

**SAN DIEGO GAS & ELECTRIC COMPANY**  
**2013 TCAP**

**2/22/2013 Update Filing**

**Workpapers to the Prepared Written Testimony of  
Joseph Mock**

# SAN DIEGO GAS & ELECTRIC COMPANY

## 2013 TCAP

### Table of Contents

#### Section 1 - Long Run Marginal Customer Cost Model

Output	Results of Customer Cost LRMC Study
Loader Input	Data input from O&M Loaders Model
Cust LRMC	Derivation of Fully Loader Customer Cost LRMC
MSA Cost	MSA cost by Flow Range
MSA RECC	Weighted-average RECC by Flow Range
MSA Rental	SRM Marginal Investment by Flow Range
MSAlloc v1	Historical Meter Count by Flow Range
MSAlloc v2	Relative Meter Percentages by Flow Range
MSA Fcst	Estimated TCAP Period Meter Count by Flow Range
SRM Cost Rental	Total SRM Investment by Class
O&M 870-894	O&M Allocation to Customer Classes
870-894 Fctrs	O&M Allocation Factors
O&M 901-910	Customer Services Allocation to Customer Classes
Svc Alloc	O&M Allocation Factor Weighted by Service Lines
MSA Weighted Cost	O&M Allocation Factor Weighted by MSA
Factors	Demand Measures
MSA PVRR	Weighted-average PVRR by Flow Range
MSA NCOp1	SRM Marginal Investment by Flow Range (NCO Method)
MSA_Life	Weighted-average MSA Book Life by Flow Range
	SRM Marginal Investment by Flow Range (NCO with RCA Method)
MSA NCOp2	
NCO Hookups	Estimated New Hookups per Year
NCO MSA's	Estimated New Hookups by Meter Type
CC NCO	Total SRM Investment by Class (NCO Method)
CC NCO Rep	Total SRM Investment by Class (NCO with RCA Method)

## Section 2 - Long Run Marginal Distribution Cost Model

Tabs:	Output	Results of Distribution Cost LRMC Study
	Loader Input	Data input from O&M Loaders Model
	Dist Fcst	Forecast Distribution Investments
	Dist HW	Economic Index Weighted by Distribution Plant
	Dist Inv	Marginal Distribution Investments
	HP Customers	HPD Customer Count and Annual Gain
	HPD PD Det	HPD Peak-Day Historical and Forecast Demand
	MP Customers	MPD Customer Count and Annual Gain
	MPD PD Det	MPD Peak-Day Historical and Forecast Demand
	Regression	HPD and MPD Linear Regression Analysis
	Dist MC	HPD and MPD Fully-Loaded LRMC

## Section 3 - O&M Loaders Model for LRMC Studies

Tabs:	Output	Data output for Customer Cost and Distribution LRMC Models
	LF-O&M Alloc	Allocation Factors for Distribution O&M
	LF-O&M	Allocation of O&M
	Dist O&M MC	Calculation of Marginal Portion of Distribution O&M
	LF-M&S	Allocation of M&S to Functions
	LF-A&G	A&G Loading Factor
	LF-GPL	GPL Loading Factor
	O&M WEF	Weighted Escalation Factor for O&M
	LRMCC-10a - LRMCC-10s	Derivation of Customer Services O&M Allocation
	LRMCC-O&M Summary	Summary of Customer Services O&M Allocation

## Section 4 - SDG&E Cost Allocation Model

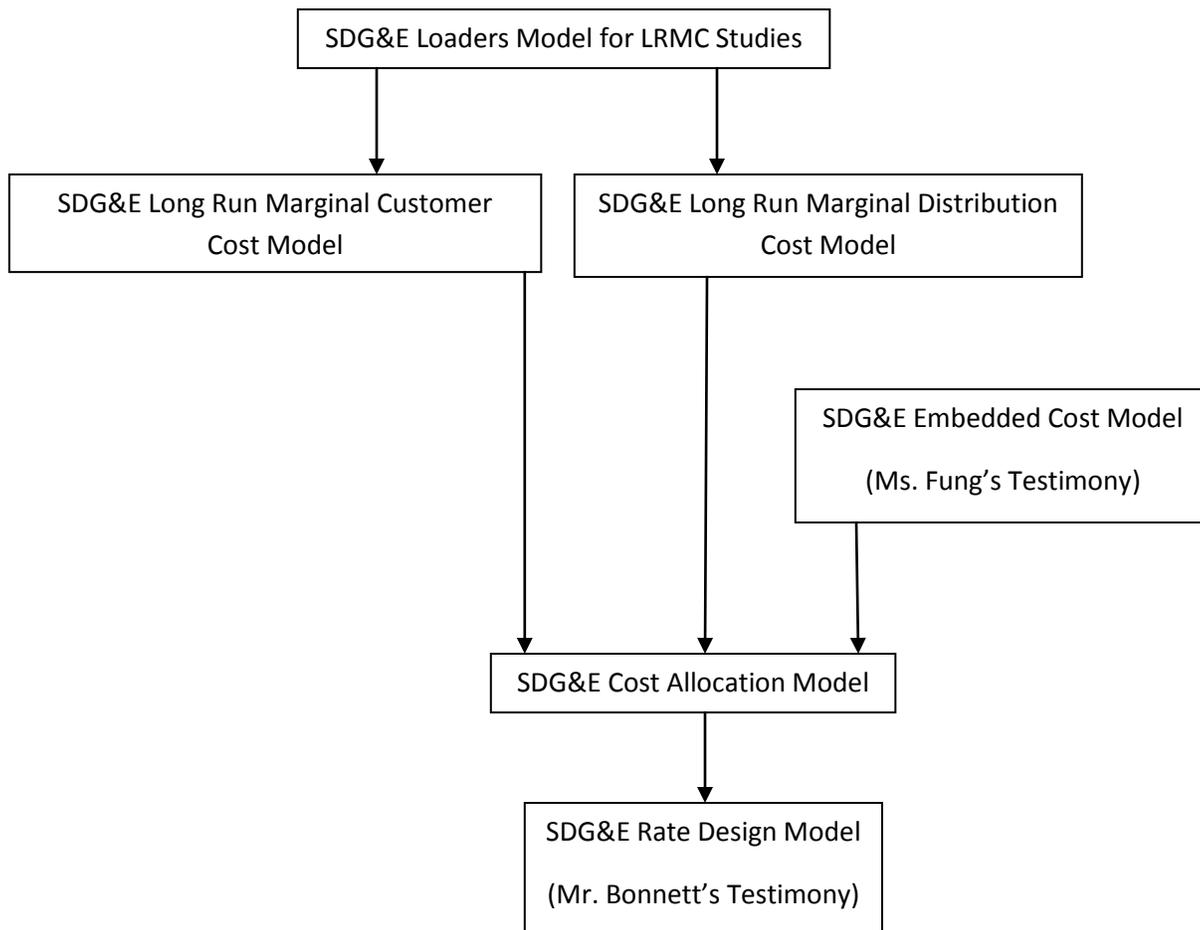
Tabs:	SDG&E Cost Allocation	Allocation of SDG&E Base Margin
-------	-----------------------	---------------------------------

## Section 5 - Miscellaneous Data

Tabs:	SDG&E Gas 2010 RECC	RECC Factors for use in LRMC Study
	Global Insight Cost Index Names	Nomenclature of Global Insight Data
	Global Insight Data	Raw Global Insight Data
	Cost Escalators	Calculation of Escalators for use in LRMC Study

**SAN DIEGO GAS & ELECTRIC COMPANY**  
**2013 TCAP**

**Cost Allocation Flowchart**



**Workpapers to the Prepared Written Testimony of  
Joseph Mock**

**SAN DIEGO GAS & ELECTRIC COMPANY**  
**2013 TCAP**

**2/22/2013 Update Filing**

**Section 1**

**Long Run Marginal Customer Cost Model**

**Workpapers to the Prepared Written Testimony of  
Joseph Mock**

SDGE Gas 2013 TCAP

[2/22/2013 Update Filing](#)

SDG&E Cost Allocation LRMC Customer Costs Costs Results

A	Residential B	NGV D	CCI C	Total Core E	Total NCCI F	EG Tier 1 G	EG Tier 2 H	Total EG I	Total NonCore J	System Total K
Customer Costs Rental Method	\$263.06	\$1,617.83	\$421.60	\$268.49	\$10,132.95	\$8,466.96	\$12,311.40	\$9,544.24	\$9,825.35	\$269.89
Customer Costs NCO Method	\$100.22	\$592.71	\$176.15	\$102.76	\$5,955.69	\$5,246.76	\$6,350.82	\$5,577.14	\$5,755.66	\$103.60
Customer Costs NCO RCA	\$296.32	\$1,475.94	\$475.46	\$302.45	\$8,412.95	\$7,393.84	\$9,695.68	\$8,050.68	\$8,221.25	\$303.61

**Output to CA Model - Select from Methods above**

Customer Costs Rental Method	\$263.06	\$1,617.83	\$421.60	\$268.49	\$10,132.95	\$8,466.96	\$12,311.40	\$9,544.24	\$9,825.35	\$269.89
------------------------------	----------	------------	----------	----------	-------------	------------	-------------	------------	------------	----------

**SDGE Gas 2013 TCAP  
LRMC O&M Loader Model  
2/22/2013 Update Filing**

	<b>Input</b>	<b>Source (1)</b>
O&M w/o A&G HPD	\$408.87	LF-O&M Tab
O&M w/o A&G MPD	\$9,388.93	LF-O&M Tab
Marginal Percent of O&M HPD	69.53%	Dist O&M MC
Marginal Percent of O&M MPD	69.53%	Dist O&M MC
Marginal A&G/Payroll Taxes Loading Factor as a % of O&M expenses	30.68%	LF-A&G Tab
General Plant Loading Factor as a % of O&M expenses	10.54%	LF-GPL Tab
Annualized M&S Customer Related Costs \$000/yr	\$136,810.05	LF-M&S Tab
Annualized M&S HDP Distribution Load Related Costs \$000/yr	\$23,356.68	LF-M&S Tab
Annualized M&S MDP Distribution Load Related Costs \$000/yr	\$159,326.57	LF-M&S Tab
O&M WEF for Escalation	1.08	O&M WEF Tab
<b>Marginal Cust-Rel O&amp;M</b>		
870 - Operation Supervision & Engineering	\$5,546	Dist O&M MC
871 - Distribution Load Dispatching	\$0	Dist O&M MC
874 - Mains & Services Expenses	\$1,710	Dist O&M MC
875 - Measuring & Regulating Station Expenses	\$0	Dist O&M MC
878 - Meter & House Regulator Expenses	\$4,690	Dist O&M MC
879 - Customer Installations Expenses	\$11,123	Dist O&M MC
880 - Other Expenses	\$8,794	Dist O&M MC
881 - Rents	\$0	Dist O&M MC
885 - Maint Supervision & Engineering	\$24	Dist O&M MC
887 - Maintenance of Mains	\$197	Dist O&M MC
888 - Maintenance Of Compressor Station Eq	\$0	Dist O&M MC
889 - Maintenance of Meas. & Reg Station Eq	\$0	Dist O&M MC
892 - Maintenance of Services	\$1,208	Dist O&M MC
893 - Maint of Meters & House Regulators	\$1,248	Dist O&M MC
894 - Maintenance of Other Equipment	\$0	Dist O&M MC

**Notes:**

(1) from "SDGE OM Loaders" file:

**TABLE 11 - LRM Customer Cost**  
**SDGE Gas 2013 TCAP**  
**2/22/2013 Update Filing**

A	Res					NGV	GN-3	Total Core
	G-R	G-M	G-S	G-T	Total Res			
B	C	D	E	F	G	H	I	
<b>Annualized SRM Cost \$/customer/yr 2013\$s</b>	<b>\$199.96</b>	<b>\$225.83</b>	<b>\$398.71</b>	<b>\$842.39</b>	<b>\$200.70</b>	<b>\$1,113.27</b>	<b>\$285.32</b>	<b>\$203.66</b>
<b>O&amp;M \$/customer/yr</b>								
FERC 870 - 894: Distribution O&M (M\$)	\$30,933	\$852	\$31	\$74	\$31,890	\$14	\$2,442	\$34,347
FERC 901 - 910: Customer O&M (M\$)	\$1,522	\$31	\$0	\$0	\$1,554	\$0	\$62	\$1,616
Total Cust-Rel O&M (M\$)	\$32,455	\$883	\$31	\$75	\$33,444	\$15	\$2,504	\$35,962
2010 Number of Customers	802,791	16,236	223	233	819,482	44	28,070	847,596
Cust-Rel O&M per Customer (2010 \$'s)	\$40	\$54	\$139	\$321	\$41	\$330	\$89	\$42
escalator 2010\$s to 2013\$s	1.079	1.079	1.079	1.079	1.079	1.079	1.079	1.079
<b>O&amp;M \$/customer/yr 2013\$s</b>	<b>\$43.63</b>	<b>\$58.69</b>	<b>\$149.92</b>	<b>\$346.56</b>	<b>\$44.04</b>	<b>\$356.35</b>	<b>\$96.25</b>	<b>\$45.78</b>
<b>O&amp;M Loaders:</b>								
Materials & Supplies Loader:								
allocator = total Customer Related O&M as % of total	89.1%	2.4%	0.1%	0.2%	91.9%	0.0%	6.9%	98.8%
Allocated Materials & Supplies Loader (\$'s)	\$121,954	\$3,318	\$116	\$281	\$125,670	\$55	\$9,408	\$135,132
2010 Number of Customers	802,791	16,236	223	233	819,482	44	28,070	847,596
M&S Loader per Customer (2010 \$'s)	\$0.15	\$0.20	\$0.52	\$1.21	\$0.15	\$1.24	\$0.34	\$0.16
escalator 2010\$s to 2013\$s	1.079	1.079	1.079	1.079	1.079	1.079	1.079	1.079
M&S Loader \$/customer/yr 2013\$s	\$0.16	\$0.22	\$0.56	\$1.30	\$0.17	\$1.34	\$0.36	\$0.17
Administrative & General as % of O&M	30.68%	30.68%	30.68%	30.68%	30.68%	30.68%	30.68%	30.68%
Administrative & General \$/customer/yr 2013\$s	\$13.38	\$18.00	\$45.99	\$106.32	\$13.51	\$109.32	\$29.53	\$14.05
General Plant as % of O&M	10.54%	10.54%	10.54%	10.54%	10.54%	10.54%	10.54%	10.54%
General Plant \$/customer/yr 2013\$s	\$4.60	\$6.19	\$15.80	\$36.53	\$4.64	\$37.56	\$10.15	\$4.83
<b>TOTAL O&amp;M LOADERS \$/customer/yr</b>	<b>\$18.15</b>	<b>\$24.41</b>	<b>\$62.36</b>	<b>\$144.15</b>	<b>\$18.32</b>	<b>\$148.22</b>	<b>\$40.03</b>	<b>\$19.04</b>
<b>LRMC Rental Customer Cost \$/customer/year</b>	<b>\$261.73</b>	<b>\$308.93</b>	<b>\$610.98</b>	<b>\$1,333.10</b>	<b>\$263.06</b>	<b>\$1,617.83</b>	<b>\$421.60</b>	<b>\$268.49</b>
<b>NCO Method:</b>								
LRMC Rental Customer Cost \$/customer/year					\$263.06	\$1,617.83	\$421.60	\$268.49
less annualized SRM rental					(\$200.70)	(\$1,113.27)	(\$285.32)	(\$203.66)
plus annualized SRM NCO					\$37.87	\$88.15	\$39.87	\$37.94
<b>NCO Customer Cost \$/customer/year</b>					<b>\$100.22</b>	<b>\$592.71</b>	<b>\$176.15</b>	<b>\$102.76</b>
<b>NCO with Replacement Cost Adder Method:</b>								
LRMC Rental Customer Cost \$/customer/year					\$263.06	\$1,617.83	\$421.60	\$268.49
less annualized SRM rental					(\$200.70)	(\$1,113.27)	(\$285.32)	(\$203.66)
plus annualized SRM					\$233.96	\$971.38	\$339.18	\$237.62
<b>NCO w/ Replacement Customer Cost \$/cstmr/yr</b>					<b>\$296.32</b>	<b>\$1,475.94</b>	<b>\$475.46</b>	<b>\$302.45</b>

**TABLE 11 - LRM Customer Cost**  
**SDGE Gas 2013 TCAP**  
**2/22/2013 Update Filing**

A	GTNC			EG			Total Noncore	System Total
	MPD	HPD	Total	< 3 MM	> 3 MM	Total		
J	K	L	M	N	O	P	Q	
<b>Annualized SRM Cost \$/customer/yr 2013\$s</b>	<b>\$4,464.38</b>	<b>\$4,511.34</b>	<b>\$4,471.09</b>	<b>\$3,486.01</b>	<b>\$6,363.66</b>	<b>\$4,270.32</b>	<b>\$4,368.32</b>	<b>\$204.27</b>
<b>O&amp;M \$/customer/yr</b>								
FERC 870 - 894: Distribution O&M (M\$)	\$87	\$14	\$101	\$53	\$41	\$93	\$194	\$34,541
FERC 901 - 910: Customer O&M (M\$)	\$99	\$19	\$118	\$97	\$37	\$134	\$252	\$1,868
Total Cust-Rel O&M (M\$)	\$187	\$32	\$219	\$150	\$78	\$228	\$446	\$36,409
2010 Number of Customers	57	2	59	46	20	66	125	847,721
Cust-Rel O&M per Customer (2010 \$'s)	\$3,272	\$16,061	\$3,706	\$3,260	\$3,893	\$3,452	\$3,572	\$43
escalator 2010\$s to 2013\$s	1.079	1.079	1.079	1.079	1.079	1.079	1.079	1.079
<b>O&amp;M \$/customer/yr 2013\$s</b>	<b>\$3,530.87</b>	<b>\$17,330.81</b>	<b>\$3,998.66</b>	<b>\$3,517.78</b>	<b>\$4,200.56</b>	<b>\$3,724.68</b>	<b>\$3,854.00</b>	<b>\$46.35</b>
<b>O&amp;M Loaders:</b>								
Materials & Supplies Loader:								
allocator = total Customer Related O&M as % of total	0.5%	0.1%	0.6%	0.4%	0.2%	0.6%	1.2%	100.0%
Allocated Materials & Supplies Loader (\$'s)	\$701	\$121	\$822	\$563	\$293	\$856	\$1,678	\$136,810
2010 Number of Customers	57	2	59	46	20	66	125	847,721
M&S Loader per Customer (2010 \$'s)	\$12.30	\$60.35	\$13.92	\$12.25	\$14.63	\$12.97	\$13.42	\$0.16
escalator 2010\$s to 2013\$s	1.079	1.079	1.079	1.079	1.079	1.079	1.079	1.079
M&S Loader \$/customer/yr 2013\$s	\$13.27	\$65.12	\$15.03	\$13.22	\$15.78	\$14.00	\$14.48	\$0.17
Administrative & General as % of O&M	30.68%	30.68%	30.68%	30.68%	30.68%	30.68%	30.68%	30.68%
Administrative & General \$/customer/yr 2013\$s	\$1,083.18	\$5,316.64	\$1,226.69	\$1,079.16	\$1,288.62	\$1,142.64	\$1,182.31	\$14.22
General Plant as % of O&M	10.54%	10.54%	10.54%	10.54%	10.54%	10.54%	10.54%	10.54%
General Plant \$/customer/yr 2013\$s	\$372.18	\$1,826.79	\$421.49	\$370.80	\$442.77	\$392.61	\$406.24	\$4.89
<b>TOTAL O&amp;M LOADERS \$/customer/yr</b>	<b>\$1,468.62</b>	<b>\$7,208.55</b>	<b>\$1,663.20</b>	<b>\$1,463.18</b>	<b>\$1,747.17</b>	<b>\$1,549.24</b>	<b>\$1,603.03</b>	<b>\$19.28</b>
<b>LRMC Rental Customer Cost \$/customer/year</b>	<b>\$9,463.87</b>	<b>\$29,050.70</b>	<b>\$10,132.95</b>	<b>\$8,466.96</b>	<b>\$12,311.40</b>	<b>\$9,544.24</b>	<b>\$9,825.35</b>	<b>\$269.89</b>
<b>NCO Method:</b>								
LRMC Rental Customer Cost \$/customer/year	\$9,463.87	\$29,050.70	\$10,132.95	\$8,466.96	\$12,311.40	\$9,544.24	\$9,825.35	\$269.89
less annualized SRM rental	(\$4,464.38)	(\$4,511.34)	(\$4,471.09)	(\$3,486.01)	(\$6,363.66)	(\$4,270.32)	(\$4,368.32)	(\$204.27)
plus annualized SRM NCO	\$289.49	\$319.83	\$293.82	\$265.80	\$403.08	\$303.21	\$298.63	\$37.98
<b>NCO Customer Cost \$/customer/year</b>	<b>\$5,288.98</b>	<b>\$24,859.19</b>	<b>\$5,955.69</b>	<b>\$5,246.76</b>	<b>\$6,350.82</b>	<b>\$5,577.14</b>	<b>\$5,755.66</b>	<b>\$103.60</b>
<b>NCO with Replacement Cost Adder Method:</b>								
LRMC Rental Customer Cost \$/customer/year	\$9,463.87	\$29,050.70	\$10,132.95	\$8,466.96	\$12,311.40	\$9,544.24	\$9,825.35	\$269.89
less annualized SRM rental	(\$4,464.38)	(\$4,511.34)	(\$4,471.09)	(\$3,486.01)	(\$6,363.66)	(\$4,270.32)	(\$4,368.32)	(\$204.27)
plus annualized SRM	\$2,721.77	\$2,927.01	\$2,751.09	\$2,412.88	\$3,747.95	\$2,776.75	\$2,764.22	\$237.99
<b>NCO w/ Replacement Customer Cost \$/cstmr/yr</b>	<b>\$7,721.26</b>	<b>\$27,466.37</b>	<b>\$8,412.95</b>	<b>\$7,393.84</b>	<b>\$9,695.68</b>	<b>\$8,050.68</b>	<b>\$8,221.25</b>	<b>\$303.61</b>

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

**METER SET ASSEMBLY (MSA) EXPENSE  
2013 TCAP**

2/22/2013 Update Filing

	Max Meter Flow Range	Meter Type	Meter, Regulator & Fitting Costs	Installation Costs	Total MSA Costs	
	A	B	C	E	F	
	Cfh		(Dollars)	(Dollars)	(Dollars)	
1	<i>Medium Pressure</i>					1
2	0-275	250	\$100.10	\$79.07	\$179.16	2
3	276 - 425	425	\$202.19	\$166.61	\$368.80	3
4	426-630	630	\$520.23	\$166.61	\$686.83	4
5	631 - 800	8C	\$857.01	\$261.81	\$1,118.81	5
6	801 - 1,100	11C	\$1,034.08	\$261.81	\$1,295.89	6
7	1,101 - 1,500	15C	\$1,351.72	\$1,361.64	\$2,713.36	7
8	1,501 - 2,000	2M	\$1,809.70	\$1,361.64	\$3,171.34	8
9	2,001 - 3,000	3M	\$1,834.64	\$1,361.64	\$3,196.28	9
10	3,001 - 5,000	5M	\$2,502.39	\$1,361.64	\$3,864.03	10
11	5,001 - 7,000	7M	\$3,097.22	\$1,361.64	\$4,458.86	11
12						12
13	<i>High Pressure</i>					13
14	0 - 940	425	\$1,032.87	\$1,361.64	\$2,394.51	14
15	941 - 1,050	8C	\$2,181.98	\$1,361.64	\$3,543.62	15
16	1,051 - 2,000	2M	\$2,220.64	\$1,361.64	\$3,582.28	16
17	2,001 - 2,700	2M	\$2,220.64	\$1,361.64	\$3,582.28	17
18	2,701 - 4,000	3M	\$2,245.58	\$1,361.64	\$3,607.22	18
19	4,001 - 6,600	5M	\$3,259.03	\$1,485.41	\$4,744.44	19
20	6,601 - 9,200	7M	\$3,853.86	\$1,485.41	\$5,339.27	20
21	9,201 - 14,500	11M	\$4,149.64	\$1,679.68	\$5,829.32	21
22	14,501 - 21,400	16M	\$5,643.72	\$2,604.05	\$8,247.77	22
23	21,401 - 24,000	Turbine	\$31,661.49	\$15,557.58	\$47,219.07	23
24	24,001 - 46,000	Turbine	\$35,806.33	\$16,516.63	\$52,322.96	24
25	46,001 - 79,000	Turbine	\$47,073.51	\$19,315.75	\$66,389.26	25
26	79,001 - 377,000	Turbine	\$63,142.78	\$23,283.01	\$86,425.79	26
27	377,001 - 600,000	Turbine			\$0.00	27
28	600,001 - 4,250,000	Turbine			\$0.00	28
29	> 4,250,000	Turbine			\$0.00	29

Notes:

1. Col. (F) = Col. (C) + Col. (D) + Col. (E).
2. MSA costs expressed in Year 2013 \$'s.
3. Data Source: SDG&E Gas Distribution Engineering Department.

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

**WEIGHTED MSA RECC FACTOR  
2013 TCAP**

2/22/2013 Update Filing

	Max Meter Flow Range	Meter, Regulator, & Fitting Costs	Meter & Regulator RECC Factor	Installation Costs	Installation Costs RECC Factor	Weighted Average RECC Factor	
	A	B	C	D	E	F	
	Cfh	(Dollars)	(Percent)	(Dollars)	(Percent)	(Percent)	
1	<i>Medium Pressure</i>						1
2	0-275	\$100.10	9.73%	\$79.07	8.98%	9.40%	2
3	276 - 425	\$202.19	9.73%	\$166.61	8.98%	9.39%	3
4	426-630	\$520.23	9.73%	\$166.61	8.98%	9.55%	4
5	631 - 800	\$857.01	9.73%	\$261.81	8.98%	9.56%	5
6	801 - 1,100	\$1,034.08	9.73%	\$261.81	8.98%	9.58%	6
7	1,101 - 1,500	\$1,351.72	9.73%	\$1,361.64	8.98%	9.35%	7
8	1,501 - 2,000	\$1,809.70	9.73%	\$1,361.64	8.98%	9.41%	8
9	2,001 - 3,000	\$1,834.64	9.73%	\$1,361.64	8.98%	9.41%	9
10	3,001 - 5,000	\$2,502.39	9.73%	\$1,361.64	8.98%	9.47%	10
11	5,001 - 7,000	\$3,097.22	9.73%	\$1,361.64	8.98%	9.50%	11
12							12
13	<i>High Pressure</i>						13
14	0 - 940	\$1,032.87	9.73%	\$1,361.64	8.98%	9.30%	14
15	941 - 1,050	\$2,181.98	9.73%	\$1,361.64	8.98%	9.44%	15
16	1,051 - 2,000	\$2,220.64	9.73%	\$1,361.64	8.98%	9.45%	16
17	2,001 - 2,700	\$2,220.64	9.73%	\$1,361.64	8.98%	9.45%	17
18	2,701 - 4,000	\$2,245.58	9.73%	\$1,361.64	8.98%	9.45%	18
19	4,001 - 6,600	\$3,259.03	9.73%	\$1,485.41	8.98%	9.50%	19
20	6,601 - 9,200	\$3,853.86	9.73%	\$1,485.41	8.98%	9.52%	20
21	9,201 - 14,500	\$4,149.64	9.73%	\$1,679.68	8.98%	9.52%	21
22	14,501 - 21,400	\$5,643.72	9.73%	\$2,604.05	8.98%	9.49%	22
23	21,401 - 24,000	\$31,661.49	9.73%	\$15,557.58	8.98%	9.48%	23
24	24,001 - 46,000	\$35,806.33	9.73%	\$16,516.63	8.98%	9.49%	24
25	46,001 - 79,000	\$47,073.51	9.73%	\$19,315.75	8.98%	9.51%	25
26	79,001 - 377,000	\$63,142.78	9.73%	\$23,283.01	8.98%	9.53%	26
27	377,001 - 600,000					9.53%	27
28	600,001 - 4,250,000					9.53%	28
29	> 4,250,000					9.53%	29

Notes:

- Col. (F) = [Col (B) x Col. (C)] + [Col. (D) x Col. (E)] ÷ [Col. (B) + Col. (D)]
- Rows (27) - (29): Weighted Average RECC Factor meter & installation weights from Row (26).
- Data Source: RECC Factors from Finance Group file: Company Assumptions and Rates.xls received by email on 3-16-2011.

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

**ANNUALIZED SERVICE, REGULATOR & METER (SRM) MARGINAL INVESTMENT  
2013 TCAP**

2/22/2013 Update Filing

	Max Meter Flow Range	Meter & Regulator				Pipe & Installation				Total SRM Annualized Marg. Invstmt.	
		Meter Type	M&R Cost	RECC Factor	Annualized Marg. Invstmt.	Service Type	Service Cost	RECC Factor	Annualized Marg. Invstmt.		
	A	B	C	D	E	F	G	H	I	J	
	Cfh		(Dollars)	(Percent)	(Dollars)		(Dollars)	(Percent)	(Dollars)	(Dollars)	
1	<i>Medium Pressure</i>										1
2	0-275	250	\$179	9.40%	\$17	Poly-0.5"	\$2,056	8.79%	\$181	\$198	2
3	276 - 425	425	\$369	9.39%	\$35	Poly-0.5"	\$2,056	8.79%	\$181	\$215	3
4	426-630	630	\$687	9.55%	\$66	Poly-1"	\$2,175	8.79%	\$191	\$257	4
5	631 - 800	8C	\$1,119	9.56%	\$107	Poly-1"	\$2,175	8.79%	\$191	\$298	5
6	801 - 1,100	11C	\$1,296	9.58%	\$124	Poly-1"	\$2,175	8.79%	\$191	\$315	6
7	1,101 - 1,500	15C	\$2,713	9.35%	\$254	Poly-1"	\$2,175	8.79%	\$191	\$445	7
8	1,501 - 2,000	2M	\$3,171	9.41%	\$298	Poly-1"	\$2,175	8.79%	\$191	\$489	8
9	2,001 - 3,000	3M	\$3,196	9.41%	\$301	Poly-1"	\$2,175	8.79%	\$191	\$492	9
10	3,001 - 5,000	5M	\$3,864	9.47%	\$366	Poly-2"	\$4,804	8.79%	\$422	\$788	10
11	5,001 - 7,000	7M	\$4,459	9.50%	\$424	Poly-2"	\$4,804	8.79%	\$422	\$846	11
12											12
13	<i>High Pressure</i>										13
14	0 - 940	425	\$2,395	9.30%	\$223	Poly-1"	\$2,175	8.79%	\$191	\$414	14
15	941 - 1,050	8C	\$3,544	9.44%	\$335	Poly-1"	\$2,175	8.79%	\$191	\$526	15
16	1,051 - 2,000	2M	\$3,582	9.45%	\$338	Poly-1"	\$2,175	8.79%	\$191	\$529	16
17	2,001 - 2,700	2M	\$3,582	9.45%	\$338	Poly-1"	\$2,175	8.79%	\$191	\$529	17
18	2,701 - 4,000	3M	\$3,607	9.45%	\$341	Poly-2"	\$4,804	8.79%	\$422	\$763	18
19	4,001 - 6,600	5M	\$4,744	9.50%	\$451	Poly-2"	\$4,804	8.79%	\$422	\$873	19
20	6,601 - 9,200	7M	\$5,339	9.52%	\$508	Poly-2"	\$4,804	8.79%	\$422	\$931	20
21	9,201 - 14,500	11M	\$5,829	9.52%	\$555	Poly-3"	\$8,528	8.79%	\$749	\$1,304	21
22	14,501 - 21,400	16M	\$8,248	9.49%	\$783	Poly-3"	\$8,528	8.79%	\$749	\$1,532	22
23	21,401 - 24,000	Turbine	\$47,219	9.48%	\$4,478	Poly-4"	\$13,395	8.79%	\$1,177	\$5,655	23
24	24,001 - 46,000	Turbine	\$52,323	9.49%	\$4,968	Poly-4"	\$13,395	8.79%	\$1,177	\$6,145	24
25	46,001 - 79,000	Turbine	\$66,389	9.51%	\$6,316	Steel-4"	\$51,935	8.79%	\$4,563	\$10,879	25
26	79,001 - 377,000	Turbine	\$86,426	9.53%	\$8,236	Steel-6"	\$46,853	8.79%	\$4,117	\$12,353	26
27	377,001 - 600,000	Turbine	\$0	9.53%	\$0	Steel-8"	\$90,304	8.79%	\$7,935	\$7,935	27
28	600,001 - 4,250,000	Turbine	\$0	9.53%	\$0	Steel-16"		8.79%	\$0	\$0	28
29	> 4,250,000	Turbine	\$0	9.53%	\$0	Steel-24"		8.79%	\$0	\$0	29

Notes:

- Col. (E) = Col. (C) x Col. (D). Col. (I) = Col. (G) x Col. (H).
- Col. (J) = Col. (E) + Col. (I).
- Service Line installation cost (column F & G) provided by SDG&E Gas Distribution Engineering Department, 5/9/2011  
RECC Factors from Finance Group file: Company Assumptions and Rates.xls received by email on 3-16-2011.

Data Sources: MSA Cost, MSA RECC

**TABLE LRMCC-4**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**  
**MSA ASSIGNMENT FACTORS BY CUSTOMER CLASS**  
**2013 TCAP**

2/22/2013 Update Filing

	Max Meter Flow Range	Meter Type	Res				Total	NGV	GN-3	Total Core	GTNC			EG		Total Noncore	System Total	
			G-R	G-M	G-S	G-T					MPD	HPD	Total	< 3 MM	> 3 MM			
	A	B	C				D	E	F	G	H	I	J	K	L	N	O	
	Cfh																	
1	<i>Medium Pressure</i>		98%	2%	0%	0%												
2	0-275	250	768,321	13,231	77	6	781,635	12	19,293	800,940	-	-	-	-	-	800,940		
3	276 - 425	425	29,492	1,579	44	6	31,121	2	3,830	34,953	-	-	-	-	-	34,953		
4	426-630	630	0	0	0	0	-	-	-	-	-	-	-	-	-	-		
5	631 - 800	8C	9,980	956	24	13	10,973	2	3,610	14,585	-	-	-	1	-	14,586		
6	801 - 1,100	11C	1,978	522	30	8	2,538	1	2,115	4,654	-	-	-	-	-	4,654		
7	1,101 - 1,500	15C	576	205	6	3	790	-	1,316	2,106	-	-	-	-	-	2,106		
8	1,501 - 2,000	2M	136	65	6	3	210	4	976	1,190	-	-	-	5	-	1,195		
9	2,001 - 3,000	3M	56	248	19	41	364	4	1,690	2,058	-	-	-	3	-	2,061		
10	3,001 - 5,000	5M	11	70	7	72	160	7	674	841	1	-	-	8	-	850		
11	5,001 - 7,000	7M	2	23	5	32	62	1	285	348	2	-	-	2	-	352		
12																		
13	<i>High Pressure</i>																	
14	0 - 940	425	0	0	0	0	-	-	-	-	-	-	-	-	-	-		
15	941 - 1,050	8C	0	0	0	0	-	-	-	-	-	-	-	-	-	-		
16	1,051 - 2,000	2M	0	0	0	0	-	1	1	2	-	-	-	-	-	2		
17	2,001 - 2,700	2M	0	0	0	0	-	-	-	-	-	-	-	-	-	-		
18	2,701 - 4,000	3M	0	1	0	0	1	-	-	1	-	-	-	-	-	1		
19	4,001 - 6,600	5M	0	0	0	0	-	1	-	1	-	1	-	1	2	3		
20	6,601 - 9,200	7M	0	0	0	0	-	-	-	-	-	2	2	1	5	5		
21	9,201 - 14,500	11M	0	26	9	42	77	2	249	328	9	1	10	5	15	343		
22	14,501 - 21,400	16M	1	20	2	15	38	8	114	160	10	1	11	7	22	182		
23	21,401 - 24,000	Turbine	0	5	2	2	9	-	19	28	10	1	11	-	12	40		
24	24,001 - 46,000	Turbine	0	2	0	0	2	2	11	15	10	1	11	3	21	36		
25	46,001 - 79,000	Turbine	0	0	0	0	-	1	2	3	5	1	6	7	15	18		
26	79,001 - 377,000	Turbine	0	0	0	0	-	-	1	1	1	1	2	3	8	9		
27	377,001 - 600,000	Turbine	0	0	0	0	-	-	-	-	-	-	-	-	-	-		
28	600,001 - 4,250,000	Turbine	0	0	0	0	-	-	-	-	-	-	-	-	-	-		
29	> 4,250,000	Turbine	0	0	0	0	-	-	-	-	-	-	-	-	-	-		
30																		
31	Total Customers		810,553	16,953	231	243	827,980	48	34,186	862,214	48	9	57	47	18	65	122	862,336

Data Sources: File Name: 2010 sdge flow range count (msalloc va).xls

**TABLE LRMCC-5**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**  
**MSA ASSIGNMENT FACTORS BY CUSTOMER CLASS**  
**2013 TCAP**

2/22/2013 Update Filing

	Max Meter Flow Range	Meter Type	Res					NGV	GN-3	Total Core	GTNC			EG			Total Noncore	System Total
			G-R	G-M	G-S	G-T	Total				MPD	HPD	Total	< 3 MM	> 3 MM	Total		
	A	B	C					D	E	F	G	H	I	J	K	L	N	O
1	<i>Medium Pressure</i>																	1
2	0-275	250	94.79%	78.05%	33.33%	2.47%	94.40%	25.00%	56.44%	92.89%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	92.88%
3	276 - 425	425	3.64%	9.31%	19.05%	2.47%	3.76%	4.17%	11.20%	4.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.05%	
4	426-630	630	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
5	631 - 800	8C	1.23%	5.64%	10.39%	5.35%	1.33%	4.17%	10.56%	1.69%	0.00%	0.00%	0.00%	2.13%	0.00%	1.54%	1.69%	
6	801 - 1,100	11C	0.24%	3.08%	12.99%	3.29%	0.31%	2.08%	6.19%	0.54%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.54%	
7	1,101 - 1,500	15C	0.07%	1.21%	2.60%	1.23%	0.10%	0.00%	3.85%	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	
8	1,501 - 2,000	2M	0.02%	0.38%	2.60%	1.23%	0.03%	8.33%	2.85%	0.14%	0.00%	0.00%	0.00%	10.64%	0.00%	7.69%	0.14%	
9	2,001 - 3,000	3M	0.01%	1.46%	8.23%	16.87%	0.04%	8.33%	4.94%	0.24%	0.00%	0.00%	0.00%	6.38%	0.00%	4.62%	0.24%	
10	3,001 - 5,000	5M	0.00%	0.41%	3.03%	29.63%	0.02%	14.58%	1.97%	0.10%	2.08%	0.00%	1.75%	17.02%	0.00%	12.31%	0.10%	
11	5,001 - 7,000	7M	0.00%	0.14%	2.16%	13.17%	0.01%	2.08%	0.83%	0.04%	4.17%	0.00%	3.51%	4.26%	0.00%	3.08%	0.04%	
12	<i>High Pressure</i>																	12
13	<i>High Pressure</i>																	13
14	0 - 940	425	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
15	941 - 1,050	8C	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
16	1,051 - 2,000	2M	0.00%	0.00%	0.00%	0.00%	0.00%	2.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
17	2,001 - 2,700	2M	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
18	2,701 - 4,000	3M	0.00%	0.01%	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%	
19	4,001 - 6,600	5M	0.00%	0.00%	0.00%	0.00%	0.00%	2.08%	0.00%	0.00%	0.00%	11.11%	1.75%	2.13%	0.00%	1.54%	1.64%	
20	6,601 - 9,200	7M	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	22.22%	3.51%	4.26%	5.56%	4.62%	4.10%	
21	9,201 - 14,500	11M	0.00%	0.15%	3.90%	17.28%	0.01%	4.17%	0.73%	0.04%	18.75%	11.11%	17.54%	10.64%	0.00%	7.69%	12.30%	
22	14,501 - 21,400	16M	0.00%	0.12%	0.87%	6.17%	0.00%	16.67%	0.33%	0.02%	20.83%	11.11%	19.30%	14.89%	22.22%	16.92%	18.03%	
23	21,401 - 24,000	Turbine	0.00%	0.03%	0.87%	0.82%	0.00%	0.00%	0.06%	0.00%	20.83%	11.11%	19.30%	0.00%	5.56%	1.54%	9.84%	
24	24,001 - 46,000	Turbine	0.00%	0.01%	0.00%	0.00%	0.00%	4.17%	0.03%	0.00%	20.83%	11.11%	19.30%	6.38%	38.89%	15.38%	17.21%	
25	46,001 - 79,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	2.08%	0.01%	0.00%	10.42%	11.11%	10.53%	14.89%	11.11%	13.85%	12.30%	
26	79,001 - 377,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.08%	11.11%	3.51%	6.38%	16.67%	9.23%	6.56%	
27	377,001 - 600,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
28	600,001 - 4,250,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
29	> 4,250,000	Turbine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
30																		30
31	Total Customers		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Notes:

1. Factors derived from meter capacity analysis results in Table "LRMCC-4" (tab MSAAllocv1)  
 Data Sources: Tabs: MSA Cost, MSAAlloc v1

TABLE LRMCC-6  
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

FORECAST CUSTOMERS BY METER TYPE BY CUSTOMER CLASS  
2013 TCAP

2/22/2013 Update Filing

	Max Meter Flow Range	Meter Type	Res				Total Core	NGV	GN-3	Total Core	GTNC			EG			Power Plant	Total Noncore	System Total
			G-R	G-M	G-S	G-T					MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C				D	E	F	G	H	I	J	K	L	M	N	O	
	Cfh																		
1	<i>Medium Pressure</i>																		
2	0-275	250	789,621	13,148	77	6	802,853	8	17,170	820,030	-	-	-	-	-	-	820,030		
3	276 - 425	425	30,310	1,569	44	6	31,929	1	3,408	35,338	-	-	-	-	-	-	35,338		
4	426-630	630	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
5	631 - 800	8C	10,257	950	24	13	11,244	1	3,213	14,458	-	-	-	1	-	1	14,459		
6	801 - 1,100	11C	2,033	519	30	8	2,590	1	1,882	4,472	-	-	-	-	-	-	4,472		
7	1,101 - 1,500	15C	592	204	6	3	805	-	1,171	1,976	-	-	-	-	-	-	1,976		
8	1,501 - 2,000	2M	140	65	6	3	213	3	869	1,085	-	-	-	5	-	5	1,090		
9	2,001 - 3,000	3M	58	246	19	41	364	3	1,504	1,870	-	-	-	3	-	3	1,874		
10	3,001 - 5,000	5M	11	70	7	72	160	5	600	764	1	-	1	8	-	8	773		
11	5,001 - 7,000	7M	2	23	5	32	62	1	254	316	2	-	2	2	-	4	320		
12																			
13	<i>High Pressure</i>																		
14	0 - 940	425	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
15	941 - 1,050	8C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
16	1,051 - 2,000	2M	-	-	-	-	-	1	1	2	-	-	-	-	-	-	2		
17	2,001 - 2,700	2M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
18	2,701 - 4,000	3M	-	1	-	-	1	-	-	1	-	-	-	-	-	-	1		
19	4,001 - 6,600	5M	-	-	-	-	-	1	-	1	-	-	1	-	-	1	2		
20	6,601 - 9,200	7M	-	-	-	-	-	-	-	-	-	2	2	1	3	-	5		
21	9,201 - 14,500	11M	-	26	9	42	77	1	222	300	10	1	11	5	-	5	16		
22	14,501 - 21,400	16M	1	20	2	15	38	5	101	145	11	1	12	7	4	11	23		
23	21,401 - 24,000	Turbine	-	5	2	2	9	-	17	26	11	1	12	-	1	1	13		
24	24,001 - 46,000	Turbine	-	2	-	-	2	1	10	13	11	1	12	3	7	10	22		
25	46,001 - 79,000	Turbine	-	-	-	-	-	1	2	2	6	1	7	7	2	9	16		
26	79,001 - 377,000	Turbine	-	-	-	-	-	-	1	1	1	1	2	3	3	6	8		
27	377,001 - 600,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
28	600,001 - 4,250,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
29	> 4,250,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
30																			
31	Total Customers		833,024	16,847	231	242	850,344	32	30,423	880,799	54	9	63	48	18	66	-	129	880,928

Notes:

- Row (31) = forecast annual average number of customers during proposed 2013 - 2015 TCAP period
- Rows (2) - (29) = Row (31) x MSA assignment factors for each market segment for each flow range.

verify

833,024 16,847 231 242 850,344 32 30,423 880,799 54 9 63 48 18 66 - 129 880,928

Data Sources: tabs: MSA Cost, MSAlloc v2

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

ANNUALIZED SRM MARGINAL INVESTMENT BY CUSTOMER CLASS  
2013 TCAP

2/22/2013 Update Filing

	Max Meter Flow Range	Meter Type	Res					Total Core	NGV	GN-3	GTNC			EG			Power Plant	Total Noncore	System Total	
			G-R	G-M	G-S	G-T	Total				MPD	HPD	Total	< 3 MM	> 3 MM	Total				
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
	Cfh		(Dollars)																	
1	<i>Medium Pressure</i>																			1
2	0-275	250	\$155,971,723	\$2,597,141	\$15,210	\$1,180	\$158,585,255	\$1,564	\$3,391,450	\$161,978,269	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$161,978,269	2
3	276 - 425	425	\$6,526,415	\$337,872	\$9,474	\$1,287	\$6,875,048	\$284	\$733,925	\$7,609,258	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,609,258	3
4	426-630	630	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4
5	631 - 800	8C	\$3,056,537	\$283,111	\$7,152	\$3,858	\$3,350,659	\$393	\$957,390	\$4,308,442	\$0	\$0	\$0	\$305	\$0	\$305	\$0	\$305	\$4,308,747	5
6	801 - 1,100	11C	\$640,828	\$163,525	\$9,457	\$2,512	\$816,322	\$208	\$593,346	\$1,409,875	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,409,875	6
7	1,101 - 1,500	15C	\$263,377	\$90,638	\$2,670	\$1,329	\$358,014	\$0	\$521,068	\$879,081	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$879,081	7
8	1,501 - 2,000	2M	\$68,416	\$31,618	\$2,937	\$1,462	\$104,433	\$1,292	\$425,159	\$530,884	\$0	\$0	\$0	\$2,502	\$0	\$2,502	\$0	\$2,502	\$533,386	8
9	2,001 - 3,000	3M	\$28,311	\$121,232	\$9,346	\$20,086	\$178,975	\$1,298	\$739,837	\$920,110	\$0	\$0	\$0	\$1,509	\$0	\$1,509	\$0	\$1,509	\$921,619	9
10	3,001 - 5,000	5M	\$8,907	\$54,807	\$5,515	\$56,495	\$125,724	\$3,639	\$472,589	\$601,952	\$886	\$0	\$886	\$6,445	\$0	\$6,445	\$0	\$7,331	\$609,283	10
11	5,001 - 7,000	7M	\$1,738	\$19,331	\$4,229	\$26,954	\$52,252	\$558	\$214,516	\$267,326	\$1,903	\$0	\$1,903	\$1,730	\$0	\$1,730	\$0	\$3,633	\$270,959	11
12																				12
13	<i>High Pressure</i>																			13
14	0 - 940	425	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	14
15	941 - 1,050	8C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	15
16	1,051 - 2,000	2M	\$0	\$0	\$0	\$0	\$0	\$349	\$471	\$821	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$821	16
17	2,001 - 2,700	2M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	17
18	2,701 - 4,000	3M	\$0	\$758	\$0	\$0	\$758	\$0	\$0	\$758	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$758	18
19	4,001 - 6,600	5M	\$0	\$0	\$0	\$0	\$0	\$576	\$0	\$576	\$0	\$873	\$873	\$892	\$0	\$892	\$0	\$1,765	\$2,341	19
20	6,601 - 9,200	7M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,861	\$1,861	\$1,903	\$931	\$2,834	\$0	\$4,695	\$4,695	20
21	9,201 - 14,500	11M	\$0	\$33,691	\$11,736	\$54,541	\$99,968	\$1,721	\$288,950	\$390,638	\$13,203	\$1,304	\$14,507	\$6,666	\$0	\$6,666	\$0	\$21,173	\$411,811	21
22	14,501 - 21,400	16M	\$1,575	\$30,456	\$3,065	\$22,891	\$57,987	\$8,088	\$155,464	\$221,538	\$17,239	\$1,532	\$18,772	\$10,968	\$6,131	\$17,099	\$0	\$35,870	\$257,408	22
23	21,401 - 24,000	Turbine	\$0	\$28,100	\$11,311	\$11,264	\$50,675	\$0	\$95,626	\$146,301	\$63,623	\$5,655	\$69,279	\$0	\$5,657	\$5,657	\$0	\$74,936	\$221,237	23
24	24,001 - 46,000	Turbine	\$0	\$12,213	\$0	\$0	\$12,213	\$8,108	\$60,154	\$80,475	\$69,130	\$6,145	\$75,275	\$18,849	\$43,026	\$61,875	\$0	\$137,150	\$217,625	24
25	46,001 - 79,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$7,177	\$19,363	\$26,541	\$61,195	\$10,879	\$72,074	\$77,864	\$21,764	\$99,628	\$0	\$171,702	\$198,243	25
26	79,001 - 377,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$10,993	\$10,993	\$13,897	\$12,353	\$26,249	\$37,890	\$37,068	\$74,958	\$0	\$101,208	\$112,201	26
27	377,001 - 600,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	27
28	600,001 - 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	28
29	> 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	29
30	Total		\$166,567,828	\$3,804,495	\$92,101	\$203,858	\$170,668,283	\$35,253	\$8,680,301	\$179,383,838	\$241,076	\$40,602	\$281,678	\$167,522	\$114,577	\$282,099	\$0	\$563,778	\$179,947,615	30
31	Forecast Customers		833,024	16,847	231	242	850,344	32	30,423	880,799	54	9	63	48	18	66	-	129	880,928	31
32																				32
33	Average SRM Cost		\$200	\$226	\$399	\$842	\$201	\$1,113	\$285	\$204	\$4,464	\$4,511	\$4,471	\$3,486	\$6,364	\$4,270	\$0	\$4,368	\$204	33

Notes:

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

2. Row (33) = Row (30) ÷ Row (31).

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

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

ALLOCATION OF CUSTOMER-RELATED DISTRIBUTION O&M EXPENSES BY CUSTOMER CLASS  
2013 TCAP

2/22/2013 Update Filing

	Distribution O&M Account	Marginal O&M	Res				Total	NGV	GN-3	Total Core	GTNC			EG			Total Noncore	System Total
			G-R	G-M	G-S	G-T					MPD	HPD	Total	< 3 MM	> 3 MM	Total		
	A	B	C				D	E	F	G	H	I	J	K	L	N	O	
1																		
2	Allocator - Total of other Distribution O&M Operating	100%	90%	2%	0%	0%	92%	0%	7%	99%	0%	0%	0%	0%	0%	0%	100%	
3	Allocation (M\$)	\$5,546	\$4,976	\$136	\$5	\$12	\$5,128	\$2	\$386	\$5,517	\$13	\$2	\$15	\$8	\$6	\$14	\$29	\$5,546
4	<b>871 - Distribution Load Dispatching = Non-Marginal Designation</b>																	
5																		
6	Allocator - Customers Wtd by Services costs	100%	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	100%	
7	Allocation (M\$)	\$1,710	\$1,609	\$33	\$1	\$1	\$1,644	\$0	\$64	\$1,708	\$1	\$0	\$1	\$1	\$0	\$1	\$2	\$1,710
8	<b>875 - Meas &amp; Reg Station Exp = 100% Demand-Related</b>																	
9																		
10	Allocator - Customers Wtd by Meters & Regs costs	100%	80%	3%	0%	1%	85%	0%	13%	98%	1%	0%	1%	1%	0%	1%	2%	100%
11	Allocation (M\$)	\$4,690	\$3,773	\$162	\$9	\$24	\$3,967	\$5	\$629	\$4,601	\$39	\$6	\$45	\$24	\$19	\$43	\$88	\$4,690
12																		
13	Allocator - Customer Service Expense	100%	93%	2%	0%	0%	95%	0%	5%	100%	0%	0%	0%	0%	0%	0%	0%	100%
14	Allocation (M\$)	\$11,123	\$10,338	\$235	\$6	\$12	\$10,591	\$2	\$527	\$11,120	\$2	\$0	\$2	\$1	\$0	\$1	\$3	\$11,123
15																		
16	Allocator - Total of other Distribution O&M Operating	100%	90%	2%	0%	0%	92%	0%	7%	99%	0%	0%	0%	0%	0%	0%	1%	100%
17	Allocation (M\$)	\$8,794	\$7,890	\$216	\$8	\$19	\$8,132	\$4	\$613	\$8,748	\$21	\$3	\$24	\$13	\$10	\$22	\$47	\$8,794
18	<b>881 - Rents = Non-Marginal Designation</b>																	
19																		
20	Allocator - Total Other Distribution O&M Maintenance	100%	88%	3%	0%	0%	91%	0%	8%	99%	0%	0%	0%	0%	0%	0%	1%	100%
21	Allocation (M\$)	\$24	\$21	\$1	\$0	\$0	\$22	\$0	\$2	\$24	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24
22																		
23	Allocator - Customers Wtd by Services costs	100%	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%
24	Allocation (M\$)	\$197	\$185	\$4	\$0	\$0	\$189	\$0	\$7	\$197	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$197
25	<b>888 - Maint. Of Compressor Station Eq = 100% Demand-Related</b>																	
26	<b>889 - Maint. of Meas. &amp; Reg Station Eq = 100% Demand-Related</b>																	
27																		
28	Allocator - Customers Wtd by Services costs	100%	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%
29	Allocation (M\$)	\$1,208	\$1,137	\$24	\$0	\$1	\$1,161	\$0	\$45	\$1,207	\$1	\$0	\$1	\$0	\$0	\$1	\$1	\$1,208
30																		
31	Allocator - Customers Wtd by Meters & Regs costs	100%	80%	3%	0%	1%	85%	0%	13%	98%	1%	0%	1%	1%	0%	1%	2%	100%
32	Allocation (M\$)	\$1,248	\$1,004	\$43	\$2	\$6	\$1,056	\$1	\$167	\$1,224	\$10	\$2	\$12	\$6	\$5	\$11	\$23	\$1,248
33	<b>894 - Maint. of Other Eq = Non-Marginal Designation</b>																	
34	<b>Total 870 - 894 O&amp;M Allocation (M\$)</b>	<b>\$34,541</b>	<b>\$30,933</b>	<b>\$852</b>	<b>\$31</b>	<b>\$74</b>	<b>\$31,890</b>	<b>\$14</b>	<b>\$2,442</b>	<b>\$34,347</b>	<b>\$87</b>	<b>\$14</b>	<b>\$101</b>	<b>\$53</b>	<b>\$41</b>	<b>\$93</b>	<b>\$194</b>	<b>\$34,541</b>
35	<b>Allocation %</b>	<b>100%</b>	<b>90%</b>	<b>2%</b>	<b>0%</b>	<b>0%</b>	<b>92%</b>	<b>0%</b>	<b>7%</b>	<b>99%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>1%</b>	<b>100%</b>

Notes:

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

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

**TABLE LRMCC-9  
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**Allocation Factors for Distribution O&M Expenses  
2013 TCAP**

2/22/2013 Update Filing

Allocation Method	G-R	G-M	Res G-S	G-T	Total	NGV	GN-3	Total Core	GTNC			EG			Total Noncore	System Total
									MPD	HPD	Total	< 3 MM	> 3 MM	Total		
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
<b>874, 887, 892 - Services</b>																
Allocator - Customers Wtd by Services costs (M\$)	\$1,714,637	\$35,511	\$612	\$1,180	\$1,751,940	\$173	\$68,453	\$1,820,565	\$845	\$157	\$1,002	\$745	\$391	\$1,136	\$2,137	\$1,822,703
Alloc %	94%	2%	0%	0%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%
<b>878, 893 - Meters &amp; House Regulators O&amp;M Expense</b>																
Allocator - Customers Wtd by Meters & Regs costs (M\$)	\$169,051	\$7,242	\$405	\$1,056	\$177,754	\$211	\$28,192	\$206,158	\$1,757	\$282	\$2,039	\$1,073	\$844	\$1,917	\$3,956	\$210,114
Alloc %	80%	3%	0%	1%	85%	0%	13%	98%	1%	0%	1%	1%	0%	1%	2%	100%
<b>879 - Customer Installations (M\$)</b>																
Allocator - Customer Service	\$8,607	\$195	\$5	\$10	\$8,817	\$2	\$439	\$9,258	\$2	\$0	\$2	\$0	\$0	\$1	\$2	\$9,260
Alloc %	93%	2%	0%	0%	95%	0%	5%	100%	0%	0%	0%	0%	0%	0%	0%	100%

Data Sources: tab: M&HR Alloc

TABLE LRMCC-10  
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

ALLOCATION OF CUSTOMER O&M EXPENSES BY CUSTOMER CLASS  
2013 TCAP

2/22/2013 Update Filing

	O&M Operational Activity	Total O&M	Res	NGV	GN-3	Total Core	GTNC			EG			IPP	Total Noncore	System Total
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	FIELD SERVICES Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	CUSTOMER CONTACT Total	\$136,947	\$131,705	\$0	\$5,242	\$136,947	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$136,947
3	METER READING Total	\$60,367	\$57,962	\$3	\$2,393	\$60,358	\$3	\$1	\$4	\$3	\$1	\$5	\$0	\$9	\$60,367
4	BILLING SERVICES Total	\$236,527	\$0	\$0	\$0	\$0	\$93,060	\$17,449	\$110,509	\$91,121	\$34,897	\$126,019	\$0	\$236,527	\$236,527
5	CREDIT & COLLECTIONS Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	BUSINESS ANALYSIS Total	\$9,947	\$9,551	\$1	\$394	\$9,946	\$1	\$0	\$1	\$1	\$0	\$1	\$0	\$1	\$9,947
7	CUSTOMER RESEARCH & COMMUNICATION Total	\$802,631	\$775,894	\$42	\$26,577	\$802,512	\$54	\$2	\$56	\$44	\$19	\$62	\$0	\$118	\$802,631
8	CUSTOMER SERVICE TECHNOLOGY & SUPPORT Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9	CAI CUSTOMER SERVICE Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10	CONSUMER PROGRAMS & SERVICES Total	\$519,267	\$485,316	\$28	\$19,725	\$505,069	\$5,586	\$1,047	\$6,634	\$5,470	\$2,095	\$7,565	\$0	\$14,198	\$519,267
11	FEDERAL ACCOUNTS MANAGEMENT Total	\$3,095	\$133	\$13	\$2,789	\$2,935	\$80	\$13	\$93	\$66	\$0	\$66	\$0	\$159	\$3,095
12	CUSTOMER SERVICES SUPPORT STAFF Total	\$45,047	\$42,484	\$5	\$2,552	\$45,041	\$2	\$0	\$2	\$3	\$0	\$3	\$0	\$6	\$45,047
13	COMMUNITY OUTREACH & INFO SERVICES Total	\$12,863	\$12,435	\$1	\$426	\$12,861	\$1	\$0	\$1	\$1	\$0	\$1	\$0	\$2	\$12,863
14	OTHER Total	\$815	\$759	\$0	\$31	\$790	\$10	\$2	\$11	\$9	\$4	\$13	\$0	\$24	\$815
15	SVP COST CENTERS Total	\$40,268	\$37,509	\$2	\$1,549	\$39,060	\$475	\$89	\$564	\$465	\$178	\$644	\$0	\$1,208	\$40,268
16															
17	<b>Total</b>	<b>\$1,867,773</b>	<b>\$1,553,747</b>	<b>\$94</b>	<b>\$61,678</b>	<b>\$1,615,520</b>	<b>\$99,272</b>	<b>\$18,603</b>	<b>\$117,875</b>	<b>\$97,183</b>	<b>\$37,195</b>	<b>\$134,378</b>	<b>\$0</b>	<b>\$252,253</b>	<b>\$1,867,773</b>
18	<b>Allocation %</b>	<b>100%</b>	<b>83%</b>	<b>0%</b>	<b>3%</b>	<b>86%</b>	<b>5%</b>	<b>1%</b>	<b>6%</b>	<b>5%</b>	<b>2%</b>	<b>7%</b>	<b>0%</b>	<b>14%</b>	<b>100%</b>

Note:

- O&M Operational Activities cost assigned using allocation methods identified for each SDG&E department in the Customer Operations division.  
Source: From file: SDGE 2013BCAP OM Loaders Tab: LRMCC-O&M Summary

TABLE LRMCC-backup.1  
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

O&M ALLOCATION FACTOR: Number of Customers Weighted by Service Line Cost  
2013 TCAP

2/22/2013 Update Filing

	Max Meter Flow Range	Meter Type	Services Plant Investment	Res					Total Core	GTNC			EG		Total Noncore	System Total			
				G-R	G-M	G-S	G-T	Total		MPD	HPD	Total	< 3 MM	> 3 MM					
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
	(Thousand Dollars)																		
1	Cth																		
1	Medium Pressure																		
2	0-275	250	\$2	\$1,623,791	\$27,038	\$158	\$12	\$1,651,000	\$16	\$35,308	\$1,686,324	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,686,324
3	276 - 425	425	\$2	\$62,329	\$3,227	\$90	\$12	\$65,659	\$3	\$7,009	\$72,671	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$72,671
4	426-630	630	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	631 - 800	800	\$2	\$22,306	\$2,066	\$52	\$28	\$24,453	\$3	\$6,987	\$31,443	\$0	\$0	\$0	\$2	\$0	\$2	\$2	\$31,445
6	801 - 1,100	1100	\$2	\$4,421	\$1,128	\$65	\$17	\$5,632	\$1	\$4,093	\$9,727	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,727
7	1,101 - 1,500	1500	\$2	\$1,287	\$443	\$13	\$6	\$1,750	\$0	\$2,547	\$4,297	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,297
8	1,501 - 2,000	2000	\$2	\$304	\$140	\$13	\$6	\$464	\$6	\$1,889	\$2,359	\$0	\$0	\$0	\$11	\$0	\$11	\$11	\$2,370
9	2,001 - 3,000	3000	\$2	\$125	\$536	\$41	\$89	\$791	\$6	\$3,271	\$4,068	\$0	\$0	\$0	\$7	\$0	\$7	\$7	\$4,075
10	3,001 - 5,000	5000	\$5	\$54	\$334	\$34	\$344	\$767	\$22	\$2,881	\$3,670	\$5	\$0	\$5	\$39	\$0	\$39	\$45	\$3,715
11	5,001 - 7,000	7000	\$5	\$10	\$110	\$24	\$153	\$297	\$3	\$1,218	\$1,518	\$11	\$0	\$11	\$10	\$0	\$10	\$21	\$1,539
12	High Pressure																		
14	0 - 940	425	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	941 - 1,050	800	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	1,051 - 2,000	2000	\$2	\$0	\$0	\$0	\$0	\$0	\$1	\$2	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3
17	2,001 - 2,700	2000	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	2,701 - 4,000	3000	\$5	\$0	\$5	\$0	\$0	\$5	\$0	\$0	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5
19	4,001 - 6,600	5000	\$5	\$0	\$0	\$0	\$0	\$0	\$3	\$0	\$3	\$0	\$5	\$5	\$5	\$0	\$5	\$10	\$13
20	6,601 - 9,200	7000	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10	\$10	\$10	\$5	\$15	\$24	\$29
21	9,201 - 14,500	11000	\$9	\$0	\$220	\$77	\$357	\$654	\$11	\$1,890	\$2,555	\$86	\$9	\$95	\$44	\$0	\$44	\$138	\$2,693
22	14,501 - 21,400	16000	\$9	\$9	\$169	\$17	\$127	\$323	\$45	\$865	\$1,233	\$96	\$9	\$104	\$61	\$34	\$95	\$200	\$1,432
23	21,401 - 24,000	Turbine	\$13	\$0	\$67	\$27	\$27	\$120	\$0	\$227	\$347	\$151	\$13	\$164	\$0	\$13	\$13	\$177	\$523
24	24,001 - 46,000	Turbine	\$13	\$0	\$27	\$0	\$0	\$27	\$18	\$131	\$175	\$151	\$13	\$164	\$41	\$94	\$135	\$299	\$474
25	46,001 - 79,000	Turbine	\$52	\$0	\$0	\$0	\$0	\$0	\$34	\$92	\$127	\$292	\$52	\$344	\$372	\$104	\$476	\$820	\$946
26	79,001 - 377,000	Turbine	\$47	\$0	\$0	\$0	\$0	\$0	\$0	\$42	\$42	\$53	\$47	\$100	\$144	\$141	\$284	\$384	\$426
27	377,001 - 600,000	Turbine	\$90	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
28	600,001 - 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
29	> 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
30	Total																		
31		N/A		\$1,714,637	\$35,511	\$612	\$1,180	\$1,751,940	\$173	\$68,453	\$1,820,565	\$845	\$157	\$1,002	\$745	\$391	\$1,136	\$2,137	\$1,822,703

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

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

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

O&M ALLOCATION FACTOR: Number of Customers Weighted by MSA Cost  
2013 TCAP

2/22/2013 Update Filing

	Max Meter Flow Range	Meter Type	MSA Capital Investment	Res					Total Core	GTNC			EG		Total Noncore	System Total			
				G-R	G-M	G-S	G-T	Total		MPD	HPD	Total	< 3 MM	> 3 MM					
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
	(Thousand Dollars)																		
1	Cln																		
2	Medium Pressure																		
3	0-275	250	\$0	\$141,469	\$2,356	\$14	\$1	\$143,839	\$1	\$3,076	\$146,917	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$146,917
4	276 - 425	425	\$0	\$11,178	\$579	\$16	\$2	\$11,775	\$0	\$1,257	\$13,033	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,033
5	426-630	630	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	631 - 800	800	\$1	\$11,475	\$1,063	\$27	\$14	\$12,580	\$1	\$3,594	\$16,175	\$0	\$0	\$0	\$1	\$0	\$1	\$1	\$16,176
7	801 - 1,100	1100	\$1	\$2,634	\$672	\$39	\$10	\$3,356	\$1	\$2,439	\$5,796	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,796
8	1,101 - 1,500	1500	\$3	\$1,606	\$553	\$16	\$8	\$2,183	\$0	\$3,178	\$5,361	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,361
9	1,501 - 2,000	2000	\$3	\$443	\$205	\$19	\$9	\$677	\$8	\$2,755	\$3,440	\$0	\$0	\$0	\$16	\$0	\$16	\$16	\$3,456
10	2,001 - 3,000	3000	\$3	\$184	\$788	\$61	\$131	\$1,163	\$8	\$4,807	\$5,979	\$0	\$0	\$0	\$10	\$0	\$10	\$10	\$5,989
11	3,001 - 5,000	5000	\$4	\$44	\$269	\$27	\$277	\$617	\$18	\$2,318	\$2,952	\$4	\$0	\$4	\$32	\$0	\$32	\$36	\$2,988
12	5,001 - 7,000	7000	\$4	\$9	\$102	\$22	\$142	\$275	\$3	\$1,131	\$1,409	\$10	\$0	\$10	\$9	\$0	\$9	\$19	\$1,428
13	High Pressure																		
14	0 - 940	425	\$2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	941 - 1,050	800	\$4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	1,051 - 2,000	2000	\$4	\$0	\$0	\$0	\$0	\$0	\$2	\$3	\$6	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6
17	2,001 - 2,700	2700	\$4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	2,701 - 4,000	3000	\$4	\$0	\$4	\$0	\$0	\$4	\$0	\$0	\$4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4
19	4,001 - 6,600	5000	\$5	\$0	\$0	\$0	\$0	\$0	\$3	\$0	\$3	\$0	\$5	\$5	\$5	\$0	\$5	\$10	\$13
20	6,601 - 9,200	7000	\$5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11	\$11	\$5	\$16	\$27	\$27	\$20
21	9,201 - 14,500	11000	\$6	\$0	\$151	\$52	\$244	\$447	\$8	\$1,292	\$1,746	\$59	\$6	\$65	\$30	\$0	\$30	\$95	\$1,841
22	14,501 - 21,400	16000	\$8	\$8	\$164	\$16	\$123	\$312	\$44	\$837	\$1,192	\$93	\$8	\$101	\$59	\$33	\$92	\$193	\$1,385
23	21,401 - 24,000	Turbine	\$47	\$0	\$235	\$94	\$94	\$423	\$0	\$798	\$1,222	\$531	\$47	\$578	\$0	\$47	\$47	\$626	\$1,847
24	24,001 - 46,000	Turbine	\$52	\$0	\$104	\$0	\$0	\$104	\$69	\$512	\$685	\$589	\$52	\$641	\$160	\$366	\$527	\$1,168	\$1,853
25	46,001 - 79,000	Turbine	\$66	\$0	\$0	\$0	\$0	\$0	\$44	\$118	\$162	\$373	\$66	\$440	\$475	\$133	\$608	\$1,048	\$1,210
26	79,001 - 377,000	Turbine	\$86	\$0	\$0	\$0	\$0	\$0	\$0	\$77	\$77	\$97	\$86	\$184	\$265	\$259	\$524	\$708	\$785
27	377,001 - 600,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
28	600,001 - 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
29	> 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
30	Total																		
31			N/A	\$169,051	\$7,242	\$405	\$1,056	\$177,754	\$211	\$28,192	\$206,158	\$1,757	\$282	\$2,039	\$1,073	\$844	\$1,917	\$3,956	\$210,114

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

Data Sources: tabs: MSA Cost, MSA Fcst

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

DEMAND DETERMINANT SUMMARY  
2013 TCAP

2/22/2013 Update Filing

Billing Determinants	Res					NGV	GN-3	Core	GTNC			EG			Power Plants	Noncore	System
	G-R	G-M	G-S	G-T	Total				MPD	HPD	Total	< 3 MM	> 3 MM	Total			
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
TCAP Customers	833,024	16,847	231	242	850,344	32	30,423	880,799	54	9	63	48	18	66	-	129	880,928
2010 Customers	802,791	16,236	223	233	819,482	44	28,070	847,596	57	2	59	46	20	66	-	125	847,721

Note:

1. Information provided by Demand Forecast witness. Updated 4-5-2012

Demand Forecast per 2009BCAP in Mtherms	Res	NGV	Core C&I	Total Core	Non Core C&I	EG Tier 1	EG Tier 2	Total EG	Total Non Core	Total System
<b>1 DIRECT Demand</b>										
<b>2 Transmission</b>										
3 Average Year Throughput (MTh)	0	0	0	0	15,070	21,305	547,042	568,347	583,417	583,417
4 Cold Year Throughput (1-in-35) (MTh)	0	0	0	0	15,070	21,305	547,042	568,347	583,417	583,417
5 Cold Year Peak Month (December) (MTh)	0	0	0	0	1,278	692	52,023	52,716	53,993	53,993
6 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	0	0	0	0	41	46	1,679	1,726	1,767	1,767
7 Number of Customers	0	0	0	0	9	12	8	20	29	29
<b>8 High Pressure</b>										
9 Average Year Throughput (MTh)	143	326	5,125	5,595	9,041	3,742	79,361	83,104	92,144	97,739
10 Cold Year Throughput (1-in-35) (MTh)	159	326	5,353	5,837	9,041	3,742	79,361	83,104	92,144	97,981
11 Cold Year Peak Month (December) (MTh)	24	29	574	626	766	291	6,757	7,048	7,814	8,441
12 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	1	1	25	27	25	9	218	227	252	279
13 Number of Customers	1	5	7	13	10	6	7	13	23	36
<b>14 Medium Pressure</b>										
15 Average Year Throughput (MTh)	307,698	11,281	177,469	496,447	24,522	4,304	10,066	14,369	38,891	535,338
16 Cold Year Throughput (1-in-35) (MTh)	340,408	11,281	185,347	537,035	24,522	4,304	10,066	14,369	38,891	575,926
17 Cold Year Peak Month (December) (MTh)	50,943	998	19,872	71,814	2,079	366	857	1,223	3,302	75,116
18 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	2,801	32	858	3,691	67	12	28	39	107	3,798
19 Number of Customers	850,343	27	30,417	880,787	44	30	3	33	77	880,864
<b>20 CUMULATIVE Demand</b>										
<b>21 Transmission</b>										
22 Average Year Throughput (MTh)	307,841	11,606	182,595	502,042	48,633	29,351	636,469	665,820	714,453	1,216,495
23 Cold Year Throughput (1-in-35) (MTh)	340,566	11,606	190,700	542,872	48,633	29,351	636,469	665,820	714,453	1,257,325
24 Cold Year Peak Month (December) (MTh)	50,967	1,027	20,446	72,440	4,123	1,350	59,637	60,987	65,110	137,550
25 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	2,803	33	883	3,718	133	67	1,925	1,992	2,125	5,844
26 Number of Customers	850,344	32	30,423	880,799	63	48	18	66	129	880,928
<b>27 High Pressure</b>										
28 Average Year Throughput (MTh)	307,841	11,606	182,595	502,042	33,562	8,046	89,427	97,473	131,035	633,077
29 Cold Year Throughput (1-in-35) (MTh)	340,566	11,606	190,700	542,872	33,562	8,046	89,427	97,473	131,035	673,907
30 Cold Year Peak Month (December) (MTh)	50,967	1,027	20,446	72,440	2,845	657	7,614	8,271	11,116	83,557
31 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	2,803	33	883	3,718	92	21	246	267	359	4,077
32 Number of Customers	850,344	32	30,423	880,799	54	36	10	46	100	880,899
<b>33 Medium Pressure</b>										
34 Average Year Throughput (MTh)	307,698	11,281	177,469	496,447	24,522	4,304	10,066	14,369	38,891	535,338
35 Cold Year Throughput (1-in-35) (MTh)	340,408	11,281	185,347	537,035	24,522	4,304	10,066	14,369	38,891	575,926
36 Cold Year Peak Month (December) (MTh)	50,943	998	19,872	71,814	2,079	366	857	1,223	3,302	75,116
37 Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	2,801	32	858	3,691	67	12	28	39	107	3,798
38 Number of Customers	850,343	27	30,417	880,787	44	30	3	33	77	880,864

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

WEIGHTED MSA PVRR FACTOR  
 2013 TCAP

2/22/2013 Update Filing

	Max Meter Flow Range	Meter, Regulator, & Fitting Costs	Meter & Regulator PVRR Factor	Installation Costs	Installation Costs PVRR Factor	Weighted Average PVRR Factor	
	A	B	C	D	E	F	
	Cfh	(Dollars)	(Percent)	(Dollars)	(Percent)	(Percent)	
1	<i>Medium Pressure</i>						1
2	0-275	\$100.10	126.32%	\$79.07	126.81%	126.54%	2
3	276 - 425	\$202.19	126.32%	\$166.61	126.81%	126.54%	3
4	426-630	\$520.23	126.32%	\$166.61	126.81%	126.44%	4
5	631 - 800	\$857.01	126.32%	\$261.81	126.81%	126.44%	5
6	801 - 1,100	\$1,034.08	126.32%	\$261.81	126.81%	126.42%	6
7	1,101 - 1,500	\$1,351.72	126.32%	\$1,361.64	126.81%	126.57%	7
8	1,501 - 2,000	\$1,809.70	126.32%	\$1,361.64	126.81%	126.53%	8
9	2,001 - 3,000	\$1,834.64	126.32%	\$1,361.64	126.81%	126.53%	9
10	3,001 - 5,000	\$2,502.39	126.32%	\$1,361.64	126.81%	126.49%	10
11	5,001 - 7,000	\$3,097.22	126.32%	\$1,361.64	126.81%	126.47%	11
12							12
13	<i>High Pressure</i>						13
14	0 - 940	\$1,032.87	126.32%	\$1,361.64	126.81%	126.60%	14
15	941 - 1,050	\$2,181.98	126.32%	\$1,361.64	126.81%	126.51%	15
16	1,051 - 2,000	\$2,220.64	126.32%	\$1,361.64	126.81%	126.51%	16
17	2,001 - 2,700	\$2,220.64	126.32%	\$1,361.64	126.81%	126.51%	17
18	2,701 - 4,000	\$2,245.58	126.32%	\$1,361.64	126.81%	126.51%	18
19	4,001 - 6,600	\$3,259.03	126.32%	\$1,485.41	126.81%	126.47%	19
20	6,601 - 9,200	\$3,853.86	126.32%	\$1,485.41	126.81%	126.46%	20
21	9,201 - 14,500	\$4,149.64	126.32%	\$1,679.68	126.81%	126.46%	21
22	14,501 - 21,400	\$5,643.72	126.32%	\$2,604.05	126.81%	126.48%	22
23	21,401 - 24,000	\$31,661.49	126.32%	\$15,557.58	126.81%	126.48%	23
24	24,001 - 46,000	\$35,806.33	126.32%	\$16,516.63	126.81%	126.48%	24
25	46,001 - 79,000	\$47,073.51	126.32%	\$19,315.75	126.81%	126.46%	25
26	79,001 - 377,000	\$63,142.78	126.32%	\$23,283.01	126.81%	126.45%	26
27	377,001 - 600,000					126.45%	27
28	600,001 - 4,250,000					126.45%	28
29	> 4,250,000					126.45%	29

Notes:

- Col. (F) = [Col. (B) x Col. (C)] + [Col. (D) x Col. (E)] ÷ [Col. (B) + Col. (D)]
  - Rows (27) - (29): Weighted Average PVRR Factor meter & installation weights from Row (26).
- Data Sources: MSA Cost tab and Finance group email dated 3-16-2011.

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

**NCO ANNUAL SERVICE, REGULATOR & METER (SRM) NEW HOOKUP INVESTMENT  
2013 TCAP**

2/22/2013 Update Filing

	Meter & Regulator					Pipe & Installation				Forecast New Hookups	Total SRM NCO Annual Investment		
	Max Meter Flow Range	Meter Type	M&R Cost	PVRR Factor	NCO Hookup Investment	Service Type	Service Cost	PVRR Factor	NCO Hookup Investment				
	A	B	C (Dollars)	D (Percent)	E (Dollars)	F	G (Dollars)	H (Percent)	I (Dollars)				J
1	<i>Medium Pressure</i>												1
2	0-275	250	\$179	126.54%	\$227	Poly-0.5"	\$2,056	126.47%	\$2,601	10,937	\$30,923,972	2	
3	276 - 425	425	\$369	126.54%	\$467	Poly-0.5"	\$2,056	126.47%	\$2,601	442	\$1,354,442	3	
4	426-630	630	\$687	126.44%	\$868	Poly-1"	\$2,175	126.47%	\$2,751	-	\$0	4	
5	631 - 800	8C	\$1,119	126.44%	\$1,415	Poly-1"	\$2,175	126.47%	\$2,751	160	\$667,253	5	
6	801 - 1,100	11C	\$1,296	126.42%	\$1,638	Poly-1"	\$2,175	126.47%	\$2,751	40	\$173,783	6	
7	1,101 - 1,500	15C	\$2,713	126.57%	\$3,434	Poly-1"	\$2,175	126.47%	\$2,751	14	\$84,270	3	
8	1,501 - 2,000	2M	\$3,171	126.53%	\$4,013	Poly-1"	\$2,175	126.47%	\$2,751	5	\$33,752	4	
9	2,001 - 3,000	3M	\$3,196	126.53%	\$4,044	Poly-1"	\$2,175	126.47%	\$2,751	9	\$57,930	5	
10	3,001 - 5,000	5M	\$3,864	126.49%	\$4,888	Poly-2"	\$4,804	126.47%	\$6,075	4	\$41,425	6	
11	5,001 - 7,000	7M	\$4,459	126.47%	\$5,639	Poly-2"	\$4,804	126.47%	\$6,075	1	\$17,244	7	
12												8	
13	<i>High Pressure</i>											9	
14	0 - 940	425	\$2,395	126.60%	\$3,031	Poly-1"	\$2,175	126.47%	\$2,751	-	\$0	10	
15	941 - 1,050	8C	\$3,544	126.51%	\$4,483	Poly-1"	\$2,175	126.47%	\$2,751	-	\$0	11	
16	1,051 - 2,000	2M	\$3,582	126.51%	\$4,532	Poly-1"	\$2,175	126.47%	\$2,751	0	\$116	12	
17	2,001 - 2,700	2M	\$3,582	126.51%	\$4,532	Poly-1"	\$2,175	126.47%	\$2,751	-	\$0	13	
18	2,701 - 4,000	3M	\$3,607	126.51%	\$4,563	Poly-2"	\$4,804	126.47%	\$6,075	0	\$148	14	
19	4,001 - 6,600	5M	\$4,744	126.47%	\$6,000	Poly-2"	\$4,804	126.47%	\$6,075	0	\$339	15	
20	6,601 - 9,200	7M	\$5,339	126.46%	\$6,752	Poly-2"	\$4,804	126.47%	\$6,075	0	\$364	16	
21	9,201 - 14,500	11M	\$5,829	126.46%	\$7,372	Poly-3"	\$8,528	126.47%	\$10,785	2	\$30,254	17	
22	14,501 - 21,400	16M	\$8,248	126.48%	\$10,431	Poly-3"	\$8,528	126.47%	\$10,785	1	\$20,503	18	
23	21,401 - 24,000	Turbine	\$47,219	126.48%	\$59,724	Poly-4"	\$13,395	126.47%	\$16,942	0	\$12,510	19	
24	24,001 - 46,000	Turbine	\$52,323	126.48%	\$66,176	Poly-4"	\$13,395	126.47%	\$16,942	0	\$9,977	20	
25	46,001 - 79,000	Turbine	\$66,389	126.46%	\$83,958	Steel-4"	\$51,935	126.47%	\$65,685	0	\$17,530	21	
26	79,001 - 377,000	Turbine	\$86,426	126.45%	\$109,288	Steel-6"	\$46,853	126.47%	\$59,257	0	\$7,506	22	
27	377,001 - 600,000	Turbine	\$0	126.45%	\$0	Steel-8"	\$90,304	126.47%	\$114,212	-	\$0	23	
28	600,001 - 4,250,000	Turbine	\$0	126.45%	\$0	Steel-16"	\$0	126.47%	\$0	-	\$0	24	
29	> 4,250,000	Turbine	\$0	126.45%	\$0	Steel-24"	\$0	126.47%	\$0	-	\$0	25	

Notes:

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

Data Sources: MSA PVRR tab and PVRR Factor from Finance group email dated 3-16-2011.

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

**WEIGHTED MSA BOOK LIFE  
2013 TCAP**

2/22/2013 Update Filing

	Max Meter Flow Range	Meter, Regulator, & Fitting Costs	Meter & Regulator Book Life	Installation Costs	Installation Costs Book Life	Weighted Average PVRR Factor	
	A	B	C	D	E	F	
	Cfh	(Dollars)	(Years)	(Dollars)	(Years)	(Percent)	
1	<i>Medium Pressure</i>						1
2	0-275	\$100.10	31.0	\$79.07	43.0	36.3	2
3	276 - 425	\$202.19	31.0	\$166.61	43.0	36.4	3
4	426-630	\$520.23	31.0	\$166.61	43.0	33.9	4
5	631 - 800	\$857.01	31.0	\$261.81	43.0	33.8	5
6	801 - 1,100	\$1,034.08	31.0	\$261.81	43.0	33.4	6
7	1,101 - 1,500	\$1,351.72	31.0	\$1,361.64	43.0	37.0	7
8	1,501 - 2,000	\$1,809.70	31.0	\$1,361.64	43.0	36.2	8
9	2,001 - 3,000	\$1,834.64	31.0	\$1,361.64	43.0	36.1	9
10	3,001 - 5,000	\$2,502.39	31.0	\$1,361.64	43.0	35.2	10
11	5,001 - 7,000	\$3,097.22	31.0	\$1,361.64	43.0	34.7	11
12							12
13	<i>High Pressure</i>						13
14	0 - 940	\$1,032.87	31.0	\$1,361.64	43.0	37.8	14
15	941 - 1,050	\$2,181.98	31.0	\$1,361.64	43.0	35.6	15
16	1,051 - 2,000	\$2,220.64	31.0	\$1,361.64	43.0	35.6	16
17	2,001 - 2,700	\$2,220.64	31.0	\$1,361.64	43.0	35.6	17
18	2,701 - 4,000	\$2,245.58	31.0	\$1,361.64	43.0	35.5	18
19	4,001 - 6,600	\$3,259.03	31.0	\$1,485.41	43.0	34.8	19
20	6,601 - 9,200	\$3,853.86	31.0	\$1,485.41	43.0	34.3	20
21	9,201 - 14,500	\$4,149.64	31.0	\$1,679.68	43.0	34.5	21
22	14,501 - 21,400	\$5,643.72	31.0	\$2,604.05	43.0	34.8	22
23	21,401 - 24,000	\$31,661.49	31.0	\$15,557.58	43.0	35.0	23
24	24,001 - 46,000	\$35,806.33	31.0	\$16,516.63	43.0	34.8	24
25	46,001 - 79,000	\$47,073.51	31.0	\$19,315.75	43.0	34.5	25
26	79,001 - 377,000	\$63,142.78	31.0	\$23,283.01	43.0	34.2	26
27	377,001 - 600,000					34.2	27
28	600,001 - 4,250,000					34.2	28
29	> 4,250,000					34.2	29

Notes:

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

Data Sources: MSA Cost tab and Finance Group for Book Life from email dated 3-16-2011.

**TABLE LRMCC-nc0.4  
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**NCO ANNUAL SERVICE, REGULATOR & METER (SRM) REPLACEMENT COST  
2013 TCAP**

2/22/2013 Update Filing

	Max Meter Flow Range	Meter & Regulator Replacement					Replacement Pipe & Installation					Number of Existing Customers	Total SRM Annual Cost Replacement
		Meter Type	M&R Cost	PVRR Factor	Replacement Investment	Replacement Rate	Service Type	Service Cost	PVRR Factor	Replacement Investment	Replacement Rate		
	A	B	C	D	E	F	G	H	I	J	K	L	M
	Cfh		(Dollars)	(Percent)	(Dollars)	(Percent)		(Dollars)	(Percent)	(Dollars)	(Percent)		(Dollars)
1	<i>Medium Pressure</i>												1
2	0-275	250	\$179	126.54%	\$227	2.8%	Poly-0.5"	\$7,339	126.47%	\$9,281	2.1%	787,366	\$157,156,713
3	276 - 425	425	\$369	126.54%	\$467	2.7%	Poly-0.5"	\$7,339	126.47%	\$9,281	2.1%	34,361	\$7,083,672
4	426-630	630	\$687	126.44%	\$868	2.9%	Poly-1"	\$13,290	126.47%	\$16,808	2.1%	-	\$0
5	631 - 800	8C	\$1,119	126.44%	\$1,415	3.0%	Poly-1"	\$13,290	126.47%	\$16,808	2.1%	14,339	\$5,607,269
6	801 - 1,100	11C	\$1,296	126.42%	\$1,638	3.0%	Poly-1"	\$13,290	126.47%	\$16,808	2.1%	4,575	\$1,821,196
7	1,101 - 1,500	15C	\$2,713	126.57%	\$3,434	2.7%	Poly-1"	\$13,290	126.47%	\$16,808	2.1%	2,070	\$912,619
8	1,501 - 2,000	2M	\$3,171	126.53%	\$4,013	2.8%	Poly-1"	\$13,290	126.47%	\$16,808	2.1%	1,175	\$538,775
9	2,001 - 3,000	3M	\$3,196	126.53%	\$4,044	2.8%	Poly-1"	\$13,290	126.47%	\$16,808	2.1%	2,026	\$931,190
10	3,001 - 5,000	5M	\$3,864	126.49%	\$4,888	2.8%	Poly-2"	\$31,305	126.47%	\$39,592	2.1%	836	\$802,518
11	5,001 - 7,000	7M	\$4,459	126.47%	\$5,639	2.9%	Poly-2"	\$31,305	126.47%	\$39,592	2.1%	346	\$340,430
12													12
13	<i>High Pressure</i>												13
14	0 - 940	425	\$2,395	126.60%	\$3,031	2.6%	Poly-1"	\$13,290	126.47%	\$16,808	2.1%	-	\$0
15	941 - 1,050	8C	\$3,544	126.51%	\$4,483	2.8%	Poly-1"	\$13,290	126.47%	\$16,808	2.1%	-	\$0
16	1,051 - 2,000	2M	\$3,582	126.51%	\$4,532	2.8%	Poly-1"	\$13,290	126.47%	\$16,808	2.1%	2	\$933
17	2,001 - 2,700	2M	\$3,582	126.51%	\$4,532	2.8%	Poly-1"	\$13,290	126.47%	\$16,808	2.1%	-	\$0
18	2,701 - 4,000	3M	\$3,607	126.51%	\$4,563	2.8%	Poly-2"	\$31,305	126.47%	\$39,592	2.1%	1	\$934
19	4,001 - 6,600	5M	\$4,744	126.47%	\$6,000	2.9%	Poly-2"	\$31,305	126.47%	\$39,592	2.1%	3	\$2,930
20	6,601 - 9,200	7M	\$5,339	126.46%	\$6,752	2.9%	Poly-2"	\$31,305	126.47%	\$39,592	2.1%	5	\$4,999
21	9,201 - 14,500	11M	\$5,829	126.46%	\$7,372	2.9%	Poly-3"	\$37,502	126.47%	\$47,431	2.1%	337	\$403,677
22	14,501 - 21,400	16M	\$8,248	126.48%	\$10,431	2.9%	Poly-3"	\$37,502	126.47%	\$47,431	2.1%	179	\$229,216
23	21,401 - 24,000	Turbine	\$47,219	126.48%	\$59,724	2.9%	Poly-4"	\$35,975	126.47%	\$45,499	2.1%	39	\$102,927
24	24,001 - 46,000	Turbine	\$52,323	126.48%	\$66,176	2.9%	Poly-4"	\$35,975	126.47%	\$45,499	2.1%	35	\$99,330
25	46,001 - 79,000	Turbine	\$66,389	126.46%	\$83,958	2.9%	Steel-4"	\$122,409	126.47%	\$154,816	2.1%	18	\$99,161
26	79,001 - 377,000	Turbine	\$86,426	126.45%	\$109,288	2.9%	Steel-6"	\$149,297	126.47%	\$188,822	2.1%	9	\$62,405
27	377,001 - 600,000	Turbine	\$0	126.45%	\$0	2.9%	Steel-8"	\$152,545	126.47%	\$192,929	2.1%	-	\$0
28	600,001 - 4,250,000	Turbine	\$0	126.45%	\$0	2.9%	Steel-16"		126.47%	\$0	2.1%	-	\$0
29	> 4,250,000	Turbine	\$0	126.45%	\$0	2.9%	Steel-24"		126.47%	\$0	2.1%	-	\$0

Notes:

- Col. (E) = Col. (C) x Col. (D).
- Col. (J) = Col. (H) x Col. (I).
- For Rows (2) - (3): Col. (M) = [Col. (E) x Col. (L) x Col. (F) x [1 - Note 6]] + [Col. (J) x Col. (L) x Col. (K)]
- For Rows (4) - (28): Col. (M) = [Col. (E) x Col. (L) x Col. (F) x [1 - Note 7]] + [Col. (J) x Col. (L) x Col. (K)]
- Col. (L) Number of Existing Customers = 2006 Forecast Customers (Total at Inception of BCAP Period) x Historical Proportion of Total @ Meter Flow.
- 0.14% = Percent of small MSA's (Flow = 0 - 375 Cfh) replaced with refurbished meter - provided by SDG&E Gas Engineering Dept.
- 2.28% = Percent of other MSA's (Flow > 375 Cfh) replaced with refurbished meter - provided by SDG&E Gas Engineering Dept.

Data Sources: tabs: MSA Cost, MSA PVRR, MSA NCOp1, MSA Life, Factors.

Data Sources: SDG&E Gas Engineering updated Service Cost Column I & Finance Group updated Replacement Rate Column L 3/9/11

**TABLE LRMCC-nco.5**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**  
**FORECAST NEW HOOKUPS FOR 2013, 2014, 2015**  
**2013 TCAP**

2/22/2013 Update Filing

	Customer Class	Year-End		2013 Hookups	Year-End		2014 Hookups	Year-End		2015 Hookups	Average Annual New Hookups
		2012	2013		2013	2014		2014	2015		
	A	B	C	D	E	F	G	E	F	G	H
1	Residential	833,520	843,654	10,135	843,654	855,422	11,768	855,422	868,153	12,731	11,544
2	NGV	30	31	1	31	32	1	32	32	-	1
3	Core C&I - GN3	30,243	30,301	57	30,301	30,366	65	30,366	30,447	81	68
4	Noncore C&I - GTNC	63	63	-	63	63	-	63	63	-	-
5	EG - Cogen	65	65	-	65	67	2	67	67	-	1
6	Power Plants	-	-	-	-	-	-	-	-	-	-
7											
8	Total Customers	863,921	874,114	10,193	874,114	885,950	11,836	885,950	898,761	12,812	11,614

Notes:

1. Col. (D) = Col. (C) - Col (B).
2. Col. (G) = Col. (F) - Col (E).
3. Col. (J) = Col. (I) - Col (H).
4. Col. (K) = Average Col. (D) & Col (G) & Col (J).
5. SDG&E Gas BCAP Customer Forecast from Prepared Testimony of Demand Forecasting witness.

TABLE LRMCC-nco.6  
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

FORECAST NEW HOOKUPS BY METER TYPE BY CUSTOMER CLASS  
2013 TCAP

2/22/2013 Update Filing

	Max Meter Flow Range	Meter Type	Res	NGV	GN-3	Total Core	GTNC			EG			Total Noncore	System Total	
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	N	O	
	Cfh														
1	<i>Medium Pressure</i>														1
2	0-275	250	10,898	0	38	10,937	-	-	-	-	-	-	-	10,937	2
3	276 - 425	425	434	0	8	442	-	-	-	-	-	-	-	442	3
4	426-630	630	-	-	-	-	-	-	-	-	-	-	-	-	4
5	631 - 800	8C	153	0	7	160	-	-	-	0	-	0	0	160	5
6	801 - 1,100	11C	35	0	4	40	-	-	-	-	-	-	-	40	6
7	1,101 - 1,500	15C	11	-	3	14	-	-	-	-	-	-	-	14	7
8	1,501 - 2,000	2M	3	0	2	5	-	-	-	0	-	0	0	5	8
9	2,001 - 3,000	3M	5	0	3	8	-	-	-	0	-	0	0	9	9
10	3,001 - 5,000	5M	2	0	1	4	-	-	-	0	-	0	0	4	10
11	5,001 - 7,000	7M	1	0	1	1	-	-	-	0	-	0	0	1	11
12															12
13	<i>High Pressure</i>														13
14	0 - 940	425	-	-	-	-	-	-	-	-	-	-	-	-	14
15	941 - 1,050	8C	-	-	-	-	-	-	-	-	-	-	-	-	15
16	1,051 - 2,000	2M	-	0	0	0	-	-	-	-	-	-	-	0	16
17	2,001 - 2,700	2M	-	-	-	-	-	-	-	-	-	-	-	-	17
18	2,701 - 4,000	3M	0	-	-	0	-	-	-	-	-	-	-	0	18
19	4,001 - 6,600	5M	-	0	-	0	-	-	-	0	-	0	0	0	19
20	6,601 - 9,200	7M	-	-	-	-	-	-	-	0	-	0	0	0	20
21	9,201 - 14,500	11M	1	0	0	2	-	-	-	0	-	0	0	2	21
22	14,501 - 21,400	16M	1	0	0	1	-	-	-	0	-	0	0	1	22
23	21,401 - 24,000	Turbine	0	-	0	0	-	-	-	-	-	-	-	0	23
24	24,001 - 46,000	Turbine	0	0	0	0	-	-	-	0	-	0	0	0	24
25	46,001 - 79,000	Turbine	-	0	0	0	-	-	-	0	-	0	0	0	25
26	79,001 - 377,000	Turbine	-	-	0	0	-	-	-	0	-	0	0	0	26
27	377,001 - 600,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	27
28	600,001 - 4,250,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	28
29	> 4,250,000	Turbine	-	-	-	-	-	-	-	-	-	-	-	-	29
30															30
31	Total Customers		11,544	1	68	11,613	-	-	-	1	-	1	1	11,614	31

Note:

1. New Hookups Forecast on Basis on Average Annual Net Customer Gain for 2013 - 2015 TCAP Period.

verify 11,544 1 68 11,613 - - - 1 - 1 1 11,614

Data Sources: Tabs: MSA Cost, MSAlloc v2

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

NCO ANNUALIZED SRM NEW HOOKUP & NO REPLACEMENT INVESTMENT BY CUSTOMER CLASS  
2013 TCAP

2/22/2013 Update Filing

	Max Meter Flow Range	Meter Type	Per Customer SRM Invstmt	Res	NGV	GN-3	Total Core	GTNC			EG			Total Noncore	System Total
								MPD	HPD	Total	< 3 MM	> 3 MM	Total		
	A	B	C	D	E	F	G	H	I	J	K	L	M	O	P
	(Dollars)														
1	<i>Medium Pressure</i>														
2	0-275	250	\$38	\$30,276,197	\$299	\$647,476	\$30,923,972	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,923,972
3	276 - 425	425	\$38	\$1,223,753	\$51	\$130,638	\$1,354,442	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,354,442
4	426-630	630	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	631 - 800	8C	\$46	\$518,884	\$61	\$148,262	\$667,206	\$0	\$0	\$0	\$47	\$0	\$47	\$47	\$667,253
6	801 - 1,100	11C	\$39	\$100,621	\$26	\$73,136	\$173,783	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$173,783
7	1,101 - 1,500	15C	\$43	\$34,320	\$0	\$49,950	\$84,270	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$84,270
8	1,501 - 2,000	2M	\$31	\$6,608	\$82	\$26,904	\$33,594	\$0	\$0	\$0	\$158	\$0	\$158	\$158	\$33,752
9	2,001 - 3,000	3M	\$31	\$11,250	\$82	\$46,504	\$57,835	\$0	\$0	\$0	\$95	\$0	\$95	\$95	\$57,930
10	3,001 - 5,000	5M	\$54	\$8,548	\$247	\$32,131	\$40,926	\$60	\$0	\$60	\$438	\$0	\$438	\$498	\$41,425
11	5,001 - 7,000	7M	\$54	\$3,325	\$36	\$13,652	\$17,013	\$121	\$0	\$121	\$110	\$0	\$110	\$231	\$17,244
12	<i>High Pressure</i>														
13	0 - 940	425	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14	941 - 1,050	8C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	1,051 - 2,000	2M	\$75	\$0	\$49	\$66	\$116	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$116
16	2,001 - 2,700	2M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
17	2,701 - 4,000	3M	\$149	\$148	\$0	\$0	\$148	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$148
18	4,001 - 6,600	5M	\$126	\$0	\$83	\$0	\$83	\$0	\$126	\$126	\$129	\$0	\$129	\$256	\$339
19	6,601 - 9,200	7M	\$72	\$0	\$0	\$0	\$0	\$0	\$144	\$144	\$147	\$72	\$220	\$364	\$364
20	9,201 - 14,500	11M	\$96	\$7,344	\$126	\$21,228	\$28,698	\$970	\$96	\$1,066	\$490	\$0	\$490	\$1,555	\$30,254
21	14,501 - 21,400	16M	\$122	\$4,619	\$644	\$12,383	\$17,646	\$1,373	\$122	\$1,495	\$874	\$488	\$1,362	\$2,857	\$20,503
22	21,401 - 24,000	Turbine	\$320	\$2,865	\$0	\$5,407	\$8,273	\$3,598	\$320	\$3,917	\$0	\$320	\$320	\$4,237	\$12,510
23	24,001 - 46,000	Turbine	\$282	\$560	\$372	\$2,758	\$3,689	\$3,169	\$282	\$3,451	\$864	\$1,973	\$2,837	\$6,288	\$9,977
24	46,001 - 79,000	Turbine	\$962	\$0	\$635	\$1,712	\$2,347	\$5,411	\$962	\$6,373	\$6,885	\$1,925	\$8,810	\$15,183	\$17,530
25	79,001 - 377,000	Turbine	\$826	\$0	\$0	\$735	\$735	\$930	\$826	\$1,756	\$2,535	\$2,480	\$5,015	\$6,771	\$7,506
26	377,001 - 600,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27	600,001 - 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
28	> 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
29	Total			\$32,199,043	\$2,791	\$1,212,944	\$33,414,778	\$15,632	\$2,878	\$18,511	\$12,773	\$7,257	\$20,031	\$38,541	\$33,453,319
30	Forecast Customers			850,344	32	30,423	880,799	54	9	63	48	18	66	129	880,928
31	Average SRM Cost			\$38	\$88	\$40	\$38	\$289	\$320	\$294	\$266	\$403	\$303	\$299	\$38

Notes:

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

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

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

NCO ANNUALIZED SRM NEW HOOKUP & REPLACEMENT INVESTMENT BY CUSTOMER CLASS  
2013 TCAP

2/22/2013 Update Filing

	Max Meter Flow Range	Meter Type	Per Customer SRM Invstmt	Res	NGV	GN-3	Total Core	GTNC			EG			Total Noncore	System Total	
								MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	M	O	P	
	Cth							(Dollars)								
1	<i>Medium Pressure</i>															1
2	0-275	250	\$229	\$184,140,895	\$1,816	\$3,937,974	\$188,080,685	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$188,080,685	
3	276 - 425	425	\$239	\$7,623,929	\$315	\$813,870	\$8,438,113	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,438,113	
	426-630	630	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4	631 - 800	8C	\$434	\$4,879,327	\$573	\$1,394,179	\$6,274,079	\$0	\$0	\$0	\$444	\$0	\$444	\$444	\$6,274,523	
5	801 - 1,100	11C	\$446	\$1,155,098	\$294	\$839,586	\$1,994,979	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,994,979	
6	1,101 - 1,500	15C	\$505	\$405,992	\$0	\$590,897	\$996,889	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$996,889	
7	1,501 - 2,000	2M	\$525	\$112,097	\$1,386	\$456,358	\$569,842	\$0	\$0	\$0	\$2,686	\$0	\$2,686	\$2,686	\$572,528	
8	2,001 - 3,000	3M	\$528	\$192,084	\$1,393	\$794,024	\$987,501	\$0	\$0	\$0	\$1,619	\$0	\$1,619	\$1,619	\$989,120	
9	3,001 - 5,000	5M	\$1,091	\$174,146	\$5,040	\$654,602	\$833,788	\$1,228	\$0	\$1,228	\$8,927	\$0	\$8,927	\$10,155	\$843,942	
10	5,001 - 7,000	7M	\$1,116	\$68,974	\$737	\$283,168	\$352,879	\$2,512	\$0	\$2,512	\$2,283	\$0	\$2,283	\$4,795	\$357,674	
11																
12	<i>High Pressure</i>															
13	0 - 940	425	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
14	941 - 1,050	8C	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
15	1,051 - 2,000	2M	\$677	\$0	\$447	\$602	\$1,049	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,049	
16	2,001 - 2,700	2M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
17	2,701 - 4,000	3M	\$1,089	\$1,083	\$0	\$0	\$1,083	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,083	
18	4,001 - 6,600	5M	\$1,219	\$0	\$804	\$0	\$804	\$0	\$1,219	\$1,219	\$1,246	\$0	\$1,246	\$2,465	\$3,269	
19	6,601 - 9,200	7M	\$1,063	\$0	\$0	\$0	\$0	\$0	\$2,126	\$2,126	\$2,174	\$1,063	\$3,237	\$5,363	\$5,363	
20	9,201 - 14,500	11M	\$1,374	\$105,337	\$1,813	\$304,471	\$411,621	\$13,912	\$1,374	\$15,286	\$7,024	\$0	\$7,024	\$22,310	\$433,931	
21	14,501 - 21,400	16M	\$1,487	\$56,254	\$7,846	\$150,820	\$214,920	\$16,724	\$1,487	\$18,211	\$10,640	\$5,948	\$16,588	\$34,799	\$249,719	
22	21,401 - 24,000	Turbine	\$2,951	\$26,441	\$0	\$49,896	\$76,337	\$33,197	\$2,951	\$36,148	\$0	\$2,952	\$2,952	\$39,100	\$115,437	
23	24,001 - 46,000	Turbine	\$3,086	\$6,134	\$4,072	\$30,214	\$40,420	\$34,722	\$3,086	\$37,809	\$9,467	\$21,611	\$31,078	\$68,886	\$109,307	
24	46,001 - 79,000	Turbine	\$6,404	\$0	\$4,225	\$11,398	\$15,623	\$36,021	\$6,404	\$42,425	\$45,833	\$12,811	\$58,644	\$101,069	\$116,692	
25	79,001 - 377,000	Turbine	\$7,697	\$0	\$0	\$6,850	\$6,850	\$8,659	\$7,697	\$16,356	\$23,609	\$23,097	\$46,706	\$63,062	\$69,911	
26	377,001 - 600,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
27	600,001 - 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
28	> 4,250,000	Turbine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
29	Total			\$198,947,792	\$30,760	\$10,318,909	\$209,297,461	\$146,975	\$26,343	\$173,318	\$115,952	\$67,482	\$183,434	\$356,752	\$209,654,213	
30	Forecast Customers			850,344	32	30,423	880,799	54	9	63	48	18	66	129	880,928	
31	Average SRM Cost				\$234	\$971	\$339	\$238	\$2,722	\$2,927	\$2,751	\$2,413	\$3,748	\$2,777	\$238	
32																

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

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

**SAN DIEGO GAS & ELECTRIC COMPANY**  
**2013 TCAP**

**2/22/2013 Update Filing**

**Section 2**

**Long Run Marginal Distribution Cost Model**

**Workpapers to the Prepared Written Testimony of  
Joseph Mock**

SDGE gas 2013 TCAP

SDG&E Cost Allocation LRMC Distribution Cost Results

[2/22/2013 Update Filing](#)

<b>MARGINAL COST COMPONENTS \$000's</b>		<b>Source</b>
Medium Pressure Distribution Costs \$/mmcf	\$211.00	Dist MC
High Pressure Distribution Costs \$/mmcf	\$23.84	Dist MC

**TABLE LRMD-1**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**  
**LRMC O&M Loaders**  
**2013 TCAP**  
**2/22/2013 Update Filing**

	<b>Input</b>	<b>Source (1)</b>
O&M w/o A&G HPD	\$408.87	LF-O&M Tab
O&M w/o A&G MPD	\$9,389	LF-O&M Tab
Marginal Percent of O&M HPD	70%	Dist O&M MC
Marginal Percent of O&M MPD	70%	Dist O&M MC
Marginal A&G/Payroll Taxes Loading Factor as a % of O&M expenses	30.68%	LF-A&G Tab
General Plant Loading Factor as a % of O&M expenses	10.54%	LF-GPL Tab
Annualized M&S Customer Related Costs \$/yr	\$136,810	LF-M&S Tab
Annualized M&S HDP Distribution Load Related Costs \$/yr	\$23,357	LF-M&S Tab
Annualized M&S MDP Distribution Load Related Costs \$/yr	\$159,327	LF-M&S Tab
O&M WEF for Escalation	1.079	O&M WEF Tab

**Notes:**

(1) from "SDGE OM Loaders" file:

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

**FORECAST DISTRIBUTION INVESTMENTS  
2013 TCAP  
2/22/2013 Update Filing**

Project #	Distribution Budget		Project Type / Function	Total Capital Budget - Distribution (M\$)					
				2011	2012	2013	2014	2015	
A	B	C	D	E	F	G	H		
1	500	New Gas Customers	New Business	\$8,000	\$8,240	\$8,870	\$9,533	\$9,944	1
2	501	Gas System Minor Add./Reloc./Retire.	New Business	\$2,050	\$2,153	\$2,260	\$2,373	\$2,492	2
3	502	Gas Meters and Regulators	New Business	\$8,650	\$10,400	\$11,100	\$11,900	\$12,200	3
4	503	Gas Distribution System Reinforcement	Replacement	\$3,147	\$3,056	\$3,318	\$4,418	\$4,680	4
5	504	Gas Distribution Easements	New Business	\$70	\$30	\$30	\$30	\$30	5
6	505	Street and Highway Relocations	Replacement	\$8,440	\$8,930	\$9,445	\$9,985	\$10,552	6
7	506	Gas Distribution Tools and Equipment	Replacement	\$213	\$213	\$224	\$235	\$247	7
8	507	Code Compliance - Distribution	Replacement	\$1,650	\$1,700	\$1,750	\$1,740	\$1,792	8
9	508	Replacement of Mains & Services	Replacement	\$3,070	\$2,000	\$2,000	\$2,000	\$2,000	9
10	509	Cathodic Protection	20% New / 80% Rplcmt?	\$849	\$1,027	\$1,027	\$1,027	\$1,027	10
11	510	Gas Distr. Sys. Rel. & Safety Improvements	Replacement	\$744	\$2,386	\$2,790	\$2,790	\$2,790	11
12	xx	Pipeline Integrity, Camp Pendleton, DIMP, and Skill City		\$4,609	\$1,000	\$500	\$500	\$340	12
13									13
14		= Total		\$41,492	\$41,135	\$43,314	\$46,531	\$48,094	14
15									15
16		<b><i>New Business &amp; Capacity Development Projects Due to Customer Growth</i></b>							16
17									17
18	500	New Gas Customers	New Business	\$8,000	\$8,240	\$8,870	\$9,533	\$9,944	18
19	501	Gas System Minor Add./Reloc./Retire.	New Business						19
20	502	Gas Meters and Regulators	New Business	\$8,650	\$10,400	\$11,100	\$11,900	\$12,200	20
21	503	Gas Distribution System Reinforcement	Replacement	\$3,147	\$3,056	\$3,318	\$4,418	\$4,680	21
22	504	Gas Distribution Easements	New Business	\$70	\$30	\$30	\$30	\$30	22
23	505	Street and Highway Relocations	Replacement						23
24	506	Gas Distribution Tools and Equipment	Replacement						24
25	507	Code Compliance - Distribution	Replacement						25
26	508	Replacement of Mains & Services	Replacement						26
27	509	Cathodic Protection	20% New / 80% Rplcmt?						27
28	510	Gas Distr. Sys. Rel. & Safety Improvements	Replacement						28
29									29
30									30
31		= Total Load Growth Projects		\$19,867	\$21,726	\$23,318	\$25,881	\$26,854	31
32									32
33		<b>Proportion of Incremental Load-Related Investment</b>		<b>47.9%</b>	<b>52.8%</b>	<b>53.8%</b>	<b>55.6%</b>	<b>55.8%</b>	33

Note:

- Expenditures provided by SDG&E Gas Engineering Department, Bryan Clementson's group (sent 5-09-2011), and shown in nominal terms for each particular year shown.

**TABLE LRMD-3**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**  
**DISTRIBUTION PLANT WEIGHTED AVERAGE ECONOMIC INDEX**  
**2013 TCAP**  
**2/22/2013 Update Filing**

	Year	FERC Account					Weighted Average	
		375	376 - CI	376 - S	376 - P	378		
	A	B	C	D	E	F	G	
1	2001	0.7111	0.5369	0.5629	0.7366	0.6563	0.6759	1
2	2002	0.7321	0.5678	0.5735	0.7533	0.6706	0.6905	2
3	2003	0.7537	0.5803	0.5964	0.7660	0.6731	0.7064	3
4	2004	0.7983	0.5935	0.7080	0.7914	0.7682	0.7626	4
5	2005	0.8373	0.6453	0.8527	0.8411	0.8666	0.8456	5
6	2006	0.8705	0.7027	0.8883	0.8847	0.9025	0.8864	6
7	2007	0.9206	0.7640	0.8595	0.9274	0.9076	0.9039	7
8	2008	0.9683	0.8644	0.9827	0.9724	1.0100	0.9767	8
9	2009	0.9597	0.9620	0.9630	1.0122	1.0008	0.9952	9
10	2010	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	10
11	2011	1.0449	1.0051	1.0311	1.0280	1.0257	1.0290	11
12	2012	1.0609	1.0225	1.0427	1.0629	1.0361	1.0554	12
13	2013	1.0677	1.0518	1.0884	1.0998	1.0628	1.0951	13
14	2014	1.1016	1.0697	1.1339	1.1246	1.1010	1.1272	14
15	2015	1.1353	1.0926	1.1614	1.1414	1.1331	1.1480	15
16								16
17	2010 Plant (M\$)	\$43	\$0	\$184,782	\$347,485	\$12,422	\$544,733	17
18	2010 Plant (%)	0%	0%	34%	64%	2%	100%	18

Notes:

1. Economic Factors for distribution plant from Handy-Whitman Gas Utility Construction Cost Indexes, Pacific Region - provided by Demand Forecast
2. Plant Investment totals from SDG&E gas FERC Form 2 for year ending December 31, 2010 pp. 208 - 209.  
 2010 Plant Investment from FERC Form 2 for Year Ended December 31, 2010, Page 209. Proportion Mains between Steel & Plastic from file "g376 376\_mains\_Dec10\_REG-10-14.xls" sent via e-mail dated 5/26/11.

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

**DISTRIBUTION REGRESSION INVESTMENTS  
2013 TCAP  
2/22/2013 Update Filing**

	Year	Incremental Investment	Demand-Rel Portion	MPD Portion	HPD Portion	Handy-Whitman Index	Adjusted MPD	Adjusted HPD	MPD Cumulative	HPD Cumulative	
	A	B	C	D	E	F	G	H	I	J	
1	2001	\$12,828	\$7,276	\$6,346	\$930	0.6759	\$10,282	\$1,507	\$10,282	\$1,507	1
2	2002	\$12,211	\$5,717	\$4,986	\$731	0.6905	\$7,908	\$1,159	\$18,191	\$2,667	2
3	2003	\$16,838	\$9,101	\$7,937	\$1,164	0.7064	\$12,306	\$1,804	\$30,496	\$4,471	3
4	2004	\$13,593	\$6,085	\$5,307	\$778	0.7626	\$7,621	\$1,117	\$38,118	\$5,588	4
5	2005	\$13,287	\$4,877	\$4,253	\$624	0.8456	\$5,508	\$808	\$43,626	\$6,395	5
6	2006	\$17,261	\$6,638	\$5,789	\$849	0.8864	\$7,153	\$1,049	\$50,779	\$7,444	6
7	2007	\$16,964	\$7,772	\$6,778	\$994	0.9039	\$8,213	\$1,204	\$58,992	\$8,648	7
8	2008	\$11,568	\$4,595	\$4,008	\$587	0.9767	\$4,493	\$659	\$63,485	\$9,307	8
9	2009	\$16,530	\$6,659	\$5,808	\$851	0.9952	\$6,391	\$937	\$69,875	\$10,243	9
10	2010	\$16,472	\$5,569	\$4,857	\$712	1.0000	\$5,319	\$780	\$75,194	\$11,023	10
11											11
12	2011	\$19,867	\$9,030	\$7,875	\$1,155	1.0290	\$8,381	\$1,229	\$83,576	\$12,252	12
13	2012	\$21,726	\$9,875	\$8,612	\$1,263	1.0554	\$8,936	\$1,310	\$92,512	\$13,562	13
14	2013	\$23,318	\$10,598	\$9,243	\$1,355	1.0951	\$9,243	\$1,355	\$101,755	\$14,917	14
15	2014	\$25,881	\$11,763	\$10,259	\$1,504	1.1272	\$9,967	\$1,461	\$111,722	\$16,378	15
16	2015	\$26,854	\$12,206	\$10,645	\$1,561	1.1480	\$10,155	\$1,489	\$121,877	\$17,867	16

Notes:

1. Cols. (B) - (E) expressed in nominal \$'s.
2. Cols. (G) - (J) expressed in Year 2013 \$'s.
3. Cols. (B) and (C) provided by SDG&E Gas Distribution department, 5/9/2011
4. Col. (B), Rows (12) - (16) from Workpapers to Testimony Table "LRMDC-2" (tab Dst Fcst)
5. 12.79% = Historical HPD Plant Investment Allocation Factor = HPD Mains Mileage Weighted by Net Plant Investment.

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

**HP DISTRIBUTION ANNUAL CUSTOMER GAIN  
2013 TCAP  
2/22/2013 Update Filing**

	Year	Core	Noncore	System	
	A	B	C	F	
1	2000	756,067	129	756,196	1
2					2
3	2001	768,799	93	768,892	3
4	Gain '01	12,731	(36)	12,695	4
5					5
6	2002	782,412	94	782,506	6
7	Gain '02	13,614	1	13,615	7
8					8
9	2003	794,746	123	794,869	9
10	Gain '03	12,334	29	12,363	10
11					11
12	2004	805,645	120	805,765	12
13	Gain '04	10,899	(3)	10,896	13
14					14
15	2005	817,987	120	818,107	15
16	Gain '05	12,341	-	12,341	16
17					17
18	2006	827,956	117	828,073	18
19	Gain '06	9,969	(3)	9,966	19
20					20
21	2007	834,901	116	835,017	21
22	Gain '07	6,946	(1)	6,945	22
23					23
24	2008	838,731	118	838,849	24
25	Gain '08	3,830	2	3,832	25
26					26
27	2009	842,323	117	842,440	27
28	Gain '09	3,591	(1)	3,590	28
29					29
30	2010	847,184	97	847,281	30
31	Gain '10	4,861	(20)	4,841	31
32					32
33					33
34	2011	852,729.14	99	852,828	34
35	Gain '11	5,545	2	5,547	35
36					36
37	2012	859,996.59	99	860,096	37
38	Gain '12	7,267	0	7,268	38
39					39
40	2013	869,227	99	869,326	40
41	Gain '13	9,230	-	9,230	41
42					42
43	2014	880,386	100	880,486	43
44	Gain '14	11,160	1	11,160	44
45					45
46	2015	892,785	101	892,886	46
47	Gain '15	12,399	1	12,400	47
48					48
49					49
50					50

Notes:

1. For purposes of this analysis, customer gain defined as number of a particular year minus number in prece
2. Updated 4-5-2012

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

**HPD PEAK-DAY REGRESSION DETERMINANTS  
2013 TCAP  
2/22/2013 Update Filing**

	Year	Res	NGV	GN-3	Core	GTNC		EG		Power Plant	Noncore	Total	HPD Incremental	HPD Cumulative Incremental	
						MPD	HPD	< 3 MM	> 3 MM						
	A	B	C	D	E	F	G	H	I		J	K	L	M	
	(MMcfd)														
1	<b>1-35 PEAK-DAY (1-35 YEAR PEAK-DAY OCCURRENCE)</b>														1
2															2
3	1-35 PD Factor														3
4															4
5	2001	263	2	83	348	10	4	5	33	54	106	454	7	7	5
6	2002	269	2	83	354	12	5	6	40	39	102	455	8	15	6
7	2003	278	2	86	366	10	3	6	40	36	95	461	7	23	7
8	2004	278	2	87	367	10	4	6	43	55	118	485	7	29	8
9	2005	271	3	83	357	12	5	7	37	32	93	450	7	36	9
10	2006	277	3	86	366	13	7	7	31	17	74	440	5	41	10
11	2007	276	3	88	367	10	5	5	40	23	83	450	4	45	11
12	2008	277	3	85	365	11	6	5	39	11	71	436	2	47	12
13	2009	267	3	84	353	11	5	5	48	4	74	427	2	49	13
14	2010	272	3	91	366	8	2	2	22	1	35	401	2	51	14
15															15
16	2011	279	3	90	372	6	2	6	23	-	37	410	3	54	16
17	2012	279	3	89	371	6	2	3	26	-	38	409	3	57	17
18	2013	275	3	88	366	7	2	1	26	-	36	402	4	61	18
19	2014	275	3	87	365	7	2	1	26	-	36	401	5	67	19
20	2015	275	3	85	364	7	2	4	20	-	33	397	6	72	20
21															21
22															22
23															23
24															24
25															25

Notes

- Information provided by Demand Forecast witnesses

TABLE LRMDC-7  
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

MP DISTRIBUTION ANNUAL CUSTOMER GAIN  
2013 TCAP  
2/22/2013 Update Filing

Year	Core	Noncore	System		
A	B	C	F		
1	2000	756,056	100	756,156	1
2					2
3	2001	768,788	71	768,859	3
4	Gain '01	12,731	(28)	12,703	4
5					5
6	2002	782,401	72	782,473	6
7	Gain '02	13,613	1	13,614	7
8					8
9	2003	794,735	95	794,829	9
10	Gain '03	12,334	22	12,356	10
11					11
12	2004	805,634	92	805,726	12
13	Gain '04	10,899	(2)	10,897	13
14					14
15	2005	817,975	92	818,067	15
16	Gain '05	12,341	-	12,341	16
17					17
18	2006	827,944	90	828,034	18
19	Gain '06	9,969	(2)	9,966	19
20					20
21	2007	834,889	89	834,979	21
22	Gain '07	6,946	(1)	6,945	22
23					23
24	2008	838,719	91	838,810	24
25	Gain '08	3,830	2	3,832	25
26					26
27	2009	842,311	90	842,401	27
28	Gain '09	3,591	(1)	3,591	28
29					29
30	2010	847,172	74	847,246	30
31	Gain '10	4,861	(16)	4,846	31
32					32
33					33
34	2011	852,717	76	852,793	34
35	Gain '11	5,545	2	5,547	35
36					36
37	2012	859,984	76	860,061	37
38	Gain '12	7,267	0	7,266	38
39					39
40	2013	869,214	76	869,291	40
41	Gain '13	9,230	-	9,230	41
42					42
43	2014	880,374	77	880,451	43
44	Gain '14	11,159	1	11,160	44
45					45
46	2015	892,772	78	892,850	46
47	Gain '15	12,399	0	12,399	47
48					48
49	MP Cust. Factor:	99.999%	76.996%		49

Notes:

- For purposes of this analysis, customer gain defined as number of a particular year minus number
- Information provided by Demand Forecast witness

MP Cust. Factor:	Core	NonCore	Sources
# Customers on MPD	880,787	77	2013TCAP Demand Forecast -
Cumulative # on HPD	880,799	100	2013TCAP Demand Forecast -
MPD as % of Cumulative HPD	99.999%	76.996%	

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

**MPD PEAK-DAY REGRESSION DETERMINANTS  
2013 TCAP  
2/22/2013 Update Filing**

	Year	Res	NGV	GN-3	Core	GTNC		EG		Noncore	Total	MPD Incremental	MPD Cumulative Incremental
						MPD	HPD	< 3 MM	> 3 MM				
	A	B	C	D	E	F	G	H	I	J	K	L	M
	(MMcfd)												
<b>1</b>	<b>1-35 PEAK-DAY (1-35 YEAR PEAK-DAY OCCURRENCE)</b>												
<b>2</b>													
<b>3</b>	2001	263	1	81	344	6	0	3	0	9	353	6	6
<b>4</b>	2002	268	1	81	350	7	0	4	0	10	360	6	12
<b>5</b>	2003	278	1	83	362	6	0	4	0	10	372	6	18
<b>6</b>	2004	278	1	85	363	6	0	3	0	9	372	5	23
<b>7</b>	2005	271	1	81	353	6	0	3	0	10	363	5	28
<b>8</b>	2006	277	1	83	361	6	0	4	0	10	371	4	33
<b>9</b>	2007	276	1	86	362	5	0	3	0	8	370	3	36
<b>10</b>	2008	277	1	83	361	5	0	3	0	8	369	2	38
<b>11</b>	2009	267	1	81	349	5	0	3	0	8	357	2	39
<b>12</b>	2010	271	1	89	361	6	0	1	2	10	370	2	41
<b>13</b>													
<b>14</b>	2011	279	3	88	370	6	0	3	3	12	382	2	44
<b>15</b>	2012	279	3	87	368	6	0	2	3	11	379	3	47
<b>16</b>	2013	274	3	85	363	7	0	1	3	10	373	4	51
<b>17</b>	2014	275	3	84	362	7	0	1	3	10	372	5	56
<b>18</b>	2015	275	3	83	361	7	0	2	2	11	372	5	61
<b>19</b>													
<b>20</b>													

Note:

- Information provided by Demand Forecast witness Mr. Wetzel. (UPDATE from Bruce Wetzel for 2013 BCAP 4-5-2012)

**TABLE LRMD-9**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**  
**Distribution Data for Regression Analysis**  
**Capital Investment and Marginal Demand Measures**  
**2/22/2013 Update Filing**

Year	Distribution Investment			Distribution Demand Measures	
	Cumulative Total Distribution	Cumulative HPD \$000's	Cumulative MPD \$000's	Cumulative HPD mmcf/ peak month	Cumulative MPD mmcf/ peak day
2001	\$11,790	\$1,507	\$10,282	7	6
2002	\$20,857	\$2,667	\$18,191	15	12
2003	\$34,967	\$4,471	\$30,496	23	18
2004	\$43,706	\$5,588	\$38,118	29	23
2005	\$50,022	\$6,395	\$43,626	36	28
2006	\$58,223	\$7,444	\$50,779	41	33
2007	\$67,639	\$8,648	\$58,992	45	36
2008	\$72,791	\$9,307	\$63,485	47	38
2009	\$80,119	\$10,243	\$69,875	49	39
2010	\$86,218	\$11,023	\$75,194	51	41
2011	\$95,828	\$12,252	\$83,576	54	44
2012	\$106,074	\$13,562	\$92,512	57	47
2013	\$116,672	\$14,917	\$101,755	61	51
2014	\$128,100	\$16,378	\$111,722	67	56
2015	\$139,744	\$17,867	\$121,877	72	61
<b>Marginal Investment</b>		<b>\$259.97</b>	<b>\$2,104.47</b>		

TABLE LRMD-9 (Cont)  
 SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT  
 Distribution Data for Regression Analysis  
 Capital Investment and Marginal Demand Measures  
 2/22/2013 Update Filing

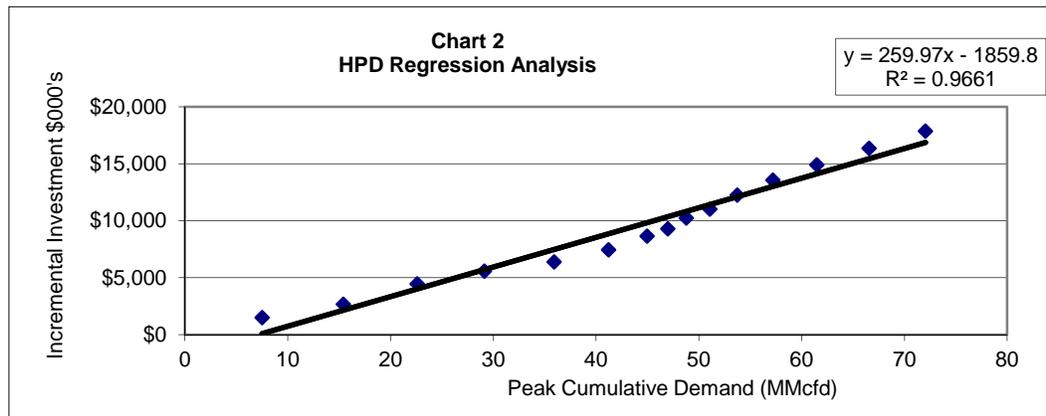
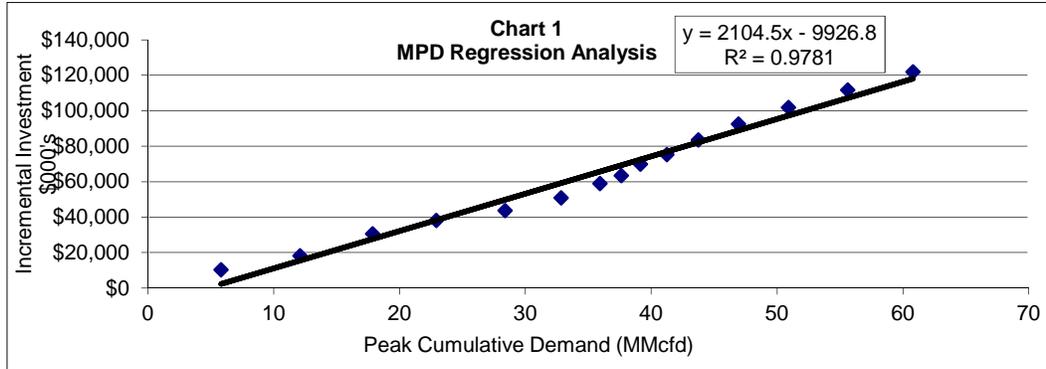


TABLE LRMDC-10  
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT  
FULLY LOADED DISTRIBUTION LRMCs  
2013 TCAP  
2/22/2013 Update Filing

	Distribution Marginal Cost	Source
<b><u>Marginal Cost of High Pressure Distribution</u></b>		
Marginal Investment Cost \$/mcf	\$259.97	Regression
RECC Factor	8.73%	2010 RECC for 2013TCAP file "SDGE WEIGHTED AVG RECCS.xls"
<b>Annualized Investment Cost \$/mcf</b>	<b>\$22.69</b>	
<b><u>O&amp;M Expenses:</u></b>		
O&M w/o A&G HPD \$000's	\$409	Loader Input
Marginal Percent of O&M HPD	70%	Loader Input
HPD O&M Expense \$000's	\$284	
2010 1-35 Peak-Day Demand mmcf	401	HPD PD Det
HPD O&M \$/mcf	\$0.71	
O&M WEF for Escalation	1.08	Loader Input
<b>O&amp;M Cost \$/mcf (2013 \$'s)</b>	<b>\$0.77</b>	
<b><u>O&amp;M Loaders:</u></b>		
A&G Loader:		
A&G Loader as % of direct O&M	30.68%	Loader Input
% of A&G to be Functionalized	0%	
<b>A&amp;G Loader \$/mcf (as % of direct O&amp;M)</b>	<b>\$0.23</b>	
General Plant Loader as % of direct O&M		
<b>General Plant Loader \$/mcf</b>	<b>\$0.08</b>	Loader Input
<b><u>M&amp;S Loaders:</u></b>		
Annualized M&S HDP Distribution Load Related Costs \$	\$23,357	Loader Input
2010 1-35 Peak-Day Demand mcf	401,008	HPD PD Det
O&M WEF for Escalation	1.08	Loader Input
<b>M&amp;S Cost \$/mcf</b>	<b>\$0.06</b>	
<b><u>Marginal Cost of HP Distribution \$/mcf</u></b>	<b>\$23.84</b>	

TABLE LRMDC-10  
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT  
FULLY LOADED DISTRIBUTION LRMCs  
2013 TCAP  
2/22/2013 Update Filing

	Distribution Marginal Cost	Source
<b><u>Marginal Cost of Medium Pressure Distribution</u></b>		
Marginal Investment Cost \$/mcf	\$2,104.47	Regression
RECC Factor	8.73%	2010 RECC for 2013TCAP file "SDGE WEIGHTED AVG RECCS.xls"
<b>Annualized Investment Cost \$/mcf</b>	<b>\$183.69</b>	
<b><u>O&amp;M Expenses:</u></b>		
O&M w/o A&G MPD \$000's	\$9,389	Loader Input
Marginal Percent of O&M MPD	70%	Loader Input
MPD O&M Expense \$000's	\$6,528	
2010 1-35 Peak-Day Demand mmcf	370	MPD PD Det
MPD O&M \$/mcf	\$17.62	
O&M WEF for Escalation	1.08	Loader Input
<b>O&amp;M Cost \$/mcf (2013 \$'s)</b>	<b>\$19.01</b>	
<b><u>O&amp;M Loaders:</u></b>		
<b>A&amp;G Loader:</b>		
A&G Loader as % of direct O&M	30.68%	Loader Input
% of A&G to be Functionalized	0%	
<b>A&amp;G Loader \$/mcf</b>	<b>\$5.83</b>	
<b>General Plant Loader as % of direct O&amp;M</b>		
<b>General Plant Loader \$/mcf</b>	<b>\$2.00</b>	Loader Input
<b><u>M&amp;S Loaders:</u></b>		
Annualized M&S HDP Distribution Load Related Costs \$	\$159,327	Loader Input
2010 1-35 Peak-Day Demand mcf	370,492	MPD PD Det
O&M WEF for Escalation	1.08	Loader Input
<b>M&amp;S Cost \$/mcf</b>	<b>\$0.46</b>	
<b>Marginal Cost of MP Distribution \$/mcf</b>	<b>\$211.00</b>	

**Notes:**

1. Weighted average distribution RECC Factor from SDG&E Market Analysis & Planning Department. File "SDGE WEIGHTED AVG RECCS.xls"
2. Rows (9) - (12) & (24) - (27) from Workpapers Tables "LF-1" and "LF-4", "LF-5", and "LF-6".
3. Escalation of O&M using weighted average escalation factor at Workpapers Table "MISC-3".

**SAN DIEGO GAS & ELECTRIC COMPANY**  
**2013 TCAP**

**2/22/2013 Update Filing**

**Section 3**

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

**Workpapers to the Prepared Written Testimony of  
Joseph Mock**

SDGE 2013BCAP  
 LRMC O&M Loader Model  
 2/22/2013 Update Filing

	Output	Source Tab
O&M w/o A&G HPD	\$408.87	LF-O&M Tab
O&M w/o A&G MPD	\$9,388.93	LF-O&M Tab
Marginal Percent of O&M HPD	69.53%	Dist O&M MC
Marginal Percent of O&M MPD	69.53%	Dist O&M MC
Marginal A&G/Payroll Taxes Loading Factor as a % of O&M expenses	30.68%	LF-A&G Tab
General Plant Loading Factor as a % of O&M expenses	10.54%	LF-GPL Tab
Annualized M&S Customer Related Costs \$/yr	\$136,810.05	LF-M&S Tab
Annualized M&S HDP Distribution Load Related Costs \$/yr	\$23,356.68	LF-M&S Tab
Annualized M&S MDP Distribution Load Related Costs \$/yr	\$159,326.57	LF-M&S Tab
O&M WEF for Escalation	1.08	O&M WEF Tab
Marginal Cust-Rel O&M		
870 - Operation Supervision & Engineering	\$5,546	Dist O&M MC
871 - Distribution Load Dispatching	\$0	Dist O&M MC
874 - Mains & Services Expenses	\$1,710	Dist O&M MC
875 - Measuring & Regulating Station Expenses	\$0	Dist O&M MC
878 - Meter & House Regulator Expenses	\$4,690	Dist O&M MC
879 - Customer Installations Expenses	\$11,123	Dist O&M MC
880 - Other Expenses	\$8,794	Dist O&M MC
881 - Rents	\$0	Dist O&M MC
885 - Maint Supervision & Engineering	\$24	Dist O&M MC
887 - Maintenance of Mains	\$197	Dist O&M MC
888 - Maintenance Of Compressor Station Eq	\$0	Dist O&M MC
889 - Maintenance of Meas. & Reg Station Eq	\$0	Dist O&M MC
892 - Maintenance of Services	\$1,208	Dist O&M MC
893 - Maint of Meters & House Regulators	\$1,248	Dist O&M MC
894 - Maintenance of Other Equipment	\$0	Dist O&M MC

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

FUNCTIONALIZATION OF YEAR 2010 O&M EXPENSES  
2013 TCAP  
2/22/2013 Update Filing

Functional Factor	Base Margin	MPD	HPD	Customer Costs	Total	Total	MPD	HPD	Customer Costs	
<b>Gas Distribution:</b>										
870- Operation Supervision & Engineering	Other Distr Operating Exp	\$11,485	\$1,515	\$66	\$9,904	\$11,485	100.0%	13.2%	0.6%	86.2%
871- Distr Load Dispatching	Other Distr Operating Exp	\$0	\$0	\$0	\$0	\$0	100.0%	13.2%	0.6%	86.2%
874- Mains & Services Exp	Demand Customer Factor DCF	\$3,983	\$2,177	\$95	\$1,710	\$3,983	100.0%	54.7%	2.4%	42.9%
875- Meas & Reg Station Exp	Demand Only Factor DOF	\$524	\$502	\$22	\$0	\$524	100.0%	95.8%	4.2%	0.0%
877- Meas & Reg Station Exp-City Gas Ck Station	Demand Only Factor DOF	\$0	\$0	\$0	\$0	\$0	100.0%	95.8%	4.2%	0.0%
878- Meter & House Regulator Exp	100% Customer Cost	\$4,690	\$0	\$0	\$4,690	\$4,690	100.0%	0.0%	0.0%	100.0%
879- Customer Installations Exp	100% Customer Cost	\$11,123	\$0	\$0	\$11,123	\$11,123	100.0%	0.0%	0.0%	100.0%
880- Other Expenses	Other Distr Operating Exp	\$13,418	\$1,770	\$77	\$11,572	\$13,418	100.0%	13.2%	0.6%	86.2%
881- Rents	Demand Only Factor DOF	\$48	\$46	\$2	\$0	\$48	100.0%	95.8%	4.2%	0.0%
885- Maint Supervision & Engineering	Other Distr Maintenance Exp	\$103	\$53	\$2	\$47	\$103	100.0%	52.0%	2.3%	45.8%
887- Maint.of Mains	Maint of Mains Factor	\$3,554	\$2,977	\$130	\$448	\$3,554	100.0%	83.8%	3.6%	12.6%
888- Maint. Of Compressor Station Equipment	Demand Only Factor DOF	\$0	\$0	\$0	\$0	\$0	100.0%	95.8%	4.2%	0.0%
889- Maint.of Meas. & Reg Station Eq	Demand Only Factor DOF	\$332	\$318	\$14	\$0	\$332	100.0%	95.8%	4.2%	0.0%
892- Maint.of Services	100% Customer Cost	\$1,208	\$0	\$0	\$1,208	\$1,208	100.0%	0.0%	0.0%	100.0%
893- Maint.of Meters & Regulators	100% Customer Cost	\$1,248	\$0	\$0	\$1,248	\$1,248	100.0%	0.0%	0.0%	100.0%
894- Maint.of Other Eq	DIR/Other Distr Maintenance Exp	\$119	\$30	\$1	\$87	\$119	100.0%	25.6%	1.1%	73.3%
		\$51,835	\$9,389	\$409	\$42,037	\$51,835				

**Calculation of Allocators:**

**DCF Demand-Cust Factor**

Miles in 2010

Total	Med. Prss	Hi Press	Customer
14,826	8,106	353	6,367
100.0%	54.7%	2.4%	42.9%

**Demand Only Factor**

Miles in 2010 (excludes service lines)

Total	Med. Prss	Hi Press	Customer
8,459	8,106	353	0
100.0%	95.8%	4.2%	0.0%

**Other Distr Operating Exp factor**

874- Mains & Services Exp  
875- Meas & Reg Station Exp  
877- Meas & Reg Station Exp-City Gas Ck Station  
878- Meter & House Regulator Exp  
879- Customer Installations Exp

Total	MPD	HPD	Customer
\$3,983	\$2,177	\$95	\$1,710
\$524	\$502	\$22	\$0
\$0	\$0	\$0	\$0
\$4,690	\$0	\$0	\$4,690
\$11,123	\$0	\$0	\$11,123
\$20,319	\$2,680	\$117	\$17,523
100.0%	13.2%	0.6%	86.2%

**Other Distr Maintenance Exp**

887- Maint.of Mains  
888- Maint. Of Compressor Station Equipment  
889- Maint.of Meas. & Reg Station Eq  
892- Maint.of Services  
893- Maint.of Meters & Regulators

Total	MPD	HPD	Customer
\$3,554	\$2,977	\$130	\$448
\$0	\$0	\$0	\$0
\$332	\$318	\$14	\$0
\$1,208	\$0	\$0	\$1,208
\$1,248	\$0	\$0	\$1,248
\$6,342	\$3,295	\$143	\$2,904
100.0%	52.0%	2.3%	45.8%

**Maint.of Mains Factor DOF/DIR**

DIR portion  
Remainder to be allocated by DOF factor  
DOF factor

Total	MPD	HPD	Customer
12.6%			12.6%
87.4%			
100.0%	95.8%	4.2%	0.0%
87.4%	83.8%	3.6%	0.0%
100.0%	83.8%	3.6%	12.6%

Portion of sub acct 887.3  
identified as service line & allocated to Dist Cust.  
SDG&E Distribution Engineering

**DIR/Other Distr Maintenance Exp Factor**

Total acct 894 Main Other Equip  
Public access NGV station O&M  
% of total  
DIR portion  
Remainder to be allocated by DOF factor  
Other Distr Maintenance Exp Factor

Total	MPD	HPD	Customer
\$119			
\$60			
50.8%			
50.8%			50.8%
49.2%			
100.0%	52.0%	2.3%	45.8%
49.2%	25.6%	1.1%	22.5%
100.0%	25.6%	1.1%	73.3%

NGV Compression Rate Adder 2013 - NGV Group

TABLE LF-2, Page 1  
 SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

FUNCTIONALIZATION OF YEAR 2010 O&M EXPENSES  
 2013 TCAP  
 2/22/2013 Update Filing

		FERC Form 2 12/31/2010	Distribution Demand						
FERC Account		Total	Medium Pressure	High Pressure	Transmission	Storage	Distribution Customer	Supply	
A	B	C	D	E	F	G	H		
		M\$							
1	<b>Purchased Gas Expenses:</b>							1	
2	807.4- Purchased Gas Calculations Expenses	\$0						\$0	
3	807.5- Other Purchased Gas Expenses	\$1						\$1	
4	<b>+ Purchased Gas Expense Total</b>	<b>\$1</b>						<b>\$1</b>	
5									
6	<b>Other Storage:</b>								
7	840- Oper Supervision & Engineering	\$0				\$0			
8	841- Oper Labor & Expenses	\$49				\$49			
9	843-Maintenance	\$0				\$0			
10	<b>+ Other Storage Total</b>	<b>\$49.2</b>				<b>\$49.2</b>			
11									
12	<b>Gas Transmission</b>								
13	850- Oper Supervision & Eng	\$2,292			\$2,292				
14	851- Sys Control & Load Dispatching	\$699			\$699				
15	852- Communication Sys Exp	\$1,587			\$1,587				
16	853- Compr Station Labor & Exp	\$1,549			\$1,549				
17	855- Other Fuel & Power for Compr Stations	\$0			\$0				
18	856- Mains Expenses	\$801			\$801				
19	857- Meas & Reg Station Exp	\$4			\$4				
20	858- Trans & Compression of Gas by Others	\$0			\$0				
21	859- Other Expenses	\$236			\$236				
22	860- Rents	\$3			\$3				
23	861- Maint Supervision & Eng	\$80			\$80				
24	862-Maint Structures and Improvements	\$0			\$0				
24	863- Maint of Mains	\$126			\$126				
25	864- Maint of Compr Station Eq	\$477			\$477				
26	865- Maint of Meas & Reg Station Eq	\$300			\$300				
26	866 - Maint of Communication Eq	\$0			\$0				
27	867- Maint of Other Eq	\$230			\$230				
28	<b>+ Net Gas Transmission</b>	<b>\$8,384</b>			<b>\$8,384</b>				

TABLE LF-2, Page 2  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**  
**FUNCTIONALIZATION OF YEAR 2010 O&M EXPENSES**  
**2013 TCAP**

Description	Total	Distribution Demand		Transmission	Storage	Distribution Customer	Supply
		Medium Pressure	High Pressure				
A	C	D	E	F	G	H	I
M\$							
<b>1 Gas Distribution:</b>							
2 870- Operation Supervision & Engineering	\$11,485	\$1,515	\$66			\$9,904	
3 871- Distr Load Dispatching	\$0	\$0	\$0			\$0	
4 874- Mains & Services Exp	\$3,983	\$2,177	\$95			\$1,710	
5 875- Meas & Reg Station Exp	\$524	\$502	\$22			\$0	
6 877- Meas & Reg Station Exp-City Gas Check Station	\$0	\$0	\$0			\$0	
7 878- Meter & House Regulator Exp	\$4,690	\$0	\$0			\$4,690	
8 879- Customer Installations Exp	\$11,123	\$0	\$0			\$11,123	
9 880- Other Expenses	\$13,418	\$1,770	\$77			\$11,572	
10 881- Rents	\$48	\$46	\$2			\$0	
11 885- Maint Supervision & Engineering	\$103	\$53	\$2			\$47	
12 887- Maint.of Mains	\$3,554	\$2,977	\$130			\$448	
13 888 - Maint. Of Compressor Station Equipment	\$0	\$0	\$0			\$0	
14 889- Maint.of Meas. & Reg Station Eq	\$332	\$318	\$14			\$0	
15 892- Maint.of Services	\$1,208	\$0	\$0			\$1,208	
16 893- Maint.of Meters & Regulators	\$1,248	\$0	\$0			\$1,248	
17 894- Maint.of Other Eq	\$119	\$30	\$1			\$87	
<b>+ Distribution Total</b>	<b>\$51,835</b>	<b>\$9,389</b>	<b>\$409</b>			<b>\$42,037</b>	
<b>Customer Accounts</b>							
20 901- Supervision	\$11					\$11	
21 902- Meter Reading Expenses	\$3,704					\$3,704	
22 903- Cust Records & Collection Exp	\$24,326					\$24,326	
23 904- Uncollectible Accounts	\$1,913					\$1,913	
24 905- Misc Cust Accounts Exp	\$0					\$0	
<b>Total Customer Accounts</b>	<b>\$29,953</b>					<b>\$29,953</b>	
26 less 903 & 904 - Adjustments	\$2,555					\$2,555	
<b>+ Net Customer Accounts</b>	<b>\$27,399</b>					<b>\$27,399</b>	
<b>Customer Service &amp; Informational Expense</b>							
30 907- Supervision	\$24					\$24	
31 908- Cust Assistance Exp	\$27,304					\$27,304	
32 909-Informational & Instructional Exp	\$13					\$13	
33 910- Misc Cust Service & Informational Exp	\$225					\$225	
<b>Total Cust Svc &amp; Info</b>	<b>\$27,565</b>					<b>\$27,565</b>	
35 less CARE/DSM/DAP/Energy Efficiency Exp	\$23,925					\$23,925	
<b>+ Net Cust Svc &amp; Info</b>	<b>\$3,641</b>					<b>\$3,641</b>	
<b>= Subtotal O&amp;M w/o A&amp;G</b>	<b>\$91,308</b>	<b>\$9,389</b>	<b>\$409</b>	<b>\$8,384</b>	<b>\$49</b>	<b>\$73,076</b>	<b>\$1</b>
<b>Percent of Total</b>	<b>100.0%</b>	<b>10.3%</b>	<b>0.4%</b>	<b>9.2%</b>	<b>0.1%</b>	<b>80.0%</b>	<b>0.0%</b>

Notes:

- O&M expenses from SDG&E Gas FERC Form 2 for year ending December 31, 2010, pp. 319 - 325.
- O&M expenses assigned to service categories using functional basis as presented in Testimony of SDG&E Embedded Cost Witness Ms. Hom.
- CARE Program expenses of approximately \$641,969 are excluded from FERC Acct # 903 because such costs recovered through G-PPPS Surcharge.
- "less CARE/DSM/DAP/Energy Efficiency Exp" - these are refundable program costs excluded from FERC Accounts 907 - 910.
- Hazardous Materials expenses of approximately \$5,000 booked to FERC Account 859 excluded because such costs are excluded from base margin.

Backed out cost for 2010:	FERC # 908	FERC # 903	Totals
CARE	\$0	\$641,969	\$641,969
Low Income Energy Efficiency	\$11,496,754		\$11,496,754
Energy Efficiency	\$12,104,491		\$12,104,491
Self Generation Program	\$323,290		\$323,290
<b>Total Adjustment for FERC</b>	<b>\$23,924,535</b>	<b>\$641,969</b>	<b>\$24,566,504</b>

TABLE LF-3  
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

MARGINAL COST ASSESSMENT - DISTRIBUTION O&M EXPENSES  
2013 TCAP  
2/22/2013 Update Filing

Distribution O&M Account	Total O&M	Demand-Related Distribution						Customer-Related		
		Medium Pressure	Marginal Portion	Marginal MPD O&M	High Pressure	Marginal Portion	Marginal HPD O&M	Distribution Customer	Marginal Portion	Marginal Cust-Rel O&M
A	B	C	D	E	F	G	H	I	J	K
<b>Gas Distribution:</b>										
870 - Operation Supervision & Engineering	\$11,485	\$1,515	56%	\$848	\$66	56%	\$37	\$9,904	56%	\$5,546
871 - Distribution Load Dispatching	\$0	\$0	0%	\$0	\$0	0%	\$0	\$0	0%	\$0
874 - Mains & Services Expenses	\$3,983	\$2,177	100%	\$2,177	\$95	100%	\$95	\$1,710	100%	\$1,710
875 - Measuring & Regulating Station Expenses	\$524	\$502	100%	\$502	\$22	100%	\$22	\$0	100%	\$0
878 - Meter & House Regulator Expenses	\$4,690	\$0	100%	\$0	\$0	100%	\$0	\$4,690	100%	\$4,690
879 - Customer Installations Expenses	\$11,123	\$0	100%	\$0	\$0	100%	\$0	\$11,123	100%	\$11,123
880 - Other Expenses	\$13,418	\$1,770	76%	\$1,345	\$77	76%	\$59	\$11,572	76%	\$8,794
881 - Rents	\$48	\$46	0%	\$0	\$2	0%	\$0	\$0	0%	\$0
885 - Maint Supervision & Engineering	\$103	\$53	51%	\$27	\$2	51%	\$1	\$47	51%	\$24
887 - Maintenance of Mains	\$3,554	\$2,977	44%	\$1,310	\$130	44%	\$57	\$448	44%	\$197
888 - Maintenance Of Compressor Station Eq	\$0	\$0	0%	\$0	\$0	0%	\$0	\$0	0%	\$0
889 - Maintenance of Meas. & Reg Station Eq	\$332	\$318	100%	\$318	\$14	100%	\$14	\$0	100%	\$0
892 - Maintenance of Services	\$1,208	\$0	100%	\$0	\$0	100%	\$0	\$1,208	100%	\$1,208
893 - Maint of Meters & House Regulators	\$1,248	\$0	100%	\$0	\$0	100%	\$0	\$1,248	100%	\$1,248
894 - Maintenance of Other Equipment	\$119	\$30	0%	\$0	\$1	0%	\$0	\$87	0%	\$0
Distribution Total	\$51,835	\$9,389	69.5%	\$6,528	\$409	69.5%	\$284	\$42,037	82%	\$34,541

Notes:

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

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

**MATERIALS & SUPPLIES LOADING FACTOR  
2013 TCAP  
2/22/2013 Update Filing**

Description	2010	Portion of Total Plant	M&S	Annualized
	Year End Plant Balances		Allocation	M&S @ 13.72%
A	B (Dollars)	C (Percent)	D (Dollars)	E (Dollars)
1 Materials & Supplies			\$2,884,475	
2 Storage	\$1,887,070	0.1%	\$4,260	\$584
4 Transmission	\$234,688,556	18.4%	\$529,777	\$72,679
5 Distribution				
6 Demand - HPD	\$75,421,012	5.9%	\$170,253	\$23,357
7 Demand - MPD	\$514,481,199	40.3%	\$1,161,370	\$159,327
8 Customer	\$441,773,142	34.6%	\$997,242	\$136,810
9 General Plant	\$9,556,837	0.7%	\$21,573	\$2,960
10 Total	\$1,277,807,816	100.0%	\$2,884,475	\$395,717

Notes:

- M&S RECC Factor from SDG&E Market Analysis & Planning Department 2007 Economic Assumptions Manual.
- Material & Supplies for 2010 - from Karen Loney as part of Rate Base Report, under report tab Report 5.
- Row (6) Plant Balance = [Total Dist Plant - Cust-Rel Dist Plant] x Historical HPD Plant Factor.
- Row (7) Plant Balance = [Total Dist Plant - Cust-Rel Dist Plant] x [1 - Historical HPD Plant Factor].
- For Rows (6) - (7) :  $12.8\%$  = Historical HPD Plant Investment Allocation Factor = HI  
From Bill Wilson email 5-9-11. Total Plant Investment substituted in place of NBV because LRMC not dependant on age of investment.
- Row (8) Plant Balance = Dist Plant Accounts 380 (Services) + 381 (Meters) + 382 (Meter Installations) + 387 (NGV Stations + Other Equipm

Calculation Distribution Plant:		Sources
Total Plant Distribution	\$1,032,669,076	Per FERC Form 2
Less 388 (ARO's)	\$0	
Less 387	(\$5,274,409)	
Plus NGV in 387	\$4,280,686	
<b>Total Plant Distribution</b>	<b>\$1,031,675,353</b>	
<b>Plant</b>		
G-387.11	\$993,723	Per FERC Form 2
G-387.12	\$3,622,490	Per FERC Form 2
G-387.13	\$658,196	Per FERC Form 2
<b>Total FERC 387</b>	<b>\$5,274,409</b>	

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

**ADMINISTRATIVE & GENERAL LOADING FACTOR  
2013 TCAP  
2/22/2013 Update Filing**

	FERC Account	Account Description	FERC 2010 Recorded	Marginal Portion	Marginal A&G	Comments
	A	B	C	D	E	
			(M\$)	(Percent)	(M\$)	
1	920	Administrative & General Salaries	\$5,097	0.00%	\$0	1
2	921	Office Supplies & Expenses	\$2,313	2.09%	\$48	2
3	922	Administrative Expenses Transferred	-\$1,723	0.00%	\$0	3
4	923	Outside Services Employed	\$17,940	0.00%	\$0	4
5	924	Property Insurance	\$1,397	0.00%	\$0	5
6	925	Injuries & Damages	\$5,226	100.00%	\$5,226	6
7	926	Employee Pensions & Benefits	\$17,562	99.37%	\$17,452	7
8	927	Franchise Requirements	\$9,658	0.00%	\$0	8
9	928	Regulatory Commission Expense	\$2,471	25.89%	\$640	9
	930.1	General Advertising Expense	\$0	0.00%	\$0	
10	930.2	Miscellaneous General Expense	\$236	21.89%	\$52	10
11	931	Rents	\$2,556	0.00%	\$0	11
12	932	Maintenance of General Plant	\$2,230	11.17%	\$249	12
13		Total A&G Expenses	\$64,964		\$23,667	13
14						14
15		Payroll Taxes	\$4,344		\$4,344	15
16		Total A&G and Payroll Taxes	\$69,308		\$28,011	16
17						17
18		Total O&M w/o Recorded A&G Expenses	\$91,308		\$91,308	18 LF-O&M tab
19						19
20		Total O&M	\$160,616			20
21		(Net of Compressor Fuel & Gas Purchases)				21
22						22
23		<b>A&amp;G/O&amp;M Loading Factor</b>			<b>30.68%</b>	23

Notes:

1. A&G expenses from SDG&E Gas FERC Form 2 for year ending December 31, 2010, pp. 325.
2. Row (23) = Marginal A&G Expenses @ Row 16 ÷ Total O&M Less A&G @ Row 18
3. CPUC expenses of \$520,721 removed from FERC Account 928 because such costs are excluded from base margin. Amount from FERC Form 1 page 351 Line 2 - Reimbursement Fees.
4. Payroll Taxes from FERC Form 2 for the year ended 12-31-2010 - Selected Financial Data - Class A, B, C, & D Gas Utilities, Page 2 of 2 of Report, Line 30 (Gas Only).

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

**GENERAL PLANT LOADING FACTOR  
2013 TCAP  
2/22/2013 Update Filing**

	Description	2010 Recorded	Comments
	A	B	
		(Dollars)	
1	Total General, Common Plant (12/31/2010)	\$164,602,743	1 FERC 2010
2			2
3	Weighted Average General, Common Plant RECC	10.29%	3 RECC
4			4
5	Annualized Plant	\$16,930,026	5
6			6
7	O&M Expenses (2010 recorded)	\$160,615,835	7 LF- A&G tab.
8			8
9	<b>General Plant Loading Factor</b>	<b>10.54%</b>	9

Notes:

1. Common and General Gas Plant from SDG&E Gas FERC Form 1 pp. 356.1 and FERC Form 2 pp. 209, for year ending December 31, 2010, respectively.
2. Weighted average RECC Factor from Mike Foster file: Company Assumptions "SDGE WEIGHTED AVG RECCS.xls".

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

**O&M WEIGHTED ESCALATION FACTOR  
2013 TCAP  
2/22/2013 Update Filing**

	Description	Dollars	Percent	
	A	B	C	
1	2010 Total Gas O&M Expenses	\$160,615,835	100%	1
2	2010 Total Salaries & Wages	\$60,962,701	38%	2
3	2010 Non-Labor O&M Expenses	\$99,653,134	62%	3
4				4
5	2010 O&M Labor Multiplier	1.000		5
6	2013 O&M Labor Multiplier	1.068	107%	6
7				7
8	2010 O&M Non-Labor Multiplier	1.000		8
9	2013 O&M Non-Labor Multiplier	1.086	109%	9
10				10
11	Weighted O&M Escalation to 2013	1.0791	1.0791	11

Notes:

1. Row (3) = Row (1) - Row (2).
2. Row (11) = [Row (9) x Row (3) percent] + [Row (6) x Row (2) percent].
3. Row (1) from Table "LF-5".
4. Rows (5) - (9) from O&M Cost Indexes - Global Insight 1st Quarter 2011.

**TABLE LRMCC-10a**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**  
**ALLOCATION FACTORS FOR CUSTOMER O&M EXPENSES**  
**2013 BCAP**  
**2/22/2013 Update Filing**

Description	Res	NGV	GN-3	Total Core	GTNC			Cogen			Total Noncore	System Total
					MPD	HPD	Total	< 3 MM	> 3 MM	Total		
A	B	C	D	E	F	G	H	I	J	K	M	N
<u>Page 1 of 2</u>												
<b>Total Field Orders</b>												
Allocator - 2010 Count	555,334	60	33,358	588,752	31	-	31	40	2	43	74	588,826
Alloc %	94%	0%	6%	100%	0%	0%	0%	0%	0%	0%	0%	100%
<b>Construction Field Orders</b>												
Allocator - 2010 Count	259	1	1,060	1,320	7	-	7	11	-	11	18	1,338
Alloc %	19%	0%	79%	99%	1%	0%	1%	1%	0%	1%	1%	100%
<b>Customer Services Field Orders</b>												
Allocator - 2010 Count	555,075	59	32,298	587,432	24	-	24	29	2	32	56	587,488
Alloc %	94%	0%	5%	100%	0%	0%	0%	0%	0%	0%	0%	100%
<b>Field Collection Orders - All Customers</b>												
Allocator - 2006 Count												
Alloc %												
<b>Field Collection Orders - Core</b>												
Allocator - 2006 Count												
Alloc %												
<b>Customer Contact Center CSR Call Information</b>												
Allocator - Call Volume Weighted by Handle Time - Year 2010 data	2,917,356	-	116,496	3,033,852	-	-	-	-	-	-	-	3,033,852
Alloc %	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%
<b>Customer Contact Center IVR Call Information</b>												
Alloc % - Year 2010 data	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%
<b>Residential</b>												
Alloc %	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%
<b>Active Meters - All Customers</b>												
Allocator - 2010 Count	827,980	48	34,186	862,214	48	9	57	47	18	65	122	862,336
Alloc %	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%

**TABLE LRMCC-10a**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**  
**ALLOCATION FACTORS FOR CUSTOMER O&M EXPENSES**  
**2013 BCAP**  
**2/22/2013 Update Filing**

Description	Res	NGV	GN-3	Total Core	GTNC			Cogen			Total Noncore	System Total	
					MPD	HPD	Total	< 3 MM	> 3 MM	Total			
A	B	C	D	E	F	G	H	I	J	K	M	N	
35 <u>Page 2 of 2</u>													35
36 <b>Active Meters - Noncore Commercial, EG</b>													36
37 Allocator - 2010 Count				-	48	9	57	47	18	65	122	122	37
38 Alloc %	0%	0%	0%	0%	39%	7%	47%	39%	15%	53%	100%	100%	38
39													39
40 <b>Effort Study - Federal Accounts</b>													40
41 Allocator - 2010 Count	10	1	210	221	6	1	7	5	-	5	12	233	41
42 Alloc %	4%	0%	90%	95%	3%	0%	3%	2%	0%	2%	5%	100%	42
43													43
44 <b>Active Billing Accounts - All Customers</b>													44
45 Allocator - 2010 Count	819,482	44	28,070	847,596	57	2	59	46	20	66	125	847,721	45
46 Alloc %	97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%	46
47													47
48 <b>Active Billing Accounts - Mass Markets Customers</b>													48
49 Allocator - 2010 Count	819,482	44	28,070	847,596	-	-	-	-	-	-	-	847,596	49
50 Alloc %	97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%	50
51													51
52 <b>Active Billing Accounts - Major Markets Customers</b>													52
53 Allocator - 2010 Count				-	57	2	59	46	20	66	125	125	53
54 Alloc %	0%	0%	0%	0%	46%	2%	47%	37%	16%	53%	100%	100%	54
55													55
56 <b>C&amp;I Markets</b>													56
57 Noncore Allocator - Active Accounts				0	57	2	59	46	20	66	125	125	57
58 Alloc %	0%	0%	99%	99%	0%	0%	0%	0%	0%	1%	1%	100%	58
59													59
60 <b>Demand Response Program - Commercial Customers</b>													60
61 Noncore Allocator - Active Accounts					57	2	59						61
62 Alloc %	0%	0%	90%	90%	10%	0%	10%	0%	0%	0%	10%	100%	62
63													63
64 <b>Meter Reading Function Net Allocation</b>													64
65 Allocator - M\$'s	\$57,962	\$3	\$2,393	\$60,358	\$3	\$1	\$4	\$3	\$1	\$5	\$9	\$60,367	65
66 Alloc %	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%	66
67													67
68 <b>FERC 901 - 903 Net Allocation</b>													68
69 Allocator - M\$'s	827,980	48	34,186	862,214	48	9	57	47	18	65	122	862,336	69

**TABLE LRMCC-10a  
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**ALOCATION FACTORS FOR CUSTOMER O&M EXPENSES  
2013 BCAP  
2/22/2013 Update Filing**

	Description	Res	NGV	GN-3	Total Core	GTNC			Cogen			Total Noncore	System Total	
						MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	M	N	
70	Alloc %	93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	70

**TABLE LRMCC-10b**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**ALLOCATION OF FIELD SERVICES CUSTOMER O&M EXPENSES BY CUSTOMER CLASS**  
**2013 BCAP**  
**2/22/2013 Update Filing**

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			IPP	Total Noncore	System Total	Source
							MPD	HPD	Total	< 3 MM	> 3 MM	Total				
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
1	<b>CUSTOMER SERVICE - FIELD Total</b>															1
2	Allocator - Total Field Orders		94%	0%	6%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%	2 LRMCC-10a Line 3
3	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	3
4	<b>GAS OPERATIONS Total</b>															4
5	Allocator - Total Field Orders		94%	0%	6%	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%	5 LRMCC-10a Line 3
6	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	6
7	<b>Total Field Services O&amp;M Allocation (\$)</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	7
8	Allocation %	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	8

**TABLE LRMCC-10c**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

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

**2013 BCAP**

2/22/2013 Update Filing

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			Total Noncore	System Total	LRMCC-10a Printed Line Ref
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	N	O	
1	<b>CUSTOMER CONTACT CENTER</b>														1
2	Allocator - CSR Call Volume Weighted by Handle Time		96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%	2 LRMCC-10a Line 23
3	Allocation (\$)	\$77,325	\$74,356	\$0	\$2,969	\$77,325	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$77,325	3
4	<b>CCC TECH SDGE - 1</b>														4
5	Allocator - CSR Call Volume Weighted by Handle Time		96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%	5 LRMCC-10a Line 23
6	Allocation (\$)	\$59,195	\$56,922	\$0	\$2,273	\$59,195	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$59,195	6
7	<b>CCC TECH SDGE - 2</b>														7
8	Allocator - IVR Call Volume by Customer Segment		100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	8 LRMCC-10a Line 26
9	Allocation (\$)	\$427	\$427	\$0	\$0	\$427	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$427	9
10	<b>Total Customer Contact Center O&amp;M Allocation (\$)</b>	\$136,947	\$131,705	\$0	\$5,242	\$136,947	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$136,947	10
11	<b>Allocation %</b>	100%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%	11

Source: SDGE Details Acct 901-910 Costs.xls

TABLE LRMCC-10d  
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

ALLOCATION OF METER READING O&M EXPENSES BY CUSTOMER CLASS  
2013 BCAP

2/22/2013 Update Filing

	Cost Center(s) A	Total O&M B	Res C	NGV D	GN-3 E	Total Core F	GTNC			Cogen			Total Noncore N	System Total O	Source	
							MPD G	HPD H	Total I	< 3 MM J	> 3 MM K	Total L				
1	METER READING															1
2	Allocator - Active Meters: All Customers		96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%		2
3	Allocation (\$)	\$60,367	\$57,962	\$3	\$2,393	\$60,358	\$3	\$1	\$4	\$3	\$1	\$5	\$9	\$60,367		3
4	Total Meter Reading O&M Allocation (\$)	\$60,367	\$57,962	\$3	\$2,393	\$60,358	\$3	\$1	\$4	\$3	\$1	\$5	\$9	\$60,367		4
5	Allocation %	100%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%		5

Source: [SDGE Details Acct 901-910 Costs.xls](#)

TABLE LRMCC-10e  
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

ALLOCATION OF BILLING SERVICES CUSTOMER O&M EXPENSES BY CUSTOMER CLASS  
2013 BCAP

2/22/2013 Update Filing

	Cost Center(s) A	Total O&M B	Res C	NGV D	GN-3 E	Total Core F	GTNC			Cogen			Total Noncore N	System Total O	LRMCC-10a Printed Line Ref
							MPD G	HPD H	Total I	< 3 MM J	> 3 MM K	Total L			
1	<b>MAJOR MARKET BILLING Total</b>														1
2	Allocator - Active Meters N/C C&I		0%	0%	0%	0%	39%	7%	47%	39%	15%	53%	100%	100%	2
3	Allocation (\$)	\$236,527	\$0	\$0	\$0	\$0	\$93,060	\$17,449	\$110,509	\$91,121	\$34,897	\$126,019	\$236,527	\$236,527	3
4	<b>MASS MRKET BILLING Total</b>														4
5	Allocator - Active Accounts: All Customers		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%	5
6	Allocation (\$)	-	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	6
7	<b>Total Billing Services O&amp;M Allocation (\$)</b>	\$236,527	\$0	\$0	\$0	\$0	\$93,060	\$17,449	\$110,509	\$91,121	\$34,897	\$126,019	\$236,527	\$236,527	7
8	<b>Allocation %</b>	100%	0%	0%	0%	0%	39%	7%	47%	39%	15%	53%	100%	100%	8

Source: SDGE Details Acct 901-910 Costs.xls

**TABLE LRMCC-10f**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**ALLOCATION OF CREDIT & COLLECTIONS O&M EXPENSES BY CUSTOMER CLASS**

**2013 BCAP**

2/22/2013 Update Filing

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			Total Noncore	System Total	Source
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	N	O	
1	<b>CREDIT &amp; COLLECTIONS - Subtotal</b>														1
2	Allocator - Residential Class		100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	2 LRMCC-10a Line 30
3	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	3
4	<b>CREDIT &amp; COLLECTIONS - Subtotal</b>														4
5	Allocator - Active Accounts: All Customers		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%	5 LRMCC-10a Line 46
6	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	6
7	<b>Total Credit &amp; Collections O&amp;M Allocation (\$)</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	7
8	Allocation %	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	8

**TABLE LRMCC-10g**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**ALLOCATION OF BUSINESS ANALYSIS CUSTOMER O&M EXPENSES BY CUSTOMER CLASS**  
**2013 BCAP**

2/22/2013 Update Filing

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			Total Noncore	System Total	Source
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	N	O	
1	<b>BUSINESS PLANNING &amp; BUDGETS Total</b>														1
2	Allocator - Active Meters: All Customers		96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%	2
3	Allocation (\$)	\$9,947	\$9,551	\$1	\$394	\$9,946	\$1	\$0	\$1	\$1	\$0	\$1	\$1	\$9,947	3
4	<b>Total Business Analysis O&amp;M Allocation (\$)</b>	<b>\$9,947</b>	<b>\$9,551</b>	<b>\$1</b>	<b>\$394</b>	<b>\$9,946</b>	<b>\$1</b>	<b>\$0</b>	<b>\$1</b>	<b>\$1</b>	<b>\$0</b>	<b>\$1</b>	<b>\$1</b>	<b>\$9,947</b>	4
5	Allocation %	100%	96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%	5

Source: [SDGE Details Acct 901-910 Costs.xls](#)

**TABLE LRMCC-10h**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**ALLOCATION OF CUSTOMER RESEARCH & COMMUNICATION O&M EXPENSES BY CUSTOMER CLASS**  
**2013 BCAP**

2/22/2013 Update Filing

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			Total Noncore	System Total	Source
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	N	O	
1	<b>COMMUNICATIONS Total</b>														1
2	Allocator - Active Accounts: All Customers		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%	2
3	Allocation (\$)	\$649,874	\$628,225	\$34	\$21,519	\$649,778	\$44	\$2	\$45	\$35	\$15	\$51	\$96	\$649,874	3
4	<b>Total Business Analysis O&amp;M Allocation (\$)</b>	<b>\$649,874</b>	<b>\$628,225</b>	<b>\$34</b>	<b>\$21,519</b>	<b>\$649,778</b>	<b>\$44</b>	<b>\$2</b>	<b>\$45</b>	<b>\$35</b>	<b>\$15</b>	<b>\$51</b>	<b>\$96</b>	<b>\$649,874</b>	4
5	Allocation %	100%	97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%	5

Source: SDGE Details Acct 901-910 Costs.xls

**TABLE LRMCC-10i**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**ALLOCATION OF CUSTOMER SERVICE TECHNOLOGY & SUPPORT O&M EXPENSES BY CUSTOMER CLASS**  
**2013 BCAP**

2/22/2013 Update Filing

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			Total Noncore	System Total	Source
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	N	O	
1	<b>VP &amp; CITO INFO TECH</b>														
2	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	1
3	Allocation (\$)	\$34,831	\$32,444	\$2	\$1,340	\$33,786	\$411	\$77	\$488	\$403	\$154	\$557	\$1,045	\$34,831	2
4	<b>DIR IT BUS PARTNER &amp;</b>														
5	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	4
6	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	5
7	<b>DIR INFRASTRUCTURE E</b>														
8	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	6
9	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	7
10	<b>DIR NETWORK &amp; TELECO</b>														
11	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	8
12	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	9
13	<b>DIR UTILITY OPS SYST</b>														
14	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	10
15	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	11
16	<b>DIR CUST CARE SYSTEM</b>														
17	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	12
18	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	13
19	<b>IT BUS PLNG &amp; BUDS</b>														
20	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	14
21	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	15
22	<b>DIR SHARED SOFTWARE</b>														
23	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	16
24	Allocation (\$)	\$5,438	\$5,065	\$0	\$209	\$5,275	\$64	\$12	\$76	\$63	\$24	\$87	\$163	\$5,438	17
25	<b>Total Cust Service Tech &amp; Support O&amp;M Allocation (\$)</b>	<b>\$40,268</b>	<b>\$37,509</b>	<b>\$2</b>	<b>\$1,549</b>	<b>\$39,060</b>	<b>\$475</b>	<b>\$89</b>	<b>\$564</b>	<b>\$465</b>	<b>\$178</b>	<b>\$644</b>	<b>\$1,208</b>	<b>\$40,268</b>	18
26	<b>Allocation %</b>	<b>100%</b>	<b>93%</b>	<b>0%</b>	<b>4%</b>	<b>97%</b>	<b>1%</b>	<b>0%</b>	<b>1%</b>	<b>1%</b>	<b>0%</b>	<b>2%</b>	<b>3%</b>	<b>100%</b>	19

Source SDGE Details Acct 901-910 Costs.xls

TABLE LRMCC-10j  
 SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

ALLOCATION OF C&I CUSTOMER SERVICE O&M EXPENSES BY CUSTOMER CLASS

2013 BCAP

2/22/2013 Update Filing

	Cost Center(s) A	Total O&M B	Res C	NGV D	GN-3 E	Total Core F	GTNC			Cogen			Total Noncore N	System Total O	Source	
							MPD G	HPD H	Total I	< 3 MM J	> 3 MM K	Total L				
1	COMMERCIAL/INDUSTRIAL MARKETS - Subtotal															1
2	Allocator - CUST SOLUTIONS: Active Accounts		0%	0%	99%	99%	0%	0%	0%	0%	0%	1%	1%	100%		2 LRMCC-10a Line 58
3	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		3
4	COMMERCIAL/INDUSTRIAL MARKETS - Subtotal															4
5	Allocator - C&I TECH SPPT: Active Accounts		0%	0%	99%	99%	0%	0%	0%	0%	0%	1%	1%	100%		5 LRMCC-10a Line 58
6	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		6
7	COMMERCIAL/INDUSTRIAL MARKETS - Subtotal															7
8	Allocator - COMMERC/INDUST MKTS: Active Accounts		0%	0%	99%	99%	0%	0%	0%	0%	0%	1%	1%	100%		8 LRMCC-10a Line 58
9	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		9
10	COMMERCIAL/INDUSTRIAL MARKETS - Subtotal															10
11	Allocator - C&I PROJ COORD: Active Accounts		0%	0%	99%	99%	0%	0%	0%	0%	0%	1%	1%	100%		11 LRMCC-10a Line 58
12	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		12
13	Total C&I Customer Service O&M Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		13
14	Allocation %	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		14

Source SDGE Details Acct 901-910 Costs.xls

**TABLE LRMCC-10k**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**ALLOCATION OF CONSUMER PROGRAMS & SERVICES O&M EXPENSES BY CUSTOMER CLASS**

**2013 BCAP**

2/22/2013 Update Filing

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			Total Noncore	System Total	Source
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	N	O	
1	CUSTOMER ASSISTANCE - Subtotal														1
2	Allocator - Residential Class		100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	2
3	Allocation (\$)	\$16	\$16	\$0	\$0	\$16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16	3
4	Total Consumer Programs & Services O&M Allocation (\$)	\$16	\$16	\$0	\$0	\$16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16	4
5	Allocation %	100%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	5

Source: SDGE Details Acct 901-910 Costs.xls

TABLE LRMCC-101  
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

**ALLOCATION OF FEDERAL ACCOUNTS MANAGEMENT O&M EXPENSES BY CUSTOMER CLASS**

**2013 BCAP**

2/22/2013 Update Filing

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			Total Noncore	System Total	Source
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	N	O	
1	<b>FEDERAL ACCOUNTS Total</b>														1
2	Allocator - 15% Res / Active Meters: Federal Accounts		4%	0%	90%	95%	3%	0%	3%	2%	0%	2%	5%	100%	2 LRMCC-10a Line 42
3	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	3
4	<b>Total Federal Accounts Management O&amp;M Allocation (\$)</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4
5	Allocation %	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	5

Source SDGE Details Acct 901-910 Costs.xls

**TABLE LRMCC-10m**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**ALLOCATION OF CUSTOMER SERVICES SUPPORT STAFF O&M EXPENSES BY CUSTOMER CLASS**  
**2013 BCAP**

2/22/2013 Update Filing

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			Total Noncore	System Total	LRMCC-10a Printed Line Ref
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	N	O	
1	<b>CUSTOMER SERVICE STAFF - FIELD Total</b>														1
2	Allocator - Total Field Orders		94%	0%	6%	100%	0%	0%	0%	0%	0%	0%	0%	100%	2 LRMCC-10a Line 3
3	Allocation (\$)	\$45,047	\$42,484	\$5	\$2,552	\$45,041	\$2	\$0	\$2	\$3	\$0	\$3	\$6	\$45,047	3
4	<b>HUMAN RESOURCES Total</b>														4
5	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	5 LRMCC-10a Line 70
6	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	6
7	<b>Total Customer Services Support Staff O&amp;M Allocation (\$)</b>	<b>\$45,047</b>	<b>\$42,484</b>	<b>\$5</b>	<b>\$2,552</b>	<b>\$45,041</b>	<b>\$2</b>	<b>\$0</b>	<b>\$2</b>	<b>\$3</b>	<b>\$0</b>	<b>\$3</b>	<b>\$6</b>	<b>\$45,047</b>	7
8	Allocation %	100%	94%	0%	6%	100%	0%	0%	0%	0%	0%	0%	0%	100%	8

Source SDGE Details Acct 901-910 Costs.xls

**TABLE LRMCC-10n**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**ALLOCATION OF COMMUNITY OUTREACH & INFO SERVICES O&M EXPENSES BY CUSTOMER CLASS**

**2013 BCAP**

2/22/2013 Update Filing

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			Total Noncore	System Total	Source
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	N	O	
1	<b>PUBLIC AFFAIRS</b>														1
2	Allocator - Active Accounts: All Customers		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%	2
3	Allocation (\$)	\$12,863	\$12,435	\$1	\$426	\$12,861	\$1	\$0	\$1	\$1	\$0	\$1	\$2	\$12,863	3
4	<b>MASS MARKETS - Subtotal</b>														4
5	Allocator - Residential Class		100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	5
6	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	6
7	<b>MASS MARKETS - Subtotal</b>														7
8	Allocator - Active Accounts: Mass Markets		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%	8
9	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	9
10	<b>MASS MARKETS - Subtotal</b>														10
11	Allocator - ENGY EFFIC ANALY & S: Active Accounts - All Customers		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%	11
12	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	12
13	<b>Total Comm Outreach &amp; Info Services O&amp;M Allocation (\$)</b>	<b>\$12,863</b>	<b>\$12,435</b>	<b>\$1</b>	<b>\$426</b>	<b>\$12,861</b>	<b>\$1</b>	<b>\$0</b>	<b>\$1</b>	<b>\$1</b>	<b>\$0</b>	<b>\$1</b>	<b>\$2</b>	<b>\$12,863</b>	13
14	<b>Allocation %</b>	<b>100%</b>	<b>97%</b>	<b>0%</b>	<b>3%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	14						

Source: SDGE Details Acct 901-910 Costs.xls

**TABLE LRMCC-10o**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**ALLOCATION OF OTHER O&M EXPENSES BY CUSTOMER CLASS**  
**2013 BCAP**

2/22/2013 Update Filing

	Cost Center(s) A	Total O&M B	Res C	NGV D	GN-3 E	Total Core F	GINC			Cogen			Total Noncore N	System Total O	Source	
							MPD G	HPD H	Total I	< 3 MM J	> 3 MM K	Total L				
1	<b>ACCOUNTING ADJUSTMENTS - Subtotal</b>															1
2	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%		2
3	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		3
4	<b>FACILITIES</b>															4
5	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%		5
6	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		6
7	<b>REGULATORY AFFAIRS</b>															7
8	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%		8
9	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		9
10	<b>SUPPLY &amp; TRANSPORTATION</b>															10
11	Allocator - Active Accounts: All Customers		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%		11
12	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		12
13	<b>NOT ASSIGNED COST CENTER</b>															13
14	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%		14
15	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		15
16	<b>Total Other O&amp;M Allocation (\$)</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		16
17	<b>Allocation %</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		17

Source: SDGE Details Acct 901-910 Costs.xls

**TABLE LRMCC-10p**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**ALLOCATION OF SVP COST CENTERS O&M EXPENSES BY CUSTOMER CLASS**

**2013 BCAP**

2/22/2013 Update Filing

	Cost Center(s) A	Total O&M B	Res C	NGV D	GN-3 E	Total Core F	GTNC			Cogen			Total Noncore N	System Total O	Source	
							MPD G	HPD H	Total I	< 3 MM J	> 3 MM K	Total L				
1	<b>CONTROLLER TOTAL</b>															1
2	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%		2
3	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		3
4	<b>CUSTOMER OPERATIONS TOTAL</b>															4
5	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%		5
6	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		6
7	<b>Total SVP Cost Centers O&amp;M Allocation (\$)</b>	\$0	\$0	\$0,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		7
8	<b>Allocation %</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		8

Source: SDGE Details Acct 901-910 Costs.xls

TABLE LRMCC-10q  
 SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT

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

2013 BCAP

2/22/2013 Update Filing

	Cost Center(s) A	Total O&M B	Res C	NGV D	GN-3 E	Total Core F	GTNC			Cogen			Total Noncore N	System Total O	Source	
							MPD G	HPD H	Total I	< 3 MM J	> 3 MM K	Total L				
1	FERC 907															
2	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	1	LRMCC-10a Line 70
3	Allocation (\$)	\$815	\$759	\$0	\$31	\$790	\$10	\$2	\$11	\$9	\$4	\$13	\$24	\$815	2	
4	<b>FEDERAL ACCOUNTS Total</b>														3	
5	Allocator - 15% Res / Active Meters: Federal Accounts		4%	0%	90%	95%	3%	0%	3%	2%	0%	2%	5%	100%	4	LRMCC-10a Line 42
6	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	5	
7	<b>Total FERC 907 Allocation (\$)</b>	<b>\$815</b>	<b>\$759</b>	<b>\$0</b>	<b>\$31</b>	<b>\$790</b>	<b>\$10</b>	<b>\$2</b>	<b>\$11</b>	<b>\$9</b>	<b>\$4</b>	<b>\$13</b>	<b>\$24</b>	<b>\$815</b>	6	
8	Allocation %	100%	93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	7	

Source: SDGE Details Acct 901-910 Costs.xls

**TABLE LRMCC-10r**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

**ALLOCATION OF NON-REFUNDABLE FERC ACCOUNT 908 O&M EXPENSES BY CUSTOMER CLASS**  
**2013 BCAP**

2/22/2013 Update Filing

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			Total Noncore	System Total	LRMCC-10a Printed Line Ref
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	N	O	
1	<b>DIR SUPPLY MANAGEMEN</b>														1
2	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	2 LRMCC-10a Line 70
3	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	3
4	<b>GAS TRANS &amp; DISTR</b>														4
5	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	5 LRMCC-10a Line 70
6	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	6
7	<b>CUST SVCS SVP &amp; STAF</b>														7
8	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	8 LRMCC-10a Line 70
9	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	9
10	<b>DIR CUSTOMER PROGRAM</b>														10
11	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	11 LRMCC-10a Line 70
12	Allocation (\$)	\$473,269	\$440,843	\$26	\$18,202	\$459,070	\$5,586	\$1,047	\$6,634	\$5,470	\$2,095	\$7,565	\$14,198	\$473,269	12
13	<b>CUSTOMER SERVICE MAS</b>														13
14	Active Billing Accounts - Mass Markets Customers		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%	14 LRMCC-10a Line 50
15	Allocation (\$)	\$45,982	\$44,457	\$2	\$1,523	\$45,982	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$45,982	15
16	<b>CUSTOMER SERVICE MAJ</b>														16
17	Business Analysis - Major Markets Customers		0%	0%	0%	0%	39%	7%	47%	39%	15%	53%	100%	100%	17 LRMCC-10a Line 38
18	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	18
19	<b>VACANT</b>														19
20	Allocator - FERC 901 - 905 Net Allocation		96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%	20 LRMCC-10a Line 23
21	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	21
22	<b>DIR CUSTOMER OPS</b>														22
23	Business Analysis - Major Markets Customers		0%	0%	0%	0%	39%	7%	47%	39%	15%	53%	100%	100%	23 LRMCC-10a Line 38
24	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	24
25	<b>CUSTOMER OPERATIONS</b>														25
26	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	26 LRMCC-10a Line 70
27	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	27
28	<b>REGULATORY &amp; STRATEG</b>														28
29	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	29 LRMCC-10a Line 70
30	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	30
31	<b>REGIONAL PUBLIC AFFA</b>														31
32	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	32 LRMCC-10a Line 70
33	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	33
34	<b>ELECTRIC GAS PROCUREMENT</b>														34
35	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	35 LRMCC-10a Line 70
36	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	36
37	<b>VACANT</b>														37
38	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	38 LRMCC-10a Line 70
39	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	39
40	<b>FEDERAL ACCOUNTS</b>														40
41	Allocator - 15% Res / Active Meters: Federal Accounts		4%	0%	90%	95%	3%	0%	3%	2%	0%	2%	5%	100%	41 LRMCC-10a Line 42
42	Allocation (\$)	\$3,095	\$133	\$13	\$2,789	\$2,935	\$80	\$13	\$93	\$66	\$0	\$66	\$159	\$3,095	42
43	<b>HUMAN RESOURCES</b>														43
44	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	44 LRMCC-10a Line 70
45	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	45
46	<b>Not Assigned</b>														46
47	Allocator - FERC 901 - 905 Net Allocation		93%	0%	4%	97%	1%	0%	1%	1%	0%	2%	3%	100%	47 LRMCC-10a Line 70
48	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	48
49	<b>Total FERC 908 Allocation (\$)</b>	<b>\$522,346</b>	<b>\$485,433</b>	<b>\$41</b>	<b>\$22,514</b>	<b>\$507,988</b>	<b>\$5,666</b>	<b>\$1,061</b>	<b>\$6,726</b>	<b>\$5,536</b>	<b>\$2,095</b>	<b>\$7,631</b>	<b>\$14,357</b>	<b>\$522,346</b>	49

---

50	Allocation %	100%	93%	0%	4%	97%	1%	0%	1%	1%	0%	1%	3%	100%	50
----	--------------	------	-----	----	----	-----	----	----	----	----	----	----	----	------	----

---

**TABLE LRMCC-10s**  
**SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT**

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

**2013 BCAP**

2/22/2013 Update Filing

	Cost Center(s)	Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			Total Noncore	System Total	Source
							MPD	HPD	Total	< 3 MM	> 3 MM	Total			
	A	B	C	D	E	F	G	H	I	J	K	L	N	O	
1	<b>SVP</b>														1
2	Allocator - Active Accounts: All Customers		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%	2 LRMCC-10a Line 46
3	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	3
4	<b>PUBLIC AFFAIRS</b>														4
5	Allocator - Active Accounts: All Customers		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%	5 LRMCC-10a Line 46
6	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	6
7	<b>CUSTOMER COMMUNICATIONS &amp; RESEARCH - Subtotal</b>														7
8	Allocator - Active Accounts: All Customers		97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%	8 LRMCC-10a Line 46
9	Allocation (\$)	\$152,757	\$147,668	\$8	\$5,058	\$152,734	\$10	\$0	\$11	\$8	\$4	\$12	\$23	\$152,757	9
10	<b>REG STRATEGY</b>														10
11	Allocator - Active Accounts: All Customers		96%	0%	4%	100%	0%	0%	0%	0%	0%	0%	0%	100%	11 LRMCC-10a Line 34
12	Allocation (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	12
13	<b>Total FERC 909-910 Allocation (\$)</b>	\$152,757	\$147,668	\$8	\$5,058	\$152,734	\$10	\$0	\$11	\$8	\$4	\$12	\$23	\$152,757	13
14	<b>Allocation %</b>	100%	97%	0%	3%	100%	0%	0%	0%	0%	0%	0%	0%	100%	14

Source SDGE Details Acct 901-910 Costs.xls

TABLE LRMCC-10t  
SAN DIEGO GAS AND ELECTRIC - GAS DEPARTMENT  
SUMMARY OF LRMCC ALLOCATION OF CUSTOMER O&M EXPENSES  
2013 BCAP  
2/22/2013 Update Filing

O&M Operational Activity		Total O&M	Res	NGV	GN-3	Total Core	GTNC			Cogen			IPP	Total Noncore	System Total	
							MPD	HPD	Total	< 3 MM	> 3 MM	Total				
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
1	FIELD SERVICES Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1	
2	CUSTOMER CONTACT Total	\$136,947	\$131,705	\$0	\$5,242	\$136,947	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$136,947	2	
3	METER READING Total	\$60,367	\$57,962	\$3	\$2,393	\$60,358	\$3	\$1	\$4	\$3	\$1	\$5	\$0	\$60,367	3	
4	BILLING SERVICES Total	\$236,527	\$0	\$0	\$0	\$0	\$93,060	\$17,449	\$110,509	\$91,121	\$34,897	\$126,019	\$0	\$236,527	4	
5	CREDIT & COLLECTIONS Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	5	
6	BUSINESS ANALYSIS Total	\$9,947	\$9,551	\$1	\$394	\$9,946	\$1	\$0	\$1	\$1	\$0	\$1	\$0	\$9,947	6	
7	CUSTOMER RESEARCH & COMMUNICATION Total	\$802,631	\$775,894	\$42	\$26,577	\$802,512	\$54	\$2	\$56	\$44	\$19	\$62	\$0	\$802,631	7	
8	CUSTOMER SERVICE TECHNOLOGY & SUPPORT Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	8	
9	C&I CUSTOMER SERVICE Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	9	
10	CONSUMER PROGRAMS & SERVICES Total	\$519,267	\$485,316	\$28	\$19,725	\$505,069	\$5,586	\$1,047	\$6,634	\$5,470	\$2,095	\$7,565	\$0	\$519,267	10	
11	FEDERAL ACCOUNTS MANAGEMENT Total	\$3,095	\$133	\$13	\$2,789	\$2,935	\$80	\$13	\$93	\$66	\$0	\$66	\$0	\$3,095	11	
12	CUSTOMER SERVICES SUPPORT STAFF Total	\$45,047	\$42,484	\$5	\$2,552	\$45,041	\$2	\$0	\$2	\$3	\$0	\$3	\$0	\$45,047	12	
13	COMMUNITY OUTREACH & INFO SERVICES Total	\$12,863	\$12,435	\$1	\$426	\$12,861	\$1	\$0	\$1	\$1	\$0	\$1	\$0	\$12,863	13	
14	OTHER Total	\$815	\$759	\$0	\$31	\$790	\$10	\$2	\$11	\$9	\$4	\$13	\$0	\$815	14	
15	SVP COST CENTERS Total	\$40,268	\$37,509	\$2	\$1,549	\$39,060	\$475	\$89	\$564	\$465	\$178	\$644	\$0	\$40,268	15	
16															16	
17	Total	\$1,867,773	\$1,553,747	\$94	\$61,678	\$1,615,520	\$99,272	\$18,603	\$117,875	\$97,183	\$37,195	\$134,378	\$0	\$252,253	\$1,867,773	17
18	Allocation %	100%	83%	0%	3%	86%	5%	1%	6%	5%	2%	7%	0%	14%	100%	18

Note:  
1. O&M Operational Activities cost assigned using allocation methods identified for each SDG&E department in the Customer Operations division.  
Data from LRMCC-10x tabs

**SAN DIEGO GAS & ELECTRIC COMPANY**  
**2013 TCAP**

**2/22/2013 Update Filing**

**Section 4**  
**SDG&E Cost Allocation Model**

**Workpapers to the Prepared Written Testimony of**  
**Joseph Mock**

2013TCAP SDGEgas COST ALLOCATION

2/22/2013 Update Filing

	Residential	NGV	CCI	Total Core	Total NCCI	EG Tier 1	EG Tier 2	Total EG	Total NonCore	System Total
1 <u>Customer Costs</u>										
2 Per Unit LRM, \$/Cust/Year	\$263.06	\$1,617.83	\$421.60	\$268.59	\$10,132.95	\$9,281.77	\$9,281.77	\$9,281.77	\$9,697.28	\$269.97
3 Number of Customers	850,344	32	30,423	880,799	63	52	14	66	129	880,928
4 <b>Customer Costs Rental Method \$000</b>	<b>\$237,822</b>	<b>\$223,692</b>	<b>\$51</b>	<b>\$12,826</b>	<b>\$236,570</b>	<b>\$638</b>	<b>\$483</b>	<b>\$130</b>	<b>\$613</b>	<b>\$1,251</b>
5										
6 <u>Medium Pressure Distribution costs</u>										
7 Medium Pressure Distribution costs (MPD)										
8 Per Unit LRM, \$/mcf	\$211.00	\$211.00	\$211.00	\$211.00	\$211.00	\$211.00	\$211.00	\$211.00	\$211.00	\$211.00
9 MPD Peak Day Demand (mmcf)	275	3	84	362	7	2	2	4	10	373
10 <b>Medium Pressure Distribution Costs \$000</b>	<b>\$78,614</b>	<b>\$57,987</b>	<b>\$667</b>	<b>\$17,756</b>	<b>\$76,409</b>	<b>\$1,388</b>	<b>\$395</b>	<b>\$422</b>	<b>\$817</b>	<b>\$2,205</b>
11										
12 <u>High Pressure Distribution costs</u>										
13 High Pressure Distribution costs (HPD)										
14 Per Unit LRM, \$/mth	\$23.84	\$23.84	\$23.84	\$23.84	\$23.84	\$23.84	\$23.84	\$23.84	\$23.84	\$23.84
15 HPD Peak Day Demand (mmcf)	275	3	87	365	9	5	21	26	35	400
16 <b>High Pressure Distribution Costs \$000</b>	<b>\$9,533</b>	<b>\$6,553</b>	<b>\$77</b>	<b>\$2,064</b>	<b>\$8,694</b>	<b>\$215</b>	<b>\$119</b>	<b>\$505</b>	<b>\$624</b>	<b>\$838</b>
17										
18 <b>Unscaled LRM Based Costs \$000</b>	<b>\$325,969</b>	<b>\$288,232</b>	<b>\$795</b>	<b>\$32,646</b>	<b>\$321,674</b>	<b>\$2,241</b>	<b>\$997</b>	<b>\$1,057</b>	<b>\$2,054</b>	<b>\$4,295</b>
19										
20 <u>Calculation of Scalar:</u>										
21 Target Base Margin \$000	\$261,726									
22 Less items not allocated per LRM method:										
23 Transmission Cost per EC \$000	\$31,473									
24 NGV Compression Adder Costs per EC \$000	\$181									
25 Target Scaled Costs \$000	\$230,072									
26 Unscaled LRM Based Costs \$000	\$325,969									
27 amount to scale \$000	(\$95,897)									
28 <b>Scalar (as a % of unscaled)</b>	<b>71%</b>	<b>71%</b>	<b>71%</b>	<b>71%</b>	<b>71%</b>	<b>71%</b>	<b>71%</b>	<b>71%</b>	<b>71%</b>	<b>71%</b>
29										
30 Scaled Customer Costs \$000 LRM/Rental Method	\$157,884	\$36	\$9,053	\$166,973	\$451	\$341	\$92	\$433	\$883	\$167,857
31 Scaled Medium Pressure Distribution Costs \$000 LRM	\$40,928	\$471	\$12,532	\$53,931	\$980	\$279	\$298	\$577	\$1,556	\$55,487
32 Scaled High Pressure Distribution Costs \$000 LRM	\$4,625	\$55	\$1,457	\$6,137	\$151	\$84	\$356	\$440	\$592	\$6,728
33 <b>Scaled LRM Based Costs \$000</b>	<b>\$230,072</b>	<b>\$203,437</b>	<b>\$561</b>	<b>\$23,042</b>	<b>\$227,041</b>	<b>\$1,582</b>	<b>\$703</b>	<b>\$746</b>	<b>\$1,450</b>	<b>\$3,031</b>
34										
35 <u>NGV Compression Costs:</u>										
36 <b>Compression Adder Costs \$000</b>	<b>\$181</b>	<b>\$181</b>		<b>\$181</b>				<b>\$0</b>	<b>\$0</b>	<b>\$181</b>
37										

2013TCAP SDGEgas COST ALLOCATION

2/22/2013 Update Filing

		Residential	NGV	CCI	Total Core	Total NCCI	EG Tier 1	EG Tier 2	Total EG	Total NonCore	System Total	
38	<u>Transmission Costs per Embedded Cost Method:</u>											
39	Embedded Transmission Costs \$000											
40	Calculate BBT/Local-T Transmission Split:											
41	BBT %		100.0%									
42	LT %		0.0%									
43												
44	<u>Allocation of BBT Costs:</u>											
45	CYTP Mth/yr	1,257,325	340,566	11,606	190,700	542,872	48,633	40,128	625,692	665,820	714,453	1,257,325
46	% CYTP		27.1%	0.9%	15.2%	43.2%	3.9%	3.2%	49.8%	53.0%	56.8%	100.0%
47	<b>BBT Costs per EC method</b>	<b>\$31,473</b>	<b>\$8,525</b>	<b>\$291</b>	<b>\$4,774</b>	<b>\$13,589</b>	<b>\$1,217</b>	<b>\$1,004</b>	<b>\$15,662</b>	<b>\$16,667</b>	<b>\$17,884</b>	<b>\$31,473</b>
48												
49	CYPM Mth	137,550	50,967	1,027	20,446	72,440	4,123	2,267	58,719	60,987	65,110	137,550
50	% CYPM		37.1%	0.7%	14.9%	52.7%	3.0%	1.6%	42.7%	44.3%	47.3%	100.0%
51	<b>LT Costs per EC method</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
52	<b>Transmission Costs per EC method</b>	<b>\$31,473</b>	<b>\$8,525</b>	<b>\$291</b>	<b>\$4,774</b>	<b>\$13,589</b>	<b>\$1,217</b>	<b>\$1,004</b>	<b>\$15,662</b>	<b>\$16,667</b>	<b>\$17,884</b>	<b>\$31,473</b>
53												
54												
55	<b>ALLOCATED BASE MARGIN (net of misc revenue &amp; t</b>	<b>\$261,726</b>	<b>\$211,962</b>	<b>\$1,032</b>	<b>\$27,816</b>	<b>\$240,810</b>	<b>\$2,799</b>	<b>\$1,708</b>	<b>\$16,408</b>	<b>\$18,116</b>	<b>\$20,915</b>	<b>\$261,726</b>
56	Percentage		17.4%	0.1%	2.3%	19.8%	0.2%	0.1%	1.3%	1.5%	1.7%	21.5%
57	Average Year Throughput Mth	1,216,495	307,841	11,606	182,595	502,042	48,633	40,128	625,692	665,820	714,453	1,216,495
58	average rate \$/therm	\$0.215	\$0.689	\$0.089	\$0.152	\$0.480	\$0.058	\$0.043	\$0.026	\$0.027	\$0.029	\$0.215
59												
60												
61												
62	<u>Model Results RD Format for RD Models</u>											
63	Customer Related Costs	\$157,884	\$36	\$9,053	\$166,973	\$451	\$341	\$92	\$433	\$883	\$167,857	
64	Medium Pressure Distribution Costs	\$40,928	\$471	\$12,532	\$53,931	\$980	\$279	\$298	\$577	\$1,556	\$55,487	
65	High Pressure Distribution Costs	\$4,625	\$55	\$1,457	\$6,137	\$151	\$84	\$356	\$440	\$592	\$6,728	
66	Backbone Transmission Costs	\$8,525	\$291	\$4,774	\$13,589	\$1,217	\$1,004	\$15,662	\$16,667	\$17,884	\$31,473	
67	Local Transmission Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
68	Storage - Borrego											
69	Core Seasonal Storage											
70	Storage - Load Balancing											
71	NGV Compression Costs:	\$0	\$181	\$0	\$181	\$0	\$0	\$0	\$0	\$0	\$0	\$181
72	<b>Total Margin Allocation pre-SI &amp; Unbundle FAR</b>	<b>\$211,962</b>	<b>\$1,032</b>	<b>\$27,816</b>	<b>\$240,810</b>	<b>\$2,799</b>	<b>\$1,708</b>	<b>\$16,408</b>	<b>\$18,116</b>	<b>\$20,915</b>	<b>\$261,726</b>	
73	<b>% Allocation</b>	<b>81.0%</b>	<b>0.4%</b>	<b>10.6%</b>	<b>92.0%</b>	<b>1.1%</b>	<b>0.7%</b>	<b>6.3%</b>	<b>6.9%</b>	<b>8.0%</b>	<b>100.0%</b>	
74												
75												
76												

	Residential	NGV	CCI	Total Core	Total NCCI	EG Tier 1	EG Tier 2	Total EG	Total NonCore	System Total
77										
78										
79	<b><u>DIRECT (%s Load or Cust/Mtrs Sum to 100%)</u></b>									
80	<b>Transmission</b>									
81	Average Year Throughput (MTh)	0	0	0	0	15,070	21,305	547,042	568,347	583,417
82	Cold Year Throughput (1-in-35) (MTh)	0	0	0	0	15,070	21,305	547,042	568,347	583,417
83	Cold Year Peak Month (December) (MTh)	0	0	0	0	1,278	692	52,023	52,716	53,993
84	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	0	0	0	0	41	46	1,679	1,726	1,767
85	Number of Customers	0	0	0	0	9	12	8	20	29
86	<b>High Pressure</b>									
87	Average Year Throughput (MTh)	143	326	5,125	5,595	9,041	11,879	71,224	83,104	92,144
88	Cold Year Throughput (1-in-35) (MTh)	159	326	5,353	5,837	9,041	11,879	71,224	83,104	92,144
89	Cold Year Peak Month (December) (MTh)	24	29	574	626	766	984	6,064	7,048	7,814
90	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	1	1	25	27	25	32	196	227	252
91	Number of Customers	1	5	7	13	10	9	4	13	23
92	<b>Medium Pressure</b>									
93	Average Year Throughput (MTh)	307,698	11,281	177,469	496,447	24,522	6,944	7,426	14,369	38,891
94	Cold Year Throughput (1-in-35) (MTh)	340,408	11,281	185,347	537,035	24,522	6,944	7,426	14,369	38,891
95	Cold Year Peak Month (December) (MTh)	50,943	998	19,872	71,814	2,079	591	632	1,223	3,302
96	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	2,801	32	858	3,691	67	19	20	39	107
97	Number of Customers	850,343	27	30,417	880,787	44	31	2	33	77
98	<b><u>CUMULATIVE (Calc'd from DIRECT %s)</u></b>									
99	<b>Transmission</b>									
100	Average Year Throughput (MTh)	307,841	11,606	182,595	502,042	48,633	40,128	625,692	665,820	714,453
101	Cold Year Throughput (1-in-35) (MTh)	340,566	11,606	190,700	542,872	48,633	40,128	625,692	665,820	714,453
102	Cold Year Peak Month (December) (MTh)	50,967	1,027	20,446	72,440	4,123	2,267	58,719	60,987	65,110
103	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	2,803	33	883	3,718	133	97	1,895	1,992	2,125
104	Number of Customers	850,344	32	30,423	880,799	63	52	14	66	129
105	<b>High Pressure</b>									
106	Average Year Throughput (MTh)	307,841	11,606	182,595	502,042	33,562	18,823	78,650	97,473	131,035
107	Cold Year Throughput (1-in-35) (MTh)	340,566	11,606	190,700	542,872	33,562	18,823	78,650	97,473	131,035
108	Cold Year Peak Month (December) (MTh)	50,967	1,027	20,446	72,440	2,845	1,575	6,696	8,271	11,116
109	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	2,803	33	883	3,718	92	51	216	267	359
110	Number of Customers	850,344	32	30,423	880,799	54	40	6	46	100
111	<b>Medium Pressure</b>									
112	Average Year Throughput (MTh)	307,698	11,281	177,469	496,447	24,522	6,944	7,426	14,369	38,891
113	Cold Year Throughput (1-in-35) (MTh)	340,408	11,281	185,347	537,035	24,522	6,944	7,426	14,369	38,891
114	Cold Year Peak Month (December) (MTh)	50,943	998	19,872	71,814	2,079	591	632	1,223	3,302
115	Peak Day (1-in-35 Core; 1-in-10 Noncore) (MTh)	2,801	32	858	3,691	67	19	20	39	107
116	Number of Customers	850,343	27	30,417	880,787	44	31	2	33	77

2013TCAP SDGEGas COST ALLOCATION

[2/22/2013 Update Filing](#)

	Residential	NGV	CCI	Total Core	Total NCCI	EG Tier 1	EG Tier 2	Total EG	Total NonCore	System Total
117										
118										
119										
120	<b>Convert EG Tier 1 &amp; Tier 2 into class average EG Customer Unit Cost:</b>									
121	<b>EG Tier 1</b>	<b>EG Tier 2</b>	<b>Total EG</b>							
122										
123	\$8,466.96	\$12,311.40	\$9,281.77							
124	52	14	66							
125	\$441	\$172	\$613							
126										
127										
128										
129	<b>Core Storage Allocator</b>									
130										
131	Injection	\$31.49								
132	Inventory	\$0.26								
133	Withdrawal	\$8.38								
134										
135										
136	<u>Core Storage Capacities:</u>	<u>Allocation Method</u>								
137	Number of Injection Days		214	214	214	214				
138	Injection MMcf	<i>Inv per Inj Day</i>	44	35.3	8.3	0.0	44			
139										
140	% Excess Winter Demand			81.0%	0.0%	19.0%	100%			
141	Inventory MMCF	<i>% Excess Winter</i>	9,334	7,563	1	1,769	9,334			
142										
143	MPD Peak Day (1-in-35 Core) Core Only	MTh								
144	% Core MPD Peak Day			65.6%	0.8%	33.7%	100%			
145	Withdrawal MMcf	<i>% Core MPD Peak</i>	235	154	2	79	235			
146										
147	Injection \$000		\$1,374	\$1,113	\$0	\$260	\$1,374			
148	Inventory \$000		\$2,471	\$2,002	\$0	\$468	\$2,471			
149	Withdrawal \$000		\$1,969	\$1,291	\$15	\$663	\$1,969			
150			\$5,814	\$4,407	\$16	\$1,391	\$5,814			
151										
152	Core Storage Allocation		75.8%	0.3%	23.9%					

2013TCAP SDGEGas COST ALLOCATION

2/22/2013 Update Filing

	NCCI-D	NCCI-T	Total NCCI	EG Tier 1 Dist	EG Tier 2 Dist	EG Tier 1 Trans	EG Tier 2 Trans	EG Trans	Total EG
1 <u>Customer Costs</u>									
2 Per Unit LRM, \$/Cust/Year									
3 Number of Customers	54	9	63	40	6	12	8	20	66
4 <b>Customer Costs Rental Method \$000</b>	<b>\$547</b>	<b>\$91</b>	<b>\$638</b>	<b>\$371</b>	<b>\$56</b>	<b>\$112</b>	<b>\$74</b>	<b>\$186</b>	<b>\$613</b>
5									
6 <u>Medium Pressure Distribution costs</u>									
7 Medium Pressure Distribution costs (MPD)									
8 Per Unit LRM, \$/mcf									
9 MPD Peak Day Demand (mmcf)									
10 <b>Medium Pressure Distribution Costs \$000</b>	<b>\$1,388</b>	<b>\$0</b>	<b>\$1,388</b>	<b>\$395</b>	<b>\$422</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$817</b>
11									
12 <u>High Pressure Distribution costs</u>									
13 High Pressure Distribution costs (HPD)									
14 Per Unit LRM, \$/mdth									
15 HPD Peak Day Demand (mmcf)									
16 <b>High Pressure Distribution Costs \$000</b>	<b>\$215</b>	<b>\$0</b>	<b>\$215</b>	<b>\$119</b>	<b>\$505</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$624</b>
17									
18 <b>Unscaled LRM Based Costs \$000</b>	<b>\$2,150</b>	<b>\$91</b>	<b>\$2,241</b>	<b>\$885</b>	<b>\$983</b>	<b>\$112</b>	<b>\$74</b>	<b>\$186</b>	<b>\$2,054</b>
19									
20 <u>Calculation of Scalar:</u>									
21 Target Base Margin \$000									
22 Less items not allocated per LRM method:									
23 Transmission Cost per EC \$000									
24 NGV Compression Adder Costs per EC \$000									
25 Target Scaled Costs \$000									
26 Unscaled LRM Based Costs \$000									
27 amount to scale \$000									
28 Scalar (as a % of unscaled)	71%	71%	71%	71%	71%	71%	71%	71%	71%
29									
30 Scaled Customer Costs \$000 LRM/Rental Method	\$386	\$64	\$451	\$262	\$39	\$79	\$52	\$131	\$433
31 Scaled Medium Pressure Distribution Costs \$000 LRM	\$980	\$0	\$980	\$279	\$298	\$0	\$0	\$0	\$577
32 Scaled High Pressure Distribution Costs \$000 LRM	\$151	\$0	\$151	\$84	\$356	\$0	\$0	\$0	\$440
33 <b>Scaled LRM Based Costs \$000</b>	<b>\$1,517</b>	<b>\$64</b>	<b>\$1,582</b>	<b>\$624</b>	<b>\$694</b>	<b>\$79</b>	<b>\$52</b>	<b>\$131</b>	<b>\$1,450</b>
34									
35 <u>NGV Compression Costs:</u>									
36 <b>Compression Adder Costs \$000</b>			<b>0</b>					<b>\$0</b>	<b>\$0</b>
37									

2013TCAP SDGEgas COST ALLOCATION

2/22/2013 Update Filing

	NCCI-D	NCCI-T	Total NCCI	EG Tier 1 Dist	EG Tier 2 Dist	EG Tier 1 Trans	EG Tier 2 Trans	EG Trans	Total EG
38 <u>Transmission Costs per Embedded Cost Method:</u>									
39 Embedded Transmission Costs \$000									
40 Calculate BBT/Local-T Transmission Split:									
41 BBT %		100.0%							
42 LT %		0.0%							
43									
44 <u>Allocation of BBT Costs:</u>									
45 CYTP Mth/yr	33,562	15,070	48,633	18,823	78,650	21,305	547,042	568,347	665,820
46 % CYTP	2.7%	1.2%	3.9%	1.5%	6.3%	1.7%	43.5%	45.2%	53.0%
47 <b>BBT Costs per EC method</b>	<b>\$840</b>	<b>\$377</b>	<b>\$1,217</b>	<b>\$471</b>	<b>\$1,969</b>	<b>\$533</b>	<b>\$13,694</b>	<b>\$14,227</b>	<b>\$16,667</b>
48									
49 CYPM Mth	2,845	1,278	4,123	1,575	6,696	692	52,023	52,716	60,987
50 % CYPM	2.1%	0.9%	3.0%	1.1%	4.9%	0.5%	37.8%	38.3%	44.3%
51 <b>LT Costs per EC method</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
52 <b>Transmission Costs per EC method</b>	<b>\$840</b>	<b>\$377</b>	<b>\$1,217</b>	<b>\$471</b>	<b>\$1,969</b>	<b>\$533</b>	<b>\$13,694</b>	<b>\$14,227</b>	<b>\$16,667</b>
53									
54									
55 <b>ALLOCATED BASE MARGIN (net of misc revenue &amp; t</b>	<b>\$2,358</b>	<b>\$442</b>	<b>\$2,799</b>	<b>\$1,096</b>	<b>\$2,662</b>	<b>\$612</b>	<b>\$13,746</b>	<b>\$14,358</b>	<b>\$18,116</b>
56 Percentage									
57 Average Year Throughput Mth									
58 average rate \$/therm									
59									
60									
61									
62 <b>Model Results RD Format for RD Models</b>									
63 Customer Related Costs	\$386	\$64	\$451	\$262	\$39	\$79	\$52	\$131	\$433
64 Medium Pressure Distribution Costs	\$980	\$0	\$980	\$279	\$298	\$0	\$0	\$0	\$577
65 High Pressure Distribution Costs	\$151	\$0	\$151	\$84	\$356	\$0	\$0	\$0	\$440
66 Backbone Transmission Costs	\$840	\$377	\$1,217	\$471	\$1,969	\$533	\$13,694	\$14,227	\$16,667
67 Local Transmission Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
68 Storage - Borrego									
69 Core Seasonal Storage									
70 Storage - Load Balancing									
71 NGV Compression Costs:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
72 <b>Total Margin Allocation pre-SI &amp; Unbundle FAR</b>	<b>\$2,358</b>	<b>\$442</b>	<b>\$2,799</b>	<b>\$1,096</b>	<b>\$2,662</b>	<b>\$612</b>	<b>\$13,746</b>	<b>\$14,358</b>	<b>\$18,116</b>
73 <b>% Allocation</b>	<b>0.9%</b>	<b>0.2%</b>	<b>1.1%</b>	<b>0.4%</b>	<b>1.0%</b>	<b>0.2%</b>	<b>5.3%</b>	<b>5.5%</b>	<b>6.9%</b>
74									
75									
76									

	NCCI-D	NCCI-T	Total NCCI	EG Tier 1 Dist	EG Tier 2 Dist	EG Tier 1 Trans	EG Tier 2 Trans	EG Trans	Total EG
77									
78									
79									
80									
81									
82									
83									
84									
85									
86									
87									
88									
89									
90									
91									
92									
93									
94									
95									
96									
97									
98									
99									
100									
101									
102									
103									
104									
105									
106									
107									
108									
109									
110									
111									
112									
113									
114									
115									
116									

2013TCAP SDGEgas COST ALLOCATION

[2/22/2013 Update Filing](#)

	NCCI-D	NCCI-T	Total NCCI	EG Tier 1 Dist	EG Tier 2 Dist	EG Tier 1 Trans	EG Tier 2 Trans	EG Trans	Total EG
117									
118									
119									
120	<b>Convert EG Tier 1 &amp; Tier 2 into class average EG Cus</b>								
121	<b>EG Tier 1</b>	<b>EG Tier 2</b>	<b>Total EG</b>						
122									
123	\$8,466.96	\$12,311.40	\$9,281.77						
124	52	14	66						
125	<b>\$441</b>	<b>\$172</b>	<b>\$613</b>						
126									
127									
128									
129	<b>Core Storage Allocator</b>								
130									
131	Injection	\$31.49							
132	Inventory	\$0.26							
133	Withdrawal	\$8.38							
134									
135									
136	<u>Core Storage Capacities:</u>		<u>Allocation Method</u>						
137	Number of Injection Days								
138	Injection MMcf		<i>Inv per Inj Day</i>						
139									
140	% Excess Winter Demand								
141	Inventory MMCF		<i>% Excess Winter</i>						
142									
143	MPD Peak Day (1-in-35 Core) Core Only		MTh						
144	% Core MPD Peak Day								
145	Withdrawal MMcf		<i>% Core MPD Pe</i>						
146									
147	Injection \$000								
148	Inventory \$000								
149	Withdrawal \$000								
150									
151									
152	Core Storage Allocation								

**SAN DIEGO GAS & ELECTRIC COMPANY**  
**2013 TCAP**

**2/22/2013 Update Filing**

**Section 5**  
**Miscellaneous Data**

**Workpapers to the Prepared Written Testimony of**  
**Joseph Mock**

# SAN DIEGO GAS & ELECTRIC

## 2010 Economic Assumptions Update LEVELIZED ANNUAL CAPITAL COST AND RECC FACTORS

utility **sdge gas**

Auth ROR ==> 8.40%

Fed Tax Rate ==> 35.00%

State Tax Rate ==>

8.84% Ad Valorem Rate ==>

1.253%

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					
<b>GAS TRANSMISSION PLANT</b>																			
		9	10	11	12	13	14	15	16	19	20	21	22	23	25	26	27		
G-365.1	Land	0	0	0	0%	FALSE	FALSE	none	0%	none	0%	0.00	8.66	4.48	1.25	14.40	n/a	166.24	1478.64
G-365.2	Land Rights	40	40	40	0%	FALSE	FALSE	sl	0%	sl	0%	2.50	6.38	3.30	0.91	13.08	10.79	145.63	386.38
G-366	Structures & Improvements	47	39	45	-20%	TRUE	FALSE	sl	0%	sl	0%	2.55	6.21	3.23	0.88	12.87	10.49	145.66	379.58
G-367	Mains	55	15	22	-20%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.18	5.50	2.61	0.93	11.21	9.05	128.15	355.10
G-368	Compressor Station Equipment	41	15	22	-15%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.80	5.26	2.52	0.86	11.44	9.42	127.74	308.62
G-369	Measuring & Regulating Equipment	39	15	22	-20%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.08	5.13	2.46	0.83	11.50	9.51	127.63	292.60
G-371	Other Equipment	20	15	22	-5%	TRUE	FALSE	db/sl	150%	db/sl	200%	5.25	5.02	2.51	0.74	13.51	11.91	126.41	227.61
<b>GAS DISTRIBUTION PLANT</b>																			
<b>M&amp;S Annualization Factor</b>																			
G-374.1	Land	0	0	0	0%	FALSE	FALSE	none	0%	none	0%	0.00	8.40	4.07	1.25	13.72	n/a	163.33	1409.42
G-374.2	Land Rights	0	40	40	0%	FALSE	FALSE	none	0%	sl	0%	0.00	8.40	2.40	1.25	12.05	n/a	143.48	1340.66
G-375	Structures & Improvements	29	39	45	5%	TRUE	FALSE	sl	0%	db/sl	150%	3.28	6.03	3.00	0.85	13.15	11.15	141.49	318.28
G-376	Mains	53	15	35	-60%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.02	4.76	2.22	0.79	10.79	8.68	126.69	251.96
G-378	Measuring & Regulating Equipment	31	15	35	-100%	TRUE	FALSE	db/sl	150%	db/sl	200%	6.45	3.36	1.43	0.43	11.67	9.83	127.59	167.57
G-380	Services	48	15	35	-85%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.85	4.29	2.02	0.68	10.85	8.79	126.47	195.72
G-381	Meters & Regulators	31	15	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.23	5.08	2.41	0.84	11.56	9.73	126.32	275.92
G-382	Meter & Regulator Installations	43	15	35	-20%	TRUE	FALSE	db/sl	150%	db/sl	200%	2.79	5.02	2.33	0.85	10.99	8.98	126.81	299.03
G-385	Industrial Measuring & Regulating Equip	24	15	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	4.17	4.97	2.42	0.79	12.34	10.67	125.74	243.26
G-387	Other Equipment	11	15	35	5%	TRUE	FALSE	db/sl	150%	db/sl	200%	8.64	5.19	2.82	0.69	17.33	16.06	121.38	180.16
<b>GAS GENERAL PLANT</b>																			
G-392.2	Trailers	7	5	6	25%	TRUE	FALSE	db/sl	200%	db/sl	200%	10.71	4.78	3.63	0.76	19.89	18.95	102.14	141.12
G-394.1	Portable Tools	29	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.45	5.29	2.53	0.83	12.10	10.26	130.19	276.70
G-394.2	Shop Equipment	29	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	3.45	5.29	2.53	0.83	12.10	10.26	130.19	276.70
G-395	Laboratory Equipment	25	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	4.00	5.24	2.54	0.80	12.58	10.83	129.84	258.04
G-397	Communications Equipment	15	7	10	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	6.67	4.28	1.90	0.71	13.56	12.25	113.26	185.11
G-398	Miscellaneous Equipment	20	20	35	0%	TRUE	FALSE	db/sl	150%	db/sl	200%	5.00	5.22	2.58	0.76	13.55	11.93	129.22	234.62

utility **sdge gas**

FERC Account	Account Name
--------------	--------------

		Gross Plant Additions from FERC Form 2							
		2013 TCAP	Account	2006-2010	2010	2009	2008	2007	2006
		RECC	Weight	Average					
<b>GAS TRANSMISSION PLANT</b>									
G-365.1	Land								
G-365.2	Land Rights								
G-366	Structures & Improvements								
G-367	Mains								
G-368	Compressor Station Equipment								
G-369	Measuring & Regulating Equipment								
G-371	Other Equipment								
<b>GAS DISTRIBUTION PLANT</b>									
G-374.1	Land								
G-374.2	Land Rights								
G-375	Structures & Improvements	0.00%	0%	\$0	\$0	\$0	\$0	\$0	\$0
G-376	Mains	8.32%	96%	\$14,162,340	\$14,887,842	\$15,655,840	\$10,228,681	\$12,938,756	\$17,100,581
G-378	Measuring & Regulating Equipment	0.41%	4%	\$611,677	\$1,119,625	\$1,091,850	\$360,361	\$273,929	\$212,622
G-380	Services								
G-381	Meters & Regulators								
G-382	Meter & Regulator Installations								
G-385	Industrial Measuring & Regulating E	0.00%	0%	\$0	\$0	\$0	-\$14,646	\$14,646	\$0
G-387	Other Equipment								
		<b>8.73%</b>	=====>	SDG&E Distribution LRMC RECC					
<b>GAS GENERAL PLANT</b>									
G-392.2	Trailers	0.00%	0.00%	\$0					
G-394.1	Portable Tools	10.17%	99.16%	\$299,984	\$98,469	\$442,919	\$74,957	\$363,908	\$519,669
G-394.2	Shop Equipment	0.00%	0.00%	\$0					
G-395	Laboratory Equipment	0.00%	0.00%	\$0					
G-397	Communications Equipment	0.50%	4.10%	\$12,390			\$15,234	\$9,546	
G-398	Miscellaneous Equipment	-0.39%	-3.25%	-\$9,834				-\$16,301	-\$3,367
		<b>10.29%</b>	=====>	SDG&E General and Common Plant RECC					

<b>Short Names</b>	<b>FERC</b>	<b>Long Names</b>
O&M Costs		
CEU4422000006		Average Hourly Earnings - Utility Service Workers
JAHE49NS	814-894 & 901-935	Labor O&M Cost Index (Based on CEU4422000006)
JGTOTALMS	814-894 & 901-935	Total Gas O&M Cost Index (MS) (Non-Labor O&M Cost Index)
Utility Construction Costs		
JUG@PCF	362-384	Total Gas Plant, Pacific Region

Miscellaneous LRMC Data  
Global Insight Cost Escalators

**Global Insight and Handy-Whitman Data**

Source: Global Insight 1st Quarter 2011 "Power Plann

<b>YEAR</b>	<b>CEU4422000006</b>	<b>JGTOTALMS</b>	<b>JUG@PCF</b>
1997	20.594	1.14017	359.000
1998	21.480	1.16037	363.500
1999	22.028	1.18585	372.000
2000	22.753	1.22812	385.500
2001	23.582	1.26237	390.750
2002	23.958	1.28718	398.750
2003	24.768	1.32728	412.000
2004	25.611	1.37700	474.500
2005	26.697	1.43900	556.750
2006	27.402	1.49400	579.500
2007	27.867	1.54600	568.500
2008	28.837	1.62500	640.300
2009	29.480	1.61800	633.300
2010	30.037	1.65900	657.000
2011	30.583	1.70900	682.800
2012	31.382	1.75400	692.100
2013	32.093	1.80100	712.200
2014	32.857	1.84800	742.500
2015	33.696	1.90200	764.100
2016	34.611	1.95100	773.700
2017	35.525	1.99800	784.300
2018	36.418	2.04600	801.000
2019	37.305	2.09400	821.100
2020	38.194	2.14200	842.800
2021	39.113	2.19200	863.000

Miscellaneous LRMC Data  
Global Insight Cost Escalators

**Utility O&M and Construction Cost Indexes**

**Base Year: 2010, Index Value = 1.0**

	Labor O&M	Non-L O&M	Gas Plant
<b>YEAR</b>	<b>JAHE49NS</b>	<b>JGTOTALMS</b>	<b>JUG@PCF</b>
1997	0.685627	0.687266	0.546423
1998	0.715118	0.699439	0.553272
1999	0.733373	0.714795	0.566210
2000	0.757482	0.740279	0.586758
2001	0.785087	0.760923	0.594749
2002	0.797627	0.775877	0.606925
2003	0.824594	0.800048	0.627093
2004	0.852643	0.830018	0.722222
2005	0.888804	0.867390	0.847412
2006	0.912275	0.900542	0.882040
2007	0.927756	0.931887	0.865297
2008	0.960049	0.979506	0.974581
2009	0.981456	0.975286	0.963927
2010	1.000000	1.000000	1.000000
2011	1.018178	1.030139	1.039269
2012	1.044778	1.057263	1.053425
2013	1.068449	1.085594	1.084018
2014	1.093884	1.113924	1.130137
2015	1.121816	1.146474	1.163014
2016	1.152279	1.176010	1.177626
2017	1.182708	1.204340	1.193760
2018	1.212438	1.233273	1.219178
2019	1.241968	1.262206	1.249772
2020	1.271565	1.291139	1.282801
2021	1.302161	1.321278	1.313546