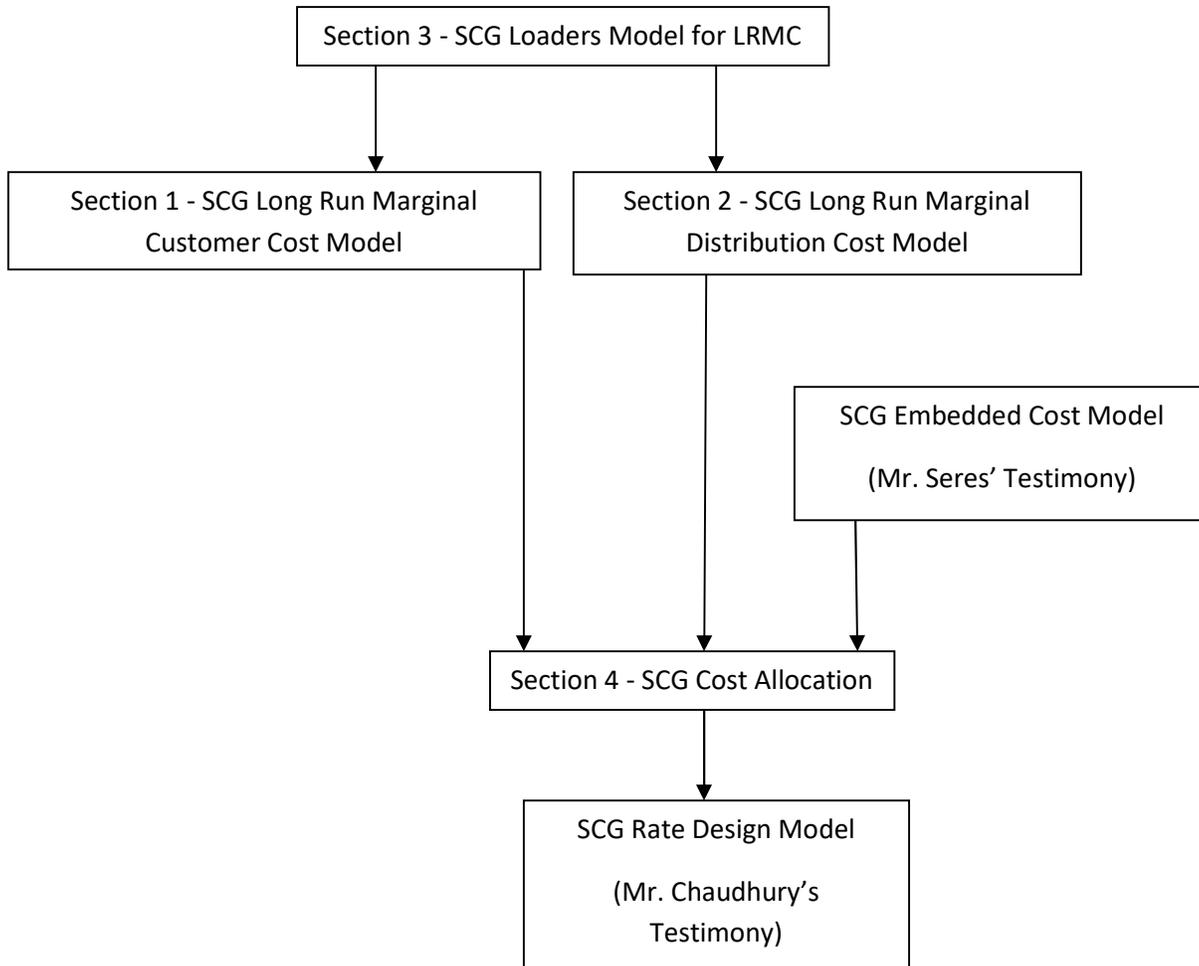


SoCalGas
2024 TCAP
Cost Allocation Flowchart



Workpapers to the Prepared Written Testimony of Marjorie Schmidt-Pines

**SOUTHERN CALIFORNIA GAS COMPANY
2024TCAP**

**Section 1
Long Run Marginal Customer Cost Model**

**Workpapers to the Prepared Written Testimony of
Marjorie Schmidt-Pines**

SCG 2024 TCAP
 LRMC Customer Cost/Rental Method
 RD Format

Corrected		Residential	CCI	G-AC	G-GEN	NGV	Total Core
	<u>Marginal Customer Unit Cost @ various LRMC Allocation Methods</u>						
1	Customer Cust \$/Cust/Year Rental Method	\$288.38	\$1,603.52	\$7,390.92	\$15,379.96	\$55,227.93	
2	Customer Cost \$/Cust/Year NCO Method	\$159.43	\$831.28	\$1,491.30	\$5,566.79	\$49,527.15	
3	Customer Cost \$/Cust/Year NCO Method w/Replacement Cost	\$271.76	\$1,057.23	\$2,646.56	\$9,212.28	\$51,436.07	

1							
2	<u>Input from O&M Loader Model:</u>						
3	Marginal A&G/Payroll Taxes Loading Factor as a % of O&M expenses	87.20%	SCG LRMC O&M Loaders				
4	General Plant Loading Factor as a % of O&M expenses	86.83%	SCG LRMC O&M Loaders				
5	Annualized Distribution Customer Related Costs \$000/yr	\$1,807,161	SCG LRMC O&M Loaders				
6							
7	2021-24 Factor: Capital General Plant	0.9874	SCG LRMC O&M Loaders				
8	2021-24 Factor: O&M	1.0809	SCG LRMC O&M Loaders				

SCG 2024 TCAP
 LRMC Customer Cost/Rental Method
 RD Format

Corrected		NCCI	EG Tier 1	EG Tier 2	EOR	Total Retail NonCore	Long Beach	SDG&E	South West Gas	Vernon
	<u>Marginal Customer Unit Cost @ various LRMC Allocation Methods</u>									
1	Customer Cust \$/Cust/Year Rental Method	\$67,851.57	\$32,230.78	\$207,138.21	\$91,610.84		\$1,174,227.71	\$2,615,750.06	\$789,930.02	\$641,584.88
2	Customer Cost \$/Cust/Year NCO Method	\$25,685.23	\$20,578.04	\$68,605.03	\$34,008.27		\$246,637.98	\$231,542.60	\$305,655.23	\$178,378.16
3	Customer Cost \$/Cust/Year NCO Method w/Replacement Cost	\$33,613.08	\$23,539.61	\$92,284.35	\$42,018.90		\$741,549.32	\$1,503,625.80	\$564,037.87	\$425,520.03

- 1
- 2 **Input from O&M Loader Model:**
- 3 Marginal A&G/Payroll Taxes Loading Factor as a % of O&M expenses
- 4 General Plant Loading Factor as a % of O&M expenses
- 5 Annualized Distribution Customer Related Costs \$000/yr
- 6
- 7 2021-24 Factor: Capital General Plant
- 8 2021-24 Factor: O&M

SCG 2024 TCAP
 LRMC Customer Cost/Rental Method
 RD Format

Corrected		Total Whole sale	Ecogas	UBS	Total Noncore	SYSTEM TOTAL	Sources
	<u>Marginal Customer Unit Cost @ various LRMC Allocation Methods</u>						
1	Customer Cust \$/Cust/Year Rental Method		\$169,574.86	\$0.00			Cust MC
2	Customer Cost \$/Cust/Year NCO Method		\$101,400.99	\$0.00			Cust MC
3	Customer Cost \$/Cust/Year NCO Method w/Replacement Cost		\$137,774.85	\$0.00	\$3,628,587.74		Cust MC

- 1
- 2 **Input from O&M Loader Model:**
- 3 Marginal A&G/Payroll Taxes Loading Factor as a % of O&M expenses
- 4 General Plant Loading Factor as a % of O&M expenses
- 5 Annualized Distribution Customer Related Costs \$000/yr
- 6
- 7 2021-24 Factor: Capital General Plant
- 8 2021-24 Factor: O&M

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	Core Residential										Core Non-Residential						Noncore Retail				
	Single Family (Detached homes)	Multi Family	Master Meter (up to 100,000 therms/year)		Residential Total or Avg.	Non-Residential Commercial/Industrial					Average	Air Conditioning	Natural Gas Vehicle	Gas Engine	G-30 - Noncore C&I			Small EG < 3million	Large EG > 3million		
			Very Small - up to 300 therms/year	Small - 301 to 3,000 therms/year		Medium - 3,001 to 50,000 therms/year	Large - 50,001 to 250,000 therms/year	Very Large - Over 250,000 therms/year	Distribution	Transmission					Total						
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	519	19	538	351	21		
Marginal Investment: 2021 \$/Customer	\$531.64	\$446.14	\$1,715.62	\$23,533.95	\$530.13	\$739.19	\$1,218.74	\$2,427.57	\$8,336.33	\$12,282.84	\$1,378.71	\$5,317.08	\$90,204.04	\$3,377.22	\$139,688.52	\$300,242.92	\$148,592.75	\$103,881.66	\$916,358.01		
Meter & House Reg Service Lines	\$1,156.49	\$1,241.99	\$11,727.95	\$93,892.86	\$1,406.66	\$8,393.24	\$8,646.46	\$12,753.10	\$51,902.21	\$708,154.59	\$11,009.79	\$79,085.45	\$88,095.97	\$205,325.53	\$383,335.44	#####	\$410,998.74	\$190,284.47	\$466,096.97		
Exclusive Use Facilities	\$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	\$0.00	\$0.00	\$320,861.60		
Total	\$1,688.13	\$1,688.13	\$13,443.57	\$117,426.80	\$1,936.79	\$9,132.43	\$9,865.20	\$15,180.67	\$60,238.53	\$720,437.43	\$12,388.50	\$84,402.52	\$178,300.01	\$208,702.74	\$548,487.11	#####	\$587,618.19	\$294,166.14	\$1,703,116.58		
Weighted RECC factors used to annualize SRM capital costs																					
Meter & House Reg Service Lines	8.65%	8.65%	8.56%	8.48%	8.66%	8.61%	8.61%	8.57%	8.55%	8.56%	8.75%	8.54%	8.46%	8.53%	8.45%	8.46%	8.46%	8.45%	8.45%		
Exclusive Use	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	9.04%	9.04%	9.04%	9.04%	9.04%		
Annualized Marginal Investment: \$/Cust.	\$45.97	\$38.60	\$146.93	\$1,996.05	\$45.90	\$63.67	\$104.97	\$207.95	\$712.37	\$1,051.23	\$120.65	\$453.91	\$7,629.65	\$288.02	\$11,806.87	\$25,391.76	\$12,566.07	\$8,781.40	\$77,462.20		
Meter & House Reg Service Lines	\$79.63	\$65.52	\$607.57	\$6,465.33	\$96.86	\$577.95	\$956.38	\$878.16	\$3,573.91	\$48,762.51	\$758.12	\$5,445.71	\$6,066.16	\$14,138.42	\$26,395.93	\$60,333.40	\$28,300.79	\$13,102.72	\$32,094.77		
Exclusive Use Facilities	\$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	\$2,300.95	\$8,860.38	\$2,532.60	\$0.00	\$0.00	\$28,976.29		
Total Annualized Marginal Investment: 2024 \$/Cust.	\$125.61	\$124.12	\$954.50	\$8,461.38	\$142.76	\$641.62	\$700.35	\$1,086.11	\$4,286.28	\$49,813.74	\$878.76	\$5,899.62	\$13,695.81	\$14,426.44	\$40,603.74	\$114,585.53	\$43,399.46	\$21,884.11	\$138,533.17		
O&M: \$/Customer																					
Customer Services O&M Cost 2021's \$/000/yr	\$86,027.90	\$40,203.55	\$2,716.25	\$1.16	\$128,948.87	\$4,326.81	\$4,724.93	\$11,943.44	\$854.96	\$224.45	\$22,074.61	\$0.17	\$83.47	\$96.26	\$0.00	\$0.00	\$269.63	\$74.89	\$4.48		
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	519	19	538	351	21		
Customer Services O&M \$/Customer 2021's	\$22.68	\$22.68	\$22.68	\$22.68	\$22.68	\$48.67	\$73.21	\$254.07	\$411.43	\$717.11	\$108.83	\$19.10	\$340.68	\$134.07	\$0.00	\$0.00	\$58.34	\$213.35	\$213.35		
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809		
Customer Services O&M \$/Customer 2024's	\$24.52	\$24.52	\$24.52	\$24.52	\$24.52	\$52.61	\$79.13	\$274.62	\$444.70	\$775.09	\$117.63	\$20.65	\$368.22	\$144.91	\$581.86	\$581.86	\$581.86	\$230.60	\$230.60		
Customer Accounts O&M 2013's \$/000/yr	\$53,584.51	\$25,041.73	\$1,691.88	\$0.72	\$80,318.84	\$1,111.27	\$687.44	\$5,977.49	\$163.40	\$117.62	\$8,057.21	\$4.32	\$284.92	\$48.52	\$0.00	\$0.00	\$897.83	\$604.04	\$36.14		
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	519	19	538	351	21		
Customer Services O&M \$/Customer 2021's	\$14.13	\$14.13	\$14.13	\$14.13	\$14.13	\$12.50	\$16.65	\$127.16	\$78.63	\$375.77	\$39.72	\$479.68	\$1,162.94	\$67.57	\$0.00	\$0.00	\$1,068.83	\$1,720.92	\$1,720.92		
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809		
Customer Accounts O&M \$/Customer 2024's	\$15.27	\$15.27	\$15.27	\$15.27	\$15.27	\$13.51	\$17.51	\$137.44	\$84.99	\$406.16	\$42.93	\$518.46	\$1,256.97	\$73.04	\$1,803.76	\$1,803.76	\$1,803.76	\$1,860.06	\$1,860.06		
Meter & House Reg O&M Total Cost	\$5,587.22	\$2,191.17	\$569.29	\$3.33	\$8,351.00	\$3.05	\$3.66	\$5.30	\$0.81	\$0.18	\$13.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$62.00	\$513.00	\$61.00		
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	519	19	538	351	21		
Customer Services O&M \$/Customer 2021's	\$1.47	\$1.24	\$4.75	\$65.21	\$1.47	\$0.03	\$0.06	\$0.11	\$0.39	\$0.57	\$0.06	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$115.24	\$1,461.54	\$2,904.76		
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809		
Meter & House Reg O&M \$/Customer 2024's	\$1.59	\$1.34	\$5.14	\$70.49	\$1.59	\$0.04	\$0.06	\$0.12	\$0.42	\$0.62	\$0.07	\$0.00	\$0.00	\$0.00	\$124.56	\$124.56	\$124.56	\$1,579.71	\$3,139.62		
Total Service Line Footage	231,707,635	58,800,895	11,613,724	14,016	302,136,270	12,721,655	6,951,318	6,611,352	562,372	116,057	26,962,754	250	60,700	625,863	104,645	16,542	121,188	46,579	16,273		
Percent of Total Footage	70.23%	17.82%	3.52%	0.00%	91.57%	3.86%	2.11%	2.00%	0.17%	0.04%	8.17%	0.00%	0.02%	0.19%	0.03%	0.01%	0.04%	0.01%	0.00%		
Allocated SL O&M Costs \$/000	\$31,820	\$8,075	\$1,595	\$2	\$41,492	\$1,747	\$955	\$908	\$77	\$16	\$3,703	\$0	\$8	\$86	\$14	\$2	\$17	\$6	\$2		
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809		
Allocated SL O&M Costs 2024's	\$34,395	\$8,728	\$1,724	\$2	\$44,947	\$1,888	\$1,032	\$961	\$83	\$17	\$4,002	\$0	\$9	\$93	\$16	\$2	\$19	\$7	\$2		
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	519	19	538	351	21		
Service Lines O&M \$/Customer 2024's	\$9.07	\$4.92	\$14.40	\$40.79	\$7.89	\$21.24	\$15.99	\$20.88	\$40.17	\$55.04	\$19.73	\$4.12	\$36.78	\$129.39	\$29.93	\$129.23	\$33.44	\$19.70	\$115.02		
Customer Service & Information Cost (CSI) Costs Accounts (FERC Accounts 907 to 910):																					
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	519	19	538	351	21		
Customer Services & Information O&M \$/Customer 2021's	\$3.49	\$3.49	\$3.49	\$3.49	\$3.49	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$77.38	\$0.00	\$12,459.35	\$0.00	\$0.00	\$5,887.41	\$72.96	\$18,175.54			
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809		
Customer Accounts O&M \$/Customer 2024's	\$3.78	\$3.78	\$3.78	\$3.78	\$3.78	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$83.64	\$0.00	\$13,466.72	\$0.00	\$0.00	\$6,363.42	\$78.86	\$19,645.09			
Total Direct O&M \$/customer/yr	\$54.23	\$49.83	\$63.10	\$154.85	\$53.04	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$264.00	\$543.23	\$15,128.69	\$347.34	\$2,540.11	\$2,639.42	\$8,907.04	\$3,768.92	\$24,990.39		
O&M Loaders: \$/Customer																					
Administrative & General as % of O&M	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%		
Administrative & General \$/customer/yr 2024's	\$47.29	\$43.45	\$55.02	\$135.03	\$46.25	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$230.21	\$473.70	\$13,192.38	\$302.88	\$2,215.01	\$2,301.60	\$7,767.04	\$3,286.54	\$21,791.90		
General Plant as % of O&M	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%		
General Plant \$/customer/yr 2024's	\$47.09	\$43.26	\$54.79	\$134.46	\$46.06	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$229.24	\$471.69	\$13,136.45	\$301.60	\$2,205.61	\$2,291.84	\$7,734.11	\$3,272.61	\$21,699.50		
Materials & Supplies Loader:																					
Per Customer Direct+AA&G+GP O&M \$/customer/yr	\$148.60	\$136.54	\$172.91	\$424.33	\$145.35	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$723.45	\$1,488.62	\$41,457.51	\$951.81	\$6,960.73	\$7,232.86	\$24,408.19	\$10,328.08	\$68,481.79		
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	519	19	538	351	21		
Total Direct+AA&G+GP O&M \$/000/yr	\$563,570	\$242,003	\$20,706	\$22	\$826,300	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$146,742	\$13	\$10,157	\$683	\$3,613	\$137	\$13,132	\$3,625	\$1,438		
Percent of Total	56.12%	24.10%	2.06%	0.00%	\$2,29%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	14.61%	0.00%	1.01%	0.07%	0.36%	0.01%	1.31%	0.36%	0.14%		
Allocated M&S \$1,807,161.19	\$1,014,231	\$435,521																			

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	Noncore Wholesale						Total O&M Cost for All	Customers	
	EOR					Ecogas			
	G-40	LB	SDG&E	SWG	Vernon				
2021 Number of Customers	30	1	1	1	1	1	5,889,515	cust 2	
Marginal Investment: 2021 \$/Customer									
Meter & House Reg	\$403,486.95	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		cust 5	
Service Lines	\$274,177.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		cust 5	
Exclusive Use Facilities	\$51,163.67	\$10,265,059.48	\$26,384,543.35	\$5,359,168.35	\$5,126,021.11	\$754,437.82		cust 6	
Total	\$728,828.22	\$10,265,059.48	\$26,384,543.35	\$5,359,168.35	\$5,126,021.11	\$754,437.82			
Weighted RECC factors used to annualize SRM capital costs									
Meter & House Reg	8.45%	0	0	0	0	0		cust 10	
Service Lines	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%		cust 10	
Exclusive Use	9.04%	9.04%	9.04%	9.04%	9.04%	9.04%		cust 10	
Annualized Marginal Investment: \$/Cust.									
Meter & House Reg	\$34,099.74	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
Service Lines	\$18,879.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
Exclusive Use Facilities	\$4,623.34	\$927,589.73	\$2,384,207.47	\$484,274.79	\$463,206.72	\$68,173.86			
Total Annualized Marginal Investment: 2024 \$/Cust.	\$57,602.56	\$927,589.73	\$2,384,207.47	\$484,274.79	\$463,206.72	\$68,173.86			
O&M: \$/Customer									
Customer Services O&M Cost 2021's \$000/year	\$1.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$151,573.87	cust 8	
2021 Number of Customers	30	1	1	1	1	1	5,889,515	cust 2	
Customer Services O&M \$/Customer 2021's	\$50.03	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$25.74		
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	Loader Model	
Customer Services O&M \$/Customer 2024's	\$54.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27.82		
Customer Accounts O&M 2013's \$000/yr	\$50.90	\$6.53	\$5.09	\$10.86	\$3.64	\$2.92	\$90,331.76	cust 8	
2021 Number of Customers	30	1	1	1	1	1	5,889,515	cust 2	
Customer Services O&M \$/Customer 2021's	\$1,696.63	\$6,530.71	\$5,087.00	\$10,861.85	\$3,643.28	\$2,921.42	\$15.34		
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	Loader Model	
Customer Accounts O&M \$/Customer 2024's	\$1,833.81	\$7,058.74	\$5,498.90	\$11,740.07	\$3,937.85	\$3,157.83	\$16.58		
Meter & House Reg O&M Total Cost	\$42.00	\$8.00	\$8.00	\$17.00	\$1.00	\$1.00	\$9,077.00	cust 8	
2021 Number of Customers	30	1	1	1	1	1	5,889,515	cust 2	
Customer Services O&M \$/Customer 2021's	\$1,400.00	\$8,000.00	\$8,000.00	\$17,000.00	\$1,000.00	\$1,000.00	\$1.54		
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	Loader Model	
Meter & House Reg O&M \$/Customer 2024's	\$1,513.19	\$8,646.82	\$8,646.82	\$18,374.50	\$1,080.85	\$1,080.85	\$1.67		
Total Service									
Line Footage	11,667	0	0	0	0	0	329,934,966	cust 8	
Percent of									
Total Footage	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%		
Allocated SL O&M Costs \$000	\$2	\$0	\$0	\$0	\$0	\$0	\$45,310	cust 8	
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	Loader Model	
Allocated SL O&M Costs 2024's	\$2	\$0	\$0	\$0	\$0	\$0	\$45,973		
2021 Number of Customers	30	1	1	1	1	1	5,889,515	cust 2	
Service Lines O&M \$/Customer 2024's	\$57.73	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8.32		
Customer Service & Information Cost (CSI) Costs Accounts (FERC P									
2021 Number of Customers	30	1	1	1	1	1	5,889,515		
Customer Services & Information O&M \$/Customer 2021's	\$8,261.26	\$68,590.22	\$64,946.55	\$75,148.83	\$55,473.00	\$30,252.33	\$7.26	\$0.00	
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	Loader Model	
Customer Accounts O&M \$/Customer 2024's	\$8,929.20	\$74,135.95	\$70,197.67	\$81,224.84	\$59,958.16	\$32,686.32	\$7.84		
Total Direct O&M \$/customer/yr	\$12,388.01	\$89,841.81	\$84,342.79	\$111,339.41	\$64,976.87	\$36,936.80	\$62.22		
O&M Loaders: \$/Customer									
Administrative & General as % of O&M	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	cust 4, a&a	
Administrative & General \$/customer/yr 2024's	\$10,802.48	\$78,342.78	\$73,547.84	\$97,089.18	\$56,660.54	\$32,209.30	\$54.26		
General Plant as % of O&M	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	cust 4, gen plant	
General Plant \$/customer/yr 2024's	\$10,756.68	\$78,010.63	\$73,236.01	\$96,677.55	\$56,420.31	\$32,072.74	\$54.02		
Materials & Supplies Loader:									
Per Customer Direct+A&G+GP O&M \$/customer/yr	\$33,947.18	\$246,194.92	\$231,126.65	\$305,106.14	\$178,057.72	\$101,218.83			
2021 Number of Customers	30	1	1	1	1	1	5,889,515	cust 2	
Total Direct+A&G+GP O&M \$000/yr	\$1,018	\$246	\$231	\$305	\$178	\$101	\$1,004,171.13		
Percent of Total	0.10%	0.02%	0.02%	0.03%	0.02%	0.01%	100.00%		
Allocated M&S	\$1,833	\$443	\$416	\$549	\$320	\$182	\$1,807,161.19	Loader Model	
2021 Number of Customers	30	1	1	1	1	1	5,889,515	cust 2	
M&S Loader \$/customer/yr 2024's	\$61.09	\$443.07	\$415.95	\$549.09	\$320.44	\$182.16	\$0.31		
Total O&M Loaders \$/customer/yr	\$21,620.26	\$156,796.47	\$147,199.80	\$194,316.82	\$113,401.29	\$64,464.19	\$108.59		
LRMC Rental Customer Cost \$/customer/year	\$91,610.84	\$1,174,227.71	\$2,615,750.06	\$789,930.02	\$641,584.88	\$169,574.86	\$170.81		

S10

	Core Residential										Core Non-Residential				Noncore Retail				
	Single Family (Detached homes)	Multi Family	Master Meter (up to 100,000 therms/year)		Residential Total or Avg.	Non-Residential Commercial/Industrial					Average	Air Conditioning	Natural Gas Vehicle	Gas Engine	G-30 - Noncore C&I			Small EG < 3million	Large EG > 3million
			(100,001 therms per year and greater)			Very Small - up to 300 therms/year	Small - 301 to 3,000 therms/year	Medium - 3,001 to 50,000 therms/year	Large - 50,001 to 250,000 therms/year	Very Large - Over 250,000 therms/year					Distribution	Transmission	Total		
Total Rental Capital (\$000) before RECC					\$11,010,181	\$811,845	\$636,690	\$713,613	\$125,176	\$225,497		\$760	\$43,684	\$149,849	\$284,665	\$29,734	\$316,139	\$103,252	\$35,765
NCO Method:																			
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	519	19	538	351	21
New Hookups Rate	0.54%	0.70%	0.19%	0.00%	0.59%	0.77%	0.72%	0.59%	0.35%	0.30%	0.70%	0.00%	3.67%	1.81%	0.19%	0.00%	0.18%	19.20%	0.00%
No of New Customer Hookups /year	20,562	12,479	233	0	33,262	685	462	277	7	1	1,430	0	9	13	1	0	1	10	0
Marginal Investment: \$/Customer																			
Meter & House Reg	\$531.64	\$446.14	\$1,715.62	\$23,533.95	\$530.13	\$739.19	\$1,218.74	\$2,427.57	\$8,336.33	\$12,282.84	\$1,378.71	\$5,317.08	\$90,204.04	\$3,377.22	\$139,688.52	\$300,242.92	\$148,592.75	\$103,881.66	\$916,358.01
Service Lines	\$1,156.49	\$1,241.99	\$11,727.95	\$93,892.86	\$1,406.66	\$8,393.24	\$8,646.46	\$12,753.10	\$51,902.21	\$708,154.59	\$11,009.79	\$79,085.45	\$88,095.97	\$205,325.53	\$383,335.44	#####	\$410,998.74	\$190,284.47	\$466,096.97
Exclusive Use Facilities	\$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	\$25,463.15	\$98,052.27	\$28,026.70	\$0.00	\$320,661.60
Total Marginal Investment \$/customer	\$1,688.13	\$1,688.13	\$13,443.57	\$117,426.80	\$1,936.79	\$9,132.43	\$9,865.20	\$15,180.67	\$60,238.53	\$720,437.43	\$12,388.50	\$84,402.52	\$178,300.01	\$208,702.74	\$548,487.11	#####	\$0.00	\$294,166.14	\$1,703,116.58
Weighted PVRR for Meter & House Reg	121.48%	121.52%	121.63%	121.93%	121.45%	121.53%	121.50%	121.62%	121.63%	121.58%	121.18%	121.67%	122.04%	121.72%	122.07%	122.05%	122.05%	122.06%	122.06%
PVCC for Service Lines	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%
PVRR:																			
Meter & House Reg \$/customer	\$645.85	\$542.14	\$2,066.66	\$28,694.66	\$643.85	\$898.30	\$1,480.78	\$2,952.32	\$10,139.17	\$14,933.84	\$1,670.71	\$6,469.48	\$110,085.50	\$4,110.79	\$170,515.42	\$366,435.20	\$181,354.26	\$126,801.65	\$1,118,539.17
Service Lines \$/customer	\$1,411.96	\$1,516.35	\$14,318.73	\$114,634.45	\$1,717.40	\$10,247.36	\$10,556.52	\$15,570.35	\$63,367.77	\$864,590.90	\$13,441.93	\$96,555.98	\$107,556.99	\$250,683.38	\$468,016.93	\$1,424,363.20	\$501,791.24	\$232,319.65	\$569,061.06
PVRR of Hookup Cost \$/customer	\$2,057.81	\$2,058.49	\$16,405.39	\$143,329.10	\$2,361.25	\$11,145.67	\$12,037.30	\$18,522.67	\$73,506.94	\$879,524.75	\$15,112.64	\$103,025.45	\$217,642.48	\$254,794.17	\$638,532.35	#####	\$683,145.50	\$359,121.30	\$1,687,600.23
Total PVRR of Hookup Cost for Class S's	\$42,312,213	\$25,687,597	\$3,823,853	\$0	\$76,540,536	\$7,639,840	\$5,566,074	\$5,137,896	\$541,178	\$931,696	\$21,607,277	\$0	\$1,958,782	\$3,312,324	\$620,598	\$0	\$693,418	\$3,591,213	\$0
PVRR of Hookup Cost \$/customer	\$11.16	\$14.49	\$31.93	\$0.00	\$13.82	\$86.94	\$86.24	\$109.30	\$260.43	\$2,657.17	\$106.53	\$0.00	\$7,995.03	\$4,613.26	\$1,195.75	\$0.00	\$1,233.11	\$10,231.38	\$0.00
O&M Cost w/Loaders \$/Cust.																			
Total Direct O&M	\$54.23	\$49.83	\$63.10	\$154.85	\$53.04	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$264.00	\$543.23	\$15,128.69	\$347.34	\$2,540.11	\$2,639.42	\$8,907.04	\$3,768.92	\$24,990.39
Total O&M Loaders \$/customer/yr	\$94.64	\$86.96	\$110.13	\$270.25	\$92.57	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$460.75	\$948.07	\$26,403.43	\$606.19	\$4,433.15	\$4,606.46	\$15,545.07	\$6,577.74	\$43,614.64
LRMC NCO Customer Cost \$/customer/year	\$160.02	\$151.28	\$205.16	\$425.09	\$159.43	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$831.28	\$1,491.30	\$49,527.15	\$5,566.79	\$8,169.01	\$7,245.87	\$25,685.23	\$20,578.04	\$68,605.03
NCO w/ Replacement Cost Adder																			
Marginal Investment: Meter & House Reg \$/Customer	\$531.64	\$446.14	\$1,715.62	\$23,533.95	\$530.13	\$739.19	\$1,218.74	\$2,427.57	\$8,336.33	\$12,282.84	\$1,378.71	\$5,317.08	\$90,204.04	\$3,377.22	\$139,688.52	\$300,242.92	\$148,592.75	\$103,881.66	\$916,358.01
Service Lines Replacement Cost	\$5,453.11	\$5,153.21	\$10,801.80	\$83,525.70	\$5,472.98	\$7,771.50	\$7,831.55	\$11,100.74	\$60,204.80	\$514,112.53	\$9,880.69	\$57,195.30	\$88,369.78	\$196,578.35	\$316,997.27	\$880,789.46	\$336,908.15	\$150,084.47	\$341,323.97
Exclusive Use Facilities	\$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	\$25,463.15	\$98,052.27	\$28,026.70	\$0.00	\$320,661.60
Total	\$1,688.13	\$1,688.13	\$13,443.57	\$117,426.80	\$1,936.79	\$9,132.43	\$9,865.20	\$15,180.67	\$60,238.53	\$720,437.43	\$12,388.50	\$84,402.52	\$178,300.01	\$208,702.74	\$548,487.11	#####	\$0.00	\$294,166.14	\$1,703,116.58
Weighted PVRR for Meter & House Reg	121.48%	121.52%	121.63%	121.93%	121.45%	121.53%	121.50%	121.62%	121.63%	121.58%	121.18%	121.67%	122.04%	121.72%	122.07%	122.05%	122.05%	122.06%	122.06%
PVCC for Service Lines	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%
PVCC for Exclusive Use Facilities (Meters)																			
Weighted Replacement Factor for Meter & House Reg	1.88%	1.64%	1.78%	0.73%	1.96%	1.93%	2.08%	1.82%	1.95%	2.09%	2.75%	1.75%	0.27%	1.54%	0.25%	0.16%	0.24%	0.18%	0.18%
Replacement Factor for Service Lines	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Replacement Factor for Exclusive Use Facilities																			
Meter & House Reg, Replacement	\$12.13	\$8.87	\$37.04	\$208.34	\$12.60	\$17.37	\$30.85	\$53.77	\$197.90	\$312.28	\$45.90	\$113.02	\$298.60	\$63.34	\$422.13	\$583.86	\$437.29	\$226.66	\$1,999.43
Service Lines, Replacement	\$99.37	\$93.90	\$196.84	\$1,522.05	\$99.73	\$141.62	\$142.71	\$202.28	\$1,097.08	\$9,368.41	\$180.05	\$1,042.24	\$1,610.32	\$3,582.15	\$5,776.48	\$16,050.18	\$6,139.31	\$2,734.91	\$6,219.77
Exclusive Use Facilities, Replace															\$1,227.66	\$4,727.41	\$1,351.26	\$0.00	\$15,460.12
Replacement Adder \$/Customer	\$111.50	\$102.77	\$233.88	\$1,730.38	\$112.33	\$158.98	\$173.56	\$256.06	\$1,294.98	\$9,680.69	\$225.95	\$1,155.26	\$1,908.92	\$3,645.49	\$7,426.27	\$21,361.45	\$7,927.85	\$2,961.58	\$23,679.32
NCO w/o Repl Cost \$/Cust/yr	\$160.02	\$151.28	\$205.16	\$425.09	\$159.43	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$831.28	\$1,491.30	\$49,527.15	\$5,566.79	\$8,169.01	\$7,245.87	\$25,685.23	\$20,578.04	\$68,605.03
NCO w/ Repl Cost: \$/Cust/yr.	\$271.52	\$254.05	\$439.04	\$2,155.48	\$271.76	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$1,057.23	\$2,646.56	\$51,436.07	\$9,212.28	\$15,595.28	\$28,607.33	\$33,613.08	\$23,539.61	\$92,284.35

S10

	Noncore Wholesale						Total O&M Cost for All Customers
	EOR	Wholesale				International	
	G-40	LB	SDG&E	SWG	Vernon	Ecogas	
Total Rental Capital (\$000) before RECC	\$21,865	\$10,265	\$26,385	\$5,359	\$5,126	\$754	\$14,556,602
<u>NCO Method:</u>							
2021 Number of Customers	30	1	1	1	1	1	5,889,515
New Hookups Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	cust 2
No of New Customer Hookups /year	0	0	0	0	0	0	34,725
Marginal Investment: \$/Customer							
Meter & House Reg	\$403,486.95	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	cust 5
Service Lines	\$274,177.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	cust 5
Exclusive Use Facilities	\$51,163.67	\$10,265,059.48	\$26,384,543.35	\$5,359,168.35	\$5,126,021.11	\$754,437.82	cust 6, cust 7
Total Marginal Investment \$/customer	\$728,828.22	\$10,265,059.48	\$26,384,543.35	\$5,359,168.35	\$5,126,021.11	\$754,437.82	
Weighted PVRR for Meter & House Reg	122.07%						cust 10
PVCC for Service Lines	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	2013 RECC
PVRR:							
Meter & House Reg \$/customer	\$492,548.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Service Lines \$/customer	\$334,745.35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
PVRR of Hookup Cost \$/customer	\$827,293.82	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Total PVRR of Hookup Cost for Class S's	\$0	\$0	\$0	\$0	\$0	\$0	
PVRR of Hookup Cost \$/customer	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<u>O&M Cost w/Loaders \$/Cust.</u>							
Total Direct O&M	\$12,388.01	\$89,841.51	\$84,342.79	\$111,339.41	\$64,976.87	\$36,936.80	
Total O&M Loaders \$/customer/yr	\$21,620.26	\$156,796.47	\$147,199.80	\$194,315.82	\$113,401.29	\$64,464.19	
LRMC NCO Customer Cost \$/customer/year	\$34,008.27	\$246,637.98	\$231,542.60	\$305,655.23	\$178,378.16	\$101,400.99	
<u>NCO w/ Replacement Cost Adder</u>							
Marginal Investment: Meter & House Reg \$/Customer	\$403,486.95	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	cust 5
Service Lines Replacement Cost	\$266,167.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	cust 5
Exclusive Use Facilities	\$51,163.67	\$10,265,059.48	\$26,384,543.35	\$5,359,168.35	\$5,126,021.11	\$754,437.82	cust 6, cust 7
Total	\$728,828.22	\$10,265,059.48	\$26,384,543.35	\$5,359,168.35	\$5,126,021.11	\$754,437.82	
Weighted PVRR for Meter & House Reg	122.07%						cust 10
PVCC for Service Lines	122%						2013 RECC
PVCC for Exclusive Use Facilities (Meters)	121%	121%	121%	121%	121%	121%	
Weighted Replacement Factor for Meter & House Reg	0.14%						cust 10
Replacement Factor for Service Lines	1.5%						
Replacement Factor for Exclusive Use Facilities	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	cust 10
Meter & House Reg, Replacement	\$693.64						
Service Lines, Replacement	\$4,850.23						
Exclusive Use Facilities, Replace	\$2,466.76	\$494,911.34	\$1,272,083.20	\$258,382.64	\$247,141.87	\$36,373.86	
Replacement Adder \$/Customer	\$8,010.63	\$494,911.34	\$1,272,083.20	\$258,382.64	\$247,141.87	\$36,373.86	
NCO w/o Repl Cost \$/Cust/yr	\$34,008.27	\$246,637.98	\$231,542.60	\$305,655.23	\$178,378.16	\$101,400.99	
NCO w/ Repl Cost: \$/Cust/yr	\$42,018.90	\$741,549.32	\$1,503,625.80	\$564,037.87	\$425,520.03	\$137,774.85	

SCG 2024 TCAP
 LRMC Customer Cost
 Number of Customers by Customer Class

	Core														
	Residential					Non-Residential							Gas Air Conditioning	Natrual Gas Vehicle	Gas Engine
	Single Family	Multi Family	Master Meter		Residential Total	G-10					Total				
Small			Large	Very Small		Small	Medium	Large	Very Large						
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	

SCG 2024 TCAP
 LRMC Customer Cost
 Number of Customers by Custom

	Noncore												Total Over All Customers
	G-30			Small EG	Large EG	EOR G-40	Wholesale				International		
	Distribution	Transmission	Total				LB	SDG&E	SWG	Vernon	Mexacali	Rosarito	
	2021 Number of Customers	519	19	538	351	21	30	1	1	1	1	1	

**SCG 2024 TCAP
LRMC Customer Cost
Number of Customers by Customer Class**

S10

1) Residential Segmentation

1a) Segmentation of Residential Total Customer Counts into Bands

	Residential				
	Single Family	Multi Family	Master Meter		Total
			Small	Large	
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763
Percent of Total	67%	31%	2%	0%	100%

values from 'Number of Customers', cust 2 tab

1b) Segmentation of Residential Meter, Regulator & MSA Investment Costs into Bands

	Residential				
	Single Family	Multi Family	Master Meter		Total
			Small	Large	
Per Cust. Meter, Reg. & MSA Investment	\$531.64	\$446.14	\$1,715.62	\$23,533.95	
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763
Total Meter, Reg. & MSA Investment	\$2,016,281,008	\$790,734,870	\$205,440,502	\$1,200,231	\$3,013,656,611
Percent of Total Meter, Reg. & MSA Investment	67%	26%	7%	0%	100%

note: used to segment Meters, Regulators & MSAs O&M Costs
values from 'Investment Meters, REGs', cust 5 tab

**SCG 2024 TCAP
LRMC Customer Cost
Number of Customers by Customer Class**

2) G10 Segmentation

2a) Segmentation of G-10 Total Customer Counts into Bands

	G-10					
	Very Small	Small	Medium	Large	Very Large	Total
2021 Number of Customers	88,897	64,539	47,008	2,078	313	202,835
Percent of Total	44%	32%	23%	1%	0%	100%

values from 'Number of Customers', cust 2 tab

2b) Segmentation of G-10 Meter, Regulator & MSA Investment Costs into Bands

	G-10					
	Very Small	Small	Medium	Large	Very Large	Total
Per Cust. Meter, Reg & MSA Investment	\$739.19	\$1,218.74	\$2,427.57	\$8,336.33	\$12,282.84	
2021 Number of Customers	88,897	64,539	47,008	2,078	313	202,835
Total Meter, Reg & MSA Investment	\$65,711,720	\$78,656,410	\$114,114,980	\$17,322,887	\$3,844,529	\$279,650,527
Percent of Total Meter, Reg & MSA Investment	23%	28%	41%	6%	1%	100%

note: used to segment Meters, Regulators & MSAs O&M Costs
values from 'Investment Meters, REGs', cust 5 tab

**SCG 2024 TCAP
LRMC Customer Cost
Number of Customers by Customer Class**

3) G 30 Segmentation

3a) Segmentation of G-30 total customer counts by Service Level

	G-30		
	Distribution	Transmission	Total
2021 Number of Customers	519	19	538
Percent of Total	96%	4%	100%

values from 'cust 2' tab

3b) Allocation of G-30 Total Big GEMS Costs by Service Level

		G-30		
		Distribution	Transmission	Total
Meter/Reg Investment Cost Per Customer	2013 \$s	\$139,688.52	\$300,242.92	
2021 Number of Customers		519	19	538
Total Cost	2013 \$s	\$72,498,342	\$5,704,615	\$78,202,957
Percent of Total Cost		93%	7%	100%

note: used to segment Meters, Regulators & MSAs O&M Costs
values from 'Investment Meters, REGs', cust 5 tab

SCG 2024 TCAP
LRMC Customer Cost
Average Per Customer Investment in Meters & Regulators by Customer Class

S10

		Core													
		Residential					Non-Residential								
		Single Family	Multi Family	Master Meter		Residential Average	G-10					Gas Air Conditioning	Natural Gas Vehicle	Gas Engine	
				Small	Large		Very Small	Small	Medium	Large	Very Large				Average
Investment Per Customer:															
Meter, Reg.	2021 \$\$	\$508.61	\$426.81	\$1,641.30	\$22,514.50	\$507.16	\$707.17	\$1,165.95	\$2,322.41	\$7,975.21	\$11,750.77	\$1,318.99	\$5,086.75	\$86,296.57	\$3,230.92
Meter, Reg.	2024 \$\$	\$531.64	\$446.14	\$1,715.62	\$23,533.95	\$530.13	\$739.19	\$1,218.74	\$2,427.57	\$8,336.33	\$12,282.84	\$1,378.71	\$5,317.08	\$90,204.04	\$3,377.22
Total		\$531.64	\$446.14	\$1,715.62	\$23,533.95	\$530.13	\$739.19	\$1,218.74	\$2,427.57	\$8,336.33	\$12,282.84	\$1,378.71	\$5,317.08	\$90,204.04	\$3,377.22

For Res and Non-Residential G10 customers we multiply 5 yr average meter size and pressure type combination for new customers per class times unit cost for each associated combination.
For other classes we multiply average meter size and pressure type combination for all customers per class times unit cost for each associated combination.

Average Per Customer Investment in
Service Lines by Customer Class

		Core													
		Residential					Non-Residential								
		Single Family	Multi Family	Master Meter		Residential Average	G-10					Gas Air Conditioning	Natural Gas Vehicle	Gas Engine	
				Small	Large		Very Small	Small	Medium	Large	Very Large				Average
Investment Per Customer:															
Service Lines	2021 \$\$	\$1,106.39	\$1,188.19	\$11,219.91	\$89,825.59	\$1,345.73	\$8,029.66	\$8,271.91	\$12,200.66	\$49,653.90	\$677,478.66	\$10,532.87	\$75,659.61	\$84,279.82	\$196,431.21
Service Lines	2024 \$\$	1,156.49	1,241.99	11,727.95	93,892.86	1,406.66	8,393.24	8,646.46	12,753.10	51,902.21	708,154.59	11,009.79	79,085.45	88,095.97	205,325.53
Total		1,156.49	1,241.99	11,727.95	93,892.86	1,406.66	8,393.24	8,646.46	12,753.10	51,902.21	708,154.59	11,009.79	79,085.45	88,095.97	205,325.53

formerly tabs: 'Investment Meter, Reg' and 'Investment Service Lines'
For residential and non-residential G10 customers we multiply Ken's 5 yr average footage, pipe type, pipe size configuration per class times Distribution Managers' cost per foot each associated configuration.
For other classes we multiply average footage, pipe type and pipe size combination for all customers per class times unit cost for each associated combination.

Service Lines Replacement Costs

		Core													
		Residential					Non-Residential								
		Single Family	Multi Family	Master Meter		Residential Average	G-10					Gas Air Conditioning	Natural Gas Vehicle	Gas Engine	
				Small	Large		Very Small	Small	Medium	Large	Very Large				Average
Investment Per Customer:															
Service Lines Replaceme	2021 \$\$	5,216.89	4,929.98	10,333.89	79,907.52	5,235.90	7,434.85	7,492.30	10,619.88	57,596.84	491,842.14	9,452.68	54,717.70	84,541.76	188,062.95
Service Lines	2024 \$\$	5,453.11	5,153.21	10,801.80	83,525.70	5,472.98	7,771.50	7,831.55	11,100.74	60,204.80	514,112.53	9,880.69	57,195.30	88,369.78	196,578.35
Total		5,453.11	5,153.21	10,801.80	83,525.70	5,472.98	7,771.50	7,831.55	11,100.74	60,204.80	514,112.53	9,880.69	57,195.30	88,369.78	196,578.35

SCG 2024 TCAP
LRMC Customer Cost
Average Per Customer Investment in

S10

Noncore													Total Over All Customers
Non-Residential													
G-30			<3 Million SM. COGEN G-50	>3 Million EG G-50	EOR G-40	Wholesale				International			
Investment Per Customer:	Distribution	Transmission	Average				LB	SDG&E	SWG	Vernon	DGN	Rosarito	
Meter, Reg. 2021 \$s	\$133,637.47	\$287,236.96	\$142,155.99	\$99,381.70	\$876,663.09	\$386,008.65	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Meter, Reg. 2024 \$s	\$139,688.52	\$300,242.92	\$148,592.75	\$103,881.66	\$916,358.01	\$403,486.95	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Total	\$139,688.52	\$300,242.92	\$148,592.75	\$103,881.66	\$916,358.01	\$403,486.95	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	

For Res and Non-Residential G10 custo
For other classes we multiply average n

Average Per Customer Investment in
Service Lines by Customer Class

Noncore													Total Over All Customers
Non-Residential													
G-30			SM. COGEN G-50	EG G-50	EOR G-40	Wholesale				International			
Investment Per Customer:	Distribution	Transmission	Average				LB	SDG&E	SWG	Vernon	DGN	Rosarito	
Service Lines 2021 \$s	\$366,730.07	\$1,116,106.66	\$393,195.04	\$182,041.71	\$445,906.52	\$262,300.73	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Service Lines 2024 \$s	383,335.44	1,166,643.48	410,998.74	190,284.47	466,096.97	274,177.59	0.00	0.00	0.00	0.00	0.00	0.00	
Total	383,335.44	1,166,643.48	410,998.74	190,284.47	466,096.97	274,177.59	0.00	0.00	0.00	0.00	0.00	0.00	

formerly tabs: 'Investment Meter, Reg' e
For residential and non-residential G10
For other classes we multiply average fc

Service Lines Replacement Costs

Noncore													Total Over All Customers
Non-Residential													
G-30			SM. COGEN G-50	EG G-50	EOR G-40	Wholesale				International			
Investment Per Customer:	Distribution	Transmission	Average				LB	SDG&E	SWG	Vernon	DGN	Rosarito	
Service Lines Replaceme 2021 \$s	303,265.54	842,635.30	322,313.92	143,583.09	326,538.45	254,637.19	0.00	0.00	0.00	0.00	0.00	0.00	
Service Lines 2024 \$s	316,997.27	880,789.46	336,908.15	150,084.47	341,323.97	266,167.05	0.00	0.00	0.00	0.00	0.00	0.00	
Total	316,997.27	880,789.46	336,908.15	150,084.47	341,323.97	266,167.05	0.00	0.00	0.00	0.00	0.00	0.00	

Code	Element	Meter Size	Above Std	avg labor and nonlabor			Total
				\$/meter	avg \$/meter	avg \$/regulator	
S10	SGL	1	0	\$247	\$118	\$29	\$394
M10	MULT	1	0	\$205	\$118	\$7	\$330
30	AG	3	0	\$259	\$201	\$29	\$489
	CMB	3		\$468	\$201	\$165	\$834
31	LBS	3	1	\$271	\$201	\$320	\$792
S40	SZ	4	0	\$155	\$645	\$263	\$1,063
S50	SZ	5	0	\$155	\$645	\$263	\$1,063
	CMB	4		\$292	\$742	\$286	\$1,320
	CMB	5		\$292	\$742	\$286	\$1,320
41	@LBS	4	1	\$1,652	\$603	\$494	\$2,750
51	@LBS	5	1	\$1,652	\$603	\$494	\$2,750
S60	STD	6	0	\$1,461	\$566	\$263	\$2,290
S70	STD	7	0	\$1,461	\$566	\$263	\$2,290
61	LBS	6	1	\$2,039	\$566	\$320	\$2,925
71	LBS	7	1	\$2,039	\$566	\$320	\$2,925
S80	STD	8	0	\$1,461	\$685	\$311	\$2,457
S90	STD	9	0	\$1,461	\$685	\$311	\$2,457
81	LBS	8	1	\$2,039	\$685	\$710	\$3,434
91	LBS	9	1	\$2,039	\$685	\$710	\$3,434
99	TURBINE METERS	10		\$739,804	\$20,289	\$3,986	\$764,079
100	ROTARY METERS	10		\$5,451	\$4,433	\$3,300	\$13,184
110	ULTRASONIC METERS	12		\$2,506,778	\$88,986	\$0	\$2,595,764

Code	Rate	Meter Size (1)	Above Std (2)	Number of customers (3)	avg labor \$/meter	avg \$/meter	avg \$/regulator	tot lab	tot met	tot reg	tot cost	Average Meter & Regulator CAPEX/
												Customer
S10	SF	1	0	42,231	\$246.69	\$118.12	\$29.15	\$10,417,965	\$4,988,309	\$1,231,034	\$16,637,308	\$393.96
30	SF	3	0	66,495	\$259.47	\$200.78	\$29.15	\$17,253,458	\$13,351,025	\$1,938,329	\$32,542,812	\$489.40
31	SF	3	1	48	\$270.94	\$200.78	\$320.15	\$13,005	\$9,638	\$15,367	\$38,010	\$791.87
S40	SF	4	0	6,938	\$154.88	\$644.79	\$262.99	\$1,074,557	\$4,473,547	\$1,824,625	\$7,372,729	\$1,062.66
41	SF	4	1	61	\$1,651.88	\$603.42	\$494.47	\$100,765	\$36,809	\$30,163	\$167,736	\$2,749.77
S50	SF	5	0	600	\$154.88	\$644.79	\$262.99	\$92,928	\$386,873	\$157,794	\$637,595	\$1,062.66
S60	SF	6	0	556	\$1,461.01	\$566.35	\$262.99	\$812,322	\$314,892	\$146,222	\$1,273,436	\$2,290.35
61	SF	6	1	13	\$2,038.84	\$566.35	\$320.15	\$26,505	\$7,363	\$4,162	\$38,029	\$2,925.34
S70	SF	7	0	2	\$1,461.01	\$566.35	\$262.99	\$2,922	\$1,133	\$526	\$4,581	\$2,290.35
S80	SF	8	0	167	\$1,461.01	\$685.14	\$310.83	\$243,989	\$114,419	\$51,909	\$410,316	\$2,456.98
81	SF	8	1	16	\$2,038.84	\$685.14	\$709.64	\$32,621	\$10,962	\$11,354	\$54,938	\$3,433.62
S90	SF	9	0	3	\$1,461.01	\$685.14	\$310.83	\$4,383	\$2,055	\$932	\$7,371	\$2,456.98
91	SF	9	1	9	\$2,038.84	\$685.14	\$709.64	\$18,350	\$6,166	\$6,387	\$30,903	\$3,433.62
100	SF	10	1	2	\$5,451.00	\$4,433.19	\$3,300.00	\$10,902	\$8,866	\$6,600	\$26,368	\$13,184.19
tot SF				117,141				\$30,104,671	\$23,712,057	\$5,425,404	\$59,242,133	\$505.73
M10	MF	1	0	43,992	\$204.52	\$118.12	\$7.29	\$8,997,244	\$5,196,318	\$320,702	\$14,514,263	\$329.93
30	MF	3	0	13,530	\$259.47	\$200.78	\$29.15	\$3,510,629	\$2,716,586	\$394,400	\$6,621,614	\$489.40
31	MF	3	1	44	\$270.94	\$200.78	\$320.15	\$11,921	\$8,834	\$14,087	\$34,842	\$791.87
S40	MF	4	0	465	\$154.88	\$644.79	\$262.99	\$72,019	\$299,827	\$122,290	\$494,137	\$1,062.66
S60	MF	6	0	17	\$1,461.01	\$566.35	\$262.99	\$24,837	\$9,628	\$4,471	\$38,936	\$2,290.35
61	MF	6	1	1	\$2,038.84	\$566.35	\$320.15	\$2,039	\$566	\$320	\$2,925	\$2,925.34
81	MF	8	1	7	\$2,038.84	\$685.14	\$709.64	\$14,272	\$4,796	\$4,967	\$24,035	\$3,433.62
tot MF				58,056				\$12,632,961	\$8,236,555	\$861,237	\$21,730,753	\$374.31
M10	MM Band 1	1	0	553	\$204.52	\$118.12	\$7.29	\$113,100	\$65,320	\$4,031	\$182,451	\$329.93
30	MM Band 1	3	0	257	\$259.47	\$200.78	\$29.15	\$66,684	\$51,601	\$7,492	\$125,776	\$489.40
31	MM Band 1	3	1	11	\$270.94	\$200.78	\$320.15	\$2,980	\$2,209	\$3,522	\$8,711	\$791.87
S40	MM Band 1	4	0	261	\$154.88	\$644.79	\$262.99	\$40,424	\$168,290	\$68,640	\$277,354	\$1,062.66
41	MM Band 1	4	1	53	\$1,651.88	\$603.42	\$494.47	\$67,550	\$31,981	\$26,207	\$145,738	\$2,749.77
S50	MM Band 1	5	0	56	\$154.88	\$644.79	\$262.99	\$8,673	\$36,108	\$14,727	\$59,509	\$1,062.66
S60	MM Band 1	6	0	121	\$1,461.01	\$566.35	\$262.99	\$176,782	\$68,529	\$31,822	\$277,133	\$2,290.35
61	MM Band 1	6	1	61	\$2,038.84	\$566.35	\$320.15	\$124,369	\$34,547	\$19,529	\$178,446	\$2,925.34
S70	MM Band 1	7	0	1	\$1,461.01	\$566.35	\$262.99	\$1,461	\$566	\$263	\$2,290	\$2,290.35
S80	MM Band 1	8	0	81	\$1,461.01	\$685.14	\$310.83	\$118,342	\$55,496	\$25,177	\$199,015	\$2,456.98
81	MM Band 1	8	1	142	\$2,038.84	\$685.14	\$709.64	\$289,515	\$97,290	\$100,769	\$487,574	\$3,433.62
S90	MM Band 1	9	0	11	\$1,461.01	\$685.14	\$310.83	\$16,071	\$7,537	\$3,419	\$27,027	\$2,456.98
91	MM Band 1	9	1	83	\$2,038.84	\$685.14	\$709.64	\$169,224	\$56,867	\$58,900	\$284,991	\$3,433.62
100	MM Band 1	10	1	45	\$5,451.00	\$4,433.19	\$3,300.00	\$245,295	\$199,494	\$148,500	\$593,289	\$13,184.19
tot MM 1				1,736				\$1,460,470	\$875,835	\$512,999	\$2,849,303	\$1,641.30
61	MM Band 2	6	1	3	\$2,038.84	\$566.35	\$320.15	\$6,117	\$1,699	\$960	\$8,776	\$2,925.34
71	MM Band 2	7	1	1	\$2,038.84	\$566.35	\$320.15	\$2,039	\$566	\$320	\$2,925	\$2,925.34
81	MM Band 2	8	1	6	\$2,038.84	\$685.14	\$709.64	\$12,233	\$4,111	\$4,258	\$20,602	\$3,433.62
91	MM Band 2	9	1	18	\$2,038.84	\$685.14	\$709.64	\$36,699	\$12,333	\$12,774	\$61,805	\$3,433.62
99	MM Band 2	10	1	1	\$739,804.00	\$20,289.00	\$3,986.00	\$739,804	\$20,289	\$3,986	\$764,079	\$764,079.00
100	MM Band 2	10	1	22	\$5,451.00	\$4,433.19	\$3,300.00	\$119,922	\$97,530	\$72,600	\$290,052	\$13,184.19
tot MM 2				51				\$916,814	\$136,528	\$94,898	\$1,148,240	\$22,514.50

Code	Rate	Meter Size (1)	Above Std (2)	Number of customers (3)	avg labor \$/meter	avg \$/meter	avg \$/regulator	tot lab	tot met	tot reg	tot cost	Average Meter & Regulator CAPEX/
												Customer
S10	G10 Band 1	1	0	1,355	\$246.69	\$118.12	\$29.15	\$334,265	\$160,052	\$39,498	\$533,815	\$393.96
30	G10 Band 1	3	0	456	\$259.47	\$200.78	\$29.15	\$118,318	\$91,557	\$13,292	\$223,167	\$489.40
31	G10 Band 1	3	1	17	\$270.94	\$200.78	\$320.15	\$4,606	\$3,413	\$5,443	\$13,462	\$791.87
S40	G10 Band 1	4	0	285	\$154.88	\$644.79	\$262.99	\$44,141	\$183,765	\$74,952	\$302,858	\$1,062.66
41	G10 Band 1	4	1	31	\$1,651.88	\$603.42	\$494.47	\$51,208	\$18,706	\$15,329	\$85,243	\$2,749.77
S50	G10 Band 1	5	0	93	\$154.88	\$644.79	\$262.99	\$14,404	\$59,965	\$24,458	\$98,827	\$1,062.66
51	G10 Band 1	5	1	9	\$1,651.88	\$603.42	\$494.47	\$14,867	\$5,431	\$4,450	\$24,748	\$2,749.77
S60	G10 Band 1	6	0	47	\$1,461.01	\$566.35	\$262.99	\$68,667	\$26,619	\$12,361	\$107,647	\$2,290.35
S70	G10 Band 1	7	0	1	\$1,461.01	\$566.35	\$262.99	\$1,461	\$566	\$263	\$2,290	\$2,290.35
S80	G10 Band 1	8	0	25	\$1,461.01	\$685.14	\$310.83	\$36,525	\$17,129	\$7,771	\$61,425	\$2,456.98
81	G10 Band 1	8	1	31	\$2,038.84	\$685.14	\$709.64	\$63,204	\$21,239	\$106,442	\$106,442	\$3,433.62
S90	G10 Band 1	9	0	3	\$1,461.01	\$685.14	\$310.83	\$4,383	\$2,055	\$932	\$7,371	\$2,456.98
91	G10 Band 1	9	1	8	\$2,038.84	\$685.14	\$709.64	\$16,311	\$5,481	\$5,677	\$27,469	\$3,433.62
100	G10 Band 1	10	1	6	\$5,451.00	\$4,433.19	\$3,300.00	\$32,706	\$26,599	\$19,800	\$79,105	\$13,184.19
tot Band 1				2,367				\$805,067	\$622,578	\$246,225	\$1,673,869	\$707.17
S10	G10 Band 2	1	0	420	\$246.69	\$118.12	\$29.15	\$103,610	\$49,610	\$12,243	\$165,463	\$393.96
30	G10 Band 2	3	0	428	\$259.47	\$200.78	\$29.15	\$111,053	\$85,935	\$12,476	\$209,464	\$489.40
31	G10 Band 2	3	1	29	\$270.94	\$200.78	\$320.15	\$7,857	\$5,823	\$9,284	\$22,964	\$791.87
S40	G10 Band 2	4	0	589	\$154.88	\$644.79	\$262.99	\$91,224	\$379,781	\$154,901	\$625,906	\$1,062.66
41	G10 Band 2	4	1	56	\$1,651.88	\$603.42	\$494.47	\$92,505	\$33,791	\$27,690	\$153,987	\$2,749.77
S50	G10 Band 2	5	0	215	\$154.88	\$644.79	\$262.99	\$33,299	\$138,630	\$56,543	\$228,472	\$1,062.66
51	G10 Band 2	5	1	3	\$1,651.88	\$603.42	\$494.47	\$4,956	\$1,810	\$1,483	\$8,249	\$2,749.77
S60	G10 Band 2	6	0	157	\$1,461.01	\$566.35	\$262.99	\$229,379	\$88,917	\$41,289	\$359,585	\$2,290.35
61	G10 Band 2	6	1	43	\$2,038.84	\$566.35	\$320.15	\$87,670	\$24,353	\$13,766	\$125,790	\$2,925.34
S70	G10 Band 2	7	0	1	\$1,461.01	\$566.35	\$262.99	\$1,461	\$566	\$263	\$2,290	\$2,290.35
71	G10 Band 2	7	1	1	\$2,038.84	\$566.35	\$320.15	\$2,039	\$566	\$320	\$2,925	\$2,925.34
S80	G10 Band 2	8	0	65	\$1,461.01	\$685.14	\$310.83	\$94,966	\$44,534	\$20,204	\$159,704	\$2,456.98
81	G10 Band 2	8	1	55	\$2,038.84	\$685.14	\$709.64	\$112,136	\$37,683	\$39,030	\$188,849	\$3,433.62
S90	G10 Band 2	9	0	7	\$1,461.01	\$685.14	\$310.83	\$10,227	\$4,796	\$2,176	\$17,199	\$2,456.98
91	G10 Band 2	9	1	20	\$2,038.84	\$685.14	\$709.64	\$40,777	\$13,703	\$14,193	\$68,672	\$3,433.62
100	G10 Band 2	10	1	8	\$5,451.00	\$4,433.19	\$3,300.00	\$43,608	\$35,466	\$26,400	\$105,474	\$13,184.19
tot Band 2				2,097				\$1,066,767	\$945,964	\$432,263	\$2,444,994	\$1,165.95
S10	G10 Band 3	1	0	12	\$246.69	\$118.12	\$29.15	\$2,960	\$1,417	\$350	\$4,728	\$393.96
30	G10 Band 3	3	0	103	\$259.47	\$200.78	\$29.15	\$26,725	\$20,681	\$3,002	\$50,408	\$489.40
31	G10 Band 3	3	1	18	\$270.94	\$200.78	\$320.15	\$4,877	\$3,614	\$5,763	\$14,254	\$791.87
S40	G10 Band 3	4	0	472	\$154.88	\$644.79	\$262.99	\$73,103	\$304,340	\$124,131	\$501,575	\$1,062.66
41	G10 Band 3	4	1	78	\$1,651.88	\$603.42	\$494.47	\$128,447	\$47,067	\$38,569	\$214,482	\$2,749.77
S50	G10 Band 3	5	0	295	\$154.88	\$644.79	\$262.99	\$45,690	\$190,213	\$77,582	\$313,484	\$1,062.66
51	G10 Band 3	5	1	4	\$1,651.88	\$603.42	\$494.47	\$6,608	\$2,414	\$1,978	\$10,999	\$2,749.77
S60	G10 Band 3	6	0	419	\$1,461.01	\$566.35	\$262.99	\$612,163	\$237,302	\$110,193	\$959,658	\$2,290.35
61	G10 Band 3	6	1	83	\$2,038.84	\$566.35	\$320.15	\$169,224	\$47,007	\$26,572	\$242,803	\$2,925.34
71	G10 Band 3	7	1	1	\$2,038.84	\$566.35	\$320.15	\$2,039	\$566	\$320	\$2,925	\$2,925.34
S80	G10 Band 3	8	0	200	\$1,461.01	\$685.14	\$310.83	\$292,202	\$137,028	\$62,166	\$491,396	\$2,456.98
81	G10 Band 3	8	1	215	\$2,038.84	\$685.14	\$709.64	\$438,351	\$147,305	\$152,573	\$738,229	\$3,433.62
S90	G10 Band 3	9	0	34	\$1,461.01	\$685.14	\$310.83	\$49,674	\$23,295	\$10,568	\$83,537	\$2,456.98
91	G10 Band 3	9	1	112	\$2,038.84	\$685.14	\$709.64	\$228,350	\$76,736	\$79,480	\$384,566	\$3,433.62
100	G10 Band 3	10	1	68	\$5,451.00	\$4,433.19	\$3,300.00	\$370,668	\$301,457	\$224,400	\$996,525	\$13,184.19
tot Band 3				2,114				\$2,451,481	\$1,540,442	\$917,647	\$4,909,569	\$2,322.41
31	G10 Band 4	3	1	1	\$270.94	\$200.78	\$320.15	\$271	\$201	\$320	\$792	\$791.87
61	G10 Band 4	6	1	3	\$2,038.84	\$566.35	\$320.15	\$6,117	\$1,699	\$960	\$8,776	\$2,925.34
S80	G10 Band 4	8	0	1	\$1,461.01	\$685.14	\$310.83	\$1,461	\$685	\$311	\$2,457	\$2,456.98
81	G10 Band 4	8	1	23	\$2,038.84	\$685.14	\$709.64	\$46,893	\$15,758	\$16,322	\$78,973	\$3,433.62
S90	G10 Band 4	9	0	1	\$1,461.01	\$685.14	\$310.83	\$1,461	\$685	\$311	\$2,457	\$2,456.98
91	G10 Band 4	9	1	27	\$2,038.84	\$685.14	\$709.64	\$55,049	\$18,499	\$19,160	\$92,708	\$3,433.62
100	G10 Band 4	10	0	3	\$5,451.00	\$4,433.19	\$3,300.00	\$16,353	\$13,300	\$9,900	\$39,553	\$13,184.19
100	G10 Band 4	10	1	47	\$5,451.00	\$4,433.19	\$3,300.00	\$256,197	\$208,360	\$155,100	\$619,657	\$13,184.19
tot Band 4				106				\$383,801	\$259,187	\$202,384	\$845,373	\$7,975.21
81	G10 Band 5	8	1	1	\$2,038.84	\$685.14	\$709.64	\$2,039	\$685	\$710	\$3,434	\$3,433.62

Code	Rate	Meter Size (1)	Above Std (2)	Number of customers (3)	avg labor \$/meter	avg \$/meter	avg \$/regulator	tot lab	tot met	tot reg	tot cost	Average Meter & Regulator CAPEX/
												Customer
91	G10 Band 5	9	1	1	\$2,038.84	\$685.14	\$709.64	\$2,039	\$685	\$710	\$3,434	\$3,433.62
100	G10 Band 5	10	1	14	\$5,451.00	\$4,433.19	\$3,300.00	\$76,314	\$62,065	\$46,200	\$184,579	\$13,184.19
	tot Band 5			16				\$78,353	\$62,750	\$46,910	\$188,012	\$11,750.77
61	GAC	6	1	1	\$2,038.84	\$566.35	\$320.15	\$2,039	\$566	\$320	\$2,925	\$2,925.34
S80	GAC	8	0	1	\$1,461.01	\$685.14	\$310.83	\$1,461	\$685	\$311	\$2,457	\$2,456.98
81	GAC	8	1	2	\$2,038.84	\$685.14	\$709.64	\$4,078	\$1,370	\$1,419	\$6,867	\$3,433.62
100	GAC	10	1	1	\$5,451.00	\$4,433.19	\$3,300.00	\$5,451	\$4,433	\$3,300	\$13,184	\$13,184.19
	tot GAC			5				\$13,029	\$7,055	\$5,350	\$25,434	\$5,086.75
S10	NGV	1	0	11	\$246.69	\$118.12	\$29.15	\$2,714	\$1,299	\$321	\$4,334	\$393.96
30	NGV	3	0	2	\$259.47	\$200.78	\$29.15	\$519	\$402	\$58	\$979	\$489.40
31	NGV	3	1	8	\$270.94	\$200.78	\$320.15	\$2,168	\$1,606	\$2,561	\$6,335	\$791.87
41	NGV	4	1	7	\$1,651.88	\$603.42	\$484.47	\$11,563	\$4,224	\$3,461	\$19,248	\$2,749.77
51	NGV	5	1	6	\$1,651.88	\$603.42	\$494.47	\$9,911	\$3,621	\$2,967	\$16,499	\$2,749.77
61	NGV	6	1	20	\$2,038.84	\$566.35	\$320.15	\$40,777	\$11,327	\$6,403	\$58,507	\$2,925.34
71	NGV	7	1	3	\$2,038.84	\$566.35	\$320.15	\$6,117	\$1,699	\$960	\$8,776	\$2,925.34
81	NGV	8	1	43	\$2,038.84	\$685.14	\$709.64	\$87,670	\$29,461	\$30,515	\$147,646	\$3,433.62
91	NGV	9	1	35	\$2,038.84	\$685.14	\$709.64	\$71,359	\$23,980	\$24,837	\$120,177	\$3,433.62
99	NGV	10	1	30	\$739,804.00	\$20,289.00	\$3,986.00	\$22,194,120	\$608,670	\$119,580	\$22,922,370	\$764,079.00
100	NGV	10	1	124	\$5,451.00	\$4,433.19	\$3,300.00	\$675,924	\$549,716	\$409,200	\$1,634,840	\$13,184.19
	tot NGV			289				\$23,102,841	\$1,236,005	\$600,864	\$24,939,710	\$86,296.57
S10	GEN	1	0	1	\$246.69	\$118.12	\$29.15	\$247	\$118	\$29	\$394	\$393.96
30	GEN	3	0	7	\$259.47	\$200.78	\$29.15	\$1,816	\$1,405	\$204	\$3,426	\$489.40
31	GEN	3	1	6	\$270.94	\$200.78	\$320.15	\$1,626	\$1,205	\$1,921	\$4,751	\$791.87
S40	GEN	4	0	27	\$154.88	\$644.79	\$262.99	\$4,182	\$17,409	\$7,101	\$28,692	\$1,062.66
41	GEN	4	1	24	\$1,651.88	\$603.42	\$494.47	\$39,645	\$14,482	\$11,867	\$65,994	\$2,749.77
S50	GEN	5	0	15	\$154.88	\$644.79	\$262.99	\$3,323	\$9,672	\$3,945	\$15,940	\$1,062.66
51	GEN	5	1	9	\$1,651.88	\$603.42	\$494.47	\$14,867	\$5,431	\$4,450	\$24,748	\$2,749.77
S60	GEN	6	0	86	\$1,461.01	\$566.35	\$262.99	\$125,647	\$48,706	\$22,617	\$196,970	\$2,290.35
61	GEN	6	1	107	\$2,038.84	\$566.35	\$320.15	\$218,156	\$60,600	\$34,256	\$313,012	\$2,925.34
S70	GEN	7	0	3	\$1,461.01	\$566.35	\$262.99	\$4,383	\$1,699	\$789	\$6,871	\$2,290.35
71	GEN	7	1	3	\$2,038.84	\$566.35	\$320.15	\$6,117	\$1,699	\$960	\$8,776	\$2,925.34
S80	GEN	8	0	87	\$1,461.01	\$685.14	\$310.83	\$127,108	\$59,607	\$27,042	\$213,757	\$2,456.98
81	GEN	8	1	163	\$2,038.84	\$685.14	\$709.64	\$332,331	\$111,678	\$115,671	\$559,680	\$3,433.62
S90	GEN	9	0	8	\$1,461.01	\$685.14	\$310.83	\$11,688	\$5,481	\$2,487	\$19,656	\$2,456.98
91	GEN	9	1	63	\$2,038.84	\$685.14	\$709.64	\$128,447	\$43,164	\$44,707	\$216,318	\$3,433.62
100	GEN	10	0	1	\$5,451.00	\$4,433.19	\$3,300.00	\$5,451	\$4,433	\$3,300	\$13,184	\$13,184.19
100	GEN	10	1	28	\$5,451.00	\$4,433.19	\$3,300.00	\$152,628	\$124,129	\$92,400	\$369,157	\$13,184.19
	tot GEN			638				\$1,176,661	\$510,919	\$373,747	\$2,061,327	\$3,230.92
71	G30 Tran	7	1	1	\$2,038.84	\$566.35	\$320.15	\$2,039	\$566	\$320	\$2,925	\$2,925.34
81	G30 Tran	8	1	1	\$2,038.84	\$685.14	\$709.64	\$2,039	\$685	\$710	\$3,434	\$3,433.62
91	G30 Tran	9	1	3	\$2,038.84	\$685.14	\$709.64	\$6,117	\$2,055	\$2,129	\$10,301	\$3,433.62
99	G30 Tran	10	1	7	\$739,804.00	\$20,289.00	\$3,986.00	\$5,178,628	\$142,023	\$27,902	\$5,348,553	\$764,079.00
100	G30 Tran	10	1	7	\$5,451.00	\$4,433.19	\$3,300.00	\$38,157	\$31,032	\$23,100	\$92,289	\$13,184.19
	tot G30 Tran			19				\$5,226,979	\$176,362	\$54,161	\$5,457,502	\$287,236.96
51	G30 Dist	5	1	4	\$1,651.88	\$603.42	\$494.47	\$6,608	\$2,414	\$1,978	\$10,999	\$2,749.77
S60	G30 Dist	6	0	2	\$1,461.01	\$566.35	\$262.99	\$2,922	\$1,133	\$526	\$4,581	\$2,290.35
61	G30 Dist	6	1	7	\$2,038.84	\$566.35	\$320.15	\$14,272	\$3,964	\$2,241	\$20,477	\$2,925.34
81	G30 Dist	8	1	37	\$2,038.84	\$685.14	\$709.64	\$75,437	\$25,350	\$26,257	\$127,044	\$3,433.62
S90	G30 Dist	9	0	2	\$1,461.01	\$685.14	\$310.83	\$2,922	\$1,370	\$622	\$4,914	\$2,456.98
91	G30 Dist	9	1	69	\$2,038.84	\$685.14	\$709.64	\$140,560	\$47,275	\$48,965	\$238,920	\$3,433.62
99	G30 Dist	10	1	85	\$739,804.00	\$20,289.00	\$3,986.00	\$82,863,340	\$1,724,565	\$338,810	\$64,946,715	\$764,079.00
100	G30 Dist	10	1	314	\$5,451.00	\$4,433.19	\$3,300.00	\$1,711,614	\$1,392,023	\$1,036,200	\$4,139,837	\$13,184.19
	tot G30 Dist			520				\$64,837,794	\$3,198,094	\$1,455,598	\$69,491,487	\$133,637.47

Code	Rate	Meter Size (1)	Above Std (2)	Number of customers (3)	avg labor \$/meter	avg \$/meter	avg \$/regulator	tot lab	tot met	tot reg	tot cost	Average Meter & Regulator CAPEX/
												Customer
41	Sml G50	4	1	1	\$1,651.88	\$603.42	\$494.47	\$1,652	\$603	\$494	\$2,750	\$2,749.77
51	Sml G50	5	1	2	\$1,651.88	\$603.42	\$494.47	\$3,304	\$1,207	\$989	\$5,500	\$2,749.77
61	Sml G50	6	1	146	\$2,038.84	\$566.35	\$320.15	\$297,671	\$82,687	\$46,742	\$427,100	\$2,925.34
81	Sml G50	8	1	58	\$2,038.84	\$685.14	\$709.64	\$118,253	\$39,738	\$41,159	\$199,150	\$3,433.62
91	Sml G50	9	1	43	\$2,038.84	\$685.14	\$709.64	\$87,670	\$29,461	\$30,515	\$147,646	\$3,433.62
99	Sml G50	10	1	41	\$739,804.00	\$20,289.00	\$3,986.00	\$30,331,964	\$831,849	\$163,426	\$31,327,239	\$764,079.00
100	Sml G50	10	1	37	\$5,451.00	\$4,433.19	\$3,300.00	\$201,687	\$164,028	\$122,100	\$487,815	\$13,184.19
	tot G50			328				\$31,042,200	\$1,149,574	\$405,425	\$32,597,199	\$99,381.70
81	G50 EG	8	1	3	\$2,038.84	\$685.14	\$709.64	\$6,117	\$2,055	\$2,129	\$10,301	\$3,433.62
99	G50 EG	10	1	30	\$739,804.00	\$20,289.00	\$3,986.00	\$22,194,120	\$608,670	\$119,580	\$22,922,370	\$764,079.00
100	G50 EG	10	1	5	\$5,451.00	\$4,433.19	\$3,300.00	\$27,255	\$22,166	\$16,500	\$65,921	\$13,184.19
110	G50 EG	12	1	6	\$2,506,778.00	\$88,986.00	\$0.00	\$15,040,668	\$533,916	\$0	\$15,574,584	\$2,595,764.00
	tot G50 EG			44				\$37,268,160	\$1,166,807	\$138,209	\$38,573,176	\$876,663.09
51	G40	5	1	1	\$1,651.88	\$603.42	\$494.47	\$1,652	\$603	\$494	\$2,750	\$2,749.77
81	G40	8	1	4	\$2,038.84	\$685.14	\$709.64	\$8,155	\$2,741	\$2,839	\$13,734	\$3,433.62
91	G40	9	1	3	\$2,038.84	\$685.14	\$709.64	\$6,117	\$2,055	\$2,129	\$10,301	\$3,433.62
99	G40	10	1	15	\$739,804.00	\$20,289.00	\$3,986.00	\$11,097,060	\$304,335	\$59,790	\$11,461,185	\$764,079.00
100	G40	10	1	7	\$5,451.00	\$4,433.19	\$3,300.00	\$38,157	\$31,032	\$23,100	\$92,289	\$13,184.19
	tot G40			30				\$11,151,141	\$340,767	\$88,352	\$11,580,259	\$386,008.65

Code	Pipe Diameter Inches	Pipe Type	New Business \$/ft	Replacement \$/ft
0.5P	0.5	P	\$146.46	\$176.54
1P	1	P	\$235.19	\$220.66
2P	2	P	\$230.98	\$196.21
3P	3	P	\$218.87	\$351.91
4P	4	P	\$537.03	\$821.46
6P	6	P	\$1,507.03	\$1,040.13
8P	8	P	\$2,177.99	\$1,602.57
0.5	0.5	S	\$445.65	\$251.60
0.75	0.75	S	\$445.65	\$251.60
1S	1	S	\$673.27	\$410.04
1.25	1.25	S	\$481.15	\$631.07
2S	2	S	\$887.66	\$688.76
3S	3	S	\$728.43	\$725.33
4S	4	S	\$903.83	\$740.56
6S	6	S	\$1,808.75	\$1,318.32
8S	8	S	\$2,645.28	\$1,812.13
10S	10	S	\$3,435.87	\$2,664.50
12S	12	S	\$4,390.84	\$3,004.50
16S	16	S	\$11,096.37	\$7,618.61
20S	20	S	\$11,096.37	\$7,618.61

Calculation of Weighted Average Service Line and Service Line Replacement Cost \$/customer

Code (1)	Rate	Pipe			# New Customers		New		Service Line	replacement Service Line		Replacement
		Diameter Inches	Pipe frac (2)	Pipe Type (3)	last 5 years (4)	Avg Length feet (5)	Business \$/ft (6)	Replacement \$/ft (6)	CAPEX \$/customer	CAPEX \$/customer	Service Line CAPEX \$'s	Service Line CAPEX \$'s
0.5P	SF	0	12	P	109,698	25.2	\$146.46	\$176.54	\$3,692	\$4,450	\$405,031,743	\$488,208,757
0.75	SF	0	34	S	186	9.3	\$445.65	\$251.60	\$4,122	\$2,327	\$766,742	\$432,880
1P	SF	1	0	P	43,508	32.4	\$235.19	\$220.66	\$7,620	\$7,149	\$331,542,120	\$311,049,555
1S	SF	1	0	S	261	2.5	\$673.27	\$410.04	\$1,676	\$1,021	\$437,552	\$266,482
2P	SF	2	0	P	117	97.7	\$230.98	\$196.21	\$22,576	\$19,178	\$2,641,347	\$2,243,809
	Tot SF				153,770				\$4,815	\$5,217	\$740,419,504	\$802,201,484
0.5P	MF	0	12	P	2,206	19.9	\$146.46	\$176.54	\$2,912	\$3,510	\$6,423,022	\$7,742,049
0.75	MF	0	34	S	80	1.0	\$445.65	\$251.60	\$423	\$239	\$33,869	\$19,122
1P	MF	1	0	P	8,736	24.2	\$235.19	\$220.66	\$5,701	\$5,349	\$49,804,642	\$46,726,225
1S	MF	1	0	S	402	8.3	\$673.27	\$410.04	\$5,608	\$3,416	\$2,254,557	\$1,373,092
1.25	MF	1	25	S	26	10.6	\$481.15	\$631.07	\$5,110	\$6,702	\$132,855	\$174,250
2P	MF	2	0	P	920	39.9	\$230.98	\$196.21	\$9,209	\$7,823	\$8,472,301	\$7,197,169
2S	MF	2	0	S	1,005	1.9	\$887.66	\$688.76	\$1,669	\$1,295	\$1,677,142	\$1,301,336
3P	MF	3	0	P	6	108.2	\$218.87	\$351.91	\$23,675	\$38,067	\$142,050	\$228,399
3S	MF	3	0	S	21	86.0	\$728.43	\$725.33	\$62,645	\$62,378	\$1,315,539	\$1,309,942
	Tot MF				13,402				\$5,242	\$4,929.98	\$70,255,977	\$66,071,584
0.5P	MM Band 1	0	12	P	250	40.7	\$146.46	\$176.54	\$5,961	\$7,185	\$1,490,225	\$1,796,257
0.75	MM Band 1	0	34	S	48	1.1	\$445.65	\$251.60	\$490	\$277	\$23,530	\$13,285
1P	MM Band 1	1	0	P	659	47.6	\$235.19	\$220.66	\$11,200	\$10,508	\$7,380,731	\$6,924,529
1S	MM Band 1	1	0	S	158	2.7	\$673.27	\$410.04	\$1,804	\$1,099	\$285,090	\$173,628
1.25	MM Band 1	1	25	S	6	2.2	\$481.15	\$631.07	\$1,044	\$1,369	\$6,265	\$8,216
2P	MM Band 1	2	0	P	308	76.4	\$230.98	\$196.21	\$17,640	\$14,985	\$5,433,014	\$4,615,313
2S	MM Band 1	2	0	S	150	20.9	\$887.66	\$688.76	\$18,543	\$14,388	\$2,781,478	\$2,158,217
3P	MM Band 1	3	0	P	23	91.3	\$218.87	\$351.91	\$19,983	\$32,130	\$459,602	\$738,984
3S	MM Band 1	3	0	S	15	25.9	\$728.43	\$725.33	\$18,844	\$18,764	\$282,666	\$281,464
	Tot MM 1				1,617				\$11,220	\$10,334	\$18,142,602	\$16,709,893
0.5P	MM Band 2	0	12	P	8	27.8	\$146.46	\$176.54	\$4,064	\$4,899	\$32,514	\$39,191
1S	MM Band 2	1	0	S	2	99.0	\$673.27	\$410.04	\$66,654	\$40,594	\$133,308	\$81,188
1.25	MM Band 2	1	25	S	8	42.5	\$481.15	\$631.07	\$20,449	\$26,820	\$163,591	\$214,562
2P	MM Band 2	2	0	P	4	739.5	\$230.98	\$196.21	\$170,807	\$145,099	\$683,228	\$580,398
2S	MM Band 2	2	0	S	12	93.7	\$887.66	\$688.76	\$83,147	\$64,516	\$997,764	\$774,189
3P	MM Band 2	3	0	P	1	96.0	\$218.87	\$351.91	\$21,011	\$33,784	\$21,011	\$33,784
3S	MM Band 2	3	0	S	11	190.5	\$728.43	\$725.33	\$138,729	\$138,139	\$1,526,018	\$1,519,526
4S	MM Band 2	4	0	S	6	205.3	\$903.83	\$740.56	\$185,583	\$152,059	\$1,113,497	\$912,352
	Tot MM 2				52				\$89,826	\$79,908	\$4,670,931	\$4,155,191
0.5P	G10 Band 1	0	12	P	58	49.0	\$146.46	\$176.54	\$7,177	\$8,650	\$416,238	\$501,716
0.75	G10 Band 1	0	34	S	214	2.3	\$445.65	\$251.60	\$1,038	\$586	\$222,210	\$125,454
1P	G10 Band 1	1	0	P	572	79.3	\$235.19	\$220.66	\$18,644	\$17,491	\$10,664,229	\$10,005,075
1S	G10 Band 1	1	0	S	945	0.8	\$673.27	\$410.04	\$566	\$344	\$534,443	\$325,492
1.25	G10 Band 1	1	25	S	34	0.9	\$481.15	\$631.07	\$452	\$593	\$15,378	\$20,169
2P	G10 Band 1	2	0	P	121	135.3	\$230.98	\$196.21	\$31,240	\$26,538	\$3,779,984	\$3,211,074
2S	G10 Band 1	2	0	S	216	5.5	\$887.66	\$688.76	\$4,900	\$3,802	\$1,058,373	\$821,218
3P	G10 Band 1	3	0	P	3	27.7	\$218.87	\$351.91	\$6,056	\$9,737	\$18,168	\$29,212
4P	G10 Band 1	4	0	P	7	190.3	\$537.03	\$821.46	\$102,191	\$156,316	\$715,337	\$1,094,215
	tot Band 1				2,170				\$8,030	\$7,435	\$17,424,360	\$16,133,624

Code (1)	Rate	Pipe		Pipe Type	# new Customers		New		Service Line	Replacement	Service Line		Replacement
		Diameter Inches	Pipe frac (2)		last 5 years (4)	Avg Length feet (5)	Business \$/ft (6)	Replacement \$/ft (6)	CAPEX \$/customer	CAPEX \$/customer	Service Line CAPEX \$'s	Service Line CAPEX \$'s	
0.5P	G10 Band 2	0	12	P	31	34.0	\$146.46	\$176.54	\$4,980	\$6,002	\$154,368	\$186,069	
0.75	G10 Band 2	0	34	S	323	3.2	\$445.65	\$251.60	\$1,426	\$805	\$460,624	\$260,055	
1P	G10 Band 2	1	0	P	578	84.3	\$235.19	\$220.66	\$19,822	\$18,597	\$11,457,159	\$10,748,994	
1S	G10 Band 2	1	0	S	961	0.8	\$673.27	\$410.04	\$532	\$324	\$511,141	\$311,300	
1.25	G10 Band 2	1	25	S	21	0.9	\$481.15	\$631.07	\$433	\$568	\$9,094	\$11,927	
2P	G10 Band 2	2	0	P	166	130.2	\$230.98	\$196.21	\$30,068	\$25,543	\$4,991,369	\$4,240,138	
2S	G10 Band 2	2	0	S	150	4.4	\$887.66	\$688.76	\$3,879	\$3,010	\$581,860	\$451,480	
3P	G10 Band 2	3	0	P	8	198.1	\$218.87	\$351.91	\$43,364	\$69,725	\$346,915	\$557,798	
tot Band 2					2,238				\$8,272	\$7,492	\$18,512,531	\$16,767,761	
0.5P	G10 Band 3	0	12	P	19	64.5	\$146.46	\$176.54	\$9,451	\$11,392	\$179,570	\$216,446	
0.75	G10 Band 3	0	34	S	258	3.4	\$445.65	\$251.60	\$1,506	\$850	\$388,625	\$219,407	
1P	G10 Band 3	1	0	P	618	80.3	\$235.19	\$220.66	\$18,881	\$17,714	\$11,668,645	\$10,947,408	
1S	G10 Band 3	1	0	S	1,172	1.4	\$673.27	\$410.04	\$909	\$554	\$1,065,250	\$648,769	
1.25	G10 Band 3	1	25	S	24	1.0	\$481.15	\$631.07	\$462	\$606	\$11,086	\$14,540	
2P	G10 Band 3	2	0	P	451	149.3	\$230.98	\$196.21	\$34,476	\$29,287	\$15,548,457	\$13,208,321	
2S	G10 Band 3	2	0	S	212	3.4	\$887.66	\$688.76	\$2,974	\$2,307	\$630,415	\$489,155	
3P	G10 Band 3	3	0	P	14	139.9	\$218.87	\$351.91	\$30,626	\$49,243	\$428,768	\$689,406	
4P	G10 Band 3	4	0	P	4	188.5	\$537.03	\$821.46	\$101,230	\$154,846	\$404,919	\$619,384	
6P	G10 Band 3	6	0	P	12	201.3	\$1,507.03	\$1,040.13	\$303,409	\$209,409	\$3,640,913	\$2,512,911	
tot Band 3					2,784				\$12,201	\$10,620	\$33,966,647	\$29,565,746	
1P	G10 Band 4	1	0	P	13	70.3	\$235.19	\$220.66	\$16,536	\$15,514	\$214,974	\$201,686	
1S	G10 Band 4	1	0	S	8	35.4	\$673.27	\$410.04	\$23,820	\$14,507	\$190,563	\$116,058	
2P	G10 Band 4	2	0	P	59	166.4	\$230.98	\$196.21	\$38,437	\$32,652	\$2,267,769	\$1,926,456	
2S	G10 Band 4	2	0	S	4	64.0	\$887.66	\$688.76	\$56,810	\$44,080	\$227,241	\$176,322	
3P	G10 Band 4	3	0	P	8	214.0	\$218.87	\$351.91	\$46,838	\$75,310	\$374,703	\$602,477	
3S	G10 Band 4	3	0	S	7	18.6	\$728.43	\$725.33	\$13,527	\$13,469	\$94,688	\$94,285	
4P	G10 Band 4	4	0	P	12	332.3	\$537.03	\$821.46	\$178,471	\$272,997	\$2,141,646	\$3,275,966	
tot Band 4					111				\$49,654	\$57,597	\$5,511,583	\$6,393,250	
2P	G10 Band 5	2	0	P	4	81.0	\$230.98	\$196.21	\$18,709	\$15,893	\$74,836	\$63,573	
4P	G10 Band 5	3	0	P	1	105.0	\$537.03	\$821.46	\$56,388	\$86,254	\$56,388	\$86,254	
4S	G10 Band 5	4	0	S	4	201.3	\$903.83	\$740.56	\$181,895	\$149,037	\$727,581	\$596,149	
6S	G10 Band 5	6	0	S	3	1,203.7	\$1,808.75	\$1,318.32	\$2,177,137	\$1,586,827	\$6,531,412	\$4,760,482	
8S	G10 Band 5	8	0	S	4	326.0	\$2,645.28	\$1,812.13	\$862,360	\$590,754	\$3,449,441	\$2,363,016	
tot Band 5					16				\$677,479	\$491,842	\$10,839,658	\$7,869,474	
1P	GAC	1	0	P	1	10.0	\$235.19	\$220.66	\$2,352	\$2,207	\$2,352	\$2,207	
1S	GAC	1	0	S	1	22.0	\$673.27	\$410.04	\$14,812	\$9,021	\$14,812	\$9,021	
6S	GAC	6	0	S	1	116.0	\$1,808.75	\$1,318.32	\$209,815	\$152,926	\$209,815	\$152,926	
tot GAC					3				\$75,660	\$54,718	\$226,979	\$164,153	

Code (1)	Rate	Pipe Diameter Inches	Pipe frac (2)	Pipe Type (3)	# new Customers		New Business		Replacement		Replacement	
					last 5 years (4)	Avg Length feet (5)	\$/ft (6)	\$/ft (6)	Service Line CAPEX \$/customer	Service Line CAPEX \$/customer	Service Line CAPEX \$'s	Service Line CAPEX \$'s
0.5P	NGV	0	12	P	3	43.7	\$146.46	\$176.54	\$6,396	\$7,709	\$19,188	\$23,128
0.75	NGV	0	34	S	2	160.5	\$445.65	\$251.60	\$71,527	\$40,382	\$143,054	\$80,764
1P	NGV	1	0	P	5	155.8	\$235.19	\$220.66	\$36,643	\$34,378	\$183,215	\$171,891
1S	NGV	1	0	S	5	123.8	\$673.27	\$410.04	\$83,351	\$50,763	\$416,755	\$253,816
1.25	NGV	1	25	S	1	330.0	\$481.15	\$631.07	\$158,779	\$208,252	\$158,779	\$208,252
2P	NGV	2	0	P	44	141.6	\$230.98	\$196.21	\$32,709	\$27,786	\$1,439,176	\$1,222,571
2S	NGV	2	0	S	9	69.4	\$887.66	\$688.76	\$61,639	\$47,827	\$554,751	\$430,445
3P	NGV	3	0	P	16	181.8	\$218.87	\$351.91	\$39,779	\$63,960	\$636,469	\$1,023,366
3S	NGV	3	0	S	15	167.3	\$728.43	\$725.33	\$121,888	\$121,369	\$1,828,315	\$1,820,537
4P	NGV	4	0	P	16	251.1	\$537.03	\$821.46	\$134,826	\$206,237	\$2,157,220	\$3,299,788
4S	NGV	4	0	S	12	136.8	\$903.83	\$740.56	\$123,598	\$101,271	\$1,483,181	\$1,215,255
6P	NGV	6	0	P	3	50.7	\$1,507.03	\$1,040.13	\$76,361	\$52,703	\$229,083	\$158,110
6S	NGV	6	0	S	6	211.7	\$1,808.75	\$1,318.32	\$382,858	\$279,050	\$2,297,148	\$1,674,298
tot NGV					137				\$84,280	\$84,542	\$11,546,335	\$11,582,222
0.5P	GEN	0	12	P	8	378.5	\$146.46	\$176.54	\$55,435	\$66,819	\$443,479	\$534,552
0.75	GEN	0	34	S	172	183.4	\$445.65	\$251.60	\$81,741	\$46,149	\$14,059,486	\$7,937,585
1P	GEN	1	0	P	182	347.0	\$235.19	\$220.66	\$81,621	\$76,576	\$14,855,097	\$13,936,906
1S	GEN	1	0	S	36	352.7	\$673.27	\$410.04	\$237,456	\$144,618	\$8,548,419	\$5,206,242
1S	GEN	1	25	S	3	2,629.0	\$673.27	\$410.04	\$1,770,030	\$1,078,001	\$5,310,091	\$3,234,004
2P	GEN	2	0	P	207	1,167.1	\$230.98	\$196.21	\$269,568	\$228,996	\$55,800,526	\$47,402,213
2S	GEN	2	0	S	43	224.0	\$887.66	\$688.76	\$198,818	\$154,268	\$8,549,164	\$6,633,506
3P	GEN	3	0	P	32	1,561.8	\$218.87	\$351.91	\$341,831	\$549,623	\$10,938,590	\$17,587,928
4P	GEN	4	0	P	18	1,985.6	\$537.03	\$821.46	\$1,066,301	\$1,631,066	\$19,193,425	\$29,359,189
tot GEN					701				\$196,431	\$188,063	\$137,698,278	\$131,832,126
0.5P	G30 Dist	0	12	P	6	174.5	\$146.46	\$176.54	\$25,557	\$30,805	\$153,343	\$184,833
0.75	G30 Dist	0	34	S	22	80.8	\$445.65	\$251.60	\$36,016	\$20,334	\$792,363	\$447,345
1P	G30 Dist	1	0	P	6	113.8	\$235.19	\$220.66	\$26,773	\$25,118	\$160,636	\$150,707
1S	G30 Dist	1	0	S	13	65.7	\$673.27	\$410.04	\$44,229	\$26,937	\$574,974	\$350,176
1.25	G30 Dist	1	25	S	15	107.1	\$481.15	\$631.07	\$51,515	\$67,566	\$772,725	\$1,013,491
2P	G30 Dist	2	0	P	48	358.6	\$230.98	\$196.21	\$82,829	\$70,363	\$3,975,792	\$3,377,412
2S	G30 Dist	2	0	S	103	273.8	\$887.66	\$688.76	\$243,073	\$188,606	\$25,036,471	\$19,426,413
3P	G30 Dist	3	0	P	46	383.0	\$218.87	\$351.91	\$83,836	\$134,798	\$3,856,466	\$6,200,730
3S	G30 Dist	3	0	S	63	325.5	\$728.43	\$725.33	\$237,132	\$236,123	\$14,939,329	\$14,875,770
4P	G30 Dist	4	0	P	14	481.3	\$537.03	\$821.46	\$258,464	\$395,360	\$3,618,501	\$5,535,034
4S	G30 Dist	4	0	S	72	761.2	\$903.83	\$740.56	\$687,963	\$563,688	\$49,533,343	\$40,585,512
6P	G30 Dist	6	0	P	3	1,282.0	\$1,507.03	\$1,040.13	\$1,932,004	\$1,333,445	\$5,796,013	\$4,000,334
6S	G30 Dist	6	0	S	23	845.1	\$1,808.75	\$1,318.32	\$1,528,631	\$1,114,157	\$35,158,504	\$25,625,611
8S	G30 Dist	8	0	S	5	1,265.8	\$2,645.28	\$1,812.13	\$3,348,390	\$2,293,792	\$16,741,951	\$11,468,961
10S	G30 Dist	10	0	S	1	73.0	\$3,435.87	\$2,664.50	\$250,818	\$194,508	\$250,818	\$194,508
tot G30 Dist					440				\$366,730	\$303,266	\$161,361,230	\$133,436,839
2P	G30 Tran	2	0	P	3	1,363.0	\$230.98	\$196.21	\$314,821	\$267,438	\$944,462	\$802,315
2S	G30 Tran	2	0	S	5	1,484.6	\$887.66	\$688.76	\$1,317,818	\$1,022,527	\$6,589,090	\$5,112,637
4S	G30 Tran	4	0	S	1	53.0	\$903.83	\$740.56	\$47,903	\$39,250	\$47,903	\$39,250
6S	G30 Tran	6	0	S	2	1,593.0	\$1,808.75	\$1,318.32	\$2,881,338	\$2,100,091	\$5,762,676	\$4,200,181
8S	G30 Tran	8	0	S	1	42.0	\$2,645.28	\$1,812.13	\$111,102	\$76,109	\$111,102	\$76,109
16S	G30 Tran	16	0	S	1	95.0	\$11,096.37	\$7,618.61	\$1,054,155	\$723,767	\$1,054,155	\$723,767
tot G30 Tran					13				\$1,116,107	\$842,635	\$14,509,387	\$10,954,259

Code (1)	Rate	Pipe Diameter Inches	Pipe frac (2)	Pipe Type (3)	# new Customers last 5 years (4)	Avg Length feet (5)	New Business \$/ft (6)	Replacement \$/ft (6)	Service Line	Service Line	Service Line	Service Line
									CAPEX \$/customer	CAPEX \$/customer	CAPEX \$'s	CAPEX \$'s
0.75	Sml G50	0	34	S	5	7.4	\$445.65	\$251.60	\$3,298	\$1,862	\$16,489	\$9,309
1P	Sml G50	1	0	P	21	113.4	\$235.19	\$220.66	\$26,678	\$25,029	\$560,232	\$525,604
1S	Sml G50	1	0	S	6	19.7	\$673.27	\$410.04	\$13,241	\$8,064	\$79,446	\$48,385
1.25	Sml G50	1	25	S	3	143.7	\$481.15	\$631.07	\$69,125	\$90,663	\$207,375	\$271,989
2P	Sml G50	2	0	P	37	103.7	\$230.98	\$196.21	\$23,959	\$20,353	\$886,486	\$753,064
2S	Sml G50	2	0	S	15	121.8	\$887.66	\$688.76	\$108,117	\$83,890	\$1,621,752	\$1,258,357
3P	Sml G50	3	0	P	2	159.5	\$218.87	\$351.91	\$34,910	\$56,130	\$69,819	\$112,261
3S	Sml G50	3	0	S	3	28.0	\$728.43	\$725.33	\$20,396	\$20,309	\$61,188	\$60,928
4P	Sml G50	4	0	P	3	284.3	\$537.03	\$821.46	\$152,695	\$233,569	\$458,084	\$700,708
4S	Sml G50	4	0	S	7	679.9	\$903.83	\$740.56	\$614,474	\$503,474	\$4,301,319	\$3,524,318
6P	Sml G50	6	0	P	2	131.5	\$1,507.03	\$1,040.13	\$198,174	\$136,777	\$396,348	\$273,554
6S	Sml G50	6	0	S	7	788.7	\$1,808.75	\$1,318.32	\$1,426,585	\$1,039,780	\$9,986,098	\$7,278,463
8S	Sml G50	8	0	S	4	82.0	\$2,645.28	\$1,812.13	\$216,913	\$148,595	\$867,651	\$594,378
10S	Sml G50	10	0	S	1	467.0	\$3,435.87	\$2,664.50	\$1,604,550	\$1,244,319	\$1,604,550	\$1,244,319
tot Sml G50					116				\$182,042	\$143,583	\$21,116,838	\$16,655,639
1.25	G50 EG	1	25	S	1	163.0	\$481.15	\$631.07	\$78,427	\$102,864	\$78,427	\$102,864
2S	G50 EG	2	0	S	2	27.0	\$887.66	\$688.76	\$23,967	\$18,596	\$47,934	\$37,193
3S	G50 EG	3	0	S	1	520.0	\$728.43	\$725.33	\$378,782	\$377,171	\$378,782	\$377,171
4S	G50 EG	4	0	S	2	22.5	\$903.83	\$740.56	\$20,336	\$16,663	\$40,672	\$33,325
6S	G50 EG	6	0	S	3	232.0	\$1,808.75	\$1,318.32	\$419,630	\$305,851	\$1,258,890	\$917,554
8S	G50 EG	8	0	S	2	586.0	\$2,645.28	\$1,812.13	\$1,550,133	\$1,061,909	\$3,100,267	\$2,123,817
tot G50 EG					11				\$445,907	\$326,538	\$4,904,972	\$3,591,923
2S	G40	2	0	S	6	86.0	\$887.66	\$688.76	\$76,339	\$59,233	\$458,032	\$355,398
3S	G40	3	0	S	4	129.3	\$728.43	\$725.33	\$94,149	\$93,749	\$376,597	\$374,995
4P	G40	4	0	P	2	1,477.5	\$537.03	\$821.46	\$793,459	\$1,213,713	\$1,586,918	\$2,427,426
4S	G40	4	0	S	7	437.3	\$903.83	\$740.56	\$395,231	\$323,835	\$2,766,616	\$2,266,847
6S	G40	6	0	S	3	5.7	\$1,808.75	\$1,318.32	\$10,250	\$7,471	\$30,749	\$22,412
8S	G40	8	0	S	2	26.5	\$2,645.28	\$1,812.13	\$70,100	\$48,021	\$140,200	\$96,043
16S	G40	16	0	S	1	108.0	\$11,096.37	\$7,618.61	\$1,198,408	\$822,809	\$1,198,408	\$822,809
tot G40					25				\$262,301	\$254,637	\$6,557,518	\$6,365,930

Notes::

- (1) "code" shows Pipe type and pipe diameter size
- (2) "Pipe fraction" is a code for the pipe size—the codes 12, 34, and 25 represent .5, .75, and .25 inch diameter pipes, respectively
- (3) "Pipe type": P means plastic and S means steel.
- (4) "# of new customers" represents new customers added to SoCalGas' system in the past 5 years. For residential, core commercial and industrial customers, new customer data were used (premises that initial gas service started between 2012-2016) while all the other rate classes cover the entire population that service line history could be matched by premise as very few large new customers are added to SoCalGas system each year.
- (5) The average length was computed by dividing the total service line footage by rate class, line diameter, and pipe type by the number of customers used in the analysis
- (6) New Business is newly installed pipe, and Replacement is when we replace existing pipe. The costs represent the unit cost that is the best representation of the cost per foot, by pipe size and pipe material, to install New Business service pipe and Replacement service pipe on the Gas Distribution system.
- (7) Line Extension Credit, per SoCalGas' Rule 20, effective 04/2017

WATER HEATING	\$ 643
SPACE HEATING	\$ 698
COOKTOP & OVEN	\$ 114
DRYER STUB	\$ 160
Total	\$ 1,615

Code	Pipe Diameter Inches	Pipe Type	new Business \$/ft	Replacement \$/ft	avg labor and nonlabor \$/meter	avg \$/meter	avg \$/regulator	Total
0.5PS10	0.5	P	\$146.46	\$176.54	\$247	\$119	\$29	\$395
0.5P30	0.5	P	\$146.46	\$176.54	\$259	\$202	\$29	\$491
0.5PS40	0.5	P	\$146.46	\$176.54	\$155	\$615	\$263	\$1,032
1PS10	1	P	\$235.19	\$220.66	\$247	\$119	\$29	\$395
1P30	1	P	\$235.19	\$220.66	\$259	\$202	\$29	\$491
1P31	1	P	\$235.19	\$220.66	\$271	\$203	\$320	\$794
1PS40	1	P	\$235.19	\$220.66	\$155	\$615	\$263	\$1,032
1PS41	1	P	\$235.19	\$220.66	\$1,652	\$573	\$494	\$2,720
1PS50	1	P	\$235.19	\$220.66	\$155	\$615	\$263	\$1,032
1PS60	1	P	\$235.19	\$220.66	\$1,461	\$536	\$263	\$2,260
1PS80	1	P	\$235.19	\$220.66	\$1,461	\$655	\$311	\$2,427
2P30	2	P	\$230.98	\$196.21	\$259	\$202	\$29	\$491
0.75S10	0.75	S	\$445.65	\$251.60	\$247	\$119	\$29	\$395
0.7530	0.75	S	\$445.65	\$251.60	\$259	\$202	\$29	\$491
0.75S40	0.75	S	\$445.65	\$251.60	\$155	\$615	\$263	\$1,032
1S30	1	S	\$673.27	\$410.04	\$259	\$202	\$29	\$491
1SS40	1	S	\$673.27	\$410.04	\$155	\$615	\$263	\$1,032

Calculation of Weighted Average Service Line and Service Line Replacement Cost \$/customer

Code (1)	Rate	Pipe Diameter Inches	Pipe frac (2)	Pipe Type (3)	# New Customers		Avg Length feet (5)	New Business \$/ft (6)	Replacement \$/ft (6)	Meter and Service Line	Replacement Service Line	Service Line	Replacement Service Line	Average Meter & Regulator
					last 5 years (4)	CAPEX \$/customer				CAPEX \$/customer	CAPEX \$'s	CAPEX \$'s	Customer	
0.5PS10	SF	0	12	P	23,872	25.2	\$146.46	\$176.54	\$1,615	\$4,450	\$38,553,280	\$106,241,859	\$395.24	
0.5P30	SF	0	34	P	45,742	25.2	\$146.46	\$176.54	\$1,615	\$4,450	\$73,873,330	\$203,573,857	\$490.68	
0.5PS40	SF	1	0	P	2,106	25.2	\$146.46	\$176.54	\$1,615	\$4,450	\$3,401,190	\$9,372,711	\$1,032.45	
1PS10	SF	1	0	P	6,956	32.4	\$235.19	\$220.66	\$1,615	\$7,149	\$11,233,940	\$49,730,181	\$395.24	
1P30	SF	1	0	P	15,390	32.4	\$235.19	\$220.66	\$1,615	\$7,149	\$24,854,850	\$110,026,953	\$490.68	
1P31	SF	1	0	P	29	32.4	\$235.19	\$220.66	\$1,615	\$7,149	\$46,835	\$207,328	\$793.71	
1PS40	SF	1	0	P	3,905	32.4	\$235.19	\$220.66	\$1,615	\$7,149	\$6,306,575	\$27,917,820	\$1,032.45	
1PS41	SF	1	0	P	44	32.4	\$235.19	\$220.66	\$1,615	\$7,149	\$71,060	\$314,567	\$2,719.56	
1PS50	SF	1	0	P	486	32.4	\$235.19	\$220.66	\$1,615	\$7,149	\$784,890	\$3,474,535	\$1,032.45	
1PS60	SF	1	0	P	454	32.4	\$235.19	\$220.66	\$1,615	\$7,149	\$733,210	\$3,245,759	\$2,260.15	
1PS80	SF	1	0	P	125	32.4	\$235.19	\$220.66	\$1,615	\$7,149	\$201,875	\$893,656	\$2,426.78	
2P30	SF	1	0	P	27	97.7	\$230.98	\$196.21	\$1,615	\$19,178	\$43,605	\$517,802	\$490.68	
0.75S10	SF	0	34	S	52	9.3	\$445.65	\$251.60	\$1,615	\$2,327	\$83,980	\$121,020	\$395.24	
0.7530	SF	0	34	S	54	9.3	\$445.65	\$251.60	\$1,615	\$2,327	\$87,210	\$125,675	\$490.68	
0.75S40	SF	0	34	S	52	9.3	\$445.65	\$251.60	\$1,615	\$2,327	\$83,980	\$121,020	\$1,032.45	
1S30	SF	1	0	S	60	2.5	\$673.27	\$410.04	\$1,615	\$1,021	\$96,900	\$61,260	\$490.68	
1SS40	SF	1	0	S	54	2.5	\$673.27	\$410.04	\$1,615	\$1,021	\$87,210	\$55,134	\$1,032.45	
Tot SF					99,408				\$1,615	\$5,191	\$160,543,920	\$516,001,139	\$509	
												Service Cost for CAPEX	\$1,106	

Notes::

- (1) "code" shows Pipe type and pipe diameter size
 - (2) "Pipe fraction" is a code for the pipe size—the codes 12, 34, and 25 represent .5, .75, and .25 inch diameter pipes, respectively
 - (3) "Pipe type": **P** means plastic and **S** means steel.
 - (4) "# of new customers" represents new customers added to SoCalGas' system in the past 5 years. For residential, core commercial and industrial customers, new customer data were used (premises that initial gas service started between 2012-2016) while all the other rate classes cover the entire population that service line history could be matched by premise as very few large new customers are added to SoCalGas system each year.
 - (5) The average length was computed by dividing the total service line footage by rate class, line diameter, and pipe type by the number of customers used in the analysis
 - (6) New Business is newly installed pipe, and Replacement is when we replace existing pipe. The costs represent the unit cost that is the best representation of the cost per foot, by pipe size and pipe material, to install New Business service pipe and Replacement service pipe on the Gas Distribution system.
 - (7) Line Extension Credit, per SoCalGas' Rule 20, effective 01/2020
- | | |
|----------------------|-----------------|
| WATER HEATING | \$ 643 |
| SPACE HEATING | \$ 698 |
| COOKTOP & OVEN | \$ 114 |
| DRYER STUB | \$ 160 |
| Total | \$ 1,615 |

Code	Pipe Diameter Inches	Pipe Type	new Business \$/ft	Replacement \$/ft	avg labor and nonlabor \$/meter	avg \$/meter	avg \$/regulator	Total
0.5PM10	0.5	P	\$146.46	\$176.54	\$205	\$118	\$7	\$330
0.5P30	0.5	P	\$146.46	\$176.54	\$259	\$201	\$29	\$489
0.5PS40	0.5	P	\$146.46	\$176.54	\$155	\$645	\$263	\$1,063
1PM10	1	P	\$235.19	\$220.66	\$205	\$118	\$7	\$330
1P30	1	P	\$235.19	\$220.66	\$259	\$201	\$29	\$489
1P31	1	P	\$235.19	\$220.66	\$271	\$201	\$320	\$792
1PS40	1	P	\$235.19	\$220.66	\$155	\$645	\$263	\$1,063
1PS41	1	P	\$235.19	\$220.66	\$1,652	\$603	\$494	\$2,750
2PM10	1	P	\$235.19	\$220.66	\$205	\$118	\$7	\$330
2P30	1	P	\$235.19	\$220.66	\$259	\$201	\$29	\$489
1SM10	1	S	\$673.27	\$410.04	\$1,461.01	\$566.35	\$263	\$2,290
1S30	1	S	\$673.27	\$410.04	\$259	\$201	\$29	\$489
1SS40	1	S	\$673.27	\$410.04	\$155	\$645	\$263	\$1,063
2SM10	2	S	\$887.66	\$688.76	\$205	\$118	\$7	\$330

Calculation of Weighted Average Service Line and Service Line Replacement Cost \$/customer

Code (1)	Rate	Pipe Diameter Inches	Pipe frac (2)	Pipe Type (3)	# New Customers		Avg Length feet (5)	New Business \$/ft (6)	Replacement \$/ft (6)	Meter and Service Line	Replacement Service Line	Service Line CAPEX \$'s	Replacement Service Line	Average Meter & Regulator
					last 5 years (4)	CAPEX \$/customer				CAPEX \$/customer	CAPEX \$'s		CAPEX /Customer	
0.5PM10	MF	0	12	P	670	19.9	\$146.46	\$176.54	\$176.54	\$1,615	\$3,510	\$1,082,050	\$2,351,393	\$329.93
0.5P30	MF	0	12	P	744	19.9	\$146.46	\$176.54	\$176.54	\$1,615	\$3,510	\$1,201,560	\$2,611,099	\$489.40
0.5PS40	MF	1	12	P	46	19.9	\$146.46	\$176.54	\$176.54	\$1,615	\$3,510	\$74,290	\$161,439	\$1,062.66
1PM10	MF	1	0	P	3,330	24.2	\$235.19	\$220.66	\$220.66	\$1,615	\$5,349	\$5,377,950	\$17,811,164	\$329.93
1P30	MF	1	0	P	2,180	24.2	\$235.19	\$220.66	\$220.66	\$1,615	\$5,349	\$3,520,700	\$11,660,161	\$489.40
1PS40	MF	1	0	P	152	24.2	\$235.19	\$220.66	\$220.66	\$1,615	\$5,349	\$245,480	\$813,002	\$1,062.66
2PM10	MF	1	0	P	452	39.9	\$235.19	\$220.66	\$220.66	\$1,615	\$8,798	\$729,980	\$3,976,492	\$329.93
2P30	MF	1	0	P	112	39.9	\$235.19	\$220.66	\$220.66	\$1,615	\$8,798	\$180,880	\$985,325	\$489.40
1SM10	MF	1	0	S	56	8.3	\$673.27	\$410.04	\$410.04	\$1,615	\$3,416	\$90,440	\$191,277	\$2,290.35
1S30	MF	1	0	S	72	8.3	\$673.27	\$410.04	\$410.04	\$1,615	\$3,416	\$116,280	\$245,927	\$489.40
1SS40	MF	1	0	S	26	8.3	\$673.27	\$410.04	\$410.04	\$1,615	\$3,416	\$41,990	\$88,807	\$1,062.66
2SM10	MF	2	0	S	103	1.9	\$887.66	\$688.76	\$688.76	\$1,615	\$1,295	\$166,345	\$133,371	\$329.93
Tot MF					7,943					\$1,615	\$5,165	\$12,827,945	\$41,029,457	\$427
													Service Cost for CAPEX	\$1,188

Notes::

- (1) "code" shows Pipe type and pipe diameter size
 - (2) "Pipe fraction" is a code for the pipe size—the codes 12, 34, and 25 represent .5, .75, and .25 inch diameter pipes, respectively
 - (3) "Pipe type": **P** means plastic and **S** means steel.
 - (4) "# of new customers" represents new customers added to SoCalGas' system in the past 5 years. For residential, core commercial and industrial customers, new customer data were used (premises that initial gas service started between 2012-2016) while all the other rate classes cover the entire population that service line history could be matched by premise as very few large new customers are added to SoCalGas system each year.
 - (5) The average length was computed by dividing the total service line footage by rate class, line diameter, and pipe type by the number of customers used in the analysis
 - (6) New Business is newly installed pipe, and Replacement is when we replace existing pipe. The costs represent the unit cost that is the best representation of the cost per foot, by pipe size and pipe material, to install New Business service pipe and Replacement service pipe on the Gas Distribution system.
 - (7) Line Extension Credit, per SoCalGas' Rule 20, effective 04/2017
- | | | |
|----------------------|-----------|--------------|
| WATER HEATING | \$ | 643 |
| SPACE HEATING | \$ | 698 |
| COOKTOP & OVEN | \$ | 114 |
| DRYER STUB | \$ | 160 |
| Total | \$ | 1,615 |

SCG 2024 TCAP
 LRM Customer Cost
 Big GEMS Investment by Customer Class for Retail Noncore (exclusive use on Cust MC)

	NonCore C&I Distribution G30	NonCore C&I Transmission G30	Total NonCore C&I G30	EG G-50	EOR G-40	LB	SDG&E	SWG	Vernon	Mexicali	Source
# of Meters											
ROTARY 11M & LARGER: (*)			0	1	2	1	0	6	0	0	
TURBINE MSA'S (*)			3	29	2	0	1	7	0	1	
ORIFICE METERS (ultra sonic)			5	38	0	4	10	0	2	0	
Total # meters			8	68	4	5	11	13	2	1	

** Number of 2021 GEMS Meters at Wholesalers provided by, Measurement
 Exclusive Use
 Meter Cost

Investment in Meters:	\$/meter										
ROTARY 11M & LARGER: (*)	\$13,184	\$0	\$0	\$0	\$13,184	\$26,367	\$13,184	\$0	\$79,102	\$0	\$0
TURBINE MSA'S (*)	\$764,079	\$2,009,022	\$283,215	\$2,292,237	\$22,158,291	\$1,528,158	\$0	\$764,079	\$5,348,553	\$0	\$764,079
ORIFICE METERS (ultra sonic)	\$2,595,764	\$11,375,234	\$1,603,586	\$12,978,820	\$98,639,032	\$0	\$10,383,056	\$25,957,640	\$0	\$5,191,528	\$0
Total Investment \$'s	2021 \$s	\$13,384,256	\$1,886,801	\$15,271,057	\$120,810,507	\$1,554,525	\$10,396,240	\$26,721,719	\$5,427,655	\$5,191,528	\$764,079
allocation of Total NonCore C&I to Distribution & Transmission		88%	12%								
Total Investment \$'s	2021 \$s	\$13,215,373	\$1,862,993	\$15,078,366	\$119,286,115	\$1,534,910	\$10,265,059	\$26,384,543	\$5,359,168	\$5,126,021	\$754,438
2016 Number of Customers		519	19	538	372	30	1	1	1	1	1
Exclusive Use Cost Per Customer	2021 \$s	\$25,463.15	\$98,052.27	\$28,026.70	\$320,661.60	\$51,163.67	\$10,265,059.48	\$26,384,543.35	\$5,359,168.35	\$5,126,021.11	\$754,437.82

Tab 'cust 2'

Note : This is part of Exclusive Use Facilities Costs

Exclusive Use Meter Cost \$/meter	2021 \$s	ULTRASONIC		
		TURBINE METERS 4"-12"	ROTARY METERS 4" - 6"	METERS 4" - 16"
Avg. Labor Cost		\$110,525	\$1,144	\$230,483
Avg. Contract Cost		\$431,457	\$0	\$600,495
Avg. Materials Cost		\$222,097	\$12,040	\$1,764,786
TOTAL		\$764,079	\$13,184	\$2,595,764

SCG 2024 TCAP
LRMC Customer Cost
Allocation of Customer-Related Distribution O&M

		Residential					Core					Non-Residential				
		Single Family	Multi Family	Master Meter		Residential Total	G-10					Gas Air Conditioning	Natural Gas Vehicle	Gas Engine		
				Small	Large		Very Small	Small	Medium	Large	Very Large				Total	
1	2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313		245	718		
Customer Services O&M Costs																
2	Total Cost	2021 M\$\$	\$86,028	\$40,204	\$2,716	\$1	\$128,949	\$4,327	\$4,725	\$11,943	\$855	\$224	\$22,075	\$0	\$83	\$96
3	2021 \$		22.68	22.68	22.68	22.68	48.67	73.21	254.07	411.43	717.11	108.83	19.10	340.68	134.07	
4	2024 \$		24.52	24.52	24.52	24.52	52.61	79.13	274.62	444.70	775.09	117.63	20.65	368.22	144.91	
Customer Accounts O&M Costs																
5	Total Cost	2021 M\$\$	\$53,585	\$25,042	\$1,692	\$1	\$80,319	\$1,111	\$687	\$5,977	\$163	\$118	\$8,057	\$4	\$285	\$49
6	2021 \$		14.13	14.13	14.13	14.13	14.13	12.50	10.65	127.16	78.63	375.77	39.72	479.68	1,162.94	67.57
7	2024 \$		15.27	15.27	15.27	15.27	13.51	11.51	137.44	84.99	406.16	42.93	518.46	1,256.97	73.04	
8	segmentation by number of customers		66.71%	31.18%	2.11%	0.001%										
Meters, Reg & MSAs O&M Costs																
10	Total Cost	2021 M\$\$	\$5,587	\$2,191	\$569	\$3	\$8,351	\$3	\$4	\$5	\$1	\$0	\$13	\$0	\$0	\$0
11	2021 \$		1.47	1.24	4.75	65.21	1.47	0.03	0.06	0.11	0.39	0.57	0.06			
12	2024 \$		1.59	1.34	5.14	70.49	1.59	0.04	0.06	0.12	0.42	0.62	0.07	0.62	0.62	0.62
Service Lines O&M Costs																
13	Total Costs	2021M \$	\$45,310													
14	2024 \$		\$49,973,451													
15	Total Service Line Footage		231,707,635	58,800,895	11,613,724	14,016	302,136,270	12,721,655	6,951,318	6,611,352	562,372	116,057	26,962,754	250	60,700	625,863
16	Percent of Total Footage		70.22%	17.82%	3.52%	0.00%	91.56%	3.86%	2.11%	2.00%	0.17%	0.04%	8.17%	0.00%	0.02%	0.19%
17	Allocated SL O&M Costs	2024 \$	\$34,388,355	\$8,726,799	\$1,723,624	\$2,080	\$44,840,859	\$1,888,055	\$1,031,664	\$981,209	\$83,463	\$17,224	\$4,001,615	\$37	\$9,009	\$92,886
18	Cost Per Customer	2024 \$	\$9.07	\$4.92	\$14.39	\$40.79	\$7.89	\$21.24	\$15.99	\$20.87	\$40.17	\$55.03	\$19.73	\$4.12	\$36.77	\$129.37
Calculation of Customer Service & Information Cost (CSI) Costs Accounts (FERC Accounts 907 to 910):																
5	Total Cost	2021 M\$\$	\$13,254	\$6,194	\$418	\$0	\$19,866	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$15,696	\$0	\$3,053	\$0
3	2021 \$		3.49	3.49	3.49	3.49	3.49	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	77.38	0.00	12,459.35	0.00
4	2024 \$		3.78	3.78	3.78	3.78	3.78	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	83.64	0.00	13,466.72	0.00

Calculation of Customer Service & Information Cost (CSI) Costs Accounts (FERC Accounts 907 to 910):

139	Calculation of Customer Service & Information Costs (CSI Costs):	2021 Costs M\$	GRC Exclusion		2021 Costs in Transport		FERC Form 2	Exclusions	2021 \$
			Items	Other Adjustments	Rates				
140	907 Cus Svc-Supervision + Payroll Taxes	\$274	\$0	\$0	\$274			Self Generation (acct 908)	\$10,876,259
141	908 Cus Svc-Cust Assist Exp (PBR Ex DAP, DSM & Self-Gen)	\$267,147	(\$228,960)	\$0	\$38,187			Energy Efficiency (acct 908)	\$115,795,522
142	909 Cus Svc-Info & Instruction Exp	\$1,835	\$0	\$0	\$1,835			Low Income Energy Efficiency (acct 908)	\$102,073,863
143	910 Cus Svc-Misc CSI Exp	\$2,436	\$0	\$0	\$2,436			AB802MA (acct 908)	\$213,621
144		\$271,692	(\$228,960)	\$0	\$42,732			MEOMA (acct 908)	\$0
147								WDRMA (acct 908 and 907001)	\$596
148	CS&I O&M, 2021 \$000's				\$42,732				\$228,959,861

		Residential	CCI	G-AC	G-GEN	NGV	Total Core	NCCI	EG Tier 1	EG Tier 2	EOR	Total Retail NonCore	Long Beach
1	Calculation of CSI Cost Allocator:												
2	Energy Markets Costs:												
3	Mgmt estimate - FTE	0.0%	2.8%	0.0%	0.0%	0.0%	2.8%	7.3%	2.4%	3.3%	2.2%	6.4%	0.6%
4	Energy Markets	\$884	\$25	\$0	\$0	\$0	\$25	\$65	\$21	\$319	\$207	\$613	\$57
6	Large C&I:												
7	# Large C&I Customers	0	2,391	0	0	0	2,391	538	0	0	0	538	0
8	% Large C&I only	0.0%	81.6%	0.0%	0.0%	0.0%	81.6%	18.4%	0.0%	0.0%	0.0%	18.4%	0.0%
9	Large C&I	\$5,719	\$4,668	\$0	\$0	\$0	\$4,668	\$1,050	\$0	\$0	\$0	\$1,050	\$0
10	NGV	\$2,553	\$0	\$0	\$0	\$2,553	\$2,553	\$0	\$0	\$0	\$0	\$0	\$0
11	Residential	\$10,728	\$0	\$0	\$0	\$0	\$10,728	\$0	\$0	\$0	\$0	\$0	\$0
12	Small Business												
13	# C10, G-AC, G-GE Customers only	0	202,835	0	0	0	202,835	0	0	0	0	0	0
14	Small Business	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15	Small Business	\$1,617	\$1,617	\$0	\$0	\$0	\$1,617	\$0	\$0	\$0	\$0	\$0	\$0
16	Econ Development												
17	# Large C&I Customers	0	2,391	0	0	0	2,391	538	0	0	0	538	0
18	% Large C&I only	0.0%	81.6%	0.0%	0.0%	0.0%	81.6%	18.4%	0.0%	0.0%	0.0%	18.4%	0.0%
19	Econ Development	\$8,353	\$6,819	\$0	\$0	\$0	\$6,819	\$1,534	\$0	\$0	\$0	\$1,534	\$0
20	Other Residential	\$5,889	\$0	\$0	\$0	\$0	\$5,889	\$0	\$0	\$0	\$0	\$0	\$0
21	Total	\$35,743	\$18,617	\$13,129	\$0	\$0	\$32,299	\$2,649	\$21	\$319	\$207	\$3,197	\$57
22	Allocator %		46.5%	36.7%	0.0%	0.0%	7.1%	90.4%	7.4%	0.1%	0.9%	0.6%	8.9%

SCG 2024 TCAP
LRMC Customer Cost
Allocation of Customer-Related Distribution O&M

		Noncore											Total Over All Customers	
		G-30			Small EG	EG	EOR	Wholesale			Intl			
		Distribution	Transmission	Total	G-50	G-40	LB	SDG&E	SWG	Vernon	ECOGAS			
1 2021 Number of Customers		519	19	538	351	21	30	1	1	1	1	1		
Customer Services O&M Costs														
2	Total Cost	2021 M\$\$			\$290	\$75	\$4	\$2	\$0	\$0	\$0	\$0	\$0	\$151,574
3	Cost Per Customer:	2021 \$\$			538.34	213.35	213.35	50.03	0.00	0.00	0.00	0.00	0.00	
4		2024 \$\$			581.86	230.60	230.60	54.08	0.00	0.00	0.00	0.00	0.00	
					Total EG	\$79								
Customer Accounts O&M Costs														
5	Total Cost:	2021 M\$\$			\$898	\$604	\$36	\$51	\$7	\$5	\$11	\$4	\$3	\$90,332
6	Cost Per Customer:	2021 \$\$			1,668.83	1,720.92	1,720.92	1,696.63	6,530.71	5,087.00	10,861.85	3,643.28	2,921.42	
7		2024 \$\$			1,803.76	1,860.06	1,860.06	1,833.81	7,058.74	5,498.30	11,740.07	3,937.85	3,157.63	
8	segmentation by number of customers													
9						EG O&M cost	\$640	note: split EG costs by # of customers						
					94%	6%								
Meters, Reg & MSAs O&M Costs														
10	Total Cost	2021 M\$\$			\$62	\$513	\$61	\$42	\$8	\$8	\$17	\$1	\$1	\$9,077
11	Cost Per Customer:	2021 \$\$			115.24	1,461.54	2,904.76	1,400.00	8,000.00	8,000.00	17,000.00	1,000.00	1,000.00	
12		2024 \$\$	124.56	124.56	124.56	1,579.71	3,139.62	1,513.19	8,646.82	8,646.82	18,374.50	1,080.85	1,080.85	
Service Lines O&M Costs														
13	Total Costs	2021M \$\$												329,981,545
14		2024 \$\$												100,000
15	Total Service Line Footage		104,645	16,542	121,188	46,579	16,273	11,667	0	0	0	0	0	
16	Percent of Total Footage		0.03%	0.01%	0.04%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
17	Allocated SL O&M Costs	2024 \$\$	\$15,531	\$2,455	\$17,986	\$6,913	\$2,415	\$1,732	\$0	\$0	\$0	\$0	\$0	\$48,973,451
18	Cost Per Customer	2024 \$\$	\$29.92	\$129.21	\$33.43	\$19.70	\$115.00	\$57.72	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8.32
Calculation of Customer Service & Information														
5	Total Cost:	2021 M\$\$			\$3,167	\$26	\$382	\$248	\$69	\$65	\$75	\$55	\$30	\$42,732
3	Cost Per Customer:	2021 \$\$			5,887.41	72.96	18,175.54	8,261.26	68,590.22	64,946.55	75,148.83	55,473.00	30,252.33	7.26
4		2024 \$\$			6,363.42	78.86	19,645.09	8,929.20	74,135.95	70,197.67	81,224.84	59,958.16	32,698.32	

Calculation of Customer Service & Information

139 Calculation of Customer Service & Information
 140 907 Cus Svc-Supervision + Payroll Taxes
 141 908 Cus Svc-Cust Assist Exp (PBR Ex DAP, DSM)
 142 909 Cus Svc-Info & Instruction Exp
 143 910 Cus Svc-Misc CSI Exp
 144
 147
 148 CS&I O&M, 2021 \$000's
 149

	SDG&E	South West Gas	Vernon	Total Whole sale	DGN	UBS	Total Noncore	SYSTEM TOTAL	Sources
1 <u>Calculation of CSI Cost Allocator:</u>									
2 Energy Markets Costs:									
3 Mgmt estimate - FTE	0.6	0.7	0.5	2.3	0.3	0.0	8.9	9.2	
4 Energy Markets	6.1%	7.1%	5.3%	25.0%	2.9%	0.0%	97.2%	100.0%	
5 Energy Markets	\$54	\$63	\$46	\$221	\$25	\$0	\$859	\$884	
6 Large C&I:									
7 # Large C&I Customers	0	0	0	0	0	0	538	2,929	2021 Customer Count
8 % Large C&I only	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.4%	100.0%	
9 Large C&I	\$0	\$0	\$0	\$0	\$0	\$0	\$1,050	\$5,719	
10 NGV	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,553	
11 Residential	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,728	
12 Small Business									
13 # C10, G-AC, G-GE Customers only	0	0	0	0	0	0	0	202,835	20213 Customer Count from SCG Cust Cost model "cust 2"
14 Small Business	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
15 Small Business	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,617	
16 Econ Development									
17 # Large C&I Customers	0	0	0	0	0	0	538	2,929	2013 Customer Count from SCG Cust Cost model "cust 2"
18 % Large C&I only	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.4%	100.0%	
19 Econ Development	\$0	\$0	\$0	\$0	\$0	\$0	\$1,534	\$8,353	
20 Other Residential	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,889	
21 Total	\$54	\$63	\$46	\$221	\$25	\$0	\$3,444	\$35,743	\$35,743
22 Allocator %	0.2%	0.2%	0.1%	0.6%	0.1%	0.0%	9.6%	100.0%	

100.6%

SCG 2024 TCAP
LRMC Customer Cost
Weighted Average RECC and Replacement Factors

S10

Line			Excluded AVERAGE LABOR COST	AVERAGE METER COST	AVERAGE REGULATOR COST	AVERAGE TOTAL COST	WEIGHTED REPLACEMENT Percent	WEIGHTED RECC Percent	WEIGHTED PVRR
1.									
2.	<u>CUSTOMER CLASS</u>	<u>RATE</u>			Dollars				
3.	SINGLE FAMILY	GR	257.00	202.42	46.32	505.73	1.88%	8.65%	121.48%
4.	MULTIPLE FAMILY	GR	217.60	141.87	14.83	374.31	1.64%	8.65%	121.52%
5.	MASTER METERED BAND 1	GM,GS	841.28	504.51	295.51	1641.30	1.78%	8.56%	121.63%
6.	MASTER METERED BAND 2	GM,GS	17976.74	2677.02	1860.74	22514.50	0.73%	8.48%	121.93%
7.	RESIDENTIAL WEIGHTED AVERAGE		170.67	146.45	32.51	349.62	1.96%	8.66%	121.45%
8.	SMALL CORE BAND 1	G-10	340.12	263.02	104.02	707.17	1.93%	8.61%	121.53%
9.	SMALL CORE BAND 2	G-10	508.71	451.10	206.13	1165.95	2.08%	8.61%	121.50%
10.	SMALL CORE BAND 3	G-10	1159.64	728.69	434.08	2322.41	1.82%	8.57%	121.62%
11.	SMALL CORE BAND 4	G-10	3620.77	2445.16	1909.29	7975.21	1.95%	8.55%	121.63%
12.	SMALL CORE BAND 5	G-10	4897.05	3921.86	2931.85	11750.77	2.09%	8.56%	121.58%
13.	G10 AVERAGE		430.93	901.17	194.53	1,526.63	2.75%	8.75%	121.18%
14.	GAS COOLING	GAC	2605.71	1410.99	1070.05	5086.75	1.75%	8.54%	121.67%
15.	Natural Gas Vehicles	NGV	79940.63	4276.83	2079.11	86296.57	0.27%	8.46%	122.04%
16.	GAS ENGINES	GENG	1844.30	800.81	585.81	3230.92	1.54%	8.53%	121.72%
17.	NONCORE COMM/IND TRANSMISSION	G-30	275104.17	9282.22	2850.56	287236.96	0.16%	8.45%	122.07%
18.	NONCORE COMM/IND DISTRIBUTION	G-30	124688.07	6150.18	2799.23	133637.47	0.25%	8.46%	122.05%
19.	NONCORE COMM/IND TOTAL	G-30	130,000.16	6,260.79	2,801.04	139061.99	0.24%	8.46%	122.05%
20.	COGENERATION	G-50	94640.85	3504.80	1236.05	99381.70	0.18%	8.45%	122.06%
21.	EOR	G-40	371704.69	11358.89	2945.07	386008.65	0.14%	8.45%	122.07%
22.	SYSTEM AVERAGE		197.25	173.32	38.52	409.08	1.98%	8.66%	121.44%
22.	INVERSE OF BOOK LIFE		0.00%	4.00%	3.03%				
23.	RECC		8.44%	9.04%	8.12%				
23.	PVRR		122.12%	120.53%	122.09%				

SCG 2024 TCAP
 LRMC Customer Cost
 Weighted Average RECC and Replacement Factors

Weighted Average RECC and Replacement Factor for Exclusive Use Facilities

<u>Line</u>			GEMs	AVERAGE	WEIGHTED	WEIGHTED
	<u>RATE</u>			<u>TOTAL COST</u>	<u>REPLACEMENT</u>	<u>RECC</u>
			Dollars	Dollars	Percent	
3.	NONCORE COMM/IND TRANSMISSION	G-30	1,862,993	1,862,993	4.00%	9.04%
4.	NONCORE COMM/IND DISTRIBUTION	G-30	13,215,373	13,215,373	4.00%	9.04%
5.	NONCORE COMM/IND TOTAL	G-30	15,078,366	15,078,366	4.00%	9.04%
6.	COGENERATION	G-50	119,286,115	119,286,115	4.00%	9.04%
7.	EOR	G-40	1,534,910	1,534,910	4.00%	9.04%
8.	LONG BEACH		10,265,059	10,265,059	4.00%	9.04%
9.	SAN DIEGO GAS & ELECTRIC		26,384,543	26,384,543	4.00%	9.04%
10.	SOUTHWEST GAS		5,359,168	5,359,168	4.00%	9.04%
11.	VERNON		5,126,021	5,126,021	4.00%	9.04%
12.	DGN		754,438	754,438	4.00%	9.04%
13.	SYSTEM TOTAL		198,866,988	198,866,988	4.00%	9.04%
14.	INVERSE OF BOOK LIFE		4.00%			
15.	RECC factors		9.04%			

Source: Meter cost detail

SOUTHERN CALIFORNIA GAS

2021 Economic Assumptions Update LEVELIZED ANNUAL CAPITAL COST AND RECC FACTORS

utility social

Auth ROR ==> 7.30%

Fed Tax Rate ==> 21.00%

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

1.342%

FERC Account	Account Name	Book Life	Fed Tax Life	State Tax Life	Percent Salvage	Normlzd Federal Taxes ?	Normlzd State Taxes ?	Depreciation Method		LACC Components (in percent)					RECC Factors	PVCC Factors	Sum of Rev Req		
								Federal Tax	State Tax	Book Depr	Return on Capital	Income Taxes	Property Taxes	Total LACC					
GAS UNDERGROUND STORAGE																			
		9	10	11	12	13	14	15	16	19	20	21	22	23	25	26	27		
G-352	Wells	49	15	22	-70%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.47	3.83	0.97	0.73	9.01	7.08	119.48	224.69
G-353	Lines	54	15	22	-40%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.59	4.41	1.09	0.87	8.97	6.99	120.14	282.24
G-354	Compressor Station Equipment	41	15	22	-15%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.80	4.46	1.11	0.88	9.26	7.43	119.86	276.35
G-356	Purification Equipment	39	15	22	-30%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.33	4.16	1.04	0.80	9.34	7.53	119.75	253.27
GAS TRANSMISSION PLANT																			
G-365.1	Land	0	0	0	0%	FALSE	FALSE	none	0%	none	0%	0.00	7.30	2.10	1.34	10.74	n/a	147.12	1105.13
G-365.2	Land Rights	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	sl	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
G-366	Structures & Improvements	47	39	45	-40%	TRUE	FALSE	sl	0%	db/sl	0%	2.98	4.68	1.38	0.83	9.86	7.79	130.22	287.81
G-367	Mains	64	15	22	-60%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.50	4.40	1.09	0.87	8.86	6.81	120.09	265.76
G-368	Compressor Station Equipment	50	15	22	-15%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.30	4.67	1.15	0.94	9.06	7.11	120.42	309.85
G-369	Measuring & Regulating Equipment	46	15	22	-50%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.26	4.04	1.01	0.78	9.10	7.20	119.75	247.73
G-371	Other Equipment	21	15	22	-10%	TRUE	FALSE	db/sl	150%	db/sl	200%	5.24	4.08	1.10	0.74	11.16	9.69	118.09	203.20
GAS DISTRIBUTION PLANT																			
G-374.1	Land	0	0	0	0%	FALSE	FALSE	none	0%	db/sl	0%	0.00	7.30	2.10	1.34	10.74	n/a	147.12	1105.13
G-374.2	Land Rights	40	40	40	0%	FALSE	FALSE	sl	0%	db/sl	0%	2.50	5.17	1.49	0.93	10.09	8.11	130.02	313.88
G-375	Structures & Improvements	40	39	45	-10%	TRUE	FALSE	sl	0%	db/sl	0%	2.75	4.99	1.47	0.89	10.10	8.12	130.11	302.03
G-376	Mains	68	20	35	-80%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.65	4.38	1.19	0.84	9.05	6.92	122.96	231.10
G-378	Measuring & Regulating Equipment	47	20	35	-95%	TRUE	FALSE	db/sl	150%	db/sl	200%	4.15	3.50	1.00	0.62	9.27	7.32	122.34	191.81
G-380	Services	67	20	35	-115%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.21	3.94	1.11	0.73	8.99	6.89	122.09	150.81
G-381	Meters	25	20	35	5%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.80	4.62	1.34	0.86	10.62	9.04	120.53	229.99
G-382	Meter & Regulator Installations	30	20	35	-10%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.67	4.41	1.24	0.82	10.14	8.44	122.12	243.24
G-383	House Regulators	33	20	35	5%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.88	4.77	1.32	0.91	9.88	8.12	122.09	266.77
G-387	Other Equipment	21	20	35	5%	TRUE	FALSE	db/sl	150%	db/sl	200%	4.52	4.57	1.37	0.83	11.29	9.80	119.44	211.60
GAS GENERAL PLANT																			
G-390	Structures & Improvements	33	39	45	-15%	TRUE	FALSE	sl	0%	db/sl	0%	3.48	4.74	1.43	0.82	10.47	8.61	129.47	269.48
G-391.1	Office Furniture & Equipment	14	7	10	0%	TRUE	FALSE	db/sl	200%	db/sl	200%	7.14	3.81	0.97	0.73	12.65	11.45	108.66	166.78
G-391.2	Computer Equipment	5	5	6	0%	TRUE	FALSE	db/sl	200%	db/sl	200%	20.00	3.78	1.09	0.57	25.44	24.59	103.47	125.64
G-393	Stores Equipment	20	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	5.00	4.45	1.33	0.79	11.56	10.09	119.69	205.90
G-394.1	Shop & Garage Equipment	29	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.45	4.59	1.30	0.86	10.20	8.52	121.60	245.35
G-394.3	Large Portable Tools	24	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	4.17	4.50	1.31	0.82	10.80	9.23	120.67	223.46
G-395	Laboratory Equipment	25	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	4.00	4.52	1.30	0.83	10.65	9.06	120.88	227.84
G-397	Communications Equipment	15	7	10	0%	TRUE	FALSE	db/sl	200%	db/sl	200%	6.07	3.82	0.96	0.74	12.19	10.96	108.93	171.15
G-398	Miscellaneous Equipment	20	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	5.00	4.45	1.33	0.79	11.56	10.09	119.69	205.90
G-391.5	Software Programs - 10yr ASL	10	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%	10.00	3.51	0.76	0.68	14.95	13.91	103.58	146.07
G-391.55	Software Programs - 15yr ASL	15	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%	6.67	3.61	0.74	0.74	11.75	10.57	105.06	167.96
G-391.6	Software Programs - 20yr ASL	20	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%	5.00	3.74	0.74	0.79	10.26	8.96	106.26	189.85
G-391.3	Software Programs - 3yr ASL	3	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%	33.33	3.76	1.08	0.47	38.65	37.98	100.87	115.42
G-391.4	Software Programs - 6yr ASL	6	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%	16.67	3.52	0.84	0.60	21.63	20.74	102.14	128.56

Calculation of Marginal Customer Costs 2024 \$/Customer					
Customer Class	CAPEX \$/customer	RECC %	Annualized CAPEX (\$/customer/year)	O&M and Loaders (\$/customer/ year)	Marginal Unit Cost 2024 (\$/customer/ year)
Residential	\$1,936.79	7.37%	\$142.76	\$145.62	\$288.38
Core C/I ¹⁴	\$12,388.50	7.09%	\$878.76	\$724.76	\$1,603.52
Gas A/C ¹⁵	\$84,402.52	6.99%	\$5,899.62	\$1,491.30	\$7,390.92
Gas Engine ¹⁶	\$208,702.74	6.91%	\$14,426.44	\$953.52	\$15,379.96
NGV	\$178,300.01	7.68%	\$13,695.81	\$41,532.12	\$55,227.93
Noncore C/I ¹⁷	\$587,618.19	7.39%	\$43,399.46	\$24,452.12	\$67,851.57
Small EG ¹⁸	\$294,166.14	7.44%	\$21,884.11	\$10,346.66	\$32,230.78
Large EG ¹⁹	\$1,703,116.58	8.13%	\$138,533.17	\$68,605.03	\$207,138.21
EOR ²⁰	\$728,828.22	7.90%	\$57,602.56	\$34,008.27	\$91,610.84
Long Beach ²¹	\$10,265,059.48	9.04%	\$927,589.73	\$246,637.98	\$1,174,227.71
SDG&E ²²	\$26,384,543.35	9.04%	\$2,384,207.47	\$231,542.60	\$2,615,750.06
Southwest Gas ²³	\$5,359,168.35	9.04%	\$484,274.79	\$305,655.23	\$789,930.02
Vernon ²⁴	\$5,126,021.11	9.04%	\$463,206.72	\$178,378.16	\$641,584.88
Ecogas ²⁵	\$754,437.82	9.04%	\$68,173.86	\$101,400.99	\$169,574.86

¹⁴ Core C&I are the Core Commercial & Industrial customers

¹⁵ Gas A/C are the Gas Air Conditioning for Commercial & Industrial customers

¹⁶ Gas Engine are Core Gas Engine Water Pumping Service for Commercial and Industrial

¹⁷ Noncore C/I are Noncore Commercial & Industrial customers

¹⁸ Small EG are Electric Generation customers with usage less than 3 million therms/year

¹⁹ Large EG are Electric Generation customers with usage greater than 3 million therms/year

²⁰ EOR are Enhanced Oil Refinery customers

²¹ Long Beach is the Wholesale - City of Long Beach customer

²² SDG&E is the Wholesale – San Diego Gas & Electric customer

²³ SW Gas is the Wholesale – Southwest Gas Corporation’s service territory in southern California

²⁴ Vernon is the Wholesale – City of Vernon customer

²⁵ Ecogas is the Wholesale – ECOGAS Mexico, S. de R.L. de C.V. customer

**SoCalGas
2024 TCAP**

**Section 2
Long Run Marginal Distribution Cost Model**

Workpapers to the Prepared Written Testimony of Marjorie Schmidt-Pines

General Information about the Distribution Model

This model estimates Demand-related Long Run Marginal Costs (LRMC) for SoCalGas' Distribution Systems, separately for High Pressure and Medium Pressure Distribution Systems.

This workbook contains multiples sheets. These sheets are categorized into:

- a) **Input/Calculations Sheets,**
- b) **Output/Calculation Sheets, and**

Below is a description of each of these sheets

Input/Calculation Sheets:

HPD_Peak_Month_Demand: Cost Driver for High Pressure Distribution Mains. It contains 3 Tables:

- 1: Peak Month Demand by Customer Class: Historical Data,
- 2: Peak Month Demand by Customer Class: Forecast Data,
- 3: Number of customers by class: Historical Data,
- 4: Number of customers by class: Forecasted Data, and
- 5: Level of usage of High Pressure Distribution Service by Customer Class.

MPD_Pe: contains 3 Tables:

- 1: Peak Day Demand by Customer Class: Historical Data,
- 2: Peak Day Demand by Customer Class: Forecast Data, and
- 3: Level of Usage of Medium Pressure Distribution Services by Customer Class.

IN_Investment_History: It contains Historical inputs needed to estimate Annualized Investment-related LRMC. It includes 9 Tables:

- 1: High Pressure Distribution (HPD) Mains Footage Investment: New Business & Replacement Combined,
- 2: Total Plastic Distribution Mains Footage Investment: New Business & Replacement Combined,
(Note: no HP Plastic Distribution Mains)
- 3: Total Steel Distribution Mains (including HP) Footage Investment: New Business & Replacement Combined,
(Medium Pressure (MP) Steel Distribution Mains Footage is calculated as the residual)
- 4: Plastic New Business Vs. Replacement Distribution Mains Footage: Based on a Sample Survey,
- 5: Steel New Business Vs. Replacement Distribution Mains Footage: Based on a Sample Survey,
- 6: Plastic Mains Pressure Betterment Investment as a Fraction of Total Plastic Mains Investment,
- 7: Steel Mains Pressure Betterment Investment as a Fraction of Total Steel Mains Investment,
- 8: Contribution in Aid of Construction as a Fraction of Total Distribution Mains Cost,
- 9: Account 378 (Meters & Regulator Stations) Investment Info.

OUT_Investment_Forecast: It contains Forecasted inputs needed to estimate Annualized Investment-related LRMC. It includes 1 Table:

- 1: Forecasted Distribution-related Investment Costs:

Intermediate Output/Calculation Sheets:

HPD_Peak_Month_Demand: It calculates 4 Tables:

- 1: Peak Month Demand for Additional Customers Served by Customer Class,
- 2: Average Coincident Peak Month Demand per Customer,
- 3: Coincident Peak Month Demand for additional Customer served, and
- 4: High Pressure Distribution-Service-Usage-Weighted Coincident Peak Month Demand for Additional Customers Served.

Peak_Day_Demand: It calculates 5 Tables:

- 1: Number of Customers by Class,
- 2: Number of Additional Customers Served,
- 3: Average Peak Day Demand per Customer,
- 4: Peak Day Demand for Additional Customer served, and
- 5: Medium Pressure Distribution-Service-Usage-Weighted Peak Day Demand for Additional Customers Served.

OUT_Investment_History: It contains 4 Tables:

- 1: Plastic Distribution Mains: New Business, Pressure Betterment & Contribution in Aid of New Construction.
- 2: Steel Distribution Mains: New Business, Pressure Betterment & Contribution in Aid of New Construction.
- 3: High Pressure Distribution Mains: New Business, Pressure Betterment & Contribution in Aid of New Construction.
- 4: Load-Growth-related HP & MP Distribution Investments by Components & Total

OUT_Investment_Forecast: It contains 1 Table:

- 1: Allocation Factor, High & Medium Pressure Distribution Mains Forecasted Investments

OUT_MP_LRMC: It contains 4 Table:

- 1: System Demand Determinate, it estimates the distribution LRMC
- 2: Regression of Distribution Investment, it estimates Regression Coefficients for MP and HP Investment
- 3: Calculate Weighted Average RECC Factor, it estimates Regression Coefficients for HP Investment
- 4: % Share of investment between MPD and HPD

ble:

HPD Peak Month
2024 TCAP

Year	Residential	Core C&I G10	Gas AC	NGV	Gas Eng	Total Core	NonCore C&I G-30	EOR G-40	EG G-50	Total Noncore	Wholesale	Total System	Cumulative Total
Table 1: Coincident Peak Month Demand by Customer Class (Mcf): Analysis Period													
2011	33,158,369	10,274,743	4,780	821,302	61,959	44,321,152	12,624,707	1,197,599	26,180,912	40,003,218	0	84,324,370	(1)
2012	33,529,230	10,561,089	4,488	887,719	80,223	45,062,748	12,336,990	574,786	23,602,690	36,514,465		81,577,213	
2013	34,474,944	10,688,621	4,643	914,448	119,725	46,202,380	12,035,985	2,017,821	23,384,401	37,438,207		83,640,587	
2014	34,233,857	10,535,790	5,216	961,365	88,873	45,825,102	13,118,963	1,770,415	21,835,259	36,724,637		82,549,739	
2015	32,267,744	10,664,737	4,371	919,641	73,833	43,930,326	12,018,388	1,709,949	19,658,518	33,386,855		77,317,181	
2016	31,079,807	10,195,310	5,105	1,100,279	98,288	42,478,789	14,272,532	1,978,620	18,744,194	34,995,345		77,474,134	
2017	35,464,898	11,414,321	5,593	1,189,689	111,750	48,186,250	13,472,390	1,411,859	15,095,793	29,980,042		78,166,292	
2018	34,433,021	11,225,909	1,275	1,205,263	83,698	46,949,166	13,250,126	1,686,235	15,063,031	29,999,392		76,948,558	
2019	34,174,027	11,182,613	1,055	1,236,293	76,692	46,670,678	13,563,407	1,559,018	18,977,545	34,099,970		80,770,648	
2020	35,214,192	9,995,333	564	1,069,007	99,958	46,379,053	13,180,122	1,498,188	17,588,672	32,266,981		78,646,035	
2021	33,036,733	10,613,559	923	1,292,908	83,739	45,027,863	12,825,458	799,403	18,831,785	32,456,645		77,484,508	
2022	36,580,938	10,883,426	867	1,330,579	87,015	48,882,826	13,838,557	1,296,573	18,810,465	33,945,594	0	82,828,420	
2023	36,159,492	10,578,875	867	1,357,046	87,015	48,183,295	13,855,442	1,296,573	18,797,216	33,949,231	0	82,132,526	
2024	35,599,937	10,295,184	867	1,387,516	87,015	47,370,519	13,874,784	1,296,573	17,478,912	32,650,269	0	80,020,788	
2025	34,942,272	10,036,879	867	1,420,599	87,015	46,487,633	13,869,130	1,296,573	16,811,896	31,977,599	0	78,465,232	
2026	34,320,756	9,808,977	867	1,455,538	87,015	45,673,152	13,862,758	1,257,675	16,408,590	31,529,024	0	77,202,176	

Table 1': Number of Customers by Class

2011	5,355,438	205,300	12	198	699	5,561,647	615	33	189	837	0	5,562,484
2012	5,380,407	204,351	10	199	695	5,585,662	607	38	199	844	0	5,586,506
2013	5,422,975	206,292	9	205	709	5,630,190	577	32	220	829	0	5,631,019
2014	5,446,579	204,616	9	218	712	5,652,134	571	32	228	831	0	5,652,965
2015	5,475,689	203,977	10	226	714	5,680,616	565	34	247	846	0	5,681,462
2016	5,516,213	203,580	9	245	718	5,720,765	554	33	313	900	0	5,721,665
2017	5,552,767	203,710	9	251	711	5,757,448	572	24	344	940	0	5,758,388
2018	5,585,261	203,226	6	262	691	5,789,446	567	24	346	937	0	5,790,383
2019	5,621,561	203,895	5	262	682	5,826,405	572	23	350	945	0	5,827,350
2020	5,651,072	202,864	4	282	658	5,854,880	565	22	367	954	0	5,855,834
2021	5,684,763	202,835	4	290	639	5,888,531	554	22	364	940	0	5,889,471
2022	5,710,782	203,089	5	359	29	5,970,638	595	34	391	1,019	0	5,971,658
2023	5,753,044	203,153	5	366	29	5,956,596	584	34	380	998	0	5,957,594
2024	5,794,138	203,096	5	373	29	5,997,640	588	34	383	1,005	0	5,998,645
2025	5,834,165	203,035	5	380	29	6,037,613	591	34	388	1,013	0	6,038,626
2026	5,873,684	202,991	5	387	29	6,077,095	593	34	389	1,016	0	6,078,111
2027	5,912,768	202,935	5	393	29	6,116,129	595	34	391	1,019	0	6,117,148

Table 2: Number of Additional Customers Served by Customer Class = change in # customers each year

2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	24,969	0	0	1	0	24,970	0	5	10	7	0	24,977
2013	42,568	1,941	0	6	14	44,529	0	0	21	0	0	44,529
2014	23,604	0	0	13	3	23,620	0	0	8	2	0	23,622
2015	29,110	0	1	8	2	29,121	0	2	19	15	0	29,136
2016	40,524	0	0	19	4	40,547	0	0	66	54	0	40,601
2017	36,554	130	0	6	0	36,690	18	0	31	40	0	36,730
2018	32,494	0	0	11	0	32,505	0	0	2	0	0	32,505
2019	36,300	669	0	0	0	36,969	5	0	4	8	0	36,977
2020	29,511	0	0	20	0	29,531	0	0	17	9	0	29,540
2021	33,691	0	0	8	0	33,699	0	0	0	0	0	33,699
2022	26,019	254	1	69	0	26,342	41	12	27	79	0	26,421
2023	42,262	64	0	7	0	42,333	0	0	0	0	0	42,333
2024	41,094	0	0	7	0	41,101	4	0	3	7	0	41,108
2025	40,027	0	0	7	0	40,034	3	0	4	8	0	40,042
2026	39,519	0	0	7	0	39,526	2	0	1	3	0	39,529

Table 2: Average Coincident Peak Month Demand Per Customer (Mcf) = Total Demand by class / total # customers in class

2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	6.2	51.7	448.8	4,460.9	115.4	5,083	20,324.5	15,125.9	118,606.5	43,263.6	0.0	48,347
2013	6.4	51.8	515.9	4,460.7	168.9	5,204	20,859.6	63,056.9	106,292.7	45,160.7	0.0	50,364
2014	6.3	51.5	579.6	4,409.9	124.8	5,172	22,975.4	55,325.5	95,768.7	44,193.3	0.0	49,365
2015	5.9	52.3	437.1	4,069.2	103.4	4,668	21,271.5	50,292.6	79,589.1	39,464.4	0.0	44,132
2016	5.6	50.1	567.3	4,490.9	136.9	5,251	25,762.7	59,958.2	59,885.6	38,883.7	0.0	44,135
2017	6.4	56.0	621.4	4,739.8	157.2	5,581	23,553.1	58,827.5	43,883.1	31,893.7	0.0	37,474
2018	6.2	55.2	212.4	4,600.2	121.1	4,995	23,368.8	70,259.8	43,534.8	32,016.4	0.0	37,012
2019	6.1	54.8	210.9	4,718.7	112.5	5,103	23,712.3	67,783.4	54,221.6	36,084.6	0.0	41,188
2020	6.2	49.3	141.1	3,790.8	151.9	4,139	23,327.6	68,099.4	47,925.5	33,822.8	0.0	37,962
2021	5.8	52.3	230.8	4,458.3	131.0	4,878	23,150.6	36,336.5	51,735.7	34,528.3	0.0	39,407
2022	6.4	53.6	192.7	3,706.3	3,003.3	6,962	23,274.3	38,134.5	48,132.7	33,299.9	0.0	40,262
2023	6.3	52.1	192.7	3,707.8	3,003.3	6,962	23,715.5	38,134.5	49,446.1	34,004.0	0.0	40,966
2024	6.1	50.7	192.7	3,719.9	3,003.3	6,973	23,594.5	38,134.5	45,587.8	32,472.9	0.0	39,446
2025	6.0	49.4	192.7	3,738.4	3,003.3	6,990	23,452.1	38,134.5	43,357.3	31,563.1	0.0	38,553
2026	5.8	48.3	192.7	3,761.1	3,003.3	7,011	23,371.2	36,990.5	42,180.4	31,027.4	0.0	38,039

Table 3: Coincident Peak Month Demand For Additional Customers Served (Mcf) = # additional customers * average demand per customers

2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	155,600	0	0	4,461	0	126,922,732	0	75,630	1,186,065	302,845	0	1,207,552,857
2013	270,613	100,569	0	26,764	2,364	231,713,114	0	0	2,232,147	0	0	2,242,673,200
2014	148,360	0	0	57,329	374	122,165,206	0	0	766,149	88,387	0	1,166,109,808
2015	171,543	0	437	32,554	207	135,933,996	0	100,585	1,512,194	591,966	0	1,285,837,826
2016	228,323	0	0	85,328	548	212,904,460	0	0	3,952,450	2,099,721	0	1,791,905,774
2017	233,466	7,284	0	28,439	0	204,759,897	423,956	0	1,360,377	1,275,746	0	1,376,437,320
2018	200,325	0	0	50,603	0	162,369,116	0	0	87,070	0	0	1,203,063,066
2019	220,671	36,691	0	0	0	188,650,937	118,561	0	216,886	288,677	0	1,522,992,907
2020	183,895	0	0	75,816	0	122,237,452	0	0	814,734	304,405	0	1,121,401,153
2021	195,794	0	0	35,666	0	164,392,638	0	0	0	0	0	1,327,963,376
2022	166,667	13,585	96	255,738	0	183,402,825	944,600	457,614	1,290,175	2,643,683	0	1,063,785,360
2023	265,628	3,333	0	25,954	0	294,729,255	0	0	0	0	0	1,734,218,797
2024	252,487	0	0	26,039	0	286,586,843	90,049	0	148,431	229,663	0	1,621,533,233
2025	239,732	0	0	26,169	0	279,832,537	78,107	0	188,187	242,115	0	1,543,723,594
2026	230,915	0	0	26,328	0	277,127,610	41,474	0	53,063	94,094	0	1,503,632,791
2027	0	0	0	0	0	0	0	0	0	0	0	0

Table 1: Level of Usage of High Pressure Distribution Service by Customer Class

all years	100.00%	99.19%	100.00%	87.09%	14.00%	54.36%	71.72%	15.69%
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Table 4: High Pressure Distribution-Service-Usage-Weighted Coincident Peak Month Demand For Additional Customers Served (Mcf) = total demand for additional customers * % of customers that use HPD system.

2011	0	0	0	0	0	0	0	0	0	0	0	0	0
2012	155,594	0	0	3,885	0	155,594	0	54,244	186,151	240,395	0	395,989	395,989
2013	270,603	99,750	0	23,309	331	370,684	0	0	350,331	350,331	0	721,016	1,117,005
2014	148,355	0	0	49,927	52	148,407	0	0	120,246	120,246	0	268,653	1,385,657
2015	171,536	0	437	28,350	29	172,002	0	72,143	237,336	309,479	0	481,481	1,867,138
2016	228,314	0	0	74,311	77	228,391	0	0	620,330	620,330	0	848,721	2,715,859
2017	233,457	7,225	0	24,767	0	240,682	230,484	0	213,509	443,992	0	684,675	3,400,534
2018	200,317	0	0	44,069	0	200,317	0	0	13,665	13,665	0	213,983	3,614,516
2019	220,663	36,393	0	0	0	257,055	64,456	0	34,040	98,496	0	355,551	3,970,067
2020	183,888	0	0	66,027	0	183,888	0	0	127,871	127,871	0	311,759	4,281,827
2021	195,786	0	0	31,061	0	195,786	0	0	0	0	0	195,786	4,477,613
2022	166,661	13,474	96	222,718	0	180,231	513,532	328,215	202,491	1,044,238	0	1,224,469	5,702,082
2023	265,618	3,306	0	22,603	0	268,924	0	0	0	0	0	268,924	5,971,006
2024	252,477	0	0	22,677	0	252,477	48,955	0	23,296	72,251	0	324,728	6,295,734
2025	239,722	0	0	22,790	0	239,722	42,463	0	29,536	71,998	0	311,721	6,607,454
2026	230,906	0	0	22,928	0	230,906	22,548	0	8,328	30,876	0	261,782	6,869,236
2027	0	0	0	0	0	0	0	0	0	0	0	0	6,869,236

MPD Peak Day Demand
2024 TCAP

Year	Core C&I					Total Core	NonCore			Total Noncore	Wholesale	Total System	Cummulative Total
	Residential	G10	Gas AC	NGV	Gas Eng		C&I G-30	EOR G-40	EG G-50				
Table 1: Peak Day Demand by Customer Class (Mcf): Analysis Period													
2011	0	0	0	0	0	0	0	0	0	0	0	0	0
2012	2,262,015	544,545	145	28,636	2,588	2,837,929	504,588	18,541	830,676	1,353,805	0	4,191,734	
2013	2,300,224	549,658	150	29,498	3,862	2,883,391	492,277	65,091	822,993	1,380,361	0	4,263,752	
2014	2,297,952	543,272	168	31,012	2,867	2,875,271	536,571	57,110	768,472	1,362,153	0	4,237,425	
2015	2,242,576	547,557	141	29,666	2,382	2,822,322	491,557	55,160	691,864	1,238,581	0	4,060,902	
2016	2,212,797	531,975	165	35,493	3,171	2,783,600	583,752	63,826	659,685	1,307,264	0	4,090,863	
2017	2,362,245	571,420	180	38,377	3,605	2,975,827	551,026	45,544	531,283	1,127,853	0	4,103,680	
2018	2,336,114	564,866	41	38,879	2,700	2,942,601	541,935	54,395	530,130	1,126,460	0	4,069,061	
2019	2,335,726	564,137	34	39,880	2,474	2,942,252	554,749	50,291	667,898	1,272,937	0	4,215,189	
2020	2,376,353	525,006	18	34,484	3,224	2,939,086	539,072	48,329	619,018	1,206,419	0	4,145,504	
2021	2,312,902	544,723	30	41,707	2,701	2,902,063	524,566	25,787	662,768	1,213,121	0	4,115,185	
2022	2,272,650	550,291	28	42,922	2,807	2,868,698	563,968	41,825	663,211	1,269,003	0	4,137,702	
2023	2,243,620	536,949	28	43,776	2,807	2,827,180	564,660	41,825	654,721	1,261,206	0	4,088,386	
2024	2,210,342	524,337	28	44,759	2,807	2,782,272	565,483	41,825	621,950	1,229,258	0	4,011,531	
2025	2,174,104	512,599	28	45,826	2,807	2,735,364	565,257	41,825	593,299	1,200,380	0	3,935,744	
2026	2,139,234	502,207	28	46,953	2,807	2,691,229	565,056	40,570	574,713	1,180,339	0	3,871,568	

Table 1': Number of Customers by Class

2012	5,355,438	205,300	12	198	699	5,561,647	615	33	189	837	0	5,562,484
2013	5,380,407	204,351	10	199	695	5,585,662	607	38	199	844	0	5,586,506
2014	5,422,975	206,292	9	205	709	5,630,190	577	32	220	829	0	5,631,019
2015	5,446,579	204,616	9	218	712	5,652,134	571	32	228	831	0	5,652,965
2016	5,475,689	203,977	10	226	714	5,680,616	565	34	247	846	0	5,681,462
2017	5,516,213	203,580	9	245	718	5,720,765	554	33	313	900	0	5,721,665
2018	5,552,767	203,710	9	251	711	5,757,448	572	24	344	940	0	5,758,388
2019	5,585,261	203,226	6	262	691	5,789,446	567	24	346	937	0	5,790,383
2020	5,621,561	203,895	5	262	682	5,826,405	572	23	350	945	0	5,827,350
2021	5,651,072	202,864	4	282	658	5,854,880	565	22	367	954	0	5,855,834
2022	5,684,763	202,835	4	290	639	5,888,531	554	22	364	940	0	5,889,471
2023	5,710,782	203,089	5	359	29	5,914,263	595	34	391	1,019	0	5,915,282
2024	5,753,044	203,153	5	366	29	5,956,596	584	34	380	998	0	5,957,594
2025	5,794,138	203,096	5	373	29	5,997,640	588	34	383	1,005	0	5,998,645
2026	5,834,165	203,035	5	380	29	6,037,613	591	34	388	1,013	0	6,038,626
2027	5,873,684	202,991	5	387	29	6,077,095	593	34	389	1,016	0	6,078,111

Table 2: Number of Additional Customers Served by Customer Class = change in # customers each year

2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	24,969	0	0	1	0	24,970	0	5	10	15	0	24,985
2013	42,568	1,941	0	6	14	44,529	0	0	21	21	0	44,550
2014	23,604	0	0	13	3	23,620	0	0	8	8	0	23,628
2015	29,110	0	1	8	2	29,121	0	2	19	21	0	29,142
2016	40,524	0	0	19	4	40,547	0	0	66	66	0	40,613
2017	36,554	130	0	6	0	36,690	18	0	31	49	0	36,739
2018	32,494	0	0	11	0	32,505	0	0	2	2	0	32,507
2019	36,300	669	0	0	0	36,969	5	0	4	9	0	36,978
2020	29,511	0	0	20	0	29,531	0	0	17	17	0	29,548
2021	33,691	0	0	8	0	33,699	0	0	0	0	0	33,699
2022	26,019	254	1	69	0	26,342	41	12	27	79	0	26,421
2023	42,262	64	0	7	0	42,333	0	0	0	0	0	42,333
2024	41,094	0	0	7	0	41,101	4	0	3	7	0	41,108
2025	40,027	0	0	7	0	40,034	3	0	4	8	0	40,042
2026	39,519	0	0	7	0	39,526	2	0	1	3	0	39,529

Table 2: Average Peak Day Demand Per Customer (Mcf/d) = Total Demand by class / total # customers in class

2006	0	0	0	0	0	0	0	0	0	0	0	0
2012	0.42	2.66	14.48	143.90	3.72	0.51	831.28	487.93	4174.25	1604.03	0.00	0.75
2013	0.42	2.66	16.64	143.89	5.45	0.51	853.17	2034.09	3740.88	1665.09	0.00	0.76
2014	0.42	2.66	18.70	142.26	4.03	0.51	939.70	1784.69	3370.49	1639.17	0.00	0.75
2015	0.41	2.68	14.10	131.26	3.34	0.50	870.01	1622.34	2801.07	1464.04	0.00	0.71
2016	0.40	2.61	18.30	144.87	4.42	0.49	1053.70	1934.13	2107.62	1452.52	0.00	0.71
2017	0.43	2.81	20.05	152.90	5.07	0.52	963.33	1897.66	1544.43	1199.84	0.00	0.71
2018	0.42	2.78	6.85	148.39	3.91	0.51	955.79	2266.44	1532.17	1202.20	0.00	0.70
2019	0.42	2.77	6.80	152.22	3.63	0.50	969.84	2186.56	1908.28	1347.02	0.00	0.72
2020	0.42	2.59	4.55	122.28	4.90	0.50	954.11	2196.76	1686.70	1264.59	0.00	0.71
2021	0.41	2.69	7.44	143.82	4.23	0.49	946.87	1172.15	1820.79	1290.55	0.00	0.70
2022	0.40	2.71	6.22	119.56	96.88	0.49	948.51	1230.14	1697.04	1244.87	0.00	0.70
2023	0.39	2.64	6.22	119.61	96.88	0.47	966.49	1230.14	1722.24	1263.24	0.00	0.69
2024	0.38	2.58	6.22	120.00	96.88	0.46	961.62	1230.14	1622.15	1222.58	0.00	0.67
2025	0.37	2.52	6.22	120.59	96.88	0.45	955.82	1230.14	1530.10	1184.82	0.00	0.65
2026	0.36	2.47	6.22	121.33	96.88	0.44	952.63	1193.24	1477.37	1161.56	0.00	0.64

Table 3: Peak Day Demand For Additional Customers Served (Mcf/d) = # additional customers * average demand per customers

2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	10,497	0	0	144	0	10,641	0	2,440	41,742	44,182	0	54,823
2013	18,056	5,172	0	863	76	24,167	0	0	78,558	78,558	0	102,726
2014	9,959	0	0	1,849	12	11,820	0	0	26,964	26,964	0	38,784
2015	11,922	0	14	1,050	7	12,993	0	3,245	53,220	56,465	0	69,458
2016	16,256	0	0	2,753	18	19,026	0	0	139,103	139,103	0	158,129
2017	15,551	365	0	917	0	16,833	17,340	0	47,877	65,217	0	82,050
2018	13,591	0	0	1,632	0	15,223	0	0	3,064	3,064	0	18,288
2019	15,082	1,851	0	0	0	16,933	4,849	0	7,633	12,482	0	29,416
2020	12,410	0	0	2,446	0	14,855	0	0	28,674	28,674	0	43,529
2021	13,708	0	0	1,151	0	14,858	0	0	0	0	0	14,858
2022	10,354	687	3	8,250	0	19,294	38,496	14,762	45,488	98,746	0	118,040
2023	16,482	169	0	837	0	17,488	0	0	0	0	0	17,488
2024	15,676	0	0	840	0	16,516	3,670	0	5,282	8,952	0	25,468
2025	14,916	0	0	844	0	15,760	3,183	0	6,641	9,825	0	25,585
2026	14,393	0	0	849	0	15,242	1,691	0	1,859	3,549	0	18,791

Table 1: Level of Usage of Medium Pressure Distribution Service by Customer Class

all years	99.61%	94.23%	100.00%	48.20%	81.31%	17.74%	0.01%	6.04%
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Source: Demand Forecast TCAP, updated 7-5-2022

Table 4: Medium Pressure Distribution-Service-Usage-Weighted Peak Day Demand For Additional Customers Served (Mcf/d) = total demand for additional customers * % of customers that use HPD system.

2011	0	0	0	0	0	0	0	0	0	0	0	0	0
2012	10,457	0	0	69	0	10,526	0	0	2,521	2,521	0	13,047	13,047
2013	17,986	4,873	0	416	62	23,338	0	0	4,745	4,745	0	28,082	41,130
2014	9,920	0	0	891	10	10,821	0	0	1,629	1,629	0	12,450	53,580
2015	11,876	0	14	506	5	12,402	0	0	3,214	3,215	0	15,616	69,196
2016	16,193	0	0	1,327	14	17,534	0	0	8,401	8,401	0	25,935	95,131
2017	15,491	344	0	442	0	16,276	3,077	0	2,892	5,969	0	22,245	117,376
2018	13,538	0	0	787	0	14,325	0	0	185	185	0	14,510	131,886
2019	15,024	1,744	0	0	0	16,768	860	0	461	1,321	0	18,090	149,976
2020	12,362	0	0	1,179	0	13,541	0	0	1,732	1,732	0	15,272	165,249
2021	13,654	0	0	555	0	14,209	0	0	0	0	0	14,209	179,458
2022	10,314	647	3	3,977	0	14,941	6,831	1	2,747	9,580	0	24,521	203,979
2023	16,418	159	0	404	0	16,981	0	0	0	0	0	16,981	220,960
2024	15,616	0	0	405	0	16,021	651	0	319	970	0	16,991	237,951
2025	14,858	0	0	407	0	15,265	565	0	401	966	0	16,231	254,182
2026	14,337	0	0	409	0	14,747	300	0	112	412	0	15,159	269,341

TABLE - 1 FORECASTED DISTRIBUTION INVESTMENT

		Pressure	New Business	FERC Account #378	Total
<u>Year</u>	<u>New Business</u>	<u>Betterment</u>	<u>Forfeiture</u>	<u>Meter & Reg. Station</u>	<u>Distribution</u>
2012	\$11,307,459	\$18,578,855	(\$2,564,785)	\$7,845,106	\$35,166,634
2013	\$19,813,570	\$16,516,777	(\$1,866,998)	\$8,316,250	\$42,779,599
2014	\$20,144,563	\$53,568,457	(\$2,938,240)	\$6,967,124	\$77,741,904
2015	\$25,504,301	\$31,731,305	(\$3,624,013)	\$6,622,661	\$60,234,254
2016	\$25,150,192	\$44,246,432	(\$7,499,486)	\$5,314,881	\$67,212,019
2017	\$30,452,297	\$33,359,289	(\$9,874,188)	\$5,451,961	\$59,389,359
2018	\$34,138,934	\$21,743,552	(\$3,783,834)	\$7,011,559	\$59,110,211
2019	\$33,437,711	\$27,628,652	(\$4,897,523)	\$6,960,835	\$63,129,675
2020	\$28,936,556	\$54,907,150	(\$3,024,569)	\$11,602,736	\$92,421,873
2021	\$33,291,769	\$24,065,823	(\$2,333,457)	\$19,668,326	\$74,692,461
Forecast 2022	\$30,990,714	\$29,094,972	(\$4,667,819)	\$19,668,326	\$75,086,193
2023	\$33,035,653	\$28,272,105	(\$4,773,643)	\$19,668,326	\$76,202,442
2024	\$33,830,726	\$28,177,382	(\$4,925,328)	\$19,668,326	\$76,751,106
2025	35,173,805	29,296,024	(\$5,120,863)	\$19,668,326	\$79,017,292
2026	36,570,206	30,459,077	(\$5,324,162)	\$19,668,326	\$81,373,446
2027	38,022,043	31,668,302	(\$5,535,531)	\$19,668,326	\$83,823,140

Post Test Years Escalate 3.97%, per Finance,

2024 \$

TABLE - 1 FORECASTED DISTRIBUTION INVESTMENT

C

Year	<u>New Business</u>	Pressure		FERC Account #378	Total
		<u>Betterment</u>	<u>New Business Forfeiture</u>	<u>Meter & Reg. Station</u>	<u>Distribution</u>
2012	\$14,325,110	\$23,537,042	(\$3,249,256)	\$10,394,989	\$45,007,885
2013	\$24,878,094	\$20,738,612	(\$2,344,219)	\$11,169,881	\$54,442,368
2014	\$25,012,781	\$66,514,031	(\$3,648,307)	\$9,082,308	\$96,960,812
2015	\$31,163,052	\$38,771,669	(\$4,428,089)	\$8,698,024	\$74,204,656
2016	\$30,248,276	\$53,215,431	(\$9,019,674)	\$6,902,756	\$81,346,790
2017	\$36,107,249	\$39,554,065	(\$11,707,812)	\$6,790,050	\$70,743,552
2018	\$39,983,772	\$25,466,209	(\$4,431,654)	\$8,331,088	\$69,349,415
2019	\$37,793,292	\$31,227,547	(\$5,535,472)	\$7,942,533	\$71,427,901
2020	\$31,743,096	\$60,232,563	(\$3,317,920)	\$12,821,333	\$101,479,072
Forecast 2021	\$34,828,562	\$25,176,734	(\$2,441,172)	\$18,938,998	\$76,503,121
2022	\$32,421,287	\$30,438,034	(\$4,883,292)	\$18,938,998	\$76,915,028
2023	\$34,560,623	\$29,577,183	(\$4,994,000)	\$18,938,998	\$78,082,805
2024	\$35,392,397	\$29,478,088	(\$5,152,688)	\$18,938,998	\$78,656,796
2025	\$36,797,475	\$30,648,368	(\$5,357,249)	\$18,938,998	\$81,027,593
2026	\$38,258,335	\$31,865,108	(\$5,569,932)	\$18,938,998	\$83,492,510
2027	\$39,777,191	\$33,130,153	(\$5,791,058)	\$18,938,998	\$86,055,284

2017 – 2021 Values

New Business Column

This includes historical, actual loaded costs of Budget Codes (BCs) 151 – 153. The figures are in recorded-year dollars and *not* constant 2021\$
 Due to the little to no HP new business main projects, these costs can be assumed to be entirely medium pressure work

Pressure Betterment Column

This includes historical, actual loaded costs of BC 251. The figures are in recorded-year dollars and *not* constant 2021\$

Prior to 2021 includes historical. The figures are in recorded-year dollars and *not* constant 2021\$

2022 – 2024 Values

New Business Column

This is the forecast costs of BCs 151 – 153 based on the RO model output of our TY2024 GRC. The figures are in constant 2021\$. This was calculated by appl:

Pressure Betterment Column

This is the forecast costs of BC 251 based on the RO model output of our TY2024 GRC. The figures are in constant 2021\$

TABLE - 2 High Pressure FORECASTED DISTRIBUTION INVESTMENT

Year	New Business	Pressure		FERC Account #378
		Betterment	New Business Forfeiture	
2012	\$0	\$9,103,639	\$0	\$998,034
2013	\$0	\$8,093,221	\$0	\$1,096,137
2014	\$0	\$26,248,544	\$0	\$909,837
2015	\$0	\$15,548,339	\$0	\$867,304
2016	\$0	\$21,680,752	\$0	\$695,240
2017	\$0	\$16,346,052	\$0	\$715,297
2018	\$0	\$10,654,340	\$0	\$919,215
2019	\$0	\$13,538,039	\$0	\$915,350
2020	\$0	\$26,904,504	\$0	\$1,540,843
2021	\$0	\$11,792,253	\$0	\$2,611,954
2022	\$0	\$14,256,536	\$0	\$2,611,954
2023	\$0	\$13,853,331	\$0	\$2,611,954
2024	\$0	\$13,806,917	\$0	\$2,611,954
2025	0	\$14,355,052	\$0	2,611,954
2026	0	\$14,924,947	\$0	2,611,954
2027	0	\$15,517,468	\$0	2,611,954

Forecast

FYI – as a follow-up for the HP/MP split, please utilize 6.43% (% of DOT-Distribution jurisdiction HP lines with Song lk, No Longer

HP	49%
	(\$ 92,526,097.77 /\$ 188,562,068.53)
MP	51%
	(\$ 96,035,970.76 /\$ 188,562,068.53)

This split was derived from the type of projects that contribute to the historical c

0.789345

TABLE - 2 High Pressure FORECASTED DISTRIBUTION INVESTMENT

Global Insight
 Plastic mains
JUGDMP@PCF

Meas. & Reg. St. Equip.
JUGDSTM&R@PCF

		<u>Year</u>	<u>New Business</u>	<u>Betterment</u>	<u>New Business Forfeiture</u>	<u>Meter & Reg. Station</u>
1.266873	1.325029	2012	\$0	\$11,533,151	\$0	\$1,322,424
1.255609	1.343139	2013	\$0	\$10,161,920	\$0	\$1,472,264
1.241664	1.303595	2014	\$0	\$32,591,875	\$0	\$1,186,059
1.221874	1.313373	2015	\$0	\$18,998,118	\$0	\$1,139,093
1.202706	1.298760	2016	\$0	\$26,075,561	\$0	\$902,950
1.185699	1.245433	2017	\$0	\$19,381,492	\$0	\$890,855
1.171207	1.188193	2018	\$0	\$12,478,442	\$0	\$1,092,206
1.130260	1.141032	2019	\$0	\$15,301,498	\$0	\$1,044,443
1.096989	1.105027	2020	\$0	\$29,513,956	\$0	\$1,702,673
1.046161	0.962919 Forecast	2021	\$0	\$12,336,599	\$0	\$2,515,099
1.046161	0.962919	2022	\$0	\$14,914,637	\$0	\$2,515,099
1.046161	0.962919	2023	\$0	\$14,492,820	\$0	\$2,515,099
1.046161	0.962919	2024	\$0	\$14,444,263	\$0	\$2,515,099
1.046161	0.962919	2025	\$0	\$15,017,700	\$0	\$2,515,099
1.046161	0.962919	2026	\$0	\$15,613,903	\$0	\$2,515,099
1.046161	0.962919	2027	\$0	\$16,233,775	\$0	\$2,515,099

Using a 5-yr historical ratio of BCs 151 – 153 (32.5%) to the overall NB workpaper

TABLE - 3 Medium Pressure FORECASTED DISTRIBUTION

Total	Hp Inventory As Fraction of Reg. Station	Year	Pressure		
			New Business	Betterment	New Business Forfeiture
<u>Distribution</u>					
\$10,101,673	0.1272	2012	\$11,307,459	\$9,475,216	(\$2,564,785)
\$9,189,358	0.1318	2013	\$19,813,570	\$8,423,556	(\$1,866,998)
\$27,158,381	0.1306	2014	\$20,144,563	\$27,319,913	(\$2,938,240)
\$16,415,643	0.1310	2015	\$25,504,301	\$16,182,966	(\$3,624,013)
\$22,375,991	0.1308	2016	\$25,150,192	\$22,565,680	(\$7,499,486)
\$17,061,349	0.1312	2017	\$30,452,297	\$17,013,237	(\$9,874,188)
\$11,573,556	0.1311	2018	\$34,138,934	\$11,089,212	(\$3,783,834)
\$14,453,389	0.1315	2019	\$33,437,711	\$14,090,613	(\$4,897,523)
\$28,445,347	0.1328	2020	\$28,936,556	\$28,002,647	(\$3,024,569)
\$14,404,207	0.1328	2021	\$33,291,769	\$12,273,570	(\$2,333,457)
\$16,868,490	0.1328	2022	\$30,990,714	\$14,838,435	(\$4,667,819)
\$16,465,285	0.1328	2023	\$33,035,653	\$14,418,774	(\$4,773,643)
\$16,418,871	0.1328	2024	\$33,830,726	\$14,370,465	(\$4,925,328)
\$16,967,006	0.1328	2025	\$35,173,805	\$14,940,972	(\$5,120,863)
\$17,536,901	0.1328	2026	\$36,570,206	\$15,534,129	(\$5,324,162)
\$18,129,422	0.1328	2027	\$38,022,043	\$16,150,834	(\$5,535,531)

in Gas Distribution; 3,325 miles out of 51,671). Please let me know Song Ik

cost during 2012 – 2021

TABLE - 3 Medium Pressure FORECASTED DISTRIBU

<u>Total</u>	<u>Cumulative</u>
<u>Distribution</u>	<u>Distribution</u>
\$12,855,575	\$12,855,575
\$11,634,184	\$24,489,758
\$33,777,934	\$58,267,692
\$20,137,211	\$78,404,903
\$26,978,511	\$105,383,413
\$20,272,347	\$125,655,760
\$13,570,648	\$139,226,408
\$16,345,941	\$155,572,350
\$31,216,629	\$186,788,979
\$14,851,698	\$201,640,677
\$17,429,736	\$219,070,413
\$17,007,919	\$236,078,332
\$16,959,362	\$253,037,694
\$17,532,799	\$270,570,493
\$18,129,002	\$288,699,495
\$18,748,874	\$307,448,369

<u>Year</u>	<u>New Business</u>	<u>Pressure</u>	
		<u>Betterment</u>	<u>New Business Forfeiture</u>
2012	\$14,325,110	\$12,003,892	(\$3,249,256)
2013	\$24,878,094	\$10,576,692	(\$2,344,219)
2014	\$25,012,781	\$33,922,156	(\$3,648,307)
2015	\$31,163,052	\$19,773,551	(\$4,428,089)
2016	\$30,248,276	\$27,139,870	(\$9,019,674)
2017	\$36,107,249	\$20,172,573	(\$11,707,812)
2018	\$39,983,772	\$12,987,767	(\$4,431,654)
2019	\$37,793,292	\$15,926,049	(\$5,535,472)
2020	\$31,743,096	\$30,718,607	(\$3,317,920)
2021	\$34,828,562	\$12,840,134	(\$2,441,172)
2022	\$32,421,287	\$15,523,398	(\$4,883,292)
2023	\$34,560,623	\$15,084,363	(\$4,994,000)
2024	\$35,392,397	\$15,033,825	(\$5,152,688)
2025	\$36,797,475	\$15,630,668	(\$5,357,249)
2026	\$38,258,335	\$16,251,205	(\$5,569,932)
2027	\$39,777,191	\$16,896,378	(\$5,791,058)

ITION INVESTMENT

FERC Account #378	Total
<u>Meter & Reg. Station</u>	<u>Distribution</u>
\$6,847,072	\$25,064,961
\$7,220,113	\$33,590,242
\$6,057,287	\$50,583,523
\$5,755,358	\$43,818,611
\$4,619,641	\$44,836,028
\$4,736,664	\$42,328,010
\$6,092,344	\$47,536,655
\$6,045,485	\$48,676,286
\$10,061,893	\$63,976,526
\$17,056,372	\$60,288,254
\$17,056,372	\$58,217,703
\$17,056,372	\$59,737,156
\$17,056,372	\$60,332,235
\$17,056,372	\$62,050,287
\$17,056,372	\$63,836,545
\$17,056,372	\$65,693,718

ITION INVESTMENT

<u>FERC Account #378</u>	<u>Total</u>	<u>Cumulative</u>
<u>Meter & Reg. Station</u>	<u>Distribution</u>	<u>Distribution</u>
\$9,072,565	\$32,152,310	\$32,152,310
\$9,697,617	\$42,808,184	\$74,960,494
\$7,896,249	\$63,182,878	\$138,143,373
\$7,558,931	\$54,067,445	\$192,210,818
\$5,999,807	\$54,368,279	\$246,579,097
\$5,899,195	\$50,471,205	\$297,050,302
\$7,238,882	\$55,778,767	\$352,829,069
\$6,898,090	\$55,081,959	\$407,911,029
\$11,118,660	\$70,262,443	\$478,173,472
\$16,423,899	\$61,651,423	\$539,824,894
\$16,423,899	\$59,485,292	\$599,310,187
\$16,423,899	\$61,074,886	\$660,385,073
\$16,423,899	\$61,697,434	\$722,082,507
\$16,423,899	\$63,494,793	\$785,577,300
\$16,423,899	\$65,363,508	\$850,940,808
\$16,423,899	\$67,306,410	\$918,247,218

TABLE 8
Distribution Long Run Marginal Cost Estimate (2024\$s)
SOUTHERN CALIFORNIA GAS COMPANY
2024 TCAP

System	MPD	HPD
Demand Determinate	mcf/d	mcf/month
Capital-related LRMC:		
Medium Pressure Regression Coefficient =	\$3,225	\$41.94
Weighted RECC Factor =	6.98%	6.95%
Annualized Capital-related LRMC	\$225.14	\$2.91
O&M-related LRMC:		
Total Distribution O&M costs (2021 \$000's) =	\$129,425	\$129,425
escalation 2021 to 2024	1.0809	1.0809
Total Distribution O&M costs (2024 \$000's) =	\$139,890	\$139,890
% Share of Investment	75%	25%
Peak Day Demand	3,936	80,021
O&M-related LRMC	\$26.54	\$0.44285
A&G-related LRMC:		
A&G Factor, as a Percent of O&M-related LRMC	87.20%	87.20%
A&G-related LRMC	\$23.14	\$0.38617
General Plant (GP)-related LRMC:		
GP Factor, as a Percent of O&M-related LRMC	86.83%	86.83%
GP-related LRMC	\$23.04	\$0.38454
Material & Supply (M&S)-related LRMC:		
Total Distribution M&S costs (2024 \$000's) =	\$2,479	\$2,479
% Share of Investment	75%	25%
Demand Determinantes	6,039	6,039
M&S-related LRMC	\$0.31	\$0.10400
Distribution LRMC =	\$298.17 \$/Mcf/d	\$4.23 \$Mcf/mo

TABLE 7
Regression of Distribution Investment
SOUTHERN CALIFORNIA GAS COMPANY
2024 TCAP

System Year	MPD	MPD	HPD	HPD
	Cumulative Investment \$000	Peak Day Cumulative Demand MMcfd	Cumulative Investment \$000	Peak Month Cumulative Demand MMcf/ Month
2012	\$32,152	13	\$12,856	396
2013	\$74,960	41	\$24,490	1,117
2014	\$138,143	54	\$58,268	1,386
2015	\$192,211	69	\$78,405	1,867
2016	\$246,579	95	\$105,383	2,716
2017	\$297,050	117	\$125,656	3,401
2018	\$352,829	132	\$139,226	3,615
2019	\$407,911	150	\$155,572	3,970
2020	\$478,173	165	\$186,789	4,282
2021	\$539,825	179	\$201,641	4,478
2022	\$599,310	204	\$219,070	5,702
2023	\$660,385	221	\$236,078	5,971
2024	\$722,083	238	\$253,038	6,296
2025	\$785,577	254	\$270,570	6,607
2026	\$850,941	269	\$288,699	6,869
Regression Coefficient	\$3,224.58		\$41.94	

Calculate Weighted Average RECC Factor:

204

System	MPD		MPD		HPD		HPD	
	New Business \$000's	Pressure Betterment \$000	New Business Forfeiture \$000	Account #378 Meter & Reg Stations \$000	New Business \$000's	Pressure Betterment \$000	New Business Forfeiture \$000	Account #378 Meter & Reg Stations \$000
2012	\$14,325	\$12,004	(\$3,249)	\$9,073	\$0	\$11,533	\$0	\$1,322
2013	\$24,878	\$10,577	(\$2,344)	\$9,698	\$0	\$10,162	\$0	\$1,472
2014	\$25,013	\$33,922	(\$3,648)	\$7,896	\$0	\$32,592	\$0	\$1,186
2015	\$31,163	\$19,774	(\$4,428)	\$7,559	\$0	\$18,998	\$0	\$1,139
2016	\$30,248	\$27,140	(\$9,020)	\$6,000	\$0	\$26,076	\$0	\$903
2017	\$36,107	\$20,173	(\$11,708)	\$5,899	\$0	\$19,381	\$0	\$891
2018	\$39,984	\$12,988	(\$4,432)	\$7,239	\$0	\$12,478	\$0	\$1,092
2019	\$37,793	\$15,926	(\$5,535)	\$6,898	\$0	\$15,301	\$0	\$1,044
2020	\$31,743	\$30,719	(\$3,318)	\$11,119	\$0	\$29,514	\$0	\$1,703
2021	\$34,829	\$12,840	(\$2,441)	\$16,424	\$0	\$12,337	\$0	\$2,515
Total Invest \$000	\$291,758	\$184,057	(\$46,874)	\$78,731	\$0	\$176,839	\$0	\$11,946
	Total Invest \$000's	% of Total	RECC %	Weghted RECC%	Total Invest \$000's	% of Total	RECC %	Weghted RECC%
New Business \$000's	\$291,758	57%	6.92%	3.98%	\$0	0%	6.92%	0.00%
Pressure Betterment	\$184,057	36%	6.92%	2.51%	\$176,839	94%	6.92%	6.48%
CIAC	(\$46,874)	-9%	6.92%	-0.64%	\$0	0%	6.92%	0.00%
subtotal	\$428,941	84%		5.85%	\$176,839	94%		6.48%
Meter & Reg Stations #378	\$78,731	16%	7.32%	1.14%	\$11,946	6%	7.32%	0.46%
Total	\$507,673	100%		6.98%	\$188,785	100%		6.95%

% Share of Investment between MPD and HPD:

	Investment \$000's	% Share
MPD Investment	\$850,941	75%
HPD Investment	\$288,699	25%
Total	\$1,139,640	100%

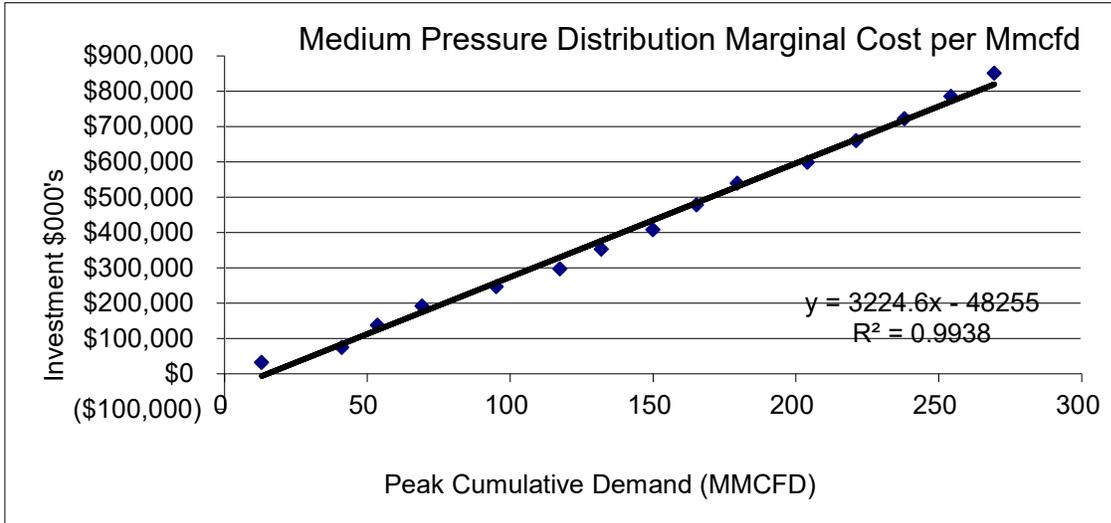
Marginal MPD Costs

Year	Cumulative MMcfd	Cumulative CAPEX \$000's
2012	13	\$32,152
2013	41	\$74,960
2014	54	\$138,143
2015	69	\$192,211
2016	95	\$246,579
2017	117	\$297,050
2018	132	\$352,829
2019	150	\$407,911
2020	165	\$478,173
2021	179	\$539,825
2022	204	\$599,310
2023	221	\$660,385
2024	238	\$722,083
2025	254	\$785,577
2026	269	\$850,941

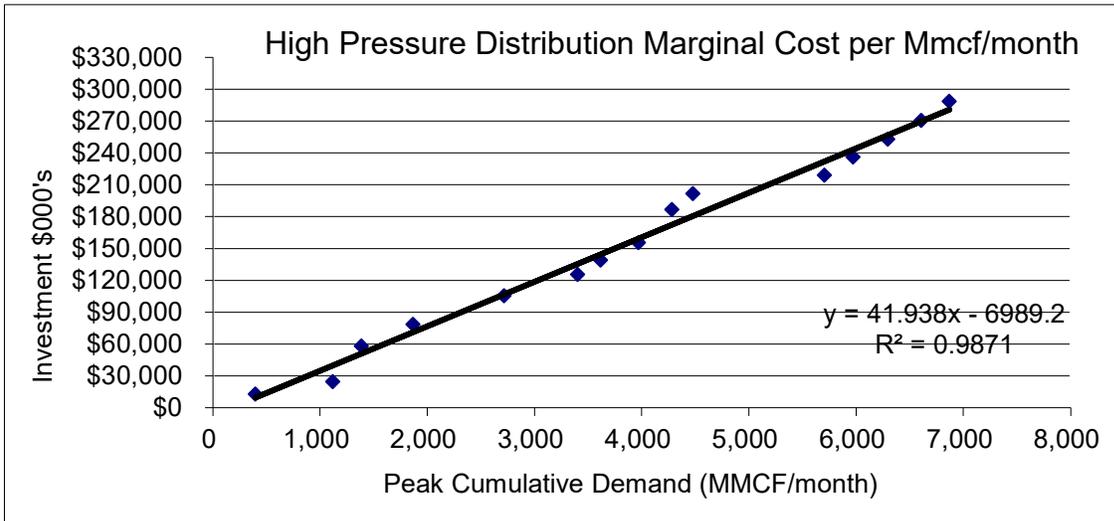
Marginal HPD Costs

Year	Cumulative Mmcf/ month	Cumulative CAPEX \$000's
2012	396	\$12,856
2013	1,117	\$24,490
2014	1,386	\$58,268
2015	1,867	\$78,405
2016	2,716	\$105,383
2017	3,401	\$125,656
2018	3,615	\$139,226
2019	3,970	\$155,572
2020	4,282	\$186,789
2021	4,478	\$201,641
2022	5,702	\$219,070
2023	5,971	\$236,078
2024	6,296	\$253,038
2025	6,607	\$270,570
2026	6,869	\$288,699

Marginal MPD Investment per MMCFD



Marginal HPD Investment per MMCF/month



Marginal MP Distribution Cost

Marginal Cost for Medium Pressure Distribution (MPD) (2024 \$/Mcf peak day)	
Capital-related Charge:	
MPD Regression Coefficient \$/Mcf	\$3,224.58
x RECC Factor	6.98%
= Annualized Capital-related Charge (\$/Mcf)	\$225.14
+ Direct O&M	\$26.54
+ A&G	\$23.14
+ GP	\$23.04
+ M&S	\$0.31
= Marginal Unit Cost (\$/Mcf)	\$298.17

Marginal HP Distribution Cost

**Marginal Cost for High Pressure Distribution
(2024 \$/MCF/month)**

Capital-related Charge:	
HPD Regression Coefficient \$/Mcf/month	\$41.94
x RECC Factor	6.95%
= Annualized Capital-related Charge (\$/Mcf/month)	\$2.91
+ Direct O&M	\$0.44
+ A&G	\$0.39
+ GP	\$0.38
+ M&S	\$0.10
= Marginal HP Distribution Cost(\$/MCF/month)	\$4.23

**SoCalGas
2024 TCAP**

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

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

Output

	<u>Output</u>	<u>Source</u>
Marginal A&G/Payroll Taxes Loading Factor as a % of O&M expenses	87.20%	A&G
General Plant Loading Factor as a % of O&M expenses	86.83%	Gen Plant
Customer Related Distribution M&S Costs 2024\$000/yr	\$1,807,161	M&S
Demand Related Distribution M&S Costs 2024\$000/yr	\$2,479,091	M&S
2021-24 Factor: Capital Plant	0.9874	Escalation Factors
2021-24 Factor: O&M	1.0809	Escalation Factors
2021-24 Factor: Capital Meter	1.0453	Escalation Factors
2021-24 Factor: Capital Service	1.0525	Escalation Factors

Input from EC Model:

Transmission A&G	\$66.446	EC Study of Frank Seres
Storage A&G	\$35.827	EC Study of Frank Seres
Total A&G	\$581.486	EC Study of Frank Seres
Transmission General Plant Return	\$3.924	EC Study of Frank Seres
Transmission Gen Plant Dep	\$24.051	EC Study of Frank Seres
Transmission Gen Plant Taxes	\$1.218	EC Study of Frank Seres
Storage General Plant Return	\$2.116	EC Study of Frank Seres
Storage Gen Plant Dep	\$12.968	EC Study of Frank Seres
Storage Gen Plant Taxes	\$0.656	EC Study of Frank Seres
Total Gen Plant Return	\$34.340	EC Study of Frank Seres
Total Gen Plant Dep	\$210.479	EC Study of Frank Seres
Total Gen Plant Taxes	\$10.655	EC Study of Frank Seres

*Sept. 19

2024 TCAP A&G LOADER ANALYSIS
O&M Costs Used in A&G Loader

	2021 Recorded Costs (\$)	source:
1. Total O&M	3,629,062,136	FERC Form 2 line no 271, page 325 less page 335, line
2. Total Production Expenses (incl Purchased Gas cost)	1,618,757,956	FERC Form 2 line no 97, page 320
3. Total Transmission Expenses	1/ 227,632,079	FERC Form 2 line no 201, page 323
4. Total Storage Expenses	1/ 84,614,222	FERC Form 2 line no 125, page 321
5. Total A&G Expenses	743,492,511	FERC Form 2 line no 270, page 325, less page 335, line
6. Exclusions	2/ 633,539,703	From Regulatory Accounting
7.		
8. Subtotal of Costs removed from O&M	3,308,036,471	
9. Net O&M	<u><u>321,025,665</u></u>	

Notes:

- 1/ Transmission and Storage expenses removed from A&G loader, because SoCalGas proposes to separately scale transmission and storage costs to embedded transmission and storage cost.
- 2/ Exclusions E all costs below that are not part of authorized base margin.
- 3/ Exclude Part of Transmission expenses

Rows (1) through (7) contain data from FERC Form 2 for 2021, pages 320-325
 Row (8) = Sum [Row (2) : Row (7)]
 Row (9) = Row (1) - Row (8)

Exclusions

<u>Title of Account</u>	<u>2021</u>	
	Total O&M Costs w/ Labor	
Assembly Bill 802 Memorandum Account	\$213,621	
Avoided Cost Calculator Update Memorandum Account	(\$300,367)	
Aliso Canyon True-up Tracking Account	\$0	From Reg Accounts Group
Advanced Metering Infrastructure Balancing Account	\$0	
Advanced Meter Opt-Out Program Balancing Account	\$0	
Biomethane Cost Incentive Program Balancing Account	\$8,000,000	
California Alternate Rates for Energy Account	\$7,800,126	
Climate Adaption Vulnerability Assessment Memorandum Account	\$12,136	
California Consumer Privacy Act Memorandum Account	\$92,369	
Catastrophic Event Memorandum Account	\$7,278,953	
Core Fixed Cost Account	(\$2,729,574)	
Compressor Station Fuel & Power Balancing Account	\$11,333,025	
Core Gas Balancing Memorandum Account	\$157,418	
Covid-19 Pandemic Protections Memorandum Account	\$788,611	
California Solar Initiative Thermal Program Memorandum Account	\$2,998,877	
Direct Assistance Program Balancing Account (low income EE)	\$115,795,522	
Dairy Biomethane Project Balancing Account	\$40,574,380	
Dairy Biomethane Project Memorandum Account	\$212,207	
Dairy Biomethane Solicitation Development Memorandum Account	\$0	

TABLE 2
A&G and Payroll Taxes Loading Factor

SOUTHERN CALIFORNIA GAS COMPANY

DESCRIPTION	2024 TCAP (\$)	source
1. Total Marginal A&G Costs	\$231,529,646	A&G 1 tab
2. Total Payroll Taxes	48,408,248	(SS + Fed&CA
3. Marginal A&G and Payroll Taxes	279,937,895	Row 1 + Row 2
4. Net O&M Costs	321,025,665	O&M Costs tab
5. Marginal A&G/Payroll Taxes Loading Factor	87.20%	Row 3 / Row 4
6. Transmission and Storage adjustment	17.59%	EC study

Notes:
 Data Source: FERC Form 2

Fed. Unemployment Insurance Tax	382,386	FERC Form 2, p. 263a (SS + Fed&CA L
Social Security Tax	70,653,507	FERC Form 2, p. 263a (SS + Fed&CA L
State Unemployment Insurance Tax	1,143,096	FERC Form 2, p. 263a (SS + Fed&CA L
Total	72,178,989	

2024 TCAP Phase II A&G LOADER ANALYSIS
Marginal vs Non-marginal Summary

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Account Title	PUC Account	Marginal Cost	Marginal Portion of Total	Non-Marginal Cost	Non-Marginal Portion of Total	Total Cost	2021 Recorded Total Cost Per FERC Form 2	Source
		(\$)	(%)	(\$)	(%)	(\$)	(\$)	
1. A&G Salaries	920	\$3,261	0.00%	\$96,294,297	14.15%	\$96,297,558	\$96,297,561	FERC Form 2 line no 254, page 325
2. Office Supplies and Exp	921	1,683,639	0.25%	25,241,462	3.71%	26,925,101	26,925,101	FERC Form 2 line no 255, page 325
3. Admin Expenses Transferred	922	0	0.00%	(10,709,919)	-1.57%	(10,709,919)	(10,709,919)	FERC Form 2 line no 256, page 325
4. Outside Services Employed	923	0	0.00%	189,697,344	27.87%	189,697,344	189,697,349	FERC Form 2 line no 257, page 325
5. Property Insurance	924	6,464,195	0.95%	0	0.00%	6,464,195	6,464,195	FERC Form 2 line no 258, page 325
6. Injuries and Damages	925	66,079,211	9.71%	0	0.00%	66,079,211	66,079,212	FERC Form 2 line no 259, page 325
7. Employee Pensions & Benefits	926	228,341,255	33.54%	0	0.00%	228,341,255	228,341,248	FERC Form 2 line no 260, page 325
8. Regulatory Commission Expenses	928	0	0.00%	7,403,259	1.09%	7,403,259	7,403,259	FERC Form 2 line no 262, page 325
9. Misc General Expenses	930	54,064	0.01%	23,721,436	3.48%	23,775,500	23,775,500	FERC Form 2 line no 265, page 325 les
10. Rents	931	4,858,919	0.71%	17,012,626	2.50%	21,871,545	21,871,545	FERC Form 2 line no 266, page 325
11. Maintenance of Gen Plant	932	24,572,418	3.61%	0	0.00%	24,572,418	24,572,417	FERC Form 2 line no 269, page 325
12. Total		<u>332,056,960</u>	48.78%	<u>348,660,505</u>	51.22%	<u>680,717,465</u>	<u>680,717,468</u>	

Pensions and benefits on non-marginal A&G labor	(35,551,855)	35,551,855	<== The Pension & Benefits OH Planning Rate for 2021 is 36.92%
Pensions and benefits on exclusions	(15,562,813)	15,562,813	<== 36.92% on the labor portion of exclusions
	280,942,293	399,775,172	
Payroll Taxes on non-marginal A&G labor	(7,703,544) <= Tax loader on non-marginal labor	7,703,544	The SCG Payroll Tax OH rate for 2016 is 8.00% (Average for 2021).
Payroll taxes on exclusions	(3,372,224) <= Tax loader on exclusions	3,372,224	

	<u>Payroll Tax</u>	<u>P&B</u>		
	8.00%	36.92%		
	3,372,224	15,562,813	42,152,798 Labor Exclusion	From Reg Accounting.

Color Key: Input Data, Source Data from other tab, calculation
Col (1) & Col (2) account description
Col (3) contains data from 'Marginal - Nonmarginal' tab
Col (4) = Col (3) / Col (7)
Col (5) contains data from 'Marginal - Nonmarginal' tab
Col (6) = Col (5) / Col (7)
Col (7) = Col (3) + Col (5)
Col (8) data from FERC Form 2 for 2021

2024 TCAP A&G LOADER ANALYSIS
2021 RECORDED COSTS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	PUC Account Number	FERC Account No.	Marginal Y/N	2021 Recorded Costs Direct (\$)	Reassigned (\$)	(5) + (6) Total (\$)	Marginal (\$)	Non-Marginal (\$)
FERC Cost Center Description								
1. BLDG OPER OTH THAN CLEANING SV	920	920.601	Y	\$ 2,753	\$ 503	\$ 3,257	\$ 3,257	\$ -
2. PROCUREMENT & LOGISTICS CONSULT	920	920.630	Y	-	-	-	-	-
3. REAL ESTATE	920	920.604	Y	-	-	-	-	-
4. BUILDING CLEANING SERVICES	920	920.600	Y	-	4	4	4	-
5. RETURN TO WORK EXAMINATIONS	920	920.212	Y	-	-	-	-	-
6. SUPPLIER MANAGEMENT	920	920.632	Y	-	-	-	-	-
ACCOUNT 920 MARGINAL TOTAL				2,753	507	3,261	3,261	-
7. ADMINISTRATIVE & GENERAL SALARIES	920	920.000	N	76,791,664	4,402,416	81,194,080	-	81,194,080
8. HUMAN RESOURCES OPER SALARIES	920	920.200	N	8,934,472	2,042,211	10,976,683	-	10,976,683
9. REGIONAL AFFAIRS	920	920.570	N	3,282,636	733,343	4,015,979	-	4,015,979
10. END USER SUPPORT COMM	920	920.372	N	-	-	-	-	-
11. COMPUTER END USER SUPPORT	920	920.371	N	349	405	754	-	754
12. REGION MANAGER SALARIES	920	920.047	N	-	-	-	-	-
13. PUBLIC AFFAIRS ADMINISTRATION	920	920.570	N	-	-	-	-	-
14. OPERATE MAINFRAME COMPUTERS GEN	920	920.360	N	-	-	-	-	-
15. STANDARD & CODES	920	920.561	N	-	-	-	-	-
16. INFORMATION SYS GENL SUPERVISION	920	920.301	N	27,309	79,493	106,802	-	106,802
17. INFORMATION SYS ADMIN SUPPORT	920	920.302	N	-	-	-	-	-
18. INFORMATION SYSTEMS	920	920.300	N	-	-	-	-	-
19. GOVERNMENTAL AFFAIRS SALARIES	920	920.560	N	-	-	-	-	-
20. PSEP - A&G SALARIES	920	920.850	N	-	-	-	-	-
21. Reassignment Only	920	920.010	N	-	-	-	-	-
ACCOUNT 920 NON-MARGINAL TOTAL				89,036,430	7,257,867	96,294,297	-	96,294,297
22. BLDG OPER OTH THAN CLEANING SV	921	921.601	Y	1,533,162	(32,941)	1,500,221	1,500,221	-
23. BUILDING CLEANING SERVICES	921	921.600	Y	182,017	885	182,902	182,902	-
24. PROCUREMENT & LOGISTICS CONSULT	921	921.630	Y	-	-	-	-	-
25. REAL ESTATE	921	921.604	Y	416	100	516	516	-
ACCOUNT 921 MARGINAL TOTAL				1,715,595	(31,956)	1,683,639	1,683,639	-
27. ADMINISTRATIVE & GENERAL SALARIES	921	921.000	N	23,623,084	(1,709,634)	21,913,450	-	21,913,450
28. HUMAN RESOURCES OPER SALARIES	921	921.200	N	281,161	5,984	287,145	-	287,145
29. COMPUTER END USER SUPPORT	921	921.371	N	302,741	(40,611)	262,130	-	262,130
30. REGIONAL AFFAIRS	921	921.571	N	242,768	(6,493)	236,275	-	236,275
31. PUBLIC AFFAIRS ADMINISTRATION	921	921.563	N	276	(8)	267	-	267
32. REGION MANAGER SALARIES	921	921.047	N	-	-	-	-	-
33. STANDARD & CODES	921	921.561	N	864	(36)	829	-	829
34. INFORMATION SYS GENL SUPERVISION	921	921.301	N	3,025,789	701,796	3,727,585	-	3,727,585
35. PSEP-A&G OFFICE SUPL	921	921.850	N	-	-	-	-	-
36. FERC B/S ERRORS	921	921.999	N	-	(1,186,219)	(1,186,219)	-	(1,186,219)
ACCOUNT 921 NON-MARGINAL TOTAL				27,476,683	(2,235,222)	25,241,462	-	25,241,462
37. ADMINISTRATIVE EXPENSES TRANSFERRED-CRED	922	922.000	N	-	(7,586,790)	(7,586,790)	-	(7,586,790)
38. HR-CAP A&G TRANS CR	922	922.200	N	-	(2,152,634)	(2,152,634)	-	(2,152,634)
39. IS GEN SUP-CAP AG CR	922	922.301	N	-	89,628	89,628	-	89,628
40. PA ADM-CAP A&G TR CR	922	922.563	N	-	(100)	(100)	-	(100)
41. REG AF-CAP A&G TR CR	922	922.570	N	-	(1,059,607)	(1,059,607)	-	(1,059,607)
42. BLD CLNG-CP AG TR CR	922	922.600	N	-	(416)	(416)	-	(416)
43. RE - CAP A&G TRN CR	922	922.604	N	-	-	-	-	-
ACCOUNT 922 NON-MARGINAL TOTAL				-	(10,709,919)	(10,709,919)	-	(10,709,919)
44. OUTSIDE SERVICES EMPLOYED	923	923.000	N	52,534,630	137,162,714	189,697,344	-	189,697,344
45. PSEP -OUTSIDE SERVICES	923	923.850	N	-	-	-	-	-
ACCOUNT 923 NON-MARGINAL TOTAL				52,534,630	137,162,714	189,697,344	-	189,697,344

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	PUC Account Number	FERC Account No.	Marginal Y/N	2021 Recorded Costs Direct	Reassigned	(5) + (6) Total	Marginal	Non-Marginal
FERC Cost Center Description								
46. INSURANCE EXPENSE	924	924.000	Y	5,901,492	562,703	6,464,195	6,464,195	-
ACCOUNT 924 MARGINAL TOTAL				5,901,492	562,703	6,464,195	6,464,195	-
47. INJURIES AND DAMAGES	925	925.000	Y	62,133	(1,846,681)	(1,784,548)	(1,784,548)	-
48. ACCIDENT PREV & SAFE	925	925.160	Y	5,134,995	870,018	6,005,012	6,005,012	-
49. A&G EMERGENCY PREP	925	925.180	Y	1,917,498	310,126	2,227,624	2,227,624	-
50. COLL WORKERS COMP	925	925.300	Y	19,960,612	(4,849,601)	15,111,011	15,111,011	-
51. COLL PLFD	925	925.310	Y	55,100,544	(10,580,432)	44,520,112	44,520,112	-
52. PSEP - INJUR & DAMAG	925	925.850	Y	-	-	-	-	-
ACCOUNT 925 MARGINAL TOTAL				82,175,782	(16,096,571)	66,079,211	66,079,211	-
53. EMPLOYEE PENSIONS AND BENEFITS	926	926.000	Y	2,975,662	38,008,354	40,984,016	40,984,016	-
54. TRANSPORTATION PROGRAM	926	926.239	Y	133,227	(133,227)	-	-	-
55. EMPLOYEE RECOGNITION PROGRAM	926	926.200	Y	8,123,061	(8,117,534)	5,527	5,527	-
56.	926	926.207	Y	-	-	-	-	-
57. DISABILITY BENEFIT EXPENSE	926	926.300	Y	245,798,389	(58,446,677)	187,351,712	187,351,712	-
ACCOUNT 926 MARGINAL TOTAL				257,030,338	(28,689,083)	228,341,255	228,341,255	-
58. BLDG SUPPORT CANTEEN GASCO TWR	926	926.202	N	-	-	-	-	-
ACCOUNT 926 NON-MARGINAL TOTAL				-	-	-	-	-
59. INTERVENOR COMPENSATION	928	928.500	N	571,804	-	571,804	-	571,804
60. REGULATORY COMMISSION EXPENSES	928	928.000	N	4,042,136	2,789,318	6,831,455	-	6,831,455
ACCOUNT 928 NON-MARGINAL TOTAL				4,613,940	2,789,318	7,403,259	-	7,403,259
61. DIVISION STATIONERY EXPENSE	930	930.625	Y	9,191	56	9,248	9,248	-
62. DUPLICATING EQUIP DIST & TRANS	930	930.600	Y	44,536	280	44,816	44,816	-
ACCOUNT 930 MARGINAL TOTAL				53,727	337	54,064	54,064	-
63. GENERAL ADVERT EXP	930	930.100	N	1,235,009	4,959	1,239,968	-	1,239,968
64. MISCELLANEOUS GENERAL EXPENSES	930	930.200	N	13,739,216	9,973,882	23,713,098	-	23,713,098
65. MISC DIV OFFICE EXPENSES	930	930.046	N	6,397	(60)	6,338	-	6,338
ACCOUNT 930 NON-MARGINAL TOTAL				13,747,613	9,973,822	23,721,436	-	23,721,436
66. RENTS DISTRIB AND TRANSM REGIONS	931	931.602	Y	5,966,514	(1,107,595)	4,858,919	4,858,919	-
ACCOUNT 931 MARGINAL TOTAL				5,966,514	(1,107,595)	4,858,919	4,858,919	-
67. GAS COMPANY TOWER RENTS	931	931.600	N	16,814,530	(799,959)	16,014,571	-	16,014,571
68. RENTS GENERAL	931	931.000	N	22,474	975,581	998,055	-	998,055
ACCOUNT 931 NON-MARGINAL TOTAL				16,837,004	175,622	17,012,626	-	17,012,626
69. BLDG YARD & EQUIP MAINTENANCE	935	935.600	Y	21,073,769	286,065	21,359,834	21,359,834	-
70. MAINTENANCE FURN OFFICE EQUIP	935	935.601	Y	18,596	(405)	18,191	18,191	-
71. MEAS SHOP EQUIP	935	935.675	Y	128,928	1,623	130,550	130,550	-
72. GARAGE/FUEL ISLAND MAINTENANCE	935	935.606	Y	1,620,271	512,971	2,133,242	2,133,242	-
73. COMPR MTC CNG VEHICLES	935	935.605	Y	23,292	(59,095)	(35,803)	(35,803)	-
74. TESTRACK MAINTENANCE	935	935.680	Y	-	-	-	-	-
75. MAINTENANCE OF GENERAL PLANT	935	935.000	Y	45,371	921,033	966,404	966,404	-
ACCOUNT 935 MARGINAL TOTAL				22,910,225	1,662,193	24,572,418	24,572,418	-
TOTAL A&G				580,002,728	100,714,737	680,717,465	332,056,960	348,660,505

2024 TCAP A&G LOADER ANALYSIS
2021 RECORDED COSTS

FERC Account	LABOR	NON_LABOR	TOTAL DIRECT	REASSIGNMENTS	TOTAL COSTS
920.000 Total	\$76,791,664		\$76,791,664	\$ 4,402,416	\$81,194,080
920.010 Total			\$0	\$ 0	\$0
920.047 Total			\$0	\$ 0	\$0
920.200 Total	\$8,934,472		\$8,934,472	\$ 2,042,211	\$10,976,683
920.212 Total			\$0	\$ 0	\$0
920.300 Total			\$0	\$ 0	\$0
920.301 Total	\$27,309		\$27,309	\$ 79,493	\$ 106,802
920.302 Total			\$0	\$ 0	\$0
920.360 Total			\$0	\$ 0	\$0
920.371 Total	\$349		\$349	\$ 405	\$754
920.372 Total			\$0	\$ 0	\$0
920.372 Total			\$0	\$ 0	\$0
920.563 Total	\$0		\$0	\$ 0	\$0
920.561 Total	\$0		\$0	\$ 0	\$0
920.563 Total	\$0		\$0	\$ 0	\$0
920.570 Total	\$3,282,636		\$3,282,636	\$ 733,343	\$4,015,979
920.600 Total	\$0		\$0	\$ 4	\$4
920.601 Total	\$2,753		\$2,753	\$ 503	\$3,257
920.604 Total			\$0	\$ 0	\$0
920.630 Total			\$0	\$ 0	\$0
920.632 Total			\$0	\$ 0	\$0
920.850 Total	\$0		\$0	\$ 0	\$ 0
	<u>\$ 89,039,183</u>	<u>\$ 0</u>	<u>\$ 89,039,183</u>	<u>\$ 7,258,375</u>	<u>\$ 96,297,558</u>
921.000 Total		\$23,623,084	\$23,623,084	-\$ 1,709,634	\$21,913,450
921.047 Total			\$0	\$ 0	\$ 0
921.200 Total		\$ 281,161	\$281,161	\$ 5,984	\$287,145
921.301 Total		\$ 3,025,789	\$3,025,789	\$ 701,796	\$3,727,585
921.371 Total		\$ 302,741	\$302,741	-\$ 40,611	\$262,130
921.561 Total		\$ 864	\$864	-\$ 36	\$829
921.563 Total		\$ 276	\$276	-\$ 8	\$267
921.570 Total		\$ 242,768	\$242,768	-\$ 6,493	\$236,275
921.600 Total		\$ 182,017	\$182,017	\$ 885	\$182,902
921.601 Total		\$ 1,533,162	\$1,533,162	-\$ 32,941	\$1,500,221
921.604 Total		\$ 416	\$416	\$ 100	\$516
921.630 Total			\$0	\$ 0	\$0
921.850 Total		\$ 0	\$0	\$ 0	\$0
921.999 Total			\$0	-\$ 1,186,219	(\$1,186,219)
	<u>\$ 0</u>	<u>\$ 29,192,278</u>	<u>\$ 29,192,278</u>	<u>-\$ 2,267,177</u>	<u>\$ 26,925,101</u>

2024 TCAP A&G LOADER ANALYSIS
2021 RECORDED COSTS

FERC Account	LABOR	NON_LABOR	TOTAL DIRECT	REASSIGNMENTS	TOTAL COSTS
922.000 Total			\$0	-\$ 7,586,790	(\$7,586,790)
922.200 Total			\$0	-\$ 2,152,634	(\$2,152,634)
922.301 Total			\$0	\$ 89,628	\$89,628
922.563 Total			\$0	-\$ 100	(\$100)
922.570 Total			\$0	-\$ 1,059,607	(\$1,059,607)
922.600 Total			\$0	-\$ 416	(\$416)
922.604 Total			\$0	\$ 0	\$0
	\$ 0	\$ 0	\$ 0	-\$ 10,709,919	-\$ 10,709,919
<hr/>					
923.000 Total	\$1,391,558	\$51,143,072	\$52,534,630	\$ 137,162,714	\$189,697,344
923.850 Total	\$0	\$0	\$0	\$ 0	\$0
	\$ 1,391,558	\$ 51,143,072	\$ 52,534,630	\$ 137,162,714	\$ 189,697,344
<hr/>					
924.000 Total	\$0	\$5,901,492	\$5,901,492	\$ 562,703	\$6,464,195
<hr/>					
925.000 Total	\$1,565,655	(\$1,503,522)	\$62,133	(\$1,846,681)	(\$1,784,548)
925.160 Total	\$3,418,284	\$1,716,711	\$5,134,995	\$870,018	\$6,005,012
925.180 Total	\$790,451	\$1,127,047	\$1,917,498	\$310,126	\$2,227,624
925.300 Total		\$19,960,612	\$19,960,612	(\$4,849,601)	\$15,111,011
925.310 Total		\$55,100,544	\$55,100,544	(\$10,580,432)	\$44,520,112
925.850 Total	\$0	\$0	\$0	\$0	\$0
	\$5,774,389	\$76,401,393	\$82,175,782	(\$16,096,571)	\$66,079,211
<hr/>					
926.000 Total	\$2,064,039	\$911,623	\$2,975,662	\$38,008,354	\$40,984,016
926.200 Total	\$14,500	\$8,108,561	\$8,123,061	(\$8,117,534)	\$5,527
926.202 Total	\$0	\$0	\$0	\$0	\$0
926.207 Total	\$0	\$0	\$0	\$0	\$0
926.239 Total		\$133,227	\$133,227	(\$133,227)	\$0
926.300 Total	\$2,293	\$245,796,096	\$245,798,389	(\$58,446,677)	\$187,351,712
	\$2,080,832	\$254,949,506	\$257,030,338	(\$28,689,083)	\$228,341,255
<hr/>					
928.000 Total	\$3,739,390	\$302,746	\$4,042,136	\$2,789,318	\$6,831,455
928.500 Total		\$571,804	\$571,804	\$0	\$571,804
	\$3,739,390	\$874,550	\$4,613,940	\$2,789,318	\$7,403,259
<hr/>					
930.046 Total		\$8,397	\$8,397	(\$60)	\$8,338
930.100 Total		\$1,235,009	\$1,235,009	\$4,959	\$1,239,968
930.200 Total	\$3,318,318	\$10,420,898	\$13,739,216	\$9,973,882	\$23,713,098
930.600 Total		\$44,536	\$44,536	\$280	\$44,816
930.625 Total		\$9,191	\$9,191	\$56	\$9,248
	\$3,318,318	\$11,718,032	\$15,036,350	\$9,979,118	\$25,015,468
<hr/>					
931.000 Total		\$22,474	\$22,474	\$975,581	\$998,055
931.600 Total		\$16,814,530	\$16,814,530	(\$799,959)	\$16,014,571
931.602 Total		\$5,966,514	\$5,966,514	(\$1,107,595)	\$4,858,919
	\$0	\$22,803,518	\$22,803,518	(\$931,973)	\$21,871,545
<hr/>					
935.000 Total		\$45,371	\$45,371	\$921,033	\$966,404
935.600 Total	\$3,648,377	\$17,425,392	\$21,073,769	\$286,065	\$21,359,834
935.601 Total		\$18,596	\$18,596	(\$405)	\$18,191
935.605 Total	\$22,727	\$565	\$23,292	(\$59,095)	(\$35,803)
935.606 Total	\$875,881	\$744,390	\$1,620,271	\$512,971	\$2,133,242
935.675 Total	\$109,601	\$19,326	\$128,928	\$1,623	\$130,550

2024 TCAP A&G LOADER ANALYSIS
 2021 RECORDED COSTS

FERC Account	LABOR	NON_LABOR	TOTAL DIRECT	REASSIGNMENTS	TOTAL COSTS
935.680 Total	\$0	\$0	\$0	\$0	\$0
	\$5,183,530	\$14,015,213	\$22,910,225	\$1,662,193	\$24,572,418
	\$110,527,200	\$466,999,054	\$581,237,737	\$100,719,696	\$681,957,433

Weighted Average RECC Calculation

Account No.	General Plant Accounts	Gas Plant In Service Year End 2021		RECC	Weighted Average RECC		Source
		Balance (\$)	Percent		RECC	Source	
1.	390	Structures and Improvements	257,107,747	23.86%	8.615%	2.056%	FERC Form 2 line no 112, page 209
2.	391	Office Furniture and Equipment					
3.	391.1	Office Furn & Equip-ME & FF	3,629,862	0.34%	11.446%	0.039%	
4.	391.2	Computer Equip	103,310,104	9.59%	24.587%	2.357%	
	391.25	Computer Hardware AMI	35,476	0.00%	24.587%	0.001%	
5.	391.3	Computer Software 2-4years	13,273,506	1.23%	37.982%	0.468%	
	391.35	Computer Software AMI	499,916	0.05%	20.736%	0.010%	
6.	391.4	Computer Software 5-8years	305,598,813	28.36%	20.736%	5.881%	
7.	391.5	Computer Software 9-12years	41,196,318	3.82%	13.908%	0.532%	
8.	391.55	Computer Software 15years	2,642,267	0.25%	10.568%	0.026%	
9.	391.6	Computer Software 20years	1,316,245	0.12%	8.959%	0.011%	
10.	392	Transportation Equipment	149,370	0.01%	10.091%	0.001%	FERC Form 2 line no 114, page 209
11.	393	Stores Equipment	112,635	0.01%	10.091%	0.001%	FERC Form 2 line no 115, page 209
12.	394	Tools, Shop, and Garage Equipment	123,277,589	11.44%	9.230%	1.056%	FERC Form 2 line no 116, page 209
13.	395	Laboratory Equipment	8,399,288	0.78%	9.062%	0.071%	FERC Form 2 line no 117, page 209
14.	396	Power Operated Equipment	1,124	0.00%	10.091%	0.000%	FERC Form 2 line no 118, page 209
15.	397	Communication Equipment	215,572,989	20.01%	10.957%	2.192%	FERC Form 2 line no 119, page 209
16.	398	Miscellaneous Equipment	1,444,836	0.13%	10.091%	0.014%	FERC Form 2 line no 120, page 209
17.			<u>1,077,568,085</u>	<u>100.00%</u>		<u>14.714%</u>	

Reflects 2021 FERC Form 2 data. RECC factors updated.

Gas Plant updated to 2021 FERC Form 2 data

RECC factors updated to 2021 values

General Plant Loading Factor

	<u>2024 TCAP</u>		<u>Sources</u>
1. Total General Plant	\$2,298,849,117		FERC Form 2, page 209, line 121
Transmission and Storage adjustment	17.59%		
Net Total General Plant after Storage adj.	<u>\$1,894,523,312</u>	ck	
1. Weighted Average RECC for General Plant	14.71%		RECC tab
2. Annualized General Plant Costs	\$278,751,022	1 x 2	
3. Net Recorded O&M Costs	\$321,025,665		O&M Expenses tab
4. General Plant Loading Factor	86.83%	3 / 4	
6. Transmission and Storage adjustment	17.59%		EC study

Notes:

1/ Total General Plant on Line 1 reflects removal of GP allocated to Transmission and Storage functions in EC study.

Reflects 2021 FERC Form 2 data for total General Plant.

**2021 FERC Form 2 data
M&S Annual Costs By Function**

I. Direct Plant Investment (To Allocate M&S Cost to Functions)

Line #	Function	Plant	Percent
1	Storage	\$1,917,731,794	9.87%
2	Transmission - Total	\$4,456,171,042	22.93%
3	Distribution - Total	\$13,058,897,985	67.20%
4	Customer Related	\$5,795,758,029	29.82%
5	Load Related	\$7,263,139,956	37.38%
6	General Plant	\$0	0.00%
7	Total	\$19,432,800,821	100.00%

FERC form 2, p. 207, line 57
FERC form 2, p. 209, line 92
from Allocation of Investment tab
from Allocation of Investment tab
from Allocation of Investment tab

II. Total M&S To Be Functionalized

8	Total Material and Supplies	\$65,353,863
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2021 FERC Year end M&S value from Selected Financial Data
(from Net Plant Investment Page 1 of 2, Line 13)

III. Functional Allocation of M&S

9	Storage	\$6,449,466	9.87%
10	Transmission - Total	\$14,986,414	22.93%
11	Distribution - Total	\$43,917,984	67.20%
12	Customer Related	\$19,491,538	29.82%
13	Load Related	\$24,426,446	37.38%
14	General Plant	\$0	0.00%
15	Total	\$65,353,863	100.00%

16	IV. M&S Annual Cost factor	9.39%
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from Annual Cost Factor tab, check with one correct

V. M&S Annual Costs

	2021 \$		2024 \$
17	Storage	\$605,605	\$597,963
18	Transmission - Total	\$1,407,224	\$1,389,468
19	Distribution - Total	\$4,123,899	\$4,071,863
20	Customer Related	\$1,830,255	\$1,807,161
21	Load Related	\$2,293,643	\$2,264,702
22	General Plant	\$0	\$0
23	Total	\$6,136,728	\$6,059,294

@ O&M Escalation 2021 to 2024

1.081 **\$2,479,091**

*escalated by capital factor: 2021\$ to 2024\$ 0.987
Updated to FERC Form 2 data for 2021

Updated to FERC Form 2 data for 2021

2024 TCAP Phase M&S Annual Costs By Function
Allocation of 2021 Distribution Plant Investment

Customer Related

	\$	Percent
1. 380 Services	3,551,498,851	
2. 381 Meters	986,390,272	
3. 382 Meter Installations	640,766,147	
4. 383 House Regulators	188,953,322	
5. 386 Other Property on Customer Premise	0	
6. Sub-Total	5,367,608,592	44.38%
388 ARO - Customer Related	428,149,437	
Customer Related Total	5,795,758,029	

Load Related

	\$	Percent
7. 374 Land & Land Rights	32,627,165	
8. 375 Structures & Improvements	361,104,453	
9. 376 Mains	6,100,785,625	
10. 378 Measurement & Reg Stations	155,470,912	
11. 387 Other Equipment	76,602,609	
12. Sub-Total	6,726,590,764	55.62%
388 ARO - Load Related	536,549,192	
Load Related Total	7,263,139,956	

13. Total Distribution Plant	13,058,897,985	100.000%
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FERC Form 2, p. 208-9

13,058,897,985 p. 209, line 109

0 <== Difference from Rounding

2024 TCAP M&S Annual Costs By Function
Development of Material & Supplies Annual Cost Factor

	<u>Capital Structure</u>	<u>Cost</u>	<u>Weighted Cost</u>	<u>Tax Factor</u>	<u>Pre-Tax Wt. Cost</u>
1. Long Term Debt	45.60%	4.23%	1.93%	1.00000	1.93%
2. Preferred Stock	2.40%	6.00%	0.14%	1.38857	0.20%
3. Common Equity	52.00%	10.05%	5.23%	1.38857	7.26%
4.			7.300%		9.39%

sources:
 2020 Cost of Capital Decision (D.19-12-056)

SOUTHERN CALIFORNIA

2021 Economic Assumptions Update LEVELIZED ANNUAL CAPI

utility social

Auth ROR ==> 7.30%

Fed Tax Rate ==> 21.00%

FERC Account	Account Name
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Book Life	Fed Tax Life	State Tax Life	Percent Salvage	Normlzd Federal Taxes ?	Normlzd State Taxes ?	Depreciation Method			
						Federal Tax	State Tax		

GAS GENERAL PLANT

G-391.5 Software Programs - 10yr ASL
 G-391.55 Software Programs - 15yr ASL
 G-391.6 Software Programs - 20yr ASL
 G-391.3 Software Programs - 3yr ASL
 G-391.4 Software Programs - 6yr ASL

10	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%
15	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%
20	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%
3	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%
6	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%

GAS

TOTAL COST AND RECC FACTORS

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

1.342%

LACC Components (in percent)					RECC Factors	PVCC Factors	Sum of Rev Req
Book Depr	Return on Capital	Income Taxes	Property Taxes	Total LACC			
10.00	3.51	0.76	0.68	14.95	13.91	103.58	146.07
6.67	3.61	0.74	0.74	11.75	10.57	105.06	167.96
5.00	3.74	0.74	0.79	10.26	8.96	106.26	189.85
33.33	3.76	1.08	0.47	38.65	37.98	100.87	115.42
16.67	3.52	0.84	0.60	21.63	20.74	102.14	128.56

SOUTHERN CALIFORNIA GAS

2021 Economic Assumptions Update LEVELIZED ANNUAL CAPITAL COST AND RECC FACTORS

utility social

Auth ROR ==> 7.30%

Fed Tax Rate ==> 21.00%

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

1.342%

FERC Account	Account Name	Book Life	Fed Tax Life	State Tax Life	Percent Salvage	Normlzd Federal Taxes ?	Normlzd State Taxes ?	Depreciation Method		LACC Components (in percent)					RECC Factors	PVCC Factors	Sum of Rev Req		
								Federal Tax	State Tax	Book Depr	Return on Capital	Income Taxes	Property Taxes	Total LACC					
GAS UNDERGROUND STORAGE																			
		9	10	11	12	13	14	15	16	19	20	21	22	23	25	26	27		
G-352	Wells	49	15	22	-70%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.47	3.83	0.97	0.73	9.01	7.08	119.48	224.69
G-353	Lines	54	15	22	-40%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.59	4.41	1.09	0.87	8.97	6.99	120.14	282.24
G-354	Compressor Station Equipment	41	15	22	-15%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.80	4.46	1.11	0.88	9.26	7.43	119.86	276.35
G-356	Purification Equipment	39	15	22	-30%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.33	4.16	1.04	0.80	9.34	7.53	119.75	253.27
GAS TRANSMISSION PLANT																			
G-365.1	Land	0	0	0	0%	FALSE	FALSE	none	0%	none	0%	0.00	7.30	2.10	1.34	10.74	n/a	147.12	1105.13
G-366	Structures & Improvements	47	39	45	-40%	TRUE	FALSE	sl	0%	db/sl	0%	2.98	4.68	1.38	0.83	9.86	7.79	130.22	287.81
G-367	Mains	64	15	22	-60%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.50	4.40	1.09	0.87	8.86	6.81	120.09	265.76
G-368	Compressor Station Equipment	50	15	22	-15%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.30	4.67	1.15	0.94	9.06	7.11	120.42	309.85
G-369	Measuring & Regulating Equipment	46	15	22	-50%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.26	4.04	1.01	0.78	9.10	7.20	119.75	247.73
G-371	Other Equipment	21	15	22	-10%	TRUE	FALSE	db/sl	150%	db/sl	200%	5.24	4.08	1.10	0.74	11.16	9.69	118.09	203.20
GAS DISTRIBUTION PLANT																			
G-374.1	Land	0	0	0	0%	FALSE	FALSE	none	0%	db/sl	0%	0.00	7.30	2.10	1.34	10.74	n/a	147.12	1105.13
G-374.2	Land Rights	40	40	40	0%	FALSE	FALSE	sl	0%	db/sl	0%	2.50	5.17	1.49	0.93	10.09	8.11	130.02	313.88
G-375	Structures & Improvements	40	39	45	-10%	TRUE	FALSE	sl	0%	db/sl	0%	2.75	4.99	1.47	0.89	10.10	8.12	130.11	302.03
G-376	Mains	68	20	35	-80%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.65	4.38	1.19	0.84	9.05	6.92	122.96	231.10
G-378	Measuring & Regulating Equipment	47	20	35	-95%	TRUE	FALSE	db/sl	150%	db/sl	200%	4.15	3.50	1.00	0.62	9.27	7.32	122.34	191.81
G-380	Services	67	20	35	-115%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.21	3.94	1.11	0.73	8.99	6.89	122.09	150.81
G-381	Meters	25	20	35	5%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.80	4.62	1.34	0.86	10.62	9.04	120.53	229.99
G-382	Meter & Regulator Installations	30	20	35	-10%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.67	4.41	1.24	0.82	10.14	8.44	122.12	243.24
G-383	House Regulators	33	20	35	5%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.88	4.77	1.32	0.91	9.88	8.12	122.09	266.77
G-387	Other Equipment	21	20	35	5%	TRUE	FALSE	db/sl	150%	db/sl	200%	4.52	4.57	1.37	0.83	11.29	9.80	119.44	211.60
GAS GENERAL PLANT																			
G-390	Structures & Improvements	33	39	45	-15%	TRUE	FALSE	sl	0%	db/sl	0%	3.48	4.74	1.43	0.82	10.47	8.61	129.47	269.48
G-391.1	Office Furniture & Equipment	14	7	10	0%	TRUE	FALSE	db/sl	200%	db/sl	200%	7.14	3.81	0.97	0.73	12.65	11.45	108.66	166.78
G-391.2	Computer Equipment	5	5	6	0%	TRUE	FALSE	db/sl	200%	db/sl	200%	20.00	3.78	1.09	0.57	25.44	24.59	103.47	125.64
G-393	Stores Equipment	20	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	5.00	4.45	1.33	0.79	11.56	10.09	119.69	205.90
G-394.1	Shop & Garage Equipment	29	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.45	4.59	1.30	0.86	10.20	8.52	121.60	245.35
G-394.3	Large Portable Tools	24	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	4.17	4.50	1.31	0.82	10.80	9.23	120.67	223.46
G-395	Laboratory Equipment	25	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	4.00	4.52	1.30	0.83	10.65	9.06	120.88	227.84
G-397	Communications Equipment	15	7	10	0%	TRUE	FALSE	db/sl	200%	db/sl	200%	6.67	3.82	0.96	0.74	12.19	10.96	108.93	171.15
G-398	Miscellaneous Equipment	20	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	5.00	4.45	1.33	0.79	11.56	10.09	119.69	205.90
G-391.5	Software Programs - 10yr ASL	10	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%	10.00	3.51	0.76	0.68	14.95	13.91	103.58	146.07
G-391.55	Software Programs - 15yr ASL	15	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%	6.67	3.61	0.74	0.74	11.75	10.57	105.06	167.96
G-391.6	Software Programs - 20yr ASL	20	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%	5.00	3.74	0.74	0.79	10.26	8.96	106.26	189.85
G-391.3	Software Programs - 3yr ASL	3	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%	33.33	3.76	1.08	0.47	38.65	37.98	100.87	115.42

Capital and O&M Escalators					
Plant	2021 \$s	to	2024 \$s	Factor: Capital	0.9874
Meter	2021 \$s	to	2024 \$s	Factor: Meter	1.0453
Service	2021 \$s	to	2024 \$s	Factor: Service	1.0525
	2021 \$s	to	2024 \$s	Factor: O&M	1.0809

factor used to escalate most capital forecasts (e.g., dist capital)
 factor used to escalate M&S\$
 factor used to escalate transmission and storage capital costs
 factor used to escalate 2021 FERC Form 2 data to 2024 \$

	<u>Labor</u>	<u>Nonlabor</u>
Split Factors		
2021	33.41%	66.59%
	\$millions	
	2021	
Total Salaries & Wages	1,065	Source: December 31, 2021 FERC Form 2, page 355, line 77
Total Gas O&M Exp.	3,186	Source: December 31, 2021 FERC Form 2, page 325, line 271

Cost Escalators, for use in SoCalGas 2024

	Non-L O&M	Labor O&M	Gas Plant	Meters	Plastic Services
	JGTOTALMS	JAHE49NS	JUG@PCF	JUGPDMT@f	JUGPDSVP@PCF
1997	0.546508	0.515474	0.329802	0.416693	0.488075
1998	0.556188	0.537647	0.333936	0.417759	0.496418
1999	0.568399	0.551372	0.341745	0.406569	0.506847
2000	0.588664	0.569498	0.354147	0.430014	0.514495
2001	0.605079	0.590252	0.358970	0.446000	0.526314
2002	0.616970	0.599680	0.366319	0.429482	0.544391
2003	0.636191	0.619954	0.378492	0.410832	0.556211
2004	0.660023	0.641042	0.435908	0.389624	0.574287
2005	0.689741	0.668229	0.511469	0.394953	0.603488
2006	0.716104	0.685875	0.532369	0.419464	0.629909
2007	0.741028	0.697514	0.522263	0.480209	0.651879
2008	0.778895	0.721793	0.588224	0.533921	0.690396
2009	0.776019	0.737888	0.581793	0.544578	0.722796
2010	0.796150	0.751854	0.606781	0.539889	0.740873
2011	0.825389	0.771478	0.664198	0.546284	0.765902
2012	0.843603	0.791098	0.716837	0.572287	0.791905
2013	0.856661	0.807784	0.712658	0.615981	0.806158
2014	0.870143	0.822510	0.720466	0.744399	0.826320
2015	0.872294	0.851420	0.710361	0.801415	0.844745
2016	0.877453	0.884126	0.708294	0.855766	0.867341
2017	0.894385	0.906570	0.746189	0.959673	0.888894
2018	0.919921	0.920128	0.790285	1.033740	0.904885
2019	0.934935	0.923903	0.827951	1.077434	0.930957
2020	0.933900	0.962888	0.869291	1.032674	0.958768
2021	1.000000	1.000000	1.000000	1.000000	1.000000
2022	1.038094	1.038914	1.075795	1.013781	1.022800
2023	1.038197	1.069333	1.022173	1.036951	1.035659
2024	1.045893	1.098394	0.987382	1.045280	1.052543
2025	1.060272	1.127620	0.978623	1.067205	1.079063
2026	1.079035	1.159055	0.995406	1.095455	1.100326
2027	1.099507	1.192006	1.017677	1.096034	1.125230
2028	1.121022	1.226165	1.040631	1.093279	1.150294
2029	1.143508	1.261991	1.065267	1.104631	1.174317
2030	1.166583	1.299289	1.088654	1.118575	1.196051

Values from EC study

Transmission and Storage

EC study allocation of A&G and Gen Plant to transmission and storage function

A&G

<u>Transmission</u>	<u>Storage</u>	<u>Total</u>	
66.4	35.8	581.5	
11.43%	6.16%		% A&G allocated to Tran/Storage

Gen Plant

<u>Transmission</u>	<u>Storage</u>	<u>Total</u>	
3.924	2.116	34.340	Gen Plant Return
24.051	12.968	210.479	Gen Plant Depreciation
1.218	0.656	10.655	Gen Plant Taxes
29.193	15.740	255.474	
11.43%	6.16%		% Gen Plant allocated to Tran/Storage

Real Economic Carry Charge (RECC) Factors		
FERC Account	Account Name	RECC Factors
G-376	Mains	8.1%
G-378	Measuring & Regulating Equipment	6.9%
G-380	Services	7.3%
G-381	Meters	6.9%
G-382	Meter Installations	9.0%
G-383	House Regulators	8.4%

Total Marginal A&G Costs \$000's	\$231,530
+ Total Payroll Taxes \$000	\$48,408
= Marginal A&G and Payroll Taxes \$000	\$279,938
/ Net O&M Costs \$000	\$321,026
= Marginal A&G Loading Factor as a % of O&M	87.20%

General Plant Loading Factor

Total General Plant \$000	\$1,894,523
* Weighted Average RECC for General Plant	14.71%
= Annualized General Plant Costs	\$278,751
/ Net Recorded O&M Costs \$000	\$321,026
= General Plant Loading Factor as a % of O&M	86.83%

M&S Annual Costs

Function	
Customer Related \$000	\$1,807
Load Related \$000	\$2,479
Total	\$4,286

Base Year	2021
Test Year	2024

**SoCalGas
2024 TCAP**

**Section 4
Cost Allocation Model**

Workpapers to the Prepared Written Testimony of Marjorie Schmidt-Pines

**SOUTHERN CALIFORNIA GAS COMPANY
2024 TCAP**

**Section 5
Long Run Marginal Customer Cost Model
Minimum observed costs - 20th percentile**

**Workpapers to the Prepared Written Testimony of
Marjorie Schmidt-Pines**

SoCalGas Residential Customer Cost for Rate Design Customer Charge for 20th min

	Residential
Marginal Customer Unit Cost @ various LRMC Allocation Methods	
Customer Cust \$/Cust/Year Rental Method	\$272.30
Customer Cost \$/Cust/Year NCO Method	\$159.95
Customer Cost \$/Cust/Year NCO Method w/Replacement Cost	\$236.20
Customer Cust \$/Cust/Year Rental Method ARM1	\$164.78
Customer Cust \$/Cust/Year Rental Method ARM2	\$248.21
ARM1 Factor	13%
ARM2 Factor	80%

Table X1	
SoCalGas' Residential Marginal Customer Unit Cost @ various LRMC Allocation Methods	
Customer Cust \$/Cust/Month Rental Method	\$22.69
Customer Cost \$/Cust/Month NCO Method	\$13.33
Customer Cost \$/Cust/Year NCO Method w/Replacement Cost	\$19.68
Customer Cust \$/Cust/Month Rental Method ARM1	\$13.73
Customer Cust \$/Cust/Month Rental Method ARM2	\$20.68
Note: Average cost for the bottom 20%	

Table 3: SoCalGas' Residential Minimum Connection Cost Per Month

	Rental method	NCO Method	ARM 1	ARM2
	\$22.69	\$19.68	\$13.73	\$20.68

Note: Average cost for the bottom 20%
 NCO is with Replacement Adder

SCG 2024 TCAP
 LRMC Customer Cost/Rental Method
 RD Format

S10		Residential	CCI	G-AC	G-GEN	NGV	Total Core
	<u>Marginal Customer Unit Cost @ various LRMC Allocation Methods</u>						
1	Customer Cust \$/Cust/Year Rental Method	\$286.40	\$1,602.20	\$7,388.64	\$15,377.31	\$55,226.83	
2	Customer Cost \$/Cust/Year NCO Method	\$159.43	\$831.15	\$1,491.30	\$5,566.15	\$49,526.62	
3	Customer Cost \$/Cust/Year NCO Method w/Replacement Cost	\$239.01	\$1,056.60	\$2,645.34	\$9,210.21	\$51,434.94	

1							
2	<u>Input from O&M Loader Model:</u>						
3	Marginal A&G/Payroll Taxes Loading Factor as a % of O&M expenses	87.20%	SCG LRMC O&M Loaders				
4	General Plant Loading Factor as a % of O&M expenses	86.83%	SCG LRMC O&M Loaders				
5	Annualized Distribution Customer Related Costs \$000/yr	\$1,807,161	SCG LRMC O&M Loaders				
6							
7	2021-24 Factor: Capital General Plant	0.9874	SCG LRMC O&M Loaders				
8	2021-24 Factor: O&M	1.0809	SCG LRMC O&M Loaders				

SCG 2024 TCAP
 LRMC Customer Cost/Rental Method
 RD Format

S10		NCCI	EG Tier 1	EG Tier 2	EOR	Total Retail NonCore	Long Beach	SDG&E	South West Gas	Vernon
	<u>Marginal Customer Unit Cost @ various LRMC Allocation Methods</u>									
1	Customer Cust \$/Cust/Year Rental Method	\$67,850.91	\$32,228.61	\$207,136.81	\$91,610.09		\$1,174,227.80	\$2,615,750.14	\$789,930.12	\$641,584.94
2	Customer Cost \$/Cust/Year NCO Method	\$25,685.22	\$20,577.22	\$68,605.06	\$34,008.28		\$246,638.07	\$231,542.67	\$305,655.33	\$178,378.22
3	Customer Cost \$/Cust/Year NCO Method w/Replacement Cost	\$33,612.71	\$23,537.62	\$92,274.48	\$42,018.50		\$741,549.41	\$1,503,625.87	\$564,037.98	\$425,520.09

- 1
- 2 **Input from O&M Loader Model:**
- 3 Marginal A&G/Payroll Taxes Loading Factor as a % of O&M expenses
- 4 General Plant Loading Factor as a % of O&M expenses
- 5 Annualized Distribution Customer Related Costs \$000/yr
- 6
- 7 2021-24 Factor: Capital General Plant
- 8 2021-24 Factor: O&M

SCG 2024 TCAP
 LRMC Customer Cost/Rental Method
 RD Format

S10		Total Whole sale	Ecogas	UBS	Total Noncore	SYSTEM TOTAL	Sources
	<u>Marginal Customer Unit Cost @ various LRMC Allocation Methods</u>						
1	Customer Cust \$/Cust/Year Rental Method		\$169,574.89	\$0.00			Cust MC
2	Customer Cost \$/Cust/Year NCO Method		\$101,401.03	\$0.00			Cust MC
3	Customer Cost \$/Cust/Year NCO Method w/Replacement Cost		\$137,774.89	\$0.00	\$3,628,537.64		Cust MC

- 1
- 2 **Input from O&M Loader Model:**
- 3 Marginal A&G/Payroll Taxes Loading Factor as a % of O&M expenses
- 4 General Plant Loading Factor as a % of O&M expenses
- 5 Annualized Distribution Customer Related Costs \$000/yr
- 6
- 7 2021-24 Factor: Capital General Plant
- 8 2021-24 Factor: O&M

S10

	Core Residential										Core Non-Residential				Noncore Retail				
	Single Family (Detached homes)	Multi Family	Master Meter (up to 100,000 therms/year and greater)		Residential Total or Avg.	Non-Residential Commercial/Industrial					Air Conditioning	Natural Gas Vehicle	Gas Engine	G-30 - Noncore C&I			Small EG < 3million	Large EG > 3million	
			Very Small - up to 300 therms/year	Small - 301 to 3,000 therms/year		Medium - 3,001 to 50,000 therms/year	Large - 50,001 to 250,000 therms/year	Very Large - Over 250,000 therms/year	Average	Distribution				Transmission	Total				
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	519	19	538	351	21
Marginal Investment: 2021 \$/Customer	\$413.14	\$346.30	\$1,700.46	\$23,516.62	\$419.62	\$733.12	\$1,201.06	\$2,399.08	\$8,319.97	\$12,280.87	\$1,363.65	\$5,291.82	\$90,191.70	\$3,347.81	\$139,681.17	\$300,234.61	\$148,585.35	\$103,857.60	\$916,355.85
Meter & House Reg Service Lines	\$1,274.99	\$1,341.83	\$11,727.95	\$93,892.86	\$1,516.85	\$8,393.24	\$8,646.46	\$12,753.10	\$51,902.21	\$708,154.59	\$11,009.79	\$79,085.45	\$88,095.97	\$205,325.53	\$383,335.44	#####	\$410,998.74	\$190,284.47	\$466,096.97
Exclusive Use Facilities	\$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	\$0.00	\$0.00	\$320,861.60
Total	\$1,688.13	\$1,688.13	\$13,428.41	\$117,409.47	\$1,936.47	\$9,126.36	\$9,847.52	\$15,152.19	\$60,222.17	\$720,435.46	\$12,373.44	\$84,377.27	\$178,287.67	\$208,673.34	\$548,479.76	#####	\$587,610.79	\$294,142.08	\$1,703,114.42
Weighted RECC factors used to annualize SRM capital costs																			
Meter & House Reg Service Lines	8.65%	8.65%	8.56%	8.48%	8.66%	8.61%	8.61%	8.56%	8.54%	8.56%	8.75%	8.53%	8.46%	8.52%	8.45%	8.46%	8.46%	8.45%	8.45%
Exclusive Use	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%	9.04%	9.04%	9.04%	9.04%	9.04%
Annualized Marginal Investment: \$/Cust.	\$35.72	\$29.96	\$145.56	\$1,994.48	\$36.33	\$63.12	\$103.37	\$205.37	\$710.89	\$1,051.05	\$119.33	\$451.63	\$7,628.54	\$285.36	\$11,806.22	\$25,390.96	\$12,565.41	\$8,779.22	\$77,460.78
Meter & House Reg Service Lines	\$87.79	\$92.40	\$807.57	\$6,465.33	\$104.45	\$577.95	\$956.38	\$878.16	\$3,573.91	\$48,762.51	\$758.12	\$5,445.71	\$6,066.16	\$14,138.42	\$26,395.93	\$60,333.40	\$28,300.79	\$13,102.72	\$32,094.77
Exclusive Use Facilities	\$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	\$0.00	\$0.00	\$28,976.20
Total Annualized Marginal Investment: 2024 \$/Cust.	\$123.52	\$122.36	\$953.13	\$8,459.81	\$140.78	\$641.07	\$698.76	\$1,083.53	\$4,284.80	\$49,813.56	\$877.45	\$5,897.34	\$13,694.70	\$14,423.78	\$40,603.10	\$114,584.74	\$43,398.79	\$21,881.94	\$138,531.75
O&M: \$/Customer																			
Customer Services O&M Cost 2021's \$/000/yr	\$86,027.90	\$40,203.55	\$2,716.25	\$1.16	\$128,948.87	\$4,326.81	\$4,724.93	\$11,943.44	\$854.96	\$224.45	\$22,074.61	\$0.17	\$83.47	\$96.26	\$0.00	\$0.00	\$269.63	\$74.89	\$4.48
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	519	19	538	351	21
Customer Services O&M \$/Customer 2021's	\$22.68	\$22.68	\$22.68	\$22.68	\$22.68	\$48.67	\$73.21	\$254.07	\$411.43	\$717.11	\$108.83	\$19.10	\$340.68	\$134.07	\$0.00	\$0.00	\$58.34	\$213.35	\$213.35
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809
Customer Services O&M \$/Customer 2024's	\$24.52	\$24.52	\$24.52	\$24.52	\$24.52	\$52.61	\$79.13	\$274.62	\$444.70	\$775.09	\$117.63	\$20.65	\$368.22	\$144.91	\$581.86	\$581.86	\$581.86	\$230.60	\$230.60
Customer Accounts O&M 2013's \$/000/yr	\$53,584.51	\$25,041.73	\$1,691.88	\$0.72	\$80,318.84	\$1,111.27	\$687.44	\$5,977.49	\$163.40	\$117.62	\$8,057.21	\$4.32	\$284.92	\$48.52	\$0.00	\$0.00	\$897.83	\$604.04	\$36.14
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	519	19	538	351	21
Customer Services O&M \$/Customer 2021's	\$14.13	\$14.13	\$14.13	\$14.13	\$14.13	\$12.50	\$16.65	\$127.16	\$78.63	\$375.77	\$39.72	\$479.68	\$1,162.94	\$67.57	\$0.00	\$0.00	\$1,068.83	\$1,720.92	\$1,720.92
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809
Customer Accounts O&M \$/Customer 2024's	\$15.27	\$15.27	\$15.27	\$15.27	\$15.27	\$13.51	\$17.51	\$137.44	\$84.99	\$406.16	\$42.93	\$518.46	\$1,256.97	\$73.04	\$1,803.76	\$1,803.76	\$1,803.76	\$1,860.06	\$1,860.06
Meter & House Reg O&M Total Cost	\$5,485.23	\$2,148.72	\$712.85	\$4.20	\$8,351.00	\$3.06	\$3.64	\$5.30	\$0.81	\$0.18	\$13.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$62.00	\$513.00	\$61.00
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	519	19	538	351	21
Customer Services O&M \$/Customer 2021's	\$1.45	\$1.21	\$5.95	\$82.33	\$1.47	\$0.03	\$0.06	\$0.11	\$0.39	\$0.58	\$0.06	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$115.24	\$1,461.54	\$2,904.76
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809
Meter & House Reg O&M \$/Customer 2024's	\$1.56	\$1.31	\$6.43	\$88.98	\$1.59	\$0.04	\$0.06	\$0.12	\$0.42	\$0.62	\$0.07	\$0.00	\$0.00	\$0.00	\$124.56	\$124.56	\$124.56	\$1,579.71	\$3,139.62
Total Service Line Footage	231,707,635	58,800,895	11,613,724	14,016	302,136,270	12,721,655	6,951,318	6,611,352	562,372	116,057	26,962,754	250	60,700	625,863	104,645	16,542	121,188	46,579	16,273
Percent of Total Footage	70.23%	17.82%	3.52%	0.00%	91.57%	3.86%	2.11%	2.00%	0.17%	0.04%	8.17%	0.00%	0.02%	0.19%	0.03%	0.01%	0.04%	0.01%	0.00%
Allocated SL O&M Costs \$/000	\$31,820	\$8,075	\$1,595	\$2	\$41,492	\$1,747	\$955	\$908	\$77	\$16	\$3,703	\$0	\$8	\$86	\$14	\$2	\$17	\$6	\$2
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809
Allocated SL O&M Costs 2024's	\$34,393	\$8,728	\$1,724	\$2	\$44,947	\$1,888	\$1,032	\$961	\$83	\$17	\$4,002	\$0	\$9	\$93	\$16	\$2	\$18	\$7	\$2
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	519	19	538	351	21
Service Lines O&M \$/Customer 2024's	\$9.07	\$4.92	\$14.40	\$40.79	\$7.89	\$21.24	\$15.99	\$20.88	\$40.17	\$55.04	\$19.73	\$4.12	\$36.78	\$129.39	\$29.93	\$129.23	\$33.44	\$19.70	\$115.02
Customer Service & Information Cost (CSI) Costs Accounts (FERC Accounts 907 to 910):																			
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	519	19	538	351	21
Customer Services & Information O&M \$/Customer 2021's	\$3.49	\$3.49	\$3.49	\$3.49	\$3.49	\$3.49	\$3.49	\$3.49	\$3.49	\$3.49	\$3.49	\$0.00	\$12,459.35	\$0.00	\$0.00	\$0.00	\$5,887.41	\$72.96	\$18,175.54
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809
Customer Accounts O&M \$/Customer 2024's	\$3.78	\$3.78	\$3.78	\$3.78	\$3.78	\$3.78	\$3.78	\$3.78	\$3.78	\$3.78	\$3.78	\$0.00	\$13,466.72	\$0.00	\$0.00	\$0.00	\$6,363.42	\$78.56	\$19,645.09
Total Direct O&M \$/customer/yr	\$54.20	\$49.80	\$64.40	\$173.34	\$53.04	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$264.00	\$543.23	\$15,128.69	\$347.34	\$2,540.11	\$2,639.42	\$8,907.04	\$3,768.92	\$24,990.39
O&M Loaders: \$/Customer																			
Administrative & General as % of O&M	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%
Administrative & General \$/customer/yr 2024's	\$47.26	\$43.43	\$56.15	\$151.16	\$46.25	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$230.21	\$473.70	\$13,192.38	\$302.88	\$2,215.01	\$2,301.60	\$7,767.04	\$3,286.54	\$21,791.90
General Plant as % of O&M	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%
General Plant \$/customer/yr 2024's	\$47.06	\$43.24	\$55.92	\$150.52	\$46.06	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$229.24	\$471.69	\$13,136.46	\$301.60	\$2,205.62	\$2,291.84	\$7,734.12	\$3,272.61	\$21,699.53
Materials & Supplies Loader:																			
Per Customer Direct+A&G+GP O&M \$/customer/yr	\$148.52	\$136.47	\$176.47	\$475.02	\$145.35	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$723.45	\$1,488.62	\$41,457.53	\$951.81	\$6,960.73	\$7,232.86	\$24,408.20	\$10,328.08	\$68,481.81
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	519	19	538	351	21
Total Direct+A&G+GP O&M \$/000/yr	\$563.268	\$241.877	\$21,131	\$24	\$826.301	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$146,742	\$13	\$10,157	\$683	\$3,613	\$137	\$13,132	\$3,625	\$1,438
Percent of Total	56.09%	24.09%	2.10%	0.00%	82.29%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	14.61%	0.00%	1.01%	0.07%	0.36%	0.01%	1.31%	0.36%	0.14%
Allocated M&S \$1,807,161.19	\$1,013,686																		

S10

	Noncore Wholesale						Total O&M Cost for All	Customers	
	Wholesale					International			
	G-40	LB	SDG&E	SWG	Vernon	Ecogas			
2021 Number of Customers	30	1	1	1	1	1	5,889,515	cust 2	
Marginal Investment: 2021 \$/Customer									
Meter & House Reg	\$403,478.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		cust 5	
Service Lines	\$274,177.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		cust 5	
Exclusive Use Facilities	\$51,163.67	\$10,265,059.48	\$26,384,543.35	\$5,359,168.35	\$5,126,021.11	\$754,437.82		cust 6	
Total	\$728,819.80	\$10,265,059.48	\$26,384,543.35	\$5,359,168.35	\$5,126,021.11	\$754,437.82			
Weighted RECC factors used to annualize SRM capital costs									
Meter & House Reg	8.45%	0	0	0	0	0		cust 10	
Service Lines	6.89%	6.89%	6.89%	6.89%	6.89%	6.89%		cust 10	
Exclusive Use	9.04%	9.04%	9.04%	9.04%	9.04%	9.04%		cust 10	
Annualized Marginal Investment: \$/Cust.									
Meter & House Reg	\$34,098.98	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
Service Lines	\$18,879.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			
Exclusive Use Facilities	\$4,623.34	\$927,589.73	\$2,384,207.47	\$484,274.79	\$463,206.72	\$68,173.86			
Total Annualized Marginal Investment: 2024 \$/Cust.	\$57,601.80	\$927,589.73	\$2,384,207.47	\$484,274.79	\$463,206.72	\$68,173.86			
O&M: \$/Customer									
Customer Services O&M Cost 2021's \$000/year	\$1.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$151,573.87	cust 8	
2021 Number of Customers	30	1	1	1	1	1	5,889,515	cust 2	
Customer Services O&M \$/Customer 2021's	\$50.03	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$25.74		
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	Loader Model	
Customer Services O&M \$/Customer 2024's	\$54.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27.82		
Customer Accounts O&M 2013's \$000/yr	\$50.90	\$6.53	\$5.09	\$10.86	\$3.64	\$2.92	\$90,331.76	cust 8	
2021 Number of Customers	30	1	1	1	1	1	5,889,515	cust 2	
Customer Services O&M \$/Customer 2021's	\$1,696.63	\$6,530.71	\$5,087.00	\$10,861.85	\$3,643.28	\$2,921.42	\$15.34		
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	Loader Model	
Customer Accounts O&M \$/Customer 2024's	\$1,833.81	\$7,058.74	\$5,498.90	\$11,740.07	\$3,937.85	\$3,157.83	\$16.58		
Meter & House Reg O&M Total Cost	\$42.00	\$8.00	\$8.00	\$17.00	\$1.00	\$1.00	\$9,077.00	cust 8	
2021 Number of Customers	30	1	1	1	1	1	5,889,515	cust 2	
Customer Services O&M \$/Customer 2021's	\$1,400.00	\$8,000.00	\$8,000.00	\$17,000.00	\$1,000.00	\$1,000.00	\$1.54		
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	Loader Model	
Meter & House Reg O&M \$/Customer 2024's	\$1,513.19	\$8,646.82	\$8,646.82	\$18,374.50	\$1,080.85	\$1,080.85	\$1.67		
Total Service									
Line Footage	11,667	0	0	0	0	0	329,934,966	cust 8	
Percent of									
Total Footage	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%		
Allocated SL O&M Costs \$000	\$2	\$0	\$0	\$0	\$0	\$0	\$45,310	cust 8	
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	Loader Model	
Allocated SL O&M Costs 2024's	\$2	\$0	\$0	\$0	\$0	\$0	\$45,973		\$0
2021 Number of Customers	30	1	1	1	1	1	5,889,515	cust 2	
Service Lines O&M \$/Customer 2024's	\$57.73	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8.32		
Customer Service & Information Cost (CSI) Costs Accounts (FERC P									
2021 Number of Customers	30	1	1	1	1	1	5,889,515		
Customer Services & Information O&M \$/Customer 2021's	\$8,261.26	\$68,590.22	\$64,946.55	\$75,148.83	\$55,473.00	\$30,252.33	\$7.26	\$0.00	\$0.00
escalator 2021's to 2024's	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	1.0809	Loader Model	
Customer Accounts O&M \$/Customer 2024's	\$8,929.20	\$74,135.95	\$70,197.67	\$81,224.84	\$59,958.16	\$32,686.32	\$7.84		
Total Direct O&M \$/customer/yr	\$12,388.01	\$89,841.81	\$84,342.79	\$111,339.41	\$64,976.87	\$36,936.80	\$62.22		
O&M Loaders: \$/Customer									
Administrative & General as % of O&M	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	87.20%	cust 4, a&a	
Administrative & General \$/customer/yr 2024's	\$10,802.48	\$78,342.78	\$73,547.84	\$97,089.18	\$56,660.54	\$32,209.30	\$54.26		
General Plant as % of O&M	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	86.83%	cust 4, gen plant	
General Plant \$/customer/yr 2024's	\$10,756.69	\$78,010.71	\$73,236.09	\$96,677.65	\$56,420.37	\$32,072.77	\$54.03		
Materials & Supplies Loader:									
Per Customer Direct+A&G+GP O&M \$/customer/yr	\$33,947.19	\$246,195.00	\$231,126.73	\$305,106.25	\$178,057.78	\$101,218.87			
2021 Number of Customers	30	1	1	1	1	1	5,889,515	cust 2	
Total Direct+A&G+GP O&M \$000/yr	\$1,018	\$246	\$231	\$305	\$178	\$101	\$1,004,171.47		
Percent of Total	0.10%	0.02%	0.02%	0.03%	0.02%	0.01%	100.00%		
Allocated M&S	\$1,807,161.19	\$443	\$446	\$549	\$320	\$182	\$1,807,161.19	Loader Model	
2021 Number of Customers	30	1	1	1	1	1	5,889,515	cust 2	
M&S Loader \$/customer/yr 2024's	\$61.09	\$443.07	\$445.95	\$549.09	\$320.44	\$182.16	\$0.31		
Total O&M Loaders \$/customer/yr	\$21,620.27	\$156,796.56	\$147,199.88	\$194,316.92	\$113,401.36	\$64,464.22	\$108.59		
LRMC Rental Customer Cost \$/customer/year	\$91,610.09	\$1,174,227.80	\$2,615,750.14	\$789,930.12	\$641,584.94	\$169,574.89	\$170.81		

S10

	Core Residential										Core Non-Residential			Noncore Retail					
	Single Family (Detached homes)	Multi Family	Master Meter (up to 100,000 therms/year)		Residential Total or Avg.	Non-Residential Commercial/Industrial					Average	Air Conditioning	Natural Gas Vehicle	Gas Engine	G-30 - Noncore C&I			Small EG < 3million	Large EG > 3million
			(100,001 therms per year and greater)			Very Small - up to 300 therms/year	Small - 301 to 3,000 therms/year	Medium - 3,001 to 50,000 therms/year	Large - 50,001 to 250,000 therms/year	Very Large - Over 250,000 therms/year					Distribution	Transmission	Total		
Total Rental Capital (\$000) before RECC					\$11,008,365	\$811,306	\$635,549	\$712,274	\$125,142	\$225,496		\$759	\$43,680	\$149,827	\$284,661	\$29,734	\$316,135	\$103,244	\$35,765
NCO Method:																			
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	519	19	538	351	21
New Hookups Rate	0.54%	0.70%	0.19%	0.00%	0.59%	0.77%	0.72%	0.59%	0.35%	0.30%	0.70%	0.00%	3.67%	1.81%	0.19%	0.00%	0.18%	19.20%	0.00%
No of New Customer Hookups /year	20,562	12,479	233	0	33,262	685	462	277	7	1	1,430	0	9	13	1	0	1	10	0
Marginal Investment: \$/Customer																			
Meter & House Reg	\$413.14	\$346.30	\$1,700.46	\$23,516.62	\$419.62	\$733.12	\$1,201.06	\$2,399.08	\$8,319.97	\$12,280.87	\$1,363.65	\$5,291.82	\$90,191.70	\$3,347.81	\$139,681.17	\$300,234.61	\$148,585.35	\$103,857.60	\$916,355.85
Service Lines	\$1,274.99	\$1,341.83	\$11,727.95	\$93,892.86	\$1,516.85	\$8,393.24	\$8,646.46	\$12,753.10	\$51,902.21	\$708,154.59	\$11,009.79	\$79,085.45	\$88,095.97	\$205,325.53	\$383,335.44	#####	\$410,998.74	\$190,284.47	\$466,096.97
Exclusive Use Facilities	\$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	\$25,463.15	\$98,052.27	\$28,026.70	\$0.00	\$320,661.60
Total Marginal Investment \$/customer	\$1,688.13	\$1,688.13	\$13,428.41	\$117,409.47	\$1,936.47	\$9,126.36	\$9,847.52	\$15,152.19	\$60,222.17	\$720,435.46	\$12,373.44	\$84,377.27	\$178,287.67	\$208,673.34	\$548,479.76	#####	\$0.00	\$294,142.08	\$1,703,114.42
Weighted PVRR for Meter & House Reg	121.48%	121.51%	121.64%	121.93%	121.45%	121.53%	121.52%	121.63%	121.63%	121.58%	121.18%	121.68%	122.04%	121.73%	122.07%	122.05%	122.05%	122.06%	122.06%
PVCC for Service Lines	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%
PVRR:																			
Meter & House Reg \$/customer	\$501.89	\$420.81	\$2,068.39	\$28,673.77	\$509.64	\$890.98	\$1,459.47	\$2,917.99	\$10,119.45	\$14,931.47	\$1,652.46	\$6,439.04	\$110,070.62	\$4,075.34	\$170,506.51	\$366,425.30	\$181,345.34	\$126,772.65	\$1,118,539.79
Service Lines \$/customer	\$1,556.64	\$1,638.24	\$14,318.73	\$114,634.45	\$1,851.93	\$10,247.36	\$10,556.52	\$15,570.35	\$63,367.77	\$864,590.90	\$13,441.93	\$96,555.98	\$107,556.99	\$250,683.38	\$468,016.93	\$1,424,363.20	\$501,791.24	\$232,319.65	\$569,061.06
PVRR of Hookup Cost \$/customer	\$2,058.54	\$2,059.05	\$16,387.12	\$143,308.21	\$2,361.57	\$11,138.35	\$12,015.99	\$18,488.34	\$73,487.22	\$879,522.37	\$15,094.39	\$102,995.01	\$217,627.61	\$254,758.72	\$638,523.44	#####	\$683,136.58	\$359,092.30	\$1,687,600.85
Total PVRR of Hookup Cost for Class \$'s	\$42,327,198	\$25,694,619	\$3,819,595	\$0	\$76,351,023	\$7,034,822	\$5,556,219	\$5,128,373	\$541,033	\$931,693	\$21,581,186	\$0	\$1,958,649	\$3,311,863	\$620,387	\$0	\$693,407	\$3,560,923	\$0
PVRR of Hookup Cost \$/customer	\$11.16	\$14.50	\$31.90	\$0.00	\$13.82	\$86.88	\$86.69	\$109.10	\$260.36	\$2,657.17	\$168.40	\$0.00	\$7,994.48	\$4,612.62	\$1,195.74	\$0.00	\$1,233.10	\$10,230.55	\$0.00
O&M Cost w/Loaders \$/Cust.																			
Total Direct O&M	\$54.20	\$49.80	\$64.40	\$173.34	\$53.04	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$264.00	\$543.23	\$15,128.69	\$347.34	\$2,540.11	\$2,639.42	\$8,907.04	\$3,768.92	\$24,990.39
Total O&M Loaders \$/customer/yr	\$94.59	\$86.91	\$112.39	\$302.53	\$92.57	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$460.75	\$948.07	\$26,403.45	\$606.19	\$4,433.15	\$4,606.46	\$15,545.08	\$6,577.74	\$43,614.67
LRMC NCO Customer Cost \$/customer/year	\$159.95	\$151.21	\$208.68	\$475.87	\$159.43	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$831.15	\$1,491.30	\$49,526.62	\$5,566.15	\$8,169.00	\$7,245.88	\$25,685.22	\$20,577.22	\$68,605.06
NCO w/ Replacement Cost Adder																			
Marginal Investment: Meter & House Reg \$/Customer	\$413.14	\$346.30	\$1,700.46	\$23,516.62	\$419.62	\$733.12	\$1,201.06	\$2,399.08	\$8,319.97	\$12,280.87	\$1,363.65	\$5,291.82	\$90,191.70	\$3,347.81	\$139,681.17	\$300,234.61	\$148,585.35	\$103,857.60	\$916,355.85
Service Lines Replacement Cost	\$3,668.45	\$3,668.45	\$10,801.80	\$83,525.70	\$3,819.43	\$7,771.50	\$7,831.55	\$11,100.74	\$60,204.80	\$514,112.53	\$9,880.69	\$57,195.30	\$88,369.78	\$196,578.35	\$316,997.27	\$880,789.46	\$336,908.15	\$150,084.47	\$341,323.97
Exclusive Use Facilities	\$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	\$25,463.15	\$98,052.27	\$28,026.70	\$0.00	\$320,661.60
Total	\$1,688.13	\$1,688.13	\$13,428.41	\$117,409.47	\$1,936.47	\$9,126.36	\$9,847.52	\$15,152.19	\$60,222.17	\$720,435.46	\$12,373.44	\$84,377.27	\$178,287.67	\$208,673.34	\$548,479.76	#####	\$0.00	\$294,142.08	\$1,703,114.42
Weighted PVRR for Meter & House Reg	121.48%	121.51%	121.64%	121.93%	121.45%	121.53%	121.52%	121.63%	121.63%	121.58%	121.18%	121.68%	122.04%	121.73%	122.07%	122.05%	122.05%	122.06%	122.06%
PVCC for Service Lines	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%	122%
PVCC for Exclusive Use Facilities (Meters)																			
Weighted Replacement Factor for Meter & House Reg	1.87%	1.64%	1.76%	0.72%	1.96%	1.92%	2.06%	1.80%	1.95%	2.09%	2.75%	1.74%	0.27%	1.52%	0.25%	0.16%	0.24%	0.18%	0.18%
Replacement Factor for Service Lines	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Replacement Factor for Exclusive Use Facilities																			
Meter & House Reg, Replacement	\$9.41	\$6.91	\$36.31	\$207.49	\$9.98	\$17.07	\$29.99	\$52.39	\$197.11	\$312.18	\$45.40	\$111.80	\$298.00	\$61.92	\$421.77	\$583.46	\$436.92	\$225.49	\$1,989.52
Service Lines, Replacement	\$66.85	\$66.85	\$196.84	\$1,522.05	\$69.60	\$141.62	\$142.71	\$202.28	\$1,097.08	\$9,368.41	\$180.05	\$1,042.24	\$1,610.32	\$3,582.15	\$5,776.48	\$16,050.18	\$6,139.31	\$2,734.91	\$6,219.77
Exclusive Use Facilities, Replace															\$1,227.66	\$4,727.41	\$1,351.26	\$0.00	\$15,460.12
Replacement Adder \$/Customer	\$76.26	\$73.76	\$233.14	\$1,729.54	\$79.57	\$158.69	\$172.70	\$254.68	\$1,294.19	\$9,680.60	\$225.45	\$1,154.04	\$1,908.32	\$3,644.06	\$7,425.91	\$21,361.05	\$7,927.48	\$2,960.40	\$23,669.42
NCO w/o Repl Cost \$/Cust/yr	\$159.95	\$151.21	\$208.68	\$475.87	\$159.43	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$831.15	\$1,491.30	\$49,526.62	\$5,566.15	\$8,169.00	\$7,245.88	\$25,685.22	\$20,577.22	\$68,605.06
NCO w/ Repl Cost: \$/Cust/yr	\$236.20	\$224.97	\$441.82	\$2,205.41	\$239.01	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$1,056.60	\$2,645.34	\$51,434.94	\$9,210.21	\$15,594.91	\$28,606.92	\$33,612.71	\$23,537.62	\$92,274.48

S10

	Noncore Wholesale						Total O&M Cost for All Customers
	EOR	Wholesale				International	
	G-40	LB	SDG&E	SWG	Vernon	Ecogas	
Total Rental Capital (\$000) before RECC	\$21,865	\$10,265	\$26,385	\$5,359	\$5,126	\$754	\$14,551,691
<u>NCO Method:</u>							
2021 Number of Customers	30	1	1	1	1	1	5,889,515 cust 2
New Hookups Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
No of New Customer Hookups /year	0	0	0	0	0	0	34,725
Marginal Investment: \$/Customer							
Meter & House Reg	\$403,478.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	cust 5
Service Lines	\$274,177.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	cust 5
Exclusive Use Facilities	\$51,163.67	\$10,265,059.48	\$26,384,543.35	\$5,359,168.35	\$5,126,021.11	\$754,437.82	cust 6, cust 7
Total Marginal Investment \$/customer	\$728,819.80	\$10,265,059.48	\$26,384,543.35	\$5,359,168.35	\$5,126,021.11	\$754,437.82	
Weighted PVRR for Meter & House Reg	122.07%						cust 10
PVCC for Service Lines	122.09%	122.09%	122.09%	122.09%	122.09%	122.09%	2013 RECC
PVRR:							
Meter & House Reg \$/customer	\$492,538.33	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Service Lines \$/customer	\$334,745.35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
PVRR of Hookup Cost \$/customer	\$827,283.67	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Total PVRR of Hookup Cost for Class S's	\$0	\$0	\$0	\$0	\$0	\$0	
PVRR of Hookup Cost \$/customer	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
<u>O&M Cost w/Loaders \$/Cust.</u>							
Total Direct O&M	\$12,388.01	\$89,841.51	\$84,342.79	\$111,339.41	\$64,976.87	\$36,936.80	
Total O&M Loaders \$/customer/yr	\$21,620.27	\$156,796.56	\$147,199.88	\$194,315.92	\$113,401.36	\$64,464.22	
LRMC NCO Customer Cost \$/customer/year	\$34,008.28	\$246,638.07	\$231,542.67	\$305,655.33	\$178,378.22	\$101,401.03	
<u>NCO w/ Replacement Cost Adder</u>							
Marginal Investment: Meter & House Reg \$/Customer	\$403,478.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	cust 5
Service Lines Replacement Cost	\$266,167.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	cust 5
Exclusive Use Facilities	\$51,163.67	\$10,265,059.48	\$26,384,543.35	\$5,359,168.35	\$5,126,021.11	\$754,437.82	cust 6, cust 7
Total	\$728,819.80	\$10,265,059.48	\$26,384,543.35	\$5,359,168.35	\$5,126,021.11	\$754,437.82	
Weighted PVRR for Meter & House Reg	122.07%						cust 10
PVCC for Service Lines	122%						2013 RECC
PVCC for Exclusive Use Facilities (Meters)	121%	121%	121%	121%	121%	121%	
Weighted Replacement Factor for Meter & House Reg	0.14%						cust 10
Replacement Factor for Service Lines	1.5%						
Replacement Factor for Exclusive Use Facilities	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	cust 10
Meter & House Reg, Replacement	\$693.22						
Service Lines, Replacement	\$4,850.23						
Exclusive Use Facilities, Replace	\$2,466.76	\$494,911.34	\$1,272,083.20	\$258,382.64	\$247,141.87	\$36,373.86	
Replacement Adder \$/Customer	\$8,010.22	\$494,911.34	\$1,272,083.20	\$258,382.64	\$247,141.87	\$36,373.86	
NCO w/o Repl Cost \$/Cust/yr	\$34,008.28	\$246,638.07	\$231,542.67	\$305,655.33	\$178,378.22	\$101,401.03	
NCO w/ Repl Cost: \$/Cust/yr	\$42,018.50	\$741,549.41	\$1,503,625.87	\$564,037.98	\$425,520.09	\$137,774.89	

SCG 2024 TCAP
 LRMC Customer Cost
 Number of Customers by Customer Class

S10

	Core														
	Residential					Non-Residential							Gas Air Conditioning	Natrual Gas Vehicle	Gas Engine
	Single Family	Multi Family	Master Meter		Residential Total	G-10					Total				
Small			Large	Very Small		Small	Medium	Large	Very Large						
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313	202,835	9	245	718	

SCG 2024 TCAP
 LRMC Customer Cost
 Number of Customers by Custom

S10

	Noncore												Total Over All Customers	
	G-30			Small EG	Large EG	EOR G-40	Wholesale				International			
	Distribution	Transmission	Total				LB	SDG&E	SWG	Vernon	Mexacali	Rosarito		
2021 Number of Customers	519	19	538	351	21	30	1	1	1	1	1	1	0	5,889,515

**SCG 2024 TCAP
LRMC Customer Cost
Number of Customers by Customer Class**

S10

1) Residential Segmentation

1a) Segmentation of Residential Total Customer Counts into Bands

	Residential				
	Single Family	Multi Family	Master Meter		Total
			Small	Large	
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763
Percent of Total	67%	31%	2%	0%	100%

values from 'Number of Customers', cust 2 tab

1b) Segmentation of Residential Meter, Regulator & MSA Investment Costs into Bands

	Residential				
	Single Family	Multi Family	Master Meter		Total
			Small	Large	
Per Cust. Meter, Reg. & MSA Investment	\$413.14	\$346.30	\$1,700.46	\$23,516.62	
2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763
Total Meter, Reg. & MSA Investment	\$1,566,850,377	\$613,780,639	\$203,625,566	\$1,199,347	\$2,385,455,930
Percent of Total Meter, Reg. & MSA Investment	66%	26%	9%	0%	100%

note: used to segment Meters, Regulators & MSAs O&M Costs
values from 'Investment Meters, REGs', cust 5 tab

**SCG 2024 TCAP
LRMC Customer Cost
Number of Customers by Customer Class**

2) G10 Segmentation

2a) Segmentation of G-10 Total Customer Counts into Bands

	G-10					
	Very Small	Small	Medium	Large	Very Large	Total
2021 Number of Customers	88,897	64,539	47,008	2,078	313	202,835
Percent of Total	44%	32%	23%	1%	0%	100%

values from 'Number of Customers', cust 2 tab

2b) Segmentation of G-10 Meter, Regulator & MSA Investment Costs into Bands

	G-10					
	Very Small	Small	Medium	Large	Very Large	Total
Per Cust. Meter, Reg & MSA Investment	\$733.12	\$1,201.06	\$2,399.08	\$8,319.97	\$12,280.87	
2021 Number of Customers	88,897	64,539	47,008	2,078	313	202,835
Total Meter, Reg & MSA Investment	\$65,171,860	\$77,515,229	\$112,776,112	\$17,288,887	\$3,843,911	\$276,595,999
Percent of Total Meter, Reg & MSA Investment	24%	28%	41%	6%	1%	100%

note: used to segment Meters, Regulators & MSAs O&M Costs
values from 'Investment Meters, REGs', cust 5 tab

**SCG 2024 TCAP
LRMC Customer Cost
Number of Customers by Customer Class**

3) G 30 Segmentation

3a) Segmentation of G-30 total customer counts by Service Level

	G-30		
	Distribution	Transmission	Total
2021 Number of Customers	519	19	538
Percent of Total	96%	4%	100%

values from 'cust 2' tab

3b) Allocation of G-30 Total Big GEMS Costs by Service Level

		G-30		
		Distribution	Transmission	Total
Meter/Reg Investment Cost Per Customer	2013 \$s	\$139,681.17	\$300,234.61	
2021 Number of Customers		519	19	538
Total Cost	2013 \$s	\$72,494,529	\$5,704,458	\$78,198,987
Percent of Total Cost		93%	7%	100%

note: used to segment Meters, Regulators & MSAs O&M Costs
values from 'Investment Meters, REGs', cust 5 tab

SCG 2024 TCAP
LRMC Customer Cost
Average Per Customer Investment in Meters & Regulators by Customer Class

S10

Investment Per Customer:		Core													
		Residential					Non-Residential						Gas Air Conditioning	Natural Gas Vehicle	Gas Engine
		Single Family	Multi Family	Master Meter		Residential Average	G-10								
				Small	Large		Very Small	Small	Medium	Large	Very Large	Average			
Meter, Reg.	2021 \$\$	\$395.24	\$331.30	\$1,626.80	\$22,497.92	\$401.45	\$701.36	\$1,149.03	\$2,295.16	\$7,959.56	\$11,748.88	\$1,304.58	\$5,062.59	\$86,284.77	\$3,202.79
Meter, Reg.	2024 \$\$	\$413.14	\$346.30	\$1,700.46	\$23,516.62	\$419.62	\$733.12	\$1,201.06	\$2,399.08	\$8,319.97	\$12,280.87	\$1,363.65	\$5,291.82	\$90,191.70	\$3,347.81
Total		\$413.14	\$346.30	\$1,700.46	\$23,516.62	\$419.62	\$733.12	\$1,201.06	\$2,399.08	\$8,319.97	\$12,280.87	\$1,363.65	\$5,291.82	\$90,191.70	\$3,347.81

For Res and Non-Residential G10 customers we multiply 5 yr average meter size and pressure type combination for new customers per class times unit cost for each associated combination.
For other classes we multiply average meter size and pressure type combination for all customers per class times unit cost for each associated combination.

Average Per Customer Investment in Service Lines by Customer Class

Investment Per Customer:		Core													
		Residential					Non-Residential						Gas Air Conditioning	Natural Gas Vehicle	Gas Engine
		Single Family	Multi Family	Master Meter		Residential Average	G-10								
				Small	Large		Very Small	Small	Medium	Large	Very Large	Average			
Service Lines	2021 \$\$	\$1,219.76	\$1,283.70	\$11,219.91	\$89,825.59	\$1,451.14	\$8,029.66	\$8,271.91	\$12,200.66	\$49,653.90	\$677,478.66	\$10,532.87	\$75,659.61	\$84,279.82	\$196,431.21
Service Lines	2024 \$\$	1,274.99	1,341.83	11,727.95	93,892.86	1,516.85	8,393.24	8,646.46	12,753.10	51,902.21	708,154.59	11,009.79	79,085.45	88,095.97	205,325.53
Total		1,274.99	1,341.83	11,727.95	93,892.86	1,516.85	8,393.24	8,646.46	12,753.10	51,902.21	708,154.59	11,009.79	79,085.45	88,095.97	205,325.53

formerly tabs: 'Investment Meter, Reg' and 'Investment Service Lines'
For residential and non-residential G10 customers we multiply Ken's 5 yr average footage, pipe type, pipe size configuration per class times Distribution Managers' cost per foot each associated configuration.
For other classes we multiply average footage, pipe type and pipe size combination for all customers per class times unit cost for each associated combination.

Service Lines Replacement Costs

Investment Per Customer:		Core													
		Residential					Non-Residential						Gas Air Conditioning	Natural Gas Vehicle	Gas Engine
		Single Family	Multi Family	Master Meter		Residential Average	G-10								
				Small	Large		Very Small	Small	Medium	Large	Very Large	Average			
Service Lines Replaceme	2021 \$\$	3,509.54	3,509.54	10,333.89	79,907.52	3,653.98	7,434.85	7,492.30	10,619.88	57,596.84	491,842.14	9,452.68	54,717.70	84,541.76	188,062.95
Service Lines	2024 \$\$	3,668.45	3,668.45	10,801.80	83,525.70	3,819.43	7,771.50	7,831.55	11,100.74	60,204.80	514,112.53	9,880.69	57,195.30	88,369.78	196,578.35
Total		3,668.45	3,668.45	10,801.80	83,525.70	3,819.43	7,771.50	7,831.55	11,100.74	60,204.80	514,112.53	9,880.69	57,195.30	88,369.78	196,578.35

SCG 2024 TCAP
LRMC Customer Cost
Average Per Customer Investment in

S10

		Noncore											Total Over All Customers
		Non-Residential											
		G-30			<3 Million SM. COGEN G-50	>3 Million EG G-50	EOR G-40	Wholesale				International	
Investment Per Customer:		Distribution	Transmission	Average				LB	SDG&E	SWG	Vernon	DGN	Rosarito
Meter, Reg.	2021 \$s	\$133,630.45	\$287,229.01	\$142,148.91	\$99,358.68	\$876,661.03	\$386,000.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Meter, Reg.	2024 \$s	\$139,681.17	\$300,234.61	\$148,585.35	\$103,857.60	\$916,355.85	\$403,478.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total		\$139,681.17	\$300,234.61	\$148,585.35	\$103,857.60	\$916,355.85	\$403,478.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

For Res and Non-Residential G10 custo
For other classes we multiply average n

Average Per Customer Investment in
Service Lines by Customer Class

		Noncore											Total Over All Customers
		Non-Residential											
		G-30			SM. COGEN G-50	EG G-50	EOR G-40	Wholesale				International	
Investment Per Customer:		Distribution	Transmission	Average				LB	SDG&E	SWG	Vernon	DGN	Rosarito
Service Lines	2021 \$s	\$366,730.07	\$1,116,106.66	\$393,195.04	\$182,041.71	\$445,906.52	\$262,300.73	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Service Lines	2024 \$s	383,335.44	1,166,643.48	410,998.74	190,284.47	466,096.97	274,177.59	0.00	0.00	0.00	0.00	0.00	0.00
Total		383,335.44	1,166,643.48	410,998.74	190,284.47	466,096.97	274,177.59	0.00	0.00	0.00	0.00	0.00	0.00

formerly tabs: 'Investment Meter, Reg' e
For residential and non-residential G10
For other classes we multiply average fc

Service Lines Replacement Costs

		Noncore											Total Over All Customers
		Non-Residential											
		G-30			SM. COGEN G-50	EG G-50	EOR G-40	Wholesale				International	
Investment Per Customer:		Distribution	Transmission	Average				LB	SDG&E	SWG	Vernon	DGN	Rosarito
Service Lines Replaceme	2021 \$s	303,265.54	842,635.30	322,313.92	143,583.09	326,538.45	254,637.19	0.00	0.00	0.00	0.00	0.00	0.00
Service Lines	2024 \$s	316,997.27	880,789.46	336,908.15	150,084.47	341,323.97	266,167.05	0.00	0.00	0.00	0.00	0.00	0.00
Total		316,997.27	880,789.46	336,908.15	150,084.47	341,323.97	266,167.05	0.00	0.00	0.00	0.00	0.00	0.00

Code	Element	Meter Size	Above Std	avg labor and nonlabor			Total
				\$/meter	avg \$/meter	avg \$/regulator	
S10	SGL	1	0	\$247	\$119	\$29	\$395
M10	MULT	1	0	\$205	\$119	\$7	\$331
30	AG	3	0	\$259	\$202	\$29	\$491
	CMB	3		\$468	\$203	\$165	\$835
31	LBS	3	1	\$271	\$203	\$320	\$794
S40	SZ	4	0	\$155	\$615	\$263	\$1,032
S50	SZ	5	0	\$155	\$615	\$263	\$1,032
	CMB	4		\$292	\$712	\$286	\$1,290
	CMB	5		\$292	\$712	\$286	\$1,290
41	@LBS	4	1	\$1,652	\$573	\$494	\$2,720
51	@LBS	5	1	\$1,652	\$573	\$494	\$2,720
S60	STD	6	0	\$1,461	\$536	\$263	\$2,260
S70	STD	7	0	\$1,461	\$536	\$263	\$2,260
61	LBS	6	1	\$2,039	\$536	\$320	\$2,895
71	LBS	7	1	\$2,039	\$536	\$320	\$2,895
S80	STD	8	0	\$1,461	\$655	\$311	\$2,427
S90	STD	9	0	\$1,461	\$655	\$311	\$2,427
81	LBS	8	1	\$2,039	\$655	\$710	\$3,403
91	LBS	9	1	\$2,039	\$655	\$710	\$3,403
99	TURBINE METERS	10		\$739,804	\$20,289	\$3,986	\$764,079
100	ROTARY METERS	10		\$5,451	\$4,433	\$3,300	\$13,184
110	ULTRASONIC METERS	12		\$2,506,778	\$88,986	\$0	\$2,595,764

Code	Rate	Meter Size (1)	Above Std (2)	Number of customers (3)	avg labor \$/meter	avg \$/meter	avg \$/regulator	tot lab	tot met	tot reg	tot cost	Average Meter & Regulator CAPEX/
												Customer
S10	SF	1	0	42,231	\$246.69	\$119.40	\$29.15	\$10,417,965	\$5,042,381	\$1,231,034	\$16,691,380	\$395.24
30	SF	3	0	66,495	\$259.47	\$202.06	\$29.15	\$17,253,458	\$13,435,980	\$1,938,329	\$32,627,767	\$490.68
31	SF	3	1	48	\$270.94	\$202.62	\$320.15	\$13,005	\$9,726	\$15,367	\$38,098	\$793.71
S40	SF	4	0	6,938	\$154.88	\$614.58	\$262.99	\$1,074,557	\$4,263,956	\$1,824,625	\$7,163,138	\$1,032.45
41	SF	4	1	61	\$1,651.88	\$573.21	\$494.47	\$100,765	\$34,966	\$30,163	\$165,893	\$2,719.56
S50	SF	5	0	600	\$154.88	\$614.58	\$262.99	\$92,928	\$368,748	\$157,794	\$619,470	\$1,032.45
S60	SF	6	0	556	\$1,461.01	\$536.15	\$262.99	\$812,322	\$298,099	\$146,222	\$1,256,643	\$2,260.15
61	SF	6	1	13	\$2,038.84	\$536.15	\$320.15	\$26,505	\$6,972	\$4,162	\$37,637	\$2,895.14
S70	SF	7	0	2	\$1,461.01	\$536.15	\$262.99	\$2,922	\$1,072	\$526	\$4,520	\$2,260.15
S80	SF	8	0	167	\$1,461.01	\$654.94	\$310.83	\$243,989	\$109,375	\$51,909	\$405,272	\$2,426.78
81	SF	8	1	16	\$2,038.84	\$654.94	\$709.64	\$32,621	\$10,479	\$11,354	\$54,455	\$3,403.42
S90	SF	9	0	3	\$1,461.01	\$654.94	\$310.83	\$4,383	\$1,965	\$932	\$7,280	\$2,426.78
91	SF	9	1	9	\$2,038.84	\$654.94	\$709.64	\$18,350	\$5,894	\$6,387	\$30,631	\$3,403.42
100	SF	10	1	2	\$5,451.00	\$4,433.19	\$3,300.00	\$10,902	\$8,866	\$6,600	\$26,368	\$13,184.19
tot SF				117,141				\$30,104,671	\$23,598,478	\$5,425,404	\$59,128,553	\$395.24
M10	MF	1	0	43,992	\$204.52	\$119.49	\$7.29	\$8,997,244	\$5,256,604	\$320,702	\$14,574,550	\$331.30
30	MF	3	0	13,530	\$259.47	\$202.06	\$29.15	\$3,510,629	\$2,733,872	\$394,400	\$6,638,900	\$490.68
31	MF	3	1	44	\$270.94	\$202.62	\$320.15	\$11,921	\$8,915	\$14,087	\$34,923	\$793.71
S40	MF	4	0	465	\$154.88	\$614.58	\$262.99	\$72,019	\$285,780	\$122,290	\$480,089	\$1,032.45
S60	MF	6	0	17	\$1,461.01	\$536.15	\$262.99	\$24,837	\$9,115	\$4,471	\$38,423	\$2,260.15
61	MF	6	1	1	\$2,038.84	\$536.15	\$320.15	\$2,039	\$536	\$320	\$2,895	\$2,895.14
81	MF	8	1	7	\$2,038.84	\$654.94	\$709.64	\$14,272	\$4,585	\$4,967	\$23,824	\$3,403.42
tot MF				58,056				\$12,632,961	\$8,299,406	\$861,237	\$21,793,604	\$331.30
M10	MM Band 1	1	0	553	\$204.52	\$119.49	\$7.29	\$113,100	\$66,078	\$4,031	\$183,209	\$331.30
30	MM Band 1	3	0	257	\$259.47	\$202.06	\$29.15	\$66,684	\$51,929	\$7,492	\$126,105	\$490.68
31	MM Band 1	3	1	11	\$270.94	\$202.62	\$320.15	\$2,980	\$2,229	\$3,522	\$8,731	\$793.71
S40	MM Band 1	4	0	261	\$154.88	\$614.58	\$262.99	\$40,424	\$160,405	\$68,640	\$269,469	\$1,032.45
41	MM Band 1	4	1	53	\$1,651.88	\$573.21	\$494.47	\$67,550	\$30,380	\$26,207	\$144,137	\$2,719.56
S50	MM Band 1	5	0	56	\$154.88	\$614.58	\$262.99	\$8,673	\$34,416	\$14,727	\$57,817	\$1,032.45
S60	MM Band 1	6	0	121	\$1,461.01	\$536.15	\$262.99	\$176,782	\$64,874	\$31,822	\$273,478	\$2,260.15
61	MM Band 1	6	1	61	\$2,038.84	\$536.15	\$320.15	\$124,369	\$32,705	\$19,529	\$176,604	\$2,895.14
S70	MM Band 1	7	0	1	\$1,461.01	\$536.15	\$262.99	\$1,461	\$536	\$263	\$2,260	\$2,260.15
S80	MM Band 1	8	0	81	\$1,461.01	\$654.94	\$310.83	\$118,342	\$53,050	\$25,177	\$196,569	\$2,426.78
81	MM Band 1	8	1	142	\$2,038.84	\$654.94	\$709.64	\$289,515	\$93,001	\$100,769	\$483,286	\$3,403.42
S90	MM Band 1	9	0	11	\$1,461.01	\$654.94	\$310.83	\$16,071	\$7,204	\$3,419	\$26,695	\$2,426.78
91	MM Band 1	9	1	83	\$2,038.84	\$654.94	\$709.64	\$169,224	\$54,360	\$58,900	\$282,484	\$3,403.42
100	MM Band 1	10	1	45	\$5,451.00	\$4,433.19	\$3,300.00	\$245,295	\$199,494	\$148,500	\$593,289	\$13,184.19
tot MM 1				1,736				\$1,460,470	\$860,663	\$512,999	\$2,824,132	\$1,626.80
61	MM Band 2	6	1	3	\$2,038.84	\$536.15	\$320.15	\$6,117	\$1,608	\$960	\$8,685	\$2,895.14
71	MM Band 2	7	1	1	\$2,038.84	\$536.15	\$320.15	\$2,039	\$536	\$320	\$2,895	\$2,895.14
81	MM Band 2	8	1	6	\$2,038.84	\$654.94	\$709.64	\$12,233	\$3,930	\$4,258	\$20,421	\$3,403.42
91	MM Band 2	9	1	18	\$2,038.84	\$654.94	\$709.64	\$36,699	\$11,789	\$12,774	\$61,262	\$3,403.42
99	MM Band 2	10	1	1	\$739,804.00	\$20,289.00	\$3,986.00	\$739,804	\$20,289	\$3,986	\$764,079	\$764,079.00
100	MM Band 2	10	1	22	\$5,451.00	\$4,433.19	\$3,300.00	\$119,922	\$97,530	\$72,600	\$290,052	\$13,184.19
tot MM 2				51				\$916,814	\$135,682	\$94,898	\$1,147,394	\$22,497.92

Code	Rate	Meter Size (1)	Above Std (2)	Number of customers (3)	avg labor \$/meter	avg \$/meter	avg \$/regulator	tot lab	tot met	tot reg	tot cost	Average Meter & Regulator CAPEX/
												Customer
S10	G10 Band 1	1	0	1,355	\$246.69	\$119.40	\$29.15	\$334,265	\$161,787	\$39,498	\$535,550	\$395.24
30	G10 Band 1	3	0	456	\$259.47	\$202.06	\$29.15	\$118,318	\$92,139	\$13,292	\$223,750	\$490.68
31	G10 Band 1	3	1	17	\$270.94	\$202.62	\$320.15	\$4,606	\$3,445	\$5,443	\$13,493	\$793.71
S40	G10 Band 1	4	0	285	\$154.88	\$614.58	\$262.99	\$44,141	\$175,155	\$74,952	\$294,248	\$1,032.45
41	G10 Band 1	4	1	31	\$1,651.88	\$573.21	\$494.47	\$51,208	\$17,770	\$15,329	\$84,306	\$2,719.56
S50	G10 Band 1	5	0	93	\$154.88	\$614.58	\$262.99	\$14,404	\$57,156	\$24,458	\$96,018	\$1,032.45
51	G10 Band 1	5	1	9	\$1,651.88	\$573.21	\$494.47	\$14,867	\$5,159	\$4,450	\$24,476	\$2,719.56
S60	G10 Band 1	6	0	47	\$1,461.01	\$536.15	\$262.99	\$68,667	\$25,199	\$12,361	\$106,227	\$2,260.15
S70	G10 Band 1	7	0	1	\$1,461.01	\$536.15	\$262.99	\$1,461	\$536	\$263	\$2,260	\$2,260.15
S80	G10 Band 1	8	0	25	\$1,461.01	\$654.94	\$310.83	\$36,525	\$16,374	\$7,771	\$60,670	\$2,426.78
81	G10 Band 1	8	1	31	\$2,038.84	\$654.94	\$709.64	\$63,204	\$20,303	\$21,999	\$105,506	\$3,403.42
S90	G10 Band 1	9	0	3	\$1,461.01	\$654.94	\$310.83	\$4,383	\$1,965	\$932	\$7,280	\$2,426.78
91	G10 Band 1	9	1	8	\$2,038.84	\$654.94	\$709.64	\$16,311	\$5,240	\$5,677	\$27,227	\$3,403.42
100	G10 Band 1	10	1	6	\$5,451.00	\$4,433.19	\$3,300.00	\$32,706	\$26,599	\$19,800	\$79,105	\$13,184.19
tot Band 1				2,367				\$805,067	\$608,826	\$246,225	\$1,660,117	\$701.36
S10	G10 Band 2	1	0	420	\$246.69	\$119.40	\$29.15	\$103,610	\$50,148	\$12,243	\$166,001	\$395.24
30	G10 Band 2	3	0	428	\$259.47	\$202.06	\$29.15	\$111,053	\$86,482	\$12,476	\$210,011	\$490.68
31	G10 Band 2	3	1	29	\$270.94	\$202.62	\$320.15	\$7,857	\$5,876	\$9,284	\$23,018	\$793.71
S40	G10 Band 2	4	0	589	\$154.88	\$614.58	\$262.99	\$91,224	\$361,988	\$154,901	\$608,113	\$1,032.45
41	G10 Band 2	4	1	56	\$1,651.88	\$573.21	\$494.47	\$92,505	\$32,100	\$27,690	\$152,295	\$2,719.56
S50	G10 Band 2	5	0	215	\$154.88	\$614.58	\$262.99	\$33,299	\$132,135	\$56,543	\$221,977	\$1,032.45
51	G10 Band 2	5	1	3	\$1,651.88	\$573.21	\$494.47	\$4,956	\$1,720	\$1,483	\$8,159	\$2,719.56
S60	G10 Band 2	6	0	157	\$1,461.01	\$536.15	\$262.99	\$229,379	\$84,176	\$41,289	\$354,844	\$2,260.15
61	G10 Band 2	6	1	43	\$2,038.84	\$536.15	\$320.15	\$87,670	\$23,054	\$13,766	\$124,491	\$2,895.14
S70	G10 Band 2	7	0	1	\$1,461.01	\$536.15	\$262.99	\$1,461	\$536	\$263	\$2,260	\$2,260.15
71	G10 Band 2	7	1	1	\$2,038.84	\$536.15	\$320.15	\$2,039	\$536	\$320	\$2,895	\$2,895.14
S80	G10 Band 2	8	0	65	\$1,461.01	\$654.94	\$310.83	\$94,966	\$42,571	\$20,204	\$157,741	\$2,426.78
81	G10 Band 2	8	1	55	\$2,038.84	\$654.94	\$709.64	\$112,136	\$36,022	\$39,030	\$187,188	\$3,403.42
S90	G10 Band 2	9	0	7	\$1,461.01	\$654.94	\$310.83	\$10,227	\$4,585	\$2,176	\$16,987	\$2,426.78
91	G10 Band 2	9	1	20	\$2,038.84	\$654.94	\$709.64	\$40,777	\$13,099	\$14,193	\$68,068	\$3,403.42
100	G10 Band 2	10	1	8	\$5,451.00	\$4,433.19	\$3,300.00	\$43,608	\$35,466	\$26,400	\$105,474	\$13,184.19
tot Band 2				2,097				\$1,066,767	\$910,491	\$432,263	\$2,409,521	\$1,149.03
S10	G10 Band 3	1	0	12	\$246.69	\$119.40	\$29.15	\$2,960	\$1,433	\$350	\$4,743	\$395.24
30	G10 Band 3	3	0	103	\$259.47	\$202.06	\$29.15	\$26,725	\$20,812	\$3,002	\$50,540	\$490.68
31	G10 Band 3	3	1	18	\$270.94	\$202.62	\$320.15	\$4,877	\$3,647	\$5,763	\$14,287	\$793.71
S40	G10 Band 3	4	0	472	\$154.88	\$614.58	\$262.99	\$73,103	\$290,082	\$124,131	\$487,316	\$1,032.45
41	G10 Band 3	4	1	78	\$1,651.88	\$573.21	\$494.47	\$128,847	\$44,710	\$38,569	\$212,126	\$2,719.56
S50	G10 Band 3	5	0	295	\$154.88	\$614.58	\$262.99	\$45,690	\$181,301	\$77,582	\$304,573	\$1,032.45
51	G10 Band 3	5	1	4	\$1,651.88	\$573.21	\$494.47	\$6,608	\$2,293	\$1,978	\$10,878	\$2,719.56
S60	G10 Band 3	6	0	419	\$1,461.01	\$536.15	\$262.99	\$612,163	\$224,647	\$110,193	\$947,003	\$2,260.15
61	G10 Band 3	6	1	83	\$2,038.84	\$536.15	\$320.15	\$169,224	\$44,500	\$26,572	\$240,297	\$2,895.14
71	G10 Band 3	7	1	1	\$2,038.84	\$536.15	\$320.15	\$2,039	\$536	\$320	\$2,895	\$2,895.14
S80	G10 Band 3	8	0	200	\$1,461.01	\$654.94	\$310.83	\$292,202	\$130,988	\$62,166	\$485,356	\$2,426.78
81	G10 Band 3	8	1	215	\$2,038.84	\$654.94	\$709.64	\$438,351	\$140,812	\$152,573	\$731,735	\$3,403.42
S90	G10 Band 3	9	0	34	\$1,461.01	\$654.94	\$310.83	\$49,674	\$22,268	\$10,568	\$82,511	\$2,426.78
91	G10 Band 3	9	1	112	\$2,038.84	\$654.94	\$709.64	\$228,350	\$73,353	\$79,480	\$381,183	\$3,403.42
100	G10 Band 3	10	1	68	\$5,451.00	\$4,433.19	\$3,300.00	\$370,668	\$301,457	\$224,400	\$996,525	\$13,184.19
tot Band 3				2,114				\$2,451,481	\$1,482,840	\$917,647	\$4,851,967	\$2,295.16
31	G10 Band 4	3	1	1	\$270.94	\$202.62	\$320.15	\$271	\$203	\$320	\$794	\$793.71
61	G10 Band 4	6	1	3	\$2,038.84	\$536.15	\$320.15	\$6,117	\$1,608	\$960	\$8,685	\$2,895.14
S80	G10 Band 4	8	0	1	\$1,461.01	\$654.94	\$310.83	\$1,461	\$655	\$311	\$2,427	\$2,426.78
81	G10 Band 4	8	1	23	\$2,038.84	\$654.94	\$709.64	\$46,893	\$15,064	\$16,322	\$78,279	\$3,403.42
S90	G10 Band 4	9	0	1	\$1,461.01	\$654.94	\$310.83	\$1,461	\$655	\$311	\$2,427	\$2,426.78
91	G10 Band 4	9	1	27	\$2,038.84	\$654.94	\$709.64	\$55,049	\$17,683	\$19,160	\$91,892	\$3,403.42
100	G10 Band 4	10	0	3	\$5,451.00	\$4,433.19	\$3,300.00	\$16,353	\$13,300	\$9,900	\$39,553	\$13,184.19
100	G10 Band 4	10	1	47	\$5,451.00	\$4,433.19	\$3,300.00	\$256,197	\$208,360	\$155,100	\$619,657	\$13,184.19
tot Band 4				106				\$383,801	\$257,528	\$202,384	\$843,713	\$7,959.56
81	G10 Band 5	8	1	1	\$2,038.84	\$654.94	\$709.64	\$2,039	\$655	\$710	\$3,403	\$3,403.42

Code	Rate	Meter Size (1)	Above Std (2)	Number of customers (3)	avg labor			Average Meter & Regulator CAPEX/				
					\$/meter	\$/meter	\$/regulator	tot lab	tot met	tot reg	tot cost	Customer
91	G10 Band 5	9	1	1	\$2,038.84	\$654.94	\$709.64	\$2,039	\$655	\$710	\$3,403	\$3,403.42
100	G10 Band 5	10	1	14	\$5,451.00	\$4,433.19	\$3,300.00	\$76,314	\$62,065	\$46,200	\$184,579	\$13,184.19
	tot Band 5			16				\$78,353	\$62,720	\$46,910	\$187,982	\$11,748.88
61	GAC	6	1	1	\$2,038.84	\$536.15	\$320.15	\$2,039	\$536	\$320	\$2,895	\$2,895.14
S80	GAC	8	0	1	\$1,461.01	\$654.94	\$310.83	\$1,461	\$655	\$311	\$2,427	\$2,426.78
81	GAC	8	1	2	\$2,038.84	\$654.94	\$709.64	\$4,078	\$1,310	\$1,419	\$6,807	\$3,403.42
100	GAC	10	1	1	\$5,451.00	\$4,433.19	\$3,300.00	\$5,451	\$4,433	\$3,300	\$13,184	\$13,184.19
	tot GAC			5				\$13,029	\$6,934	\$5,350	\$25,313	\$5,062.59
S10	NGV	1	0	11	\$246.69	\$119.40	\$29.15	\$2,714	\$1,313	\$321	\$4,348	\$395.24
30	NGV	3	0	2	\$259.47	\$202.06	\$29.15	\$519	\$404	\$58	\$981	\$490.68
31	NGV	3	1	8	\$270.94	\$202.62	\$320.15	\$2,168	\$1,621	\$2,561	\$6,350	\$793.71
41	NGV	4	1	7	\$1,651.88	\$573.21	\$484.47	\$11,563	\$4,012	\$3,461	\$19,037	\$2,719.56
51	NGV	5	1	6	\$1,651.88	\$573.21	\$494.47	\$9,911	\$3,439	\$2,967	\$16,317	\$2,719.56
61	NGV	6	1	20	\$2,038.84	\$536.15	\$320.15	\$40,777	\$10,723	\$6,403	\$57,903	\$2,895.14
71	NGV	7	1	3	\$2,038.84	\$536.15	\$320.15	\$6,117	\$1,608	\$960	\$8,685	\$2,895.14
81	NGV	8	1	43	\$2,038.84	\$654.94	\$709.64	\$87,670	\$28,162	\$30,515	\$146,347	\$3,403.42
91	NGV	9	1	35	\$2,038.84	\$654.94	\$709.64	\$71,359	\$22,923	\$24,837	\$119,120	\$3,403.42
99	NGV	10	1	30	\$739,804.00	\$20,289.00	\$3,986.00	\$22,194,120	\$608,670	\$119,580	\$22,922,370	\$764,079.00
100	NGV	10	1	124	\$5,451.00	\$4,433.19	\$3,300.00	\$675,924	\$549,716	\$409,200	\$1,634,840	\$13,184.19
	tot NGV			289				\$23,102,841	\$1,232,593	\$600,864	\$24,936,298	\$86,284.77
S10	GEN	1	0	1	\$246.69	\$119.40	\$29.15	\$247	\$119	\$29	\$395	\$395.24
30	GEN	3	0	7	\$259.47	\$202.06	\$29.15	\$1,816	\$1,414	\$204	\$3,435	\$490.68
31	GEN	3	1	6	\$270.94	\$202.62	\$320.15	\$1,626	\$1,216	\$1,921	\$4,762	\$793.71
S40	GEN	4	0	27	\$154.88	\$614.58	\$262.99	\$4,182	\$16,594	\$7,101	\$27,876	\$1,032.45
41	GEN	4	1	24	\$1,651.88	\$573.21	\$494.47	\$39,645	\$13,757	\$11,867	\$65,269	\$2,719.56
S50	GEN	5	0	15	\$154.88	\$614.58	\$262.99	\$3,323	\$9,219	\$3,945	\$15,487	\$1,032.45
51	GEN	5	1	9	\$1,651.88	\$573.21	\$494.47	\$14,867	\$5,159	\$4,450	\$24,476	\$2,719.56
S60	GEN	6	0	86	\$1,461.01	\$536.15	\$262.99	\$125,647	\$46,109	\$22,617	\$194,373	\$2,260.15
61	GEN	6	1	107	\$2,038.84	\$536.15	\$320.15	\$218,156	\$57,368	\$34,256	\$309,780	\$2,895.14
S70	GEN	7	0	3	\$1,461.01	\$536.15	\$262.99	\$4,383	\$1,608	\$789	\$6,780	\$2,260.15
71	GEN	7	1	3	\$2,038.84	\$536.15	\$320.15	\$6,117	\$1,608	\$960	\$8,685	\$2,895.14
S80	GEN	8	0	87	\$1,461.01	\$654.94	\$310.83	\$127,108	\$56,980	\$27,042	\$211,130	\$2,426.78
81	GEN	8	1	163	\$2,038.84	\$654.94	\$709.64	\$332,331	\$106,755	\$115,671	\$554,757	\$3,403.42
S90	GEN	9	0	8	\$1,461.01	\$654.94	\$310.83	\$11,688	\$5,240	\$2,487	\$19,414	\$2,426.78
91	GEN	9	1	63	\$2,038.84	\$654.94	\$709.64	\$128,447	\$41,261	\$44,707	\$214,415	\$3,403.42
100	GEN	10	0	1	\$5,451.00	\$4,433.19	\$3,300.00	\$5,451	\$4,433	\$3,300	\$13,184	\$13,184.19
100	GEN	10	1	28	\$5,451.00	\$4,433.19	\$3,300.00	\$152,628	\$124,129	\$92,400	\$369,157	\$13,184.19
	tot GEN			638				\$1,176,661	\$492,970	\$373,747	\$2,043,378	\$3,202.79
71	G30 Tran	7	1	1	\$2,038.84	\$536.15	\$320.15	\$2,039	\$536	\$320	\$2,895	\$2,895.14
81	G30 Tran	8	1	1	\$2,038.84	\$654.94	\$709.64	\$2,039	\$655	\$710	\$3,403	\$3,403.42
91	G30 Tran	9	1	3	\$2,038.84	\$654.94	\$709.64	\$6,117	\$1,965	\$2,129	\$10,210	\$3,403.42
99	G30 Tran	10	1	7	\$739,804.00	\$20,289.00	\$3,986.00	\$5,178,628	\$142,023	\$27,902	\$5,348,553	\$764,079.00
100	G30 Tran	10	1	7	\$5,451.00	\$4,433.19	\$3,300.00	\$38,157	\$31,032	\$23,100	\$92,289	\$13,184.19
	tot G30 Tran			19				\$5,226,979	\$176,211	\$54,161	\$5,457,351	\$287,229.01
51	G30 Dist	5	1	4	\$1,651.88	\$573.21	\$494.47	\$6,608	\$2,293	\$1,978	\$10,878	\$2,719.56
S60	G30 Dist	6	0	2	\$1,461.01	\$536.15	\$262.99	\$2,922	\$1,072	\$526	\$4,520	\$2,260.15
61	G30 Dist	6	1	7	\$2,038.84	\$536.15	\$320.15	\$14,272	\$3,753	\$2,241	\$20,266	\$2,895.14
81	G30 Dist	8	1	37	\$2,038.84	\$654.94	\$709.64	\$75,437	\$24,233	\$26,257	\$125,927	\$3,403.42
S90	G30 Dist	9	0	2	\$1,461.01	\$654.94	\$310.83	\$2,922	\$1,310	\$622	\$4,854	\$2,426.78
91	G30 Dist	9	1	69	\$2,038.84	\$654.94	\$709.64	\$140,560	\$45,191	\$48,965	\$234,836	\$3,403.42
99	G30 Dist	10	1	85	\$739,804.00	\$20,289.00	\$3,986.00	\$62,863,340	\$1,724,565	\$338,810	\$64,946,715	\$764,079.00
100	G30 Dist	10	1	314	\$5,451.00	\$4,433.19	\$3,300.00	\$1,711,614	\$1,392,023	\$1,036,200	\$4,139,837	\$13,184.19
	tot G30 Dist			520				\$64,837,794	\$3,194,439	\$1,455,598	\$69,487,832	\$133,630.45

Code	Rate	Meter Size (1)	Above Std (2)	Number of customers (3)	avg labor \$/meter	avg \$/meter	avg \$/regulator	tot lab	tot met	tot reg	tot cost	Average Meter & Regulator CAPEX/
												Customer
41	Sml G50	4	1	1	\$1,651.88	\$573.21	\$494.47	\$1,652	\$573	\$494	\$2,720	\$2,719.56
51	Sml G50	5	1	2	\$1,651.88	\$573.21	\$494.47	\$3,304	\$1,146	\$989	\$5,439	\$2,719.56
61	Sml G50	6	1	146	\$2,038.84	\$536.15	\$320.15	\$297,671	\$78,278	\$46,742	\$422,690	\$2,895.14
81	Sml G50	8	1	58	\$2,038.84	\$654.94	\$709.64	\$118,253	\$37,987	\$41,159	\$197,398	\$3,403.42
91	Sml G50	9	1	43	\$2,038.84	\$654.94	\$709.64	\$87,670	\$28,162	\$30,515	\$146,347	\$3,403.42
99	Sml G50	10	1	41	\$739,804.00	\$20,289.00	\$3,986.00	\$30,331,964	\$831,849	\$163,426	\$31,327,239	\$764,079.00
100	Sml G50	10	1	37	\$5,451.00	\$4,433.19	\$3,300.00	\$201,687	\$164,028	\$122,100	\$487,815	\$13,184.19
	tot G50			328				\$31,042,200	\$1,142,024	\$405,425	\$32,589,649	\$99,358.68
81	G50 EG	8	1	3	\$2,038.84	\$654.94	\$709.64	\$6,117	\$1,965	\$2,129	\$10,210	\$3,403.42
99	G50 EG	10	1	30	\$739,804.00	\$20,289.00	\$3,986.00	\$22,194,120	\$608,670	\$119,580	\$22,922,370	\$764,079.00
100	G50 EG	10	1	5	\$5,451.00	\$4,433.19	\$3,300.00	\$27,255	\$22,166	\$16,500	\$65,921	\$13,184.19
110	G50 EG	12	1	6	\$2,506,778.00	\$88,986.00	\$0.00	\$15,040,668	\$533,916	\$0	\$15,574,584	\$2,595,764.00
	tot G50 EG			44				\$37,268,160	\$1,166,717	\$138,209	\$38,573,085	\$876,661.03
51	G40	5	1	1	\$1,651.88	\$573.21	\$494.47	\$1,652	\$573	\$494	\$2,720	\$2,719.56
81	G40	8	1	4	\$2,038.84	\$654.94	\$709.64	\$8,155	\$2,620	\$2,839	\$13,614	\$3,403.42
91	G40	9	1	3	\$2,038.84	\$654.94	\$709.64	\$6,117	\$1,965	\$2,129	\$10,210	\$3,403.42
99	G40	10	1	15	\$739,804.00	\$20,289.00	\$3,986.00	\$11,097,060	\$304,335	\$59,790	\$11,461,185	\$764,079.00
100	G40	10	1	7	\$5,451.00	\$4,433.19	\$3,300.00	\$38,157	\$31,032	\$23,100	\$92,289	\$13,184.19
	tot G40			30				\$11,151,141	\$340,525	\$88,352	\$11,580,018	\$386,000.59

Code	Pipe Diameter Inches	Pipe Type	New Business \$/ft	Replacement \$/ft
0.5P	0.5	P	\$146.46	\$176.54
1P	1	P	\$235.19	\$220.66
2P	2	P	\$230.98	\$196.21
3P	3	P	\$218.87	\$351.91
4P	4	P	\$537.03	\$821.46
6P	6	P	\$1,507.03	\$1,040.13
8P	8	P	\$2,177.99	\$1,602.57
0.5	0.5	S	\$445.65	\$251.60
0.75	0.75	S	\$445.65	\$251.60
1S	1	S	\$673.27	\$410.04
1.25	1.25	S	\$481.15	\$631.07
2S	2	S	\$887.66	\$688.76
3S	3	S	\$728.43	\$725.33
4S	4	S	\$903.83	\$740.56
6S	6	S	\$1,808.75	\$1,318.32
8S	8	S	\$2,645.28	\$1,812.13
10S	10	S	\$3,435.87	\$2,664.50
12S	12	S	\$4,390.84	\$3,004.50
16S	16	S	\$11,096.37	\$7,618.61
20S	20	S	\$11,096.37	\$7,618.61

Calculation of Weighted Average Service Line and Service Line Replacement Cost \$/customer

Code (1)	Rate	Pipe			# New Customers		New		Service Line	replacement Service Line		Replacement
		Diameter Inches	Pipe frac (2)	Pipe Type (3)	last 5 years (4)	Avg Length feet (5)	Business \$/ft (6)	Replacement \$/ft (6)	CAPEX \$/customer	CAPEX \$/customer	Service Line CAPEX \$'s	Service Line CAPEX \$'s
0.5P	SF	0	12	P	109,698	25.2	\$146.46	\$176.54	\$3,692	\$4,450	\$405,031,743	\$488,208,757
0.75	SF	0	34	S	186	9.3	\$445.65	\$251.60	\$4,122	\$2,327	\$766,742	\$432,880
1P	SF	1	0	P	43,508	32.4	\$235.19	\$220.66	\$7,620	\$7,149	\$331,542,120	\$311,049,555
1S	SF	1	0	S	261	2.5	\$673.27	\$410.04	\$1,676	\$1,021	\$437,552	\$266,482
2P	SF	2	0	P	117	97.7	\$230.98	\$196.21	\$22,576	\$19,178	\$2,641,347	\$2,243,809
	Tot SF				153,770				\$4,815	\$3,510	\$740,419,504	\$802,201,484
0.5P	MF	0	12	P	2,206	19.9	\$146.46	\$176.54	\$2,912	\$3,510	\$6,423,022	\$7,742,049
0.75	MF	0	34	S	80	1.0	\$445.65	\$251.60	\$423	\$239	\$33,869	\$19,122
1P	MF	1	0	P	8,736	24.2	\$235.19	\$220.66	\$5,701	\$5,349	\$49,804,642	\$46,726,225
1S	MF	1	0	S	402	8.3	\$673.27	\$410.04	\$5,608	\$3,416	\$2,254,557	\$1,373,092
1.25	MF	1	25	S	26	10.6	\$481.15	\$631.07	\$5,110	\$6,702	\$132,855	\$174,250
2P	MF	2	0	P	920	39.9	\$230.98	\$196.21	\$9,209	\$7,823	\$8,472,301	\$7,197,169
2S	MF	2	0	S	1,005	1.9	\$887.66	\$688.76	\$1,669	\$1,295	\$1,677,142	\$1,301,336
3P	MF	3	0	P	6	108.2	\$218.87	\$351.91	\$23,675	\$38,067	\$142,050	\$228,399
3S	MF	3	0	S	21	86.0	\$728.43	\$725.33	\$62,645	\$62,378	\$1,315,539	\$1,309,942
	Tot MF				13,402				\$5,242	\$3,510	\$70,255,977	\$66,071,584
0.5P	MM Band 1	0	12	P	250	40.7	\$146.46	\$176.54	\$5,961	\$7,185	\$1,490,225	\$1,796,257
0.75	MM Band 1	0	34	S	48	1.1	\$445.65	\$251.60	\$490	\$277	\$23,530	\$13,285
1P	MM Band 1	1	0	P	659	47.6	\$235.19	\$220.66	\$11,200	\$10,508	\$7,380,731	\$6,924,529
1S	MM Band 1	1	0	S	158	2.7	\$673.27	\$410.04	\$1,804	\$1,099	\$285,090	\$173,628
1.25	MM Band 1	1	25	S	6	2.2	\$481.15	\$631.07	\$1,044	\$1,369	\$6,265	\$8,216
2P	MM Band 1	2	0	P	308	76.4	\$230.98	\$196.21	\$17,640	\$14,985	\$5,433,014	\$4,615,313
2S	MM Band 1	2	0	S	150	20.9	\$887.66	\$688.76	\$18,543	\$14,388	\$2,781,478	\$2,158,217
3P	MM Band 1	3	0	P	23	91.3	\$218.87	\$351.91	\$19,983	\$32,130	\$459,602	\$738,984
3S	MM Band 1	3	0	S	15	25.9	\$728.43	\$725.33	\$18,844	\$18,764	\$282,666	\$281,464
	Tot MM 1				1,617				\$11,220	\$10,334	\$18,142,602	\$16,709,893
0.5P	MM Band 2	0	12	P	8	27.8	\$146.46	\$176.54	\$4,064	\$4,899	\$32,514	\$39,191
1S	MM Band 2	1	0	S	2	99.0	\$673.27	\$410.04	\$66,654	\$40,594	\$133,308	\$81,188
1.25	MM Band 2	1	25	S	8	42.5	\$481.15	\$631.07	\$20,449	\$26,820	\$163,591	\$214,562
2P	MM Band 2	2	0	P	4	739.5	\$230.98	\$196.21	\$170,807	\$145,099	\$683,228	\$580,398
2S	MM Band 2	2	0	S	12	93.7	\$887.66	\$688.76	\$83,147	\$64,516	\$997,764	\$774,189
3P	MM Band 2	3	0	P	1	96.0	\$218.87	\$351.91	\$21,011	\$33,784	\$21,011	\$33,784
3S	MM Band 2	3	0	S	11	190.5	\$728.43	\$725.33	\$138,729	\$138,139	\$1,526,018	\$1,519,526
4S	MM Band 2	4	0	S	6	205.3	\$903.83	\$740.56	\$185,583	\$152,059	\$1,113,497	\$912,352
	Tot MM 2				52				\$89,826	\$79,908	\$4,670,931	\$4,155,191
0.5P	G10 Band 1	0	12	P	58	49.0	\$146.46	\$176.54	\$7,177	\$8,650	\$416,238	\$501,716
0.75	G10 Band 1	0	34	S	214	2.3	\$445.65	\$251.60	\$1,038	\$586	\$222,210	\$125,454
1P	G10 Band 1	1	0	P	572	79.3	\$235.19	\$220.66	\$18,644	\$17,491	\$10,664,229	\$10,005,075
1S	G10 Band 1	1	0	S	945	0.8	\$673.27	\$410.04	\$566	\$344	\$534,443	\$325,492
1.25	G10 Band 1	1	25	S	34	0.9	\$481.15	\$631.07	\$452	\$593	\$15,378	\$20,169
2P	G10 Band 1	2	0	P	121	135.3	\$230.98	\$196.21	\$31,240	\$26,538	\$3,779,984	\$3,211,074
2S	G10 Band 1	2	0	S	216	5.5	\$887.66	\$688.76	\$4,900	\$3,802	\$1,058,373	\$821,218
3P	G10 Band 1	3	0	P	3	27.7	\$218.87	\$351.91	\$6,056	\$9,737	\$18,168	\$29,212
4P	G10 Band 1	4	0	P	7	190.3	\$537.03	\$821.46	\$102,191	\$156,316	\$715,337	\$1,094,215
	tot Band 1				2,170				\$8,030	\$7,435	\$17,424,360	\$16,133,624

Code (1)	Rate	Pipe Diameter Inches	Pipe frac (2)	Pipe Type (3)	# new Customers		New Business		Service Line	Replacement	Service Line		Replacement
					last 5 years (4)	Avg Length feet (5)	\$/ft (6)	\$/ft (6)	\$/customer	\$/customer	Service Line CAPEX \$'s	Service Line CAPEX \$'s	
0.5P	G10 Band 2	0	12	P	31	34.0	\$146.46	\$176.54	\$4,980	\$6,002	\$154,368	\$186,069	
0.75	G10 Band 2	0	34	S	323	3.2	\$445.65	\$251.60	\$1,426	\$805	\$460,624	\$260,055	
1P	G10 Band 2	1	0	P	578	84.3	\$235.19	\$220.66	\$19,822	\$18,597	\$11,457,159	\$10,748,994	
1S	G10 Band 2	1	0	S	961	0.8	\$673.27	\$410.04	\$532	\$324	\$511,141	\$311,300	
1.25	G10 Band 2	1	25	S	21	0.9	\$481.15	\$631.07	\$433	\$568	\$9,094	\$11,927	
2P	G10 Band 2	2	0	P	166	130.2	\$230.98	\$196.21	\$30,068	\$25,543	\$4,991,369	\$4,240,138	
2S	G10 Band 2	2	0	S	150	4.4	\$887.66	\$688.76	\$3,879	\$3,010	\$581,860	\$451,480	
3P	G10 Band 2	3	0	P	8	198.1	\$218.87	\$351.91	\$43,364	\$69,725	\$346,915	\$557,798	
tot Band 2					2,238				\$8,272	\$7,492	\$18,512,531	\$16,767,761	
0.5P	G10 Band 3	0	12	P	19	64.5	\$146.46	\$176.54	\$9,451	\$11,392	\$179,570	\$216,446	
0.75	G10 Band 3	0	34	S	258	3.4	\$445.65	\$251.60	\$1,506	\$850	\$388,625	\$219,407	
1P	G10 Band 3	1	0	P	618	80.3	\$235.19	\$220.66	\$18,881	\$17,714	\$11,668,645	\$10,947,408	
1S	G10 Band 3	1	0	S	1,172	1.4	\$673.27	\$410.04	\$909	\$554	\$1,065,250	\$648,769	
1.25	G10 Band 3	1	25	S	24	1.0	\$481.15	\$631.07	\$462	\$606	\$11,086	\$14,540	
2P	G10 Band 3	2	0	P	451	149.3	\$230.98	\$196.21	\$34,476	\$29,287	\$15,548,457	\$13,208,321	
2S	G10 Band 3	2	0	S	212	3.4	\$887.66	\$688.76	\$2,974	\$2,307	\$630,415	\$489,155	
3P	G10 Band 3	3	0	P	14	139.9	\$218.87	\$351.91	\$30,626	\$49,243	\$428,768	\$689,406	
4P	G10 Band 3	4	0	P	4	188.5	\$537.03	\$821.46	\$101,230	\$154,846	\$404,919	\$619,384	
6P	G10 Band 3	6	0	P	12	201.3	\$1,507.03	\$1,040.13	\$303,409	\$209,409	\$3,640,913	\$2,512,911	
tot Band 3					2,784				\$12,201	\$10,620	\$33,966,647	\$29,565,746	
1P	G10 Band 4	1	0	P	13	70.3	\$235.19	\$220.66	\$16,536	\$15,514	\$214,974	\$201,686	
1S	G10 Band 4	1	0	S	8	35.4	\$673.27	\$410.04	\$23,820	\$14,507	\$190,563	\$116,058	
2P	G10 Band 4	2	0	P	59	166.4	\$230.98	\$196.21	\$38,437	\$32,652	\$2,267,769	\$1,926,456	
2S	G10 Band 4	2	0	S	4	64.0	\$887.66	\$688.76	\$56,810	\$44,080	\$227,241	\$176,322	
3P	G10 Band 4	3	0	P	8	214.0	\$218.87	\$351.91	\$46,838	\$75,310	\$374,703	\$602,477	
3S	G10 Band 4	3	0	S	7	18.6	\$728.43	\$725.33	\$13,527	\$13,469	\$94,688	\$94,285	
4P	G10 Band 4	4	0	P	12	332.3	\$537.03	\$821.46	\$178,471	\$272,997	\$2,141,646	\$3,275,966	
tot Band 4					111				\$49,654	\$57,597	\$5,511,583	\$6,393,250	
2P	G10 Band 5	2	0	P	4	81.0	\$230.98	\$196.21	\$18,709	\$15,893	\$74,836	\$63,573	
4P	G10 Band 5	3	0	P	1	105.0	\$537.03	\$821.46	\$56,388	\$86,254	\$56,388	\$86,254	
4S	G10 Band 5	4	0	S	4	201.3	\$903.83	\$740.56	\$181,895	\$149,037	\$727,581	\$596,149	
6S	G10 Band 5	6	0	S	3	1,203.7	\$1,808.75	\$1,318.32	\$2,177,137	\$1,586,827	\$6,531,412	\$4,760,482	
8S	G10 Band 5	8	0	S	4	326.0	\$2,645.28	\$1,812.13	\$862,360	\$590,754	\$3,449,441	\$2,363,016	
tot Band 5					16				\$677,479	\$491,842	\$10,839,658	\$7,869,474	
1P	GAC	1	0	P	1	10.0	\$235.19	\$220.66	\$2,352	\$2,207	\$2,352	\$2,207	
1S	GAC	1	0	S	1	22.0	\$673.27	\$410.04	\$14,812	\$9,021	\$14,812	\$9,021	
6S	GAC	6	0	S	1	116.0	\$1,808.75	\$1,318.32	\$209,815	\$152,926	\$209,815	\$152,926	
tot GAC					3				\$75,660	\$54,718	\$226,979	\$164,153	

Code (1)	Rate	Pipe Diameter Inches	Pipe frac (2)	Pipe Type (3)	# new Customers		New Business		Replacement		Replacement	
					last 5 years (4)	Avg Length feet (5)	\$/ft (6)	\$/ft (6)	\$/customer	\$/customer	Service Line CAPEX \$'s	Service Line CAPEX \$'s
0.5P	NGV	0	12	P	3	43.7	\$146.46	\$176.54	\$6,396	\$7,709	\$19,188	\$23,128
0.75	NGV	0	34	S	2	160.5	\$445.65	\$251.60	\$71,527	\$40,382	\$143,054	\$80,764
1P	NGV	1	0	P	5	155.8	\$235.19	\$220.66	\$36,643	\$34,378	\$183,215	\$171,891
1S	NGV	1	0	S	5	123.8	\$673.27	\$410.04	\$83,351	\$50,763	\$416,755	\$253,816
1.25	NGV	1	25	S	1	330.0	\$481.15	\$631.07	\$158,779	\$208,252	\$158,779	\$208,252
2P	NGV	2	0	P	44	141.6	\$230.98	\$196.21	\$32,709	\$27,786	\$1,439,176	\$1,222,571
2S	NGV	2	0	S	9	69.4	\$887.66	\$688.76	\$61,639	\$47,827	\$554,751	\$430,445
3P	NGV	3	0	P	16	181.8	\$218.87	\$351.91	\$39,779	\$63,960	\$636,469	\$1,023,366
3S	NGV	3	0	S	15	167.3	\$728.43	\$725.33	\$121,888	\$121,369	\$1,828,315	\$1,820,537
4P	NGV	4	0	P	16	251.1	\$537.03	\$821.46	\$134,826	\$206,237	\$2,157,220	\$3,299,788
4S	NGV	4	0	S	12	136.8	\$903.83	\$740.56	\$123,598	\$101,271	\$1,483,181	\$1,215,255
6P	NGV	6	0	P	3	50.7	\$1,507.03	\$1,040.13	\$76,361	\$52,703	\$229,083	\$158,110
6S	NGV	6	0	S	6	211.7	\$1,808.75	\$1,318.32	\$382,858	\$279,050	\$2,297,148	\$1,674,298
tot NGV					137				\$84,280	\$84,542	\$11,546,335	\$11,582,222
0.5P	GEN	0	12	P	8	378.5	\$146.46	\$176.54	\$55,435	\$66,819	\$443,479	\$534,552
0.75	GEN	0	34	S	172	183.4	\$445.65	\$251.60	\$81,741	\$46,149	\$14,059,486	\$7,937,585
1P	GEN	1	0	P	182	347.0	\$235.19	\$220.66	\$81,621	\$76,576	\$14,855,097	\$13,936,906
1S	GEN	1	0	S	36	352.7	\$673.27	\$410.04	\$237,456	\$144,618	\$8,548,419	\$5,206,242
1S	GEN	1	25	S	3	2,629.0	\$673.27	\$410.04	\$1,770,030	\$1,078,001	\$5,310,091	\$3,234,004
2P	GEN	2	0	P	207	1,167.1	\$230.98	\$196.21	\$269,568	\$228,996	\$55,800,526	\$47,402,213
2S	GEN	2	0	S	43	224.0	\$887.66	\$688.76	\$198,818	\$154,268	\$8,549,164	\$6,633,506
3P	GEN	3	0	P	32	1,561.8	\$218.87	\$351.91	\$341,831	\$549,623	\$10,938,590	\$17,587,928
4P	GEN	4	0	P	18	1,985.6	\$537.03	\$821.46	\$1,066,301	\$1,631,066	\$19,193,425	\$29,359,189
tot GEN					701				\$196,431	\$188,063	\$137,698,278	\$131,832,126
0.5P	G30 Dist	0	12	P	6	174.5	\$146.46	\$176.54	\$25,557	\$30,805	\$153,343	\$184,833
0.75	G30 Dist	0	34	S	22	80.8	\$445.65	\$251.60	\$36,016	\$20,334	\$792,363	\$447,345
1P	G30 Dist	1	0	P	6	113.8	\$235.19	\$220.66	\$26,773	\$25,118	\$160,636	\$150,707
1S	G30 Dist	1	0	S	13	65.7	\$673.27	\$410.04	\$44,229	\$26,937	\$574,974	\$350,176
1.25	G30 Dist	1	25	S	15	107.1	\$481.15	\$631.07	\$51,515	\$67,566	\$772,725	\$1,013,491
2P	G30 Dist	2	0	P	48	358.6	\$230.98	\$196.21	\$82,829	\$70,363	\$3,975,792	\$3,377,412
2S	G30 Dist	2	0	S	103	273.8	\$887.66	\$688.76	\$243,073	\$188,606	\$25,036,471	\$19,426,413
3P	G30 Dist	3	0	P	46	383.0	\$218.87	\$351.91	\$83,836	\$134,798	\$3,856,466	\$6,200,730
3S	G30 Dist	3	0	S	63	325.5	\$728.43	\$725.33	\$237,132	\$236,123	\$14,939,329	\$14,875,770
4P	G30 Dist	4	0	P	14	481.3	\$537.03	\$821.46	\$258,464	\$395,360	\$3,618,501	\$5,535,034
4S	G30 Dist	4	0	S	72	761.2	\$903.83	\$740.56	\$687,963	\$563,688	\$49,533,343	\$40,585,512
6P	G30 Dist	6	0	P	3	1,282.0	\$1,507.03	\$1,040.13	\$1,932,004	\$1,333,445	\$5,796,013	\$4,000,334
6S	G30 Dist	6	0	S	23	845.1	\$1,808.75	\$1,318.32	\$1,528,631	\$1,114,157	\$35,158,504	\$25,625,611
8S	G30 Dist	8	0	S	5	1,265.8	\$2,645.28	\$1,812.13	\$3,348,390	\$2,293,792	\$16,741,951	\$11,468,961
10S	G30 Dist	10	0	S	1	73.0	\$3,435.87	\$2,664.50	\$250,818	\$194,508	\$250,818	\$194,508
tot G30 Dist					440				\$366,730	\$303,266	\$161,361,230	\$133,436,839
2P	G30 Tran	2	0	P	3	1,363.0	\$230.98	\$196.21	\$314,821	\$267,438	\$944,462	\$802,315
2S	G30 Tran	2	0	S	5	1,484.6	\$887.66	\$688.76	\$1,317,818	\$1,022,527	\$6,589,090	\$5,112,637
4S	G30 Tran	4	0	S	1	53.0	\$903.83	\$740.56	\$47,903	\$39,250	\$47,903	\$39,250
6S	G30 Tran	6	0	S	2	1,593.0	\$1,808.75	\$1,318.32	\$2,881,338	\$2,100,091	\$5,762,676	\$4,200,181
8S	G30 Tran	8	0	S	1	42.0	\$2,645.28	\$1,812.13	\$111,102	\$76,109	\$111,102	\$76,109
16S	G30 Tran	16	0	S	1	95.0	\$11,096.37	\$7,618.61	\$1,054,155	\$723,767	\$1,054,155	\$723,767
tot G30 Tran					13				\$1,116,107	\$842,635	\$14,509,387	\$10,954,259

Code (1)	Rate	Pipe Diameter Inches	Pipe frac (2)	Pipe Type (3)	# new Customers last 5 years (4)	Avg Length feet (5)	New Business \$/ft (6)	Replacement \$/ft (6)	Service Line		Replacement	
									CAPEX \$/customer	CAPEX \$/customer	Service Line CAPEX \$'s	Service Line CAPEX \$'s
0.75	Sml G50	0	34	S	5	7.4	\$445.65	\$251.60	\$3,298	\$1,862	\$16,489	\$9,309
1P	Sml G50	1	0	P	21	113.4	\$235.19	\$220.66	\$26,678	\$25,029	\$560,232	\$525,604
1S	Sml G50	1	0	S	6	19.7	\$673.27	\$410.04	\$13,241	\$8,064	\$79,446	\$48,385
1.25	Sml G50	1	25	S	3	143.7	\$481.15	\$631.07	\$69,125	\$90,663	\$207,375	\$271,989
2P	Sml G50	2	0	P	37	103.7	\$230.98	\$196.21	\$23,959	\$20,353	\$886,486	\$753,064
2S	Sml G50	2	0	S	15	121.8	\$887.66	\$688.76	\$108,117	\$83,890	\$1,621,752	\$1,258,357
3P	Sml G50	3	0	P	2	159.5	\$218.87	\$351.91	\$34,910	\$56,130	\$69,819	\$112,261
3S	Sml G50	3	0	S	3	28.0	\$728.43	\$725.33	\$20,396	\$20,309	\$61,188	\$60,928
4P	Sml G50	4	0	P	3	284.3	\$537.03	\$821.46	\$152,695	\$233,569	\$458,084	\$700,708
4S	Sml G50	4	0	S	7	679.9	\$903.83	\$740.56	\$614,474	\$503,474	\$4,301,319	\$3,524,318
6P	Sml G50	6	0	P	2	131.5	\$1,507.03	\$1,040.13	\$198,174	\$136,777	\$396,348	\$273,554
6S	Sml G50	6	0	S	7	788.7	\$1,808.75	\$1,318.32	\$1,426,585	\$1,039,780	\$9,986,098	\$7,278,463
8S	Sml G50	8	0	S	4	82.0	\$2,645.28	\$1,812.13	\$216,913	\$148,595	\$867,651	\$594,378
10S	Sml G50	10	0	S	1	467.0	\$3,435.87	\$2,664.50	\$1,604,550	\$1,244,319	\$1,604,550	\$1,244,319
tot Sml G50					116				\$182,042	\$143,583	\$21,116,838	\$16,655,639
1.25	G50 EG	1	25	S	1	163.0	\$481.15	\$631.07	\$78,427	\$102,864	\$78,427	\$102,864
2S	G50 EG	2	0	S	2	27.0	\$887.66	\$688.76	\$23,967	\$18,596	\$47,934	\$37,193
3S	G50 EG	3	0	S	1	520.0	\$728.43	\$725.33	\$378,782	\$377,171	\$378,782	\$377,171
4S	G50 EG	4	0	S	2	22.5	\$903.83	\$740.56	\$20,336	\$16,663	\$40,672	\$33,325
6S	G50 EG	6	0	S	3	232.0	\$1,808.75	\$1,318.32	\$419,630	\$305,851	\$1,258,890	\$917,554
8S	G50 EG	8	0	S	2	586.0	\$2,645.28	\$1,812.13	\$1,550,133	\$1,061,909	\$3,100,267	\$2,123,817
tot G50 EG					11				\$445,907	\$326,538	\$4,904,972	\$3,591,923
2S	G40	2	0	S	6	86.0	\$887.66	\$688.76	\$76,339	\$59,233	\$458,032	\$355,398
3S	G40	3	0	S	4	129.3	\$728.43	\$725.33	\$94,149	\$93,749	\$376,597	\$374,995
4P	G40	4	0	P	2	1,477.5	\$537.03	\$821.46	\$793,459	\$1,213,713	\$1,586,918	\$2,427,426
4S	G40	4	0	S	7	437.3	\$903.83	\$740.56	\$395,231	\$323,835	\$2,766,616	\$2,266,847
6S	G40	6	0	S	3	5.7	\$1,808.75	\$1,318.32	\$10,250	\$7,471	\$30,749	\$22,412
8S	G40	8	0	S	2	26.5	\$2,645.28	\$1,812.13	\$70,100	\$48,021	\$140,200	\$96,043
16S	G40	16	0	S	1	108.0	\$11,096.37	\$7,618.61	\$1,198,408	\$822,809	\$1,198,408	\$822,809
tot G40					25				\$262,301	\$254,637	\$6,557,518	\$6,365,930

Notes::

- (1) "code" shows Pipe type and pipe diameter size
- (2) "Pipe fraction" is a code for the pipe size—the codes 12, 34, and 25 represent .5, .75, and .25 inch diameter pipes, respectively
- (3) "Pipe type": P means plastic and S means steel.
- (4) "# of new customers" represents new customers added to SoCalGas' system in the past 5 years. For residential, core commercial and industrial customers, new customer data were used (premises that initial gas service started between 2012-2016) while all the other rate classes cover the entire population that service line history could be matched by premise as very few large new customers are added to SoCalGas system each year.
- (5) The average length was computed by dividing the total service line footage by rate class, line diameter, and pipe type by the number of customers used in the analysis
- (6) New Business is newly installed pipe, and Replacement is when we replace existing pipe. The costs represent the unit cost that is the best representation of the cost per foot, by pipe size and pipe material, to install New Business service pipe and Replacement service pipe on the Gas Distribution system.
- (7) Line Extension Credit, per SoCalGas' Rule 20, effective 04/2017

WATER HEATING	\$ 643
SPACE HEATING	\$ 698
COOKTOP & OVEN	\$ 114
DRYER STUB	\$ 160
Total	\$ 1,615

Code	Pipe Diameter Inches	Pipe Type	New		avg labor and		avg \$/meter	avg \$/regulator	Total
			Business \$/ft	Replacement \$/ft	\$/meter	nonlabor			
0.5PS10	0.5	P	\$146.46	\$176.54	\$247	\$119	\$29	\$395	
0.5P30	0.5	P	\$146.46	\$176.54	\$259	\$202	\$29	\$491	
0.5PS40	0.5	P	\$146.46	\$176.54	\$155	\$615	\$263	\$1,032	
1PS10	1	P	\$235.19	\$220.66	\$247	\$119	\$29	\$395	
1P30	1	P	\$235.19	\$220.66	\$259	\$202	\$29	\$491	
1P31	1	P	\$235.19	\$220.66	\$271	\$203	\$320	\$794	
1PS40	1	P	\$235.19	\$220.66	\$155	\$615	\$263	\$1,032	
1PS41	1	P	\$235.19	\$220.66	\$1,652	\$573	\$494	\$2,720	
1PS50	1	P	\$235.19	\$220.66	\$155	\$615	\$263	\$1,032	
1PS60	1	P	\$235.19	\$220.66	\$1,461	\$536	\$263	\$2,260	
1PS80	1	P	\$235.19	\$220.66	\$1,461	\$655	\$311	\$2,427	
2P30	2	P	\$230.98	\$196.21	\$259	\$202	\$29	\$491	
0.75S10	0.75	S	\$445.65	\$251.60	\$247	\$119	\$29	\$395	
0.7530	0.75	S	\$445.65	\$251.60	\$259	\$202	\$29	\$491	
0.75S40	0.75	S	\$445.65	\$251.60	\$155	\$615	\$263	\$1,032	
1S30	1	S	\$673.27	\$410.04	\$259	\$202	\$29	\$491	
1SS40	1	S	\$673.27	\$410.04	\$155	\$615	\$263	\$1,032	

Calculation of Weighted Average Service Line and Service Line Replacement Cost \$/customer

Code (1)	Rate	Pipe Diameter Inches	Pipe frac (2)	Pipe Type (3)	# New Customers		Avg Length feet (5)	New Business \$/ft (6)	Replacement \$/ft (6)	Meter and	Replacement	Service Line CAPEX \$/customer	Replacement	Average
					Service Line CAPEX \$/customer	Service Line CAPEX \$/customer				Service Line CAPEX \$/customer	Regulator CAPEX/ Customer			
0.5PS10	SF	0	12	P	23,872	25.2	\$146.46	\$176.54	\$1,615	\$4,450	\$38,553,280	\$106,241,859	\$395.24	
0.5P30	SF	0	34	P	45,742	25.2	\$146.46	\$176.54	\$1,615	\$4,450	\$73,873,330	\$203,573,857	\$490.68	
0.5PS40	SF	1	0	P	2,106	25.2	\$146.46	\$176.54	\$1,615	\$4,450	\$3,401,190	\$9,372,711	\$1,032.45	
1PS10	SF	1	0	P	6,956	32.4	\$235.19	\$220.66	\$1,615	\$7,149	\$11,233,940	\$49,730,181	\$395.24	
1P30	SF	1	0	P	15,390	32.4	\$235.19	\$220.66	\$1,615	\$7,149	\$24,854,850	\$110,026,953	\$490.68	
1P31	SF	1	0	P	29	32.4	\$235.19	\$220.66	\$1,615	\$7,149	\$46,835	\$207,328	\$793.71	
1PS40	SF	1	0	P	3,905	32.4	\$235.19	\$220.66	\$1,615	\$7,149	\$6,306,575	\$27,917,820	\$1,032.45	
1PS41	SF	1	0	P	44	32.4	\$235.19	\$220.66	\$1,615	\$7,149	\$71,060	\$314,567	\$2,719.56	
1PS50	SF	1	0	P	486	32.4	\$235.19	\$220.66	\$1,615	\$7,149	\$784,890	\$3,474,535	\$1,032.45	
1PS60	SF	1	0	P	454	32.4	\$235.19	\$220.66	\$1,615	\$7,149	\$733,210	\$3,245,759	\$2,260.15	
1PS80	SF	1	0	P	125	32.4	\$235.19	\$220.66	\$1,615	\$7,149	\$201,875	\$893,656	\$2,426.78	
2P30	SF	1	0	P	27	97.7	\$230.98	\$196.21	\$1,615	\$19,178	\$43,605	\$517,802	\$490.68	
0.75S10	SF	0	34	S	52	9.3	\$445.65	\$251.60	\$1,615	\$2,327	\$83,980	\$121,020	\$395.24	
0.7530	SF	0	34	S	54	9.3	\$445.65	\$251.60	\$1,615	\$2,327	\$87,210	\$125,675	\$490.68	
0.75S40	SF	0	34	S	52	9.3	\$445.65	\$251.60	\$1,615	\$2,327	\$83,980	\$121,020	\$1,032.45	
1S30	SF	1	0	S	60	2.5	\$673.27	\$410.04	\$1,615	\$1,021	\$96,900	\$61,260	\$490.68	
1SS40	SF	1	0	S	54	2.5	\$673.27	\$410.04	\$1,615	\$1,021	\$87,210	\$55,134	\$1,032.45	
Tot SF					99,408				\$1,615	\$5,191	\$160,543,920	\$516,001,139	\$395	
												Service Cost for CAPEX		\$1,220

Notes::

- (1) "code" shows Pipe type and pipe diameter size
 - (2) "Pipe fraction" is a code for the pipe size—the codes 12, 34, and 25 represent .5, .75, and .25 inch diameter pipes, respectively
 - (3) "Pipe type": **P** means plastic and **S** means steel.
 - (4) "# of new customers" represents new customers added to SoCalGas' system in the past 5 years. For residential, core commercial and industrial customers, new customer data were used (premises that initial gas service started between 2012-2016) while all the other rate classes cover the entire population that service line history could be matched by premise as very few large new customers are added to SoCalGas system each year.
 - (5) The average length was computed by dividing the total service line footage by rate class, line diameter, and pipe type by the number of customers used in the analysis
 - (6) New Business is newly installed pipe, and Replacement is when we replace existing pipe. The costs represent the unit cost that is the best representation of the cost per foot, by pipe size and pipe material, to install New Business service pipe and Replacement service pipe on the Gas Distribution system.
 - (7) Line Extension Credit, per SoCalGas' Rule 20, effective 01/2020
- | | | |
|----------------------|-----------|--------------|
| WATER HEATING | \$ | 643 |
| SPACE HEATING | \$ | 698 |
| COOKTOP & OVEN | \$ | 114 |
| DRYER STUB | \$ | 160 |
| Total | \$ | 1,615 |

Code	Pipe Diameter Inches	Pipe Type	New		avg labor and nonlabor			Total
			Business \$/ft	Replacement \$/ft	\$/meter	avg \$/meter	avg \$/regulator	
0.5PM10	0.5	P	\$146.46	\$176.54	\$205	\$119	\$7	\$331
0.5P30	0.5	P	\$146.46	\$176.54	\$259	\$202	\$29	\$491
0.5PS40	0.5	P	\$146.46	\$176.54	\$155	\$615	\$263	\$1,032
1PM10	1	P	\$235.19	\$220.66	\$205	\$119	\$7	\$331
1P30	1	P	\$235.19	\$220.66	\$259	\$202	\$29	\$491
1P31	1	P	\$235.19	\$220.66	\$271	\$203	\$320	\$794
1PS40	1	P	\$235.19	\$220.66	\$155	\$615	\$263	\$1,032
1PS41	1	P	\$235.19	\$220.66	\$1,652	\$573	\$494	\$2,720
2PM10	1	P	\$235.19	\$220.66	\$205	\$119	\$7	\$331
2P30	1	P	\$235.19	\$220.66	\$259	\$202	\$29	\$491
1SM10	1	S	\$673.27	\$410.04	\$305.21	\$515.37	\$263	\$1,084
1S30	1	S	\$673.27	\$410.04	\$259	\$202	\$29	\$491
1SS40	1	S	\$673.27	\$410.04	\$155	\$615	\$263	\$1,032
2SM10	2	S	\$887.66	\$688.76	\$205	\$119	\$7	\$331

Calculation of Weighted Average Service Line and Service Line Replacement Cost \$/customer

Code (1)	Rate	Pipe Diameter Inches	Pipe frac (2)	Pipe Type (3)	# New Customers last 5 years (4)	Avg Length feet (5)	New Business \$/ft (6)	Replacement \$/ft (6)	Meter and	Replacement	Service Line CAPEX \$/customer	Replacement	Average
									Service Line CAPEX \$/customer	Service Line CAPEX \$/customer		Service Line CAPEX \$/customer	Meter & Regulator CAPEX/ Customer
0.5PM10	MF	0	12	P	670	19.9	\$146.46	\$176.54	\$1,615	\$3,510	\$1,082,050	\$2,351,393	\$331.30
0.5P30	MF	0	12	P	744	19.9	\$146.46	\$176.54	\$1,615	\$3,510	\$1,201,560	\$2,611,099	\$490.68
0.5PS40	MF	1	12	P	46	19.9	\$146.46	\$176.54	\$1,615	\$3,510	\$74,290	\$161,439	\$1,032.45
1PM10	MF	1	0	P	3,330	24.2	\$235.19	\$220.66	\$1,615	\$5,349	\$5,377,950	\$17,811,164	\$331.30
1P30	MF	1	0	P	2,180	24.2	\$235.19	\$220.66	\$1,615	\$5,349	\$3,520,700	\$11,660,161	\$490.68
1PS40	MF	1	0	P	152	24.2	\$235.19	\$220.66	\$1,615	\$5,349	\$245,480	\$813,002	\$1,032.45
2PM10	MF	1	0	P	452	39.9	\$235.19	\$220.66	\$1,615	\$8,798	\$729,980	\$3,976,492	\$331.30
2P30	MF	1	0	P	112	39.9	\$235.19	\$220.66	\$1,615	\$8,798	\$180,880	\$985,325	\$490.68
1SM10	MF	1	0	S	56	8.3	\$673.27	\$410.04	\$1,615	\$3,416	\$90,440	\$191,277	\$1,083.57
1S30	MF	1	0	S	72	8.3	\$673.27	\$410.04	\$1,615	\$3,416	\$116,280	\$245,927	\$490.68
1SS40	MF	1	0	S	26	8.3	\$673.27	\$410.04	\$1,615	\$3,416	\$41,990	\$88,807	\$1,032.45
2SM10	MF	2	0	S	103	1.9	\$887.66	\$688.76	\$1,615	\$1,295	\$166,345	\$133,371	\$331.30
Tot MF					7,943				\$1,615	\$5,165	\$12,827,945	\$41,029,457	\$331
												Service Cost for CAPEX	\$1,284

Notes::

- (1) "code" shows Pipe type and pipe diameter size
 - (2) "Pipe fraction" is a code for the pipe size—the codes 12, 34, and 25 represent .5, .75, and .25 inch diameter pipes, respectively
 - (3) "Pipe type": **P** means plastic and **S** means steel.
 - (4) "# of new customers" represents new customers added to SoCalGas' system in the past 5 years. For residential, core commercial and industrial customers, new customer data were used (premises that initial gas service started between 2012-2016) while all the other rate classes cover the entire population that service line history could be matched by premise as very few large new customers are added to SoCalGas system each year.
 - (5) The average length was computed by dividing the total service line footage by rate class, line diameter, and pipe type by the number of customers used in the analysis
 - (6) New Business is newly installed pipe, and Replacement is when we replace existing pipe. The costs represent the unit cost that is the best representation of the cost per foot, by pipe size and pipe material, to install New Business service pipe and Replacement service pipe on the Gas Distribution system.
 - (7) Line Extension Credit, per SoCalGas' Rule 20, effective 04/2017
- | | | |
|----------------------|-----------|--------------|
| WATER HEATING | \$ | 643 |
| SPACE HEATING | \$ | 698 |
| COOKTOP & OVEN | \$ | 114 |
| DRYER STUB | \$ | 160 |
| Total | \$ | 1,615 |

SCG 2024 TCAP
LRMC Customer Cost
Big GEMS Investment by Customer Class for Retail Noncore (exclusive use on Cust MC)

	NonCore C&I Distribution G30	NonCore C&I Transmission G30	Total NonCore C&I G30	EG G-50	EOR G-40	LB	SDG&E	SWG	Vernon	Mexicali	Source
# of Meters											
ROTARY 11M & LARGER: (*)			0	1	2	1	0	6	0	0	
TURBINE MSA'S (*)			3	29	2	0	1	7	0	1	
ORIFICE METERS (ultra sonic)			5	38	0	4	10	0	2	0	
Total # meters			8	68	4	5	11	13	2	1	

** Number of 2021 GEMS Meters at Wholesalers provided by, Measurement
Exclusive Use
Meter Cost

Investment in Meters:	\$/meter										
ROTARY 11M & LARGER: (*)	\$13,184	\$0	\$0	\$0	\$13,184	\$26,367	\$13,184	\$0	\$79,102	\$0	\$0
TURBINE MSA'S (*)	\$764,079	\$2,009,022	\$283,215	\$2,292,237	\$22,158,291	\$1,528,158	\$0	\$764,079	\$5,348,553	\$0	\$764,079
ORIFICE METERS (ultra sonic)	\$2,595,764	\$11,375,234	\$1,603,586	\$12,978,820	\$98,639,032	\$0	\$10,383,056	\$25,957,640	\$0	\$5,191,528	\$0
Total Investment \$'s	2021 \$s	\$13,384,256	\$1,886,801	\$15,271,057	\$120,810,507	\$1,554,525	\$10,396,240	\$26,721,719	\$5,427,655	\$5,191,528	\$764,079
allocation of Total NonCore C&I to Distribution & Transmission		88%	12%								
Total Investment \$'s	2021 \$s	\$13,215,373	\$1,862,993	\$15,078,366	\$119,286,115	\$1,534,910	\$10,265,059	\$26,384,543	\$5,359,168	\$5,126,021	\$754,438
2016 Number of Customers		519	19	538	372	30	1	1	1	1	1
Exclusive Use Cost Per Customer	2021 \$s	\$25,463.15	\$98,052.27	\$28,026.70	\$320,661.60	\$51,163.67	\$10,265,059.48	\$26,384,543.35	\$5,359,168.35	\$5,126,021.11	\$754,437.82

Note : This is part of Exclusive Use Facilities Costs

Exclusive Use Meter Cost \$/meter	2021 \$s	ULTRASONIC		
		TURBINE METERS 4"-12"	ROTARY METERS 4" - 6"	METERS 4" - 16"
Avg. Labor Cost		\$110,525	\$1,144	\$230,483
Avg. Contract Cost		\$431,457	\$0	\$600,495
Avg. Materials Cost		\$222,097	\$12,040	\$1,764,786
TOTAL		\$764,079	\$13,184	\$2,595,764

SCG 2024 TCAP
LRMC Customer Cost
Allocation of Customer-Related Distribution O&M

		Residential					Core					Non-Residential				
		Single Family	Multi Family	Master Meter		Residential Total	G-10					Gas Air Conditioning	Natural Gas Vehicle	Gas Engine		
				Small	Large		Very Small	Small	Medium	Large	Very Large				Total	
1	2021 Number of Customers	3,792,575	1,772,390	119,747	51	5,684,763	88,897	64,539	47,008	2,078	313		202,835			
Customer Services O&M Costs																
2	Total Cost	2021 M\$\$	\$86,028	\$40,204	\$2,716	\$1	\$128,949	\$4,327	\$4,725	\$11,943	\$855	\$224	\$22,075	\$0	\$83	\$96
3	Cost Per Customer:	2021 \$	22.68	22.68	22.68	22.68	48.67	73.21	254.07	411.43	717.11	108.83	19.10	340.68	134.07	
4		2024 \$	24.52	24.52	24.52	24.52	52.61	79.13	274.62	444.70	775.09	117.63	20.65	368.22	144.91	
Customer Accounts O&M Costs																
5	Total Cost:	2021 M\$\$	\$53,585	\$25,042	\$1,692	\$1	\$80,319	\$1,111	\$687	\$5,977	\$163	\$118	\$8,057	\$4	\$285	\$49
6	Cost Per Customer:	2021 \$	14.13	14.13	14.13	14.13	14.13	12.50	10.65	127.16	78.63	375.77	39.72	479.68	1,162.94	67.57
7		2024 \$	15.27	15.27	15.27	15.27	15.27	13.51	11.51	137.44	84.99	406.16	42.93	518.46	1,256.97	73.04
8	segmentation by number of customers		66.71%	31.18%	2.11%	0.001%										
Meters, Reg & MSAs O&M Costs																
10	Total Cost	2021 M\$\$	\$5,485	\$2,149	\$713	\$4	\$8,351	\$3	\$4	\$5	\$1	\$0	\$13	\$0	\$0	\$0
11	Cost Per Customer:	2021 \$	1.45	1.21	5.95	82.33	1.47	0.03	0.06	0.11	0.39	0.58	0.06			
12		2024 \$	1.56	1.31	6.43	88.98	1.59	0.04	0.06	0.12	0.42	0.62	0.07	0.62	0.62	0.62
Service Lines O&M Costs																
13	Total Costs	2021M \$	\$45,310													
14		2024 \$	\$48,973,451													
15	Total Service Line Footage		231,707,635	58,800,895	11,613,724	14,016	302,136,270	12,721,655	6,951,318	6,611,352	562,372	116,057	26,962,754	250	60,700	625,863
16	Percent of Total Footage		70.22%	17.82%	3.52%	0.00%	91.56%	3.86%	2.11%	2.00%	0.17%	0.04%	8.17%	0.00%	0.02%	0.19%
17	Allocated SL O&M Costs	2024 \$	\$34,388,355	\$8,726,799	\$1,723,624	\$2,080	\$44,840,859	\$1,888,055	\$1,031,664	\$981,209	\$83,463	\$17,224	\$4,001,615	\$37	\$9,009	\$92,886
18	Cost Per Customer	2024 \$	\$9.07	\$4.92	\$14.39	\$40.79	\$7.89	\$21.24	\$15.99	\$20.87	\$40.17	\$55.03	\$19.73	\$4.12	\$36.77	\$129.37
Calculation of Customer Service & Information Cost (CSI) Costs Accounts (FERC Accounts 907 to 910):																
5	Total Cost:	2021 M\$\$	\$13,254	\$6,194	\$418	\$0	\$19,866	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$15,696	\$0	\$3,053	\$0
3	Cost Per Customer:	2021 \$	3.49	3.49	3.49	3.49	3.49	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	77.38	0.00	12,459.35	0.00
4		2024 \$	3.78	3.78	3.78	3.78	3.78	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	83.64	0.00	13,466.72	0.00

Calculation of Customer Service & Information Cost (CSI) Costs Accounts (FERC Accounts 907 to 910):

2021 Costs M\$	GRC Exclusion		2021 Costs in Transport		FERC Form 2	Exclusions	2021 \$
	Items	Other Adjustments	Rates				
139 Calculation of Customer Service & Information Costs (CSI Costs):							
140 907 Cus Svc-Supervision + Payroll Taxes	NON-DSM CUST. INFO	\$274	\$0	\$0	\$274		\$10,876,259
141 908 Cus Svc-Cust. Assist Exp (PBR Ex DAP, DSM & Self-Gen)	NON-DSM CUST. INFO	\$267,147	(\$228,960)	\$0	\$38,187		\$115,795,522
142 909 Cus Svc-Info & Instruction Exp	NON-DSM CUST. INFO	\$1,835	\$0	\$0	\$1,835		\$102,073,863
143 910 Cus Svc-Misc CSI Exp	NON-DSM CUST. INFO	\$2,436	\$0	\$0	\$2,436		\$213,621
144		\$271,692	(\$228,960)	\$0	\$42,732		\$0
147						MEOMA (acct 908)	\$596
148 CS&I O&M, 2021 \$000's						WDRMA (acct 908 and 907001)	\$228,959,861
149							

	Residential	CCI	G-AC	G-GEN	NGV	Total Core	NCCI	EG Tier 1	EG Tier 2	EOR	Total Retail NonCore	Long Beach
1 Calculation of CSI Cost Allocator:												
2 Energy Markets Costs:												
3 Mgmt estimate - FTE	0.0%	0.3	0.0	0.0	0.0	0	0.7	0.2	3.3	2.2	6.4	0.6
4 Energy Markets		2.8%	0.0%	0.0%	0.0%	2.8%	7.3%	2.4%	36.1%	23.5%	69.3%	6.5%
5 Energy Markets	\$884	\$0	\$25	\$0	\$0	\$25	\$65	\$21	\$319	\$207	\$613	\$57
6 Large C&I:												
7 # Large C&I Customers	0	2,391	0	0	0	2,391	538	0	0	0	538	0
8 % Large C&I only	0.0%	81.6%	0.0%	0.0%	0.0%	81.6%	18.4%	0.0%	0.0%	0.0%	18.4%	0.0%
9 Large C&I	\$5,719	\$0	\$4,668	\$0	\$0	\$4,668	\$1,050	\$0	\$0	\$0	\$1,050	\$0
10 NGV	\$2,553	\$0	\$0	\$0	\$2,553	\$2,553	\$0	\$0	\$0	\$0	\$0	\$0
11 Residential	\$10,728	\$10,728	\$0	\$0	\$0	\$10,728	\$0	\$0	\$0	\$0	\$0	\$0
12 Small Business												
13 # C10, G-AC, G-GE Customers only	0	202,835	0	0	0	202,835	0	0	0	0	0	0
14 Small Business	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15 Small Business	\$1,617	\$0	\$1,617	\$0	\$0	\$1,617	\$0	\$0	\$0	\$0	\$0	\$0
16 Econ Development												
17 # Large C&I Customers	0	2,391	0	0	0	2,391	538	0	0	0	538	0
18 % Large C&I only	0.0%	81.6%	0.0%	0.0%	0.0%	81.6%	18.4%	0.0%	0.0%	0.0%	18.4%	0.0%
19 Econ Development	\$8,353	\$0	\$6,819	\$0	\$0	\$6,819	\$1,534	\$0	\$0	\$0	\$1,534	\$0
20 Other Residential	\$5,889	\$5,889	\$0	\$0	\$0	\$5,889	\$0	\$0	\$0	\$0	\$0	\$0
21 Total	\$35,743	\$16,617	\$13,129	\$0	\$0	\$2,553	\$32,299	\$2,649	\$21	\$319	\$207	\$3,197
22 Allocator %		46.5%	36.7%	0.0%	0.0%	7.1%	90.4%	7.4%	0.1%	0.9%	0.6%	8.9%

SCG 2024 TCAP
LRMC Customer Cost
Allocation of Customer-Related Distribution O&M

		Noncore											Total Over All Customers	
		Non-Residential												
		G-30			Small EG	EG	EOR	Wholesale			Intl			
		Distribution	Transmission	Total	G-50	G-40	LB	SDG&E	SWG	Vernon	ECOGAS			
1	2021 Number of Customers	519	19	538	351	21	30	1	1	1	1	1	5,889,515	
Customer Services O&M Costs														
2	Total Cost	2021 M\$\$			\$290	\$75	\$4	\$2	\$0	\$0	\$0	\$0	\$0	\$151,574
3	Cost Per Customer:	2021 \$\$			538.34	213.35	213.35	50.03	0.00	0.00	0.00	0.00	0.00	
4		2024 \$\$			581.86	230.60	230.60	54.08	0.00	0.00	0.00	0.00	0.00	
					Total EG	\$79								
Customer Accounts O&M Costs														
5	Total Cost:	2021 M\$\$			\$898	\$604	\$36	\$51	\$7	\$5	\$11	\$4	\$3	\$90,332
6	Cost Per Customer:	2021 \$\$			1,668.83	1,720.92	1,720.92	1,696.63	6,530.71	5,087.00	10,861.85	3,643.28	2,921.42	
7		2024 \$\$			1,803.76	1,860.06	1,860.06	1,833.81	7,058.74	5,498.30	11,740.07	3,937.85	3,157.63	
8	segmentation by number of customers													
9						EG O&M cost	\$640							
					94%	6%	note: split EG costs by # of customers							
Meters, Reg & MSAs O&M Costs														
10	Total Cost	2021 M\$\$			\$62	\$513	\$61	\$42	\$8	\$8	\$17	\$1	\$1	\$9,077
11	Cost Per Customer:	2021 \$\$			115.24	1,461.54	2,904.76	1,400.00	8,000.00	8,000.00	17,000.00	1,000.00	1,000.00	
12		2024 \$\$	124.56	124.56	124.56	1,579.71	3,139.62	1,513.19	8,646.82	8,646.82	18,374.50	1,080.85	1,080.85	
Service Lines O&M Costs														
13	Total Costs	2021M \$\$												
14		2024 \$\$												
15	Total Service Line Footage		104,645	16,542	121,188	46,579	16,273	11,667	0	0	0	0	0	329,981,545
16	Percent of Total Footage		0.03%	0.01%	0.04%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
17	Allocated SL O&M Costs	2024 \$\$	\$15,531	\$2,455	\$17,986	\$6,913	\$2,415	\$1,732	\$0	\$0	\$0	\$0	\$0	\$48,973,451
18	Cost Per Customer	2024 \$\$	\$29.92	\$129.21	\$33.43	\$19.70	\$115.00	\$57.72	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8.32
Calculation of Customer Service & Information														
5	Total Cost:	2021 M\$\$			\$3,167	\$26	\$382	\$248	\$69	\$65	\$75	\$55	\$30	\$42,732
3	Cost Per Customer:	2021 \$\$			5,887.41	72.96	18,175.54	8,261.26	68,590.22	64,946.55	75,148.83	55,473.00	30,252.33	7.26
4		2024 \$\$			6,363.42	78.86	19,645.09	8,929.20	74,135.95	70,197.67	81,224.84	59,958.16	32,698.32	

Calculation of Customer Service & Information

139 **Calculation of Customer Service & Information**
 140 907 Cus Svc-Supervision + Payroll Taxes
 141 908 Cus Svc-Cust Assist Exp (PBR Ex DAP, DSM)
 142 909 Cus Svc-Info & Instruction Exp
 143 910 Cus Svc-Misc CSI Exp
 144
 147
 148 **CS&I O&M, 2021 \$000's**
 149

	SDG&E	South West Gas	Vernon	Total Whole sale	DGN	UBS	Total Noncore	SYSTEM TOTAL	Sources
1 Calculation of CSI Cost Allocator:									
2 Energy Markets Costs:									
3 Mgmt estimate - FTE	0.6	0.7	0.5	2.3	0.3	0.0	8.9	9.2	
4 Energy Markets	6.1%	7.1%	5.3%	25.0%	2.9%	0.0%	97.2%	100.0%	
5 Energy Markets	\$54	\$63	\$46	\$221	\$25	\$0	\$859	\$884	
6 Large C&I:									
7 # Large C&I Customers	0	0	0	0	0	0	538	2,929	2021 Customer Count
8 % Large C&I only	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.4%	100.0%	
9 Large C&I	\$0	\$0	\$0	\$0	\$0	\$0	\$1,050	\$5,719	
10 NGV	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,553	
11 Residential	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,728	
12 Small Business									
13 # G10, G-AC, G-GE Customers only	0	0	0	0	0	0	0	202,835	20213 Customer Count from SCG Cust Cost model "cust 2"
14 Small Business	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	
15 Small Business	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,617	
16 Econ Development									
17 # Large C&I Customers	0	0	0	0	0	0	538	2,929	2013 Customer Count from SCG Cust Cost model "cust 2"
18 % Large C&I only	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.4%	100.0%	
19 Econ Development	\$0	\$0	\$0	\$0	\$0	\$0	\$1,534	\$8,353	
20 Other Residential	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,889	
21 Total	\$54	\$63	\$46	\$221	\$25	\$0	\$3,444	\$35,743	\$35,743
22 Allocator %	0.2%	0.2%	0.1%	0.6%	0.1%	0.0%	9.6%	100.0%	

100.6%

SCG 2024 TCAP
LRMC Customer Cost
Weighted Average RECC and Replacement Factors

\$10

Line			Excluded AVERAGE LABOR COST	AVERAGE METER COST	AVERAGE REGULATOR COST	AVERAGE TOTAL COST	WEIGHTED REPLACEMENT Percent	WEIGHTED RECC Percent	WEIGHTED PVRR
1.									
2.	CUSTOMER CLASS	RATE			Dollars				
3.	SINGLE FAMILY	GR	257.00	201.45	46.32	504.76	1.87%	8.65%	121.48%
4.	MULTIPLE FAMILY	GR	217.60	142.96	14.83	375.39	1.64%	8.65%	121.51%
5.	MASTER METERED BAND 1	GM,GS	841.28	490.01	295.51	1626.80	1.76%	8.56%	121.64%
6.	MASTER METERED BAND 2	GM,GS	17976.74	2660.44	1860.74	22497.92	0.72%	8.48%	121.93%
7.	RESIDENTIAL WEIGHTED AVERAGE		170.67	146.45	32.51	349.62	1.96%	8.66%	121.45%
8.	SMALL CORE BAND 1	G-10	340.12	257.21	104.02	701.36	1.92%	8.61%	121.53%
9.	SMALL CORE BAND 2	G-10	508.71	434.19	206.13	1149.03	2.06%	8.61%	121.52%
10.	SMALL CORE BAND 3	G-10	1159.64	701.44	434.08	2295.16	1.80%	8.56%	121.63%
11.	SMALL CORE BAND 4	G-10	3620.77	2429.51	1909.29	7959.56	1.95%	8.54%	121.63%
12.	SMALL CORE BAND 5	G-10	4897.05	3919.98	2931.85	11748.88	2.09%	8.56%	121.58%
13.	G10 AVERAGE		430.93	901.17	194.53	1,526.63	2.75%	8.75%	121.18%
14.	GAS COOLING	GAC	2605.71	1386.83	1070.05	5062.59	1.74%	8.53%	121.68%
15.	Natural Gas Vehicles	NGV	79940.63	4265.03	2079.11	86284.77	0.27%	8.46%	122.04%
16.	GAS ENGINES	GENG	1844.30	772.68	585.81	3202.79	1.52%	8.52%	121.73%
17.	NONCORE COMM/IND TRANSMISSION	G-30	275104.17	9274.28	2850.56	287229.01	0.16%	8.45%	122.07%
18.	NONCORE COMM/IND DISTRIBUTION	G-30	124688.07	6143.15	2799.23	133630.45	0.25%	8.46%	122.05%
19.	NONCORE COMM/IND TOTAL	G-30	130,000.16	6,253.73	2,801.04	139054.93	0.24%	8.46%	122.05%
20.	COGENERATION	G-50	94640.85	3481.78	1236.05	99358.68	0.18%	8.45%	122.06%
21.	EOR	G-40	371704.69	11350.84	2945.07	386000.59	0.14%	8.45%	122.07%
22.	SYSTEM AVERAGE		197.25	173.32	38.52	409.08	1.98%	8.66%	121.44%
22.	INVERSE OF BOOK LIFE		0.00%	4.00%	3.03%				
23.	RECC		8.44%	9.04%	8.12%				
23.	PVRR		122.12%	120.53%	122.09%				

SCG 2024 TCAP
LRMC Customer Cost
Weighted Average RECC and Replacement Factors

Weighted Average RECC and Replacement Factor for Exclusive Use Facilities

<u>Line</u>			GEMs	AVERAGE <u>TOTAL COST</u>	WEIGHTED <u>REPLACEMENT</u>	WEIGHTED <u>RECC</u>
	<u>RATE</u>		Dollars	Dollars	Percent	
1.						
2.	<u>CUSTOMER CLASS</u>					
3.	NONCORE COMM/IND TRANSMISSION	G-30	1,862,993	1,862,993	4.00%	9.04%
4.	NONCORE COMM/IND DISTRIBUTION	G-30	13,215,373	13,215,373	4.00%	9.04%
5.	NONCORE COMM/IND TOTAL	G-30	15,078,366	15,078,366	4.00%	9.04%
6.	COGENERATION	G-50	119,286,115	119,286,115	4.00%	9.04%
7.	EOR	G-40	1,534,910	1,534,910	4.00%	9.04%
8.	LONG BEACH		10,265,059	10,265,059	4.00%	9.04%
9.	SAN DIEGO GAS & ELECTRIC		26,384,543	26,384,543	4.00%	9.04%
10.	SOUTHWEST GAS		5,359,168	5,359,168	4.00%	9.04%
11.	VERNON		5,126,021	5,126,021	4.00%	9.04%
12.	DGN		754,438	754,438	4.00%	9.04%
13.	SYSTEM TOTAL		198,866,988	198,866,988	4.00%	9.04%
14.	INVERSE OF BOOK LIFE		4.00%			
15.	RECC factors		9.04%			

Source: Meter cost detail

SOUTHERN CALIFORNIA GAS

2021 Economic Assumptions Update LEVELIZED ANNUAL CAPITAL COST AND RECC FACTORS

utility social

Auth ROR ==> 7.30%

Fed Tax Rate ==> 21.00%

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

1.342%

FERC Account	Account Name	Book Life	Fed Tax Life	State Tax Life	Percent Salvage	Normlzd Federal Taxes ?	Normlzd State Taxes ?	Depreciation Method		LACC Components (in percent)					RECC Factors	PVCC Factors	Sum of Rev Req		
								Federal Tax	State Tax	Book Depr	Return on Capital	Income Taxes	Property Taxes	Total LACC					
GAS UNDERGROUND STORAGE																			
		9	10	11	12	13	14	15	16	19	20	21	22	23	25	26	27		
G-352	Wells	49	15	22	-70%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.47	3.83	0.97	0.73	9.01	7.08	119.48	224.69
G-353	Lines	54	15	22	-40%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.59	4.41	1.09	0.87	8.97	6.99	120.14	282.24
G-354	Compressor Station Equipment	41	15	22	-15%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.80	4.46	1.11	0.88	9.26	7.43	119.86	276.35
G-356	Purification Equipment	39	15	22	-30%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.33	4.16	1.04	0.80	9.34	7.53	119.75	253.27
GAS TRANSMISSION PLANT																			
G-365.1	Land	0	0	0	0%	FALSE	FALSE	none	0%	none	0%	0.00	7.30	2.10	1.34	10.74	n/a	147.12	1105.13
G-365.2	Land Rights	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	sl	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
G-366	Structures & Improvements	47	39	45	-40%	TRUE	FALSE	sl	0%	db/sl	0%	2.98	4.68	1.38	0.83	9.86	7.79	130.22	287.81
G-367	Mains	64	15	22	-60%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.50	4.40	1.09	0.87	8.86	6.81	120.09	265.76
G-368	Compressor Station Equipment	50	15	22	-15%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.30	4.67	1.15	0.94	9.06	7.11	120.42	309.85
G-369	Measuring & Regulating Equipment	46	15	22	-50%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.26	4.04	1.01	0.78	9.10	7.20	119.75	247.73
G-371	Other Equipment	21	15	22	-10%	TRUE	FALSE	db/sl	150%	db/sl	200%	5.24	4.08	1.10	0.74	11.16	9.69	118.09	203.20
GAS DISTRIBUTION PLANT																			
G-374.1	Land	0	0	0	0%	FALSE	FALSE	none	0%	db/sl	0%	0.00	7.30	2.10	1.34	10.74	n/a	147.12	1105.13
G-374.2	Land Rights	40	40	40	0%	FALSE	FALSE	sl	0%	db/sl	0%	2.50	5.17	1.49	0.93	10.09	8.11	130.02	313.88
G-375	Structures & Improvements	40	39	45	-10%	TRUE	FALSE	sl	0%	db/sl	0%	2.75	4.99	1.47	0.89	10.10	8.12	130.11	302.03
G-376	Mains	68	20	35	-80%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.65	4.38	1.19	0.84	9.05	6.92	122.96	231.10
G-378	Measuring & Regulating Equipment	47	20	35	-95%	TRUE	FALSE	db/sl	150%	db/sl	200%	4.15	3.50	1.00	0.62	9.27	7.32	122.34	191.81
G-380	Services	67	20	35	-115%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.21	3.94	1.11	0.73	8.99	6.89	122.09	150.81
G-381	Meters	25	20	35	5%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.80	4.62	1.34	0.86	10.62	9.04	120.53	229.99
G-382	Meter & Regulator Installations	30	20	35	-10%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.67	4.41	1.24	0.82	10.14	8.44	122.12	243.24
G-383	House Regulators	33	20	35	5%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.88	4.77	1.32	0.91	9.88	8.12	122.09	266.77
G-387	Other Equipment	21	20	35	5%	TRUE	FALSE	db/sl	150%	db/sl	200%	4.52	4.57	1.37	0.83	11.29	9.80	119.44	211.60
GAS GENERAL PLANT																			
G-390	Structures & Improvements	33	39	45	-15%	TRUE	FALSE	sl	0%	db/sl	0%	3.48	4.74	1.43	0.82	10.47	8.61	129.47	269.48
G-391.1	Office Furniture & Equipment	14	7	10	0%	TRUE	FALSE	db/sl	200%	db/sl	200%	7.14	3.81	0.97	0.73	12.65	11.45	108.66	166.78
G-391.2	Computer Equipment	5	5	6	0%	TRUE	FALSE	db/sl	200%	db/sl	200%	20.00	3.78	1.09	0.57	25.44	24.59	103.47	125.64
G-393	Stores Equipment	20	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	5.00	4.45	1.33	0.79	11.56	10.09	119.69	205.90
G-394.1	Shop & Garage Equipment	29	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.45	4.59	1.30	0.86	10.20	8.52	121.60	245.35
G-394.3	Large Portable Tools	24	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	4.17	4.50	1.31	0.82	10.80	9.23	120.67	223.46
G-395	Laboratory Equipment	25	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	4.00	4.52	1.30	0.83	10.65	9.06	120.88	227.84
G-397	Communications Equipment	15	7	10	0%	TRUE	FALSE	db/sl	200%	db/sl	200%	6.07	3.82	0.96	0.74	12.19	10.96	108.93	171.15
G-398	Miscellaneous Equipment	20	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	5.00	4.45	1.33	0.79	11.56	10.09	119.69	205.90
G-391.5	Software Programs - 10yr ASL	10	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%	10.00	3.51	0.76	0.68	14.95	13.91	103.58	146.07
G-391.55	Software Programs - 15yr ASL	15	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%	6.67	3.61	0.74	0.74	11.75	10.57	105.06	167.96
G-391.6	Software Programs - 20yr ASL	20	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%	5.00	3.74	0.74	0.79	10.26	8.96	106.26	189.85
G-391.3	Software Programs - 3yr ASL	3	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%	33.33	3.76	1.08	0.47	38.65	37.98	100.87	115.42
G-391.4	Software Programs - 6yr ASL	6	3	3	0%	TRUE	FALSE	sl	0%	db/sl	0%	16.67	3.52	0.84	0.60	21.63	20.74	102.14	128.56

S1

**Calculation of Marginal Customer Costs
2020 \$/Customer**

Customer Class	CAPEX \$/customer	RECC %	Annualized CAPEX (\$/customer/year)	O&M and Loaders (\$/customer/ year)	Marginal Unit Cost 2020 (\$/customer/ year)
Residential	\$1,936.47	7.27%	\$140.78	\$145.62	\$286.40
Core C/I ¹⁴	\$12,373.44	7.09%	\$877.45	\$724.76	\$1,602.20
Gas A/C ¹⁵	\$84,377.27	6.99%	\$5,897.34	\$1,491.30	\$7,388.64
Gas Engine ¹⁶	\$208,673.34	6.91%	\$14,423.78	\$953.53	\$15,377.31
NGV	\$178,287.67	7.68%	\$13,694.70	\$41,532.13	\$55,226.83
Noncore C/I ¹⁷	\$587,610.79	7.39%	\$43,398.79	\$24,452.12	\$67,850.91
Small EG ¹⁸	\$294,142.08	7.44%	\$21,881.94	\$10,346.67	\$32,228.61
Large EG ¹⁹	\$1,703,114.42	8.13%	\$138,531.75	\$68,605.06	\$207,136.81
EOR ²⁰	\$728,819.80	7.90%	\$57,601.80	\$34,008.28	\$91,610.09
Long Beach ²¹	\$10,265,059.48	9.04%	\$927,589.73	\$246,638.07	\$1,174,227.80
SDG&E ²²	\$26,384,543.35	9.04%	\$2,384,207.47	\$231,542.67	\$2,615,750.14
Southwest Gas ²³	\$5,359,168.35	9.04%	\$484,274.79	\$305,655.33	\$789,930.12
Vernon ²⁴	\$5,126,021.11	9.04%	\$463,206.72	\$178,378.22	\$641,584.94
Ecogas ²⁵	\$754,437.82	9.04%	\$68,173.86	\$101,401.03	\$169,574.89

¹⁴ Core C&I are the Core Commercial & Industrial customers

¹⁵ Gas A/C are the Gas Air Conditioning for Commercial & Industrial customers

¹⁶ Gas Engine are Core Gas Engine Water Pumping Service for Commercial and Industrial

¹⁷ Noncore C/I are Noncore Commercial & Industrial customers

¹⁸ Small EG are Electric Generation customers with usage less than 3 million therms/year

¹⁹ Large EG are Electric Generation customers with usage greater than 3 million therms/year

²⁰ EOR are Enhanced Oil Refinery customers

²¹ Long Beach is the Wholesale - City of Long Beach customer

²² SDG&E is the Wholesale – San Diego Gas & Electric customer

²³ SW Gas is the Wholesale – Southwest Gas Corporation’s service territory in southern California

²⁴ Vernon is the Wholesale – City of Vernon customer

²⁵ Ecogas is the Wholesale – ECOGAS Mexico, S. de R.L. de C.V. customer

Southern California Gas Company
WEIGHTED AVERAGE DEPRECIATED RATE BASE
Service Line, Regulator, & Meter (SRM) Assets
(Thousands of Dollars)
As of December 31, 2021

Line No.	Account Description	G-380	G-381	G-382	G-383	Total
<i>Fixed Capital</i>						
1	Plant In Service	\$ 3,426,260	\$ 974,827	\$ 627,592	\$ 185,622	\$ 5,214,300
2	Work-In-Progress (non-interest bearing)	\$ -	\$ -	\$ -	\$ -	\$ -
3	Total Fixed Capital	\$ 3,426,260	\$ 974,827	\$ 627,592	\$ 185,622	\$ 5,214,300
<i>Working Capital</i>						
4	Materials & Supplies	-	-	-	-	-
5	Working Cash	-	-	-	-	-
6	Total Working Capital	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Other Deductions</i>						
7	Customer Advances For Construction	\$ (43,501)	\$ (12,368)	\$ (7,964)	\$ (2,355)	\$ (66,188)
8	Total Other	\$ (43,501)	\$ (12,368)	\$ (7,964)	\$ (2,355)	\$ (66,188)
<i>Deductions For Reserves</i>						
9	Accumulated Depreciation Reserve	\$ (2,236,882)	\$ (298,608)	\$ (219,859)	\$ (83,080)	\$ (2,838,429)
10	Accumulated Amortization Reserve	-	-	-	-	-
11	Accumulated Deferred Taxes	(259,801)	(94,603)	(54,704)	(16,793)	(425,902)
12	Total Deductions For Reserves	\$ (2,496,683)	\$ (393,211)	\$ (274,563)	\$ (99,873)	\$ (3,264,331)
13	Weighted Average Depreciated Rate Base	\$ 886,076	\$ 569,248	\$ 345,064	\$ 83,393	\$ 1,883,782

ARM1 Factor = Rate Base Value/Rental Capital

Rate Base Value 1,883,782

Rental 14,551,691

% 13%

ARM2 Factor

Rental less depreciation 11,713,262

Rental 14,551,691

% 80%

Summary of Book Depreciation Expense

	G-380	G-381	G-382	G-383	Total
Jan-21	8,023,828	3,474,390	2,012,461	433,051	13,943,731
Feb-21	8,063,088	3,470,530	2,017,184	433,590	13,984,392
Mar-21	8,103,316	3,470,775	2,022,345	435,828	14,032,264
Apr-21	8,157,029	3,486,302	2,026,448	437,000	14,106,779
May-21	8,210,939	3,493,237	2,032,052	438,043	14,174,271
Jun-21	8,268,416	3,504,220	2,037,099	439,553	14,249,287
Jul-21	8,326,738	3,519,088	2,043,148	440,342	14,329,316
Aug-21	8,380,349	3,524,939	2,048,489	441,573	14,395,350
Sep-21	8,419,269	3,530,789	2,053,678	442,853	14,446,589
Oct-21	8,483,253	3,531,278	2,060,157	443,496	14,518,184
Nov-21	8,520,365	3,532,483	2,066,491	445,170	14,564,509
Dec-21	8,566,141	3,541,705	2,073,576	446,722	14,628,144
Total	99,522,731	42,079,737	24,493,126	5,277,220	171,372,814

REPORT 1

DETERMINATION OF WEIGHTED ADDITIONS
PLANT ADDITIONS - 101
December 31, 2021

	G-380	G-381	G-382
	A-D	E-I	J-M
December 2020	3,304,885,944	964,161,618	616,214,320
January 2021	3,321,056,619	963,123,759	617,918,353
February 2021	3,337,625,930	963,307,762	619,925,504
March 2021	3,359,749,141	968,110,769	621,388,365
April 2021	3,381,953,875	970,276,941	623,355,096
May 2021	3,405,627,940	973,264,943	625,195,468
June 2021	3,429,649,846	977,482,246	627,279,229
July 2021	3,451,731,167	979,274,826	629,296,049
August 2021	3,467,761,620	980,925,571	631,169,799
September 2021	3,494,115,622	981,063,184	633,410,842
October 2021	3,509,401,674	981,552,856	635,601,779
November 2021	3,528,256,142	984,259,816	638,069,930
December 2021	3,551,498,851	986,390,272	640,766,147
Total	44,543,314,371	12,673,194,563	8,159,590,880
Less 1/2 First & Last Month	3,428,192,397	975,275,945	628,490,233
Total 12 Mos Wtd Average	41,115,121,974	11,697,918,618	7,531,100,647
Monthly Weighted Average	3,426,260,164	974,826,551	627,591,721

REPORT 2

DETERMINATION OF WEIGHTED ADDITIONS
DEPRECIATION AND AMORTIZATION RESERVES
December 31, 2021

	G-380	G-381	G-382
	A-D	E-I	J-M
December 2020	(2,205,330,684)	(280,923,918)	(210,266,064)
January 2021	(2,210,799,027)	(283,743,326)	(211,921,809)
February 2021	(2,216,549,148)	(286,629,543)	(213,234,055)
March 2021	(2,221,594,701)	(289,471,735)	(214,912,834)
April 2021	(2,227,260,114)	(292,399,269)	(216,566,278)
May 2021	(2,233,543,623)	(295,434,253)	(218,097,236)
June 2021	(2,238,928,279)	(298,538,296)	(219,898,100)
July 2021	(2,244,243,325)	(301,676,906)	(221,254,389)
August 2021	(2,245,114,175)	(304,435,014)	(222,822,790)
September 2021	(2,250,215,369)	(307,360,914)	(224,607,012)

October 2021	(2,255,421,562)	(310,663,046)	(226,433,684)
November 2021	(2,262,168,747)	(313,888,172)	(228,305,005)
December 2021	(2,268,159,414)	(317,191,250)	(230,243,699)
	<hr/>		
Total	(29,079,328,167)	(3,882,355,644)	(2,858,562,955)
Less 1/2 First & Last Month	(2,236,745,049)	(299,057,584)	(220,254,882)
Total 12 Mos Wtd Average	(26,842,583,118)	(3,583,298,060)	(2,638,308,073)
Monthly Weighted Average	(2,236,881,927)	(298,608,172)	(219,859,006)

REPORT 3

DETERMINATION OF WEIGHTED ADDITIONS
CUSTOMER ADVANCES FOR CONSTRUCTION
December 31, 2021

	G-380	G-381	G-382
	A-D	E-I	J-M
December 2020	(38,374,973)	(11,195,447)	(7,155,227)
January 2021	(39,095,663)	(11,337,947)	(7,274,169)
February 2021	(39,824,942)	(11,494,301)	(7,397,023)
March 2021	(41,059,343)	(11,831,238)	(7,593,959)
April 2021	(41,831,248)	(12,001,316)	(7,710,254)
May 2021	(42,450,424)	(12,131,539)	(7,792,928)
June 2021	(43,362,356)	(12,358,677)	(7,930,928)
July 2021	(44,072,753)	(12,503,679)	(8,035,043)
August 2021	(45,092,041)	(12,755,184)	(8,207,235)
September 2021	(46,365,026)	(13,018,178)	(8,405,020)
October 2021	(47,136,804)	(13,183,804)	(8,537,135)
November 2021	(48,188,282)	(13,442,842)	(8,714,643)
December 2021	(48,682,882)	(13,521,142)	(8,783,430)
	<hr/>		
Total	(565,536,738)	(160,775,293)	(103,536,994)
Less 1/2 First & Last Month	(43,528,928)	(12,358,295)	(7,969,329)
Total 12 Mos Wtd Average	(522,007,810)	(148,416,998)	(95,567,666)
Monthly Weighted Average	(43,500,651)	(12,368,083)	(7,963,972)

G-383	TOTAL
N-O	P
182,522,693	5,067,784,575
182,749,657	5,084,848,387
183,693,038	5,104,552,232
184,186,908	5,133,435,183
184,626,654	5,160,212,567
185,262,942	5,189,351,293
185,595,476	5,220,006,797
186,114,376	5,246,416,418
186,654,160	5,266,511,150
186,925,150	5,295,514,798
187,630,443	5,314,186,752
188,284,652	5,338,870,540
188,953,322	5,367,608,592
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2,413,199,469	67,789,299,283
185,738,007	5,217,696,583
2,227,461,462	62,571,602,700
185,621,788	5,214,300,225

G-383	TOTAL
N-O	P
(80,896,899)	(2,777,417,565)
(81,330,018)	(2,787,794,179)
(81,763,770)	(2,798,176,516)
(81,974,416)	(2,807,953,685)
(82,411,574)	(2,818,637,235)
(82,849,791)	(2,829,924,903)
(82,950,989)	(2,840,315,663)
(83,391,476)	(2,850,566,096)
(83,833,279)	(2,856,205,258)
(84,032,209)	(2,866,215,504)

(84,475,887)	(2,876,994,178)
(84,921,406)	(2,889,283,331)
(85,150,604)	(2,900,744,967)

(1,079,982,317)	(36,900,229,083)
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(83,023,751)	(2,839,081,266)
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(996,958,566)	(34,061,147,817)
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(83,079,880)	(2,838,428,985)
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G-383

TOTAL

N-O

P

(2,119,378)	(58,845,026)
(2,151,339)	(59,859,118)
(2,191,847)	(60,908,113)
(2,250,940)	(62,735,480)
(2,283,639)	(63,826,457)
(2,309,263)	(64,684,154)
(2,346,554)	(65,998,514)
(2,376,365)	(66,987,840)
(2,427,104)	(68,481,563)
(2,480,396)	(70,268,620)
(2,520,173)	(71,377,916)
(2,571,558)	(72,917,325)
(2,590,116)	(73,577,570)

(30,618,671)	(860,467,696)
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(2,354,747)	(66,211,298)
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(28,263,924)	(794,256,398)
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(2,355,327)	(66,188,033)
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