SDG&E 2024 TCAP

Section 1
Customer Costs Model for LRMC Studies

Workpapers to the Prepared Written Testimony of
Marjorie Schmidt-Pines

Errata (Redlined) - September 8, 2023

SDG&E Cost Allocation LRMC 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 % or 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 - LRMC Customer Cost

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			Res						Total
		G-R	G-M	G-S	G-T	Total Res	NGV	GN-3	Core
	A	B	C	D	E	F	G	H	I
1									
2	**Annualized SRM Cost $/customer/yr 2024$s**	**$202.44**	**$202.41**	**$202.35**	**$202.44**	**$202.44**	**$1,249.81**	**$398.30**	**$208.84**
3									
4	**O&M $/customer/yr**								
5	FERC 870 - 894: Distribution O&M (M$)	$33,728	$825	$23	$46	$34,621	$12	$2,942	$24,165
6	FERC 901 - 910: Customer O&M (M$)	$819	$16	$0	$0	$836	$0	$26	$862
7	Total Cust-Rel O&M (M$)	$34,547	$841	$23	$46	$35,457	$12	$2,969	$25,027
8	2021 Number of Customers	847,801	16,309	219	176	864,505	45	26,214	890,764
9	Cust-Rel O&M per Customer (2021$'s)	$41	$52	$105	$260	$41	$261	$113	$28
10	escalator 2021's to 2024$'s	1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063
11	**O&M $/customer/yr 2020$s**	**$43.32**	**$54.81**	**$111.79**	**$276.84**	**$43.60**	**$277.92**	**$120.40**	**$29.87**
12									
13	**O&M Loaders:**								
14	Materials & Supplies Loader:								
15	allocator = total Customer Related O&M as % of total	89.7%	2.2%	0.1%	0.1%	92.1%	0.0%	7.7%	65.0%
16	Allocated Materials & Supplies Loader ($'s) $419,449	$376,267	$9,157	$251	$499	$386,174	$128	$32,334	$272,581
17	2021 Number of Customers	847,801	16,309	219	176	864,505	45	26,214	890,764
18	M&S Loader per Customer (2021 $'s)	$0.44	$0.56	$1.15	$2.84	$0.45	$2.85	$1.23	$0.31
19	escalator 2021$'s to 2024$'s	1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063
20	M&S Loader $/customer/yr 2024$s	$0.47	$0.60	$1.22	$3.02	$0.47	$3.03	$1.31	$0.33
21									
22	Administrative & General as % of O&M	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%
23	Administrative & General $/customer/yr 2024$'s	$12.10	$15.31	$31.23	$77.34	$12.18	$77.65	$33.64	$8.35
24									
25	General Plant as % of O&M	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%
26	General Plant $/customer/yr 2024$'s	$10.81	$13.67	$27.89	$69.06	$10.88	$69.33	$30.04	$7.45
27	**TOTAL O&M LOADERS $/customer/yr**	**$23.38**	**$29.58**	**$60.34**	**$149.42**	**$23.53**	**$150.01**	**$64.98**	**$16.12**
28									
29	**LRMC Rental Customer Cost $/customer/year**	**$269.15**	**$286.79**	**$374.47**	**$628.70**	**$269.58**	**$1,677.74**	**$583.69**	**$254.83**
30						$22.47			
31	**NCO Method:**								
32	LRMC Rental Customer Cost $/customer/year					$269.58	$1,677.74	$583.69	$254.83
33	less annualized SRM rental					($202.44)	($1,249.81)	($398.30)	($208.84)
34	plus annualized SRM NCO					$32.70	$56.50	$40.69	$33.12
35	**NCO Customer Cost $/customer/year**					**$99.84**	**$484.43**	**$226.08**	**$79.11**
36						**$8.32**			
37	**NCO with Recplacement Cost Adder Method:**								
38	LRMC Rental Customer Cost $/customer/year					$269.58	$1,677.74	$583.69	$254.83
39	less annualized SRM rental					($202.44)	($1,249.81)	($398.30)	($208.84)
40	plus annualized SRM					$229.54	$676.12	$298.19	$231.78
41	**NCO w/ Replacement Customer Cost $/cstmr/yr**					**$296.68**	**$1,104.05**	**$483.57**	**$277.77**
						$24.72			

GTNC			EG			Total	System
MPD	HPD	Total	< 3 MM	> 3 MM	Total	Noncore	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	*Medium Pressure*					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	*High Pressure*					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	*Medium Pressure*						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	*High Pressure*						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

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

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

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

DEMAND DETERMINANT SUMMARY
2024 TCAP

	Billing Determinants	Res								GTNC			EG			Power		
		G-R	G-M	G-S	G-T	Total	NGV	GN-3	Core	MPD	HPD	Total	< 3 MM	> 3 MM	Total	Plants	Noncore	System
	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 C&I	EG Tier 1	EG Tier 2	Total EG	Total Non 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	23,209	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							Total Core	GTNC			EG			Total Noncore	System Total	
			G-R	G-M	G-S	G-T	Total	NGV	GN-3		MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B					C	D	E	F	G	H	I	J	K	L	N	O	
	Cfh																		
1	*Medium Pressure*																		1
2	0-275	250	94.81%	79.29%	38.81%	2.84%	94.48%	24.44%	46.88%	93.08%	0.00%	0.00%	0.00%	1.41%	0.00%	1.23%	0.72%	93.06%	2
3	276 - 425	425	2.44%	6.42%	13.24%	1.14%	2.52%	0.00%	7.90%	2.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.67%	3
4	426-630	630	1.31%	3.73%	2.74%	3.98%	1.36%	0.00%	8.01%	1.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.55%	4
5	631 - 800	8C	0.91%	3.34%	8.22%	2.27%	0.96%	2.22%	8.15%	1.17%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.17%	5
6	801 - 1,100	11C	0.37%	2.86%	13.24%	2.27%	0.42%	4.44%	7.20%	0.62%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.62%	6
7	1,101 - 1,500	15C	0.12%	1.26%	2.28%	2.27%	0.14%	0.00%	4.78%	0.28%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.28%	7
8	1,501 - 2,000	2M	0.04%	0.54%	2.74%	1.14%	0.05%	0.00%	4.79%	0.19%	0.00%	0.00%	0.00%	47.89%	0.00%	41.98%	24.46%	0.19%	8
9	2,001 - 3,000	3M	0.01%	1.55%	7.76%	17.05%	0.05%	4.44%	6.29%	0.23%	0.00%	0.00%	0.00%	11.27%	0.00%	9.88%	5.76%	0.23%	9
10	3,001 - 5,000	5M	0.00%	0.51%	3.20%	29.55%	0.02%	6.67%	2.88%	0.10%	2.08%	0.00%	1.72%	14.08%	0.00%	12.35%	7.91%	0.10%	10
11	5,001 - 7,000	7M	0.00%	0.17%	2.28%	12.50%	0.01%	11.11%	1.24%	0.04%	14.58%	0.00%	12.07%	9.86%	0.00%	8.64%	10.07%	0.05%	11
12																			12
13	*High Pressure*																		13
14	0 - 940	400	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.41%	0.00%	1.23%	0.72%	0.00%	14
15	941 - 1,050	8C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15
16	1,051 - 1,500	630	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16
17	1,501 - 2,700	2M	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	17
18	2,701 - 4,000	3M	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	1.23%	0.72%	0.00%	18
19	4,001 - 6,600	5M	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.08%	0.00%	1.72%	0.00%	0.00%	0.00%	0.72%	0.00%	19
20	6,601 - 9,200	7M	0.00%	0.00%	0.00%	0.00%	0.00%	2.22%	0.00%	0.00%	2.08%	0.00%	1.72%	0.00%	40.00%	4.94%	3.60%	0.00%	20
21	9,201 - 14,500	11M	0.00%	0.17%	3.65%	17.61%	0.01%	0.00%	1.03%	0.04%	14.58%	20.00%	15.52%	4.23%	0.00%	3.70%	8.63%	0.04%	21
22	14,501 - 21,400	16M	0.00%	0.15%	1.37%	7.39%	0.01%	24.44%	0.56%	0.02%	31.25%	0.00%	25.86%	1.41%	0.00%	1.23%	11.51%	0.02%	22
23	21,401 - 24,000	11M-HP	0.00%	0.02%	0.46%	0.00%	0.00%	6.67%	0.04%	0.00%	8.33%	0.00%	6.90%	0.00%	10.00%	1.23%	3.60%	0.00%	23
24	24,001 - 46,000	16M-HP	0.00%	0.00%	0.00%	0.00%	0.00%	11.11%	0.20%	0.01%	14.58%	40.00%	18.97%	4.23%	10.00%	4.94%	10.79%	0.01%	24
25	46,001 - 79,000	23M-HP	0.00%	0.00%	0.00%	0.00%	0.00%	2.22%	0.03%	0.00%	6.25%	20.00%	8.62%	4.23%	30.00%	7.41%	7.91%	0.00%	25
26	79,001 - 377,000	8" Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	4.17%	20.00%	6.90%	0.00%	0.00%	0.00%	2.88%	0.00%	26
27	377,001 - 600,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	27
28	600,001 - 4,250,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	28
29	> 4,250,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	29
30																			30
31	Total Customers		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	31

Notes:

1. Factors derived from meter capacity analysis results in Table "LRMCC-4" (tab MSAllocv1)
   Data Sources: Tabs: MSA Cost, MSAlloc 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 G-R	Res G-M	Res G-S	Res G-T	Res Total	NGV	GN-3	Total Core	GTNC MPD	GTNC HPD	GTNC Total	EG < 3 MM	EG > 3 MM	EG Total	Power Plant	Total Noncore	System Total	
	A	B					C	D	E	F	G	H	I	J	K	L	M	N	O	
	Cfh																			
1	*Medium Pressure*																			1
2	0-275	250	845,479	13,603	89	5	859,177	9	14,294	873,479	-	-	-	1	-	1	-	1	873,480	2
3	276 - 425	425	21,749	1,101	31	2	22,883	-	2,409	25,291	-	-	-	-	-	-	-	-	25,291	3
4	426-630	630	11,678	640	6	7	12,331	-	2,441	14,772	-	-	-	-	-	-	-	-	14,772	4
5	631 - 800	8C	8,106	573	19	4	8,702	1	2,485	11,188	-	-	-	-	-	-	-	-	11,188	5
6	801 - 1,100	11C	3,289	491	31	4	3,815	2	2,195	6,011	-	-	-	-	-	-	-	-	6,011	6
7	1,101 - 1,500	15C	1,041	217	5	4	1,268	-	1,457	2,725	-	-	-	-	-	-	-	-	2,725	7
8	1,501 - 2,000	2M	313	93	6	2	414	-	1,460	1,874	-	-	-	40	-	40	-	40	1,914	8
9	2,001 - 3,000	3M	100	265	18	32	414	2	1,919	2,335	-	-	-	9	-	9	-	9	2,344	9
10	3,001 - 5,000	5M	18	87	7	55	167	2	879	1,049	1	-	1	12	-	12	-	13	1,062	10
11	5,001 - 7,000	7M	8	28	5	23	65	4	377	446	8	-	8	8	-	8	-	16	462	11
12																				12
13	*High Pressure*																			13
14	0 - 940	400	-	-	-	-	-	-	1	1	-	-	-	1	-	1	-	1	2	14
15	941 - 1,050	8C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
16	1,051 - 1,500	630	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
17	1,501 - 2,700	2M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
18	2,701 - 4,000	3M	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	2	2	18
19	4,001 - 6,600	5M	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	1	1	19
20	6,601 - 9,200	7M	-	-	-	-	-	1	1	2	1	-	1	-	6	6	-	7	9	20
21	9,201 - 14,500	11M	2	28	8	33	72	-	313	384	8	1	9	4	-	4	-	12	397	21
22	14,501 - 21,400	16M	4	25	3	14	46	9	171	226	17	-	17	1	-	1	-	18	244	22
23	21,401 - 24,000	11M-HP	-	3	1	-	4	2	13	19	4	-	4	-	2	2	-	6	25	23
24	24,001 - 46,000	16M-HP	-	-	-	-	-	4	60	65	8	2	10	4	2	5	-	15	79	24
25	46,001 - 79,000	23M-HP	-	-	-	-	-	1	10	11	3	1	4	4	5	8	-	12	24	25
26	79,001 - 377,000	8" Turbine	-	-	-	-	-	-	2	2	2	1	3	-	-	-	-	3	6	26
27	377,001 - 600,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27
28	600,001 - 4,250,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28
29	> 4,250,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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	31

Notes:

1. Row (31) = forecast annual average number of customers during proposed 2020 - 2022 TCAP period

2. 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	Meter	Res							Total	GTNC			EG			Power	Total	System	
	Flow Range	Type	G-R	G-M	G-S	G-T	Total	NGV	GN-3	Core	MPD	HPD	Total	< 3 MM	> 3 MM	Total	Plant	Noncore	Total	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
	Cfh											(Dollars)								
1	*Medium Pressure*																			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	*High Pressure*																			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	Res G-R	Res G-M	Res G-S	Res G-T	Res Total	NGV	GN-3	Total Core	GTNC MPD	GTNC HPD	GTNC Total	EG < 3 MM	EG > 3 MM	EG Total	Total Noncore	System Total	
	A	B					C	D	E	F	G	H	I	J	K	L	N	O	
1																			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%	2
3	Allocation (M$)	$3,782	$3,305	$81	$2	$4	$3,393	$1	$295	$2,098	$2	$0	$3	$2	$1	$3	$5	$3,694	3
4	**871 - Distribution Load Dispatching = Non-Marginal Designation**																		4
5																			5
6	Allocator - Customers Wtd by Services costs	100%	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%	6
7	Allocation (M$)	$5,421	$5,120	$100	$2	$2	$5,224	$1	$193	$5,418	$1	$0	$1	$1	$0	$1	$3	$5,421	7
8	**875 - Meas & Reg Station Exp = 100% Demand-Related**																		8
9																			9
10	Allocator - Customers Wtd by Meters & Regs costs	100%	83%	3%	0%	0%	86%	0%	14%	100%	0%	0%	0%	0%	0%	0%	0%	100%	10
11	Allocation (M$)	$5,510	$4,550	$162	$7	$15	$4,734	$4	$746	$5,485	$11	$2	$13	$8	$4	$12	$25	$5,510	11
12																			12
13	Allocator - Customer Service Expense	0%	86%	2%	0%	0%	88%	0%	7%	0%	0%	0%	0%	0%	0%	0%	0%	95%	13
14	Allocation (M$)	$8,727	$7,507	$157	$3	$5	$7,673	$1	$593	$0	$0	$0	$0	$0	$0	$1	$0	$8,268	14
15																			15
16	Allocator - Total of other Distribution O&M Operating	56%	87%	2%	0%	0%	90%	0%	8%	55%	0%	0%	0%	0%	0%	0%	0%	98%	16
17	Allocation (M$)	$8,447	$7,381	$180	$5	$10	$7,576	$3	$658	$4,685	$5	$1	$6	$4	$2	$6	$12	$8,249	17
18	**881 - Rents = Non-Marginal Designation**																		18
19																			19
20	Allocator - Total Other Distribution O&M Maintenance	100%	90%	2%	0%	0%	93%	0%	7%	100%	0%	0%	0%	0%	0%	0%	0%	100%	20
21	Allocation (M$)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	21
22																			22
23	Allocator - Customers Wtd by Services costs	100%	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%	23
24	Allocation (M$)	$1,237	$1,168	$23	$0	$1	$1,192	$0	$44	$1,236	$0	$0	$0	$0	$0	$0	$1	$1,237	24
25	**888 - Maint. Of Compressor Station Eq = 100% Demand-Related**																		25
26	**889 - Maint. of Meas. & Reg Station Eq = 100% Demand-Related**																		26
27																			27
28	Allocator - Customers Wtd by Services costs	100%	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%	28
29	Allocation (M$)	$2,998	$2,832	$55	$1	$1	$2,889	$0	$107	$2,996	$1	$0	$1	$0	$0	$1	$2	$2,998	29
30																			30
31	Allocator - Customers Wtd by Meters & Regs costs	100%	83%	3%	0%	0%	86%	0%	14%	100%	0%	0%	0%	0%	0%	0%	0%	100%	31
32	Allocation (M$)	$2,258	$1,865	$66	$3	$6	$1,940	$2	$306	$2,248	$4	$1	$5	$3	$1	$5	$10	$2,258	32
33	**894 - Maint. of Other Eq = Non-Marginal Designation**																		33
34	**Total 870 - 894 O&M Allocation (M$)**	**$38,379**	**$33,728**	**$825**	**$23**	**$46**	**$34,621**	**$12**	**$2,942**	**$24,165**	**$25**	**$5**	**$29**	**$20**	**$8**	**$28**	**$57**	**$37,633**	34
35	**Allocation %**	**100%**	**88%**	**2%**	**0%**	**0%**	**90%**	**0%**	**8%**	**63%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**98%**	35

Notes:

1. Col. (B) from Customer-Related expense section of Workpapers Table "LF-3". (tab Loader Input)
2. 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 MPD	GTNC HPD	GTNC Total	EG < 3 MM	EG > 3 MM	EG Total	Total Noncore	System 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	$3,169,100	2
3	Alloc %	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%	3
4																		4
5	**878, 893 - Meters & House Regulators O&M Expense**																	5
6	Allocator - Customers Wtd by Meters & Regs costs (M$)	$287,790	$10,240	$431	$980	$299,441	$258	$47,204	$346,904	$679	$125	$804	$533	$231	$764	$1,568	$348,472	6
7	Alloc %	83%	3%	0%	0%	86%	0%	14%	100%	0%	0%	0%	0%	0%	0%	0%	100%	7
8																		8
9	**879 - Customer Installations (M$)**																	9
10	Allocator - Customer Service	$9,991	$209	$4	$7	$10,211	$2	$789	$11,003	$0	$0	$0	$0	$0	$0	$0	$11,615	10
11	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%	95%	11

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 MPD	GTNC HPD	GTNC Total	EG < 3 MM	EG > 3 MM	EG Total	IPP	Total Noncore	System Total	
	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	1
2	CUSTOMER CONTACT Total	$9,845	$9,269	$0	$576	$9,845	$0	$0	$0	$0	$0	$0	$0	$0	$9,845	2
3	METER READING Total	$120,838	$117,160	$6	$3,652	$120,818	$7	$2	$9	$10	$1	$11	$0	$20	$120,838	3
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	4
5	CREDIT & COLLECTIONS Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	5
6	BUSINESS ANALYSIS Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	6
7	CUSTOMER RESEARCH & COMMUNICATION Total	$157,128	$152,347	$8	$4,749	$157,104	$8	$2	$10	$13	$2	$14	$0	$24	$157,128	7
8	CUSTOMER SERVICE TECHNOLOGY & SUPPORT Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	8
9	C&I CUSTOMER SERVICE Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	9
10	CONSUMER PROGRAMS & SERVICES Total	$192,630	$186,767	$9	$5,822	$192,599	$10	$3	$14	$15	$2	$18	$0	$31	$192,630	10
11	FEDERAL ACCOUNTS MANAGEMENT Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	11
12	CUSTOMER SERVICES SUPPORT STAFF Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	12
13	COMMUNITY OUTREACH & INFO SERVICES Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	13
14	OTHER Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	14
15	SVP COST CENTERS Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	15
16																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**	17
18	**Allocation %**	**100%**	**95%**	**0%**	**3%**	**98%**	**1%**	**0%**	**1%**	**1%**	**0%**	**1%**	**0%**	**2%**	**100%**	18

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 LRMC 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	GTNC			EG			Total	System	
				G-R	G-M	G-S	G-T	Total	NGV	GN-3	Core	MPD	HPD	Total	< 3 MM	> 3 MM	Total	Noncore	Total	
	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	$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	$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																		28
29	> 4,250,000	Turbine																		29
30																				30
31	**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**	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 Core	GTNC			EG			Total Noncore	System Total	
				G-R	G-M	G-S	G-T	Total	NGV	GN-3		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									(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	$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	$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	$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	$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	$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	$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	$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	$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	$68	$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	$90	$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	$3	$6	14
15	941 - 1,050	8C	$5	$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	$5	$0	$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	$0	$7	$7	$7	$7	18
19	4,001 - 6,600	5M	$7	$0	$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	$65	20
21	9,201 - 14,500	11M	$8	$17	$228	$67	$261	$573	$0	$2,507	$3,080	$62	$8	$70	$28	$0	$28	$98	$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	$1,985	22
23	21,401 - 24,000	11M-HP	$16	$0	$51	$17	$0	$68	$39	$207	$314	$71	$0	$71	$0	$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	$1,357	24
25	46,001 - 79,000	23M-HP	$29	$0	$0	$0	$0	$0	$23	$305	$329	$97	$29	$126	$102	$131	$234	$359	$688	25
26	79,001 - 377,000	8" Turbine	$53	$0	$0	$0	$0	$0	$0	$123	$123	$117	$53	$170	$0	$0	$0	$170	$294	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																				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	*Medium Pressure*						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	*High Pressure*						13
14	0 - 940	$1,560.80	132.96%	$965.32	124.49%	129.72%	14
15	941 - 1,050	$3,326.33	132.96%	$1,521.50	124.49%	130.30%	15
16	1,051 - 1,500	$1,950.71	132.96%	$965.32	124.49%	130.16%	16
17	1,501 - 2,700	$3,498.37	132.96%	$1,521.50	124.49%	130.39%	17
18	2,701 - 4,000	$3,370.57	132.96%	$1,521.50	124.49%	130.33%	18
19	4,001 - 6,600	$4,823.01	132.96%	$1,736.02	124.49%	130.72%	19
20	6,601 - 9,200	$5,428.28	132.96%	$1,736.02	124.49%	130.91%	20
21	9,201 - 14,500	$5,971.25	132.96%	$2,040.68	124.49%	130.80%	21
22	14,501 - 21,400	$6,100.56	132.96%	$2,040.68	124.49%	130.84%	22
23	21,401 - 24,000	$11,792.33	132.96%	$4,360.50	124.49%	130.67%	23
24	24,001 - 46,000	$12,722.16	132.96%	$4,406.99	124.49%	130.78%	24
25	46,001 - 79,000	$21,019.90	132.96%	$8,145.67	124.49%	130.60%	25
26	79,001 - 377,000	$41,020.86	132.96%	$12,055.79	124.49%	131.04%	26
27	377,001 - 600,000					131.04%	27
28	600,001 - 4,250,000					131.04%	28
29	> 4,250,000					131.04%	29

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

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

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

		Meter & Regulator				Pipe & Installation						Forecast
	Max Meter Flow Range	Meter Type	M&R Cost	PVRR Factor	NCO Hookup Investment	Service Type	Service Cost	Residential Cost Line X	PVRR Factor	NCO Hookup Investment	NCO Residential Cost Line X	New Hookups
	A	B	C	D	E	F	G		H	I		J
	Cfh		(Dollars)	(Percent)	(Dollars)		(Dollars)		(Percent)	(Dollars)		
1	*Medium Pressure*											
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	*High Pressure*											
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%			-
29	> 4,250,000	Turbine	$0	131.04%	$0	Steel-24"	$0	$0	125.07%			-

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

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

WEIGHTED MSA BOOK LIFE
2024 TCAP

	Max Meter Flow Range	Meter, Regulator, & Fitting Costs	Meter & Regulator Book Life	Installation Costs	Installation Costs Book Life	Weighted Average PVRR Factor	
	A	B	C	D	E	F	
	Cfh	(Dollars)	(Years)	(Dollars)	(Years)	(Percent)	
1	*Medium Pressure*						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	*High Pressure*						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-nco.4
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

NCO ANNUAL SERVICE, REGULATOR & METER (SRM) REPLACEMENT COST
2024 TCAP

		Meter & Regulator Replacement					Replacement Pipe & Installation						
	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	Number of Existing Customers	Total SRM Annual Cost Replacement	
	A	B	C	D	E	F	G	H	I	J	K	L	M	
	Cfh		(Dollars)	(Percent)	(Dollars)	(Percent)		(Dollars)	(Percent)	(Dollars)	(Percent)		(Dollars)	
1	*Medium Pressure*													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														12
13	*High Pressure*													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%		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:

1. Col. (E) = Col. (C) x Col. (D).
2. Col. (J) = Col. (H) x Col. (I).
3. 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)]
4. 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)]
5. 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 2023	Year-End 2024	2024 Hookups	Year-End 2024	Year-End 2025	2025 Hookups	Year-End 2025	Year-End 2026	2026 Hookups	Year-End 2026	Year-End 2027	2027 Hookups	Average Annual New Hookups	
	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	1
2	NGV	37	37	-	37	37	-	37	38	1	38	38	-	0	2
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	3
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	8

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

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 MPD	GTNC HPD	GTNC Total	EG < 3 MM	EG > 3 MM	Total	Total Noncore
	A	B	C		D		E	F	G	H	I	J	K	L	M	O
	Cfh		(Dollars)													
1	*Medium Pressure*															
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	*High Pressure*															
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	Res	NGV	GN-3	Total Core	GTNC MPD	GTNC HPD	GTNC Total	EG < 3 MM	EG < 3 MM	EG > 3 MM	EG Total	Total Noncore	System Total	
	A	B	C		D		D	E	F	G	H	I	J	K	L	M	N	O	P	
	Cfh		(Dollars)																	
1	*Medium Pressure*																			1
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	2
3	276 - 425	425	$246	$238	$5,176,862	$278,679	$5,455,541	$0	$591,951	$6,047,492	$0	$0	$0	$0	$0	$0	$0	$0	$6,047,492	3
	426-630	630	$300	$293	$3,420,625	$196,062	$3,616,687	$0	$732,714	$4,349,401	$0	$0	$0	$0	$0	$0	$0	$0	$4,349,401	
4	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	4
5	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	5
6	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	6
7	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	7
8	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	8
9	3,001 - 5,000	5M	$689	$675	$12,069	$102,978	$115,047	$1,666	$606,174	$722,887	$761	$0	$761	$8,059	$8,059	$0	$8,059	$761	$723,648	9
10	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	#
11																				#
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	$0	$770	$0	$770	$0	$0	$0	$0	$770	$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	$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	$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																		#
28	> 4,250,000	Turbine																		#
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 Fcst, 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%

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 (mcfd)	M&S Loader $/mcfd
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 (mcfd)	Direct O&M $/mcfd
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 Reside

	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 LRMC 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 % or 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 - LRMC Customer Cost

0

			Res						Total
		G-R	G-M	G-S	G-T	Total Res	NGV	GN-3	Core
	A	B	C	D	E	F	G	H	I
1									
2	**Annualized SRM Cost $/customer/yr 2024$s**	**$145.93**	**$153.98**	**$175.98**	**$200.47**	**$146.10**	**$1,203.07**	**$274.73**	**$150.31**
3									
4	**O&M $/customer/yr**								
5	FERC 870 - 894: Distribution O&M (M$)	$33,604	$852	$26	$58	$34,540	$13	$3,016	$24,158
6	FERC 901 - 910: Customer O&M (M$)	$819	$16	$0	$0	$836	$0	$26	$862
7	Total Cust-Rel O&M (M$)	$34,423	$867	$26	$58	$35,375	$13	$3,042	$25,020
8	2021 Number of Customers	847,801	16,309	219	176	864,505	45	26,214	890,764
9	Cust-Rel O&M per Customer (2021$'s)	$41	$53	$120	$332	$41	$291	$116	$28
10	escalator 2021's to 2024$'s	1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063
11	**O&M $/customer/yr 2020$s**	**$43.17**	**$56.54**	**$127.74**	**$352.62**	**$43.50**	**$309.06**	**$123.37**	**$29.86**
12									
13	**O&M Loaders:**								
14	Materials & Supplies Loader:								
15	allocator = total Customer Related O&M as % of total	89.4%	2.3%	0.1%	0.2%	91.9%	0.0%	7.9%	65.0%
16	Allocated Materials & Supplies Loader ($'s) $419,449	$374,920	$9,447	$287	$636	$385,289	$142	$33,131	$272,508
17	2021 Number of Customers	847,801	16,309	219	176	864,505	45	26,214	890,764
18	M&S Loader per Customer (2016 $'s)	$0.44	$0.58	$1.31	$3.61	$0.45	$3.17	$1.26	$0.31
19	escalator 2021$'s to 2024$'s	1.063	1.063	1.063	1.063	1.063	1.063	1.063	1.063
20	M&S Loader $/customer/yr 2024$s	$0.47	$0.62	$1.39	$3.84	$0.47	$3.37	$1.34	$0.33
21									
22	Administrative & General as % of O&M	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%	27.94%
23	Administrative & General $/customer/yr 2024$'s	$12.06	$15.80	$35.69	$98.52	$12.15	$86.35	$34.47	$8.34
24									
25	General Plant as % of O&M	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%	24.95%
26	General Plant $/customer/yr 2024$'s	$10.77	$14.11	$31.87	$87.96	$10.85	$77.10	$30.78	$7.45
27	**TOTAL O&M LOADERS $/customer/yr**	**$23.30**	**$30.52**	**$68.94**	**$190.32**	**$23.48**	**$166.81**	**$66.59**	**$16.12**
28									
29	**LRMC Rental Customer Cost $/customer/year**	**$212.39**	**$241.04**	**$372.66**	**$743.41**	**$213.08**	**$1,678.94**	**$464.68**	**$196.29**
30						$17.76			
31	**NCO Method:**								
32	LRMC Rental Customer Cost $/customer/year					$213.08	$1,678.94	$464.68	$196.29
33	less annualized SRM rental					($146.10)	($1,203.07)	($274.73)	($150.31)
34	plus annualized SRM NCO					$24.54	$50.37	$24.89	$24.51
35	**NCO Customer Cost $/customer/year**					**$91.52**	**$526.24**	**$214.85**	**$70.49**
36						**$7.63**			
37	**NCO with Recplacement Cost Adder Method:**								
38	LRMC Rental Customer Cost $/customer/year					$213.08	$1,678.94	$464.68	$196.29
39	less annualized SRM rental					($146.10)	($1,203.07)	($274.73)	($150.31)
40	plus annualized SRM					$221.18	$669.99	$282.38	$223.18
41	**NCO w/ Replacement Customer Cost $/cstmr/yr**					**$288.16**	**$1,145.86**	**$472.34**	**$269.16**
						$24.01			

GTNC			EG			Total	System
MPD	HPD	Total	< 3 MM	> 3 MM	Total	Noncore	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	*Medium Pressure*					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	*High Pressure*					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	*Medium Pressure*						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	*High Pressure*						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

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

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

Data Sources: MSA Cost, MSA RECC

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

TABLE LRMCC-4
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

MSA ASSIGNMENT FACTORS BY CUSTOMER CLASS
2024 TCAP

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

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

DEMAND DETERMINANT SUMMARY
2024 TCAP

	Billing Determinants	Res								GTNC			EG			Power		
		G-R	G-M	G-S	G-T	Total	NGV	GN-3	Core	MPD	HPD	Total	< 3 MM	> 3 MM	Total	Plants	Noncore	System
	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 C&I	EG Tier 1	EG Tier 2	Total EG	Total Non 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	23,209	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							Total Core	GTNC			EG			Total Noncore	System Total	
			G-R	G-M	G-S	G-T	Total	NGV	GN-3		MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B					C	D	E	F	G	H	I	J	K	L	N	O	
	Cfh																		
1	*Medium Pressure*																		1
2	0-275	250	94.81%	79.29%	38.81%	2.84%	94.48%	24.44%	46.88%	93.08%	0.00%	0.00%	0.00%	1.41%	0.00%	1.23%	0.72%	93.06%	2
3	276 - 425	425	2.44%	6.42%	13.24%	1.14%	2.52%	0.00%	7.90%	2.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.67%	3
4	426-630	630	1.31%	3.73%	2.74%	3.98%	1.36%	0.00%	8.01%	1.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.55%	4
5	631 - 800	8C	0.91%	3.34%	8.22%	2.27%	0.96%	2.22%	8.15%	1.17%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.17%	5
6	801 - 1,100	11C	0.37%	2.86%	13.24%	2.27%	0.42%	4.44%	7.20%	0.62%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.62%	6
7	1,101 - 1,500	15C	0.12%	1.26%	2.28%	2.27%	0.14%	0.00%	4.78%	0.28%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.28%	7
8	1,501 - 2,000	2M	0.04%	0.54%	2.74%	1.14%	0.05%	0.00%	4.79%	0.19%	0.00%	0.00%	0.00%	47.89%	0.00%	41.98%	24.46%	0.19%	8
9	2,001 - 3,000	3M	0.01%	1.55%	7.76%	17.05%	0.05%	4.44%	6.29%	0.23%	0.00%	0.00%	0.00%	11.27%	0.00%	9.88%	5.76%	0.23%	9
10	3,001 - 5,000	5M	0.00%	0.51%	3.20%	29.55%	0.02%	6.67%	2.88%	0.10%	2.08%	0.00%	1.72%	14.08%	0.00%	12.35%	7.91%	0.10%	10
11	5,001 - 7,000	7M	0.00%	0.17%	2.28%	12.50%	0.01%	11.11%	1.24%	0.04%	14.58%	0.00%	12.07%	9.86%	0.00%	8.64%	10.07%	0.05%	11
12																			12
13	*High Pressure*																		13
14	0 - 940	400	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.41%	0.00%	1.23%	0.72%	0.00%	14
15	941 - 1,050	8C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15
16	1,051 - 1,500	630	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16
17	1,501 - 2,700	2M	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	17
18	2,701 - 4,000	3M	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	1.23%	0.72%	0.00%	18
19	4,001 - 6,600	5M	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.08%	0.00%	1.72%	0.00%	0.00%	0.00%	0.72%	0.00%	19
20	6,601 - 9,200	7M	0.00%	0.00%	0.00%	0.00%	0.00%	2.22%	0.00%	0.00%	2.08%	0.00%	1.72%	0.00%	40.00%	4.94%	3.60%	0.00%	20
21	9,201 - 14,500	11M	0.00%	0.17%	3.65%	17.61%	0.01%	0.00%	1.03%	0.04%	14.58%	20.00%	15.52%	4.23%	0.00%	3.70%	8.63%	0.04%	21
22	14,501 - 21,400	16M	0.00%	0.15%	1.37%	7.39%	0.01%	24.44%	0.56%	0.02%	31.25%	0.00%	25.86%	1.41%	0.00%	1.23%	11.51%	0.02%	22
23	21,401 - 24,000	11M-HP	0.00%	0.02%	0.46%	0.00%	0.00%	6.67%	0.04%	0.00%	8.33%	0.00%	6.90%	0.00%	10.00%	1.23%	3.60%	0.00%	23
24	24,001 - 46,000	16M-HP	0.00%	0.00%	0.00%	0.00%	0.00%	11.11%	0.20%	0.01%	14.58%	40.00%	18.97%	4.23%	10.00%	4.94%	10.79%	0.01%	24
25	46,001 - 79,000	23M-HP	0.00%	0.00%	0.00%	0.00%	0.00%	2.22%	0.03%	0.00%	6.25%	20.00%	8.62%	4.23%	30.00%	7.41%	7.91%	0.00%	25
26	79,001 - 377,000	8" Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	4.17%	20.00%	6.90%	0.00%	0.00%	0.00%	2.88%	0.00%	26
27	377,001 - 600,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	27
28	600,001 - 4,250,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	28
29	> 4,250,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	29
30																			30
31	Total Customers		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	31

Notes:

1. Factors derived from meter capacity analysis results in Table "LRMCC-4" (tab MSAllocv1)
   Data Sources: Tabs: MSA Cost, MSAlloc 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					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	
	Cfh																			
1	*Medium Pressure*																			1
2	0-275	250	845,479	13,603	89	5	859,177	9	14,294	873,479	-	-	-	1	-	1	-	1	873,480	2
3	276 - 425	425	21,749	1,101	31	2	22,883	-	2,409	25,291	-	-	-	-	-	-	-	-	25,291	3
4	426-630	630	11,678	640	6	7	12,331	-	2,441	14,772	-	-	-	-	-	-	-	-	14,772	4
5	631 - 800	8C	8,106	573	19	4	8,702	1	2,485	11,188	-	-	-	-	-	-	-	-	11,188	5
6	801 - 1,100	11C	3,289	491	31	4	3,815	2	2,195	6,011	-	-	-	-	-	-	-	-	6,011	6
7	1,101 - 1,500	15C	1,041	217	5	4	1,268	-	1,457	2,725	-	-	-	-	-	-	-	-	2,725	7
8	1,501 - 2,000	2M	313	93	6	2	414	-	1,460	1,874	-	-	-	40	-	40	-	40	1,914	8
9	2,001 - 3,000	3M	100	265	18	32	414	2	1,919	2,335	-	-	-	9	-	9	-	9	2,344	9
10	3,001 - 5,000	5M	18	87	7	55	167	2	879	1,049	1	-	1	12	-	12	-	13	1,062	10
11	5,001 - 7,000	7M	8	28	5	23	65	4	377	446	8	-	8	8	-	8	-	16	462	11
12																				12
13	*High Pressure*																			13
14	0 - 940	400	-	-	-	-	-	-	1	1	-	-	-	1	-	1	-	1	2	14
15	941 - 1,050	8C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
16	1,051 - 1,500	630	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
17	1,501 - 2,700	2M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
18	2,701 - 4,000	3M	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	2	2	18
19	4,001 - 6,600	5M	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	1	1	19
20	6,601 - 9,200	7M	-	-	-	-	-	1	1	2	1	-	1	-	6	6	-	7	9	20
21	9,201 - 14,500	11M	2	28	8	33	72	-	313	384	8	1	9	4	-	4	-	12	397	21
22	14,501 - 21,400	16M	4	25	3	14	46	9	171	226	17	-	17	1	-	1	-	18	244	22
23	21,401 - 24,000	11M-HP	-	3	1	-	4	2	13	19	4	-	4	-	2	2	-	6	25	23
24	24,001 - 46,000	16M-HP	-	-	-	-	-	4	60	65	8	2	10	4	2	5	-	15	79	24
25	46,001 - 79,000	23M-HP	-	-	-	-	-	1	10	11	3	1	4	4	5	8	-	12	24	25
26	79,001 - 377,000	8" Turbine	-	-	-	-	-	-	2	2	2	1	3	-	-	-	-	3	6	26
27	377,001 - 600,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27
28	600,001 - 4,250,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28
29	> 4,250,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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	31

Notes:

1. Row (31) = forecast annual average number of customers during proposed 2020 - 2022 TCAP period

2. 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	Meter	Res							Total	GTNC			EG			Power	Total	System	
	Flow Range	Type	G-R	G-M	G-S	G-T	Total	NGV	GN-3	Core	MPD	HPD	Total	< 3 MM	> 3 MM	Total	Plant	Noncore	Total	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
	Cfh											(Dollars)								
1	*Medium Pressure*																			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	*High Pressure*																			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																		28
29	> 4,250,000	Turbine																		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	Res G-R	Res G-M	Res G-S	Res G-T	Res Total	NGV	GN-3	Total Core	GTNC MPD	GTNC HPD	GTNC Total	EG < 3 MM	EG > 3 MM	EG Total	Total Noncore	System Total	
	A	B					C	D	E	F	G	H	I	J	K	L	N	O	
1																			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%	2
3	Allocation (M$)	$3,782	$3,294	$84	$3	$6	$3,386	$1	$301	$2,097	$3	$0	$3	$2	$1	$3	$6	$3,694	3
4	**871 - Distribution Load Dispatching = Non-Marginal Designation**																		4
5																			5
6	Allocator - Customers Wtd by Services costs	100%	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%	6
7	Allocation (M$)	$5,421	$5,082	$102	$2	$4	$5,190	$1	$223	$5,415	$3	$0	$3	$2	$1	$2	$6	$5,421	7
8	**875 - Meas & Reg Station Exp = 100% Demand-Related**																		8
9																			9
10	Allocator - Customers Wtd by Meters & Regs costs	100%	83%	3%	0%	0%	86%	0%	14%	100%	0%	0%	0%	0%	0%	0%	0%	100%	10
11	Allocation (M$)	$5,510	$4,550	$162	$7	$15	$4,734	$4	$746	$5,485	$11	$2	$13	$8	$4	$12	$25	$5,510	11
12																			12
13	Allocator - Customer Service Expense	0%	86%	2%	0%	0%	88%	0%	7%	0%	0%	0%	0%	0%	0%	0%	0%	95%	13
14	Allocation (M$)	$8,727	$7,488	$171	$4	$10	$7,673	$1	$593	$0	$0	$0	$0	$0	$0	$1	$0	$8,268	14
15																			15
16	Allocator - Total of other Distribution O&M Operating	56%	87%	2%	0%	0%	90%	0%	8%	55%	0%	0%	0%	0%	0%	0%	0%	98%	16
17	Allocation (M$)	$8,447	$7,356	$187	$6	$13	$7,562	$3	$672	$4,684	$6	$1	$7	$4	$2	$6	$13	$8,249	17
18	**881 - Rents = Non-Marginal Designation**																		18
19																			19
20	Allocator - Total Other Distribution O&M Maintenance	100%	90%	2%	0%	0%	92%	0%	7%	100%	0%	0%	0%	0%	0%	0%	0%	100%	20
21	Allocation (M$)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	21
22																			22
23	Allocator - Customers Wtd by Services costs	100%	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%	23
24	Allocation (M$)	$1,237	$1,159	$23	$0	$1	$1,184	$0	$51	$1,235	$1	$0	$1	$0	$0	$1	$1	$1,237	24
25	**888 - Maint. Of Compressor Station Eq = 100% Demand-Related**																		25
26	**889 - Maint. of Meas. & Reg Station Eq = 100% Demand-Related**																		26
27																			27
28	Allocator - Customers Wtd by Services costs	100%	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%	28
29	Allocation (M$)	$2,998	$2,810	$57	$1	$2	$2,871	$1	$124	$2,995	$2	$0	$2	$1	$0	$1	$3	$2,998	29
30																			30
31	Allocator - Customers Wtd by Meters & Regs costs	100%	83%	3%	0%	0%	86%	0%	14%	100%	0%	0%	0%	0%	0%	0%	0%	100%	31
32	Allocation (M$)	$2,258	$1,865	$66	$3	$6	$1,940	$2	$306	$2,248	$4	$1	$5	$3	$1	$5	$10	$2,258	32
33	**894 - Maint. of Other Eq = Non-Marginal Designation**																		33
34	**Total 870 - 894 O&M Allocation (M$)**	**$38,379**	**$33,604**	**$852**	**$26**	**$58**	**$34,540**	**$13**	**$3,016**	**$24,158**	**$29**	**$5**	**$33**	**$22**	**$10**	**$31**	**$64**	**$37,633**	34
35	**Allocation %**	**100%**	**88%**	**2%**	**0%**	**0%**	**90%**	**0%**	**8%**	**63%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**98%**	35

Notes:

1. Col. (B) from Customer-Related expense section of Workpapers Table "LF-3". (tab Loader Input)
2. 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 MPD	GTNC HPD	GTNC Total	EG < 3 MM	EG > 3 MM	EG Total	Total Noncore	System 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	$1,496,450	2
3	Alloc %	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%	3
4																		4
5	**878, 893 - Meters & House Regulators O&M Expense**																	5
6	Allocator - Customers Wtd by Meters & Regs costs (M$)	$287,790	$10,240	$431	$980	$299,441	$258	$47,204	$346,904	$679	$125	$804	$533	$231	$764	$1,568	$348,472	6
7	Alloc %	83%	3%	0%	0%	86%	0%	14%	100%	0%	0%	0%	0%	0%	0%	0%	100%	7
8																		8
9	**879 - Customer Installations (M$)**																	9
10	Allocator - Customer Service	$9,966	$227	$6	$13	$10,211	$2	$789	$11,003	$0	$0	$0	$0	$0	$0	$0	$11,615	10
11	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%	95%	11

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 MPD	GTNC HPD	GTNC Total	EG < 3 MM	EG > 3 MM	EG Total	IPP	Total Noncore	System Total	
	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	1
2	CUSTOMER CONTACT Total	$9,845	$9,269	$0	$576	$9,845	$0	$0	$0	$0	$0	$0	$0	$0	$9,845	2
3	METER READING Total	$120,838	$117,160	$6	$3,652	$120,818	$7	$2	$9	$10	$1	$11	$0	$20	$120,838	3
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	4
5	CREDIT & COLLECTIONS Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	5
6	BUSINESS ANALYSIS Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	6
7	CUSTOMER RESEARCH & COMMUNICATION Total	$157,128	$152,347	$8	$4,749	$157,104	$8	$2	$10	$13	$2	$14	$0	$24	$157,128	7
8	CUSTOMER SERVICE TECHNOLOGY & SUPPORT Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	8
9	C&I CUSTOMER SERVICE Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	9
10	CONSUMER PROGRAMS & SERVICES Total	$192,630	$186,767	$9	$5,822	$192,599	$10	$3	$14	$15	$2	$18	$0	$31	$192,630	10
11	FEDERAL ACCOUNTS MANAGEMENT Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	11
12	CUSTOMER SERVICES SUPPORT STAFF Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	12
13	COMMUNITY OUTREACH & INFO SERVICES Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	13
14	OTHER Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	14
15	SVP COST CENTERS Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	15
16																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**	17
18	**Allocation %**	**100%**	**95%**	**0%**	**3%**	**98%**	**1%**	**0%**	**1%**	**1%**	**0%**	**1%**	**0%**	**2%**	**100%**	18

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 LRMC 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 Core	GTNC			EG			Total Noncore	System Total	
				G-R	G-M	G-S	G-T	Total	NGV	GN-3		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									(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																		28
29	> 4,250,000	Turbine																		29
30																				30
31	**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**	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 Core	GTNC			EG			Total Noncore	System Total	
				G-R	G-M	G-S	G-T	Total	NGV	GN-3		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									(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	$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	$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	$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	$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	$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	$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	$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	$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	$68	$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	$90	$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	$3	$6	14
15	941 - 1,050	8C	$5	$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	$5	$0	$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	$0	$7	$7	$7	$7	18
19	4,001 - 6,600	5M	$7	$0	$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	$65	20
21	9,201 - 14,500	11M	$8	$17	$228	$67	$261	$573	$0	$2,507	$3,080	$62	$8	$70	$28	$0	$28	$98	$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	$1,985	22
23	21,401 - 24,000	11M-HP	$16	$0	$51	$17	$0	$68	$39	$207	$314	$71	$0	$71	$0	$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	$1,357	24
25	46,001 - 79,000	23M-HP	$29	$0	$0	$0	$0	$0	$23	$305	$329	$97	$29	$126	$102	$131	$234	$359	$688	25
26	79,001 - 377,000	8" Turbine	$53	$0	$0	$0	$0	$0	$0	$123	$123	$117	$53	$170	$0	$0	$0	$170	$294	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																				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	*Medium Pressure*						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	*High Pressure*						13
14	0 - 940	$1,560.80	132.96%	$965.32	124.49%	129.72%	14
15	941 - 1,050	$3,326.33	132.96%	$1,521.50	124.49%	130.30%	15
16	1,051 - 1,500	$1,950.71	132.96%	$965.32	124.49%	130.16%	16
17	1,501 - 2,700	$3,498.37	132.96%	$1,521.50	124.49%	130.39%	17
18	2,701 - 4,000	$3,370.57	132.96%	$1,521.50	124.49%	130.33%	18
19	4,001 - 6,600	$4,823.01	132.96%	$1,736.02	124.49%	130.72%	19
20	6,601 - 9,200	$5,428.28	132.96%	$1,736.02	124.49%	130.91%	20
21	9,201 - 14,500	$5,971.25	132.96%	$2,040.68	124.49%	130.80%	21
22	14,501 - 21,400	$6,100.56	132.96%	$2,040.68	124.49%	130.84%	22
23	21,401 - 24,000	$11,792.33	132.96%	$4,360.50	124.49%	130.67%	23
24	24,001 - 46,000	$12,722.16	132.96%	$4,406.99	124.49%	130.78%	24
25	46,001 - 79,000	$21,019.90	132.96%	$8,145.67	124.49%	130.60%	25
26	79,001 - 377,000	$41,020.86	132.96%	$12,055.79	124.49%	131.04%	26
27	377,001 - 600,000					131.04%	27
28	600,001 - 4,250,000					131.04%	28
29	> 4,250,000					131.04%	29

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

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

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

		Meter & Regulator				Pipe & Installation						Forecast
	Max Meter Flow Range	Meter Type	M&R Cost	PVRR Factor	NCO Hookup Investment	Service Type	Service Cost	Residential Cost Line X	PVRR Factor	NCO Hookup Investment	NCO Residential Cost Line X	New Hookups
	A	B	C	D	E	F	G		H	I		J
	Cfh		(Dollars)	(Percent)	(Dollars)		(Dollars)		(Percent)	(Dollars)		
1	*Medium Pressure*											
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	*High Pressure*											
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%			-
29	> 4,250,000	Turbine	$0	131.04%	$0	Steel-24"	$0	$0	125.07%			-

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

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

WEIGHTED MSA BOOK LIFE
2024 TCAP

	Max Meter Flow Range	Meter, Regulator, & Fitting Costs	Meter & Regulator Book Life	Installation Costs	Installation Costs Book Life	Weighted Average PVRR Factor	
	A	B	C	D	E	F	
	Cfh	(Dollars)	(Years)	(Dollars)	(Years)	(Percent)	
1	*Medium Pressure*						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	*High Pressure*						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-nco.4
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

NCO ANNUAL SERVICE, REGULATOR & METER (SRM) REPLACEMENT COST
2024 TCAP

		Meter & Regulator Replacement					Replacement Pipe & Installation						
	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	Number of Existing Customers	Total SRM Annual Cost Replacement	
	A	B	C	D	E	F	G	H	I	J	K	L	M	
	Cfh		(Dollars)	(Percent)	(Dollars)	(Percent)		(Dollars)	(Percent)	(Dollars)	(Percent)		(Dollars)	
1	*Medium Pressure*													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														12
13	*High Pressure*													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%		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:

1. Col. (E) = Col. (C) x Col. (D).
2. Col. (J) = Col. (H) x Col. (I).
3. 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)]
4. 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)]
5. 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 2023	Year-End 2024	2024 Hookups	Year-End 2024	Year-End 2025	2025 Hookups	Year-End 2025	Year-End 2026	2026 Hookups	Year-End 2026	Year-End 2027	2027 Hookups	Average Annual New Hookups	
	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	1
2	NGV	37	37	-	37	37	-	37	38	1	38	38	-	0	2
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	3
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	8

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

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 MPD	GTNC HPD	GTNC Total	EG < 3 MM	EG > 3 MM	Total	Total Noncore
	A	B	C		D		E	F	G	H	I	J	K	L	M	O
	Cfh		(Dollars)													
1	*Medium Pressure*															
2	0-275	250	$21	$24	$20,303,521	$285,894	$185	$298,332	$20,887,931	$0	$0	$0	$24	$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
	426-630	630	$27	$37	$428,918	$17,350	$0	$64,839	$511,107	$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
5	801 - 1,100	11C	$25	$33	$109,907	$13,276	$41	$55,399	$178,623	$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
7	1,501 - 2,000	2M	$24	$28	$8,709	$2,406	$0	$34,781	$45,896	$0	$0	$0	$947	$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
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	*High Pressure*															
13	0 - 940	400	$4	$5	$0	$0	$0	$4	$4	$0	$0	$0	$4	$0	$0	$0
14	941 - 1,050	8C	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
15	1,051 - 1,500	630	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
16	1,501 - 2,700	2M	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
17	2,701 - 4,000	3M	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
18	4,001 - 6,600	5M	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
19	6,601 - 9,200	7M	$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				$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	Res	NGV	GN-3	Total Core	GTNC MPD	GTNC HPD	GTNC Total	EG < 3 MM	EG < 3 MM	EG > 3 MM	EG Total	Total Noncore	System Total	
	A	B	C		D		D	E	F	G	H	I	J	K	L	M	N	O	P	
	Cfh		(Dollars)																	
1	*Medium Pressure*																			1
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	2
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	3
	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	
4	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	4
5	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	5
6	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	6
7	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	7
8	2,001 - 3,000	3M	$316	$320	$31,946	$99,415	$131,360	$509	$606,575	$738,444	$0	$0	$0	$2,956	$2,956	$0	$2,956	$0	$738,444	8
9	3,001 - 5,000	5M	$689	$675	$12,069	$102,978	$115,047	$1,666	$606,174	$722,887	$761	$0	$761	$8,059	$8,059	$0	$8,059	$761	$723,648	9
10	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	#
11																				#
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	$770	$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	$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	$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																		#
28	> 4,250,000	Turbine																		#
29	Total						$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	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 Fcst, 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)

		Expense-Related O&M				
Customer Class	Annualized Capital Cost	Direct	M&S	A&G	General Plant	Total $/Customer
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 4
DISTRIBUTION-RELATED DIRECT MARGINAL O&M EXPENSES
(2024 $)

Distribution Function	FERC 870-894 $000	Peak-day Load (mcfd)	Direct O&M $/mcfd
Medium-Pressure	$19,699	440,066	$44.76
High-Pressure	$1,172	462,002	$2.54

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 (mcfd)	M&S Loader $/mcfd
Medium-Pressure	$644,432	440,066	$1.46
High-Pressure	$166,452	462,002	$0.36