	Meter & Regulator Replacement						Replacement Pipe & Installation					Number of Existing Customers	Total SRM Annual Cost Replacement	
	Max Meter Flow Range	Meter Type	M&R Cost	PVRR Factor	Replacement Investment	Replacement Rate	Service Type	Service Cost	PVRR Factor	Replacement Investment	Replacement Rate			
	A	B	C	D	E	F	G	H	I	J	K			L
	Cfh	(Dollars)	(Percent)	(Dollars)	(Percent)		(Dollars)	(Percent)	(Dollars)	(Percent)		(Dollars)		
1	<i>Medium Pressure</i>													1
2	0-275	250	\$202	124.49%	\$251	2.5%	Poly-0.5"	\$10,304	125.07%	\$12,888	1.5%	829,100	\$169,692,606	2
3	276 - 425	400	\$553	124.49%	\$688	2.5%	Poly-0.5"	\$10,304	125.07%	\$12,888	1.5%	23,825	\$5,136,589	3
4	426-630	630	\$943	124.49%	\$1,174	2.5%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	13,822	\$3,784,440	4
5	631 - 800	8C	\$1,185	124.49%	\$1,475	2.5%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	10,411	\$2,932,307	5
6	801 - 1,100	11C	\$1,272	124.49%	\$1,584	2.5%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	5,516	\$1,568,294	6
7	1,101 - 1,500	15C	\$1,960	124.49%	\$2,440	2.6%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	2,458	\$754,891	7
8	1,501 - 2,000	2M	\$3,005	124.49%	\$3,741	2.6%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	1,683	\$573,143	8
9	2,001 - 3,000	3M	\$2,877	124.49%	\$3,581	2.6%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	2,054	\$691,388	9
10	3,001 - 5,000	5M	\$3,819	124.49%	\$4,754	2.5%	Poly-2"	\$32,214	125.07%	\$40,291	1.5%	929	\$688,260	10
11	5,001 - 7,000	7M	\$4,135	124.49%	\$5,148	2.5%	Poly-2"	\$32,214	125.07%	\$40,291	1.5%	405	\$303,982	11
12	<i>High Pressure</i>													12
13	<i>High Pressure</i>													13
14	0 - 940	400	\$1,561	124.49%	\$1,943	2.6%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	2	\$588	14
15	941 - 1,050	8C	\$3,326	124.49%	\$4,141	2.6%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	-	\$0	15
16	1,051 - 1,500	630	\$1,951	124.49%	\$2,429	2.6%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	-	\$0	16
17	1,501 - 2,700	2M	\$3,498	124.49%	\$4,355	2.6%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	-	\$0	17
18	2,701 - 4,000	3M	\$3,371	124.49%	\$4,196	2.6%	Poly-2"	\$32,214	125.07%	\$40,291	1.5%	1	\$725	18
19	4,001 - 6,600	5M	\$4,823	124.49%	\$6,004	2.5%	Poly-2"	\$32,214	125.07%	\$40,291	1.5%	1	\$770	19
20	6,601 - 9,200	7M	\$5,428	124.49%	\$6,758	2.5%	Poly-2"	\$32,214	125.07%	\$40,291	1.5%	7	\$5,515	20
21	9,201 - 14,500	11M	\$5,971	124.49%	\$7,434	2.5%	Poly-3"	\$41,203	125.07%	\$51,534	1.5%	349	\$341,335	21
22	14,501 - 21,400	16M	\$6,101	124.49%	\$7,595	2.5%	Poly-3"	\$41,203	125.07%	\$51,534	1.5%	218	\$214,061	22
23	21,401 - 24,000	11M-HP	\$11,792	124.49%	\$14,681	2.5%	Poly-4"	\$32,950	125.07%	\$41,211	1.5%	23	\$23,015	23
24	24,001 - 46,000	16M-HP	\$12,722	124.49%	\$15,838	2.5%	Poly-4"	\$32,950	125.07%	\$41,211	1.5%	72	\$74,072	24
25	46,001 - 79,000	23M-HP	\$21,020	124.49%	\$26,169	2.5%	Steel-4"	\$52,031	125.07%	\$65,076	1.5%	21	\$34,768	25
26	79,001 - 377,000	8" Turbine	\$41,021	124.49%	\$51,069	2.5%	Steel-6"	\$64,522	125.07%	\$80,700	1.5%	6	\$15,051	26
27	377,001 - 600,000	Turbine	\$0	0.00%	\$0	2.5%	Steel-8"	\$0	125.07%	\$0	1.5%	-	\$0	27
28	600,001 - 4,250,000	Turbine	\$0	0.00%	\$0	2.5%	Steel-16"	--	125.07%	\$0	1.5%	-	\$0	28
29	> 4,250,000	Turbine	\$0	0.00%	\$0	2.5%	Steel-24"	--	125.07%	\$0	1.5%	-	\$0	29

Notes:

- Col. (E) = Col. (C) x Col. (D).
- Col. (J) = Col. (H) x Col. (I).
- For Rows (2) - (3): Col. (M) = [Col. (E) x Col. (L) x Col. (F) x [1 - Note 6]] + [Col. (J) x Col. (L) x Col. (K)]
- For Rows (4) - (28): Col. (M) = [Col. (E) x Col. (L) x Col. (F) x [1 - Note 7]] + [Col. (J) x Col. (L) x Col. (K)]
- Col. (L) Number of Existing Customers = 2016 Recorded Customers (Total at Inception of TCAP Period) x Proportion of Total @ Meter Flow.
0.00% Percent of small MSA's (Flow = 0 - 375 Cfh) replaced with refurbished meter - provided by SDG&E Gas Engineering Dept.
1.66% Percent of other MSA's (Flow > 375 Cfh) replaced with refurbished meter - provided by SDG&E Gas Engineering Dept.

Data Sources: tabs: MSA Cost, MSA PVRR, MSA NCOp1, MSA Life, Factors.
Data Sources: SDG&E Gas Engineering & Finance Group

TABLE LRMCC-nco.5
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
FORECAST NEW HOOKUPS FOR 2023-2027
2024 TCAP

	Customer Class	Year-End		2024 Hookups	Year-End		2025 Hookups	Year-End		2026 Hookups	Year-End		2027 Hookups	Average Annual New Hookups
		2023	2024		2024	2025		2025	2026		2026	2027		
	A	B	C	D	E	F	G	E	F	G	E	F	G	H
1	Residential	888,738	896,990	8,252	896,990	905,216	8,226	905,216	913,509	8,293	913,509	921,721	8,212	8,246
2	NGV	37	37	-	37	37	-	37	38	1	38	38	-	0
3	Core C&I - GN3	30,378	30,424	46	30,424	30,467	43	30,467	30,510	43	30,510	30,549	39	43
4	Noncore C&I - GTNC	50	50	-	50	50	-	50	50	-	50	50	-	4
5	EG - Cogen	96	96	-	96	96	-	96	96	-	96	96	-	5
6	Power Plants	-	-	-	-	-	-	-	-	-	-	-	-	6
7														7
8	Total Customers	919,299	927,597	8,298	927,597	935,866	8,269	935,866	944,203	8,337	944,203	952,454	8,251	8,289

- Notes:
1. Col. (D) = Col. (C) - Col (B).
 2. Col. (G) = Col. (F) - Col (E).
 3. Col. (J) = Col. (I) - Col (H).
 4. Col. (K) = Average Col. (D) & Col (G) & Col (J).

**TABLE LRMCC-nc0.6
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**FORECAST NEW HOOKUPS BY METER TYPE BY CUSTOMER CLASS
2020 TCAP**

	Max Meter Flow Range	Meter Type	Res	NGV	GN-3	Total Core	GTNC			EG			Total Noncore	System Total	
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	N	O	
	Cfh														
1	<i>Medium Pressure</i>														1
2	0-275	250	7,791	0	20	7,811	-	-	-	-	-	-	-	7,811	
3	276 - 425	425	207	-	3	211	-	-	-	-	-	-	-	211	
4	426-630	630	112	-	3	115	-	-	-	-	-	-	-	115	
5	631 - 800	8C	79	0	3	82	-	-	-	-	-	-	-	82	
6	801 - 1,100	11C	35	0	3	38	-	-	-	-	-	-	-	38	
7	1,101 - 1,500	15C	11	-	2	14	-	-	-	-	-	-	-	14	
8	1,501 - 2,000	2M	4	-	2	6	-	-	-	-	-	-	-	6	
9	2,001 - 3,000	3M	4	0	3	6	-	-	-	-	-	-	-	6	
10	3,001 - 5,000	5M	2	0	1	3	-	-	-	-	-	-	-	3	
11	5,001 - 7,000	7M	1	0	1	1	-	-	-	-	-	-	-	1	
12														12	
13	<i>High Pressure</i>														
14	0 - 940	400	-	-	0	0	-	-	-	-	-	-	-	0	
15	941 - 1,050	8C	-	-	-	-	-	-	-	-	-	-	-	-	
16	1,051 - 1,500	630	-	-	-	-	-	-	-	-	-	-	-	-	
17	1,501 - 2,700	2M	-	-	-	-	-	-	-	-	-	-	-	-	
18	2,701 - 4,000	3M	-	-	-	-	-	-	-	-	-	-	-	-	
19	4,001 - 6,600	5M	-	-	-	-	-	-	-	-	-	-	-	-	
20	6,601 - 9,200	7M	-	0	0	0	-	-	-	-	-	-	-	0	
21	9,201 - 14,500	11M	1	-	0	1	-	-	-	-	-	-	-	1	
22	14,501 - 21,400	16M	0	0	0	1	-	-	-	-	-	-	-	1	
23	21,401 - 24,000	11M-HP	0	0	0	0	-	-	-	-	-	-	-	0	
24	24,001 - 46,000	16M-HP	-	0	0	0	-	-	-	-	-	-	-	0	
25	46,001 - 79,000	23M-HP	-	0	0	0	-	-	-	-	-	-	-	0	
26	79,001 - 377,000	8" Turbine	-	-	0	0	-	-	-	-	-	-	-	0	
27	377,001 - 600,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	
28	600,001 - 4,250,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	
29	> 4,250,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	
30														30	
31	Total Customers		8,246	0	43	8,289	-	-	-	-	-	-	-	8,289	

Note:
1. New Hookups Forecast on Basis on Average Annual Net Customer Gain for 2017 - 2019 TCAP Period.

verify 8,246 0 43 8,289 - - - - - - - 8,289
Data Sources: Tabs: MSA Cost, MSALoc v2

TABLE LRMCC-nc0.7
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

NCO ANNUALIZED SRM NEW HOOKUP & NO REPLACEMENT INVESTMENT BY CUSTOMER CLASS
2020 TCAP

	Max Meter Flow Range	Meter Type	Per Customer SRM Invstmt	Res Per Customer G-R SRM Line X	Res	Other Res	NGV	GN-3	Total Core	GTNC			EG		Total	Total Noncore
										MPD	HPD	Total	< 3 MM	> 3 MM		
	A	B	C		D		E	F	G	H	I	J	K	L	M	O
	Cfh		(Dollars)													
1	<i>Medium Pressure</i>															
2	0-275	250	\$42	\$34	\$27,476,427	\$558,649	\$287	\$615,431	\$28,650,794	\$0	\$0	\$0	\$43	\$0	\$0	\$0
3	276 - 425	425	\$44	\$36	\$755,745	\$48,125	\$0	\$107,920	\$911,790	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	426-630	630	\$45	\$38	\$425,005	\$28,456	\$0	\$112,270	\$565,731	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	631 - 800	8C	\$46	\$39	\$307,482	\$26,648	\$29	\$117,236	\$451,394	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	801 - 1,100	11C	\$40	\$34	\$107,722	\$20,222	\$49	\$89,081	\$217,073	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	1,101 - 1,500	15C	\$40	\$36	\$35,558	\$8,734	\$0	\$59,416	\$103,708	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	1,501 - 2,000	2M	\$31	\$28	\$8,370	\$2,969	\$0	\$45,312	\$56,651	\$0	\$0	\$0	\$1,055	\$0	\$0	\$0
8	2,001 - 3,000	3M	\$27	\$25	\$2,369	\$8,224	\$33	\$52,975	\$63,601	\$0	\$0	\$0	\$221	\$0	\$0	\$0
9	3,001 - 5,000	5M	\$41	\$27	\$457	\$5,887	\$76	\$36,586	\$43,006	\$38	\$0	\$38	\$416	\$0	\$0	\$38
10	5,001 - 7,000	7M	\$40	\$27	\$214	\$2,202	\$124	\$15,418	\$17,958	\$259	\$0	\$259	\$286	\$0	\$0	\$259
11																
12	<i>High Pressure</i>															
13	0 - 940	400	\$6	\$5	\$0	\$0	\$0	\$7	\$7	\$0	\$0	\$0	\$6	\$0	\$0	\$0
14	941 - 1,050	8C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	1,051 - 1,500	630	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	1,501 - 2,700	2M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
17	2,701 - 4,000	3M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	4,001 - 6,600	5M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19	6,601 - 9,200	7M	\$13	\$9	\$0	\$0	\$8	\$16	\$24	\$12	\$0	\$12	\$0	\$95	\$190	\$107
20	9,201 - 14,500	11M	\$73	\$38	\$76	\$4,839	\$0	\$23,020	\$27,934	\$465	\$131	\$596	\$221	\$0	\$0	\$596
21	14,501 - 21,400	16M	\$80	\$42	\$169	\$3,246	\$542	\$13,925	\$17,883	\$1,104	\$0	\$1,104	\$81	\$0	\$0	\$1,104
22	21,401 - 24,000	11M-HP	\$121	\$73	\$0	\$490	\$223	\$1,573	\$2,287	\$444	\$0	\$444	\$0	\$218	\$436	\$663
23	24,001 - 46,000	16M-HP	\$59	\$36	\$0	\$0	\$182	\$3,644	\$3,827	\$381	\$214	\$595	\$181	\$107	\$214	\$702
24	46,001 - 79,000	23M-HP	\$61	\$35	\$0	\$0	\$37	\$645	\$682	\$167	\$109	\$276	\$185	\$328	\$656	\$604
25	79,001 - 377,000	8" Turbine	\$66	\$40	\$0	\$0	\$0	\$157	\$157	\$122	\$120	\$242	\$0	\$0	\$0	\$242
26	377,001 - 600,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27	600,001 - 4,250,000	Turbine														
28	> 4,250,000	Turbine														
29	Total				\$29,119,594	\$718,691	\$1,591	\$1,294,630	\$31,134,506	\$2,992	\$573	\$3,565	\$2,694	\$748	\$1,496	\$4,313
30	Forecast Customers				857,179	16,889	28	30,937	905,032	44	9	53	72	18	90	143
31																
32	Average SRM Cost				\$34	\$43	\$58	\$42	\$34	\$68	\$64	\$67	\$37	\$42	\$17	\$30

Notes:

- Row (29) = Total of NCO Annualized SRM New Hookup & Replacement Investment x Number of MSA's per Customer Segment.
- Row (32) = Row (29) ÷ Row (30).

Data Sources: tabs: MSA Cost, MSA Fcst, MSA NCOp1

TABLE LRMCC-nco.7
 SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
 NCO ANNUALIZED SRM NEW HOOKUP & REPLACEMENT INVESTMENT BY CUSTOMER CLASS
 2020 TCAP

	Max Meter Flow Range	Meter Type	Per Customer SRM Invstmt	Res SRM Invstmt	Res	Other Res	Res			Total Core	GTNC			EG			Total Noncore	System Total		
							Res	NGV	GN-3		MPD	HPD	Total	< 3 MM	< 3 MM	> 3 MM			Total	
	A	B	C	D			D	E	F	G	H	I	J	K	L	M	N	O	P	
	Ch		(Dollars)																	
1	Medium Pressure																			
2	0-275	250	\$244	\$236	\$191,579,939	\$3,217,295	\$194,797,234	\$1,651	\$3,544,310	\$198,343,195	\$0	\$0	\$0	\$248	\$248	\$0	\$248	\$0	\$198,343,195	
3	276 - 425	425	\$254	\$246	\$5,149,539	\$277,208	\$5,426,747	\$0	\$621,632	\$6,048,379	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,048,379	
4	426-630	630	\$309	\$302	\$3,389,419	\$194,273	\$3,583,692	\$0	\$766,479	\$4,350,171	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,350,171	
5	631 - 800	8C	\$316	\$309	\$2,405,948	\$181,052	\$2,586,999	\$194	\$796,508	\$3,383,701	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,383,701	
6	801 - 1,100	11C	\$306	\$300	\$948,778	\$154,704	\$1,103,483	\$376	\$681,509	\$1,785,367	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,785,367	
7	1,101 - 1,500	15C	\$320	\$315	\$315,716	\$69,577	\$385,293	\$0	\$473,306	\$858,599	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$858,599	
8	1,501 - 2,000	2M	\$330	\$327	\$98,595	\$32,035	\$130,630	\$0	\$488,839	\$619,469	\$0	\$0	\$0	\$11,380	\$11,380	\$0	\$11,380	\$0	\$619,469	
9	2,001 - 3,000	3M	\$321	\$318	\$30,568	\$96,977	\$127,545	\$394	\$624,667	\$752,606	\$0	\$0	\$0	\$2,602	\$2,602	\$0	\$2,602	\$0	\$752,606	
10	3,001 - 5,000	5M	\$687	\$672	\$11,556	\$98,595	\$110,151	\$1,285	\$612,709	\$724,125	\$630	\$0	\$630	\$5,964	\$6,964	\$0	\$6,964	\$630	\$724,125	
11	5,001 - 7,000	7M	\$699	\$685	\$5,540	\$38,152	\$43,693	\$2,146	\$267,202	\$313,041	\$4,484	\$0	\$4,484	\$4,960	\$4,960	\$0	\$4,960	\$4,484	\$317,525	
12	High Pressure																			
13	0 - 940	400	\$273	\$273	\$0	\$0	\$0	\$0	\$323	\$323	\$0	\$0	\$0	\$277	\$277	\$0	\$277	\$0	\$323	
14	941 - 1,050	8C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
15	1,051 - 1,500	630	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
16	1,501 - 2,700	2M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
17	2,701 - 4,000	3M	\$403	\$403	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$725	\$725	\$725	\$725	
18	4,001 - 6,600	5M	\$840	\$840	\$0	\$0	\$0	\$0	\$0	\$0	\$770	\$0	\$770	\$0	\$0	\$0	\$0	\$0	\$770	
19	6,601 - 9,200	7M	\$570	\$566	\$0	\$0	\$350	\$672	\$1,022	\$522	\$0	\$522	\$0	\$0	\$0	\$4,102	\$4,102	\$4,624	\$5,646	
20	9,201 - 14,300	11M	\$931	\$896	\$1,813	\$62,143	\$63,956	\$0	\$295,645	\$359,601	\$5,976	\$1,676	\$7,652	\$2,833	\$2,833	\$0	\$2,833	\$7,652	\$367,253	
21	14,501 - 21,400	16M	\$974	\$936	\$3,784	\$39,394	\$43,178	\$6,681	\$168,988	\$218,748	\$13,394	\$0	\$13,394	\$986	\$986	\$0	\$986	\$13,394	\$232,141	
22	21,401 - 24,000 11M-HP		\$1,067	\$1,019	\$0	\$4,315	\$4,315	\$1,966	\$13,851	\$20,131	\$3,912	\$0	\$3,912	\$0	\$0	\$1,920	\$1,920	\$5,833	\$25,964	
23	24,001 - 46,000 16M-HP		\$993	\$971	\$0	\$0	\$3,051	\$60,969	\$64,020	\$6,375	\$3,577	\$9,951	\$3,022	\$3,022	\$1,788	\$4,811	\$11,740	\$14,883	\$75,759	
24	46,001 - 79,000 23M-HP		\$1,496	\$1,470	\$0	\$0	\$0	\$919	\$15,887	\$16,806	\$4,113	\$2,692	\$6,806	\$4,550	\$4,550	\$8,077	\$12,628	\$14,883	\$31,689	
25	79,001 - 377,000 Turbine		\$2,578	\$2,551	\$0	\$0	\$0	\$0	\$6,084	\$6,084	\$4,726	\$4,640	\$9,366	\$0	\$0	\$0	\$0	\$9,366	\$15,450	
26	377,001 - 600,000 Turbine		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
27	600,001 - 4,250,000 Turbine		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
28	> 4,250,000 Turbine		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
29	Total				\$208,406,916	\$18,893	\$9,439,580	\$217,865,389	\$44,901	\$12,585	\$57,486	\$44,901	\$12,585	\$57,486	\$37,826	\$37,826	\$16,613	\$54,439	\$74,099	\$217,939,487
30	Forecast Customers				\$74,067	\$28	\$0,937	\$905,032	\$44	\$9	\$53	\$44	\$9	\$53	\$72	\$72	\$18	\$90	\$143	\$905,175
31																				
32	Average SRM Cost						\$238	\$684	\$305	\$241	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	

Notes:
 1. Row (29) = Total of NCO Annualized SRM New Hookup & Replacement Investment x Number of MSA's per Customer Segment.
 2. Row (32) = Row (29) + Row (30).

Data Sources: tabs: MSA Cost, MSA Fost, MSA NCOp1, MSA NCOp2

SDG&E Customer Costs
 Testimony Tables

TABLE 1 CUSTOMER-RELATED LRMC - CAPITAL COSTS	
Customer Class	Rental-Method Customer Cost (2024 \$/customer)
Residential	\$202
Core Commercial/Industrial	\$398
Natural Gas Vehicle	\$1,250
Noncore Commercial/Industrial	\$2,370
Small Electric Generation	\$987
Large Electric Generation	\$2,353

TABLE 3 CUSTOMER-RELATED LONG RUN MARGINAL COSTS (2024 \$/customer)						
Customer Class	Annualized Capital Cost	Expense-Related O&M				Total \$/Customer
		Direct	M&S	A&G	General Plant	
Residential	\$202	\$43	\$0	\$12	\$11	\$269
Core Commercial/Industrial	\$398	\$124	\$1	\$35	\$31	\$590
Natural Gas Vehicle	\$1,250	\$230	\$2	\$64	\$57	\$1,603
Noncore Commercial/Industrial	\$2,370	\$675	\$7	\$189	\$168	\$3,409
Small Electric Generation	\$987	\$390	\$4	\$109	\$97	\$1,588
Large Electric Generation	\$2,353	\$1,233	\$13	\$344	\$307	\$4,251

TABLE 7 REAL ECONOMIC CARRYING CHARGE FACTORS	
Cost Type	RECC %
Meters and Regulators	8.02%
Meter/Regulator Installation	8.36%
Service Line Pipe	7.37%
Weighted-Average Distribution	7.37%
Materials and Supplies	13.12%

SDG&E Customer Costs
 Testimony Tables

TABLE 2				
CUSTOMER-RELATED DIRECT MARGINAL O&M EXPENSES				
(2024 \$)				
Customer Class	FERC 870-894 \$000	FERC 901-910 \$000	Customers per Class	Direct O&M \$/Customer
Residential	\$36,705	\$888	864,505	\$43
Core Commercial/Industrial	\$3,232	\$28	26,214	\$124
Natural Gas Vehicle	\$10	\$0.0	45	\$230
Noncore Commercial/Industrial	\$32	\$8	58	\$675
Small Electric Generation	\$19	\$9	71	\$390
Large Electric Generation	\$11	\$1	10	\$1,233

TABLE 10			
M&S LOADING FACTORS			
(2024 \$)			
Customer Class	Allocated M&S	Customers per Class	M&S Loader \$/Customer
Residential	\$409,445	864,505	\$0.47
Core Commercial/Industrial	\$35,504	26,214	\$1.35
Natural Gas Vehicle	\$112	45	\$2.50
Noncore Commercial/Industrial	\$426	58	\$7.35
Small Electric Generation	\$302	71	\$4.25
Large Electric Generation	\$134	10	\$13.42
Distribution Function	Allocated M&S	Peak-day Load (mcf)	M&S Loader \$/mcf
Medium-Pressure	\$644,432	440,066	\$1.46
High-Pressure	\$166,452	462,002	\$0.36

TABLE 4			
DISTRIBUTION-RELATED DIRECT MARGINAL O&M EXPENSES			
(2024 \$)			
Distribution Function	FERC 870-894 \$000	Peak-day Load (mcf)	Direct O&M \$/mcf
Medium-Pressure	\$19,699	440,066	\$44.76
High-Pressure	\$1,172	462,002	\$2.54

SDG&E 2024 TCAP

**Section 2
Distribution Cost Model for LRMC Studies**

SDGE gas 2024

SDG&E Cost Allocation LRMC Distribution Cost Results

MARGINAL COST COMPONENTS \$000's		Source
Medium Pressure Distribution Costs \$/mmcf	\$246.73	Dist MC
High Pressure Distribution Costs \$/mmcf	\$47.79	Dist MC

**TABLE LRMD-1
 SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
 LRMC O&M Loaders
 SDGE gas 2024**

	Input	Source (1)
O&M w/o A&G HPD	\$1,210	LF-O&M Tab
O&M w/o A&G MPD	\$20,501	LF-O&M Tab
Marginal Percent of O&M HPD	91.08%	Dist O&M MC
Marginal Percent of O&M MPD	90.38%	Dist O&M MC
Marginal A&G/Payroll Taxes Loading Factor as a % of O&M expenses	27.94%	LF-A&G Tab
General Plant Loading Factor as a % of O&M expenses	24.95%	LF-GPL Tab
Annualized M&S Customer Related Costs \$/yr	\$419,449	LF-M&S Tab
Annualized M&S HDP Distribution Load Related Costs \$/yr	\$156,567	LF-M&S Tab
Annualized M&S MDP Distribution Load Related Costs \$/yr	\$606,163	LF-M&S Tab
O&M WEF for Escalation	1.06	O&M WEF Tab

Notes:
 (1) from "SDGE OM Loaders" file

TABLE LRMD-4
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
DISTRIBUTION REGRESSION INVESTMENTS
SDGE gas 2024

	Year	Demand-Rel Portion	HPD Inv as % total Dist Inv	MPD Portion	HPD Portion	Handy- Whitman Index	MPD Adjusted to 2020\$'s	HPD Adjusted to 2020\$'s	MPD Cumulative	HPD Cumulative
	A	B	C	D=B*C	E=B-D	F	G	H	I	J
1	2012	\$7,269	20.53%	\$5,777	\$1,492	0.7844	\$7,557	\$1,952	\$7,557	\$1,952
2	2013	\$5,571	20.53%	\$4,427	\$1,144	0.7861	\$5,780	\$1,493	\$13,337	\$3,445
3	2014	\$8,028	20.53%	\$6,380	\$1,648	0.7936	\$8,249	\$2,131	\$21,586	\$5,576
4	2015	\$11,438	20.53%	\$9,090	\$2,348	0.7964	\$11,711	\$3,025	\$33,298	\$8,601
5	2016	\$7,823	20.53%	\$6,217	\$1,606	0.8030	\$7,945	\$2,052	\$41,243	\$10,653
6	2017	\$6,100	20.53%	\$4,848	\$1,252	0.8253	\$6,028	\$1,557	\$47,271	\$12,210
7	2018	\$15,280	20.53%	\$12,143	\$3,137	0.8490	\$14,677	\$3,791	\$61,948	\$16,001
8	2019	\$4,541	20.53%	\$3,609	\$932	0.8841	\$4,189	\$1,082	\$66,137	\$17,083
9	2020	\$3,844	20.53%	\$3,055	\$789	0.9180	\$3,415	\$882	\$69,551	\$17,965
10	2021	\$6,752	20.53%	\$5,366	\$1,386	1.0000	\$5,506	\$1,422	\$75,057	\$19,387
11	2022	\$8,132	20.53%	\$6,463	\$1,669	1.0620	\$6,244	\$1,613	\$81,302	\$21,000
12	2023	\$9,333	20.53%	\$7,417	\$1,916	1.0395	\$7,321	\$1,891	\$88,623	\$22,891
13	2024	\$9,050	20.53%	\$7,192	\$1,858	1.0209	\$7,229	\$1,867	\$95,852	\$24,758
14	2025	\$9,050	20.53%	\$7,192	\$1,858	1.0261	\$7,192	\$1,858	\$103,045	\$26,616
15	2026	\$9,050	20.53%	\$7,192	\$1,858	1.0429	\$7,077	\$1,828	\$110,121	\$28,443
16	2027	\$9,050	20.53%	\$7,192	\$1,858	1.0647	\$6,932	\$1,790	\$117,053	\$30,234

Notes:

1. Cols. (B) - (E) expressed in nominal \$'s. Col. B recorded through 2016, 2017 - 2022 forecast
2. Cols. (J) - (K) expressed in Year 2020 \$'s.
3. Cols. (B) and (C) 2020 costs
4. Col. (B), Rows (1) - (16) from SDG&E Gas Distribution Engineering
5. Col F = Historical HPD Plant Investment Allocation Factor = HPD Mains Mileage Weighted by Net Plant Investment.

**TABLE LRMD-3
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
DISTRIBUTION PLANT WEIGHTED AVERAGE ECONOMIC INDEX
SDGE gas 2024**

		FERC Account						
		375 Structures and Improvements JUGPDS&I@PCF	376 - Mains CI JUGPDMCI@PCF	376 - Mains S JUGPDMS@PCF	376 - Main P JUGPDMP@PCF	378 measuring and Regulating Station Equip JUGPDSTM&R@PCF	Weighted Average	
	Year	A	B	C	D	E	F	G
1	2012	0.7346	0.6650	0.7106	0.8258	0.7267	0.7844	1
2	2013	0.7459	0.7102	0.7024	0.8332	0.7169	0.7861	2
3	2014	0.7625	0.7681	0.7054	0.8425	0.7387	0.7936	3
4	2015	0.7675	0.7587	0.6886	0.8562	0.7332	0.7964	4
5	2016	0.7841	0.7801	0.6816	0.8698	0.7414	0.8030	5
6	2017	0.8159	0.8323	0.7217	0.8823	0.7732	0.8253	6
7	2018	0.8551	0.8719	0.7685	0.8932	0.8104	0.8490	7
8	2019	0.8738	0.9138	0.8088	0.9256	0.8439	0.8841	8
9	2020	0.8960	0.9540	0.8542	0.9537	0.8714	0.9180	9
10	2021	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	10
11	2022	0.9997	0.9889	1.0872	1.0487	1.0582	1.0620	11
12	2023	0.9839	1.0202	1.0217	1.0510	0.9876	1.0395	12
13	2024	0.9862	1.0162	0.9776	1.0462	0.9629	1.0209	13
14	2025	0.9907	1.0033	0.9635	1.0618	0.9636	1.0261	14
15	2026	1.0046	1.0237	0.9789	1.0793	0.9798	1.0429	15
16	2027	1.0219	1.0559	1.0009	1.1010	1.0006	1.0647	16
17								17
18	2021 Plant (M\$)	\$43	\$0	\$299,608	\$563,208	\$21,186	\$884,045	18
19	2021 Plant (%)	0.00%	0%	34%	64%	2%	100%	19

Notes:

1. Economic Factors for distribution plant from Handy-Whitman Gas Utility Construction Cost Indexes
2. Plant Investment totals from SDG&E gas FERC Form 2 for year ending December 31, 2016 pp. 208 - 209.
2016 Plant Investment from FERC Form 2 for Year Ended December 31, 2016, Page 209.

**TABLE LRMD-5
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**HP DISTRIBUTION ANNUAL CUSTOMER GAIN
SDGE gas 2024**

	Year	Core Customers on HPD	Noncore Customers on HPD	System Total Customers on HPD D=B+C	% of CORE customers on MPD E	Core Customers on MPD F=B*E	% of NONCORE customers on MPD G	NONCore Customers on MPD H=C*G	System Total Customers on MPD I=F+H
	A	B	C	D=B+C	E	F=B*E	G	H=C*G	I=F+H
1	2012	856,693	106	856,799	99.999%	856,682	88.406%	94	856,776
2	2013	861,873	91	861,964	99.999%	861,862	88.406%	80	861,943
3	2014	865,790	98	865,888	99.999%	865,779	88.406%	86	865,866
4	2015	872,762	93	872,855	99.999%	872,751	88.406%	82	872,833
5	2016	877,978	106	878,084	99.999%	877,967	88.406%	94	878,061
6	2017	883,064	121	883,185	99.999%	883,053	88.406%	107	883,160
7	2018	888,887	119	889,006	99.999%	888,876	88.406%	105	888,981
8	2019	894,646	119	894,765	99.999%	894,635	88.406%	105	894,740
9	2020	900,933	119	901,052	99.999%	900,922	88.406%	105	901,027
10	2021	906,011	119	906,130	99.999%	906,000	88.406%	105	906,105
11	2022	911,748	119	911,867	99.999%	911,737	88.406%	105	911,842
12	2023	919,153	138	919,291	99.999%	919,141	88.406%	122	919,263
13	2024	927,451	138	927,589	99.999%	927,439	88.406%	122	927,561
14	2025	935,719	138	935,857	99.999%	935,707	88.406%	122	935,829
15	2026	944,055	138	944,193	99.999%	944,043	88.406%	122	944,165
16	2027	952,306	138	952,444	99.999%	952,294	88.406%	122	952,416
17	2028	960,405	138	960,543	99.999%	960,393	88.406%	122	960,515

Notes:

- Updated TCAP Forecast
- Data from SDGE R2 reports. Assume that core is 100% HPD and noncore is GTNC+EG exclude PP's, TLS (on transmission) through 2017
Average No. Customers - 12 months to Date, for Core = Total CORE + Res Aggreg Trans + Com Aggreg Trans
Noncore = Cogen Trans + NonCogen Trans (exclude TLS and Power Plant EG since these are served by transmission).

MP Cust. Factor:	Core	NonCore	Sources
# Customers on MPD	939,871	122	TCAP Forecast 7-7-2022
Cumulative # on HPD	939,883	138	TCAP Forecast 7-7-2022
% of HPD customers on MPD	99.999%	88.406%	

**TABLE LRMD-6
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**HPD PEAK-DAY REGRESSION DETERMINANTS
SDGE gas 2024**

**1-35 PEAK-DAY (1-35 YEAR PEAK-DAY OCCURRENCE)
MMcfd**

	Year	Res	NGV	GN-3	Core mmcf on HPD	GTNC MPD	GTNC HPD	EG < 3 MMth	EG > 3 MMth	Power Plant Load	Noncore mmcf on HPD	System Total mmcf on HPD	System Total Customers on HPD	Annual Change in Customers on HPD N=M-M	HPD Incremental Demand mmcf O=L/M* N	HPD Cumulative demand mmcf P=O+O
	A	B	C	D	E	F	G	H	I	J	K	L	M	N=M-M	O=L/M* N	P=O+O
1	2011															
2	2012	302	3	95	401	6	8	4	20	2	41	442	856,799	856,799	442	442
3	2013	301	4	93	397	6	7	5	19	2	38	435	861,964	5,165	3	444
4	2014	318	4	99	421	5	6	4	20	1	36	456	865,888	3,924	2	446
5	2015	309	4	99	412	6	10	5	16	0	38	450	872,855	6,967	4	450
6	2016	306	5	100	411	6	7	7	19	0	39	449	878,084	5,229	3	453
7	2017	322	5	103	430	6	8	6	18	1	39	469	883,185	5,101	3	455
8	2018	321	5	104	431	6	8	5	11	0	31	462	889,006	5,821	3	458
9	2019	312	6	100	417	8	9	7	11	0	35	452	894,765	5,759	3	461
10	2020	307	6	93	406	8	10	8	9	0	35	440	901,052	6,287	3	464
11	2021	302	6	96	404	9	10	7	11	1	38	442	906,130	5,078	2	467
12	2022	300	6	98	405	9	1	8	11		28	433	911,867	5,737	3	469
13	2023	299	6	99	404	9	1	8	11		28	432	919,291	7,424	3	473
14	2024	297	6	99	403	9	1	8	11		28	431	927,589	8,298	4	477
15	2025	296	6	99	401	9	1	8	10		28	429	935,857	8,268	4	481
16	2026	294	6	99	399	9	1	8	10		28	427	944,193	8,336	4	484
17	2027	293	6	98	398	9	1	8	10		28	425	952,444	8,251	4	488

Notes

Updated Historical from Demand Forecasting through 2021

**TABLE LRMD-8
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

MPD PEAK-DAY REGRESSION DETERMINANTS

SDGE gas 2024

**1-35 PEAK-DAY (1-35 YEAR PEAK-DAY OCCURRENCE)
MMCFD**

	Year A	Res B	NGV C	GN-3 D	Core mmcf on MPD E	GTNC MPD F	GTNC HPD G	EG < 3 MMth H	EG > 3 MMth I	Noncore mmcf on MPD J	System Total mmcf on MPD K	System Total Customers on MPD L	Annual Change in Customers on MPD M=L-L	MPD Incremental Demand mmcf N=K/L* M	MPD Cumulative demand mmcf P=N+N
1															
2	2011	287	2	89	377	7	0	2	2	11	388				
3	2012	302	2	93	398	6	0	2	2	11	409	856,776	856,776	409	409
4	2013	301	2	91	394	6	0	3	2	11	404	861,943	5,167	2	411
5	2014	318	2	97	417	5	0	3	2	10	427	865,866	3,923	2	413
6	2015	309	2	97	408	6	0	4	2	13	421	872,833	6,968	3	416
7	2016	306	3	98	407	6	0	5	2	12	419	878,061	5,227	2	419
8	2017	322	3	101	426	6	0	5	2	14	440	883,160	5,099	3	421
9	2018	321	3	102	426	6	0	4	3	14	440	888,981	5,821	3	424
10	2019	312	3	98	413	8	0	6	2	16	428	894,740	5,759	3	427
11	2020	307	3	91	402	8	0	5	2	16	417	901,027	6,287	3	430
12	2021	302	4	95	400	9	0	5	1	16	415	906,105	5,078	2	432
13	2022	300	4	98	402	9	0	6	1	16	418	911,842	5,737	3	435
14	2023	299	4	99	401	9	0	6	1	16	417	919,263	7,421	3	438
15	2024	297	4	99	400	9	0	6	1	15	415	927,561	8,298	4	442
16	2025	296	4	99	398	9	0	6	1	15	413	935,829	8,268	4	446
17	2026	294	4	98	396	9	0	6	1	15	412	944,165	8,336	4	449
18	2027	293	4	98	395	9	0	6	1	15	410	952,416	8,251	4	453

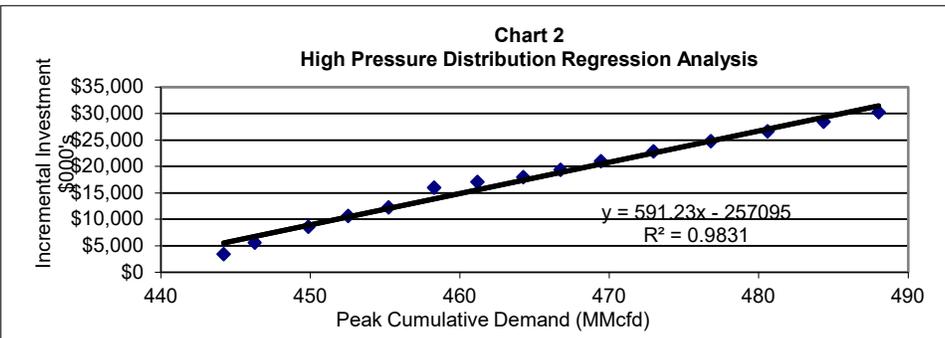
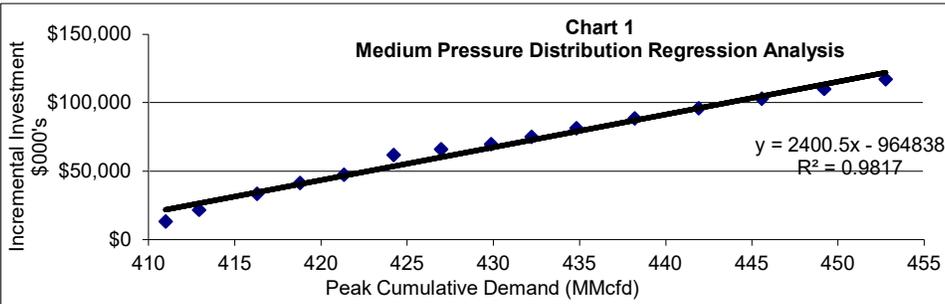
Note:

1. Updated Historical from Demand Forecasting through 2027

TABLE LRMD-9
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
Distribution Data for Regression Analysis
Capital Investment and Marginal Demand Measures

	Cumulative Distribution Investment \$000's	Cumulative HPD Investment \$000's	Cumulative MPD Investment \$000's	Cumulative HPD Demand mmcf	Cumulative MPD Demand mmcf
2013	\$16,782	\$3,445	\$13,337	444	411
2014	\$27,162	\$5,576	\$21,586	446	413
2015	\$41,899	\$8,601	\$33,298	450	416
2016	\$51,896	\$10,653	\$41,243	453	419
2017	\$59,480	\$12,210	\$47,271	455	421
2018	\$77,948	\$16,001	\$61,948	458	424
2019	\$83,219	\$17,083	\$66,137	461	427
2020	\$87,516	\$17,965	\$69,551	464	430
2021	\$94,444	\$19,387	\$75,057	467	432
2022	\$102,302	\$21,000	\$81,302	469	435
2023	\$111,514	\$22,891	\$88,623	473	438
2024	\$120,610	\$24,758	\$95,852	477	442
2025	\$129,660	\$26,616	\$103,045	481	446
2026	\$138,565	\$28,443	\$110,121	484	449
2027	\$147,287	\$30,234	\$117,053	488	453
Marginal Investment		\$591.23	\$2,400.53		

TABLE LRMD-9 (Cont)
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
Distribution Data for Regression Analysis
Capital Investment and Marginal Demand Measures



**TABLE LRMD-10
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
FULLY LOADED DISTRIBUTION LRMCs
SDGE gas 2024**

	HPD Marginal Cost \$/mcf	MPD Marginal Cost \$/mcf	Source
<u>Marginal Cost of High Pressure Distribution</u>			
Marginal Investment Cost \$/mcf	\$591.23	\$2,400.53	Regression
RECC Factor	7.37%	7.37%	Finance
Annualized Investment Cost \$/mcf	\$43.55	\$176.82	
<u>O&M Expenses:</u>			
O&M w/o A&G HPD \$000's	\$1,210	\$20,501	Loader Input
Marginal Percent of O&M HPD	91%	90%	Loader Input
HPD O&M Expense \$000's	\$1,102	\$18,529	
2016 1-35 Peak-Day Demand mmcf	462	440	HPD PD Det/ MPD PD Det
HPD O&M \$/mcf	\$2.39	\$42.11	
O&M WEF for Escalation	1.06	1.06	Loader Input
O&M Cost \$/mcf (2013 \$'s)	\$2.54	\$44.76	
<u>O&M Loaders:</u>			
A&G Loader:			
A&G Loader as % of direct O&M	27.94%	27.94%	Loader Input
% of A&G to be Functionalized	0%	0%	
A&G Loader \$/mcf (as % of direct O&M)	\$0.71	\$12.51	
General Plant Loader as % of direct O&M			
General Plant Loader \$/mcf	\$0.63	\$11.17	Loader Input
M&S Loaders:			
Annualized M&S HDP Distribution Load Related Costs \$	\$156,567	\$606,163	Loader Input
2016 1-35 Peak-Day Demand mcf	462,002	440,066	HPD PD Det/ MPD PD Det
O&M WEF for Escalation	1.06	1.06	Loader Input
M&S Cost \$/mcf	\$0.36	\$1.46	
Marginal Unit Cost of Distribution	\$47.79	\$246.73	

Notes:

Weighted average distribution RECC Factor from SDG&E Market Analysis & Planning Department.

Rows (9) - (12) & (24) - (27) from Workpapers

Tables "LF-1" and "LF-4", "LF-5", and "LF-6".

Escalation of O&M using weighted average escalation factor

TABLE LRMD-11
 SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
 SDGE gas 2024

TABLE 5	
MEDIUM-PRESSURE DISTRIBUTION LRM	
(2024 \$/MCF MPD peak day)	
Marginal Investment Cost	\$2,400.53
x <u>RECC Factor</u>	<u>7.37%</u>
= Annualized Investment Cost	\$176.82
 <u>Expense-Related</u>	
+ O&M Cost	\$44.76
+ A&G Cost	\$12.51
+ General / Common Plant Cost	\$11.17
+ <u>M&S Cost</u>	<u>\$1.46</u>
= Total Marginal Cost	\$246.73

TABLE 6	
HIGH-PRESSURE DISTRIBUTION LRM	
(2024 \$/MCF HPD peak day)	
Marginal Investment Cost	\$591.23
x <u>RECC Factor</u>	<u>7.37%</u>
= Annualized Investment Cost	\$43.55
 <u>Expense-Related</u>	
+ O&M Cost	\$2.54
+ A&G Cost	\$0.71
+ General / Common Plant Cost	\$0.63
+ <u>M&S Cost</u>	<u>\$0.36</u>
= Total Marginal Cost	\$47.79

SDG&E 2024 TCAP

**Section 3
O&M Loaders Model for LRMC Studies**

**SDGE 2024 TCAP
LRMC O&M Loader Model**

	Output	Source Tab
O&M w/o A&G HPD	\$1,210	LF-O&M Tab
O&M w/o A&G MPD	\$20,501	LF-O&M Tab
Marginal Percent of O&M HPD	91.08%	Dist O&M MC
Marginal Percent of O&M MPD	90.38%	Dist O&M MC
Marginal A&G/Payroll Taxes Loading Factor as a % of O&M expenses	27.94%	LF-A&G Tab
General Plant Loading Factor as a % of O&M expenses	24.95%	LF-GPL Tab
Annualized M&S Customer Related Costs \$/yr	\$419,449	LF-M&S Tab
Annualized M&S HDP Distribution Load Related Costs \$/yr	\$156,567	LF-M&S Tab
Annualized M&S MDP Distribution Load Related Costs \$/yr	\$606,163	LF-M&S Tab
O&M WEF for Escalation	1.06	O&M WEF Tab
Marginal Cust-Rel O&M		
870 - Operation Supervision & Engineering	\$3,782	Dist O&M MC
871 - Distribution Load Dispatching	\$19	Dist O&M MC
874 - Mains & Services Expenses	\$5,421	Dist O&M MC
875 - Measuring & Regulating Station Expenses	\$0	Dist O&M MC
878 - Meter & House Regulator Expenses	\$5,510	Dist O&M MC
879 - Customer Installations Expenses	\$8,727	Dist O&M MC
880 - Other Expenses	\$8,447	Dist O&M MC
881 - Rents	\$0	Dist O&M MC
885 - Maint Supervision & Engineering	\$0	Dist O&M MC
887 - Maintenance of Mains	\$1,237	Dist O&M MC
888 - Maintenance Of Compressor Station Eq	\$0	Dist O&M MC
889 - Maintenance of Meas. & Reg Station Eq	\$0	Dist O&M MC
892 - Maintenance of Services	\$2,998	Dist O&M MC
893 - Maint of Meters & House Regulators	\$2,258	Dist O&M MC
894 - Maintenance of Other Equipment	\$385	Dist O&M MC

TABLE LF-1
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
FUNCTIONALIZATION OF YEAR 2021 O&M EXPENSES
SDGE 2024 TCAP

		\$ thousands								
Functional Factor	Base Margin	MPD	HPD	Customer Costs	Total	Total	MPD	HPD	Customer Costs	
Gas Distribution:										
870- Operation Supervision & Engineering	Other Distr Operating Exp	\$8,611	\$2,108	\$93	\$6,411	\$8,611	100.0%	24.5%	1.1%	74.4%
871- Distr Load Dispatching	Other Distr Operating Exp	\$26	\$6	\$0	\$19	\$26	100.0%	24.5%	1.1%	74.4%
874- Mains & Services Exp	Demand Customer Factor DCF	\$11,881	\$6,176	\$271	\$5,433	\$11,881	100.0%	52.0%	2.3%	45.7%
875- Meas & Reg Station Exp	Demand Only Factor DOF	\$794	\$761	\$33	\$0	\$794	100.0%	95.8%	4.2%	0.0%
877- Meas & Reg Station Exp-City Gas Ck Station	Demand Only Factor DOF	(\$13)	(\$12)	(\$1)	\$0	(\$13)	100.0%	95.8%	4.2%	0.0%
878- Meter & House Regulator Exp	100% Customer Cost	\$5,510	\$0	\$0	\$5,510	\$5,510	100.0%	0.0%	0.0%	100.0%
879- Customer Installations Exp	100% Customer Cost	\$10,118	\$0	\$0	\$10,118	\$10,118	100.0%	0.0%	0.0%	100.0%
880- Other Expenses	Other Distr Operating Exp	\$13,836	\$3,387	\$149	\$10,301	\$13,836	100.0%	24.5%	1.1%	74.4%
881- Rents	Demand Only Factor DOF	\$34	\$33	\$1	\$0	\$34	100.0%	95.8%	4.2%	0.0%
885- Maint Supervision & Engineering	Other Distr Maintenance Exp	\$0	\$0	\$0	\$0	\$0	100.0%	51.9%	4.3%	43.8%
887- Maint. of Mains	Maint of Mains Factor Revised	\$8,863	\$6,925	\$609	\$1,330	\$8,863	100.0%	78.1%	6.9%	15.0%
888- Maint. Of Compressor Station Equipment	Demand Only Factor DOF	\$0	\$0	\$0	\$0	\$0	100.0%	95.8%	4.2%	0.0%
889- Maint. of Meas. & Reg Station Eq	Regulator Location Factor	\$910	\$876	\$34	\$0	\$910	100.0%	96.3%	3.7%	0.0%
892- Maint. of Services	100% Customer Cost	\$2,998	\$0	\$0	\$2,998	\$2,998	100.0%	0.0%	0.0%	100.0%
893- Maint. of Meters & Regulators	100% Customer Cost	\$2,258	\$0	\$0	\$2,258	\$2,258	100.0%	0.0%	0.0%	100.0%
894- Maint. of Other Eq	DIR/Other Distr Maintenance Exp	\$647	\$242	\$20	\$385	\$647	100.0%	37.4%	3.1%	59.5%
		\$66,473	\$20,501	\$1,210	\$44,761	\$66,473				

Calculation of Allocators:

DCF Demand-Cust Factor	Total	Med. Prss	Hi Press	Customer	
Miles in 2016	15,285	7,945	349	6,990	Source: Gas Distribution Engineering
	100.0%	52.0%	2.3%	45.7%	

Demand Only Factor	Total	Med. Prss	Hi Press	Customer	
Miles in 2016 (excludes service lines)	8,295	7,945	349	0	<== Customer set to Zero since this excludes service line.
	100.0%	95.8%	4.2%	0.0%	

\$ thousands				
Other Distr Operating Exp factor	Total	MPD	HPD	Customer
874- Mains & Services Exp	\$11,881	\$6,176	\$271	\$5,433
875- Meas & Reg Station Exp	\$794	\$761	\$33	\$0
877- Meas & Reg Station Exp-City Gas Ck Station	(\$13)	(\$12)	(\$1)	\$0
878- Meter & House Regulator Exp	\$5,510	\$0	\$0	\$5,510
879- Customer Installations Exp	\$10,118	\$0	\$0	\$10,118
Total	\$28,289	\$6,924	\$304	\$21,061
	100.0%	24.5%	1.1%	74.4%

Other Distr Maintenance Exp	Total	MPD	HPD	Customer
887- Maint. of Mains	\$8,863	\$6,925	\$609	\$1,330
888- Maint. Of Compressor Station Equipment	\$0	\$0	\$0	\$0
889- Maint. of Meas. & Reg Station Eq	\$910	\$876	\$34	\$0
892- Maint. of Services	\$2,998	\$0	\$0	\$2,998
893- Maint. of Meters & Regulators	\$2,258	\$0	\$0	\$2,258
Total	\$15,029	\$7,801	\$642	\$6,585
	100.0%	51.9%	4.3%	43.8%

Maint. of Mains Factor DOF/DIR	Total	MPD	HPD	Customer	
DIR portion	15.0%			15.0%	Portion of sub acct 887.3 identified as service line & allocated to Dist Cust.
Remainder to be allocated by DOF factor	85.0%			0.0%	SDG&E Distribution Engineering
DOF factor	100.0%	91.9%	8.1%	0.0%	
	85.0%	78.1%	6.9%	0.0%	
	100.0%	78.1%	6.9%	15.0%	

DIR/Other Distr Maintenance Exp Factor	Total	MPD	HPD	Customer	
Total acct 894 Main Other Equip	\$647				
Public access NGV station O&M	\$180				NGV Compression Rate Adder - NGV Group (only O&M)
% of total	27.9%				
DIR portion	27.9%			27.9%	
Remainder to be allocated by DOF factor	72.1%				
Other Distr Maintenance Exp Factor	100.0%	51.9%	4.3%	43.8%	
	72.1%	37.4%	3.1%	31.6%	
	100.0%	37.4%	3.1%	59.5%	

Reg Station Interface	# of Stations	% of total
Transmission to HP Distribution	18	3.7%
HP Distribution to MP Distribution	327	67.7%
Transmission to MP Distribution	129	26.7%
Other (Gate Stations, etc)	9	1.9%

TABLE LF-2, Page 1
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
FUNCTIONALIZATION OF YEAR 2021 O&M EXPENSES
2024 TCAP

FERC Account	Total	Distribution Demand		Transmission	Storage	Distribution Customer	Supply
		Medium Pressure	High Pressure				
A	B	C	D	E	F	G	H
FERC Form 2 12/31/2021							
\$thousands							
1	Purchased Gas Expenses:						
2	807.4- Purchased Gas Calculations Expenses	\$0.0					\$0
3	807.5- Other Purchased Gas Expenses	\$0.4					\$0
4	+ Purchased Gas Expense Total	\$0					\$0
5							
6	Other Storage:						
7	840- Oper Supervision & Engineering	\$0			\$0		
8	841- Oper Labor & Expenses	\$326			\$326		
9	843-Maintenance	\$0			\$0		
10	+ Other Storage Total	\$326			\$326.2		
11							
12	Gas Transmission						
13	850- Oper Supervision & Eng	\$5,674		\$5,674			
14	851- Sys Control & Load Dispatching	\$919		\$919			
15	852- Communication Sys Exp	\$0		\$0			
16	853- Compr Station Labor & Exp	\$3,893		\$3,893			
17	855- Other Fuel & Power for Compr Stations	\$180		\$180			
18	856- Mains Expenses	\$1,203		\$1,203			
19	857- Meas & Reg Station Exp	\$561		\$561			
20	858- Trans & Compression of Gas by Others	\$0		\$0			
21	859- Other Expenses	\$1,288		\$1,288			
22	860- Rents	\$4		\$4			
23	861- Maint Supervision & Eng	\$394		\$394			
24	862-Maint Structures and Improvements	\$0		\$0			
24	863- Maint of Mains	\$8,930		\$8,930			
25	864- Maint of Compr Station Eq	\$767		\$767			
26	865- Maint of Meas & Reg Station Eq	\$133		\$133			
26	866 - Maint of Communication Eq	\$0		\$0			
27	867- Maint of Other Eq	\$325		\$325			
28	+ Net Gas Transmission	\$24,272		\$24,272			

TABLE LF-2, Page 2
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
FUNCTIONALIZATION OF YEAR 2021 O&M EXPENSES
2024 TCAP

Description	Total	Distribution Demand		Transmission	Storage	Distribution Customer	Supply	
		Medium Pressure	High Pressure					
A	C	D	E	F	G	H	I	
\$thousands								
1	Gas Distribution:							
2	870- Operation Supervision & Engineering	\$8,611	\$2,108	\$93		\$6,411		
3	871- Distr Load Dispatching	\$26	\$6	\$0		\$19		
4	874- Mains & Services Exp	\$11,881	\$6,176	\$271		\$5,433		
5	875- Meas & Reg Station Exp	\$794	\$761	\$33		\$0		
5	877- Meas & Reg Station Exp-City Gas Check Station	-\$13	-\$12	-\$1		\$0		
6	878- Meter & House Regulator Exp	\$5,510	\$0	\$0		\$5,510		
7	879- Customer Installations Exp	\$10,118	\$0	\$0		\$10,118		
8	880- Other Expenses	\$13,836	\$3,387	\$149		\$10,301		
9	881- Rents	\$34	\$33	\$1		\$0		
10	885- Maint Supervision & Engineering	\$0	\$0	\$0		\$0		
11	887- Maint of Mains	\$8,863	\$6,925	\$609		\$1,330		
12	888 - Maint. Of Compressor Station Equipment	\$0	\$0	\$0		\$0		
13	889- Maint of Meas. & Reg Station Eq	\$910	\$876	\$34		\$0		
14	892- Maint of Services	\$2,998	\$0	\$0		\$2,998		
15	893- Maint of Meters & Regulators	\$2,258	\$0	\$0		\$2,258		
16	894- Maint of Other Eq	\$647	\$242	\$20		\$385		
17	+ Distribution Total	\$66,473	\$20,501	\$1,210		\$44,761		
18								
19	Customer Accounts							
20	901- Supervision	\$0.2				\$0		
21	902- Meter Reading Expenses	\$1,106				\$1,106		
22	903- Cust Records & Collection Exp	\$34,231				\$34,231		
23	904- Uncollectible Accounts	\$2,895				\$2,895		
24	905- Misc Cust Accounts Exp	\$1				\$1		
25	Total Customer Accounts	\$38,234				\$38,234		
26	less 903 & 904 - Adjustments	\$13,068				\$13,068		
27	+ Net Customer Accounts	\$25,166				\$25,166		
28								
29	Customer Service & Informational Expense							
30	907- Supervision	\$0				\$0		
31	908- Cust Assistance Exp	\$34,748				\$34,748		
32	909-Informational & Instructional Exp	\$349				\$349		
33	910- Misc Cust Service & Informational Exp	\$59				\$59		
34	Total Cust Svc & Info	\$35,157				\$35,157		
35	less CARE/DSM/DAP/Energy Efficiency Exp	\$21,007				\$21,007		
36	+ Net Cust Svc & Info	\$14,150				\$14,150		
37								
38	= Subtotal O&M w/o A&G	\$130,388	\$20,501	\$1,210	\$24,272	\$326	\$84,077	\$0
39	Percent of Total	100.0%	15.7%	0.9%	18.6%	0.3%	64.5%	0.0%

Notes:

- O&M expenses from SDG&E Gas FERC Form 2 for year ending December 31, 2021, pp. 319 - 325.
- O&M expenses assigned to service categories using functional basis
- CARE Program expenses of approximately \$516,276 are excluded from FERC Acct # 903 because such costs recovered through G-PPPS Surcharge.
- "less CARE/DSM/DAP/Energy Efficiency Exp" = these are refundable program costs excluded from FERC Accounts 907 - 910.

Backed out cost for 2021:	FERC # 908	FERC # 903	Totals
CARE	\$0	\$516,276	\$516,276
Low Income Energy Efficiency	\$8,049,184		\$8,049,184
Energy Efficiency	\$4,496,000		\$4,496,000
Self Generation Program	\$2,397,797		\$2,397,797
Avoided Cost Calculator Update Memorandum Account	\$9,279		\$9,279
California Solar Initiative Thermal Program Memorandum Account	\$1,258,343		\$1,258,343
Customer Information System Balancing Account		\$4,150,073	\$4,150,073
Biomethane Cost Incentive Program Balancing Account	\$2,710,475		\$2,710,475
California Consumer Privacy Act Memorandum Account		\$95,635	\$95,635
Emergency Customer Protection Memorandum Account	-\$5,663		(\$5,663)
Green House Gas Balancing Account	\$2,538,750		\$2,538,750
Greenhouse Gas Administrative Costs Memorandum Account		\$6,428	\$6,428
Port Energy Management Plan Balancing Account	\$38,340		\$38,340
Residential Disconnect Protections Memo Account		\$252,154	\$252,154
Statewide Energy Efficiency Programs	-\$485,766		(\$485,766)
Transition, Stabilization and OCM Balancing Account		\$5,151,736	\$5,151,736
Total Adjustment for FERC	\$21,006,739	\$10,172,301	\$31,179,040

**TABLE LF-3
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
MARGINAL COST ASSESSMENT - DISTRIBUTION O&M EXPENSES
2024 TCAP**

Distribution O&M Account	Total O&M	Demand-Related Distribution			Customer-Related					
		Medium Pressure	Marginal Portion	Marginal MPD O&M	High Pressure	Marginal Portion	Marginal HPD O&M	Distribution Customer	Marginal Portion	Marginal Cust-Rel O&M
A	B	C	D	E	F	G	H	I	J	K
1 Gas Distribution:										
2 870 - Operation Supervision & Engineering	\$8,611	\$2,108	59%	\$1,244	\$93	59%	\$55	\$6,411	59%	\$3,782
3 871 - Distribution Load Dispatching	\$26	\$6	100%	\$6	\$0	100%	\$0	\$19	100%	\$19
4 874 - Mains & Services Expenses	\$11,881	\$6,176	100%	\$6,162	\$271	100%	\$271	\$5,433	100%	\$5,421
5 875 - Measuring & Regulating Station Expenses	\$794	\$761	100%	\$761	\$33	100%	\$33	\$0	100%	\$0
6 878 - Meter & House Regulator Expenses	\$5,510	\$0	100%	\$0	\$0	100%	\$0	\$5,510	100%	\$5,510
7 879 - Customer Installations Expenses	\$10,118	\$0	86%	\$0	\$0	86%	\$0	\$10,118	86%	\$8,727
8 880 - Other Expenses	\$13,836	\$3,387	82%	\$2,777	\$149	82%	\$122	\$10,301	82%	\$8,447
9 881 - Rents	\$34	\$33	100%	\$33	\$1	100%	\$1	\$0	100%	\$0
10 885 - Maint Supervision & Engineering	\$0	\$0	100%	\$0	\$0	100%	\$0	\$0	100%	\$0
11 887 - Maintenance of Mains	\$8,863	\$6,925	93%	\$6,440	\$609	93%	\$566	\$1,330	93%	\$1,237
12 888 - Maintenance Of Compressor Station Eq	\$0	\$0	0%	\$0	\$0	0%	\$0	\$0	0%	\$0
13 889 - Maintenance of Meas. & Reg Station Eq	\$910	\$876	100%	\$876	\$34	100%	\$34	\$0	100%	\$0
14 892 - Maintenance of Services	\$2,998	\$0	100%	\$0	\$0	100%	\$0	\$2,998	100%	\$2,998
15 893 - Maint of Meters & House Regulators	\$2,258	\$0	100%	\$0	\$0	100%	\$0	\$2,258	100%	\$2,258
16 894 - Maintenance of Other Equipment	\$647	\$242	100%	\$242	\$20	100%	\$20	\$385	100%	\$385
17 Distribution Total	\$66,485	\$20,513	90.4%	\$18,540	\$1,211	91.1%	\$1,103	\$44,761	87%	\$38,782

Notes:

1. O&M expenses assigned to customer- and demand-related functional service categories at Workpapers to Testimony, Table "LF-2", Page 2 of 2 (tab LF-O&M)
2. Col. (E) = Col. (C) x Col. (D).
3. Col. (H) = Col. (F) x Col. (G).
4. Col. (K) = Col. (I) x Col. (J).
5. Marginal Cost assessment performed in conjunction w/ SDG&E Gas Distribution Operations Department subject matter experts.

**TABLE LF-4
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**MATERIALS & SUPPLIES LOADING FACTOR
2024 TCAP**

	Description	2021 Year End Plant Balances	Portion of Total Plant	M&S Allocation	Annualized M&S @ 13.12%	
	A	B	C	D	E	
		(Dollars)	(Percent)	(Dollars)	(Dollars)	
1	Materials & Supplies			\$11,499,626		1
2						2
3	Storage	\$2,168,803	0.1%	\$8,186	\$1,074	3
4	Transmission	\$630,704,840	20.7%	\$2,380,673	\$312,444	4
5	Distribution					5
6	Demand - HPD	\$316,049,448	10.4%	\$1,192,968	\$156,567	6
7	Demand - MPD	\$1,223,613,223	40.2%	\$4,618,679	\$606,163	7
8	Customer	\$846,707,203	27.8%	\$3,196,001	\$419,449	8
9	General Plant	\$27,319,254	0.9%	\$103,120	\$13,534	9
10						10
11	Total	\$3,046,562,771	100.0%	\$11,499,626	\$1,509,231	11

Notes:

Row (6) Plant Balance = [Total Dist Plant - Cust-Rel Dist Plant] x Historical HPD Plant Factor.
 Row (7) Plant Balance = [Total Dist Plant - Cust-Rel Dist Plant] x [1 - Historical HPD Plant Factor].
 For Rows (6) - (7) : 20.5% = Historical HPD Plant Investment Allocation Factor = H
 . Total Plant Investment substituted in place of NBV because LRMC not dependant on age of investment.
 Row (8) Plant Balance = Dist Plant Accounts 380 (Services) + 381 (Meters) + 382 (Meter Installations) + 387 (NGV Stations + Other Equipme

Calculation Distribution Plant:

Total Plant Distribution	\$2,513,342,113	Sources
Less 388 (ARO's)	(\$125,978,516)	Per FERC Form 2, page 209, line 109
Less 387	(\$11,397,018)	
Plus NGV in 387	\$10,403,295	
Total Plant Distribution	\$2,386,369,874	

Plant

G-387.11	\$993,723	Per FERC Form 2
G-387.12	\$9,745,099	Per FERC Form 2
G-387.13	\$658,196	Per FERC Form 2
Total FERC 387	\$11,397,018	

Calculation Customer Plant:

380 - Services	\$522,356,357	Sources
381 - Meters	\$188,284,845	Per FERC Form 2
382 - Meter Installation	\$125,662,706	Per FERC Form 2
387 - NGV/ Other equipment	\$10,403,295	Per FERC Form 2
Total Customer Plant	\$846,707,203	

TABLE LF-5
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
ADMINISTRATIVE & GENERAL LOADING FACTOR
2024 TCAP

	FERC Account	Account Description	FERC 2021 Recorded	Marginal Portion	Marginal A&G	Comments
	A	B	C	D	E	
			(1,000\$)	(Percent)	(1,000\$)	
1	920	Administrative & General Salaries	\$21,069	0.00%	\$0	1
2	921	Office Supplies & Expenses	\$12,073	2.09%	\$252	2
3	922	Administrative Expenses Transferred	-\$6,815	0.00%	\$0	3
4	923	Outside Services Employed	\$37,655	0.00%	\$0	4
5	924	Property Insurance	\$1,449	0.00%	\$0	5
6	925	Injuries & Damages	\$8,516	100.00%	\$8,516	6
7	926	Employee Pensions & Benefits	\$19,656	99.37%	\$19,532	7
8	927	Franchise Requirements	\$14,820	0.00%	\$0	8
9	928	Regulatory Commission Expense	\$7,341	25.89%	\$1,901	9
	930.1	General Advertising Expense	\$20	0.00%	\$0	
10	930.2	Miscellaneous General Expense	\$1,471	21.89%	\$322	10
11	931	Rents	\$3,643	0.00%	\$0	11
12	932	Maintenance of General Plant	\$6,367	11.17%	\$711	12
13		Total A&G Expenses	\$127,265		\$31,234	13
14						14
15		Payroll Taxes	\$5,194		\$5,194	15
16		Total A&G and Payroll Taxes	\$132,460		\$36,429	16
		Remove P&B and Payroll tax on non-marginal A&G			-5764.4	16 Rates
		Remove P&B and Payroll tax on exclusions			-443.4	16 PT 0.0646
17		Net marginal A&G			30,221	17 P&B 0.2090
18		Total O&M w/o Recorded A&G Expenses	\$130,388		\$130,388	18 LF-O&M tab
19						19
20		Total O&M	\$262,847			20
21		(Net of Compressor Fuel & Gas Purchases)				21
22						22
23		A&G/O&M Loading Factor			27.94%	23

Notes:

- A&G expenses from SDG&E Gas FERC Form 2 for year ending December 31, 20121 pp. 325.
- Row (23) = Marginal A&G Expenses @ Row 16 ÷ Total O&M Less A&G @ Row 18 are excluded from base margin. Amount from FERC Form 1 page 351 Line 2 - Reimbursement Fees.
- Payroll Taxes from FERC Form 2 for the year ended 12-31-2021 - front of the report in summary version right before the cover page for FERC Form 1. The amount for 2021 is \$5,194.46 "Taxes Other than Income & Property Taxes". Selected Financial Data = Class A, B, C and D Gas Utilities, page 2
- Marginal Portion per LRM study

**TABLE LF-6
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**GENERAL PLANT LOADING FACTOR
2024 TCAP**

	Description	2016 Recorded	Comments	Recorded B
	A	B (Dollars)		B (Dollars)
1	Total General, Common Plant (12/31/2016)	\$598,939,671	1 FERC 2021	\$164,602,743
2			2	
3	Weighted Average General, Common Plant RECC	10.95%	3 2020 RECC	10.29%
4			4	
5	Annualized Plant	\$65,570,773	5	\$16,930,026
6			6	
7	O&M Expenses (2013 recorded)	\$262,847,153	7 LF- A&G tab.	\$160,615,835
8			8	
9	General Plant Loading Factor	24.95%	9	10.54%

Notes:

1. Common and General Gas Plant from SDG&E Gas FERC Form 1 pp. 356.1 and FERC Form 2 pp. 209, for year ending December 31, 2016, respectively.

Calculation Total General, Common Plant :

Total General Plant	\$27,319,254	Sources
Common Utility Plant - Gas	\$571,620,417	FERC Form 2 pp. 209
Total	<u>\$598,939,671</u>	SDG&E Gas FERC Form 1 pp. 356.1

**TABLE LF-7
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
O&M WEIGHTED ESCALATION FACTOR
2024 TCAP**

	Description	Dollars	Percent	
	A	B	C	
1	2021 Total Gas O&M Expenses	\$262,847,153	100%	1
2	2021 Total Salaries & Wages	\$86,307,392	33%	2
3	2016 Non-Labor O&M Expenses	\$176,539,761	67%	3
4				4
5	2021 O&M Labor Multiplier	1.000		5
6	2024 O&M Labor Multiplier	1.098	110%	6
7				7
8	2021 O&M Non-Labor Multiplier	1.000		8
9	2024 O&M Non-Labor Multiplier	1.046	105%	9
10				10
11	Weighted O&M Escalation to 2023	1.0631	1.0631	11

Notes:

1. Row (3) = Row (1) - Row (2).
2. Row (11) = [Row (9) x Row (3) percent] + [Row (6) x Row (2) percent].
3. Row (1) from Table "LF-5".
4. Rows (5) - (9) from O&M Cost Indexes

TABLE LRMCC-10a
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
ALLOCATION FACTORS FOR CUSTOMER O&M EXPENSES
2020 TCAP

	Description	Res	NGV	GN-3	Total Core	GINC			Cogen			Total Noncore	System Total
						MPD	HPD	Total	< 3 MM	> 3 MM	Total		
	A	B	C	D	E	F	G	H	I	J	K	M	N
1	Total Field Orders												
2	Allocator - 2021 Count	81,716	8	5,230	86,954	9	0	9	1	2	3	12	86,966
3	Alloc %	94%	0%	6%	100%	0%	0%	0%	0%	0%	0%	0%	100%
4													
5	Customer Services Field Orders												
6	Allocator - 2021 Count	81,716	8	5,230	86,954	9	0	9	1	2	3	12	86,966
7	Alloc %	94%	0%	6%	100%	0%	0%	0%	0%	0%	0%	0%	100%
8													
9	Customer Contact Center CSR Call Information												
10	Allocator - Call Volume Weighted by Handle Time - Year 2016 data	3,895,864	-	242,017	4,137,881	-	-	-	-	-	-	-	4,137,881
11	Alloc %	94%	0%	6%	100%	0%	0%	0%	0%	0%	0%	0%	100%
12													
13													
14	Active Meters - All Customers												
15	Allocator - 2021 Count	868,559	43	27,077	895,679	49	16	65	74	10	84	149	895,828
16	Alloc %	97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%
17													
18	Active Meters - Noncore Commercial, EG												
19	Allocator - 2021 Count				-	49	16	65	74	10	84	149	149
20	Alloc %	0%	0%	0%	0%	33%	11%	44%	50%	7%	56%	100%	100%
21													
22	Effort Study - Federal Accounts												
23	Allocator - 2016 Count	10	-	199	209	9	-	9	-	2	2	11	220
24	Alloc %	5%	0%	90%	95%	4%	0%	4%	0%	1%	1%	5%	100%
25													
26	Active Billing Accounts - All Customers												
27	Allocator - 2021 Count	868,559	43	27,077	895,679	47	9	56	72	9	81	137	895,816
28	Alloc %	97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%
29													
30	Active Billing Accounts - Mass Markets Customers												
31	Allocator - 2021 Count	868,559	43	27,077	895,679	-	-	-	-	-	-	-	895,679
32	Alloc %	97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%
33													
34	Active Billing Accounts - Major Markets Customers												
35	Allocator - 2021 Count				-	47	9	56	72	9	81	137	137
36	Alloc %	0%	0%	0%	0%	34%	7%	41%	53%	7%	59%	100%	100%
37													
38	C&I Markets												
39	Noncore Allocator - Active Accounts				0	47	9	56	72	9	81	137	137
40	Alloc %	0.00%	0.00%	99.50%	99.50%	0.17%	0.03%	0.21%	0.26%	0.03%	0.30%	0.50%	100.00%
41													
42	Demand Response Program - Commercial Customers												
43	Noncore Allocator - Active Accounts					47	9	56					
44	Alloc %	0.00%	0.00%	90.00%	90%	8%	2%	10%	0%	0%	0%	10%	100%

TABLE LRMCC-10a
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
ALLOCATION FACTORS FOR CUSTOMER O&M EXPENSES
2020 TCAP

	Description	Res	NGV	GN-3	Total Core	GINC			Cogen			Total Noncore	System Total	
						MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	M	N	
45														45
46	Meter Reading Function Net Allocation													46
47	Allocator - M\$'s	\$117,160	\$6	\$3,652	\$120,818	\$7	\$2	\$9	\$10	\$1	\$11	\$20	\$120,838	47
48	Alloc %	97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%	48
49														49
50	FERC 901 - 903 Net Allocation													50
51	Allocator - M\$'s	868,559	43	27,077	895,679	49	16	65	74	10	84	149	895,828	51
52	Alloc %	97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%	52

TABLE LRMCC-10b
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
SUMMARY OF LRMCC ALLOCATION OF CUSTOMER O&M EXPENSES
2020 TCAP

	O&M Operational Activity	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			IPP	Total Noncore	System Total
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	CUSTOMER CONTACT Total	\$9,845	\$9,269	\$0	\$576	\$9,845	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,845
2	METER READING Total	\$120,838	\$117,160	\$6	\$3,652	\$120,818	\$7	\$2	\$9	\$10	\$1	\$11	\$0	\$20	\$120,838
3	BILLING SERVICES Total	\$397,794	\$370,009	\$18	\$11,535	\$381,562	\$5,339	\$1,741	\$7,079	\$8,063	\$1,089	\$9,152	\$0	\$16,232	\$397,794
4	CUSTOMER RESEARCH & COMMUNICATION Total	\$157,128	\$152,347	\$8	\$4,749	\$157,104	\$8	\$2	\$10	\$13	\$2	\$14	\$0	\$24	\$157,128
5	CONSUMER PROGRAMS & SERVICES Total	\$192,630	\$186,767	\$9	\$5,822	\$192,599	\$10	\$3	\$14	\$15	\$2	\$18	\$0	\$31	\$192,630
6	OTHER Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7															
8	Total	\$878,235	\$835,552	\$41	\$26,335	\$861,928	\$5,364	\$1,748	\$7,112	\$8,101	\$1,094	\$9,196	\$0	\$16,307	\$878,235
9	Allocation %	100%	95%	0%	3%	98%	1%	0%	1%	1%	0%	1%	0%	2%	100%

Note:
1. O&M Operational Activities cost assigned using allocation methods identified for each SDG&E department in the Customer Operations division. Data from below

ALLOCATION OF CUSTOMER CONTACT CENTER O&M EXPENSES BY CUSTOMER CLASS

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			IPP	Total Noncore	System Total
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	CUSTOMER CONTACT CENTER														
2	Allocator - CSR Call Volume Weighted by Handle Time		94%	0%	6%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
3	Allocation (\$)	\$9,845	\$9,269	\$0	\$576	\$9,845	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,845
10	Total Customer Contact Center O&M Allocation (\$)	\$9,845	\$9,269	\$0	\$576	\$9,845	\$0	\$9,845							
11	Allocation %	100%	94%	0%	6%	100%	0%	100%							

Source SDGE Details Acct 901-910 Costs.xls

ALLOCATION OF METER READING O&M EXPENSES BY CUSTOMER CLASS

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			IPP	Total Noncore	System Total
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	METER READING														
2	Allocator - Active Meters: All Customers		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
3	Allocation (\$)	\$120,838	\$117,160	\$6	\$3,652	\$120,818	\$7	\$2	\$9	\$10	\$1	\$11	\$0	\$20	\$120,838
4	Total Meter Reading O&M Allocation (\$)	\$120,838	\$117,160	\$6	\$3,652	\$120,818	\$7	\$2	\$9	\$10	\$1	\$11	\$0	\$20	\$120,838
5	Allocation %	100%	97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%

Source SDGE Details Acct 901-910 Costs.xls

ALLOCATION OF BILLING SERVICES CUSTOMER O&M EXPENSES BY CUSTOMER CLASS

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			IPP	Total Noncore	System Total
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	MAJOR MARKET BILLING Total														
2	Allocator - Active Meters N/C C&I		0%	0%	0%	0%	33%	11%	44%	50%	7%	56%	0%	100%	100%
3	Allocation (\$)	\$16,173	\$0	\$0	\$0	\$0	\$5,319	\$1,737	\$7,056	\$8,032	\$1,085	\$9,118	\$0	\$16,173	\$16,173
4	MASS MRKET BILLING Total														
5	Allocator - Active Accounts: All Customers		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
6	Allocation (\$)	\$381,620	\$370,009	\$18	\$11,535	\$381,562	\$20	\$4	\$24	\$31	\$4	\$35	\$0	\$58	\$381,620
7	Total Billing Services O&M Allocation (\$)	\$397,794	\$370,009	\$18	\$11,535	\$381,562	\$5,339	\$1,741	\$7,079	\$8,063	\$1,089	\$9,152	\$0	\$16,232	\$397,794
8	Allocation %	100%	93%	0%	3%	96%	1%	0%	2%	2%	0%	2%	0%	4%	100%

Source SDGE Details Acct 901-910 Costs.xls

ALLOCATION OF CUSTOMER RESEARCH & COMMUNICATION O&M EXPENSES BY CUSTOMER CLASS

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			IPP	Total Noncore	System Total
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	COMMUNICATIONS Total														
2	Allocator - Active Accounts: All Customers		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
3	Allocation (\$)	\$157,128	\$152,347	\$8	\$4,749	\$157,104	\$8	\$2	\$10	\$13	\$2	\$14	\$0	\$24	\$157,128
4	Total Business Analysis O&M Allocation (\$)	\$157,128	\$152,347	\$8	\$4,749	\$157,104	\$8	\$2	\$10	\$13	\$2	\$14	\$0	\$24	\$157,128
5	Allocation %	100%	97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%

Source SDGE Details Acct 901-910 Costs.xls

ALLOCATION OF NON-REFUNDABLE FERC ACCOUNT 907 O&M EXPENSES BY CUSTOMER CLASS

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			IPP	Total Noncore	System Total
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	FERC 907														
2	Allocator - FERC 901 - 905 Net Allocation		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
3	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	FEDERAL ACCOUNTS Total														
5	Allocator - 15% Res / Active Meters: Federal Accounts		5%	0%	90%	95%	4%	0%	4%	0%	1%	1%	0%	5%	100%
6	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	Total FERC 907 Allocation (\$)	\$0	\$0												
8	Allocation %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Source SDGE Details Acct 901-910 Costs.xls

ALLOCATION OF NON-REFUNDABLE FERC ACCOUNT 908 O&M EXPENSES BY CUSTOMER CLASS

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			IPP	Total Noncore	System Total
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
10	DIR CUSTOMER PROGRAM														
11	Allocator - Active Accounts: All Customers		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
12	Allocation (\$)	\$187,195	\$181,497	\$9	\$5,658	\$187,164	\$10	\$3	\$14	\$15	\$2	\$18	\$0	\$31	\$187,195
13	CUSTOMER SERVICE MAS														
14	Active Billing Accounts - Mass Markets Customers		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
15	Allocation (\$)	\$5,435	\$5,270	\$0	\$164	\$5,435	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,435
49	Total FERC 908 Allocation (\$)	\$192,630	\$186,767	\$9	\$5,822	\$192,599	\$10	\$3	\$14	\$15	\$2	\$18	\$0	\$31	\$192,630
50	Allocation %	100%	97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%

Source SDGE Details Acct 901-910 Costs.xls

ALLOCATION OF NON-REFUNDABLE FERC ACCOUNT 909-910 O&M EXPENSES BY CUSTOMER CLASS

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			IPP	Total Noncore	System Total
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
7	CUSTOMER COMMUNICATIONS & RESEARCH - Subtotal														
8	Allocator - Active Accounts: All Customers		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%
9	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	Total FERC 909-910 Allocation (\$)	\$0	\$0												
14	Allocation %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Source SDGE Details Acct 901-910 Costs.xls

TABLE LRMCC-10c
 SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
 2024 TCAP

TABLE 8 A&G LOADING FACTOR	
Account Description	Marginal Costs 2024 \$ 000s
A&G Expenses	\$31,234
+ <u>Payroll Taxes</u>	<u>\$5,194</u>
= Total A&G with Payroll Taxes	\$36,429
/ <u>Total O&M Expenses excluding A&G</u>	<u>\$130,388</u>
= A&G Loading Factor	27.94%

TABLE 9 GENERAL PLANT LOADING FACTOR	
Account Description	2020 Recorded Costs 2024 \$ 000s
Total General Plant	\$598,940
+ <u>Average General Plant RECC</u>	<u>10.95%</u>
= Annualized General Plant	\$65,571
/ <u>Total O&M Expenses</u>	<u>\$262,847</u>
= General Plant Loading Factor	24.95%

TCAP	2024
Base Year	2021

SDG&E 2024 TCAP

**Section 4
Cost Allocation**

2024 TCAPSDGEgas COST ALLOCATION

TABLE 11 UNSCALED LONG RUN MARGINAL COST CUSTOMER COST			
Customer Class	Customer LRM \$/customer	Customer Count	Customer Cost \$000
Residential	\$269	909,359	\$244,982
Core C/I	\$590	30,488	\$17,981
NGV	\$1,603	36	\$58
Total Core			\$263,020
Noncore C/I	\$3,409	58	\$198
Small EG	\$1,588	83	\$132
Large EG	\$4,251	15	\$64
Total Noncore			\$393
Total SDG&E			\$263,414

TABLE 12 UNSCALED LONG RUN MARGINAL COST DISTRIBUTION COSTS						
Customer Class	MPD LRM \$/mcf	MPD Peak- Day (Mcf)	MPD Costs \$000	HPD LRM \$/mcf	HPD Peak- Day (Mcf)	HPD Costs \$000
Residential	\$247	292,353	\$72,131	\$48	292,372	\$13,972
Core C/I	\$247	95,840	\$23,646	\$48	97,659	\$4,667
NGV	\$247	3,491	\$861	\$48	6,175	\$295
Total Core			\$96,639			\$18,934
Noncore C/I	\$247	8,451	\$2,085	\$48	9,163	\$438
Small EG	\$247	5,759	\$1,421	\$48	8,101	\$387
Large EG	\$247	1,119	\$276	\$48	10,369	\$496
Total Noncore			\$3,782			\$1,321
Total SDG&E			\$100,421			\$20,254

TABLE 13
LONG RUN MARGINAL COST SCALED CUSTOMER AND DISTRIBUTION COSTS
 \$ 000

Customer Class	Customer Cost	+	MPD	+	HPD	=	Unscaled LRMC	x	Scalar	=	Scaled LRMC
Residential	\$244,982		\$72,131		\$13,972		\$331,085		99%		\$327,566
Core C/I	\$17,981		\$23,646		\$4,667		\$46,294		99%		\$45,802
NGV	\$58		\$861		\$295		\$1,214		99%		\$1,202
Total Core	\$263,020		\$96,639		\$18,934		\$378,593		99%		\$374,570
Noncore C/I	\$198		\$2,085		\$438		\$2,721		99%		\$2,692
Small EG	\$132		\$1,421		\$387		\$1,940		99%		\$1,919
Large EG	\$64		\$276		\$496		\$835		99%		\$827
Total Noncore	\$393		\$3,782		\$1,321		\$5,496		99%		\$5,438
Total SDG&E	\$263,414		\$100,421		\$20,254		\$384,089		99%		\$380,008

TABLE 14
ALLOCATION OF BASE MARGIN
\$ 000

Customer Class	Scaled LRMC	+	Backbone Transmission	+	NGV Public Access	=	Unadjusted Allocated Base Margin
Residential	\$327,566		\$0		\$0		\$327,566
Core C/I	\$45,802		\$0		\$0		\$45,802
NGV	\$1,202		\$0		\$774		\$1,976
Total Core	\$374,570		\$0		\$774		\$375,344
Noncore C/I	\$2,692		\$0		\$0		\$2,692
Small EG	\$1,919		\$0		\$0		\$1,919
Large EG	\$827		\$0		\$0		\$827
Total Noncore	\$5,438		\$0		\$0		\$5,438
Backbone Transmission	\$0		\$69,374		\$0		\$69,374
Total SDG&E	\$380,008		\$69,374		\$774		\$450,156

TABLE 13
COST ALLOCATION COMPARISON
 \$ 000

Customer Class	Adjusted Allocation of Base Margin		Current Allocation of Base Margin	
		% Total		% Total
Residential	\$327,566	72.8%	\$339,615	75.4%
Core C/I	\$45,802	10.2%	\$55,304	12.3%
NGV	\$1,976	0.4%	\$2,273	0.5%
Total Core	\$375,344	83.4%	\$397,192	88.2%
Noncore C/I - D	\$2,692	0.6%	\$2,400	0.5%
EG - D	\$1,919	0.4%	\$3,679	0.8%
TLS	\$827	0.2%	\$61	0.0%
Total Noncore	\$5,438	1.2%	\$6,140	1.4%
Backbone Transmission	\$69,374	15.4%	\$46,823	10.4%
Total SDG&E	\$450,156		\$450,156	

SDGE Gas Transmission and Distribution

SAN DIEGO GAS & ELECTRIC

2021 Economic Assumptions Update LEVELIZED ANNUAL CAPITAL COST AND RECC FACTORS

utility sdge gas

Auth ROR ==>> 7.55%

Fed Tax Rate ==>>> 21.00%

State Tax Rate ==>> 8.84% Id Valorum Rate ==>>>

1.610%

FERC Account	Account Name	Book Life	Fed Tax Life	State Tax Life	Percent Salvage	Normlzd Federal Taxes ?	Normlzd State Taxes ?	Depreciation Method		LACC Components (in percent)					RECC factors	PVCC factors	Sum of Rev Req		
								Federal Tax	State Tax	Book Depr	Return on Capital	Income Taxes	Property Taxes	Total LACC					
GAS TRANSMISSION PLANT																			
		9	10	11	12	13	14	15	16	19	20	21	22	23	25	26	27		
G-365.1	Land	0	0	0	0%	FALSE	FALSE	none	0%	none	0%	0.00	7.70	2.25	1.61	11.55	n/a	150.09	1188.48
G-365.2	Land Rights	40	40	40	0%	FALSE	FALSE	sl	0%	sl	0%	2.50	5.52	1.61	1.13	10.76	8.71	132.64	329.93
G-366	Structures & Improvements	34	39	45	0%	TRUE	FALSE	sl	0%	sl	0%	2.94	5.38	1.62	1.09	11.03	9.09	131.82	299.73
G-367	Mains	45	15	22	-25%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.78	4.73	1.20	1.06	9.77	7.81	122.40	290.53
G-368	Compressor Station Equipment	35	15	22	-10%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.14	4.71	1.22	1.04	10.12	8.31	121.72	269.98
G-369	Measuring & Regulating Equipment	31	15	22	-5%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.39	4.71	1.24	1.04	10.37	8.63	121.19	256.99
G-371	Other Equipment	27	15	22	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.70	4.71	1.27	1.03	10.71	9.06	120.39	242.10
GAS DISTRIBUTION PLANT																			
G-374.1	Land	0	0	0	0%	FALSE	FALSE	none	0%	none	0%	0.00	7.55	2.14	1.61	11.30	n/a	149.65	1163.01
G-374.2	Land Rights	31	40	40	0%	FALSE	FALSE	sl	0%	sl	0%	3.23	5.09	1.65	1.06	11.02	9.16	130.65	274.18
G-375	Structures & Improvements	44	39	45	0%	TRUE	FALSE	sl	0%	sl	0%	2.27	5.46	1.55	1.16	10.44	8.35	132.66	342.48
G-376	Mains	69	20	35	-55%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.25	4.92	1.29	1.11	9.56	7.37	125.73	298.97
G-378	Measuring & Regulating Equipment	47	20	35	-25%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.66	4.79	1.27	1.07	9.78	7.77	125.29	298.55
G-380	Services	65	20	35	-70%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.62	4.64	1.24	1.03	9.53	7.37	125.07	255.45
G-381	Meters & Regulators	41	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.44	5.05	1.34	1.14	9.96	8.02	125.23	308.61
G-382	Meter & Regulator Installations	35	20	35	-30%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.71	4.36	1.19	0.94	10.20	8.36	124.49	252.11
G-385	Industrial Measuring & Regulating Equip	28	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.57	4.77	1.33	1.03	10.70	9.00	123.27	248.44
G-387	Other Equipment	16	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	6.25	4.58	1.39	0.91	13.12	11.73	119.52	191.77
GAS GENERAL PLANT																			
G-392.2	Trailers	21	5	6	0%	TRUE	FALSE	db/sl	200%	db/sl	200%	4.76	4.01	0.85	0.96	10.59	9.20	109.81	201.06
G-394.1	Portable Tools	24	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	4.17	4.69	1.34	0.99	11.19	9.58	122.37	229.93
G-394.2	Shop Equipment	24	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	4.17	4.69	1.34	0.99	11.19	9.58	122.37	229.93
G-395	Laboratory Equipment	19	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	5.26	4.61	1.37	0.94	12.18	10.71	120.89	206.60
G-397	Communications Equipment	15	7	10	0%	TRUE	FALSE	db/sl	200%	db/sl	200%	6.67	3.98	0.98	0.89	12.52	11.26	110.12	174.96
G-398	Miscellaneous Equipment	19	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	5.26	4.61	1.37	0.94	12.18	10.71	120.89	206.60

Short Names	FERC
O&M Costs	
CEU4422000008	
JAHE49NS	814-894 & 901-935
JGTOTALMS	814-894 & 901-935

Utility Construction Costs	
JUG@PCF	362-384
JUGPT@PCF	366-369
JUGPDS&I@PCF	375
JUGPDMCI@PCF	376
JUGPDMS@PCF	376
JUGPDMP@PCF	376
JUGPDSTCM@PCF	377
JUGPDSTM&R@PCF	378
JUGPDSTM&RL@PCF	379
JUGPDSVS@PCF	380
JUGPDSVP@PCF	380
JUGPDMT@PCF	381
JUGPDMTI@PCF	382
JUGPDRH@PCF	383
JUGPDRHI@PCF	384

Long Names

Average Hourly Earnings - Utility Service Workers
Labor O&M Cost Index (Based on CEU4422000008)
Total Gas O&M Cost Index (MS) (Non-Labor O&M Cost Index)

Total Gas Plant, Pacific Region
Total Transmission Plant, Pacific Region
Gas Distribution Plant Structures & Improvements, Pacific Region
Gas Distribution Plant Cast Iron Mains, Pacific Region
Gas Distribution Plant Steel Mains, Pacific Region
Gas Distribution Plant Plastic Mains, Pacific Region
Gas Distribution Plant Compressor Station Equipment, Pacific Region
Gas Distribution Plant Meas. & Reg. Sta. Equipment, Pacific Region
Gas Distribution Plant Meas. & Reg. Sta. Equipment - City Gt., Pacific Region
Gas Distribution Plant Steel Services, Pacific Region
Gas Distribution Plant Plastic Services, Pacific Region
Gas Distribution Plant Meters, Pacific Region
Gas Distribution Plant Meter Installations, Pacific Region
Gas Distribution Plant House Regulators, Pacific Region
Gas Distribution Plant House Regulators Installations, Pacific Region

Global Insight and Handy-Whitman Data

from Global Insight 2nd Quarter 2021 Power Planner utility cost forecast (released late July 2021)

YEAR	CEU4422000008	JGTOTALMS	JUG@PCF	JUGPT@PCF	JUGPDS&I@PCF	JUGPDMCI@PCF	JUGPDMS@PCF	JUGPDMP@PCF
1997	20.594	0.64783	359.000	321.000	326.000	315.500	368.000	340.500
1998	21.480	0.65930	363.500	325.250	331.500	318.000	372.250	345.750
1999	22.028	0.67378	372.000	328.000	337.500	322.500	381.500	351.500
2000	22.753	0.69780	385.500	331.000	345.250	327.500	395.750	356.250
2001	23.582	0.71726	390.750	333.750	354.750	334.500	399.750	363.000
2002	23.958	0.73135	398.750	339.500	365.250	353.750	407.250	371.250
2003	24.768	0.75414	412.000	344.000	376.000	361.500	423.500	377.500
2004	25.611	0.78239	474.500	398.250	398.300	369.800	502.800	390.000
2005	26.697	0.81761	556.750	440.750	417.800	402.000	605.500	414.500
2006	27.402	0.84886	579.500	459.000	434.300	437.800	630.800	436.000
2007	27.867	0.87841	568.500	480.300	458.100	469.700	609.200	455.400
2008	28.837	0.92330	640.300	525.900	483.000	538.300	697.500	479.000
2009	29.480	0.91989	633.300	512.800	478.800	599.300	683.800	498.800
2010	30.038	0.94375	660.500	515.800	498.300	621.500	715.300	493.000
2011	30.822	0.97841	723.000	543.800	512.300	626.000	793.800	508.800
2012	31.606	1.00000	780.300	574.300	520.000	706.300	864.500	529.500

JUGPDSTCM@PCF	JUGPDSTM&R@PCF	JUGPDSTM&RL@PCF	JUGPDSVS@PCF	JUGPDSVP@PCF	JUGPDMT@PCF
397.000	368.500	365.500	356.000	351.000	195.500
403.250	372.750	369.750	361.750	357.000	196.000
405.250	377.000	374.000	370.750	364.500	190.750
410.250	385.500	383.250	380.000	370.000	201.750
415.250	388.500	385.500	385.750	378.500	209.250
424.500	397.000	393.500	395.750	391.500	201.500
428.750	398.500	396.250	406.750	400.000	192.750
448.800	454.800	454.300	443.500	413.000	182.800
491.300	513.000	516.800	494.000	434.000	185.300
500.000	534.300	537.300	513.500	453.000	196.800
521.500	532.700	533.300	515.100	468.800	225.300
564.500	598.000	600.500	558.800	496.500	250.500
579.000	592.500	592.800	567.000	519.800	255.500
594.300	606.500	607.300	586.800	532.800	253.300
619.800	686.500	687.500	625.500	550.800	256.300
641.000	726.800	730.300	662.300	569.500	268.500

JUGPDMTI@PCF	JUGPDRH@PCF	JUGPDRHI@PCF
378.500	302.750	378.000
381.000	306.750	380.500
390.000	305.500	389.500
407.250	305.250	405.500
410.000	311.750	409.250
417.500	318.500	417.500
437.000	317.750	436.000
542.800	322.800	534.300
677.000	339.500	659.300
705.300	358.300	686.800
671.400	377.600	656.400
788.800	395.800	768.300
762.300	404.500	746.000
803.300	414.800	786.800
907.500	429.300	884.800
999.500	437.800	970.800

SDG&E 2024 TCAP

Section 5

**Long Run Marginal Customer Cost Model
Minimum observed costs - 20th percentile**

SDG&E Cost Allocation LRMC Customer Costs Costs Results

A	Residential B
Customer Costs Rental Method	\$212.89
Customer Costs NCO Method	\$92.29
Customer Costs NCO RCA	\$296.54

Table 4: SDG&E's Residential

	Rental method
SDG&E	\$17.74

	Rental Capital
ARM 1	\$145.93
ARM 2	\$145.93

ntial Minimum Connection Cost Per Month

NCO Method	ARM 1	ARM2
\$24.71	\$6.99	\$14.72

ARM Factor 1	ARM Capital	O&M + O&M Loaders	Total
12%	\$17.09	\$66.80	\$83.89
75%	\$109.81	\$66.80	\$176.61

SDG&E Cost Allocation LRM Customer Costs Costs Results

A	Residential B	NGV D	CCI C	Total Core E	Total NCCI F	EG Tier 1 G	EG Tier 2 H	Total EG I	Total NonCore J	System Total K
Customer Costs Rental Method	\$212.89	\$1,594.42	\$471.01	\$196.51	\$3,521.74	\$1,540.31	\$4,461.07	\$2,011.69	\$2,577.29	\$221.35
Customer Costs NCO Method	\$92.29	\$442.55	\$221.80	\$71.43	\$1,219.32	\$667.72	\$2,149.41	\$833.07	\$976.92	\$100.75
Customer Costs NCO RCA	\$296.54	\$1,068.56	\$485.08	\$277.75	\$1,152.06	\$634.55	\$2,107.85	\$816.44	\$946.76	\$70.59
Customer Costs 50/50 NCO/RECC	\$254.72	\$1,331.49	\$478.04	\$237.13	\$2,336.90	\$1,087.43	\$3,284.46	\$1,414.07	\$1,762.02	\$145.97

LRMC O&M Loader Model

	Input	Source (1)
O&M w/o A&G HPD	\$1,269.11	LF-O&M Tab
O&M w/o A&G MPD	\$20,442.26	LF-O&M Tab
Marginal Percent of O&M HPD	91.49%	Dist O&M MC
Marginal Percent of O&M MPD	90.35%	Dist O&M MC
Marginal A&G/Payroll Taxes Loading Factor as a % of O&M expenses	27.94%	LF-A&G Tab
General Plant Loading Factor as a % of O&M expenses	24.95%	LF-GPL Tab
Annualized M&S Customer Related Costs \$000/yr	\$419,448.67	LF-M&S Tab
Annualized M&S HDP Distribution Load Related Costs \$000/yr	\$156,567.14	LF-M&S Tab
Annualized M&S MDP Distribution Load Related Costs \$000/yr	\$606,163.43	LF-M&S Tab
O&M WEF for Escalation	1.06	O&M WEF Tab
Marginal Cust-Rel O&M		
870 - Operation Supervision & Engineering	\$3,782	Dist O&M MC
871 - Distribution Load Dispatching	\$19	Dist O&M MC
874 - Mains & Services Expenses	\$5,421	Dist O&M MC
875 - Measuring & Regulating Station Expenses	\$0	Dist O&M MC
878 - Meter & House Regulator Expenses	\$5,510	Dist O&M MC
879 - Customer Installations Expenses	\$8,727	Dist O&M MC
880 - Other Expenses	\$8,447	Dist O&M MC
881 - Rents	\$0	Dist O&M MC
885 - Maint Supervision & Engineering	\$0	Dist O&M MC
887 - Maintenance of Mains	\$1,237	Dist O&M MC
888 - Maintenance Of Compressor Station Eq	\$0	Dist O&M MC
889 - Maintenance of Meas. & Reg Station Eq	\$0	Dist O&M MC
892 - Maintenance of Services	\$2,998	Dist O&M MC
893 - Maint of Meters & House Regulators	\$2,258	Dist O&M MC
894 - Maintenance of Other Equipment	\$385	Dist O&M MC

Notes:

(1) from "SDGE OM Loaders" file:

TABLE 11 - LRM Customer Cost

0

A	Res					Total Res	NGV	GN-3	Total Core
	G-R	G-M	G-S	G-T					
B	C	D	E	F	G	H	I		
Annualized SRM Cost \$/customer/yr 2020\$s	\$145.93	\$153.98	\$175.98	\$200.47	\$146.10	\$1,203.07	\$274.73	\$150.53	
O&M \$/customer/yr									
FERC 870 - 894: Distribution O&M (M\$)	\$33,508	\$849	\$26	\$58	\$34,440	\$11	\$3,117	\$24,158	
FERC 901 - 910: Customer O&M (M\$)	\$819	\$16	\$0	\$0	\$836	\$0	\$26	\$862	
Total Cust-Rel O&M (M\$)	\$34,327	\$864	\$26	\$58	\$35,276	\$11	\$3,143	\$25,020	
2016 Number of Customers	847,801	16,309	219	176	864,505	45	26,214	890,764	
Cust-Rel O&M per Customer (2016 \$'s)	\$40	\$53	\$120	\$330	\$41	\$239	\$120	\$28	
escalator 2016\$'s to 2020\$'s	1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063	
O&M \$/customer/yr 2020\$s	\$43.05	\$56.35	\$127.18	\$351.06	\$43.38	\$254.17	\$127.48	\$29.86	
O&M Loaders:									
Materials & Supplies Loader:									
allocator = total Customer Related O&M as % of total	89.1%	2.2%	0.1%	0.2%	91.6%	0.0%	8.2%	65.0%	
Allocated Materials & Supplies Loader (\$'s) \$419,449	\$373,875	\$9,415	\$285	\$633	\$384,208	\$117	\$34,234	\$272,504	
2016 Number of Customers	847,801	16,309	219	176	864,505	45	26,214	890,764	
M&S Loader per Customer (2016 \$'s)	\$0.44	\$0.58	\$1.30	\$3.60	\$0.44	\$2.60	\$1.31	\$0.31	
escalator 2016\$'s to 2020\$'s	1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063	
M&S Loader \$/customer/yr 2020\$s	\$0.47	\$0.61	\$1.39	\$3.82	\$0.47	\$2.77	\$1.39	\$0.33	
Administrative & General as % of O&M	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	
Administrative & General \$/customer/yr 2020\$'s	\$12.03	\$15.74	\$35.53	\$98.08	\$12.12	\$71.01	\$35.62	\$8.34	
General Plant as % of O&M	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	
General Plant \$/customer/yr 2020\$'s	\$10.74	\$14.06	\$31.73	\$87.58	\$10.82	\$63.41	\$31.80	\$7.45	
TOTAL O&M LOADERS \$/customer/yr	\$23.23	\$30.41	\$68.65	\$189.48	\$23.41	\$137.19	\$68.80	\$16.12	
LRMC Rental Customer Cost \$/customer/year	\$212.21	\$240.74	\$371.81	\$741.01	\$212.89	\$1,594.42	\$471.01	\$196.51	
					\$17.74				
NCO Method:									
LRMC Rental Customer Cost \$/customer/year					\$212.89	\$1,594.42	\$471.01	\$196.51	
less annualized SRM rental					(\$146.10)	(\$1,203.07)	(\$274.73)	(\$150.53)	
plus annualized SRM NCO					\$25.49	\$51.20	\$25.52	\$25.45	
NCO Customer Cost \$/customer/year					\$92.29	\$442.55	\$221.80	\$71.43	
					\$7.69				
NCO with Replacement Cost Adder Method:									
LRMC Rental Customer Cost \$/customer/year					\$212.89	\$1,594.42	\$471.01	\$196.51	
less annualized SRM rental					(\$146.10)	(\$1,203.07)	(\$274.73)	(\$150.53)	
plus annualized SRM					\$229.74	\$677.21	\$288.80	\$231.78	
NCO w/ Replacement Customer Cost \$/cstmr/yr					\$296.54	\$1,068.56	\$485.08	\$277.75	
					\$24.71				

GTNC			EG			Total Noncore	System Total
MPD	HPD	Total	< 3 MM	> 3 MM	Total		
J	K	L	M	N	O	P	Q
\$2,098.99	\$3,693.07	\$2,369.69	\$905.76	\$2,353.22	\$1,195.25	\$1,630.53	\$150.76
\$25	\$9	\$34	\$19	\$12	\$31	\$64	\$37,633
\$5	\$2	\$7	\$8	\$1	\$9	\$16	\$878
\$30	\$11	\$41	\$28	\$13	\$40	\$80	\$38,512
48	10	58	71	10	81	139	890,903
\$628	\$1,113	\$704	\$388	\$1,288	\$499	\$578	\$43
1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063
\$667.34	\$1,183.42	\$748.21	\$412.12	\$1,368.96	\$530.25	\$614.88	\$45.96
0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.2%	100.0%
\$328	\$121	\$445	\$300	\$140	\$440	\$876	\$273,380
48	10	58	71	10	81	139	890,903
\$6.84	\$12.12	\$7.67	\$4.22	\$14.02	\$5.43	\$6.30	\$0.31
1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063
\$7.27	\$12.89	\$8.15	\$4.49	\$14.91	\$5.78	\$6.70	\$0.33
27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%
\$186.45	\$330.64	\$209.04	\$115.14	\$382.47	\$148.14	\$171.79	\$12.84
24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%
\$166.48	\$295.22	\$186.65	\$102.81	\$341.51	\$132.28	\$153.39	\$11.46
\$360.19	\$638.75	\$403.84	\$222.44	\$738.89	\$286.20	\$331.88	\$24.63
\$3,126.52	\$5,515.24	\$3,521.74	\$1,540.31	\$4,461.07	\$2,011.69	\$2,577.29	\$221.35
\$3,126.52	\$5,515.24	\$3,521.74	\$1,540.31	\$4,461.07	\$2,011.69	\$2,577.29	\$221.35
(\$2,098.99)	(\$3,693.07)	(\$2,369.69)	(\$905.76)	(\$2,353.22)	(\$1,195.25)	(\$1,630.53)	(\$150.76)
\$67.99	\$63.70	\$67.26	\$33.17	\$41.56	\$16.62	\$30.16	\$30.16
\$1,095.52	\$1,885.87	\$1,219.32	\$667.72	\$2,149.41	\$833.07	\$976.92	\$100.75
\$3,126.52	\$5,515.24	\$3,521.74	\$1,540.31	\$4,461.07	\$2,011.69	\$2,577.29	\$221.35
(\$2,098.99)	(\$3,693.07)	(\$2,369.69)	(\$905.76)	(\$2,353.22)	(\$1,195.25)	(\$1,630.53)	(\$150.76)
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$1,027.53	\$1,822.17	\$1,152.06	\$634.55	\$2,107.85	\$816.44	\$946.76	\$70.59

**TABLE LRMCC-1
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**METER SET ASSEMBLY (MSA) EXPENSE
2024 TCAP**

	Max Meter Flow Range	Meter Type	Meter, Regulator & Fitting Costs	Installation Costs	Total MSA Costs	
	A	B	C	E	F	
	Cfh		(Dollars)	(Dollars)	(Dollars)	
1	<i>Medium Pressure</i>					1
2	0-275	250	\$201.92	\$79.05	\$280.97	2
3	276 - 425	425	\$552.79	\$147.95	\$700.73	3
4	426-630	630	\$942.70	\$147.95	\$1,090.64	4
5	631 - 800	8C	\$1,184.83	\$295.89	\$1,480.72	5
6	801 - 1,100	11C	\$1,272.08	\$295.89	\$1,567.97	6
7	1,101 - 1,500	15C	\$1,959.59	\$965.32	\$2,924.91	7
8	1,501 - 2,000	2M	\$3,004.61	\$1,521.50	\$4,526.11	8
9	2,001 - 3,000	3M	\$2,876.82	\$1,521.50	\$4,398.32	9
10	3,001 - 5,000	5M	\$3,818.62	\$1,521.50	\$5,340.12	10
11	5,001 - 7,000	7M	\$4,135.22	\$1,521.50	\$5,656.72	11
12						12
13	<i>High Pressure</i>					13
14	0 - 940	400	\$1,560.80	\$965.32	\$2,526.12	14
15	941 - 1,050	8C	\$3,326.33	\$1,521.50	\$4,847.83	15
16	1,051 - 1,500	630	\$1,950.71	\$965.32	\$2,916.03	16
17	1,501 - 2,700	2M	\$3,498.37	\$1,521.50	\$5,019.87	17
18	2,701 - 4,000	3M	\$3,370.57	\$1,521.50	\$4,892.07	18
19	4,001 - 6,600	5M	\$4,823.01	\$1,736.02	\$6,559.03	19
20	6,601 - 9,200	7M	\$5,428.28	\$1,736.02	\$7,164.29	20
21	9,201 - 14,500	11M	\$5,971.25	\$2,040.68	\$8,011.93	21
22	14,501 - 21,400	16M	\$6,100.56	\$2,040.68	\$8,141.24	22
23	21,401 - 24,000	11M-HP	\$11,792.33	\$4,360.50	\$16,152.84	23
24	24,001 - 46,000	16M-HP	\$12,722.16	\$4,406.99	\$17,129.15	24
25	46,001 - 79,000	23M-HP	\$21,019.90	\$8,145.67	\$29,165.57	25
26	79,001 - 377,000	8" Turbine	\$41,020.86	\$12,055.79	\$53,076.65	26
27	377,001 - 600,000	Turbine			\$0.00	27
28	600,001 - 4,250,000	Turbine			\$0.00	28
29	> 4,250,000	Turbine			\$0.00	29

Notes:

1. Col. (F) = Col. (C) + Col. (D) + Col. (E).
2. MSA costs expressed in Year 2020 \$'s.
3. Data Source: SDG&E Gas Distribution Engineering Department.

**TABLE LRMCC-2
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**WEIGHTED MSA RECC FACTOR
2024 TCAP**

	Max Meter Flow Range	Meter, Regulator, & Fitting Costs	Meter & Regulator RECC Factor	Installation Costs	Installation Costs RECC Factor	Weighted Average RECC Factor	
	A	B	C	D	E	F	
	Cfh	(Dollars)	(Percent)	(Dollars)	(Percent)	(Percent)	
1	<i>Medium Pressure</i>						1
2	0 - 275	\$201.92	8.02%	\$79.05	8.36%	8.12%	2
3	276 - 425	\$552.79	8.02%	\$147.95	8.36%	8.09%	3
4	426-630	\$942.70	8.02%	\$147.95	8.36%	8.07%	4
5	631 - 800	\$1,184.83	8.02%	\$295.89	8.36%	8.09%	5
6	801 - 1,100	\$1,272.08	8.02%	\$295.89	8.36%	8.08%	6
7	1,101 - 1,500	\$1,959.59	8.02%	\$965.32	8.36%	8.13%	7
8	1,501 - 2,000	\$3,004.61	8.02%	\$1,521.50	8.36%	8.13%	8
9	2,001 - 3,000	\$2,876.82	8.02%	\$1,521.50	8.36%	8.14%	9
10	3,001 - 5,000	\$3,818.62	8.02%	\$1,521.50	8.36%	8.12%	10
11	5,001 - 7,000	\$4,135.22	8.02%	\$1,521.50	8.36%	8.11%	11
12							12
13	<i>High Pressure</i>						13
14	0 - 940	\$1,560.80	8.02%	\$965.32	8.36%	8.15%	14
15	941 - 1,050	\$3,326.33	8.02%	\$1,521.50	8.36%	8.13%	15
16	1,051 - 1,500	\$1,950.71	8.02%	\$965.32	8.36%	8.13%	16
17	1,501 - 2,700	\$3,498.37	8.02%	\$1,521.50	8.36%	8.12%	17
18	2,701 - 4,000	\$3,370.57	8.02%	\$1,521.50	8.36%	8.13%	18
19	4,001 - 6,600	\$4,823.01	8.02%	\$1,736.02	8.36%	8.11%	19
20	6,601 - 9,200	\$5,428.28	8.02%	\$1,736.02	8.36%	8.10%	20
21	9,201 - 14,500	\$5,971.25	8.02%	\$2,040.68	8.36%	8.11%	21
22	14,501 - 21,400	\$6,100.56	8.02%	\$2,040.68	8.36%	8.10%	22
23	21,401 - 24,000	\$11,792.33	8.02%	\$4,360.50	8.36%	8.11%	23
24	24,001 - 46,000	\$12,722.16	8.02%	\$4,406.99	8.36%	8.11%	24
25	46,001 - 79,000	\$21,019.90	8.02%	\$8,145.67	8.36%	8.11%	25
26	79,001 - 377,000	\$41,020.86	8.02%	\$12,055.79	8.36%	8.10%	26
27	377,001 - 600,000					8.10%	27
28	600,001 - 4,250,000					8.10%	28
29	> 4,250,000					8.10%	29

Notes:

1. Col. (F) = [Col (B) x Col. (C)] + [Col. (D) x Col. (E)] ÷ [Col. (B) + Col. (D)]
2. Rows (27) - (29): Weighted Average RECC Factor meter & installation weights from Row (26).
3. Data Source: RECC Factors from Finance Group

TABLE LRMCC-3
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
ANNUALIZED SERVICE, REGULATOR & METER (SRM) MARGINAL INVESTMENT
2024 TCAP

	Max Meter Flow Range	Meter & Regulator				Pipe & Installation				Total SRM Annualized Marg. Invstmnt.
		Meter Type	M&R Cost	RECC Factor	Annualized Marg. Invstmnt.	Service Type	Service Cost	RECC Factor	Annualized Marg. Invstmnt.	
	A	B	C	D	E	F	G	H	I	J
	Cfh		(Dollars)	(Percent)	(Dollars)		(Dollars)	(Percent)	(Dollars)	(Dollars)
1	<i>Medium Pressure</i>									
2	0-275	250	\$281	8.12%	\$23	Poly-1"	\$1,573	7.37%	\$116	\$139
3	276 - 425	425	\$701	8.09%	\$57	Poly-1"	\$1,573	7.37%	\$116	\$173
4	426-630	630	\$1,091	8.07%	\$88	Poly-1"	\$1,573	7.37%	\$116	\$204
5	631 - 800	8C	\$1,481	8.09%	\$120	Poly-1"	\$1,573	7.37%	\$116	\$236
6	801 - 1,100	11C	\$1,568	8.08%	\$127	Poly-1"	\$1,573	7.37%	\$116	\$243
7	1,101 - 1,500	15C	\$2,925	8.13%	\$238	Poly-1"	\$1,573	7.37%	\$116	\$354
8	1,501 - 2,000	2M	\$4,526	8.13%	\$368	Poly-1"	\$1,573	7.37%	\$116	\$484
9	2,001 - 3,000	3M	\$4,398	8.14%	\$358	Poly-1"	\$1,573	7.37%	\$116	\$474
10	3,001 - 5,000	5M	\$5,340	8.12%	\$433	Poly-2"	\$7,059	7.37%	\$520	\$954
11	5,001 - 7,000	7M	\$5,657	8.11%	\$459	Poly-2"	\$7,059	7.37%	\$520	\$979
12										
13	<i>High Pressure</i>									
14	0 - 940	400	\$2,526	8.15%	\$206	Poly-1"	\$1,573	7.37%	\$116	\$322
15	941 - 1,050	8C	\$4,848	8.13%	\$394	Poly-1"	\$1,573	7.37%	\$116	\$510
16	1,051 - 1,500	630	\$2,916	8.13%	\$237	Poly-1"	\$1,573	7.37%	\$116	\$353
17	1,501 - 2,700	2M	\$5,020	8.12%	\$408	Poly-1"	\$1,573	7.37%	\$116	\$524
18	2,701 - 4,000	3M	\$4,892	8.13%	\$397	Poly-2"	\$7,059	7.37%	\$520	\$918
19	4,001 - 6,600	5M	\$6,559	8.11%	\$532	Poly-2"	\$7,059	7.37%	\$520	\$1,052
20	6,601 - 9,200	7M	\$7,164	8.10%	\$580	Poly-2"	\$7,059	7.37%	\$520	\$1,101
21	9,201 - 14,500	11M	\$8,012	8.11%	\$649	Poly-3"	\$12,815	7.37%	\$944	\$1,594
22	14,501 - 21,400	16M	\$8,141	8.10%	\$660	Poly-3"	\$12,815	7.37%	\$944	\$1,604
23	21,401 - 24,000	11M-HP	\$16,153	8.11%	\$1,310	Poly-4"	\$15,533	7.37%	\$1,145	\$2,455
24	24,001 - 46,000	16M-HP	\$17,129	8.11%	\$1,389	Poly-4"	\$15,533	7.37%	\$1,145	\$2,533
25	46,001 - 79,000	23M-HP	\$29,166	8.11%	\$2,367	Steel-4"	\$27,696	7.37%	\$2,041	\$4,408
26	79,001 - 377,000	8" Turbine	\$53,077	8.10%	\$4,298	Steel-6"	\$42,055	7.37%	\$3,099	\$7,397
27	377,001 - 600,000	Turbine	\$0	8.10%	\$0	Steel-8"	\$0	7.37%	\$0	\$0
28	600,001 - 4,250,000	Turbine	\$0	8.10%	\$0	Steel-16"	\$0	7.37%	\$0	\$0
29	> 4,250,000	Turbine	\$0	8.10%	\$0	Steel-24"	\$0	7.37%	\$0	\$0

Notes:

1. Col. (E) = Col. (C) x Col. (D). Col. (I) = Col. (G) x Col. (H).
2. Col. (J) = Col. (E) + Col. (I).
3. Service Line installation cost (column F & G) provided by SDG&E Gas Distribution Engineering Department

Data Sources: MSA Cost, MSA RECC

Line Extension Credit, Rule 15, 11/20/2020	
Water Heating	\$1,138
Oven/Range	\$201
Space Heating	\$987
Dryer Stub	\$289
Total	\$2,615

TABLE LRMCC-4
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
MSA ASSIGNMENT FACTORS BY CUSTOMER CLASS
2024 TCAP

	Max Meter Flow Range	Meter Type	Res					NGV	GN-3	Total Core	GTNC			EG			Total Noncore	System Total
			G-R	G-M	G-S	G-T	Total				MPD	HPD	Total	< 3 MM	> 3 MM	Total		
	A	B	C					D	E	F	G	H	I	J	K	L	N	O
	Cfh																	
1	Medium Pressure		98%	2%	0%	0%												1
2	0-275	250	803,776	12,932	85	5	816,798	11	12,290	829,099	-	-	-	1	-	1	1	829,100
3	276 - 425	425	20,676	1,047	29	2	21,754	-	2,071	23,825	-	-	-	-	-	-	-	23,825
4	426-630	630	11,102	608	6	7	11,723	-	2,099	13,822	-	-	-	-	-	-	-	13,822
5	631 - 800	8C	7,706	545	18	4	8,273	1	2,137	10,411	-	-	-	-	-	-	-	10,411
6	801 - 1,100	11C	3,127	467	29	4	3,627	2	1,887	5,516	-	-	-	-	-	-	-	5,516
7	1,101 - 1,500	15C	990	206	5	4	1,205	-	1,253	2,458	-	-	-	-	-	-	-	2,458
8	1,501 - 2,000	2M	298	88	6	2	394	-	1,255	1,649	-	-	-	34	-	34	34	1,683
9	2,001 - 3,000	3M	95	252	17	30	394	2	1,650	2,046	-	-	-	8	-	8	8	2,054
10	3,001 - 5,000	5M	17	83	7	52	159	3	756	918	1	-	1	10	-	10	11	929
11	5,001 - 7,000	7M	8	27	5	22	62	5	324	391	7	-	7	7	-	7	14	405
12																		
13	High Pressure																	
14	0 - 940	400	0	0	0	0	-	-	1	1	-	-	-	1	-	1	1	2
15	941 - 1,050	8C	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
16	1,051 - 1,500	630	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
17	1,501 - 2,700	2M	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
18	2,701 - 4,000	3M	0	0	0	0	-	-	-	-	-	-	-	1	-	1	1	1
19	4,001 - 6,600	5M	0	0	0	0	-	-	-	-	1	-	1	-	-	1	1	1
20	6,601 - 9,200	7M	0	0	0	0	-	-	-	-	1	-	1	-	4	4	5	7
21	9,201 - 14,500	11M	2	27	8	31	68	-	269	337	7	2	9	3	-	3	12	349
22	14,501 - 21,400	16M	4	24	3	13	44	11	147	202	15	-	15	1	-	1	16	218
23	21,401 - 24,000	11M-HP	0	3	1	0	4	3	11	18	4	-	4	-	1	1	5	23
24	24,001 - 46,000	16M-HP	0	0	0	0	-	5	52	57	7	4	11	3	1	4	15	72
25	46,001 - 79,000	23M-HP	0	0	0	0	-	1	9	10	3	2	5	3	3	6	11	21
26	79,001 - 377,000	8" Turbine	0	0	0	0	-	-	2	2	2	2	4	-	-	-	4	6
27	377,001 - 600,000	Turbine	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
28	600,001 - 4,250,000	Turbine	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
29	> 4,250,000	Turbine	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
30																		
31	Total Customers		847,801	16,309	219	176	864,505	45	26,214	890,764	48	10	58	71	10	81	139	890,903

TABLE MISC-1
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

DEMAND DETERMINANT SUMMARY
2024 TCAP

Billing Determinants	Res					Total	NGV	GN-3	Core	GINC			EG			Power Plants	Noncore	System
	G-R	G-M	G-S	G-T	MPD					HPD	Total	< 3 MM	> 3 MM	Total				
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
TCAP Customers	857,179	16,489	221	178	874,067	28	30,937	905,032	44	9	53	72	18	90	-	143	905,175	
2021Customers	847,801	16,309	219	176	864,505	45	26,214	890,764	48	10	58	71	10	81	-	139	890,903	

Demand Forecast per 2017 TCAP in Mtherms		Res	NGV	Core C&I	Total Core	C&I	EG Tier 1	EG Tier 2	Total EG	Core	Total System
1	DIRECT Demand										
2	Transmission										
3	Average Year Throughput (MTh)	0	0	0	0	17,569	5,074	456,289	461,363	478,932	478,932
4	Cold Year Throughput (1-in-35) (MTh)	0	0	0	0	17,569	5,074	456,289	461,363	478,932	478,932
5	Cold Year Peak Month (December) (MTh)	0	0	0	0	1,477	191	35,479	35,670	37,147	37,147
6	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	0	0	0	0	48	6	1,684	1,690	1,738	1,738
7	Number of Customers	0	0	0	0	9	3	12	15	24	24
8	High Pressure										
9	Average Year Throughput (MTh)	67	8,874	3,116	12,057	7,497	3,531	36,209	39,740	47,237	59,294
10	Cold Year Throughput (1-in-35) (MTh)	74	8,874	3,251	12,199	7,497	3,531	36,209	39,740	47,237	59,436
11	Cold Year Peak Month (December) (MTh)	11	721	373	1,105	630	287	3,027	3,314	3,944	5,049
12	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	1	23	18	42	20	9	98	107	127	169
13	Number of Customers	2	4	5	11	9	5	4	9	18	29
14	Medium Pressure										
15	Average Year Throughput (MTh)	313,167	15,255	191,661	520,083	21,879	21,131	7,997	29,127	51,006	571,089
16	Cold Year Throughput (1-in-35) (MTh)	343,334	15,255	199,985	558,574	21,879	21,131	7,997	29,127	51,006	609,580
17	Cold Year Peak Month (December) (MTh)	50,177	1,239	22,957	74,374	1,839	1,767	669	2,435	4,275	78,649
18	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	2,943	40	1,098	4,081	59	57	22	79	138	4,219
19	Number of Customers	874,065	24	30,932	905,021	35	64	2	66	101	905,122
20	CUMULATIVE Demand										
21	Transmission										
22	Average Year Throughput (MTh)	313,234	24,129	194,777	532,140	46,945	29,736	500,494	530,230	577,175	1,109,315
23	Cold Year Throughput (1-in-35) (MTh)	343,408	24,129	203,236	570,773	46,945	29,736	500,494	530,230	577,175	1,147,948
24	Cold Year Peak Month (December) (MTh)	50,188	1,960	23,331	75,479	3,947	2,244	39,175	41,419	45,366	120,845
25	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	2,944	63	1,115	4,123	127	72	1,803	1,876	2,003	6,126
26	Number of Customers	874,067	28	30,937	905,032	53	72	18	90	143	905,175
27	High Pressure										
28	Average Year Throughput (MTh)	313,234	24,129	194,777	532,140	29,376	24,662	44,206	68,867	98,243	630,384
29	Cold Year Throughput (1-in-35) (MTh)	343,408	24,129	203,236	570,773	29,376	24,662	44,206	68,867	98,243	669,016
30	Cold Year Peak Month (December) (MTh)	50,188	1,960	23,331	75,479	2,470	2,053	3,696	5,749	8,219	83,698
31	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	2,944	63	1,115	4,123	80	66	119	185	265	4,388
32	Number of Customers	874,067	28	30,937	905,032	44	69	6	75	119	905,151
33	Medium Pressure										
34	Average Year Throughput (MTh)	313,167	15,255	191,661	520,083	21,879	21,131	7,997	29,127	51,006	571,089
35	Cold Year Throughput (1-in-35) (MTh)	343,334	15,255	199,985	558,574	21,879	21,131	7,997	29,127	51,006	609,580
36	Cold Year Peak Month (December) (MTh)	50,177	1,239	22,957	74,374	1,839	1,767	669	2,435	4,275	78,649
37	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	2,943	40	1,098	4,081	59	57	22	79	138	4,219
38	Number of Customers	874,065	24	30,932	905,021	35	64	2	66	101	905,122

TABLE LRMCC-5
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
MSA ASSIGNMENT FACTORS BY CUSTOMER CLASS
2020 TCAP

	Max Meter Flow Range	Meter Type	Res					NGV	GN-3	Total Core	GTNC			EG			Total Noncore	System Total		
			G-R	G-M	G-S	G-T	Total				MPD	HPD	Total	< 3 MM	> 3 MM	Total				
	A	B	C					D	E	F	G	H	I	J	K	L	N	O		
	Cfh																			
1	<i>Medium Pressure</i>																	1		
2	0-275	250	94.81%	79.29%	38.81%	2.84%	94.48%	24.44%	46.88%	93.08%	0.00%	0.00%	0.00%	1.41%	0.00%	1.23%	0.72%	93.06%	2	
3	276 - 425	425	2.44%	6.42%	13.24%	1.14%	2.52%	0.00%	7.90%	2.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.67%	3	
4	426-630	630	1.31%	3.73%	2.74%	3.98%	1.36%	0.00%	8.01%	1.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.55%	4	
5	631 - 800	8C	0.91%	3.34%	8.22%	2.27%	0.96%	2.22%	8.15%	1.17%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.17%	5	
6	801 - 1,100	11C	0.37%	2.86%	13.24%	2.27%	0.42%	4.44%	7.20%	0.62%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.62%	6	
7	1,101 - 1,500	15C	0.12%	1.26%	2.28%	2.27%	0.14%	0.00%	4.78%	0.28%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.28%	7	
8	1,501 - 2,000	2M	0.04%	0.54%	2.74%	1.14%	0.05%	0.00%	4.79%	0.19%	0.00%	0.00%	0.00%	47.89%	0.00%	41.98%	24.46%	0.19%	8	
9	2,001 - 3,000	3M	0.01%	1.55%	7.76%	17.05%	0.05%	4.44%	6.29%	0.23%	0.00%	0.00%	0.00%	11.27%	0.00%	9.88%	5.76%	0.23%	9	
10	3,001 - 5,000	5M	0.00%	0.51%	3.20%	29.55%	0.02%	6.67%	2.88%	0.10%	2.08%	0.00%	1.72%	14.08%	0.00%	12.35%	7.91%	0.10%	10	
11	5,001 - 7,000	7M	0.00%	0.17%	2.28%	12.50%	0.01%	11.11%	1.24%	0.04%	14.58%	0.00%	12.07%	9.86%	0.00%	8.64%	10.07%	0.05%	11	
12																			12	
13	<i>High Pressure</i>																		13	
14	0 - 940	400	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.41%	0.00%	1.23%	0.72%	0.00%	14	
15	941 - 1,050	8C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15	
16	1,051 - 1,500	630	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16	
17	1,501 - 2,700	2M	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	17	
18	2,701 - 4,000	3M	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	1.23%	0.72%	0.00%	18	
19	4,001 - 6,600	5M	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.08%	0.00%	1.72%	0.00%	0.00%	0.00%	0.72%	0.00%	19	
20	6,601 - 9,200	7M	0.00%	0.00%	0.00%	0.00%	0.00%	2.22%	0.00%	0.00%	2.08%	0.00%	1.72%	0.00%	40.00%	4.94%	3.60%	0.00%	20	
21	9,201 - 14,500	11M	0.00%	0.17%	3.65%	17.61%	0.01%	0.00%	1.03%	0.04%	14.58%	20.00%	15.52%	4.23%	0.00%	3.70%	8.63%	0.04%	21	
22	14,501 - 21,400	16M	0.00%	0.15%	1.37%	7.39%	0.01%	24.44%	0.56%	0.02%	31.25%	0.00%	25.86%	1.41%	0.00%	1.23%	11.51%	0.02%	22	
23	21,401 - 24,000	11M-HP	0.00%	0.02%	0.46%	0.00%	0.00%	6.67%	0.04%	0.00%	8.33%	0.00%	6.90%	0.00%	10.00%	1.23%	3.60%	0.00%	23	
24	24,001 - 46,000	16M-HP	0.00%	0.00%	0.00%	0.00%	0.00%	11.11%	0.20%	0.01%	14.58%	40.00%	18.97%	4.23%	10.00%	4.94%	10.79%	0.01%	24	
25	46,001 - 79,000	23M-HP	0.00%	0.00%	0.00%	0.00%	0.00%	2.22%	0.03%	0.00%	6.25%	20.00%	8.62%	4.23%	30.00%	7.41%	7.91%	0.00%	25	
26	79,001 - 377,000	8" Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	4.17%	20.00%	6.90%	0.00%	0.00%	0.00%	2.88%	0.00%	26	
27	377,001 - 600,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	27	
28	600,001 - 4,250,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	28	
29	> 4,250,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	29	
30																			30	
31	Total Customers		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	31

Notes:

- Factors derived from meter capacity analysis results in Table "LRMCC-4" (tab MSAIlocv1)
 Data Sources: Tabs: MSA Cost, MSAIloc v1

TABLE LRMCC-6
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
FORECAST CUSTOMERS BY METER TYPE BY CUSTOMER CLASS
2020 TCAP

	Max Meter Flow Range	Meter Type	Res				Total	NGV	GN-3	Total Core	GTNC			EG			Power Plant	Total Noncore	System Total
			G-R	G-M	G-S	G-T					MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C				D	E	F	G	H	I	J	K	L	M	N	O	
1	<i>Medium Pressure</i>																		1
2	0-275	250	812,667	13,075	86	5	825,833	7	14,504	840,344	-	-	-	1	-	1	-	840,345	
3	276 - 425	425	20,905	1,059	29	2	21,995	-	2,444	24,439	-	-	-	-	-	-	-	24,439	
4	426-630	630	11,225	615	6	7	11,853	-	2,477	14,330	-	-	-	-	-	-	-	14,330	
5	631 - 800	8C	7,791	551	18	4	8,365	1	2,522	10,887	-	-	-	-	-	-	-	10,887	
6	801 - 1,100	11C	3,162	472	29	4	3,667	1	2,227	5,895	-	-	-	-	-	-	-	5,895	
7	1,101 - 1,500	15C	1,001	208	5	4	1,218	-	1,479	2,697	-	-	-	-	-	-	-	2,697	
8	1,501 - 2,000	2M	301	89	6	2	398	-	1,481	1,879	-	-	-	34	-	34	-	1,914	
9	2,001 - 3,000	3M	96	255	17	30	398	1	1,947	2,347	-	-	-	8	-	8	-	2,355	
10	3,001 - 5,000	5M	17	84	7	53	161	2	892	1,055	1	-	1	10	-	10	-	1,066	
11	5,001 - 7,000	7M	8	27	5	22	63	3	382	448	6	-	6	7	-	7	-	462	
12	<i>High Pressure</i>																		12
13	0 - 940	400	-	-	-	-	-	-	1	1	-	-	-	1	-	1	-	2	
14	941 - 1,050	8C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
15	1,051 - 1,500	630	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	1,501 - 2,700	2M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
17	2,701 - 4,000	3M	-	-	-	-	-	-	-	-	-	-	-	2	-	2	-	2	
18	4,001 - 6,600	5M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
19	6,601 - 9,200	7M	-	-	-	-	-	-	1	1	1	-	1	-	7	7	-	8	
20	9,201 - 14,500	11M	2	27	8	31	69	-	317	386	6	2	8	3	-	3	-	397	
21	14,501 - 21,400	16M	4	24	3	13	44	7	173	225	14	-	14	1	-	1	-	239	
22	21,401 - 24,000	11M-HP	-	3	1	-	4	2	13	19	4	-	4	-	2	2	-	24	
23	24,001 - 46,000	16M-HP	-	-	-	-	-	3	61	64	6	4	10	3	2	5	-	79	
24	46,001 - 79,000	23M-HP	-	-	-	-	-	1	11	11	3	2	5	3	5	8	-	24	
25	79,001 - 377,000	8" Turbine	-	-	-	-	-	-	2	2	2	2	4	-	-	-	-	6	
26	377,001 - 600,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
27	600,001 - 4,250,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
28	> 4,250,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
29																			29
30																			30
31	Total Customers		857,179	16,489	221	178	874,067	28	30,937	905,032	44	9	53	72	18	90	-	143	905,175

- Notes:
- Row (31) = forecast annual average number of customers during proposed 2020 - 2022 TCAP period
 - Rows (2) - (29) = Row (31) x MSA assignment factors for each market segment for each flow range.

verify 857,179 16,489 221 178 874,067 28 30,937 905,032 44 9 53 72 18 90 - 143 905,175
 Data Sources: tabs: MSA Cost, MSAlloc v2

**TABLE LRMCC-7
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**ANNUALIZED SRM MARGINAL INVESTMENT BY CUSTOMER CLASS
2020 TCAP**

	Max Meter Flow Range	Meter Type	Res					NGV	GN-3	Total Core	GTNC			EG			Power Plant	Total Noncore	System Total	
			G-R	G-M	G-S	G-T	Total				MPD	HPD	Total	< 3 MM	> 3 MM	Total				
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
	Cfh																			
	(Dollars)																			
1	<i>Medium Pressure</i>																			1
2	0-275	250	\$116,642,219	\$1,876,664	\$12,335	\$726	\$118,531,943	\$937	\$2,011,951	\$120,544,831	\$0	\$0	\$0	\$141	\$0	\$141	\$0	\$141	\$120,544,972	2
3	276 - 425	425	\$3,674,206	\$186,056	\$5,153	\$355	\$3,865,770	\$0	\$421,887	\$4,287,658	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,287,658	3
4	426-630	630	\$2,265,392	\$124,064	\$1,224	\$1,428	\$2,392,109	\$0	\$505,054	\$2,897,163	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,897,163	4
5	631 - 800	8C	\$1,574,644	\$111,365	\$3,678	\$817	\$1,690,504	\$145	\$594,360	\$2,285,009	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,285,009	5
6	801 - 1,100	11C	\$638,815	\$95,404	\$5,924	\$817	\$740,960	\$298	\$540,412	\$1,281,670	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,281,670	6
7	1,101 - 1,500	15C	\$202,874	\$42,214	\$1,025	\$820	\$246,932	\$0	\$523,122	\$770,054	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$770,054	7
8	1,501 - 2,000	2M	\$61,075	\$18,036	\$1,230	\$410	\$80,750	\$0	\$716,944	\$797,695	\$0	\$0	\$0	\$16,690	\$0	\$16,690	\$0	\$16,690	\$814,384	8
9	2,001 - 3,000	3M	\$19,474	\$51,658	\$3,485	\$6,150	\$80,768	\$582	\$922,638	\$1,003,988	\$0	\$0	\$0	\$3,844	\$0	\$3,844	\$0	\$3,844	\$1,007,832	9
10	3,001 - 5,000	5M	\$3,480	\$16,992	\$1,433	\$10,645	\$32,551	\$1,757	\$850,884	\$885,192	\$874	\$0	\$874	\$9,671	\$0	\$9,671	\$0	\$10,545	\$895,737	10
11	5,001 - 7,000	7M	\$1,637	\$5,526	\$1,023	\$4,502	\$12,688	\$3,007	\$374,373	\$390,068	\$6,282	\$0	\$6,282	\$6,950	\$0	\$6,950	\$0	\$13,232	\$403,301	11
12																				12
13	<i>High Pressure</i>																			13
14	0 - 940	400	\$0	\$0	\$0	\$0	\$0	\$0	\$380	\$380	\$0	\$0	\$0	\$326	\$0	\$326	\$0	\$326	\$706	14
15	941 - 1,050	8C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	15
16	1,051 - 1,500	630	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	16
17	1,501 - 2,700	2M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	17
18	2,701 - 4,000	3M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,652	\$1,652	\$0	\$1,652	\$1,652	18
19	4,001 - 6,600	5M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$964	\$0	\$964	\$0	\$0	\$0	\$0	\$964	\$964	19
20	6,601 - 9,200	7M	\$0	\$0	\$0	\$0	\$0	\$676	\$1,299	\$1,975	\$1,009	\$0	\$1,009	\$0	\$7,925	\$7,925	\$0	\$8,934	\$10,909	20
21	9,201 - 14,500	11M	\$409	\$5,524	\$1,637	\$6,342	\$13,912	\$0	\$505,998	\$519,910	\$10,227	\$2,869	\$13,096	\$4,849	\$0	\$4,849	\$0	\$17,945	\$537,855	21
22	14,501 - 21,400	16M	\$818	\$4,910	\$614	\$2,659	\$9,001	\$10,839	\$278,311	\$298,150	\$22,058	\$0	\$22,058	\$1,627	\$0	\$1,627	\$0	\$23,685	\$321,836	22
23	21,401 - 24,000	11M-HP	\$0	\$614	\$205	\$0	\$819	\$4,524	\$31,870	\$37,212	\$9,002	\$0	\$9,002	\$0	\$4,419	\$4,419	\$0	\$13,421	\$50,633	23
24	24,001 - 46,000	16M-HP	\$0	\$0	\$0	\$0	\$0	\$7,780	\$155,474	\$163,254	\$16,256	\$9,120	\$25,377	\$7,707	\$4,560	\$12,268	\$0	\$37,644	\$200,898	24
25	46,001 - 79,000	23M-HP	\$0	\$0	\$0	\$0	\$0	\$2,707	\$46,817	\$49,524	\$12,121	\$7,934	\$20,055	\$13,409	\$23,802	\$37,211	\$0	\$57,266	\$106,790	25
26	79,001 - 377,000	8" Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$17,459	\$17,459	\$13,561	\$13,314	\$26,875	\$0	\$0	\$0	\$0	\$26,875	\$44,334	26
27	377,001 - 600,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	27
28	600,001 - 4,250,000	Turbine																		28
29	> 4,250,000	Turbine																		29
30	Total		\$125,085,044	\$2,539,025	\$38,966	\$35,673	\$127,698,707	\$33,251	\$8,499,232	\$136,231,191	\$92,356	\$33,238	\$125,593	\$65,214	\$42,358	\$107,572	\$0	\$233,166	\$136,464,357	30
31	Forecast Customers		857,179	16,489	221	178	874,067	28	30,937	905,032	44	9	53	72	18	90	-	143	905,175	31
32																				32
33	Average SRM Cost		\$146	\$154	\$176	\$200	\$146	\$1,203	\$275	\$151	\$2,099	\$3,693	\$2,370	\$906	\$2,353	\$1,195	\$0	\$1,631	\$151	33

Notes:

1. Rows (2) - (29) = SRM Annualized Marginal Investment x Number of MSA's per Customer Segment for each particular flow range.

2. Row (33) = Row (30) ÷ Row (31).

Data Sources: tabs: MSA Fcst, MSA Rental, Factors

TABLE LRMCC-8
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

ALLOCATION OF CUSTOMER-RELATED DISTRIBUTION O&M EXPENSES BY CUSTOMER CLASS
2024 TCAP

	Distribution O&M Account	Marginal O&M	G-R	G-M	Res G-S	G-T	Total	NGV	GN-3	Total Core	GTNC			EG			Total Noncore	System Total
											MPD	HPD	Total	< 3 MM	> 3 MM	Total		
	A	B					C	D	E	F	G	H	I	J	K	L	N	O
1																		
2	Allocator - Total of other Distribution O&M Operating	56%	87%	2%	0%	0%	89%	0%	8%	55%	0%	0%	0%	0%	0%	0%	0%	98%
3	Allocation (M\$)	\$3,782	\$3,285	\$83	\$0	\$6	\$3,377	\$1	\$310	\$2,097	\$2	\$1	\$3	\$2	\$1	\$3	\$6	\$3,694
4	871 - Distribution Load Dispatching = Non-Marginal Designation																	
5																		
6	Allocator - Customers Wtd by Services costs	100%	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%
7	Allocation (M\$)	\$5,421	\$5,070	\$102	\$2	\$4	\$5,179	\$1	\$235	\$5,415	\$2	\$1	\$3	\$1	\$1	\$2	\$6	\$5,421
8	875 - Meas & Reg Station Exp = 100% Demand-Related																	
9																		
10	Allocator - Customers Wtd by Meters & Regs costs	100%	82%	3%	0%	0%	85%	0%	14%	100%	0%	0%	0%	0%	0%	0%	0%	100%
11	Allocation (M\$)	\$5,510	\$4,517	\$161	\$7	\$15	\$4,699	\$3	\$782	\$5,485	\$9	\$4	\$13	\$8	\$5	\$12	\$25	\$5,510
12																		
13	Allocator - Customer Service Expense	0%	86%	2%	0%	0%	88%	0%	7%	0%	0%	0%	0%	0%	0%	0%	0%	95%
14	Allocation (M\$)	\$8,727	\$7,488	\$171	\$4	\$10	\$7,673	\$1	\$593	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$0	\$8,268
15																		
16	Allocator - Total of other Distribution O&M Operating	56%	87%	2%	0%	0%	89%	0%	8%	55%	0%	0%	0%	0%	0%	0%	0%	98%
17	Allocation (M\$)	\$8,447	\$7,337	\$186	\$6	\$13	\$7,541	\$2	\$692	\$4,684	\$5	\$2	\$7	\$4	\$2	\$6	\$13	\$8,249
18	881 - Rents = Non-Marginal Designation																	
19																		
20	Allocator - Total Other Distribution O&M Maintenance	100%	90%	2%	0%	0%	92%	0%	8%	100%	0%	0%	0%	0%	0%	0%	0%	100%
21	Allocation (M\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
22																		
23	Allocator - Customers Wtd by Services costs	100%	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%
24	Allocation (M\$)	\$1,237	\$1,157	\$23	\$0	\$1	\$1,181	\$0	\$54	\$1,235	\$1	\$0	\$1	\$0	\$0	\$1	\$1	\$1,237
25	888 - Maint. Of Compressor Station Eq = 100% Demand-Related																	
26	889 - Maint. of Meas. & Reg Station Eq = 100% Demand-Related																	
27																		
28	Allocator - Customers Wtd by Services costs	100%	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%
29	Allocation (M\$)	\$2,998	\$2,804	\$56	\$1	\$2	\$2,864	\$0	\$130	\$2,995	\$1	\$0	\$2	\$1	\$1	\$1	\$3	\$2,998
30																		
31	Allocator - Customers Wtd by Meters & Regs costs	100%	82%	3%	0%	0%	85%	0%	14%	100%	0%	0%	0%	0%	0%	0%	0%	100%
32	Allocation (M\$)	\$2,258	\$1,851	\$66	\$3	\$6	\$1,926	\$1	\$320	\$2,248	\$4	\$1	\$5	\$3	\$2	\$5	\$10	\$2,258
33	894 - Maint. of Other Eq = Non-Marginal Designation																	
34	Total 870 - 894 O&M Allocation (M\$)	\$38,379	\$33,508	\$849	\$26	\$58	\$34,440	\$11	\$3,117	\$24,158	\$25	\$9	\$34	\$19	\$12	\$31	\$64	\$37,633
35	Allocation %	100%	87%	2%	0%	0%	90%	0%	8%	63%	0%	0%	0%	0%	0%	0%	0%	98%

Notes:

- Col. (B) from Customer-Related expense section of Workpapers Table "LF-3". (tab Loader Input)
- Allocation Factors for FERC Accounts 870 - 894 from Workpapers Table "LRMCC-9" (tab 870-894 Fctrs)

Data Sources: tab: Loader Input, 870-894 Fctrs

TABLE LRMCC-9
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
Allocation Factors for Distribution O&M Expenses
2020 TCAP

Allocation Method	G-R	G-M	Res G-S	G-T	Total	NGV	GN-3	Total Core	GTNC			EG			Total Noncore	System Total
									MPD	HPD	Total	< 3 MM	> 3 MM	Total		
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1 874, 887, 892 - Services																1
2 Allocator - Customers Wtd by Services costs (M\$)	\$1,348,408	\$27,167	\$554	\$1,190	\$1,377,320	\$234	\$62,588	\$1,440,142	\$633	\$205	\$838	\$375	\$269	\$644	\$1,482	\$1,441,624
3 Alloc %	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%
4 878, 893 - Meters & House Regulators O&M Expense																4
5 Allocator - Customers Wtd by Meters & Regs costs (M\$)	\$276,621	\$9,843	\$414	\$942	\$287,820	\$197	\$47,900	\$335,917	\$564	\$224	\$788	\$462	\$278	\$740	\$1,528	\$337,445
6 Alloc %	82%	3%	0%	0%	85%	0%	14%	100%	0%	0%	0%	0%	0%	0%	0%	100%
7 879 - Customer Installations (M\$)																7
8 Allocator - Customer Service	\$9,966	\$227	\$6	\$13	\$10,211	\$2	\$789	\$11,003	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,615
9 Alloc %	85.8%	2.0%	0.1%	0.1%	87.9%	0.0%	6.8%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	95%

Data Sources: tab: M&HR Alloc

TABLE LRMCC-10
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
ALLOCATION OF CUSTOMER O&M EXPENSES BY CUSTOMER CLASS
2020 TCAP

O&M Operational Activity	Total O&M	Res	NGV	GN-3	Total Core	GTNC			EG		IPP	Total Noncore	System Total	
						MPD	HPD	Total	< 3 MM	> 3 MM				
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1 FIELD SERVICES Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2 CUSTOMER CONTACT Total	\$9,845	\$9,269	\$0	\$576	\$9,845	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,845
3 METER READING Total	\$120,838	\$117,160	\$6	\$3,652	\$120,818	\$7	\$2	\$9	\$10	\$1	\$11	\$0	\$20	\$120,838
4 BILLING SERVICES Total	\$397,794	\$370,009	\$18	\$11,535	\$381,562	\$5,339	\$1,741	\$7,079	\$8,063	\$1,089	\$9,152	\$0	\$16,232	\$397,794
5 CREDIT & COLLECTIONS Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6 BUSINESS ANALYSIS Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7 CUSTOMER RESEARCH & COMMUNICATION Total	\$157,128	\$152,347	\$8	\$4,749	\$157,104	\$8	\$2	\$10	\$13	\$2	\$14	\$0	\$24	\$157,128
8 CUSTOMER SERVICE TECHNOLOGY & SUPPORT Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9 C&I CUSTOMER SERVICE Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10 CONSUMER PROGRAMS & SERVICES Total	\$192,630	\$186,767	\$9	\$5,822	\$192,599	\$10	\$3	\$14	\$15	\$2	\$18	\$0	\$31	\$192,630
11 FEDERAL ACCOUNTS MANAGEMENT Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12 CUSTOMER SERVICES SUPPORT STAFF Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13 COMMUNITY OUTREACH & INFO SERVICES Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14 OTHER Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15 SVP COST CENTERS Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16														
17 Total	\$878,235	\$835,552	\$41	\$26,335	\$861,928	\$5,364	\$1,748	\$7,112	\$8,101	\$1,094	\$9,196	\$0	\$16,307	\$878,235
18 Allocation %	100%	95%	0%	3%	98%	1%	0%	1%	1%	0%	1%	0%	2%	100%

Note:
1. O&M Operational Activities cost assigned using allocation methods identified for each SDG&E department in the Customer Operations division.
Source: From file: SDGE 2020TCAP LRMCC OM Loaders.xls Tab: LRMCC-O&M Summary

TABLE LRMCC-backup.1
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
O&M ALLOCATION FACTOR: Number of Customers Weighted by Service Line Cost
2020 TCAP

	Max Meter Flow Range	Meter Type	Services Plant Investment	Res				Total	NGV	GN-3	Total Core	GTNC			EG		Total Noncore	System Total		
				G-R	G-M	G-S	G-T					MPD	HPD	Total	< 3 MM	> 3 MM				
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
	(Thousand Dollars)																			
1	Medium Pressure																			1
2	0-275	250	\$2	\$1,278,191	\$20,565	\$135	\$8	\$1,298,899	\$11	\$22,813	\$1,321,722	\$0	\$0	\$0	\$2	\$0	\$2	\$2	\$1,321,724	2
3	276 - 425	425	\$2	\$32,880	\$1,665	\$46	\$3	\$34,594	\$0	\$3,944	\$38,438	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38,438	3
4	426-630	630	\$2	\$17,655	\$967	\$10	\$11	\$18,642	\$0	\$3,896	\$22,538	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22,538	4
5	631 - 800	8C	\$2	\$12,254	\$867	\$29	\$6	\$13,156	\$1	\$3,967	\$17,124	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,124	5
6	801 - 1,100	11C	\$2	\$4,973	\$743	\$46	\$6	\$5,768	\$2	\$3,503	\$9,272	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,272	6
7	1,101 - 1,500	15C	\$2	\$1,574	\$328	\$8	\$6	\$1,916	\$0	\$2,326	\$4,242	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,242	7
8	1,501 - 2,000	2M	\$2	\$474	\$140	\$10	\$3	\$627	\$0	\$2,330	\$2,956	\$0	\$0	\$0	\$54	\$0	\$54	\$54	\$3,010	8
9	2,001 - 3,000	3M	\$2	\$151	\$401	\$27	\$48	\$627	\$2	\$3,063	\$3,691	\$0	\$0	\$0	\$13	\$0	\$13	\$13	\$3,704	9
10	3,001 - 5,000	5M	\$7	\$121	\$592	\$50	\$371	\$1,135	\$13	\$6,298	\$7,446	\$6	\$0	\$6	\$72	\$0	\$72	\$78	\$7,524	10
11	5,001 - 7,000	7M	\$7	\$57	\$193	\$36	\$157	\$443	\$22	\$2,699	\$3,164	\$45	\$0	\$45	\$50	\$0	\$50	\$95	\$3,259	11
12																				12
13	High Pressure																			13
14	0 - 940	400	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$2	\$2	\$0	\$0	\$0	\$2	\$0	\$2	\$2	\$3	14
15	941 - 1,050	8C	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	15
16	1,051 - 1,500	630	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	16
17	1,501 - 2,700	2M	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	17
18	2,701 - 4,000	3M	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13	\$13	\$13	\$13	18
19	4,001 - 6,600	5M	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6	\$0	\$6	\$0	\$0	\$6	\$6	\$6	19
20	6,601 - 9,200	7M	\$7	\$0	\$0	\$0	\$0	\$0	\$4	\$8	\$13	\$6	\$0	\$6	\$0	\$51	\$51	\$57	\$70	20
21	9,201 - 14,500	11M	\$13	\$26	\$350	\$104	\$402	\$881	\$0	\$4,068	\$4,949	\$82	\$23	\$105	\$39	\$0	\$39	\$144	\$5,094	21
22	14,501 - 21,400	16M	\$13	\$52	\$311	\$39	\$168	\$570	\$87	\$2,223	\$2,880	\$176	\$0	\$176	\$13	\$0	\$13	\$189	\$3,069	22
23	21,401 - 24,000	11M-HP	\$16	\$0	\$47	\$16	\$39	\$63	\$29	\$202	\$293	\$57	\$0	\$57	\$0	\$28	\$28	\$85	\$378	23
24	24,001 - 46,000	16M-HP	\$16	\$0	\$0	\$0	\$0	\$0	\$48	\$953	\$1,001	\$100	\$56	\$156	\$47	\$28	\$75	\$231	\$1,232	24
25	46,001 - 79,000	23M-HP	\$28	\$0	\$0	\$0	\$0	\$0	\$17	\$294	\$311	\$76	\$50	\$126	\$84	\$150	\$234	\$360	\$671	25
26	79,001 - 377,000	8" Turbine	\$42	\$0	\$0	\$0	\$0	\$0	\$0	\$99	\$99	\$77	\$76	\$153	\$0	\$0	\$0	\$153	\$252	26
27	377,001 - 600,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	27
28	600,001 - 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	28
29	> 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	29
30	Total			\$1,348,408	\$27,167	\$554	\$1,190	\$1,377,320	\$234	\$62,588	\$1,440,142	\$633	\$205	\$838	\$375	\$269	\$644	\$1,482	\$1,441,624	31

Note:
1. Rows (2) - (31) = Gross Service Line Capital Investment Cost (Table LRMCC-3) x Number of Services per Customer Segment for each particular flow range (Table LRMCC-6).

Data Sources: tabs: MSA Cost, MSA Fcst MSA Rental

TABLE LRMCC-backup.2
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
O&M ALLOCATION FACTOR: Number of Customers Weighted by MSA Cost
2020 TCAP

	Max Meter Flow Range	Meter Type	MSA Capital Investment	Res					Total	NGV	GN-3	Total Core	GTNC			EG		Total Noncore	System Total
				G-R	G-M	G-S	G-T						MPD	HPD	Total	< 3 MM	> 3 MM		
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
	(Thousand Dollars)																		
1	<i>Medium Pressure</i>																		
2	0-275	250	\$0	\$228,336	\$3,674	\$24	\$1	\$232,035	\$2	\$4,075	\$236,112	\$0	\$0	\$0	\$0	\$0	\$0	\$236,112	
3	276 - 425	425	\$1	\$14,649	\$742	\$21	\$1	\$15,412	\$0	\$1,713	\$17,125	\$0	\$0	\$0	\$0	\$0	\$0	\$17,125	
4	426-630	630	\$1	\$12,242	\$670	\$7	\$8	\$12,927	\$0	\$2,702	\$15,629	\$0	\$0	\$0	\$0	\$0	\$0	\$15,629	
5	631 - 800	8C	\$1	\$11,537	\$816	\$27	\$6	\$12,386	\$1	\$3,734	\$16,121	\$0	\$0	\$0	\$0	\$0	\$0	\$16,121	
6	801 - 1,100	11C	\$2	\$4,957	\$740	\$46	\$6	\$5,750	\$2	\$3,492	\$9,244	\$0	\$0	\$0	\$0	\$0	\$0	\$9,244	
7	1,101 - 1,500	15C	\$3	\$2,928	\$609	\$15	\$12	\$3,564	\$0	\$4,325	\$7,889	\$0	\$0	\$0	\$0	\$0	\$0	\$7,889	
8	1,501 - 2,000	2M	\$5	\$1,364	\$403	\$27	\$9	\$1,803	\$0	\$6,704	\$8,507	\$0	\$0	\$0	\$156	\$0	\$156	\$8,663	
9	2,001 - 3,000	3M	\$4	\$422	\$1,121	\$76	\$133	\$1,752	\$5	\$8,565	\$10,322	\$0	\$0	\$0	\$36	\$0	\$36	\$10,358	
10	3,001 - 5,000	5M	\$5	\$92	\$448	\$38	\$281	\$858	\$10	\$4,764	\$5,633	\$5	\$0	\$5	\$54	\$0	\$54	\$5,692	
11	5,001 - 7,000	7M	\$6	\$46	\$154	\$29	\$126	\$355	\$17	\$2,163	\$2,535	\$36	\$0	\$36	\$40	\$0	\$40	\$2,611	
12																			
13	<i>High Pressure</i>																		
14	0 - 940	400	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$3	\$3	\$0	\$0	\$0	\$3	\$0	\$3	\$6	
15	941 - 1,050	8C	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
16	1,051 - 1,500	630	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
17	1,501 - 2,700	2M	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
18	2,701 - 4,000	3M	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9	\$9	\$9	\$9	
19	4,001 - 6,600	5M	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6	\$0	\$6	\$0	\$0	\$6	\$6	
20	6,601 - 9,200	7M	\$7	\$0	\$0	\$0	\$0	\$0	\$4	\$8	\$13	\$7	\$0	\$7	\$0	\$52	\$52	\$58	
21	9,201 - 14,500	11M	\$8	\$16	\$219	\$65	\$251	\$551	\$0	\$2,544	\$3,094	\$51	\$14	\$66	\$24	\$0	\$24	\$3,185	
22	14,501 - 21,400	16M	\$8	\$33	\$198	\$25	\$107	\$362	\$55	\$1,412	\$1,830	\$112	\$0	\$112	\$8	\$0	\$8	\$1,950	
23	21,401 - 24,000	11M-HP	\$16	\$0	\$49	\$16	\$0	\$65	\$30	\$210	\$305	\$59	\$0	\$59	\$0	\$29	\$29	\$393	
24	24,001 - 46,000	16M-HP	\$17	\$0	\$0	\$0	\$0	\$0	\$53	\$1,051	\$1,104	\$110	\$62	\$172	\$52	\$31	\$83	\$1,358	
25	46,001 - 79,000	23M-HP	\$29	\$0	\$0	\$0	\$0	\$0	\$18	\$310	\$328	\$80	\$52	\$133	\$89	\$157	\$246	\$707	
26	79,001 - 377,000	8" Turbine	\$53	\$0	\$0	\$0	\$0	\$0	\$0	\$125	\$125	\$97	\$96	\$193	\$0	\$0	\$0	\$193	
27	377,001 - 600,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
28	600,001 - 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
29	> 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
30																			
31	Total		N/A	\$276,621	\$9,843	\$414	\$942	\$287,820	\$197	\$47,900	\$335,917	\$564	\$224	\$788	\$462	\$278	\$740	\$1,528	\$337,445

Note:
1. Rows (2) - (31) = Gross MSA Capital Investment Cost (Table LRMCC-1) x Number of MSA's per Customer Segment for each particular flow range (Table LRMCC-6).

Data Sources: tabs: MSA Cost, MSA Fcst

**TABLE LRMCC-nco.1
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**WEIGHTED MSA PVRR FACTOR
2024 TCAP**

	Max Meter Flow Range	Meter, Regulator, & Fitting Costs	Meter & Regulator PVRR Factor	Installation Costs	Installation Costs PVRR Factor	Weighted Average PVRR Factor	
	A	B	C	D	E	F	
	Cfh	(Dollars)	(Percent)	(Dollars)	(Percent)	(Percent)	
1	<i>Medium Pressure</i>						1
2	0-275	\$201.92	132.96%	\$79.05	124.49%	130.58%	2
3	276 - 425	\$552.79	132.96%	\$147.95	124.49%	131.17%	3
4	426-630	\$942.70	132.96%	\$147.95	124.49%	131.81%	4
5	631 - 800	\$1,184.83	132.96%	\$295.89	124.49%	131.27%	5
6	801 - 1,100	\$1,272.08	132.96%	\$295.89	124.49%	131.36%	6
7	1,101 - 1,500	\$1,959.59	132.96%	\$965.32	124.49%	130.17%	7
8	1,501 - 2,000	\$3,004.61	132.96%	\$1,521.50	124.49%	130.11%	8
9	2,001 - 3,000	\$2,876.82	132.96%	\$1,521.50	124.49%	130.03%	9
10	3,001 - 5,000	\$3,818.62	132.96%	\$1,521.50	124.49%	130.55%	10
11	5,001 - 7,000	\$4,135.22	132.96%	\$1,521.50	124.49%	130.68%	11
12							12
13	<i>High Pressure</i>						13
14	0 - 940	\$1,560.80	132.96%	\$965.32	124.49%	129.72%	14
15	941 - 1,050	\$3,326.33	132.96%	\$1,521.50	124.49%	130.30%	15
16	1,051 - 1,500	\$1,950.71	132.96%	\$965.32	124.49%	130.16%	16
17	1,501 - 2,700	\$3,498.37	132.96%	\$1,521.50	124.49%	130.39%	17
18	2,701 - 4,000	\$3,370.57	132.96%	\$1,521.50	124.49%	130.33%	18
19	4,001 - 6,600	\$4,823.01	132.96%	\$1,736.02	124.49%	130.72%	19
20	6,601 - 9,200	\$5,428.28	132.96%	\$1,736.02	124.49%	130.91%	20
21	9,201 - 14,500	\$5,971.25	132.96%	\$2,040.68	124.49%	130.80%	21
22	14,501 - 21,400	\$6,100.56	132.96%	\$2,040.68	124.49%	130.84%	22
23	21,401 - 24,000	\$11,792.33	132.96%	\$4,360.50	124.49%	130.67%	23
24	24,001 - 46,000	\$12,722.16	132.96%	\$4,406.99	124.49%	130.78%	24
25	46,001 - 79,000	\$21,019.90	132.96%	\$8,145.67	124.49%	130.60%	25
26	79,001 - 377,000	\$41,020.86	132.96%	\$12,055.79	124.49%	131.04%	26
27	377,001 - 600,000					131.04%	27
28	600,001 - 4,250,000					131.04%	28
29	> 4,250,000					131.04%	29

Notes:

1. Col. (F) = [Col. (B) x Col. (C)] + [Col. (D) x Col. (E)] + [Col. (B) + Col. (D)]
2. Rows (27) - (29): Weighted Average PVRR Factor meter & installation weights from Row (26).

**TABLE LRMCC-nco.2
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**NCO ANNUAL SERVICE, REGULATOR & METER (SRM) NEW HOOKUP INVESTMENT
2020 TCAP**

	Max Meter Flow Range	Meter & Regulator			Pipe & Installation			Residential Cost Line X	PVRR Factor	NCO Hookup Investment	NCO Residential Cost Line X	Forecast New Hookups
		Meter Type	M&R Cost	PVRR Factor	NCO Hookup Investment	Service Type	Service Cost					
	A	B	C	D	E	F	G	H	I	J		
	Cfh	(Dollars)	(Percent)	(Dollars)	(Dollars)	(Dollars)	(Percent)	(Dollars)				
1	<i>Medium Pressure</i>											
2	0-275	250	\$281	130.58%	\$367	Poly-0.5"	\$1,573	\$1,854	125.07%	\$1,967	\$2,319	7,811
3	276 - 425	425	\$701	131.17%	\$919	Poly-0.5"	\$1,573	\$2,274	125.07%	\$1,967	\$2,844	211
4	426-630	630	\$1,091	131.81%	\$1,438	Poly-1"	\$1,573	\$2,615	125.07%	\$1,967	\$3,271	115
5	631 - 800	8C	\$1,481	131.27%	\$1,944	Poly-1"	\$1,573	\$2,615	125.07%	\$1,967	\$3,271	82
6	801 - 1,100	11C	\$1,568	131.36%	\$2,060	Poly-1"	\$1,573	\$2,615	125.07%	\$1,967	\$3,271	38
7	1,101 - 1,500	15C	\$2,925	130.17%	\$3,807	Poly-1"	\$1,573	\$2,615	125.07%	\$1,967	\$3,271	14
8	1,501 - 2,000	2M	\$4,526	130.11%	\$5,889	Poly-1"	\$1,573	\$2,615	125.07%	\$1,967	\$3,271	6
9	2,001 - 3,000	3M	\$4,398	130.03%	\$5,719	Poly-1"	\$1,573	\$2,615	125.07%	\$1,967	\$3,271	6
10	3,001 - 5,000	5M	\$5,340	130.55%	\$6,971	Poly-2"	\$7,059	\$2,615	125.07%	\$8,829	\$3,271	3
11	5,001 - 7,000	7M	\$5,657	130.68%	\$7,392	Poly-2"	\$7,059	\$2,615	125.07%	\$8,829	\$3,271	1
12												
13	<i>High Pressure</i>											
14	0 - 940	400	\$2,526	129.72%	\$3,277	Poly-1"	\$1,573	\$2,615	125.07%	\$1,967	\$3,271	0
15	941 - 1,050	8C	\$4,848	130.30%	\$6,317	Poly-1"	\$1,573	\$2,615	125.07%	\$1,967	\$3,271	-
16	1,051 - 1,500	630	\$2,916	130.16%	\$3,795	Poly-1"	\$1,573	\$2,615	125.07%	\$1,967	\$3,271	-
17	1,501 - 2,700	2M	\$5,020	130.39%	\$6,546	Poly-1"	\$1,573	\$2,615	125.07%	\$1,967	\$3,271	-
18	2,701 - 4,000	3M	\$4,892	130.33%	\$6,376	Poly-2"	\$7,059	\$2,615	125.07%	\$8,829	\$3,271	-
19	4,001 - 6,600	5M	\$6,559	130.72%	\$8,574	Poly-2"	\$7,059	\$2,615	125.07%	\$8,829	\$3,271	-
20	6,601 - 9,200	7M	\$7,164	130.91%	\$9,379	Poly-2"	\$7,059	\$2,615	125.07%	\$8,829	\$3,271	0
21	9,201 - 14,500	11M	\$8,012	130.80%	\$10,480	Poly-3"	\$12,815	\$2,615	125.07%	\$16,028	\$3,271	1
22	14,501 - 21,400	16M	\$8,141	130.84%	\$10,652	Poly-3"	\$12,815	\$2,615	125.07%	\$16,028	\$3,271	1
23	21,401 - 24,000	11M-HP	\$16,153	130.67%	\$21,108	Poly-4"	\$15,533	\$2,615	125.07%	\$19,428	\$3,271	0
24	24,001 - 46,000	16M-HP	\$17,129	130.78%	\$22,402	Poly-4"	\$15,533	\$2,615	125.07%	\$19,428	\$3,271	0
25	46,001 - 79,000	23M-HP	\$29,166	130.60%	\$38,089	Steel-4"	\$27,696	\$2,615	125.07%	\$34,640	\$3,271	0
26	79,001 - 377,000	8" Turbine	\$53,077	131.04%	\$69,550	Steel-6"	\$42,055	\$2,615	125.07%	\$52,599	\$3,271	0
27	377,001 - 600,000	Turbine	\$0	131.04%	\$0	Steel-8"	\$0	\$0	125.07%	\$0	\$0	-
28	600,001 - 4,250,000	Turbine	\$0	131.04%	\$0	Steel-16"	\$0	\$0	125.07%	\$0	\$0	-
29	> 4,250,000	Turbine	\$0	131.04%	\$0	Steel-24"	\$0	\$0	125.07%	\$0	\$0	-

- Notes:
1. Col. (E) = Col. (C) x Col. (D).
 2. Col. (I) = Col. (G) x Col. (H).
 3. Col. (K) = [Col. (E) + Col. (I)] x Col. (J).

**TABLE LRMCC-nco.3
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**WEIGHTED MSA BOOK LIFE
2024 TCAP**

	Max Meter Flow Range	Meter, Regulator, & Fitting Costs	Meter & Regulator Book Life	Installation Costs	Installation Costs Book Life	Weighted Average PVRR Factor	
	A	B	C	D	E	F	
	Cfh	(Dollars)	(Years)	(Dollars)	(Years)	(Percent)	
1	<i>Medium Pressure</i>						1
2	0-275	\$201.92	41.0	\$79.05	35.0	39.3	2
3	276 - 425	\$552.79	41.0	\$147.95	35.0	39.7	3
4	426-630	\$942.70	41.0	\$147.95	35.0	40.2	4
5	631 - 800	\$1,184.83	41.0	\$295.89	35.0	39.8	5
6	801 - 1,100	\$1,272.08	41.0	\$295.89	35.0	39.9	6
7	1,101 - 1,500	\$1,959.59	41.0	\$965.32	35.0	39.0	7
8	1,501 - 2,000	\$3,004.61	41.0	\$1,521.50	35.0	39.0	8
9	2,001 - 3,000	\$2,876.82	41.0	\$1,521.50	35.0	38.9	9
10	3,001 - 5,000	\$3,818.62	41.0	\$1,521.50	35.0	39.3	10
11	5,001 - 7,000	\$4,135.22	41.0	\$1,521.50	35.0	39.4	11
12							12
13	<i>High Pressure</i>						13
14	0 - 940	\$1,560.80	41.0	\$965.32	35.0	38.7	14
15	941 - 1,050	\$3,326.33	41.0	\$1,521.50	35.0	39.1	15
16	1,051 - 1,500	\$1,950.71	41.0	\$965.32	35.0	39.0	16
17	1,501 - 2,700	\$3,498.37	41.0	\$1,521.50	35.0	39.2	17
18	2,701 - 4,000	\$3,370.57	41.0	\$1,521.50	35.0	39.1	18
19	4,001 - 6,600	\$4,823.01	41.0	\$1,736.02	35.0	39.4	19
20	6,601 - 9,200	\$5,428.28	41.0	\$1,736.02	35.0	39.5	20
21	9,201 - 14,500	\$5,971.25	41.0	\$2,040.68	35.0	39.5	21
22	14,501 - 21,400	\$6,100.56	41.0	\$2,040.68	35.0	39.5	22
23	21,401 - 24,000	\$11,792.33	41.0	\$4,360.50	35.0	39.4	23
24	24,001 - 46,000	\$12,722.16	41.0	\$4,406.99	35.0	39.5	24
25	46,001 - 79,000	\$21,019.90	41.0	\$8,145.67	35.0	39.3	25
26	79,001 - 377,000	\$41,020.86	41.0	\$12,055.79	35.0	39.6	26
27	377,001 - 600,000					39.6	27
28	600,001 - 4,250,000					39.6	28
29	> 4,250,000					39.6	29

Notes:

1. Col. (F) = [Col (B) x Col. (C)] + [Col. (D) x Col. (E)] ÷ [Col. (B) + Col. (D)]
2. Rows (27) - (29): Weighted Average Book Life meter & installation weights from Row (26).

Data Sources: MSA Cost tab and Finance Group for Book Life

TABLE LRMCC-nc0.4
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
NCO ANNUAL SERVICE, REGULATOR & METER (SRM) REPLACEMENT COST
2024 TCAP

	Meter & Regulator Replacement						Replacement Pipe & Installation					Number of Existing Customers	Total SRM Annual Cost Replacement	
	Max Meter Flow Range	Meter Type	M&R Cost	PVRR Factor	Replacement Investment	Replacement Rate	Service Type	Service Cost	PVRR Factor	Replacement Investment	Replacement Rate			
	A	B	C	D	E	F	G	H	I	J	K			L
Cfh		(Dollars)	(Percent)	(Dollars)	(Percent)		(Dollars)	(Percent)	(Dollars)	(Percent)		(Dollars)		
1	<i>Medium Pressure</i>													1
2	0-275	250	\$202	124.49%	\$251	2.5%	Poly-0.5"	\$10,304	125.07%	\$12,888	1.5%	829,100	\$169,692,606	2
3	276 - 425	400	\$553	124.49%	\$688	2.5%	Poly-0.5"	\$10,304	125.07%	\$12,888	1.5%	23,825	\$5,136,589	3
4	426-630	630	\$943	124.49%	\$1,174	2.5%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	13,822	\$3,784,440	4
5	631 - 800	8C	\$1,185	124.49%	\$1,475	2.5%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	10,411	\$2,932,307	5
6	801 - 1,100	11C	\$1,272	124.49%	\$1,584	2.5%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	5,516	\$1,568,294	6
7	1,101 - 1,500	15C	\$1,960	124.49%	\$2,440	2.6%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	2,458	\$754,891	7
8	1,501 - 2,000	2M	\$3,005	124.49%	\$3,741	2.6%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	1,683	\$573,143	8
9	2,001 - 3,000	3M	\$2,877	124.49%	\$3,581	2.6%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	2,054	\$691,388	9
10	3,001 - 5,000	5M	\$3,819	124.49%	\$4,754	2.5%	Poly-2"	\$32,214	125.07%	\$40,291	1.5%	929	\$688,260	10
11	5,001 - 7,000	7M	\$4,135	124.49%	\$5,148	2.5%	Poly-2"	\$32,214	125.07%	\$40,291	1.5%	405	\$303,982	11
12	<i>High Pressure</i>													12
13	<i>High Pressure</i>													13
14	0 - 940	400	\$1,561	124.49%	\$1,943	2.6%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	2	\$588	14
15	941 - 1,050	8C	\$3,326	124.49%	\$4,141	2.6%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	-	\$0	15
16	1,051 - 1,500	630	\$1,951	124.49%	\$2,429	2.6%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	-	\$0	16
17	1,501 - 2,700	2M	\$3,498	124.49%	\$4,355	2.6%	Poly-1"	\$12,711	125.07%	\$15,899	1.5%	-	\$0	17
18	2,701 - 4,000	3M	\$3,371	124.49%	\$4,196	2.6%	Poly-2"	\$32,214	125.07%	\$40,291	1.5%	1	\$725	18
19	4,001 - 6,600	5M	\$4,823	124.49%	\$6,004	2.5%	Poly-2"	\$32,214	125.07%	\$40,291	1.5%	1	\$770	19
20	6,601 - 9,200	7M	\$5,428	124.49%	\$6,758	2.5%	Poly-2"	\$32,214	125.07%	\$40,291	1.5%	7	\$5,515	20
21	9,201 - 14,500	11M	\$5,971	124.49%	\$7,434	2.5%	Poly-3"	\$41,203	125.07%	\$51,534	1.5%	349	\$341,335	21
22	14,501 - 21,400	16M	\$6,101	124.49%	\$7,595	2.5%	Poly-3"	\$41,203	125.07%	\$51,534	1.5%	218	\$214,061	22
23	21,401 - 24,000	11M-HP	\$11,792	124.49%	\$14,681	2.5%	Poly-4"	\$32,950	125.07%	\$41,211	1.5%	23	\$23,015	23
24	24,001 - 46,000	16M-HP	\$12,722	124.49%	\$15,838	2.5%	Poly-4"	\$32,950	125.07%	\$41,211	1.5%	72	\$74,072	24
25	46,001 - 79,000	23M-HP	\$21,020	124.49%	\$26,169	2.5%	Steel-4"	\$52,031	125.07%	\$65,076	1.5%	21	\$34,768	25
26	79,001 - 377,000	8" Turbine	\$41,021	124.49%	\$51,069	2.5%	Steel-6"	\$64,522	125.07%	\$80,700	1.5%	6	\$15,051	26
27	377,001 - 600,000	Turbine	\$0	0.00%	\$0	2.5%	Steel-8"	\$0	125.07%	\$0	1.5%	-	\$0	27
28	600,001 - 4,250,000	Turbine	\$0	0.00%	\$0	2.5%	Steel-16"	--	125.07%	\$0	1.5%	-	\$0	28
29	> 4,250,000	Turbine	\$0	0.00%	\$0	2.5%	Steel-24"	--	125.07%	\$0	1.5%	-	\$0	29

- Notes:
- Col. (E) = Col. (C) x Col. (D).
 - Col. (J) = Col. (H) x Col. (I).
 - For Rows (2) - (3): Col. (M) = [Col. (E) x Col. (L) x Col. (F) x [1 - Note 6]] + [Col. (J) x Col. (L) x Col. (K)]
 - For Rows (4) - (28): Col. (M) = [Col. (E) x Col. (L) x Col. (F) x [1 - Note 7]] + [Col. (J) x Col. (L) x Col. (K)]
 - Col. (L) Number of Existing Customers = 2016 Recorded Customers (Total at Inception of TCAP Period) x Proportion of Total @ Meter Flow.
0.00% Percent of small MSA's (Flow = 0 - 375 Cfh) replaced with refurbished meter - provided by SDG&E Gas Engineering Dept.
1.66% Percent of other MSA's (Flow > 375 Cfh) replaced with refurbished meter - provided by SDG&E Gas Engineering Dept.

Data Sources: tabs: MSA Cost, MSA PVRR, MSA NCOp1, MSA Life, Factors.
Data Sources: SDG&E Gas Engineering & Finance Group

**TABLE LRMCC-nc0.5
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**FORECAST NEW HOOKUPS FOR 2023-2027
2024 TCAP**

	Customer Class	Year-End		2024 Hookups	Year-End		2025 Hookups	Year-End		2026 Hookups	Year-End		2027 Hookups	Average Annual New Hookups
		2023	2024		2024	2025		2025	2026		2026	2027		
	A	B	C	D	E	F	G	E	F	G	E	F	G	H
1	Residential	888,738	896,990	8,252	896,990	905,216	8,226	905,216	913,509	8,293	913,509	921,721	8,212	8,246
2	NGV	37	37	-	37	37	-	37	38	1	38	38	-	0
3	Core C&I - GN3	30,378	30,424	46	30,424	30,467	43	30,467	30,510	43	30,510	30,549	39	43
4	Noncore C&I - GTNC	50	50	-	50	50	-	50	50	-	50	50	-	4
5	EG - Cogen	96	96	-	96	96	-	96	96	-	96	96	-	5
6	Power Plants	-	-	-	-	-	-	-	-	-	-	-	-	6
7														7
8	Total Customers	919,299	927,597	8,298	927,597	935,866	8,269	935,866	944,203	8,337	944,203	952,454	8,251	8,289

- Notes:
1. Col. (D) = Col. (C) - Col (B).
 2. Col. (G) = Col. (F) - Col (E).
 3. Col. (J) = Col. (I) - Col (H).
 4. Col. (K) = Average Col. (D) & Col (G) & Col (J).

**TABLE LRMCC-nc0.6
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**FORECAST NEW HOOKUPS BY METER TYPE BY CUSTOMER CLASS
2020 TCAP**

	Max Meter Flow Range	Meter Type	Res	NGV	GN-3	Total Core	GTNC			EG			Total Noncore	System Total
							MPD	HPD	Total	< 3 MM	> 3 MM	Total		
	A	B	C	D	E	F	G	H	I	J	K	L	N	O
	Cfh													
1	<i>Medium Pressure</i>													
2	0-275	250	7,791	0	20	7,811	-	-	-	-	-	-	-	7,811
3	276 - 425	425	207	-	3	211	-	-	-	-	-	-	-	211
4	426-630	630	112	-	3	115	-	-	-	-	-	-	-	115
5	631 - 800	8C	79	0	3	82	-	-	-	-	-	-	-	82
6	801 - 1,100	11C	35	0	3	38	-	-	-	-	-	-	-	38
7	1,101 - 1,500	15C	11	-	2	14	-	-	-	-	-	-	-	14
8	1,501 - 2,000	2M	4	-	2	6	-	-	-	-	-	-	-	6
9	2,001 - 3,000	3M	4	0	3	6	-	-	-	-	-	-	-	6
10	3,001 - 5,000	5M	2	0	1	3	-	-	-	-	-	-	-	3
11	5,001 - 7,000	7M	1	0	1	1	-	-	-	-	-	-	-	1
12														
13	<i>High Pressure</i>													
14	0 - 940	400	-	-	0	0	-	-	-	-	-	-	-	0
15	941 - 1,050	8C	-	-	-	-	-	-	-	-	-	-	-	-
16	1,051 - 1,500	630	-	-	-	-	-	-	-	-	-	-	-	-
17	1,501 - 2,700	2M	-	-	-	-	-	-	-	-	-	-	-	-
18	2,701 - 4,000	3M	-	-	-	-	-	-	-	-	-	-	-	-
19	4,001 - 6,600	5M	-	-	-	-	-	-	-	-	-	-	-	-
20	6,601 - 9,200	7M	-	0	0	0	-	-	-	-	-	-	-	0
21	9,201 - 14,500	11M	1	-	0	1	-	-	-	-	-	-	-	1
22	14,501 - 21,400	16M	0	0	0	1	-	-	-	-	-	-	-	1
23	21,401 - 24,000	11M-HP	0	0	0	0	-	-	-	-	-	-	-	0
24	24,001 - 46,000	16M-HP	-	0	0	0	-	-	-	-	-	-	-	0
25	46,001 - 79,000	23M-HP	-	0	0	0	-	-	-	-	-	-	-	0
26	79,001 - 377,000	8" Turbine	-	-	0	0	-	-	-	-	-	-	-	0
27	377,001 - 600,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-
28	600,001 - 4,250,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-
29	> 4,250,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-
30														
31	Total Customers		8,246	0	43	8,289	-	-	-	-	-	-	-	8,289

Note:
1. New Hookups Forecast on Basis on Average Annual Net Customer Gain for 2017 - 2019 TCAP Period.

verify 8,246 0 43 8,289 - - - - - - 8,289
Data Sources: Tabs: MSA Cost, MSAlloc v2

TABLE LRMCC-nco.7
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

NCO ANNUALIZED SRM NEW HOOKUP & NO REPLACEMENT INVESTMENT BY CUSTOMER CLASS
2020 TCAP

	Max Meter Flow Range	Meter Type	Per Customer SRM Invstmt	Res Per Customer G-R SRM Line X	Res	Other Res	NGV	GN-3	Total Core	GTNC			EG		Total	Total Noncore
										MPD	HPD	Total	< 3 MM	> 3 MM		
	A	B	C		D		E	F	G	H	I	J	K	L	M	O
	Cfh		(Dollars)													
1	<i>Medium Pressure</i>															
2	0-275	250	\$22	\$25	\$20,285,072	\$285,634	\$147	\$314,667	\$20,885,520	\$0	\$0	\$0	\$22	\$0	\$0	\$0
3	276 - 425	425	\$25	\$32	\$678,717	\$27,145	\$0	\$60,871	\$766,732	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	426-630	630	\$27	\$38	\$425,005	\$17,192	\$0	\$67,827	\$510,023	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	631 - 800	8C	\$30	\$39	\$307,482	\$16,969	\$18	\$74,651	\$399,120	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	801 - 1,100	11C	\$26	\$34	\$107,722	\$13,012	\$32	\$57,323	\$178,089	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	1,101 - 1,500	15C	\$29	\$36	\$35,558	\$6,300	\$0	\$42,858	\$84,716	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	1,501 - 2,000	2M	\$24	\$28	\$8,370	\$2,313	\$0	\$35,290	\$45,973	\$0	\$0	\$0	\$822	\$0	\$0	\$0
8	2,001 - 3,000	3M	\$21	\$25	\$2,369	\$6,374	\$26	\$41,058	\$49,826	\$0	\$0	\$0	\$171	\$0	\$0	\$0
9	3,001 - 5,000	5M	\$41	\$27	\$457	\$5,887	\$76	\$36,586	\$43,006	\$38	\$0	\$38	\$416	\$0	\$0	\$38
10	5,001 - 7,000	7M	\$40	\$27	\$214	\$2,202	\$124	\$15,418	\$17,958	\$259	\$0	\$259	\$286	\$0	\$0	\$259
11																
12	<i>High Pressure</i>															
13	0 - 940	400	\$4	\$5	\$0	\$0	\$0	\$5	\$5	\$0	\$0	\$0	\$4	\$0	\$0	\$0
14	941 - 1,050	8C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	1,051 - 1,500	630	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	1,501 - 2,700	2M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
17	2,701 - 4,000	3M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	4,001 - 6,600	5M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19	6,601 - 9,200	7M	\$13	\$9	\$0	\$0	\$8	\$16	\$24	\$12	\$0	\$12	\$0	\$95	\$190	\$107
20	9,201 - 14,500	11M	\$73	\$38	\$76	\$4,839	\$0	\$23,020	\$27,934	\$465	\$131	\$596	\$221	\$0	\$0	\$596
21	14,501 - 21,400	16M	\$80	\$42	\$169	\$3,246	\$542	\$13,925	\$17,883	\$1,104	\$0	\$1,104	\$81	\$0	\$0	\$1,104
22	21,401 - 24,000	11M-HP	\$121	\$73	\$0	\$490	\$223	\$1,573	\$2,287	\$444	\$0	\$444	\$0	\$218	\$436	\$663
23	24,001 - 46,000	16M-HP	\$59	\$36	\$0	\$0	\$182	\$3,644	\$3,827	\$381	\$214	\$595	\$181	\$107	\$214	\$702
24	46,001 - 79,000	23M-HP	\$61	\$35	\$0	\$0	\$37	\$645	\$682	\$167	\$109	\$276	\$185	\$328	\$656	\$604
25	79,001 - 377,000	8" Turbine	\$66	\$40	\$0	\$0	\$0	\$157	\$157	\$122	\$120	\$242	\$0	\$0	\$0	\$242
26	377,001 - 600,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27	600,001 - 4,250,000	Turbine														
28	> 4,250,000	Turbine														
29	Total				\$21,851,212	\$391,602	\$1,415	\$789,533	\$23,033,761	\$2,992	\$573	\$3,565	\$2,388	\$748	\$1,496	\$4,313
30	Forecast Customers				857,179	16,889	28	30,937	905,032	44	9	53	72	18	90	143
31																
32	Average SRM Cost				\$25	\$23	\$51	\$26	\$25	\$68	\$64	\$67	\$33	\$42	\$17	\$30

Notes:

- Row (29) = Total of NCO Annualized SRM New Hookup & Replacement Investment x Number of MSA's per Customer Segment.
- Row (32) = Row (29) ÷ Row (30).

Data Sources: tabs: MSA Cost, MSA Fcst, MSA NCOp1

TABLE LRMCC-nco.7
 SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT
 NCO ANNUALIZED SRM NEW HOOKUP & REPLACEMENT INVESTMENT BY CUSTOMER CLASS
 2020 TCAP

	Max Meter Flow Range	Meter Type	Per Customer SRM Invstmt	Res SRM Invstmt	Res	Other Res	Total				GTNC			EG			Total Noncore	System Total		
							Res	NGV	GN-3	Total Core	MPD	HPD	Total	< 3 MM	< 3 MM	> 3 MM			Total	
	A	B	C	D	D	E	F	G	H	I	J	K	L	M	N	O	P			
	Ch		(Dollars)																	
1	Medium Pressure																			
2	0-275	250	\$224	\$227	\$184,388,585	\$2,944,280	\$187,332,865	\$1,511	\$3,243,545	\$190,577,921	\$0	\$0	\$0	\$227	\$227	\$0	\$227	\$0	\$190,577,921	
3	276 - 425	425	\$235	\$243	\$5,072,511	\$256,227	\$5,328,738	\$0	\$574,583	\$5,903,322	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,903,322	
4	426-630	630	\$291	\$302	\$3,389,419	\$183,009	\$3,572,428	\$0	\$722,036	\$4,294,464	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,294,464	
5	631 - 800	8C	\$299	\$309	\$2,405,948	\$171,372	\$2,577,320	\$184	\$753,924	\$3,331,427	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,331,427	
6	801 - 1,100	11C	\$292	\$300	\$948,778	\$147,495	\$1,096,274	\$358	\$649,751	\$1,746,383	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,746,383	
7	1,101 - 1,500	15C	\$309	\$315	\$315,716	\$67,143	\$382,859	\$0	\$456,748	\$839,607	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$839,607	
8	1,501 - 2,000	2M	\$323	\$327	\$98,595	\$31,378	\$129,973	\$0	\$478,818	\$608,791	\$0	\$0	\$0	\$11,146	\$11,146	\$0	\$11,146	\$0	\$608,791	
9	2,001 - 3,000	3M	\$315	\$318	\$30,569	\$95,127	\$125,695	\$387	\$612,751	\$738,832	\$0	\$0	\$0	\$2,553	\$2,553	\$0	\$2,553	\$0	\$738,832	
10	3,001 - 5,000	5M	\$687	\$672	\$11,556	\$98,595	\$110,151	\$1,265	\$612,709	\$724,125	\$630	\$0	\$630	\$6,964	\$6,964	\$0	\$6,964	\$630	\$724,125	
11	5,001 - 7,000	7M	\$699	\$685	\$5,540	\$38,152	\$43,693	\$2,146	\$267,202	\$313,041	\$4,484	\$0	\$4,484	\$4,960	\$4,960	\$0	\$4,960	\$4,484	\$317,525	
12	High Pressure																			
13	0 - 940	400	\$272	\$273	\$0	\$0	\$0	\$0	\$321	\$321	\$0	\$0	\$0	\$276	\$276	\$0	\$276	\$0	\$321	
14	941 - 1,050	8C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
15	1,051 - 1,500	630	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
16	1,501 - 2,700	2M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
17	2,701 - 4,000	3M	\$403	\$403	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$725	\$725	\$725	\$725	
18	4,001 - 6,600	5M	\$840	\$840	\$0	\$0	\$0	\$0	\$0	\$0	\$770	\$0	\$0	\$0	\$0	\$0	\$0	\$770	\$770	
19	6,601 - 9,200	7M	\$570	\$566	\$0	\$0	\$350	\$672	\$1,022	\$522	\$0	\$522	\$0	\$0	\$4,102	\$4,102	\$4,624	\$5,646		
20	9,201 - 14,300	11M	\$931	\$896	\$1,813	\$62,143	\$63,956	\$0	\$295,645	\$359,601	\$5,976	\$1,676	\$7,652	\$2,833	\$2,833	\$0	\$2,833	\$7,652	\$367,253	
21	14,501 - 21,400	16M	\$974	\$936	\$3,784	\$39,394	\$43,178	\$6,681	\$168,988	\$218,748	\$13,394	\$0	\$13,394	\$986	\$986	\$0	\$986	\$13,394	\$232,141	
22	21,401 - 24,000 11M-HP		\$1,067	\$1,019	\$0	\$4,315	\$4,315	\$1,966	\$13,851	\$20,131	\$3,912	\$0	\$3,912	\$0	\$0	\$1,920	\$1,920	\$5,833	\$25,964	
23	24,001 - 46,000 16M-HP		\$993	\$971	\$0	\$0	\$3,051	\$60,969	\$64,020	\$6,375	\$3,577	\$9,951	\$3,022	\$3,022	\$1,788	\$4,811	\$11,740	\$15,450	\$75,759	
24	46,001 - 79,000 23M-HP		\$1,496	\$1,470	\$0	\$0	\$0	\$919	\$15,887	\$16,806	\$4,113	\$2,692	\$6,806	\$4,550	\$4,550	\$8,077	\$12,628	\$14,883	\$31,689	
25	79,001 - 377,000 Turbine		\$2,578	\$2,551	\$0	\$0	\$0	\$0	\$6,084	\$6,084	\$4,726	\$4,640	\$9,366	\$0	\$0	\$0	\$0	\$9,366	\$15,450	
26	377,001 - 600,000 Turbine		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
27	600,001 - 4,250,000 Turbine																			
28	> 4,250,000 Turbine																			
29	Total				\$200,811,444	\$18,717	\$8,934,483	\$209,764,644	\$44,901	\$12,585	\$57,486	\$44,901	\$12,585	\$57,486	\$37,520	\$37,520	\$16,613	\$54,133	\$74,099	\$209,838,743
30	Forecast Customers				874,067	28	30,937	905,032	44	9	53	44	9	53	72	18	90	143	905,175	
31																				
32	Average SRM Cost				\$230	\$677	\$289	\$232	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	

Notes:
 1. Row (29) = Total of NCO Annualized SRM New Hookup & Replacement Investment x Number of MSA's per Customer Segment.
 2. Row (32) = Row (29) + Row (30).

Data Sources: tabs: MSA Cost, MSA Fost, MSA NCOp1, MSA NCOp2

SDG&E Customer Costs
 Testimony Tables

TABLE 1 CUSTOMER-RELATED LRMC - CAPITAL COSTS	
Customer Class	Rental-Method Customer Cost (2024 \$/customer)
Residential	\$146
Core Commercial/Industrial	\$275
Natural Gas Vehicle	\$1,203
Noncore Commercial/Industrial	\$2,370
Small Electric Generation	\$906
Large Electric Generation	\$2,353

TABLE 3 CUSTOMER-RELATED LONG RUN MARGINAL COSTS (2024 \$/customer)						
Customer Class	Annualized Capital Cost	Expense-Related O&M				Total \$/Customer
		Direct	M&S	A&G	General Plant	
Residential	\$146	\$43	\$0	\$12	\$11	\$213
Core Commercial/Industrial	\$275	\$127	\$1	\$36	\$32	\$471
Natural Gas Vehicle	\$1,203	\$254	\$3	\$71	\$63	\$1,594
Noncore Commercial/Industrial	\$2,370	\$748	\$8	\$209	\$187	\$3,522
Small Electric Generation	\$906	\$412	\$4	\$115	\$103	\$1,540
Large Electric Generation	\$2,353	\$1,369	\$15	\$382	\$342	\$4,461

TABLE 7 REAL ECONOMIC CARRYING CHARGE FACTORS	
Cost Type	RECC %
Meters and Regulators	8.02%
Meter/Regulator Installation	8.36%
Service Line Pipe	7.37%
Weighted-Average Distribution	7.37%
Materials and Supplies	13.12%

SDG&E Customer Costs
Testimony Tables

TABLE 2				
CUSTOMER-RELATED DIRECT MARGINAL O&M EXPENSES				
(2024 \$)				
Customer Class	FERC 870-894 \$000	FERC 901-910 \$000	Customers per Class	Direct O&M \$/Customer
Residential	\$36,615	\$888	864,505	\$43
Core Commercial/Industrial	\$3,314	\$28	26,214	\$127
Natural Gas Vehicle	\$11	\$0.0	45	\$254
Noncore Commercial/Industrial	\$36	\$8	58	\$748
Small Electric Generation	\$21	\$9	71	\$412
Large Electric Generation	\$13	\$1	10	\$1,369

TABLE 10			
M&S LOADING FACTORS			
(2024 \$)			
Customer Class	Allocated M&S	Customers per Class	M&S Loader \$/Customer
Residential	\$408,463	864,505	\$0.47
Core Commercial/Industrial	\$36,396	26,214	\$1.39
Natural Gas Vehicle	\$125	45	\$2.77
Noncore Commercial/Industrial	\$473	58	\$8.15
Small Electric Generation	\$319	71	\$4.49
Large Electric Generation	\$149	10	\$14.91
Distribution Function	Allocated M&S	Peak-day Load (mcf)	M&S Loader \$/mcf
Medium-Pressure	\$644,432	440,066	\$1.46
High-Pressure	\$166,452	462,002	\$0.36

TABLE 4				
DISTRIBUTION-RELATED DIRECT MARGINAL O&M EXPENSES				
(2024 \$)				
Distribution Function	FERC 870-894 \$000	FERC 901-910 \$000	Peak-day Load (mcf)	Direct O&M \$/mcf
Medium-Pressure	\$19,636	\$0	440,066	\$44.62
High-Pressure	\$1,234	\$0	462,002	\$2.67

San Diego Gas and Electric Company
WEIGHTED AVERAGE DEPRECIATED RATE BASE
Gas Service Lines, Regulators, and Meters (SRM)
(Thousands of Dollars)
As of December 31, 2021

Line No.	Account Description	G-380.00	G-381.00	G-380.01	G-382.00	G-382.01	Total
<i>Fixed Capital</i>							
1	Plant In Service	\$ 462,163	\$ 89,308	\$ 95,554	\$ 89,460	\$ 25,983	\$ 762,467
2	Total Fixed Capital	\$ 462,163	\$ 89,308	\$ 95,554	\$ 89,460	\$ 25,983	\$ 762,467
<i>Working Capital</i>							
3	Fuel in Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	Materials & Supplies	2,750	305	331	-	-	3,386
5	Working Cash	-	-	-	-	-	-
6	Total Working Capital	\$ 2,750	\$ 305	\$ 331	\$ -	\$ -	\$ 3,386
<i>Other Deductions</i>							
7	Customer Advances For Construction	\$ (627)	\$ -	\$ -	\$ -	\$ -	\$ (627)
8	Total Other	\$ (627)	\$ -	\$ -	\$ -	\$ -	\$ (627)
<i>Deductions For Reserves</i>							
9	Accumulated Depreciation Reserve	\$ (307,354)	\$ (31,615)	\$ (49,506)	\$ (30,051)	\$ (18,576)	\$ (437,101)
10	Accumulated Amortization Reserve	-	-	-	-	-	-
11	Accumulated Deferred Taxes (Used 2020 as proxy for 2021)	(26,824)	(5,978)	(5,959)	(5,752)	(1,771)	(46,284)
12	Total Deductions For Reserves	\$ (334,178)	\$ (37,593)	\$ (55,465)	\$ (35,803)	\$ (20,346)	\$ (483,384)
13	Weighted Average Depreciated Rate Base	\$ 130,108	\$ 52,020	\$ 40,420	\$ 53,657	\$ 5,637	\$ 281,842

ARM1 Factor = Rate Base Value/Rental Capital

Rate Base Value 281,842

Rental 2,405,991

% 11.7%

ARM2 Factor

Rental less depreciation 1,328,959

Rental 1,766,060

REPORT 3

DETERMINATION OF WEIGHTED ADDITIONS
MATERIALS AND SUPPLIES
December 31, 2021

	G-380.00	G-381.00	G-381.01	G-382.00	G-382.01	TOTAL
	C	D	F	F	F	G
December 2020	2,444,132	305,333	330,934	-	-	3,080,399
January 2021	2,400,815	305,333	330,934	-	-	3,037,082
February 2021	2,606,193	305,333	330,934	-	-	3,242,460
March 2021	2,600,175	305,333	330,934	-	-	3,236,442
April 2021	2,664,466	305,333	330,934	-	-	3,300,733
May 2021	2,705,426	305,333	330,934	-	-	3,341,693
June 2021	2,771,443	305,333	330,934	-	-	3,407,710
July 2021	2,742,363	305,333	330,934	-	-	3,378,630
August 2021	2,748,671	305,333	330,934	-	-	3,384,938
September 2021	2,830,509	305,333	330,934	-	-	3,466,776
October 2021	2,935,520	305,333	330,934	-	-	3,571,787
November 2021	2,877,919	305,333	330,934	-	-	3,514,186
December 2021	3,789,546	305,333	330,934	-	-	4,425,813
Total	36,117,177	3,969,325	4,302,146	-	-	44,388,648
Less 1/2 First & Last Month	3,116,839	305,333	330,934	-	-	3,753,106
Total 12 Mos Wtd Average	33,000,338	3,663,992	3,971,212	-	-	40,635,542
Monthly Weighted Average	2,750,028	305,333	330,934	-	-	3,386,295

Summary of Book Depreciation Expense - SRM

	G-380.00	G-381.00	G-381.01	G-382.00	G-382.01	Total
Jan-21	708,507	166,648	527,488	276,986	144,041	1,823,670
Feb-21	715,146	166,329	531,280	276,586	144,107	1,833,448
Mar-21	728,192	166,563	538,497	276,352	144,190	1,853,794
Apr-21	742,033	167,619	544,148	277,853	144,288	1,875,942
May-21	756,479	168,512	548,604	279,493	144,381	1,897,469
Jun-21	769,965	169,472	551,580	284,271	144,518	1,919,806
Jul-21	781,739	169,814	552,691	289,400	144,665	1,938,310
Aug-21	796,704	169,977	553,135	296,881	144,776	1,961,474
Sep-21	811,082	170,336	553,797	307,958	144,947	1,988,120
Oct-21	818,839	170,605	555,458	314,857	145,116	2,004,875
Nov-21	837,625	170,629	557,492	318,177	145,230	2,029,154
Dec-21	868,623	170,778	559,958	324,505	145,377	2,069,241
Total	9,334,935	2,027,282	6,574,129	3,523,320	1,735,635	23,195,301