

SDG&E 2024 TCAP

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

Workpapers to the Prepared Written Testimony of
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Errata - September 8, 2023

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	\$269.58	\$1,677.74	\$583.69	\$254.83	\$3,267.40	\$1,634.41	\$3,922.78	\$1,957.36	\$2,446.98	\$279.65
Customer Costs NCO Method	\$99.84	\$484.43	\$226.08	\$79.11	\$1,098.32	\$684.66	\$1,611.62	\$773.94	\$893.05	\$99.67
Customer Costs NCO RCA	\$296.68	\$1,104.05	\$483.57	\$277.77	\$1,030.99	\$647.19	\$1,569.56	\$761.06	\$863.97	\$70.59
Customer Costs 50/50 NCO/RECC	\$283.13	\$1,390.89	\$533.63	\$266.30	\$2,149.20	\$1,140.80	\$2,746.17	\$1,359.21	\$1,655.47	\$175.12

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 2024\$s	\$202.44	\$202.41	\$202.35	\$202.44	\$202.44	\$1,249.81	\$398.30	\$208.84	
O&M \$/customer/yr									
FERC 870 - 894: Distribution O&M (M\$)	\$33,728	\$825	\$23	\$46	\$34,621	\$12	\$2,942	\$24,165	
FERC 901 - 910: Customer O&M (M\$)	\$819	\$16	\$0	\$0	\$836	\$0	\$26	\$862	
Total Cust-Rel O&M (M\$)	\$34,547	\$841	\$23	\$46	\$35,457	\$12	\$2,969	\$25,027	
2021 Number of Customers	847,801	16,309	219	176	864,505	45	26,214	890,764	
Cust-Rel O&M per Customer (2021\$s)	\$41	\$52	\$105	\$260	\$41	\$261	\$113	\$28	
escalator 2021's to 2024\$s	1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063	
O&M \$/customer/yr 2020\$s	\$43.32	\$54.81	\$111.79	\$276.84	\$43.60	\$277.92	\$120.40	\$29.87	
O&M Loaders:									
Materials & Supplies Loader:									
allocator = total Customer Related O&M as % of total	89.7%	2.2%	0.1%	0.1%	92.1%	0.0%	7.7%	65.0%	
Allocated Materials & Supplies Loader (\$'s) \$419,449	\$376,267	\$9,157	\$251	\$499	\$386,174	\$128	\$32,334	\$272,581	
2021 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	\$1.15	\$2.84	\$0.45	\$2.85	\$1.23	\$0.31	
escalator 2021\$s to 2024\$s	1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063	
M&S Loader \$/customer/yr 2024\$s	\$0.47	\$0.60	\$1.22	\$3.02	\$0.47	\$3.03	\$1.31	\$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 2024\$s	\$12.10	\$15.31	\$31.23	\$77.34	\$12.18	\$77.65	\$33.64	\$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 2024\$s	\$10.81	\$13.67	\$27.89	\$69.06	\$10.88	\$69.33	\$30.04	\$7.45	
TOTAL O&M LOADERS \$/customer/yr	\$23.38	\$29.58	\$60.34	\$149.42	\$23.53	\$150.01	\$64.98	\$16.12	
LRMC Rental Customer Cost \$/customer/year	\$269.15	\$286.79	\$374.47	\$628.70	\$269.58	\$1,677.74	\$583.69	\$254.83	
					\$22.47				
NCO Method:									
LRMC Rental Customer Cost \$/customer/year					\$269.58	\$1,677.74	\$583.69	\$254.83	
less annualized SRM rental					(\$202.44)	(\$1,249.81)	(\$398.30)	(\$208.84)	
plus annualized SRM NCO					\$32.70	\$56.50	\$40.69	\$33.12	
NCO Customer Cost \$/customer/year					\$99.84	\$484.43	\$226.08	\$79.11	
					\$8.32				
NCO with Replacement Cost Adder Method:									
LRMC Rental Customer Cost \$/customer/year					\$269.58	\$1,677.74	\$583.69	\$254.83	
less annualized SRM rental					(\$202.44)	(\$1,249.81)	(\$398.30)	(\$208.84)	
plus annualized SRM					\$229.54	\$676.12	\$298.19	\$231.78	
NCO w/ Replacement Customer Cost \$/cstmr/yr					\$296.68	\$1,104.05	\$483.57	\$277.77	
					\$24.72				

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	\$2,236.41	\$987.22	\$2,353.22	\$1,196.30	\$1,583.01	\$209.07
\$25	\$5	\$29	\$20	\$8	\$28	\$57	\$37,633
\$5	\$2	\$7	\$8	\$1	\$9	\$16	\$878
\$31	\$6	\$37	\$28	\$10	\$38	\$73	\$38,512
48	10	58	71	10	81	139	890,903
\$639	\$631	\$630	\$395	\$959	\$465	\$528	\$43
1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063
\$679.01	\$671.36	\$669.59	\$420.32	\$1,019.36	\$494.28	\$561.11	\$45.96
0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.2%	100.0%
\$334	\$69	\$398	\$306	\$104	\$410	\$799	\$273,380
48	10	58	71	10	81	139	890,903
\$6.96	\$6.88	\$6.86	\$4.31	\$10.44	\$5.06	\$5.75	\$0.31
1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063
\$7.40	\$7.31	\$7.29	\$4.58	\$11.10	\$5.38	\$6.11	\$0.33
27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%
\$189.71	\$187.57	\$187.07	\$117.43	\$284.80	\$138.10	\$156.77	\$12.84
24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%
\$169.39	\$167.48	\$167.04	\$104.85	\$254.29	\$123.30	\$139.98	\$11.46
\$366.49	\$362.36	\$361.41	\$226.87	\$550.19	\$266.78	\$302.86	\$24.63
\$3,144.49	\$4,726.80	\$3,267.40	\$1,634.41	\$3,922.78	\$1,957.36	\$2,446.98	\$279.65
\$3,144.49	\$4,726.80	\$3,267.40	\$1,634.41	\$3,922.78	\$1,957.36	\$2,446.98	\$279.65
(\$2,098.99)	(\$3,693.07)	(\$2,236.41)	(\$987.22)	(\$2,353.22)	(\$1,196.30)	(\$1,583.01)	(\$209.07)
\$67.53	\$65.18	\$67.33	\$37.48	\$42.07	\$12.88	\$29.08	\$29.08
\$1,113.03	\$1,098.90	\$1,098.32	\$684.66	\$1,611.62	\$773.94	\$893.05	\$99.67
\$3,144.49	\$4,726.80	\$3,267.40	\$1,634.41	\$3,922.78	\$1,957.36	\$2,446.98	\$279.65
(\$2,098.99)	(\$3,693.07)	(\$2,236.41)	(\$987.22)	(\$2,353.22)	(\$1,196.30)	(\$1,583.01)	(\$209.07)
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$1,045.50	\$1,033.73	\$1,030.99	\$647.19	\$1,569.56	\$761.06	\$863.97	\$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:
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
	Cfm																	
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	
CAP Customers	891,788	17,155	230	185	909,359	36	30,488	939,883	53	5	58	83	15	98	-	156	940,039	
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 2024 CAP in Mtherms	Res	NGV	Core C&I	Total Core	Non Core			Total EG	Total Non	
					C&I	EG Tier 1	EG Tier 2		Core	Total System
1 DIRECT Demand										
2 Transmission										
3 Average Year Throughput (MTh)	0	0	0	0	13,965	0	225,945	225,945	239,910	239,910
4 Cold Year Throughput (1-in-35) (MTh)	0	0	0	0	13,965	0	225,945	225,945	239,910	239,910
5 Cold Year Peak Month (December) (MTh)	0	0	0	0	1,167	0	19,867	19,867	21,035	21,035
6 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	0	0	0	0	38	0	828	828	866	866
7 Number of Customers	0	0	0	0	5	3	10	13	18	18
8 High Pressure										
9 Average Year Throughput (MTh)	18	10,075	3,333	13,426	2,747	9,085	35,885	44,970	47,717	61,142
10 Cold Year Throughput (1-in-35) (MTh)	19	10,075	3,442	13,536	2,747	9,085	35,885	44,970	47,717	61,253
11 Cold Year Peak Month (December) (MTh)	3	865	391	1,259	230	755	2,981	3,736	3,965	5,224
12 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	0	28	19	47	7	24	96	121	128	175
13 Number of Customers	2	5	5	12	5	7	4	11	16	28
14 Medium Pressure										
15 Average Year Throughput (MTh)	270,586	13,104	175,580	459,270	32,591	22,343	4,342	26,685	59,276	518,546
16 Cold Year Throughput (1-in-35) (MTh)	298,699	13,104	181,329	493,131	32,591	22,343	4,342	26,685	59,276	552,407
17 Cold Year Peak Month (December) (MTh)	43,868	1,125	20,592	65,584	2,724	1,856	361	2,217	4,941	70,525
18 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	3,040	36	996	4,072	88	60	12	72	159	4,232
19 Number of Customers	909,357	31	30,483	939,871	48	73	1	74	122	939,993
20 CUMULATIVE Demand										
21 Transmission										
22 Average Year Throughput (MTh)	270,604	23,179	178,913	472,696	49,302	31,429	266,171	297,600	346,902	819,598
23 Cold Year Throughput (1-in-35) (MTh)	298,718	23,179	184,771	506,668	49,302	31,429	266,171	297,600	346,902	853,570
24 Cold Year Peak Month (December) (MTh)	43,870	1,990	20,983	66,843	4,120	2,611	3,342	25,820	29,941	96,784
25 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	3,040	64	1,015	4,119	133	84	936	1,020	1,153	5,272
26 Number of Customers	909,359	36	30,488	939,883	58	83	15	98	156	940,039
27 High Pressure										
28 Average Year Throughput (MTh)	270,604	23,179	178,913	472,696	35,337	31,429	40,227	71,656	106,993	579,689
29 Cold Year Throughput (1-in-35) (MTh)	298,718	23,179	184,771	506,668	35,337	31,429	40,227	71,656	106,993	613,661
30 Cold Year Peak Month (December) (MTh)	43,870	1,990	20,983	66,843	2,953	2,611	3,342	5,953	8,906	75,749
31 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	3,040	64	1,015	4,119	95	84	108	192	287	4,407
32 Number of Customers	909,359	36	30,488	939,883	53	80	5	85	138	940,021
33 Medium Pressure										
34 Average Year Throughput (MTh)	270,586	13,104	175,580	459,270	32,591	22,343	4,342	26,685	59,276	518,546
35 Cold Year Throughput (1-in-35) (MTh)	298,699	13,104	181,329	493,131	32,591	22,343	4,342	26,685	59,276	552,407
36 Cold Year Peak Month (December) (MTh)	43,868	1,125	20,592	65,584	2,724	1,856	361	2,217	4,941	70,525
37 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	3,040	36	996	4,072	88	60	12	72	159	4,232
38 Number of Customers	909,357	31	30,483	939,871	48	73	1	74	122	939,993

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
1	Cfh																	
1	Medium Pressure																	
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	High Pressure																	
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%	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	845,479	13,603	89	5	859,177	9	14,294	873,479	-	-	-	1	-	1	-	873,480	
3	276 - 425	425	21,749	1,101	31	2	22,883	-	2,409	25,291	-	-	-	-	-	-	-	25,291	
4	426-630	630	11,678	640	6	7	12,331	-	2,441	14,772	-	-	-	-	-	-	-	14,772	
5	631 - 800	8C	8,106	573	19	4	8,702	1	2,485	11,188	-	-	-	-	-	-	-	11,188	
6	801 - 1,100	11C	3,289	491	31	4	3,815	2	2,195	6,011	-	-	-	-	-	-	-	6,011	
7	1,101 - 1,500	15C	1,041	217	5	4	1,268	-	1,457	2,725	-	-	-	-	-	-	-	2,725	
8	1,501 - 2,000	2M	313	93	6	2	414	-	1,460	1,874	-	-	-	40	-	40	-	1,914	
9	2,001 - 3,000	3M	100	265	18	32	414	2	1,919	2,335	-	-	-	9	-	9	-	2,344	
10	3,001 - 5,000	5M	18	87	7	55	167	2	879	1,049	1	-	1	12	-	12	-	1,062	
11	5,001 - 7,000	7M	8	28	5	23	65	4	377	446	8	-	8	8	-	8	-	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	2	1	-	1	6	-	6	-	9	
20	9,201 - 14,500	11M	2	28	8	33	72	-	313	384	8	1	9	4	-	4	-	397	
21	14,501 - 21,400	16M	4	25	3	14	46	9	171	226	17	-	17	1	-	1	-	244	
22	21,401 - 24,000	11M-HP	-	3	1	-	4	2	13	19	4	-	4	-	2	2	-	25	
23	24,001 - 46,000	16M-HP	-	-	-	-	-	4	60	65	8	2	10	4	2	5	-	79	
24	46,001 - 79,000	23M-HP	-	-	-	-	-	1	10	11	3	1	4	4	5	8	-	24	
25	79,001 - 377,000	8" Turbine	-	-	-	-	-	-	2	2	2	1	3	-	-	-	3	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		891,788	17,155	230	185	909,359	36	30,488	939,883	53	5	58	83	15	98	-	156	940,039

- 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 891,788 17,155 230 185 909,359 36 30,488 939,883 53 5 58 83 15 98 - 156 940,039
 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	\$171,180,221	\$2,754,129	\$18,102	\$1,065	\$173,953,517	\$2,394	\$3,861,678	\$177,817,589	\$0	\$0	\$0	\$316	\$0	\$316	\$0	\$316	\$177,817,905	2
3	276 - 425	425	\$4,396,608	\$222,637	\$6,167	\$425	\$4,625,837	\$0	\$732,383	\$5,358,220	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,358,220	3
4	426-630	630	\$2,356,860	\$129,073	\$1,274	\$1,486	\$2,488,693	\$0	\$818,622	\$3,307,315	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,307,315	4
5	631 - 800	8C	\$1,638,222	\$115,862	\$3,827	\$850	\$1,758,761	\$296	\$912,441	\$2,671,497	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,671,497	5
6	801 - 1,100	11C	\$664,608	\$99,256	\$6,164	\$850	\$770,878	\$603	\$821,054	\$1,592,535	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,592,535	6
7	1,101 - 1,500	15C	\$211,065	\$43,919	\$1,066	\$853	\$256,902	\$0	\$707,087	\$963,989	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$963,989	7
8	1,501 - 2,000	2M	\$63,541	\$18,764	\$1,279	\$426	\$84,011	\$0	\$898,399	\$982,410	\$0	\$0	\$0	\$24,464	\$0	\$24,464	\$0	\$24,464	\$1,006,875	8
9	2,001 - 3,000	3M	\$20,261	\$53,744	\$3,626	\$6,398	\$84,029	\$975	\$1,161,495	\$1,246,498	\$0	\$0	\$0	\$5,660	\$0	\$5,660	\$0	\$5,660	\$1,252,159	9
10	3,001 - 5,000	5M	\$3,621	\$17,678	\$1,491	\$11,075	\$33,865	\$2,305	\$838,523	\$874,692	\$1,053	\$0	\$1,053	\$11,149	\$0	\$11,149	\$0	\$12,202	\$886,894	10
11	5,001 - 7,000	7M	\$1,703	\$5,749	\$1,065	\$4,684	\$13,201	\$3,943	\$368,935	\$386,079	\$7,567	\$0	\$7,567	\$8,012	\$0	\$8,012	\$0	\$15,579	\$401,658	11
12																				12
13	<i>High Pressure</i>																			13
14	0 - 940	400	\$0	\$0	\$0	\$0	\$0	\$0	\$527	\$527	\$0	\$0	\$0	\$530	\$0	\$530	\$0	\$530	\$1,057	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	\$1,377	\$1,377	\$0	\$1,377	\$1,377	18
19	4,001 - 6,600	5M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,162	\$0	\$1,162	\$0	\$0	\$0	\$0	\$1,162	\$1,162	19
20	6,601 - 9,200	7M	\$0	\$0	\$0	\$0	\$0	\$887	\$1,280	\$2,167	\$1,215	\$0	\$1,215	\$0	\$6,604	\$6,604	\$0	\$7,820	\$9,986	20
21	9,201 - 14,500	11M	\$426	\$5,747	\$1,703	\$6,598	\$14,474	\$0	\$498,647	\$513,120	\$12,319	\$1,594	\$13,913	\$5,590	\$0	\$5,590	\$0	\$19,503	\$532,623	21
22	14,501 - 21,400	16M	\$851	\$5,108	\$638	\$2,767	\$9,364	\$14,215	\$274,268	\$297,847	\$26,570	\$0	\$26,570	\$1,875	\$0	\$1,875	\$0	\$28,446	\$326,293	22
23	21,401 - 24,000	11M-HP	\$0	\$639	\$213	\$0	\$852	\$5,933	\$31,407	\$38,192	\$10,843	\$0	\$10,843	\$0	\$3,682	\$3,682	\$0	\$14,525	\$52,717	23
24	24,001 - 46,000	16M-HP	\$0	\$0	\$0	\$0	\$0	\$10,204	\$153,215	\$163,420	\$19,581	\$5,067	\$24,648	\$8,885	\$3,800	\$12,685	\$0	\$37,333	\$200,753	24
25	46,001 - 79,000	23M-HP	\$0	\$0	\$0	\$0	\$0	\$3,551	\$46,137	\$49,687	\$14,601	\$4,408	\$19,008	\$15,458	\$19,835	\$35,293	\$0	\$54,301	\$103,988	25
26	79,001 - 377,000	8" Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$17,205	\$17,205	\$16,335	\$7,397	\$23,732	\$0	\$0	\$0	\$0	\$23,732	\$40,937	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		\$180,537,987	\$3,472,303	\$46,614	\$37,478	\$184,094,383	\$45,306	\$12,143,302	\$196,282,990	\$111,247	\$18,465	\$129,712	\$81,939	\$35,298	\$117,238	\$0	\$246,950	\$196,529,940	30
31	Forecast Customers		891,788	17,155	230	185	909,359	36	30,488	939,883	53	5	58	83	15	98	-	156	940,039	31
32																				32
33	Average SRM Cost		\$202	\$202	\$202	\$202	\$202	\$1,250	\$398	\$209	\$2,099	\$3,693	\$2,236	\$987	\$2,353	\$1,196	\$0	\$1,583	\$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%	90%	0%	8%	55%	0%	0%	0%	0%	0%	0%	0%	98%
3	Allocation (M\$)	\$3,782	\$3,305	\$81	\$2	\$4	\$3,393	\$1	\$295	\$2,098	\$2	\$0	\$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	\$5,120	\$100	\$2	\$2	\$5,224	\$1	\$193	\$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%	83%	3%	0%	0%	86%	0%	14%	100%	0%	0%	0%	0%	0%	0%	0%	100%
11	Allocation (M\$)	\$5,510	\$4,550	\$162	\$7	\$15	\$4,734	\$4	\$746	\$5,485	\$11	\$2	\$13	\$8	\$4	\$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%	90%	0%	8%	55%	0%	0%	0%	0%	0%	0%	0%	98%
17	Allocation (M\$)	\$8,447	\$7,381	\$180	\$5	\$10	\$7,576	\$3	\$658	\$4,685	\$5	\$1	\$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%	93%	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	\$1,168	\$23	\$0	\$1	\$1,192	\$0	\$44	\$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	\$2,832	\$55	\$1	\$1	\$2,889	\$0	\$107	\$2,996	\$1	\$0	\$1	\$0	\$0	\$1	\$2	\$2,998
30																		
31	Allocator - Customers Wtd by Meters & Regs costs	100%	83%	3%	0%	0%	86%	0%	14%	100%	0%	0%	0%	0%	0%	0%	0%	100%
32	Allocation (M\$)	\$2,258	\$1,865	\$66	\$3	\$6	\$1,940	\$2	\$306	\$2,248	\$4	\$1	\$5	\$3	\$1	\$5	\$10	\$2,258
33	894 - Maint. of Other Eq = Non-Marginal Designation																	
34	Total 870 - 894 O&M Allocation (M\$)	\$38,379	\$33,728	\$825	\$23	\$46	\$34,621	\$12	\$2,942	\$24,165	\$25	\$5	\$29	\$20	\$8	\$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\$)	\$2,993,497	\$58,557	\$942	\$1,347	\$3,054,343	\$330	\$112,801	\$3,167,475	\$763	\$114	\$876	\$524	\$224	\$749	\$1,625	\$3,169,100
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\$)	\$287,790	\$10,240	\$431	\$980	\$299,441	\$258	\$47,204	\$346,904	\$679	\$125	\$804	\$533	\$231	\$764	\$1,568	\$348,472
6 Alloc %	83%	3%	0%	0%	86%	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	\$2,837,900	\$45,659	\$300	\$18	\$2,883,877	\$30	\$47,977	\$2,931,884	\$0	\$0	\$0	\$4	\$0	\$4	\$4	\$2,931,888	2
3	276 - 425	425	\$3	\$73,001	\$3,697	\$102	\$7	\$76,807	\$0	\$8,085	\$84,892	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$84,892	3
4	426-630	630	\$3	\$39,198	\$2,147	\$21	\$25	\$41,391	\$0	\$8,194	\$49,585	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,585	4
5	631 - 800	8C	\$3	\$27,208	\$1,924	\$64	\$14	\$29,210	\$3	\$8,342	\$37,555	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$37,555	5
6	801 - 1,100	11C	\$3	\$11,041	\$1,649	\$102	\$14	\$12,806	\$5	\$7,366	\$20,178	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,178	6
7	1,101 - 1,500	15C	\$3	\$3,495	\$727	\$18	\$14	\$4,255	\$0	\$4,891	\$9,146	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,146	7
8	1,501 - 2,000	2M	\$3	\$1,052	\$311	\$21	\$7	\$1,391	\$0	\$4,899	\$6,290	\$0	\$0	\$0	\$133	\$0	\$133	\$133	\$6,424	8
9	2,001 - 3,000	3M	\$3	\$335	\$890	\$60	\$106	\$1,391	\$5	\$6,441	\$7,838	\$0	\$0	\$0	\$31	\$0	\$31	\$31	\$7,869	9
10	3,001 - 5,000	5M	\$7	\$126	\$616	\$52	\$386	\$1,181	\$17	\$6,207	\$7,405	\$8	\$0	\$8	\$83	\$0	\$83	\$90	\$7,495	10
11	5,001 - 7,000	7M	\$7	\$59	\$200	\$37	\$163	\$460	\$28	\$2,660	\$3,149	\$55	\$0	\$55	\$58	\$0	\$58	\$112	\$3,261	11
12																				12
13	High Pressure																			13
14	0 - 940	400	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$4	\$4	\$0	\$0	\$0	\$4	\$0	\$4	\$4	\$8	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	\$11	\$11	\$11	\$11	18
19	4,001 - 6,600	5M	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8	\$0	\$8	\$0	\$0	\$0	\$0	\$8	19
20	6,601 - 9,200	7M	\$7	\$0	\$0	\$0	\$0	\$0	\$6	\$8	\$14	\$8	\$0	\$8	\$0	\$42	\$42	\$50	\$64	20
21	9,201 - 14,500	11M	\$13	\$27	\$364	\$108	\$418	\$917	\$0	\$4,009	\$4,926	\$99	\$13	\$112	\$45	\$0	\$45	\$157	\$5,083	21
22	14,501 - 21,400	16M	\$13	\$54	\$324	\$40	\$175	\$593	\$114	\$2,191	\$2,898	\$212	\$0	\$212	\$15	\$0	\$15	\$227	\$3,125	22
23	21,401 - 24,000	11M-HP	\$16	\$0	\$49	\$16	\$0	\$65	\$38	\$199	\$302	\$69	\$0	\$69	\$0	\$23	\$23	\$92	\$394	23
24	24,001 - 46,000	16M-HP	\$16	\$0	\$0	\$0	\$0	\$0	\$63	\$939	\$1,002	\$120	\$31	\$151	\$54	\$23	\$78	\$229	\$1,231	24
25	46,001 - 79,000	23M-HP	\$28	\$0	\$0	\$0	\$0	\$0	\$22	\$290	\$312	\$92	\$28	\$119	\$97	\$125	\$222	\$341	\$653	25
26	79,001 - 377,000	8" Turbine	\$42	\$0	\$0	\$0	\$0	\$0	\$0	\$98	\$98	\$93	\$42	\$135	\$0	\$0	\$0	\$135	\$233	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																		29
30	Total		N/A	\$2,993,497	\$58,557	\$942	\$1,347	\$3,054,343	\$330	\$112,801	\$3,167,475	\$763	\$114	\$876	\$524	\$224	\$749	\$1,625	\$3,169,100	30

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		
Cfh																				
(Thousand Dollars)																				
1	Medium Pressure																		1	
2	0-275	250	\$0	\$237,555	\$3,822	\$25	\$1	\$241,404	\$2	\$4,016	\$245,422	\$0	\$0	\$0	\$0	\$0	\$0	\$245,422	2	
3	276 - 425	425	\$1	\$15,240	\$772	\$21	\$1	\$16,035	\$0	\$1,688	\$17,722	\$0	\$0	\$0	\$0	\$0	\$0	\$17,722	3	
4	426-630	630	\$1	\$12,737	\$698	\$7	\$8	\$13,449	\$0	\$2,662	\$16,111	\$0	\$0	\$0	\$0	\$0	\$0	\$16,111	4	
5	631 - 800	8C	\$1	\$12,002	\$849	\$28	\$6	\$12,886	\$1	\$3,680	\$16,567	\$0	\$0	\$0	\$0	\$0	\$0	\$16,567	5	
6	801 - 1,100	11C	\$2	\$5,157	\$770	\$48	\$7	\$5,982	\$3	\$3,441	\$9,426	\$0	\$0	\$0	\$0	\$0	\$0	\$9,426	6	
7	1,101 - 1,500	15C	\$3	\$3,046	\$634	\$15	\$12	\$3,707	\$0	\$4,262	\$7,970	\$0	\$0	\$0	\$0	\$0	\$0	\$7,970	7	
8	1,501 - 2,000	2M	\$5	\$1,419	\$419	\$29	\$10	\$1,876	\$0	\$6,606	\$8,482	\$0	\$0	\$0	\$180	\$0	\$180	\$8,662	8	
9	2,001 - 3,000	3M	\$4	\$440	\$1,166	\$79	\$139	\$1,823	\$7	\$8,440	\$10,270	\$0	\$0	\$0	\$41	\$0	\$41	\$10,311	9	
10	3,001 - 5,000	5M	\$5	\$95	\$466	\$39	\$292	\$893	\$13	\$4,695	\$5,601	\$6	\$0	\$6	\$62	\$0	\$62	\$5,670	10	
11	5,001 - 7,000	7M	\$6	\$48	\$161	\$30	\$131	\$369	\$23	\$2,132	\$2,523	\$44	\$0	\$44	\$46	\$0	\$46	\$2,613	11	
12																			12	
13	High Pressure																		13	
14	0 - 940	400	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$3	\$3	\$0	\$0	\$0	\$3	\$0	\$3	\$6	14	
15	941 - 1,050	8C	\$5	\$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	16	
17	1,501 - 2,700	2M	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	17	
18	2,701 - 4,000	3M	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7	\$0	\$7	\$7	18	
19	4,001 - 6,600	5M	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7	\$0	\$7	\$0	\$0	\$0	\$7	\$7	19	
20	6,601 - 9,200	7M	\$7	\$0	\$0	\$0	\$0	\$0	\$6	\$8	\$14	\$8	\$0	\$8	\$0	\$43	\$43	\$51	20	
21	9,201 - 14,500	11M	\$8	\$17	\$228	\$67	\$261	\$573	\$0	\$2,507	\$3,080	\$62	\$8	\$70	\$28	\$0	\$28	\$3,178	21	
22	14,501 - 21,400	16M	\$8	\$34	\$206	\$26	\$111	\$377	\$72	\$1,392	\$1,841	\$135	\$0	\$135	\$10	\$0	\$10	\$144	22	
23	21,401 - 24,000	11M-HP	\$16	\$0	\$51	\$17	\$0	\$68	\$39	\$207	\$314	\$71	\$0	\$71	\$24	\$24	\$96	\$409	23	
24	24,001 - 46,000	16M-HP	\$17	\$0	\$0	\$0	\$0	\$0	\$69	\$1,036	\$1,105	\$132	\$34	\$167	\$60	\$26	\$86	\$252	24	
25	46,001 - 79,000	23M-HP	\$29	\$0	\$0	\$0	\$0	\$0	\$23	\$305	\$329	\$97	\$29	\$126	\$102	\$131	\$234	\$359	25	
26	79,001 - 377,000	8" Turbine	\$53	\$0	\$0	\$0	\$0	\$0	\$0	\$123	\$123	\$117	\$53	\$170	\$0	\$0	\$0	\$170	26	
27	377,001 - 600,000	Turbine	\$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	28	
29	> 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	29	
30																			30	
31	Total		N/A	\$287,790	\$10,240	\$431	\$980	\$299,441	\$258	\$47,204	\$346,904	\$679	\$125	\$804	\$533	\$231	\$764	\$1,568	\$348,472	31

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>													
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	\$41	\$33	\$27,501,416	\$559,157	\$362	\$583,483	\$28,644,417	\$0	\$0	\$0	\$48	\$0	\$0	\$0
3	276 - 425	425	\$43	\$35	\$759,755	\$48,381	\$0	\$102,767	\$910,902	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	426-630	630	\$44	\$37	\$428,918	\$28,718	\$0	\$107,324	\$564,960	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	631 - 800	8C	\$45	\$38	\$311,282	\$26,978	\$36	\$112,421	\$450,718	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	801 - 1,100	11C	\$39	\$33	\$109,907	\$20,632	\$63	\$86,091	\$216,693	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	1,101 - 1,500	15C	\$40	\$35	\$36,618	\$8,994	\$0	\$57,957	\$103,569	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	1,501 - 2,000	2M	\$31	\$28	\$8,709	\$3,090	\$0	\$44,657	\$56,455	\$0	\$0	\$0	\$1,216	\$0	\$0	\$0
8	2,001 - 3,000	3M	\$27	\$25	\$2,475	\$8,595	\$44	\$52,441	\$63,555	\$0	\$0	\$0	\$256	\$0	\$0	\$0
9	3,001 - 5,000	5M	\$41	\$27	\$477	\$6,149	\$99	\$36,196	\$42,921	\$45	\$0	\$45	\$481	\$0	\$0	\$45
10	5,001 - 7,000	7M	\$40	\$26	\$223	\$2,289	\$162	\$15,184	\$17,858	\$311	\$0	\$311	\$330	\$0	\$0	\$311
11																
12	<i>High Pressure</i>															
13	0 - 940	400	\$5	\$5	\$0	\$0	\$0	\$6	\$6	\$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	\$14	\$10	\$0	\$0	\$12	\$17	\$28	\$16	\$0	\$16	\$0	\$87	\$173	\$102
20	9,201 - 14,500	11M	\$73	\$38	\$79	\$5,045	\$0	\$22,734	\$27,858	\$562	\$73	\$634	\$255	\$0	\$0	\$634
21	14,501 - 21,400	16M	\$79	\$41	\$173	\$3,317	\$699	\$13,478	\$17,667	\$1,306	\$0	\$1,306	\$92	\$0	\$0	\$1,306
22	21,401 - 24,000	11M-HP	\$116	\$70	\$0	\$490	\$281	\$1,489	\$2,261	\$514	\$0	\$514	\$0	\$175	\$349	\$689
23	24,001 - 46,000	16M-HP	\$59	\$36	\$0	\$0	\$239	\$3,594	\$3,833	\$459	\$119	\$578	\$208	\$89	\$178	\$667
24	46,001 - 79,000	23M-HP	\$62	\$35	\$0	\$0	\$50	\$653	\$703	\$207	\$62	\$269	\$219	\$281	\$561	\$550
25	79,001 - 377,000	8" Turbine	\$72	\$43	\$0	\$0	\$0	\$167	\$167	\$159	\$72	\$231	\$0	\$0	\$0	\$231
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				\$29,160,032	\$721,833	\$2,048	\$1,240,660	\$31,124,573	\$3,579	\$326	\$3,905	\$3,111	\$631	\$1,262	\$4,536
30	Forecast Customers				891,788	17,571	36	30,488	939,883	53	5	58	83	15	98	156
31																
32	Average SRM Cost				\$33	\$41	\$57	\$41	\$33	\$68	\$65	\$67	\$37	\$42	\$13	\$29

- 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 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 Core				GTNC			EG			Total Noncore	System Total		
							Res	NGV	GN-3	Total	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	\$235	\$227	\$191,754,173	\$3,220,221	\$194,974,394	\$2,083	\$3,360,319	\$198,336,796	\$0	\$0	\$0	\$275	\$275	\$0	\$275	\$0	\$198,336,796	
3	276 - 425	425	\$246	\$238	\$5,176,862	\$278,679	\$5,455,541	\$0	\$5,991,951	\$6,047,492	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,047,492	
4	426-630	630	\$300	\$293	\$3,420,625	\$196,052	\$3,616,687	\$0	\$732,714	\$4,349,401	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,349,401	
5	631 - 800	8C	\$307	\$300	\$2,435,688	\$183,290	\$2,618,978	\$248	\$763,800	\$3,383,025	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,383,025	
6	801 - 1,100	11C	\$300	\$294	\$968,023	\$157,843	\$1,125,866	\$484	\$658,638	\$1,784,987	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,784,987	
7	1,101 - 1,500	15C	\$317	\$312	\$325,124	\$71,650	\$396,773	\$0	\$461,687	\$858,460	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$858,460	
8	1,501 - 2,000	2M	\$330	\$327	\$102,585	\$33,331	\$135,916	\$0	\$481,779	\$617,695	\$0	\$0	\$0	\$13,119	\$13,119	\$0	\$13,119	\$0	\$617,695	
9	2,001 - 3,000	3M	\$322	\$320	\$31,946	\$101,348	\$133,294	\$519	\$618,371	\$752,184	\$0	\$0	\$0	\$3,014	\$3,014	\$0	\$3,014	\$0	\$752,184	
10	3,001 - 5,000	5M	\$688	\$675	\$12,069	\$102,978	\$115,047	\$1,666	\$608,174	\$722,897	\$761	\$0	\$761	\$8,059	\$8,059	\$0	\$8,059	\$761	\$723,648	
11	5,001 - 7,000	7M	\$698	\$684	\$5,760	\$39,665	\$45,425	\$2,813	\$263,132	\$311,370	\$5,397	\$0	\$5,397	\$5,714	\$5,714	\$0	\$5,714	\$5,397	\$316,767	
12	High Pressure																			
13	0 - 940	400	\$257	\$257	\$0	\$0	\$0	\$0	\$299	\$299	\$0	\$0	\$0	\$301	\$301	\$0	\$301	\$0	\$299	
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	\$484	\$484	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$725	\$725	\$725	\$725	
18	4,001 - 6,600	5M	\$697	\$697	\$0	\$0	\$0	\$0	\$0	\$770	\$0	\$770	\$0	\$0	\$0	\$0	\$0	\$770	\$770	
19	6,601 - 9,200	7M	\$622	\$618	\$0	\$0	\$501	\$724	\$1,225	\$687	\$0	\$687	\$0	\$0	\$3,734	\$3,734	\$4,421	\$5,646		
20	9,201 - 14,300	11M	\$933	\$898	\$1,890	\$64,793	\$66,682	\$0	\$291,980	\$358,663	\$7,213	\$933	\$8,147	\$3,273	\$3,273	\$0	\$3,273	\$8,147	\$366,810	
21	14,501 - 21,400	16M	\$957	\$919	\$3,867	\$40,254	\$44,121	\$8,478	\$163,563	\$216,162	\$15,846	\$0	\$15,846	\$1,118	\$1,118	\$0	\$1,118	\$15,846	\$232,007	
22	21,401 - 24,000 11M-HP		\$1,025	\$978	\$0	\$4,312	\$4,312	\$2,477	\$13,111	\$19,900	\$4,526	\$0	\$4,526	\$0	\$0	\$1,537	\$1,537	\$6,064	\$25,964	
23	24,001 - 46,000 16M-HP		\$994	\$971	\$0	\$0	\$4,004	\$60,126	\$64,131	\$7,684	\$1,988	\$9,673	\$3,487	\$3,487	\$1,491	\$4,978	\$11,164	\$75,295		
24	46,001 - 79,000 23M-HP		\$1,536	\$1,509	\$0	\$0	\$0	\$1,237	\$16,078	\$17,316	\$5,088	\$1,536	\$6,624	\$5,387	\$5,387	\$6,912	\$12,299	\$13,536	\$30,852	
25	79,001 - 377,000 Turbine		\$2,792	\$2,763	\$0	\$0	\$0	\$0	\$6,493	\$6,493	\$6,165	\$2,792	\$8,956	\$0	\$0	\$0	\$8,956	\$15,450		
26	377,001 - 600,000 Turbine		\$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		
28	> 4,250,000 Turbine		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
29	Total							\$208,733,034	\$24,510	\$9,090,941	\$217,848,485	\$54,138	\$7,249	\$61,388	\$43,748	\$43,748	\$14,400	\$58,148	\$75,788	\$217,924,273
30	Forecast Customers							909,359	36	30,488	939,883	53	5	58	83	15	98	-	156	940,039
31																				
32	Average SRM Cost							\$230	\$676	\$298	\$232	\$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	\$2,236
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	\$44	\$0	\$12	\$11	\$270
Core Commercial/Industrial	\$398	\$120	\$1	\$34	\$30	\$584
Natural Gas Vehicle	\$1,250	\$278	\$3	\$78	\$69	\$1,678
Noncore Commercial/Industrial	\$2,236	\$670	\$7	\$187	\$167	\$3,267
Small Electric Generation	\$987	\$420	\$5	\$117	\$105	\$1,634
Large Electric Generation	\$2,353	\$1,019	\$11	\$285	\$254	\$3,923

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	\$36,807	\$888	864,505	\$44
Core Commercial/Industrial	\$3,128	\$28	26,214	\$120
Natural Gas Vehicle	\$12	\$0.0	45	\$278
Noncore Commercial/Industrial	\$31	\$8	58	\$670
Small Electric Generation	\$21	\$9	71	\$420
Large Electric Generation	\$9	\$1	10	\$1,019

TABLE 10			
M&S LOADING FACTORS			
(2024 \$)			
Customer Class	Allocated M&S	Customers per Class	M&S Loader \$/Customer
Residential	\$410,554	864,505	\$0.47
Core Commercial/Industrial	\$34,375	26,214	\$1.31
Natural Gas Vehicle	\$136	45	\$3.03
Noncore Commercial/Industrial	\$423	58	\$7.29
Small Electric Generation	\$325	71	\$4.58
Large Electric Generation	\$111	10	\$11.10
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 1
Customer Costs Model for LRMC Studies**

SDG&E Cost Allocation LRMC Customer Costs Costs Results

A	Residential B
Customer Costs Rental Method	\$213.08
Customer Costs NCO Method	\$91.52
Customer Costs NCO RCA	\$288.16
	\$196.64
	\$16.39

Table 4: SDG&E's Residential

	Rental method
SDG&E	\$17.76

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

ntial Minimum Connection Cost Per Month

NCO Method	ARM 1	ARM2
\$24.01	\$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	\$213.08	\$1,678.94	\$464.68	\$196.29	\$3,381.02	\$1,590.09	\$4,091.38	\$1,941.74	\$2,482.15	\$221.13
Customer Costs NCO Method	\$91.52	\$526.24	\$214.85	\$70.49	\$1,211.94	\$717.57	\$1,780.23	\$827.31	\$971.56	\$99.67
Customer Costs NCO RCA	\$288.16	\$1,145.86	\$472.34	\$269.16	\$1,144.61	\$684.33	\$1,738.17	\$814.43	\$942.48	\$70.59
Customer Costs 50/50 NCO/RECC	\$250.62	\$1,412.40	\$468.51	\$232.72	\$2,262.81	\$1,137.21	\$2,914.77	\$1,378.09	\$1,712.31	\$145.86

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

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 2024\$s	\$145.93	\$153.98	\$175.98	\$200.47	\$146.10	\$1,203.07	\$274.73	\$150.31	
O&M \$/customer/yr									
FERC 870 - 894: Distribution O&M (M\$)	\$33,604	\$852	\$26	\$58	\$34,540	\$13	\$3,016	\$24,158	
FERC 901 - 910: Customer O&M (M\$)	\$819	\$16	\$0	\$0	\$836	\$0	\$26	\$862	
Total Cust-Rel O&M (M\$)	\$34,423	\$867	\$26	\$58	\$35,375	\$13	\$3,042	\$25,020	
2021 Number of Customers	847,801	16,309	219	176	864,505	45	26,214	890,764	
Cust-Rel O&M per Customer (2021\$s's)	\$41	\$53	\$120	\$332	\$41	\$291	\$116	\$28	
escalator 2021's to 2024\$s's	1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063	
O&M \$/customer/yr 2020\$s	\$43.17	\$56.54	\$127.74	\$352.62	\$43.50	\$309.06	\$123.37	\$29.86	
O&M Loaders:									
Materials & Supplies Loader:									
allocator = total Customer Related O&M as % of total	89.4%	2.3%	0.1%	0.2%	91.9%	0.0%	7.9%	65.0%	
Allocated Materials & Supplies Loader (\$'s) \$419,449	\$374,920	\$9,447	\$287	\$636	\$385,289	\$142	\$33,131	\$272,508	
2021 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	\$1.31	\$3.61	\$0.45	\$3.17	\$1.26	\$0.31	
escalator 2021's to 2024's	1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063	
M&S Loader \$/customer/yr 2024\$s	\$0.47	\$0.62	\$1.39	\$3.84	\$0.47	\$3.37	\$1.34	\$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 2024's	\$12.06	\$15.80	\$35.69	\$98.52	\$12.15	\$86.35	\$34.47	\$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 2024's	\$10.77	\$14.11	\$31.87	\$87.96	\$10.85	\$77.10	\$30.78	\$7.45	
TOTAL O&M LOADERS \$/customer/yr	\$23.30	\$30.52	\$68.94	\$190.32	\$23.48	\$166.81	\$66.59	\$16.12	
LRMC Rental Customer Cost \$/customer/year	\$212.39	\$241.04	\$372.66	\$743.41	\$213.08	\$1,678.94	\$464.68	\$196.29	
					\$17.76				
NCO Method:									
LRMC Rental Customer Cost \$/customer/year					\$213.08	\$1,678.94	\$464.68	\$196.29	
less annualized SRM rental					(\$146.10)	(\$1,203.07)	(\$274.73)	(\$150.31)	
plus annualized SRM NCO					\$24.54	\$50.37	\$24.89	\$24.51	
NCO Customer Cost \$/customer/year					\$91.52	\$526.24	\$214.85	\$70.49	
					\$7.63				
NCO with Replacement Cost Adder Method:									
LRMC Rental Customer Cost \$/customer/year					\$213.08	\$1,678.94	\$464.68	\$196.29	
less annualized SRM rental					(\$146.10)	(\$1,203.07)	(\$274.73)	(\$150.31)	
plus annualized SRM					\$221.18	\$669.99	\$282.38	\$223.18	
NCO w/ Replacement Customer Cost \$/cstmr/yr					\$288.16	\$1,145.86	\$472.34	\$269.16	
					\$24.01				

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	\$2,236.41	\$905.76	\$2,353.22	\$1,127.31	\$1,539.67	\$150.54
\$29	\$5	\$33	\$22	\$10	\$31	\$64	\$37,633
\$5	\$2	\$7	\$8	\$1	\$9	\$16	\$878
\$34	\$7	\$41	\$30	\$11	\$40	\$80	\$38,512
48	10	58	71	10	81	139	890,903
\$712	\$684	\$699	\$418	\$1,062	\$498	\$576	\$43
1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063
\$756.61	\$726.87	\$743.38	\$444.44	\$1,128.87	\$528.94	\$612.10	\$45.96
0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.2%	100.0%
\$372	\$74	\$442	\$323	\$116	\$439	\$872	\$273,380
48	10	58	71	10	81	139	890,903
\$7.75	\$7.45	\$7.62	\$4.55	\$11.56	\$5.42	\$6.27	\$0.31
1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063
\$8.24	\$7.92	\$8.10	\$4.84	\$12.30	\$5.76	\$6.67	\$0.33
27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%
\$211.39	\$203.08	\$207.69	\$124.17	\$315.39	\$147.78	\$171.01	\$12.84
24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%
\$188.75	\$181.33	\$185.45	\$110.87	\$281.61	\$131.95	\$152.70	\$11.46
\$408.37	\$392.32	\$401.23	\$239.89	\$609.30	\$285.49	\$330.38	\$24.63
\$3,263.97	\$4,812.26	\$3,381.02	\$1,590.09	\$4,091.38	\$1,941.74	\$2,482.15	\$221.13
\$3,263.97	\$4,812.26	\$3,381.02	\$1,590.09	\$4,091.38	\$1,941.74	\$2,482.15	\$221.13
(\$2,098.99)	(\$3,693.07)	(\$2,236.41)	(\$905.76)	(\$2,353.22)	(\$1,127.31)	(\$1,539.67)	(\$150.54)
\$67.53	\$65.18	\$67.33	\$33.24	\$42.07	\$12.88	\$29.08	\$29.08
\$1,232.51	\$1,184.37	\$1,211.94	\$717.57	\$1,780.23	\$827.31	\$971.56	\$99.67
\$3,263.97	\$4,812.26	\$3,381.02	\$1,590.09	\$4,091.38	\$1,941.74	\$2,482.15	\$221.13
(\$2,098.99)	(\$3,693.07)	(\$2,236.41)	(\$905.76)	(\$2,353.22)	(\$1,127.31)	(\$1,539.67)	(\$150.54)
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$1,164.98	\$1,119.19	\$1,144.61	\$684.33	\$1,738.17	\$814.43	\$942.48	\$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"	\$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					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>		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	<i>High Pressure</i>																	
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	
CAP Customers	891,788	17,155	230	185	909,359	36	30,488	939,883	53	5	58	83	15	98	-	156	940,039	
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 2024 CAP in Mtherms	Res	NGV	Core C&I	Total Core	Non Core			Total EG	Total Non	
					C&I	EG Tier 1	EG Tier 2		Core	Total System
1 DIRECT Demand										
2 Transmission										
3 Average Year Throughput (MTh)	0	0	0	0	13,965	0	225,945	225,945	239,910	239,910
4 Cold Year Throughput (1-in-35) (MTh)	0	0	0	0	13,965	0	225,945	225,945	239,910	239,910
5 Cold Year Peak Month (December) (MTh)	0	0	0	0	1,167	0	19,867	19,867	21,035	21,035
6 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	0	0	0	0	38	0	828	828	866	866
7 Number of Customers	0	0	0	0	5	3	10	13	18	18
8 High Pressure										
9 Average Year Throughput (MTh)	18	10,075	3,333	13,426	2,747	9,085	35,885	44,970	47,717	61,142
10 Cold Year Throughput (1-in-35) (MTh)	19	10,075	3,442	13,536	2,747	9,085	35,885	44,970	47,717	61,253
11 Cold Year Peak Month (December) (MTh)	3	865	391	1,259	230	755	2,981	3,736	3,965	5,224
12 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	0	28	19	47	7	24	96	121	128	175
13 Number of Customers	2	5	5	12	5	7	4	11	16	28
14 Medium Pressure										
15 Average Year Throughput (MTh)	270,586	13,104	175,580	459,270	32,591	22,343	4,342	26,685	59,276	518,546
16 Cold Year Throughput (1-in-35) (MTh)	298,699	13,104	181,329	493,131	32,591	22,343	4,342	26,685	59,276	552,407
17 Cold Year Peak Month (December) (MTh)	43,868	1,125	20,592	65,584	2,724	1,856	361	2,217	4,941	70,525
18 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	3,040	36	996	4,072	88	60	12	72	159	4,232
19 Number of Customers	909,357	31	30,483	939,871	48	73	1	74	122	939,993
20 CUMULATIVE Demand										
21 Transmission										
22 Average Year Throughput (MTh)	270,604	23,179	178,913	472,696	49,302	31,429	266,171	297,600	346,902	819,598
23 Cold Year Throughput (1-in-35) (MTh)	298,718	23,179	184,771	506,668	49,302	31,429	266,171	297,600	346,902	853,570
24 Cold Year Peak Month (December) (MTh)	43,870	1,990	20,983	66,843	4,120	2,611	3,342	25,820	29,941	96,784
25 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	3,040	64	1,015	4,119	133	84	936	1,020	1,153	5,272
26 Number of Customers	909,359	36	30,488	939,883	58	83	15	98	156	940,039
27 High Pressure										
28 Average Year Throughput (MTh)	270,604	23,179	178,913	472,696	35,337	31,429	40,227	71,656	106,993	579,689
29 Cold Year Throughput (1-in-35) (MTh)	298,718	23,179	184,771	506,668	35,337	31,429	40,227	71,656	106,993	613,661
30 Cold Year Peak Month (December) (MTh)	43,870	1,990	20,983	66,843	2,953	2,611	3,342	5,953	8,906	75,749
31 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	3,040	64	1,015	4,119	95	84	108	192	287	4,407
32 Number of Customers	909,359	36	30,488	939,883	53	80	5	85	138	940,021
33 Medium Pressure										
34 Average Year Throughput (MTh)	270,586	13,104	175,580	459,270	32,591	22,343	4,342	26,685	59,276	518,546
35 Cold Year Throughput (1-in-35) (MTh)	298,699	13,104	181,329	493,131	32,591	22,343	4,342	26,685	59,276	552,407
36 Cold Year Peak Month (December) (MTh)	43,868	1,125	20,592	65,584	2,724	1,856	361	2,217	4,941	70,525
37 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	3,040	36	996	4,072	88	60	12	72	159	4,232
38 Number of Customers	909,357	31	30,483	939,871	48	73	1	74	122	939,993

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>																		
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%	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	845,479	13,603	89	5	859,177	9	14,294	873,479	-	-	-	1	-	1	-	873,480	
3	276 - 425	425	21,749	1,101	31	2	22,883	-	2,409	25,291	-	-	-	-	-	-	-	25,291	
4	426-630	630	11,678	640	6	7	12,331	-	2,441	14,772	-	-	-	-	-	-	-	14,772	
5	631 - 800	8C	8,106	573	19	4	8,702	1	2,485	11,188	-	-	-	-	-	-	-	11,188	
6	801 - 1,100	11C	3,289	491	31	4	3,815	2	2,195	6,011	-	-	-	-	-	-	-	6,011	
7	1,101 - 1,500	15C	1,041	217	5	4	1,268	-	1,457	2,725	-	-	-	-	-	-	-	2,725	
8	1,501 - 2,000	2M	313	93	6	2	414	-	1,460	1,874	-	-	-	40	-	40	-	1,914	
9	2,001 - 3,000	3M	100	265	18	32	414	2	1,919	2,335	-	-	-	9	-	9	-	2,344	
10	3,001 - 5,000	5M	18	87	7	55	167	2	879	1,049	1	-	1	12	-	12	-	1,062	
11	5,001 - 7,000	7M	8	28	5	23	65	4	377	446	8	-	8	8	-	8	-	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	2	1	-	1	6	-	6	-	9	
20	9,201 - 14,500	11M	2	28	8	33	72	-	313	384	8	1	9	4	-	4	-	397	
21	14,501 - 21,400	16M	4	25	3	14	46	9	171	226	17	-	17	1	-	1	-	244	
22	21,401 - 24,000	11M-HP	-	3	1	-	4	2	13	19	4	-	4	-	2	2	-	25	
23	24,001 - 46,000	16M-HP	-	-	-	-	-	4	60	65	8	2	10	4	2	5	-	79	
24	46,001 - 79,000	23M-HP	-	-	-	-	-	1	10	11	3	1	4	4	5	8	-	24	
25	79,001 - 377,000	8" Turbine	-	-	-	-	-	-	2	2	2	1	3	-	-	-	3	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		891,788	17,155	230	185	909,359	36	30,488	939,883	53	5	58	83	15	98	-	156	940,039

- 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 891,788 17,155 230 185 909,359 36 30,488 939,883 53 5 58 83 15 98 - 156 940,039
 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	\$121,351,798	\$1,952,436	\$12,833	\$755	\$123,317,822	\$1,229	\$1,982,722	\$125,301,773	\$0	\$0	\$0	\$162	\$0	\$162	\$0	\$162	\$125,301,935	2
3	276 - 425	425	\$3,822,556	\$193,568	\$5,361	\$370	\$4,021,856	\$0	\$415,758	\$4,437,614	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,437,614	3
4	426-630	630	\$2,356,860	\$129,073	\$1,274	\$1,486	\$2,488,693	\$0	\$497,716	\$2,986,410	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,986,410	4
5	631 - 800	8C	\$1,638,222	\$115,862	\$3,827	\$850	\$1,758,761	\$190	\$585,726	\$2,344,676	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,344,676	5
6	801 - 1,100	11C	\$664,608	\$99,256	\$6,164	\$850	\$770,878	\$391	\$532,561	\$1,303,829	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,303,829	6
7	1,101 - 1,500	15C	\$211,065	\$43,919	\$1,066	\$853	\$256,902	\$0	\$515,522	\$772,424	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$772,424	7
8	1,501 - 2,000	2M	\$63,541	\$18,764	\$1,279	\$426	\$84,011	\$0	\$706,529	\$790,540	\$0	\$0	\$0	\$19,240	\$0	\$19,240	\$0	\$19,240	\$809,779	8
9	2,001 - 3,000	3M	\$20,261	\$53,744	\$3,626	\$6,398	\$84,029	\$763	\$909,234	\$994,027	\$0	\$0	\$0	\$4,431	\$0	\$4,431	\$0	\$4,431	\$998,458	9
10	3,001 - 5,000	5M	\$3,621	\$17,678	\$1,491	\$11,075	\$33,865	\$2,305	\$838,523	\$874,692	\$1,053	\$0	\$1,053	\$11,149	\$0	\$11,149	\$0	\$12,202	\$886,894	10
11	5,001 - 7,000	7M	\$1,703	\$5,749	\$1,065	\$4,684	\$13,201	\$3,943	\$368,935	\$386,079	\$7,567	\$0	\$7,567	\$8,012	\$0	\$8,012	\$0	\$15,579	\$401,658	11
12																				12
13	<i>High Pressure</i>																			13
14	0 - 940	400	\$0	\$0	\$0	\$0	\$0	\$0	\$374	\$374	\$0	\$0	\$0	\$376	\$0	\$376	\$0	\$376	\$750	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	\$1,377	\$1,377	\$0	\$1,377	\$1,377	18
19	4,001 - 6,600	5M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,162	\$0	\$1,162	\$0	\$0	\$0	\$0	\$1,162	\$1,162	19
20	6,601 - 9,200	7M	\$0	\$0	\$0	\$0	\$0	\$887	\$1,280	\$2,167	\$1,215	\$0	\$1,215	\$0	\$6,604	\$6,604	\$0	\$7,820	\$9,986	20
21	9,201 - 14,500	11M	\$426	\$5,747	\$1,703	\$6,598	\$14,474	\$0	\$498,647	\$513,120	\$12,319	\$1,594	\$13,913	\$5,590	\$0	\$5,590	\$0	\$19,503	\$532,623	21
22	14,501 - 21,400	16M	\$851	\$5,108	\$638	\$2,767	\$9,364	\$14,215	\$274,268	\$297,847	\$26,570	\$0	\$26,570	\$1,875	\$0	\$1,875	\$0	\$28,446	\$326,293	22
23	21,401 - 24,000	11M-HP	\$0	\$639	\$213	\$0	\$852	\$5,933	\$31,407	\$38,192	\$10,843	\$0	\$10,843	\$0	\$3,682	\$3,682	\$0	\$14,525	\$52,717	23
24	24,001 - 46,000	16M-HP	\$0	\$0	\$0	\$0	\$0	\$10,204	\$153,215	\$163,420	\$19,581	\$5,067	\$24,648	\$8,885	\$3,800	\$12,685	\$0	\$37,333	\$200,753	24
25	46,001 - 79,000	23M-HP	\$0	\$0	\$0	\$0	\$0	\$3,551	\$46,137	\$49,687	\$14,601	\$4,408	\$19,008	\$15,458	\$19,835	\$35,293	\$0	\$54,301	\$103,988	25
26	79,001 - 377,000	8" Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$17,205	\$17,205	\$16,335	\$7,397	\$23,732	\$0	\$0	\$0	\$0	\$23,732	\$40,937	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		\$130,135,512	\$2,641,542	\$40,539	\$37,113	\$132,854,706	\$43,611	\$8,375,759	\$141,274,077	\$111,247	\$18,465	\$129,712	\$75,178	\$35,298	\$110,476	\$0	\$240,188	\$141,514,265	30
31	Forecast Customers		891,788	17,155	230	185	909,359	36	30,488	939,883	53	5	58	83	15	98	-	156	940,039	31
32																				32
33	Average SRM Cost		\$146	\$154	\$176	\$200	\$146	\$1,203	\$275	\$150	\$2,099	\$3,693	\$2,236	\$906	\$2,353	\$1,127	\$0	\$1,540	\$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%	90%	0%	8%	55%	0%	0%	0%	0%	0%	0%	0%	98%
3	Allocation (M\$)	\$3,782	\$3,294	\$84	\$3	\$6	\$3,386	\$1	\$301	\$2,097	\$3	\$0	\$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	\$5,082	\$102	\$2	\$4	\$5,190	\$1	\$223	\$5,415	\$3	\$0	\$3	\$2	\$1	\$2	\$6	\$5,421
8	875 - Meas & Reg Station Exp = 100% Demand-Related																	
9																		
10	Allocator - Customers Wtd by Meters & Regs costs	100%	83%	3%	0%	0%	86%	0%	14%	100%	0%	0%	0%	0%	0%	0%	0%	100%
11	Allocation (M\$)	\$5,510	\$4,550	\$162	\$7	\$15	\$4,734	\$4	\$746	\$5,485	\$11	\$2	\$13	\$8	\$4	\$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%	90%	0%	8%	55%	0%	0%	0%	0%	0%	0%	0%	98%
17	Allocation (M\$)	\$8,447	\$7,356	\$187	\$6	\$13	\$7,562	\$3	\$672	\$4,684	\$6	\$1	\$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%	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	\$1,159	\$23	\$0	\$1	\$1,184	\$0	\$51	\$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	\$2,810	\$57	\$1	\$2	\$2,871	\$1	\$124	\$2,995	\$2	\$0	\$2	\$1	\$0	\$1	\$3	\$2,998
30																		
31	Allocator - Customers Wtd by Meters & Regs costs	100%	83%	3%	0%	0%	86%	0%	14%	100%	0%	0%	0%	0%	0%	0%	0%	100%
32	Allocation (M\$)	\$2,258	\$1,865	\$66	\$3	\$6	\$1,940	\$2	\$306	\$2,248	\$4	\$1	\$5	\$3	\$1	\$5	\$10	\$2,258
33	894 - Maint. of Other Eq = Non-Marginal Designation																	
34	Total 870 - 894 O&M Allocation (M\$)	\$38,379	\$33,604	\$852	\$26	\$58	\$34,540	\$13	\$3,016	\$24,158	\$29	\$5	\$33	\$22	\$10	\$31	\$64	\$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\$)	\$1,402,852	\$28,264	\$576	\$1,239	\$1,432,931	\$307	\$61,679	\$1,494,917	\$763	\$114	\$876	\$433	\$224	\$657	\$1,533	\$1,496,450
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\$)	\$287,790	\$10,240	\$431	\$980	\$299,441	\$258	\$47,204	\$346,904	\$679	\$125	\$804	\$533	\$231	\$764	\$1,568	\$348,472
6 Alloc %	83%	3%	0%	0%	86%	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%	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 SDGE 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	\$1,329,800	\$21,395	\$141	\$8	\$1,351,344	\$14	\$22,481	\$1,373,839	\$0	\$0	\$0	\$2	\$0	\$2	\$2	\$1,373,841	2
3	276 - 425	425	\$2	\$34,207	\$1,732	\$48	\$3	\$35,991	\$0	\$3,788	\$39,779	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$39,779	3
4	426-630	630	\$2	\$18,368	\$1,006	\$10	\$12	\$19,395	\$0	\$3,840	\$23,235	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$23,235	4
5	631 - 800	8C	\$2	\$12,749	\$902	\$30	\$7	\$13,687	\$1	\$3,909	\$17,598	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,598	5
6	801 - 1,100	11C	\$2	\$5,173	\$773	\$48	\$7	\$6,001	\$3	\$3,452	\$9,455	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,455	6
7	1,101 - 1,500	15C	\$2	\$1,638	\$341	\$8	\$7	\$1,994	\$0	\$2,292	\$4,286	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,286	7
8	1,501 - 2,000	2M	\$2	\$493	\$146	\$10	\$3	\$652	\$0	\$2,296	\$2,948	\$0	\$0	\$0	\$63	\$0	\$63	\$63	\$3,010	8
9	2,001 - 3,000	3M	\$2	\$157	\$417	\$28	\$50	\$652	\$3	\$3,018	\$3,673	\$0	\$0	\$0	\$15	\$0	\$15	\$15	\$3,687	9
10	3,001 - 5,000	5M	\$7	\$126	\$616	\$52	\$386	\$1,181	\$17	\$6,207	\$7,405	\$8	\$0	\$8	\$83	\$0	\$83	\$90	\$7,495	10
11	5,001 - 7,000	7M	\$7	\$59	\$200	\$37	\$163	\$460	\$28	\$2,660	\$3,149	\$55	\$0	\$55	\$58	\$0	\$58	\$112	\$3,261	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	\$4	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	\$11	\$11	\$11	\$11	18
19	4,001 - 6,600	5M	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8	\$0	\$8	\$0	\$0	\$0	\$8	\$8	19
20	6,601 - 9,200	7M	\$7	\$0	\$0	\$0	\$0	\$0	\$6	\$8	\$14	\$8	\$0	\$8	\$0	\$42	\$42	\$50	\$64	20
21	9,201 - 14,500	11M	\$13	\$27	\$364	\$108	\$418	\$917	\$0	\$4,009	\$4,926	\$99	\$13	\$112	\$45	\$0	\$45	\$157	\$5,083	21
22	14,501 - 21,400	16M	\$13	\$54	\$324	\$40	\$175	\$593	\$114	\$2,191	\$2,898	\$212	\$0	\$212	\$15	\$0	\$15	\$227	\$3,125	22
23	21,401 - 24,000	11M-HP	\$16	\$0	\$49	\$16	\$0	\$65	\$38	\$199	\$302	\$69	\$0	\$69	\$0	\$23	\$23	\$92	\$394	23
24	24,001 - 46,000	16M-HP	\$16	\$0	\$0	\$0	\$0	\$0	\$63	\$939	\$1,002	\$120	\$31	\$151	\$54	\$23	\$78	\$229	\$1,231	24
25	46,001 - 79,000	23M-HP	\$28	\$0	\$0	\$0	\$0	\$0	\$22	\$290	\$312	\$92	\$28	\$119	\$97	\$125	\$222	\$341	\$653	25
26	79,001 - 377,000	8" Turbine	\$42	\$0	\$0	\$0	\$0	\$0	\$0	\$98	\$98	\$93	\$42	\$135	\$0	\$0	\$0	\$135	\$233	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																		29
30	Total		N/A	\$1,402,852	\$28,264	\$576	\$1,239	\$1,432,931	\$307	\$61,679	\$1,494,917	\$763	\$114	\$876	\$433	\$224	\$657	\$1,533	\$1,496,450	30
31																				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	\$237,555	\$3,822	\$25	\$1	\$241,404	\$2	\$4,016	\$245,422	\$0	\$0	\$0	\$0	\$0	\$0	\$245,422	
3	276 - 425	425	\$1	\$15,240	\$772	\$21	\$1	\$16,035	\$0	\$1,688	\$17,722	\$0	\$0	\$0	\$0	\$0	\$0	\$17,722	
4	426-630	630	\$1	\$12,737	\$698	\$7	\$8	\$13,449	\$0	\$2,662	\$16,111	\$0	\$0	\$0	\$0	\$0	\$0	\$16,111	
5	631 - 800	8C	\$1	\$12,002	\$849	\$28	\$6	\$12,886	\$1	\$3,680	\$16,567	\$0	\$0	\$0	\$0	\$0	\$0	\$16,567	
6	801 - 1,100	11C	\$2	\$5,157	\$770	\$48	\$7	\$5,982	\$3	\$3,441	\$9,426	\$0	\$0	\$0	\$0	\$0	\$0	\$9,426	
7	1,101 - 1,500	15C	\$3	\$3,046	\$634	\$15	\$12	\$3,707	\$0	\$4,262	\$7,970	\$0	\$0	\$0	\$0	\$0	\$0	\$7,970	
8	1,501 - 2,000	2M	\$5	\$1,419	\$419	\$29	\$10	\$1,876	\$0	\$6,606	\$8,482	\$0	\$0	\$0	\$180	\$0	\$180	\$8,662	
9	2,001 - 3,000	3M	\$4	\$440	\$1,166	\$79	\$139	\$1,823	\$7	\$8,440	\$10,270	\$0	\$0	\$0	\$41	\$0	\$41	\$10,311	
10	3,001 - 5,000	5M	\$5	\$95	\$466	\$39	\$292	\$893	\$13	\$4,695	\$5,601	\$6	\$0	\$6	\$62	\$0	\$62	\$5,670	
11	5,001 - 7,000	7M	\$6	\$48	\$161	\$30	\$131	\$369	\$23	\$2,132	\$2,523	\$44	\$0	\$44	\$46	\$0	\$46	\$2,613	
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	\$7	\$0	\$7	\$7	
19	4,001 - 6,600	5M	\$7	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7	\$0	\$7	\$0	\$0	\$0	\$7	\$7	
20	6,601 - 9,200	7M	\$7	\$0	\$0	\$0	\$0	\$0	\$6	\$8	\$14	\$8	\$0	\$8	\$0	\$43	\$43	\$51	
21	9,201 - 14,500	11M	\$8	\$17	\$228	\$67	\$261	\$573	\$0	\$2,507	\$3,080	\$62	\$8	\$70	\$28	\$0	\$28	\$3,178	
22	14,501 - 21,400	16M	\$8	\$34	\$206	\$26	\$111	\$377	\$72	\$1,392	\$1,841	\$135	\$0	\$135	\$10	\$0	\$10	\$144	
23	21,401 - 24,000	11M-HP	\$16	\$0	\$51	\$17	\$0	\$68	\$39	\$207	\$314	\$71	\$0	\$71	\$24	\$24	\$96	\$409	
24	24,001 - 46,000	16M-HP	\$17	\$0	\$0	\$0	\$0	\$0	\$69	\$1,036	\$1,105	\$132	\$34	\$167	\$60	\$26	\$86	\$252	
25	46,001 - 79,000	23M-HP	\$29	\$0	\$0	\$0	\$0	\$0	\$23	\$305	\$329	\$97	\$29	\$126	\$102	\$131	\$234	\$359	
26	79,001 - 377,000	8" Turbine	\$53	\$0	\$0	\$0	\$0	\$0	\$0	\$123	\$123	\$117	\$53	\$170	\$0	\$0	\$0	\$170	
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	\$287,790	\$10,240	\$431	\$980	\$299,441	\$258	\$47,204	\$346,904	\$679	\$125	\$804	\$533	\$231	\$764	\$1,568	\$348,472

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"	\$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-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>														13
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, 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	\$21	\$24	\$20,303,521	\$285,894	\$185	\$298,332	\$20,887,931	\$0	\$0	\$0	\$24	\$0	\$0	\$0	\$0
3	276 - 425	425	\$24	\$31	\$682,318	\$27,289	\$0	\$57,964	\$767,571	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	426-630	630	\$27	\$37	\$428,918	\$17,350	\$0	\$64,839	\$511,107	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	631 - 800	8C	\$29	\$38	\$311,282	\$17,178	\$23	\$71,586	\$400,070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	801 - 1,100	11C	\$25	\$33	\$109,907	\$13,276	\$41	\$55,399	\$178,623	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	1,101 - 1,500	15C	\$29	\$35	\$36,618	\$6,488	\$0	\$41,805	\$84,911	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	1,501 - 2,000	2M	\$24	\$28	\$8,709	\$2,406	\$0	\$34,781	\$45,896	\$0	\$0	\$0	\$947	\$0	\$0	\$0	\$0
8	2,001 - 3,000	3M	\$21	\$25	\$2,475	\$6,661	\$34	\$40,644	\$49,815	\$0	\$0	\$0	\$198	\$0	\$0	\$0	\$0
9	3,001 - 5,000	5M	\$41	\$27	\$477	\$6,149	\$99	\$36,196	\$42,921	\$45	\$0	\$45	\$481	\$0	\$0	\$0	\$45
10	5,001 - 7,000	7M	\$40	\$26	\$223	\$2,289	\$162	\$15,184	\$17,858	\$311	\$0	\$311	\$330	\$0	\$0	\$0	\$311
11	<i>High Pressure</i>																
12	0 - 940	400	\$4	\$5	\$0	\$0	\$0	\$4	\$4	\$0	\$0	\$0	\$4	\$0	\$0	\$0	\$0
13	941 - 1,050	8C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14	1,051 - 1,500	630	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	1,501 - 2,700	2M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	2,701 - 4,000	3M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
17	4,001 - 6,600	5M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	6,601 - 9,200	7M	\$14	\$10	\$0	\$0	\$12	\$17	\$28	\$16	\$0	\$16	\$0	\$87	\$173	\$0	\$102
19	9,201 - 14,500	11M	\$73	\$38	\$79	\$5,045	\$0	\$22,734	\$27,858	\$562	\$73	\$634	\$255	\$0	\$0	\$0	\$634
20	14,501 - 21,400	16M	\$79	\$41	\$173	\$3,317	\$699	\$13,478	\$17,667	\$1,306	\$0	\$1,306	\$92	\$0	\$0	\$0	\$1,306
21	21,401 - 24,000	11M-HP	\$116	\$70	\$0	\$490	\$281	\$1,489	\$2,261	\$514	\$0	\$514	\$0	\$175	\$349	\$0	\$689
22	24,001 - 46,000	16M-HP	\$59	\$36	\$0	\$0	\$239	\$3,594	\$3,833	\$459	\$119	\$578	\$208	\$89	\$178	\$0	\$667
23	46,001 - 79,000	23M-HP	\$62	\$35	\$0	\$0	\$50	\$653	\$703	\$207	\$62	\$269	\$219	\$281	\$561	\$0	\$550
24	79,001 - 377,000	8" Turbine	\$72	\$43	\$0	\$0	\$0	\$167	\$167	\$159	\$72	\$231	\$0	\$0	\$0	\$0	\$231
25	377,001 - 600,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
26	600,001 - 4,250,000	Turbine															
27	> 4,250,000	Turbine															
28																	
29	Total				\$21,884,701	\$393,832	\$1,826	\$758,866	\$23,039,225	\$3,579	\$326	\$3,905	\$2,759	\$631	\$1,262	\$4,536	
30	Forecast Customers				891,788	17,571	36	30,488	939,883	53	5	58	83	15	98	156	
31																	
32	Average SRM Cost				\$25	\$22	\$50	\$25	\$25	\$68	\$65	\$67	\$33	\$42	\$13	\$29	

- 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 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		D	E	F	G	H	I	J	K	L	M	N	O	P
	Ch		(Dollars)																
1	Medium Pressure																		
2	0-275	250	\$215	\$218	\$184,556,278	\$2,946,958	\$187,503,236	\$1,906	\$3,075,168	\$190,580,310	\$0	\$0	\$0	\$252	\$252	\$0	\$252	\$0	\$190,580,310
3	276 - 425	425	\$227	\$234	\$5,099,425	\$257,587	\$5,357,012	\$0	\$547,148	\$5,904,160	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,904,160
4	426-630	630	\$283	\$293	\$3,420,625	\$184,694	\$3,605,318	\$0	\$690,229	\$4,295,547	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,295,547
5	631 - 800	8C	\$291	\$300	\$2,435,688	\$173,490	\$2,609,178	\$234	\$722,964	\$3,332,377	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,332,377
6	801 - 1,100	11C	\$286	\$294	\$968,023	\$150,487	\$1,118,510	\$461	\$627,946	\$1,746,917	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,746,917
7	1,101 - 1,500	15C	\$306	\$312	\$325,124	\$69,143	\$394,267	\$0	\$445,535	\$839,802	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$839,802
8	1,501 - 2,000	2M	\$323	\$327	\$102,585	\$32,648	\$135,233	\$0	\$471,902	\$607,135	\$0	\$0	\$0	\$12,850	\$12,850	\$0	\$12,850	\$0	\$607,135
9	2,001 - 3,000	3M	\$316	\$320	\$31,946	\$99,415	\$131,360	\$509	\$908,575	\$738,444	\$0	\$0	\$0	\$2,956	\$2,956	\$0	\$2,956	\$0	\$738,444
10	3,001 - 5,000	5M	\$689	\$675	\$12,069	\$12,069	\$115,047	\$1,666	\$608,174	\$722,887	\$761	\$0	\$761	\$8,059	\$8,059	\$0	\$8,059	\$761	\$723,648
11	5,001 - 7,000	7M	\$698	\$684	\$5,760	\$39,665	\$45,425	\$2,813	\$263,132	\$311,370	\$5,397	\$0	\$5,397	\$5,714	\$5,714	\$0	\$5,714	\$5,397	\$316,767
12	High Pressure																		
13	0 - 940	400	\$256	\$257	\$0	\$0	\$0	\$0	\$297	\$297	\$0	\$0	\$0	\$299	\$299	\$0	\$299	\$0	\$297
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	\$484	\$484	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$725	\$725	\$725	\$725
18	4,001 - 6,600	5M	\$697	\$697	\$0	\$0	\$0	\$0	\$0	\$0	\$770	\$0	\$770	\$0	\$0	\$0	\$0	\$0	\$770
19	6,601 - 9,200	7M	\$622	\$618	\$0	\$0	\$0	\$501	\$724	\$1,225	\$687	\$0	\$687	\$0	\$0	\$3,734	\$3,734	\$4,421	\$5,646
20	9,201 - 14,500	11M	\$933	\$898	\$1,890	\$64,793	\$66,682	\$0	\$291,980	\$358,663	\$7,213	\$933	\$8,147	\$3,273	\$3,273	\$0	\$3,273	\$8,147	\$366,810
21	14,501 - 21,400	16M	\$957	\$919	\$3,867	\$40,254	\$44,121	\$8,478	\$163,563	\$216,162	\$15,846	\$0	\$15,846	\$1,118	\$1,118	\$0	\$1,118	\$15,846	\$232,007
22	21,401 - 24,000 11M-HP		\$1,025	\$978	\$0	\$4,312	\$4,312	\$2,477	\$13,111	\$19,900	\$4,526	\$0	\$4,526	\$0	\$0	\$1,537	\$1,537	\$6,064	\$25,964
23	24,001 - 46,000 16M-HP		\$994	\$971	\$0	\$0	\$4,004	\$60,126	\$64,131	\$7,684	\$1,988	\$9,673	\$3,487	\$3,487	\$1,491	\$4,978	\$11,164	\$75,295	\$11,164
24	46,001 - 79,000 23M-HP		\$1,536	\$1,509	\$0	\$0	\$0	\$1,237	\$16,078	\$17,316	\$5,088	\$1,536	\$6,624	\$5,387	\$5,387	\$6,912	\$12,299	\$13,536	\$30,852
25	79,001 - 377,000 Turbine		\$2,792	\$2,763	\$0	\$0	\$0	\$0	\$6,493	\$6,493	\$6,165	\$2,792	\$8,956	\$0	\$0	\$0	\$0	\$8,956	\$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				\$201,129,702	\$24,287	\$201,129,702	\$24,287	\$8,609,148	\$209,763,137	\$54,138	\$7,249	\$61,388	\$43,396	\$43,396	\$14,400	\$57,796	\$75,788	\$209,838,924
30	Forecast Customers				909,359	36	909,359	36	30,488	939,883	53	5	58	83	15	98	-	156	940,039
31																			
32	Average SRM Cost						\$221	\$670	\$282	\$223	\$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	\$2,236
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	\$44	\$0	\$12	\$11	\$213
Core Commercial/Industrial	\$275	\$123	\$1	\$34	\$31	\$465
Natural Gas Vehicle	\$1,203	\$309	\$3	\$86	\$77	\$1,679
Noncore Commercial/Industrial	\$2,236	\$743	\$8	\$208	\$185	\$3,381
Small Electric Generation	\$906	\$444	\$5	\$124	\$111	\$1,590
Large Electric Generation	\$2,353	\$1,129	\$12	\$315	\$282	\$4,091

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	\$36,720	\$888	864,505	\$44
Core Commercial/Industrial	\$3,206	\$28	26,214	\$123
Natural Gas Vehicle	\$14	\$0.0	45	\$309
Noncore Commercial/Industrial	\$36	\$8	58	\$743
Small Electric Generation	\$23	\$9	71	\$444
Large Electric Generation	\$10	\$1	10	\$1,129

TABLE 10			
M&S LOADING FACTORS			
(2024 \$)			
Customer Class	Allocated M&S	Customers per Class	M&S Loader \$/Customer
Residential	\$409,613	864,505	\$0.47
Core Commercial/Industrial	\$35,223	26,214	\$1.34
Natural Gas Vehicle	\$151	45	\$3.37
Noncore Commercial/Industrial	\$470	58	\$8.10
Small Electric Generation	\$344	71	\$4.84
Large Electric Generation	\$123	10	\$12.30
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